COMMONWEALTH OF PENNSYLVANIA



OFFICE OF CONSUMER ADVOCATE 555 Walnut Street, 5th Floor, Forum Place Harrisburg, Pennsylvania 17101-1923 (717) 783-5048 800-684-6560

November 18, 2020



FAX (717) 783-7152 consumer@paoca.org

Rosemary Chiavetta, Secretary Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street Harrisburg, PA 17120

> Re: Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company Docket Nos. R-2020-3019369 (Water) C-2020-3019751 R-2020-3019371 (Wastewater) C-2020-3019754

Dear Secretary Chiavetta:

On November 10, 2020, the Office of Consumer Advocate filed its Main Brief in the above-referenced proceedings. On November 16, 2020, the Presiding Officer directed the OCA to submit an abridged brief that is fewer than 75 pages or, in the alternative, that he would restrict his consideration to the first 75 pages of the original brief. Because the Presiding Officer also required the parties to follow a common briefing outline, the OCA was not able to reorganize the brief for purposes of presenting the most important issues in the first 75 pages. The situation is further complicated by timing – the parties' Reply Briefs are due tomorrow and, to this point, the parties have developed their responsive arguments and citations utilizing the brief the OCA submitted on November 10, 2020.

The OCA requested a waiver of the 75 pages identified by the ALJ, based on the unique circumstances of the case. The OCA noted that there are eight separate revenue requirements making up PAWC's requested water and wastewater increases, two projected rate years, and multiple revenue impact scenarios presented by the Company and the OCA resulting from and compounded by several matters of first impression – the first litigated multi-year rate plan, proposed subsidies related to Section 1329 acquisitions and the effect of the pandemic on the Company's pre-pandemic projections. The OCA also informed the ALJ that we do not object to the Company's request for permission to submit a Reply Brief longer than 40 pages. The OCA anticipates that it will be able to make its responsive case in 40 pages – largely because we fully developed our positions in our original Main Brief. On November 17, 2020, the ALJ determined that the OCA could file a Main Brief that does not exceed 120 pages, excluding Appendices, by November 18, 2020.

November 18, 2020 Page 2 of 2

Consistent with the foregoing, for electronic filing please find the Office of Consumer Advocate's Abridged Main Brief in the above-referenced proceedings. Please note that the **CONFIDENTIAL** version of OCA's Abridged Main Brief will only be sent to the parties that have executed the non-disclosure agreement as indicated on the Certificate of Service.

Copies have been served per the attached Certificate of Service.

Respectfully submitted,

<u>/s/ Christine Maloni Hoover</u> Christine Maloni Hoover Senior Assistant Consumer Advocate PA Attorney I.D. # 50026 E-Mail: <u>CHoover@paoca.org</u>

Enclosures:

cc: The Honorable Conrad A. Johnson (email only) Office of Special Assistants (email only: <u>ra-OSA@pa.gov</u>) Certificate of Service

*299114

CERTIFICATE OF SERVICE

Re: Pennsylvania Public Utility Commission	:	Docket Nos. R-2020-3019369 (Water)
V.	:	C-2020-3019751
Pennsylvania-American Water Company	:	R-2020-3019371 (Wastewater)
	:	C-2020-3019754

I hereby certify that I have this day served a true copy of the following documents, the Office of Consumer Advocate's Abridged Main Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 18th day of November 2020.

*Receiving the CONFIDENTIAL Version of OCA's ABRIDGED Main Brief

SERVICE BY E-MAIL ONLY

Carrie B. Wright, Esquire* Bureau of Investigation & Enforcement Pennsylvania Public Utility Commission Commonwealth Keystone Building 400 North Street, 2nd Floor Harrisburg, PA 17120

Anthony C. DeCusatis, Esquire* Kenneth M. Kulak, Esquire* Brooke. E. McGlinn, Esquire* Mark A. Lazaroff, Esquire* Morgan, Lewis & Bockius LLP 1701 Market Street Philadelphia, PA 19103-2921

Susan Simms Marsh, Esquire* Elizabeth Rose Triscari, Esquire* Pennsylvania-American Water Company 852 Wesley Drive Mechanicsburg, PA 17055

Michael L. Kurtz, Esquire Kurt J. Boehm, Esquire Jody Kyler Cohn, Esquire Boehm, Kurtz, & Lowry 36 East Seventh Street, Suite 1510 Cincinnati, OH 45202

Joseph L. Vullo, Esquire Commission on Economic Opportunity 1460 Wyoming Avenue Forty Fort, PA 18704 Erin K. Fure, Esquire* Office of Small Business Advocate 555 Walnut Street 1st Floor, Forum Place Harrisburg, PA 17101-1923

Adeolu A. Bakare, Esquire* Jo-Anne S. Thompson, Esquire* McNees Wallace & Nurick LLC 100 Pine Street P.O. Box 1166 Harrisburg, PA 17108-1166

David P. Zambito, Esquire* Cozen O'Connor 17 North Second Street Suite 1410 Harrisburg, PA 17101

Elizabeth R. Marx, Esquire* Ria M. Pereira, Esquire* John W. Sweet, Esquire* Pennsylvania Utility Law Project 118 Locust Street Harrisburg, PA 17101

Jan K. Vroman 623 Eastman Street West Mifflin, PA 15122 jan.vroman@yahoo.com Jessica and Jeffrey LaBarge 123 Fairmount Avenue Reading, PA 19606 jessi@russolawllc.com

Brian Kalcic* Excel Consulting 225 S. Meramec Avenue Suite 720 T St. Louis, MO 63105 Charles and Jennifer Spryn 899 Bullcreek Road Butler, PA 16002 <u>sprynhouse@live.com</u>

<u>/s/ Christine Maloni Hoover</u> Christine Maloni Hoover Senior Assistant Consumer Advocate PA Attorney I.D. # 50026 E-Mail: <u>CHoover@paoca.org</u>

Erin L. Gannon Senior Assistant Consumer Advocate PA Attorney I.D. # 83487 E-Mail: <u>EGannon@paoca.org</u>

Lauren E. Guerra Assistant Consumer Advocate PA Attorney I.D. # 323192 E-Mail: <u>LGuerra@paoca.org</u> Harrison W. Breitman Assistant Consumer Advocate PA Attorney I.D. # 320580 E-Mail: <u>HBreitman@paoca.org</u>

Christy M. Appleby Assistant Consumer Advocate PA Attorney I.D. # 85824 E-Mail: <u>CAppleby@paoca.org</u>

Counsel for: Office of Consumer Advocate 555 Walnut Street 5th Floor, Forum Place Harrisburg, PA 17101-1923 Phone: (717) 783-5048 Fax: (717) 783-7152 Dated: November 18, 2020 *299657

PUBLIC VERSION

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission v. Pennsylvania-American Water Company

:	Docket Nos. R-2020-3019369 (Water)
:	C-2020-3019751
:	R-2020-3019371 (Wastewater)
:	C-2020-3019754

ABRIDGED MAIN BRIEF OF THE OFFICE OF CONSUMER ADVOCATE

Christine Maloni Hoover Senior Assistant Consumer Advocate PA Attorney I.D. # 50026 E-Mail: <u>CHoover@paoca.org</u>

Erin L. Gannon Senior Assistant Consumer Advocate PA Attorney I.D. # 83487 E-Mail: <u>EGannon@paoca.org</u> Christy M. Appleby Assistant Consumer Advocate PA Attorney I.D. # 85824 E-Mail: <u>CAppleby@paoca.org</u>

Harrison W. Breitman Assistant Consumer Advocate PA Attorney I.D. # 320580 E-Mail: <u>HBreitman@paoca.org</u>

Lauren E. Guerra Assistant Consumer Advocate PA Attorney I.D. # 323192 E-Mail: <u>LGuerra@paoca.org</u>

Counsel for Tanya J. McCloskey Acting Consumer Advocate

Office of Consumer Advocate 555 Walnut Street 5th Floor, Forum Place Harrisburg, PA 17101-1923 Phone: (717) 783-5048 Fax: (717) 783-7152

Dated: November 18, 2020

TABLE OF CONTENTS

I.	INTRODUCTION AND OVERVIEW
A.	Description of Company1
B.	Procedural History
C.	Overview of PAWC's Filing1
D.	Overview of the Non-Unanimous Settlement1
E.	Burden of Proof1
II.	SUMMARY OF ARGUMENT
III.	OVERALL POSITION ON RATE INCREASE
A.	Introduction
В.	The Economic Hardships of PAWC's Ratepayers During and After This Pandemic Should Play a Prevalent Role in the Commission's Decision on Increasing Rates
C.	Rejecting PAWC's Rate Increase Requests During an Unprecedented and Economically Devastating Pandemic Would Result in Just and Reasonable Rates
1.	PAWC Does Not Need to Increase Rates Right Now11
2.	Case Law From Similar Economic Circumstances Provides Precedent For the Commission to Deny A Rate Increase Due to Extreme Customer Hardships
3.	The Principles of Public Utility Regulation Lend Support to the OCA's Claim That Increasing Rates During This Financially Challenging Time For Ratepayers Would Not Lead to Just and Reasonable Rates
4.	The Projections in PAWC's Early Pandemic Filing Cannot Be Given Any Credence in Determining Future Rates in a Vastly Different Economic Environment
D.	Conclusion
IV.	PAWC'S PROPOSED MULTI-YEAR RATE PLAN
V.	RATE BASE
А.	Utility Plant in Service
B.	Average Versus Year-End Rate Base

C.	Ra	ate Base Adjustment Relating to Amortization of EADIT	25
D.	Ca	ash Working Capita	26
VI.	RE	EVENUES	26
VII.	OF	PERATING AND MAINTENANCE EXPENSES	27
А.	Pa	yroll Costs – Prorating Wage Increases	27
В.	Pe	orformance Based Compensation (PAWC and Service Co.)	27
1.	An	nnual Performance Plan	27
2.	Sto	ock-Based Compensation Expense/LTPP	29
C.	Ca	apitalization Rate	30
D.	An	nnual Depreciation	31
VIII.	TA	AXES	31
А.	Та	exes Other Than Income Taxes	31
В.	Inc	come Taxes – Excess ADIT	31
IX.	RA	ATE OF RETURN	35
А.	Ca	apital Structure	36
В.	Co	ost of Long-Term Debt	37
C.	Co	ommon Equity Cost Rate	37
1.	Th and	he Legal Framework for Determining What Rate of Return is Fair to PAWC Consume d the Company's Investors	ers 38
2.	Co	ost of Equity Calculation	41
	a.	Proxy Group	41
	b.	Application of Constant Growth DCF Model	42
	c.	Application of Non-Constant Growth DCF Model	43
	d.	CAPM	45
		i. Risk Free Rates	45
		ii. Betas	46

	iii. Stock Options
	iv. Equity Risk Premium47
3.	Analysis of PAWC's Cost of Equity
4.	PAWC's Proposed Multi-Year Rate Plan
5.	Fair Market Value Legislation's Impact on Cost of Equity: Section 1329 Reduces PAWC's Cost of Equity
D.	Business Risks and Management Performance
E.	Other Parties' Equity Cost Rate Recommendations and Principal Areas of Dispute53
X.	REGIONALIZATION AND CONSOLIDATION SURCHARGE
A.	Introduction
В.	PAWC's Surcharge Imposes Additional Burdens on Existing Customers Solely Due to Increased Costs Related to Section 1329 Acquisitions
C.	PAWC's Proposed Surcharge Is Contrary to Section 1329 and Sound Regulatory Policy
1.	Section 1329
2.	PAWC Has Not Established That It Is Reasonable and Necessary to Have an Automatic Rate Adjustment For the 1329 "Revenue Deficiency"
XI.	PENSION/OPEB TRACKER
XII.	RATE STRUCTURE AND RATE DESIGN
A.	Introduction
B.	Cost of Service Study
C.	Rate Design Proposals61
1.	Residential Rate Design-Water61
8	A. PAWC Proposed Changes to the Structure of Residential Rates
ł	o. OCA Proposed Changes to the Structure of Residential Rates
2.	Residential Rate Design – Wastewater
8	a. Zone 3 (Scranton Area) Rates

ł	b. Zone 4 (Koppel) Rates	65
C	c. Zone 6 (McKeesport) Rates	65
3.	OCA's Scale Back Proposal	66
D.	Allocation of Wastewater Revenue Requirement to Water Operations	67
1.	Introduction	67
2.	The Impact on Water Customers of PAWC's Proposed Subsidies	68
3.	A Framework for Determining Whether PAWC's Proposed Subsidies Are in the Interest.	Public 71
4.	Section 1311(c) Must Be Applied Cautiously When There Is a Significant Acqui Adjustment	sition 74
E.	Allocation of Steelton Revenue Requirement to Other Water Operations	76
F.	Separate Stormwater Rate	76
1.	The Differences between Stormwater and Sanitary Sewer Services	77
2.	The Recognized Way to Charge for Stormwater Service	79
3.	PAWC Collects Stormwater Costs From Water and Wastewater Customers	80
XIII.	RECOMMENDATIONS FOR ACTIONS RELATED TO THE COVE EMERGENCY	ID-19 83
XIV.	LOW-INCOME CUSTOMER ASSISTANCE	83
А.	H2O Discount Program Design	85
B.	Hardship Fund	88
C.	Low-Income Customer Outreach, Data Collection and Reporting	88
D.	Comprehensive Universal Service Plan	89
E.	Winter Shut-Off Moratorium	90
XV.	SERVICE QUALITY AND CUSTOMER SERVICE ISSUES	90
А.	Customer Performance Service Standards	91
1.	Average Answer Time and Call Abandonment Rate	94

2.	Response Time to Leaks and Outage Restoration, Keeping Customer Appointments94
3.	Customer Billing Accuracy and Resolution of Inquiries
B.	Call Centers
1.	Average Answer Time and Call Abandonment Rate96
2.	Pennsylvania-Specific Audits of Third-Party Call Centers
C.	Customer Complaints
1.	Reporting on PAWC's Analysis of Root Causes of Disputes and Complaints and Response to Identified Trends
2.	Complaint Logs
D.	Customer Satisfaction Surveys
E.	Training on Termination of Service102
F.	Pressure Surveys and Pressures
G.	Main Extensions
1.	Introduction
2.	PAWC Should Extend a Main to Serve Area 1104
3.	The Company Should Extend a Main to Serve Area 2106
H.	Sewage Backups
I.	Tenant Issues and Protections
J.	Language Access
K.	Protection for Victims of Domestic Violence
XVI.	TARIFF CHANGES
А.	Limitation of Liability109
B.	Chapter 56 Customer Protections to Be Included in Tariff
C.	Align Tariff Language on Low-Income Customers with Actual Practice
XVII.	CONCLUSION113

LIST OF APPENDICES TO OCA ABRIDGED MAIN BRIEF		
Appendix A	A.1: OCA Rate Case Tables, Zero IncreaseA.2: OCA Rate Case Tables, End of Rate Year 2021A.3: OCA Rate Case Tables, Average Rate Year 2022	
Appendix B	Proposed Findings of Fact – PUBLIC	
Appendix C	Proposed Conclusions of Law and Ordering paragraphs	
Appendix D	List of OCA-Sponsored Testimony and Exhibits admitted into the record	
Appendix E	Summary of Public Input Hearing Testimony	
Appendix F	Supplement to OCA Main Brief I. Introduction and Overview I.B. Procedural History	

TABLE OF AUTHORITIES

Cases

Atlantic Refining Co. v. Public Serv. Comm'n, 360 U.S. 378 (1959)	40
Behrend v. Bell, 242 Pa. Super. Ct. 47, 363 A.2d 1752 (1976)	
Berner v. Pa. P.U.C., 382 Pa. 622, 116 A.2d 738 (1955)	2
Burleson v. Pa. P.U.C., 461 A.2d 1234 (Pa. 1983)	2
Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n, 262 U.S. 679 (1923)	
Brockway Glass v. Pa. P.U.C., 63 Pa. Commw. 238, 437 A.2d 1067 (1981)	2
<u>City of Pittsburgh v. Pa. P.U.C.,</u> 126 A.2d 777, 785 (Pa. Super. 1956)	
<u>DeFrancesco v. West Penn Water Co</u> , 329 Pa. Sup. Ct. 508, 478 A.2d 1295 (1984)	109, 110
Donham v. Public Serv. Comm'n, 232 Mass. 309, 122 N.E. 397 (1919)	
Duquesne Light Co. v. Barasch, 488 U.S. 299 (1989)	
<u>Federal Power Comm'n v. Hope Natural Gas Co.,</u> 320 U.S. 591 (1944)	13, 15, 40
<u>Federal Power Comm'n v. Natural Gas Pipeline Co.,</u> 315 U.S. 575, 585 (1942)	12
<u>Federal Power Comm'n v. Texaco, Inc.</u> , 417 U.S. 380 (1974)	12
Lansberry v. Pa. P.U.C., 578 A.2d 600 (Pa. Commw. 1990)	2

Lower Frederick Twp. Water Co. v. Pa. P.U.C.,
48 Pa. Commw. 222, 409 A.2d 505 (Pa. Cmwlth. 1980)2, 15
Market St. R. Co. v. Railroad Comm'n of Ca.,
324 U.S. 548 (1945)
Missouri, Kansas & Topeka Railway Co. v. Interstate
<u>Commerce Comm'n</u> , 164 Fed. 645 (1908)13
National Fuel Gas Dist. Corp. v. Pa. P.U.C.,
76 Pa. Commw. 102, 464 A.2d 546 (1983)
Pennsylvania Indus. Energy Coalition v. Pa. P.U.C.,
653 A.2d 1336 (Pa. Commw. 1995)
Permian Basin Area Rate Cases, 390 U.S. 747 (1968)
Philadelphia Elec. Co. v. Pa. P.U.C.,
93 Pa. Commw. 410, 502 A.2d 722 (1985)
Pittsburgh v. Pa. P.U.C.,
165 Pa. Super. 519, 69 A.2d 844 (1949)
Popowsky v. Pa. P.U.C.,
683 A.2d 958 (Pa. Cmwlth. 1996) passim
University of Pennsylvania v. Pa. P.U.C.,
86 Pa. Commw. 410, 485 A.2d 1217 (1984)2
Riverton Consol. Water Co. v. Pa. P.U.C.,
140 A.2d 114 (Pa. Super. 1958)

Administrative Cases

Application of Aqua Pennsylvania Wastewater, Inc.,	
Docket No. A-2017-2605434, Order (Nov. 8, 2017)	51
Application of Aqua America, Inc., et al.,	
Docket Nos. A-2018-3006061, Order (Jan. 24, 2020)	
Application of California-American Water Co.,	
2018 Cal. PUC LEXIS 628 (Dec. 20, 2018)	
	, ,
Blue Bird Coach Lines. Inc.,	
72 Pa PUC 262 (1990)	107
7210.100.202 (1990)	

<u>Implementation of Act 11 of 2012</u> , Docket No. M-2012-2293611, Order (Sept. 21, 2016)	25
In re: Tennessee American Water Co.'s Response to the Commission's Investigation on the Impact of Federal Tax Reform on the Public Utility Revenue Requirements, 2020 Tenn. PUC LEXIS 101 (Aug. 3, 2020)	34
In the Matter of the Petition of New Jersey-American Water Co., Inc., Docket Nos AX18010001 <i>et al.</i> Order (N I Bd Pub Util, Oct. 28, 2020)	34
Joint Application of Pennsylvania-American Water Co. and the Sewer Authority of the City of Scranton, Docket No. A-2016-2537209, Order (Oct. 19, 2016)	64
Joint Application of T.W. Phillips Gas and Oil Co., Docket No. A-2010-2210326, Order (May 23, 2011)	93
Kentucky Public Serv. Comm'n, Electronic Application of Kentucky-American Water Co. for an Adjustment of Rates, 2019 Ky. PUC LEXIS 663 (June 27, 2019)	28, 29
Pa. P.U.C. v. Aqua Pa, Inc., 99 Pa. PUC 204 (2004)	48
Pa. P.U.C. v. City of Bethlehem, 2011 Pa. PUC LEXIS 190 (2011)	3
Pa. P.U.C. v. City of Dubois, Docket No. R-2016-2554150, Order (Mar. 28, 2017)	48
Pa. P.U.C. v. City of Lancaster – Bureau of Water, 2011 Pa. PUC LEXIS 1685 (2011)	48
<u>Pa. P.U.C. v. Duquesne Light Co.,</u> 59 Pa. PUC 67, 91 (1985)	17-18
Pa. P.U.C. v. Equitable Gas Co., 57 Pa. PUC 423 (1983)	2
Pa. P.U.C. v. Emporium Water Co., 2008 Pa. PUC LEXIS 2076 (2006)	48
Pa. P.U.C. v. Emporium Water Co., 95 Pa. PUC 191, 208 PUR4th 502 (2001)	39, 48
Pa. P.U.C. v. National Fuel Gas Dist. Corp., 67 Pa. PUC 264 (1988)	48

Pa	P.U.C. v. National Fuel Gas Dist. Corp., 73 Pa, PUC 552 (1990)
D	751a.10C 552(1770)
<u>Pa</u>	<u>P.U.C. v. Pennsylvania-American Water Co.,</u> 2017 Pa. PUC LEXIS 249 (Dec. 7, 2017)105
п	
<u>Pa</u>	<u>P.U.C. v. Pennsylvania-American Water Co.,</u> 71 Pa. PUC 210 (1989)
р.	DUC Dramatica American Weter Co
<u>Pa</u>	<u>P.U.C. v. Pennsylvania-American Water Co.,</u> 99 Pa. PUC 38 (2004)
п	
<u>Pa</u>	P.U.C. v. Pennsylvania-American Water Co., Docket No. R-2013-2355276, Order (Dec. 19, 2013)
п	
<u>Pa</u>	<u>P.U.C. v. Pennsylvania-American Water Co.,</u> Docket No. R-2017-2595853 (Dec. 7, 2017)
п	
<u>Pa</u>	61 Pa. PUC 409. 74 PUR4th 238 (1986)
р.	DUC Dramatic Drama Ca
<u>Pa</u>	<u>55 Pa. PUC 552 (1982)</u>
Do	DUC v The Deeples Network Cos Co
<u>r a</u>	69 Pa. PUC 1 (1989)
Da	PUC v Philadelphia Gas Works
<u>1 a</u>	Docket No. R-00005654, Order (Nov. 22, 2000)
Pa	P II C v Philadelphia Suburban Water Co
<u>1 u</u>	1991 Pa. PUC LEXIS 206 (Oct. 18, 1991)
Pa	PUC v Philadelphia Suburban Water Co
<u>1 u</u>	71 Pa. PUC 593, 623 (1989)
Pa	P.U.C. v. PPL Electric Util. Corp.,
	237 P.U.R.4th 419 (PaPUC 2004)2
Pa	P.U.C. v. PPL Electric Util. Corp.,
	Docket No. R-2012-2290597, Order (Dec. 28, 2012)
Pa	P.U.C. v. Roaring Creek Water Co.,
	87 Pa. PUC 826, 844 (1997)
Pa	P.U.C. v. UGI Utilities – Elec. Div.,
	Docket No. R-2017-2640058, Order (Oct. 25, 2018)

Pa. P.U.C. v. York Water Co.,	
75 Pa. PUC 134 (1991)	48
Proceeding on Motion of the Commission on Changes in Law that May Affect	
Rates, 2018 N.Y. PUC LEXIS 393 (Aug. 9, 2018)	34
Re Utility Rates During Economic Emergency,	
3 P.U.R. NS 123 (Pa. PSC 1934)	14
Do VID Troval Sorra Inc.	
<u>Ke v.i.P. Traver Servs., Inc.,</u>	105
56 Pa. PUC 625 (1982)	107
Tariff Provisions that Limit the Liability of Utilities for Injury or Damage as a	
Result of Negligence or Intentional Torts, Policy Statement, 29 Pa. Bull. 2147-	
2149 (Nov. 19, 1998)	109

Statutes

02 passim	66 Pa. C.S. §
15(a)1, 15	66 Pa. C.S. §
15(e)	66 Pa. C.S. §
23(a)92	66 Pa. C.S. §
102(a)	66 Pa. C.S. §
103(a)	66 Pa. C.S. §
311(c) passim	66 Pa. C.S. §
329 passim	66 Pa. C.S. §
329(c)	66 Pa. C.S. §
329(d)(1)(v)	66 Pa. C.S. §
329(d)(4)	66 Pa. C.S. §
329(d)(5)	66 Pa. C.S. §
33023, 25	66 Pa. C.S. §
357(a)(1)25	66 Pa. C.S. §
358(b)(2)	66 Pa. C.S. §

66 Pa. C.S. § 1358(b)(3)	25
66 Pa. C.S. § 1501	93
66 Pa. C.S. § 1504	

Regulations

52 Pa. Code § 65.3	
52 Pa. Code § 65.20	
52 Pa. Code § 69.87	110
52 Pa. Code § 69.3301	21
52 Pa. Code § 69.3302	21
52 Pa. Code § 69.3302(a)(4)	21

Other Authorities

C. Warren Campbell,	70
Western Kentucky University Stormwater Utility Survey 2019	
Manual of Practice No. 27, Financing and Charges for Wastewater Systems,	
Water Environment Federation	80
Public Utility Economics, Garfield and Lovejoy (1964)	

I. INTRODUCTION AND OVERVIEW

The OCA is providing this 120-page version of its Main Brief in compliance with the directive contained in Administrative Law Judge Johnson's November 17, 2020 email. For brevity, the OCA's introduction (Section I) and discussion of procedural history (Section I.B.) are provided in Appendix F to this brief. The OCA will not address the remaining subheadings under Section I, but reserves the right to respond in its Reply Brief, as necessary, to the statements and arguments made by other parties.

The OCA will provide its response to the non-unanimous settlement petition by November 20, 2020, as directed by Administrative Law Judge Conrad A. Johnson.¹ Tr. at 533-34.

- A. <u>Description of Company</u>
- B. <u>Procedural History</u>
- C. <u>Overview of PAWC's Filing</u>
- D. <u>Overview of the Non-Unanimous Settlement</u>
- E. <u>Burden of Proof</u>

PAWC bears the burden of proof to establish the justness and reasonableness of every

element of its requested rate increase. As set forth in Section 315(a) of the Public Utility Code:

Reasonableness of rates – In any proceeding upon the motion of the Commission, involving any proposed or existing rate of any public utility, or in any proceedings upon the complaint involving any proposed increase in rates, the burden of proof to show that the rate involved is just and reasonable shall be upon the public utility.²

The Commonwealth Court interprets this principle as follows:

Section 315(a) of the Public Utility Code, 66 Pa. C.S. § 315(a), places the burden of proving the justness and reasonableness of a proposed rate hike squarely on the

¹ ALJ Johnson agreed to consider a request for additional time to submit the response to the Exhibits filed on November 6, 2020, if the OCA determines that additional time is needed.

² 66 Pa. C.S. § 315(a).

utility. It is well-established that the evidence adduced by a utility to meet this burden must be substantial.³

The Pennsylvania Supreme Court has stated that the party with the burden of proof has a formidable task to show that the Commission may lawfully adopt its position. Even where a party has established a prima facie case, the party with the burden must establish that "the elements of that cause of action are proven with substantial evidence which enables the party asserting the cause of action to prevail, precluding all reasonable inferences to the contrary."⁴ Furthermore, it is well-established that the "degree of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of the evidence."⁵ Additionally, the evidence must be substantial and legally credible, and cannot be mere "suspicion" or a "scintilla" of evidence.⁶ Thus, a utility has an affirmative burden to establish the justness and reasonableness of every component of its rate request.

Pennsylvania law is clear that there is no similar burden for a party proposing an adjustment to a utility base rate filing.⁷ In <u>Berner</u>, the Pennsylvania Supreme Court stated:

[T]he appellants did not have the burden of proving that the plant additions were improper, unnecessary or too costly; on the contrary, that burden is, by statute, on the utility to demonstrate the reasonable necessity and cost of the installations and that is the burden which the utility patently failed to carry.⁸

The Commission recognizes this standard in its rate determinations.⁹ Thus, the burden is not on the OCA, or any challenger, to prove that PAWC's proposed rates are unjust, unreasonable, or not in the public interest. Instead, Pennsylvania law requires only that the OCA show how PAWC failed

³ <u>Lower Frederick Twp. v. Pa. P.U.C.</u>, 48 Pa. Commw. 222, 226-27, 409 A.2d 505, 507 (1980) (citations omitted) (<u>Lower Frederick</u>); <u>see also Brockway Glass v. Pa. P.U.C.</u>, 63 Pa. Commw. 238, 437 A.2d 1067 (1981).

⁴ <u>Burleson v. Pa. P.U.C.</u>, 461 A.2d 1234, 1236 (Pa. 1983).

⁵ Lansberry v. Pa. P.U.C., 578 A.2d 600, 602 (Pa. Commw. 1990).

⁶ <u>Id.</u>

⁷ <u>See, e.g.</u>, <u>Berner v. Pa. P.U.C.</u>, 382 Pa. 622, 116 A.2d 738 (1955).

⁸ Berner, 382 Pa. at 631, 116 A.2d at 744.

⁹ <u>Pa. P.U.C. v. Equitable Gas Co.</u>, 57 PaPUC 423, 471 (1983). <u>See also University of Pennsylvania v. Pa. P.U.C.</u>, 86 Pa. Commw. 410, 485 A.2d 1217 (1984); <u>Pa. P.U.C. v. PPL Elec. Util. Corp.</u>, 237 PUR4th 419 (PaPUC 2004).

to meet its burden of proof. While subtle, this critical distinction shows that parties opposing a utility in a rate proceeding need only to shift the burden of going forward to prevail. The burden of proof will not shift to an intervener that is challenging the requested rate increase.¹⁰

In sum, PAWC must affirmatively demonstrate the reasonableness of every element of its claims and demonstrate that its proposed rates are just, reasonable, and in the public interest. The OCA will show that PAWC has failed to satisfy its statutory burden in the manner set forth below.

II. SUMMARY OF ARGUMENT

This Commission should not approve any rate increase for PAWC at this time. PAWC's customers, and indeed the entire Commonwealth, remain firmly in the grip of the COVID-19 pandemic. Due to the extreme economic and personal hardships being endured by PAWC's customers, and the public in general, any rate increase at this time would not result in just and reasonable rates. If the Commission should decide, however, that it wants to proceed with a "business as usual approach, the OCA has presented testimony on water and wastewater revenue requirements, including cost of capital, that establish that there is no need for rates to increase at this time. The OCA has also presented testimony opposing the multiyear rate plan and trackers proposed by PAWC that serve only to increase rates between rate cases and for years into the future without any safeguards or evidence that its projections are reasonable. In particular, the OCA strongly recommends that the Commission deny the Company's novel Regionalization and Consolidation Surcharge as it is unreasonable to require ratepayers to pay a surcharge for the Company's expansion efforts. The OCA also has identified the large subsidies that water customers are being asked to bear and has recommended reasonable ratemaking alternatives. In addition, the

¹⁰ Pa. P.U.C. v. City of Bethlehem, 2011 Pa. PUC LEXIS 190, *11.

OCA has identified numerous issues related to the low-income programs, customer service, and quality of service that need to be addressed.

The financial impacts of the pandemic will affect every aspect of the proposed two-year multiyear rate plan, including revenues, operating expenses, capital expenditures, and the cost of debt yet PAWC has not modified its proposals. Many of the customers who testified at the public input hearings expressed concerns about their ability to pay their current water and wastewater bills due to the impact of the pandemic and expressed concern about the large proposed increases. Based on the evidence presented here and the compelling testimony presented at the public input hearings, PAWC cannot meet its burden of proof to show that its multitude of requests will result in just and reasonable rates.

III. OVERALL POSITION ON RATE INCREASE

A. <u>Introduction</u>

The OCA strongly urges that the Commission, at a minimum, deny PAWC's rate increase requests to protect the ratepayers in PAWC's service territory who are, and will be, experiencing unemployment and income loss due to the unprecedented and continuing COVID-19 pandemic. The OCA is not recommending that PAWC should have rates that are inadequate to ensure the provision of safe and reliable service to its customers. OCA St. 1 at 28. As described in this Main Brief, PAWC could continue operations, recover all of its expenses, and earn a profit with no revenue increase. <u>Id.</u> In these extraordinary times, denying PAWC's rate increase is a reasonable— and temporary—outcome until fewer customers are suffering financially and the future is more ascertainable for ratemaking.

While perhaps not as much profit as PAWC would like¹¹, but more than the OCA's accounting and financial experts recommend, the overall rate of return of 7.70% for water and 2.84% for wastewater without any change in rates is more than adequate. <u>See</u> OCA App. A.1, Table I (Total Water), Table I (Total Wastewater). As OCA Witness Rubin stated: "Most Pennsylvania businesses would be absolutely thrilled if they could pay all their bills (including various increases in expenses that may or may not occur next year), make all of their debt payments, and still have enough left over to earn a profit on their equity investment." OCA St. 1 at 28-29.

Further, the OCA submits that the Commission should not rely on PAWC's FPFTY projections and related assumptions which were developed before the pandemic emerged. Mr. Rubin noted that this applied to "essentially every aspect of the Company's projections." <u>Id.</u> at 29. He explained that interest rates have dropped to near zero, oil prices have plunged and consumer prices have barely changed. OCA St. 1 at 29. If PAWC is concerned about operating revenues during this uncertain time and moving forward, PAWC could defer new construction projects that are not necessary to ensure the current provision of safe and reliable service to existing customers. <u>Id.</u> at 30. Mr. Rubin explained that some utilities are refinancing and issuing debt at historically low levels. <u>Id.</u> Additionally, PAWC could file rate cases after the pandemic once the "dust settles" and reliable and complete evidence of the full effect of the pandemic will be available to determine just and reasonable rates.

There is precedent supporting the Commission's authority to determine that raising rates would not be just and reasonable during this time of extreme economic hardship for ratepayers.

¹¹ The OCA's revenue requirement recommendations, absent any consideration of the pandemic or shift of any water or wastewater revenue requirement, result in an overall sufficiency of (\$70,274,184) for water operations excluding Steelton and a revenue deficiency of \$1,940,190 for Water-Steelton. The OCA's recommendation for wastewater is a total increase of \$30,906,732 for all wastewater divisions. See OCA Appendix A.2, Table I, for each of the revenue requirements.

OCA St. 1 SR at 21-22. In addition, the reasonable rate of return that a Company is awarded within the constitutional parameters is within the Commission's discretion and must reflect current economic circumstances. The OCA therefore submits that increasing PAWC's water and wastewater rates during the COVID-19 pandemic is not only unnecessary at this time, but would not lead to just and reasonable rates given PAWC ratepayers' reduced incomes and ability to pay and the economic uncertainties of PAWC's FPFTY projections in its rate increase filings.

B. <u>The Economic Hardships of PAWC's Ratepayers During and After This Pandemic</u> <u>Should Play a Prevalent Role in the Commission's Decision on Increasing Rates.</u>

The economic repercussions of the COVID-19 pandemic—to the extent yet known—are real and significant in PAWC's service territory and the OCA submits that the Commission must give great weight to the circumstances of consumers during these extraordinary times. As of mid-July, the unemployment rates in the counties served in whole or in part by PAWC ranged from 8.8% in Centre County to 17.4% in Monroe County. OCA St. 1 at 14-15, Fig. 4, Sch. SJR-1. In mid-August, the picture was not substantially better, with unemployment rates in the counties served in whole or in part by PAWC ranging from 6% to 13.1%. Figure 4 updated at Sch. SJR-10-SR at 2.

As a consequence of the massive job losses across Pennsylvania, there were 30 times as many initial unemployment claims during the week ending March 21, 2020 and 33 times as many during the next week ending March 28, 2020 than the amount during the week ending March 7, 2020 as shown in shown in OCA St. 1 SR, Sch. SJR-10-SR at 1, Figure 3 (Updated). As shown on the updated Figure 3, at the end of September, initial unemployment claims have declined since peaking in March at 400,000 claims in one week, but the level of initial unemployment claims in September were still about 50% higher than it was in February 2020. OCA St. 1 SR at 3. During September, between 22,000 and 23,000 Pennsylvania workers filed initial unemployment claims

each week. Id. Mr. Rubin explained that in the space of 6.5 months (mi-March to the end of September), "more than 39 percent of Pennsylvania's workforce filed an unemployment claim."

According to a survey conducted by the U.S. Census Bureau, roughly 50% of Pennsylvania households experienced wage loss from March 13, 2020 through July 21, 2020 and, while down a bit at the end of September, the number of households experiencing wage loss was still approximately 45%. OCA St. 1 SR at 3; Sch. SJR-10-SR at 3, Figure 5 (Updated).

Given the substantial reductions in employment and wages, there is an unusually large pool of ratepayers unable to afford utility bills. To address the prospect of Pennsylvanians experiencing job and wage loss to afford bill payments, Mr. Rubin cites the U.S. Census Bureau's Household

Pulse Survey, testifying:

Only 60% of Pennsylvanians who lost income said they used their normal source of income to pay bills in the previous week. About 26% cited unemployment benefits and 27% referred to the CARES Act stimulus payments. More people, however, relied on credit card debt or loans (including loans from family or friends) (40%) or money from savings or asset sales (35%) than relied on short-term government benefits.

OCA St. 1 at 18. For utility bills specifically, Mr. Rubin testified:

A recent survey conducted by the Electric Power Research Institute ("EPRI") found that about two-thirds of people who lost their jobs during the pandemic are concerned about being able to pay their energy bills. Moreover, more than 20% of survey respondents reported that their energy bills were higher because of the pandemic. Interestingly, the survey also found that more than 25% of people who lost their jobs are planning to skip at least one utility bill payment, but a much lower percentage were planning to contact their utilities for assistance.

Id. at pp. 18-19 (footnote omitted); Sch. SJR-5, pp. 3, 7, 12. The OCA submits that PAWC's customers, a significant portion of whom it is reasonable to assume are experiencing a situation that aligns with the pandemic-related job and wage loss mentioned in Mr. Rubin's testimony, cannot reasonably withstand a rate increase at this time. Many of the customers who testified at the Public Input Hearings were concerned about being able to pay their bills including higher water and/or wastewater bills, especially when many have lost their jobs, or are suffering from the financial effects of COVID-19, that the increase was large, that the company should forego any rate increase during this time of economic difficulties for individuals and businesses. State Senator Schwank testified that she was very disturbed that significant rate increases were being discussed in the middle of an economic catastrophe caused by COVID-19. Tr. 82-83. The OCA has provided a summary of the public input hearing testimony as Appendix E, attached to this Main Brief.

It should be further recognized that the economic repercussions of the pandemic are affecting minorities and individuals of lower income the most. In highlighting this disparity, Mr. Rubin testified:

...the lower a household's income, the greater the impact of the pandemic on income loss. Similarly, households headed by a person who the Census Bureau categorizes as being Black or Hispanic are much more likely to have experienced an income loss -- and to expect additional income loss into mid-August -- than are households headed by a White, Non-Hispanic.

OCA St. 1 at 17-18. The OCA submits that water and wastewater rate increases in the PAWC service territory will not only increase the financial burden faced by customers experiencing job and wage loss due to the pandemic, but will likely increase that burden particularly on those individuals belonging to low-income and Black or Hispanic households.

In rebuttal, Company witness Cawley claimed that Mr. Rubin's testimony "ignored substantial state and federal aid provided in response to the COVID-19 pandemic." PAWC St. 14-R at 5. Mr. Rubin explained that this statement was incorrect. OCA St. 1 SR at 20. Mr. Rubin provided a discussion in his direct (OCA St. 1 at 18) and an accompanying schedule (SJR-4). In surrebuttal, Mr. Rubin updated SJR-4 as page 8 of SJR-10-SR. He explained that the update shows:

[A]s of September 28 only 50% of Pennsylvania households were able to use their regular source of income to pay their bills. About 21% cited unemployment benefits and 28% referred to the CARES Act stimulus payments. Indeed, more people had to rely on credit card debt or loans (including loans from family or friends) (39%) or money from savings or asset sales (27%) than relied on short-term government

benefits. Thus, I reject the implication that government benefits have been sufficient to compensate most people for the loss of income during the pandemic.

OCA St. 1 SR at 20. In addition to residential customers, businesses in PAWC's service territory

have also been impacted substantially from the pandemic. Mr. Rubin testified:

The outlook for small business is slightly better than it was when I prepared my initial testimony, but still dire. On pages 19-20 of OCA Statement 1, I summarized the results of the Census Bureau's Small Business Pulse Survey for Pennsylvania. At the end of August, that survey reported that 46% of Pennsylvania's small businesses expected it to take six months or more to return to a normal level of operations, with another 11% saying their business would never fully recover. In the week ending October 3, 44% of Pennsylvania's small businesses said they would take at least six months to recover.

OCA St. 1 SR at 3; see also OCA St. 1 at 19-20.

From the above information, drawn from surveys and reports on the economic well-being

of households and businesses both in PAWC's service territory and in Pennsylvania from the start

of the pandemic, Mr. Rubin recommends that at a minimum, rates in PAWC's service territories

not be raised at this time. OCA St. 1 at 4-5. This data, collectively, demonstrates why the economic

hardships faced by customers in PAWC's service territories should not be added to by any increase

in PAWC's rates at this time.¹²

Raising rates on PAWC's customers while many are experiencing job and wage loss would only serve to further diminish their currently-reduced incomes and financial resources. The OCA

¹² In rebuttal, PAWC witness Cawley cited consumer price data from July to rebut Mr. Rubin's statement that businesses are not able to sustainably increase their prices. PAWC St. 14-R at 26-27. Mr. Rubin explained that the figures cited by Mr. Cawley regarding the all-urban Consumer Price Index (CPI) need to be put in perspective. In February 2020, the last full month before the economic collapse, the CPI was 258.678. It dropped to 256.389 or by 0.9%, in April. OCA St. 1 SR at 22. In July, it had increased to 259.101 or where it had been prior to the shut-down of segments of the economy in March. Mr. Cawley also referred to a 0.6% increase in the producer price index (PPI) in July. Mr. Rubin explained that the PPI measures the price suppliers are able to charge to businesses for goods and services used by the business in its retail products. OCA St. 1 at 22. Mr. Rubin noted that the PPI has been recovering more slowly than the CPI, indicating "that the economy is still far from having fully recovered." Id. Further, the PPI was 118.6 in February 2020, fell to 116.6, or by 1.7%, in April 2020 and had "recovered" to 118.0 in July 2020, or 0.5% below the pre-pandemic level. Id. at 22-23. In September, the PPI was at 118.9, or 0.3% higher than February 2020. Id. at 23. The OCA submits that the CPI and PPI numbers show a return to near-February 2020 levels, but disagree that these numbers, alone or reviewed in context with the data presented by Mr. Rubin, reflect an economic recovery.

submits that the unprecedented situation at hand provides ample basis for the Commission to deny such an increase during this time.

C. <u>Rejecting PAWC's Rate Increase Requests During an Unprecedented and</u> Economically Devastating Pandemic Would Result in Just and Reasonable Rates.

Mr. Rubin recommends that the Commission not focus, in this proceeding, on PAWC's historic costs, or on cost projections prepared before the pandemic, under a business as usual approach. Rather, the Commission "must focus on what rates are reasonable for consumers to pay under these extraordinary conditions." OCA St. 1 at 22. While this is not the Commission's standard approach to ratemaking, these ratemaking conditions are not standard by any means. Based on the reasons discussed below, it is both legal and practical for the Commission to consider the unprecedented public health and economic crisis and the grave economic environment and financial hardships faced by PAWC's customers in denying PAWC any rate increases at this time. Such consideration will still result in just and reasonable rates and indeed, is necessary to determining just and reasonable rates at this time.¹³

¹³ In further support of his recommendation against the rate increases requested by PAWC, Mr. Rubin also cites many examples where utilities have either withdrawn or deferred filing rate increase requests to provide relief to their customers who are likely spending more time at home and/or experiencing some level of income loss during this pandemic. OCA St. 1 at 25-26. Other public utilities, including some in Pennsylvania, have recognized the increased hardships that would be placed on their customers if they were to charge higher rates at the time. Mr. Rubin provides some examples in his testimony:

Minnesota Power significantly reduced its requested rate increase and is refunding more than \$12 million to customers to help alleviate pandemic-related financial concerns.

[•] California Water Service Co. is eliminating all scheduled rate increases during 2020.

[•] Chelan County (Washington) Public Utility District is postponing previously approved increases in electric, water, and wastewater rates by six months to provide customers some relief during the pandemic.

[•] The City of Austin (Texas) reduced its electricity rates by about 4%, eliminated the residential price increment for usage in excess of 1,000 kilowatt-hours per month, and reduced rates for residential water and wastewater consumption by 10%.

[•] PEPCO, the electric utility serving the District of Columbia and surrounding areas, announced on June 1st that it would forego a \$25 million rate increase scheduled for this year in D.C., make a shareholder donation to its low-income assistance fund, and take other actions to assist customers during the pandemic.

[•] A report by Moody's Investors Service expects similar delays in numerous electric, gas, and water utility rate proceedings throughout the U.S. as a way of providing some relief to consumers during the pandemic.

[•] Most recently, Philadelphia Water Department withdrew its pending request for increases in water, wastewater, and stormwater rates that would have become effective in September 2020 and September 2021.

1. <u>PAWC Does Not Need to Increase Rates Right Now.</u>

OCA witness Rubin found that, not only are PAWC's continued pursuit of its proposed rate increases suspect due to the drastic change in the economic environment, but PAWC would have enough revenue to continue safe and reliable operations if its rates were to remain unchanged. On the topic of PAWC's alleged need to increase rates, Mr. Rubin testifies:

In the historic test year (twelve months ending December 31, 2019), under its existing rates, PAWC had per books net income of \$173.9 million for water operations (excluding Steelton). This provided the Company with a return on common equity of approximately 8.69%.

OCA St. 1 at 28 citing PAWC Exh. 3-A, pp. 1, 70. Even assuming some of PAWC's FPFTY projections are accurate, OCA Witness Ralph Smith concluded that PAWC had a revenue sufficiency for water of \$68,333,994 and a rate increase of \$30,906,901 for wastewater under traditional ratemaking, but that number remains speculative given the uncertainty of the projections and future operations. OCA St. 2SR at 5-6; OCA Exh. LA-6, Sch. A. Simply put, in the near term, PAWC's rates are adequate at this time. After the COVID-19 pandemic has passed, PAWC can file again for rate increases when the Company's financial projections will be founded on more stable, and thus predictable, economic conditions.

The current and projected ratepayer affordability of rates gives strong weight to the conclusion that granting PAWC's rate requests in this proceeding would unnecessarily harm ratepayers and not result in just and reasonable rates. If, however, the economic situation worsens significantly and cash flow becomes a concern for PAWC, the Company could preserve cash by deferring for several months certain construction projects, such as growth-related projects or longer-term system rehabilitation activities, which are not needed to ensure the current provision of safe

In a June 2020 filing, the utility cited "the on-going pandemic and the uncertainty over the anticipated duration of continuing emergency measures.

Id. (footnotes omitted).

and reliable service to existing customers. OCA St. 1 at 30. In addition, Mr. Rubin explained that other large utilities have been taking advantage of the very low cost of debt and issuing 10-year notes or bonds at what are historically low interest rates. <u>Id.</u> He explained that low-cost, long-term financing can help provide cash flow needed to keep existing rates in effect throughout the pandemic without suffering significant economic harm.¹⁴ <u>Id.</u> Given the vast uncertainty and lack of support for PAWC's claimed costs, the OCA submits that rate increases at this time are not necessary or reasonable.

2. <u>Case Law From Similar Economic Circumstances Provides Precedent For</u> the Commission to Deny A Rate Increase Due to Extreme Customer Hardships.

A rejection of PAWC's rate increases due to the economic hardships and uncertainties accompanying the COVID-19 pandemic as well as the uncertainties surrounding the FPFTY projections, while not common by any means, would be a legally viable and not an unprecedented ratemaking solution during this abnormal time. OCA St. 1 at 22-24. When it comes to ratemaking, "[a]ll that is protected against, in a constitutional sense, is that the rates fixed by the Commission be higher than a confiscatory level." <u>Federal Power Comm'n v. Texaco, Inc.</u>, 417 U.S. 380, 392-92 (1974) (citing Federal Power Comm'n v. Natural Gas Pipeline Co., 315 U.S. 575, 585 (1942)). On the topic of rate of return, the U.S. Supreme Court has held:

[t]he return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. <u>A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.</u>

¹⁴ Mr. Rubin noted that he had seen recent headlines for a gas utility issuing debt at a 2.2% interest rate and a utility in the southern U.S. issuing debt at 1.75%. OCA St. 1 at 30, n. 38 and 39. PAWC's weighted cost of debt is in the range of 4.5%. <u>Id.</u> at n. 40; PAWC Exh. 3-A, p. 70.

<u>Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n</u>, 262 U.S. 679, 693 (1923) (<u>Bluefield</u>). The Court has also held that, "whether a particular rate is 'unjust' or 'unreasonable' will depend to some extent on what is a fair rate of return given the risks under a particular rate setting, and on the amount of capital upon which the investors are entitled to earn on that return." Duquesne Light Co. v. Barasch, 488 U.S. 299, 310 (1989) (Duquesne Light).

It is clear that the Commission is required to balance the consumer and utility's interests. "The rate-making process..., *i.e.*, the fixing of 'just and reasonable' rates, involves a balancing of the investor and consumer interests . . . and does not insure that the business shall produce revenues." <u>Federal Power Comm'n v. Hope Natural Gas Co.</u>, 320 U.S. 591 (1944) (<u>Hope</u>). "The owners of a property dedicated to the public service cannot be said to suffer injury if a rate is fixed for an experimental period, which probably will produce a fair return on the present fair value of their property." <u>Market St. R. Co. v. Railroad Comm'n of Ca.</u>, 324 U.S. 548 (1945).

During the last large-scale nationwide pandemic, the Influenza of 1918, the Supreme Judicial Court of Massachusetts upheld a public service commission ratemaking order that was not expected to permit the utility to earn a profit due to the abnormal times. <u>Donham v. Public Serv.</u> Comm'n, 232 Mass. 309, 317, 122 N.E. 397, 401 (1919) (Donham). The court's stated:

To be just and reasonable, within the meaning of the constitutional guaranty, the rates must be prescribed with reasonable regard for the cost to the carrier of the service rendered and for the value of the property employed therein; but <u>this does not mean that regard is to be had only for the interests of the carrier, or that the rates must necessarily be such as to render its business profitable, for reasonable regard <u>must also be had for the value of the service to the public</u>. And where the cost to the carrier is not kept within reasonable limits, or <u>where for any reasons its business cannot reasonably be so conducted as to render it profitable the misfortune must fall upon the carrier, as would be the case if it were engaged in any other line of business.¹⁵</u></u>

¹⁵ <u>Id.</u>, 232 Mass at 317, 122 N.E. at 401 (emphases added; quoting <u>Missouri, Kansas & Topeka Railway Co. v. Interstate</u> <u>Commerce Comm'n</u>, 164 Fed. 645 (1908)).

Although the utility was facing hardships of its own, the court noted that it did not deprive the commission of its regulatory responsibility to "exercise its judgment for the protection of the public interests when it does not reduce substantially the revenue proposed to be exacted from the public by the owners of the public utility." <u>Donham</u>, 232 Mass. at 326, 122 N.E. at 405. In addition, the court emphasized that the rates were "likely to be impermanent and experimental." <u>Id.</u> In reference to this case, Mr. Rubin testified that:

[t]he idea that ratemaking must adapt to extraordinary conditions is neither new nor novel. A century ago during another serious pandemic, regulators adapted, took actions that provided relief to the public, and did not inflict long-term harm on the utility.

OCA St. 1 at 24.

Here in Pennsylvania during the Great Depression, the Public Service Commission (PSC) called on utilities to reduce rates so that they would earn no more than 6% on their rate base. <u>Re</u> <u>Utility Rates During Economic Emergency</u>, 3 P.U.R. NS 123 (Pa. PSC 1934); PAWC Exh. JHC-3R. In recognition that societal economic conditions should affect utility ratemaking, the PSC stated, "this Commission should take cognizance of the present economic conditions prevailing in the United States and as such economic conditions particularly affect the welfare of the people of this commonwealth." <u>Id.</u> at 124. Similar to the result of the case in Massachusetts during the Influenza and the PSC's action in response to the Great Depression, the OCA's proposal to deny PAWC's proposed increases in rates reflects both a viable and reasonable solution to the abnormal and unexpected set of circumstances under which the Commission is currently tasked with developing just and reasonable rates for a population of ratepayers financially distressed by a nationwide pandemic.

Denying PAWC's requested rate increase due to the current societal economic conditions would be an appropriate and valid exercise of the Commission's authority in this proceeding. Section 315(a) of the Public Utility Code places the burden of proving the reasonableness of a proposed rate on the utility. 66 Pa. C.S. § 315(a). The evidence necessary to meet that burden must be substantial.¹⁶ PAWC has not proven that rate increases would be just and reasonable at this time.

The Commission would be fully within its authority to reject PAWC's rate increase requests due to the current economic conditions because (1) rates would not be confiscatory as it is projected that the Company would continue to earn a profit in the near future and (2) simply put, it is only the opportunity to earn a fair return that a utility is entitled to. As the U.S. Supreme Court held in <u>Hope</u>, the "lowest reasonable rate" is one that is not confiscatory in the constitutional sense.¹⁷ The OCA's calculations demonstrate that, at PAWC's current rates, it will still earn a 7.70% and 2.84% rate of return for water and wastewater, respectively. <u>See</u> OCA App. A.1, Table I (Total Wastewater). While this may not be a desirable rate of return for the Company, it is sufficient compensation in the constitutional sense and fully within the Commission's authority.

3. <u>The Principles of Public Utility Regulation Lend Support to the OCA's</u> <u>Claim That Increasing Rates During This Financially Challenging Time</u> For Ratepayers Would Not Lead to Just and Reasonable Rates.

To understand how just and reasonable rates are affected by a major economic event such as the COVID-19 pandemic, Mr. Rubin presents a valuable review of the regulated-monopoly framework of public utilities in this country and the determination of just and reasonable rates. OCA St. 1 at 7-11. Mr. Rubin testified that, "At its core, regulation is designed to protect utility consumers from what otherwise would be the unfettered power of a monopoly to set prices and the conditions of service." OCA St. 1 at 7. Mr. Rubin explains that utility regulators should attempt to set rates within the "zone of reasonableness" which captures the interests of the ratepayers, the utility's investors, officers and employees, and local governments whose residents are served by

¹⁶ Lower Frederick, 48 Pa. Commw. at 222, 409 A.2d at 507.

¹⁷ Hope, 320 U.S. at 586.

the utility. <u>Id.</u> at 8. Mr. Rubin explains that, under normal conditions, there is often an area of overlap of interests between utility customers and the utility, including its investors. <u>Id.</u> Within that area, regulators are provided a range of rates that utility customers would be willing and able to pay for service and investors would consider a reasonable return on their investment. <u>Id.</u> at 9.

However, Mr. Rubin testifies, under certain conditions the two ranges may not overlap creating no "zone of reasonableness" at all. <u>Id.</u> at 9-10. When this occurs, regulators are tasked with setting rates outside of one of the ranges, or both. <u>Id.</u> at 10. Under the above-described economic conditions faced by PAWC's customers brought on by the pandemic, the range of rates the customers would be willing and able to pay for service has shifted away from the range of rates which would, in the eyes of the utility, provide a reasonable return on investment.

In his Rebuttal Testimony, PAWC witness James H. Cawley states that "sound and accepted utility ratemaking should not be deterred by unsettling economic circumstances." PAWC St. 14-R at 22. Mr. Rubin explained why Mr. Cawley's statement is the "very antithesis of sound ratemaking in the public interest":

Utility regulators must recognize the economic environment in which utilities operate. This is supposed to be reflected not just in the authorized rate of return, but also in the ultimate rates determined to be just and reasonable. As I explained in my direct testimony, whether a rate is just and reasonable is a function not just of the utility's costs but also of the value and affordability of service to the customer.

OCA St. 1 SR at 21.

Given the description of significant income loss experienced in PAWC's service territory discussed in Section III.B above, the OCA submits that keeping rates constant is a reasonable balance and completely lawful exercise of Commission authority. While this is not the profit PAWC would prefer, there is no reasonable basis for the Company to have a higher return at this time. The OCA emphasizes that this is a temporary measure until future conditions are known.

As Mr. Rubin explained, regulation must always consider current economic conditions. Mr.

Rubin testified:

If regulation is supposed to be a substitute for market forces, then we must recognize that except for those commodities experiencing significant imbalances of supply and demand due to the pandemic, <u>competitive businesses cannot sustainably raise prices</u> when their customers' incomes have decreased significantly...Simply stated, what may have been a "just and reasonable" rate earlier this year may be unreasonable today.

OCA St. 1 at 12 (emphasis added). Mr. Rubin also stated:

Importantly, though, regulation is not designed to insulate the utility or its investors from normal market forces, technological improvements, or general economic conditions. If market forces (such as technological change) result in significant reductions in the demand for service, then the utility may not be able to recover its costs. That is not a failure of regulation, but a natural evolution of the market -- businesses fail if they cannot keep up with changes in consumers' preferences or respond to technological innovations.

Similarly, if economic conditions change such that rates become unaffordable to many customers, rates may need to be reduced in order to remain "just and reasonable from the perspective of customers.

Id. at 7-8 (emphasis added). PAWC witness Cawley disagreed with the statement that regulation

is supposed to be a substitute for market forces. PAWC St. 14-R at 27. Although this concept

would appear to be non-controversial, as Mr. Rubin based it on his decades of experience appearing

before the Commission, he provided a Commission statement that he believes contradicts Mr.

Cawley's position and accurately represents utility regulation in Pennsylvania¹⁸:

Even in general business enterprises, unfortunate or inexpedient management expenditures, even if prudently made, may not always be totally recovered from their customers; the market may not so permit as customers may reject the product or service at such cost. *Regulation provides a substitute for market influences so as to protect the interest of captive customers of the public utility.*

¹⁸ Mr. Rubin noted that Mr. Cawley was a member of the Commission in 1985 and voted in favor of the order. OCA St. 1 SR at 23.

OCA St. 1 SR at 23 (citing Pa. P.U.C. v. Duquesne Light Co., 59 Pa. PUC 67, 91 (1985) (emphasis added).

Thus, rejecting PAWC's requested rate increase at this time is an appropriate result during the COVID-19 pandemic and an appropriate response to the market imbalance caused by PAWC's customers' reduced ability to pay utility bills. As explained above, this can be done and PAWC would still have sufficient income.

4. <u>The Projections in PAWC's Early Pandemic Filing Cannot Be Given Any</u> <u>Credence in Determining Future Rates in a Vastly Different Economic</u> <u>Environment.</u>

The OCA submits that the lack of reliability of PAWC's FPFTY projections in its filing submitted just weeks after the pandemic reached its service territory is another basis for PAWC's rate increases to be rejected. Mr. Rubin testified:

The Company filed this case on April 29, 2020, when its service area -- indeed the entire world -- was being devastated with the worst pandemic in a century. While I understand that it takes months to prepare a rate filing, and that PAWC prepared this case assuming "business as usual," there was nothing that compelled it to actually file the case. To state the obvious, life and business in the Company's service territory are now anything but normal.

OCA St. 1 at 12. The OCA submits that the changes and uncertainties in FPFTY assumptions, including interest rates, inflation, and how much consumption for each customer classes and other elements that enter into the ratemaking process, could not be accurately projected in the months leading up to PAWC's April filing or relied on to make reasonable findings or conclusions in this proceeding.. <u>Id.</u> at 27. Additionally, the use of the FPFTY is discretionary and, the Commission may, at its discretion, adjust the Company's rates on the basis of it FPFTY data evidencing the accuracy of its estimates.¹⁹ Mr. Rubin testified:

¹⁹ Section 66 Pa. C.S. § 315(e) provides:

Whenever a utility utilizes a future test year or a fully projected future test year in any rate proceeding and such future test year or a fully projected test year forms a substantive basis for the final rate determination of

...I conclude that the Commission cannot have any confidence in the projections made by PAWC for the FPFTY; there is simply too much uncertainty. It would be neither just nor reasonable to set rates based on the assumptions the Company made when it filed this case in late April. <u>Virtually every assumption is changing as a result of the pandemic</u>. As a consequence, it is my opinion that it is reasonable -- I would go so far as to say required -- for the Commission to reject PAWC's request to increase its rates. <u>The Commission cannot have any certainty about the appropriate, ongoing level of expenses, interest rates, consumption patterns, and the numerous other factors that affect the determination of an appropriate level of rates.</u>

Id. at 29-30 (emphasis added). Given the devastating financial impacts on customers and the

uncertain economic future of the next few years and the unreliability of the projections, Mr. Rubin

concluded:

Faced with this unprecedented public health and economic crisis, I respectfully submit that the Commission cannot treat this case as "business as usual." Almost no other business in PAWC's service area is conducting business as usual; residential consumers are using Columbia's services differently than they do during normal circumstances (few if any people are usually at home 24 hours per day, 7 days a week, preparing every meal at home, and so on).

Respectfully, the Commission cannot focus on PAWC's historic costs, or on cost projections prepared before the pandemic, and assume that the resulting rates will be "just and reasonable." The Commission must focus on what rates are reasonable for consumers to pay under these extraordinary conditions.

<u>Id.</u> at 22. This rate increase was requested at a time of extreme uncertainty not only in terms of the economy at large, but also in terms of projected customer usage, projected expenses, projected capital expenditures, and revenue required to provide service. In addition to the effect of the COVID-19 pandemic on the Company's projections, OCA Witness Ralph J. Smith has calculated a revenue sufficiency as set forth in OCA St. 2 and Exhibit LA-6. The OCA therefore submits that the Commission should not accept PAWC's projections and at a minimum, deny PAWC's requested rate increases.

the commission, the utility shall provide, as specified by the commission in its final order, appropriate data evidencing the accuracy of the estimates contained in the future test year or a fully projected future test year, and <u>the commission may after reasonable notice and hearing</u>, in its discretion, adjust the utility's rates on the basis of such data.

⁶⁶ Pa. C.S. § 315(e) (emphasis added).
D. <u>Conclusion</u>

With an unprecedented number of ratepayers unemployed and/or experiencing income loss – during this pandemic and in the foreseeable future – it is not reasonable to expect ratepayers currently struggling to pay utility bills to have the income to cover increased natural gas bills if higher rates go into effect, especially as we approach the winter months. Ratepayers are suffering during this pandemic and granting a request for an increase in water and wastewater rates, as if PAWC should be shielded from the economic impacts caused by this pandemic, would not be just and reasonable. As stated before, the OCA calculations present that PAWC could continue water and wastewater operations, recover all of its expenses at present rates, and earn a profit in the near term. The OCA respectfully requests the Commission find that rates at present rates will provide the Company sufficient compensation for the near future and deny this rate increase as it not an appropriate time to raise the rates paid by PAWC's customers who are currently struggling to navigate these turbulent economic times.

IV. PAWC'S PROPOSED MULTI-YEAR RATE PLAN

PAWC has proposed to increase its water and wastewater rates in January 2021 by \$92.4 million (12.9%) and by \$46.2 million (5.8% above the January 2021 level) in January 2022. OCA St. 1 at 32. PAWC proposes rate increases in January 2021 and January 2022 pursuant to Section 1330 of the Public Utility Code. 66 Pa. C.S. § 1330. As discussed below, Mr. Rubin found that this is not an appropriate case to consider a multiyear rate plan (MYRP). <u>Id.</u> However, if a MYRP is approved, OCA witness Rothschild addresses considerations regarding the appropriate rate of return and OCA witness Smith provided adjustments to 2021 (Rate Year 1) and 2022 (Rate Year 2). In addition, OCA witness Alexander recommends customer service related metrics if a MYRP is approved.

Based on his experience with PAWC and in jurisdictions that use MYRP, Mr. Rubin identified three factors that make a MYRP inappropriate in this case. OCA St. 1 at 33-35. First, as discussed in Section III, *supra*, Pennsylvania is in the midst of the COVID-19 pandemic. <u>Id.</u> at 33. The pandemic affects nearly all aspects of daily life, there is uncertainty about how long it will last, and how long it will take the economy to recover. <u>Id.</u> Mr. Rubin explained that he has "serious doubts" about the reliability of PAWC's projections for 2021 and 2022. <u>Id.</u> He concluded, "With all of this uncertainty, this is not an appropriate time to project capital additions, expenses, sales, revenues, and capital costs two years into the future." <u>Id.</u>

The second factor that makes a MYRP inappropriate in this case is that one of the stated purposes of a MYRP is to delay the filing of the next rate case, while providing benefits to customers. OCA St. 1 at 33. The types of benefits a MYRP (or other alternative ratemaking) might provide were addressed by the Commission in a 2019 Policy Statement.²⁰ Id.; 52 Pa. Code §§ 69.3301-69.3302. Mr. Rubin noted that the Company did not discuss any of these factors in its testimony.²¹ Id.

The third factor that makes a MYRP inappropriate in this case, as explained by Mr. Rubin, is based on his experience in other jurisdictions that routinely use MYRPs. OCA St. 1 at 34. In his

²⁰ PAWC has failed to meet its burden of proof to support its request for a multiyear rate plan, as indicated in part, by its failure to address the Policy Statement.

²¹ Mr. Rubin, acknowledging that there are benefits and detriments to delaying a rate case, explained why it is not in the public interest to delay PAWC's next case. <u>Id.</u> at 33-34. He based his conclusion on the fourth factor listed in the Policy Statement regarding how the [alternative] "ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting." 52 Pa. Code § 69.3302(a)(4). PAWC failed to propose a separate stormwater rate in the three service areas that have combined sewer systems which are systems that transport sanitary sewage and stormwater through the same pipes (Kane, McKeesport and Scranton). OCA St. 1 at 34. As discussed in Section XII.F, *infra*, Mr. Rubin finds that "it is neither just nor reasonable for PAWC to not charge any stormwater-related costs to properties that cause those costs to be incurred and to instead have all of those costs paid either through sewer rates or by water customers." OCA St. 1 at 34. He explained that this inequity should not be perpetuated and to the extent that the MYRP would delay the next case, it would defer the implementation of separate stormwater rates that would relieve water and wastewater customers of some of this "unreasonable burden". <u>Id.</u>

experience rates for the years beyond the test year are based on specific cost increases like a contractual wage increases or specific capital plans. He explained how that process can work:

Before the start of each rate year, the utility will make a filing that documents its actual expenditures for the pre-identified items and then calculates the rate year increase and rates. Future rate levels are not set years in advance; rather a process is established that allows the utility to update particular elements of its cost of service, and to prove that the increases actually occurred, before implementing a future rate increase.

OCA St. 1 at 34. In contrast, PAWC's proposed process is that the Commission determine in this case what rates will be for 2022 and nothing can change that. OCA St. 1 at 35. Mr. Rubin explained that it will not matter if the Company installs the plant it is projecting, whether costs increase or decrease, whether the Company reduces its capital costs by taking advantage of historically low interest rates, whether sales change, or anything else changes, before 2022. <u>Id.</u> In his experience that is not how MYRPs work because no one can accurately forecast an entire revenue requirement two years in advance. He added that this issue is exacerbated while we are in the midst of the pandemic and do not know how water demand commodity prices, inflation, interest rates, or other components of the revenue requirement. <u>Id.</u>

For the reasons discussed above, Mr. Rubin recommended that the Commission reject the Company's request for a MYRP and determine rates in this case that will remain in effect until the end of PAWC's next rate proceeding. OCA St. 1 at 35. He recommended that the next rate proceeding should include separate revenue requirements and rate calculations for stormwater service in the combined sewer systems. <u>Id.</u>

In rebuttal, PAWC witness Nevirauskas discussed the Company's ability to make projections during the pandemic. PAWC St. 1-R at 8-16. It is disingenuous for PAWC to maintain that its projections made before the pandemic, and not revised, are an appropriate basis to set rates for 2021 and 2022. Mr. Rubin noted the impact that the ongoing pandemic has had during 2020, and that it may continue to have during 2021 and 2022, PAWC's Rate Years 1 and 2. These changes to all aspects of the components of the revenue requirements are not accounted for in PAWC's filed case. Mr. Nevirauskas did not address Mr. Rubin's other two concerns and no other PAWC witness discussed the OCA's recommendation to reject the MYRP. OCA St. 1 SR at 6. The OCA submits that PAWC did not support its proposed MYRP and for all of the reasons provided by Mr. Rubin, the MYRP should be rejected.

If the Commission does not accept the OCA's recommendation to reject PAWC's proposed MYRP, OCA witness Smith provided recommendations regarding the revenue requirement for 2021 and 2022 as discussed in Sections V through VIII, *infra*. OCA witness Rothschild discussed the impact on return on equity in OCA Statement 3 as discussed in Section IX, *infra*.

V. RATE BASE

A. <u>Utility Plant in Service</u>

The OCA has not raised an issue with regard to PAWC's utility plant in service.

B. Average Versus Year-End Rate Base

Under Act 58 of 2018, utilities are permitted to develop rates through the use of multiyear rate plans. <u>See</u> 66 Pa. C.S. § 1330. The use of a fully projected future test year (FPFTY) in a multiyear rate plan is intended to allow rates to be set to reflect the costs that will be incurred during each year in the MYRP the rates will be in effect. PAWC utilized two projected rate years to establish the Company's cost of service for the period ending December 31, 2021 (Rate Year 1) and December 31, 2022 (Rate Year 2) for determining its revenue requirement in this proceeding under the proposed MYRP.²² OCA St. 2 at 17. PAWC used an average rate base FPFTY for 2021,

²² If granted, PAWC's proposal would be the first multiyear rate plan in Pennsylvania approved by the Commission. OCA St. 2SR at 42.

which is the first year of its proposed MYRP and an end of year rate base for 2022, which is the second year of its proposed MYRP. OCA St. 2 at 17.

The OCA objects to the Company's use of an end of year rate base for 2022. OCA witness

Smith discusses the standardized nature and importance of using average rate base in MYRPs:

Based on my experience, in other states where multi-year rate plans are used, an average test year concept is applied for each year in the multi-year rate plan. In order to achieve matching of the revenue requirement in each year of a multi-year rate plan, the rate base is based on the average for that year, rather than upon values as of a single date. The use of an average properly matches the collection of the revenue requirement during each year of the MRP. To be clear, although the Commission has allowed the use of a year-end rate base for a FPFTY, the Commission has not allowed year-end rate base in the context of multi-year rate plans that project even further into the future. In my professional opinion, utilizing the end of year rate base for MRPs would be a radical and extreme departure from traditional ratemaking.

OCA St. 2SR at 42.23

Mr. Smith demonstrated that PAWC has overstated its cost of service for Rate Year 2 in its MYRP by reflecting costs at end of year levels rather than at the levels of costs that will be experienced during Rate Year 2. OCA St. 2 at 17-18. In other words, rather than reflecting costs that will be incurred during the 2022 Rate Year 2 in its MYRP, PAWC has reflected costs that will be incurred as of January 1, 2023. <u>Id.</u> at 18. In contrast, using an average rate base for Rate Year 2 properly matches the collection of the revenue requirement during each year of a MYRP with the incurrence of the projected cost of providing utility service in that year. OCA St. 2 at 21.

The OCA has recommended that PAWC's MYRP be rejected in its entirety. OCA St. 2SR at 44. However, if PAWC's proposed MYRP were to be adopted, the OCA recommends that an

²³ Allowing end-of-year rate base to be utilized in the context of multiyear rate plans means greater inaccuracy and speculation for all aspects of the revenue requirement. If utilities propose MYRPs of longer duration, it would further exacerbate that problem because the rates set at the end of the rate case (beginning of Rate Year 1) for multiple rate years in the future would have no basis in reality. "Where the utility's rate base is growing significantly, as is the case with PAWC, the distortion in the measurement of results for the applicable period being used as the FPFTY in an MRP can become quite large." OCA St. 2 at 22. Construction budgets change over time for a variety of reasons and projecting that far into the future – without any review of earnings, reports, or criteria – is not reasonable.

average rate base should be used for Rate Year 2 to mitigate the impact of the rate increase on customers. <u>Id.</u>; <u>see</u> OCA App. A.3, Exh. LA-8, Sch. B-1, at 1-8 (reflecting average balances of plant in service, accumulated depreciation and other rate base components for Rate Year 2).

In rebuttal, PAWC witness Nevirauskas claims that if an average rate base were used, the Company will have to file more frequent base rate cases to prevent erosion of its authorized rate of return. PAWC St. 1R at 34. There is no support, however, for this claim. To be clear, using an average test-year still provides recovery of a portion (the average) of the Company's rate base and expenses during 2022. Thus, using a MYRP and an average test-year, PAWC will still avoid almost all attrition for 18 months (2021 and half of 2022). Further, by early 2023, after the Company has made all of the plant investment that was included in its base rate claim (and barring overearning), it can reinstate its water and wastewater Distribution System Improvement Charges (DSIC).²⁴ Id. at 33; 66 Pa. C.S. §§ 1357(a)(1), 1358(b)(2)-(3).

C. <u>Rate Base Adjustment Relating to Amortization of EADIT</u>

OCA witness Smith recommended an adjustment to rate base to incorporate the impact of his recommended adjustment to PAWC's proposed amortization period for unprotected Excess Accumulated Deferred Income Taxes, referred to as "excess ADIT" or "EADIT". OCA App. A.2, Table II (end of Year 2021); OCA App. A.3, Exh. LA-8, Sch. C-11 at 5 (2022 FPFTY); OCA St. 2 at 110; OCA St. 2SR at 55.

²⁴ In a related argument, Mr. Nevirauskas claims that, using an average-test year for rate base would mean the Company "would have to be able to implement a DSIC by the fourth quarter of 2022, just to begin recovering the costs associated with the portion of its Rate Year 2 plant additions not included in the average (mid-year) rate base…" and argues this is not contemplated by the Commission's Supplemental Implementation Order. PAWC St. 1R at 34 (citing Implementation of Act 11 of 2012, Docket No. M-2012-2293611, Order (Sept. 21, 2016)). The Supplemental Implementation Order does not address multiyear rate plans (or whether average or end of year test years are utilized in a MYRP) and was entered almost two years before the Public Utility Code was amended to address the use of a MYRP. OCA St. 2SR at 43-44; 66 Pa. C.S. § 1330 (effective Aug. 28, 2018). As OCA witness Smith aptly stated: "using a DSIC start date to drive the rate base in a base rate case is like having the 'tail wagging the dog.' The utility's rate base is set in a base rate case. Then the DSIC starting point can be adjusted accordingly." OCA St. 2SR at 44.

D. Cash Working Capital

OCA witness Smith recommended adjustments to the Company's proposed Cash Working Capital to incorporate the impacts of his expense adjustments. <u>See</u> OCA App. A.1-A.2, Tables IV, VI; OCA App. A.3, Exh. LA-8, Sch. B-2; OCA St. 2 at 38-43.

VI. REVENUES

PAWC is seeking a large amount of additional revenue from customers as a result of this Company-proposed ratemaking adjustment although the trend cited by PAWC is not new. OCA St. 2 at 50. The Company's adjustment, if adopted, would have customers preemptively paying higher rates for estimated declines in future usage. <u>Id.</u> at 51. It would enable PAWC to increase its revenue requirements and customer rates while also having its customers pay for water that PAWC projects its customers will not be using in the future. <u>Id.</u>

The OCA notes that as a result of the COVID-19 pandemic, there was a statewide shutdown of schools and business on March 16, 2020 in an effort to halt the spread of the COVID-19. OCA St. 2 at 52. As a result of the statewide shutdown and the subsequent increase of Pennsylvanians staying at home, it stands to reason that residential water usage has increased during this period. <u>Id.</u> at 53. Given the current circumstances in Pennsylvania and the unknown duration of the Governor's disaster emergency, OCA witness Smith testified that the Company's projected decrease in residential water usage for the 2020 FTY cannot be relied upon. OCA St. 2 at 53. As such, the OCA recommends that the portion of PAWC's adjustment related to estimated declining residential water usage for the 2020 FTY be rejected. OCA St. 2 at 53-55; OCA App. A.3, Exh. LA-8, Sch. C-1B through C-1H.

VII. OPERATING AND MAINTENANCE EXPENSES

A. <u>Payroll Costs – Prorating Wage Increases</u>

Following from the OCA's recommendation to utilize an average rate base instead of an end of year rate base for the MYRP as proposed by the Company, OCA witness Smith made an adjustment to the Company's salary and wages and, following from that adjustment, an adjustment to Defined Contribution Plan and Employee Stock Purchase Plan and Group Insurance expenses. OCA St. 2SR at 46-48, 50-53; <u>see</u> OCA App. A.3, Exh. LA-8, Schs. C-5 at 1-7, C-7.

B. <u>Performance Based Compensation (PAWC and Service Co.)</u>

1. <u>Annual Performance Plan</u>

The OCA recommends that PAWC's and its allocated Annual Performance Plan (APP) costs for the affiliate Service Company be reduced by

because the program's growth strategy and payment of the awards are driven by financial gains to shareholders. Additionally, the increased costs are beyond what is necessary for the provision of safe and reliable utility service at just and reasonable rates. OCA St. 2SR at 50. The OCA's recommendation to

OCA St. 2SR at 32.

The OCA further recommends that PAWC's and its affiliate Service Company's costs for its LTPP should be eliminated from PAWC's cost of providing utility service for ratepayers. OCA St. 2SR at 50.

OCA witness Smith testified in regard to the APP as follows:



OCA St. 2SR at 34.²⁵

Ratepayers should not be required to fully fund executive and management compensation as derived from the Company's APP, especially given the current difficulties faced by ratepayers due to the COVID-19 pandemic. The OCA's recommendation results in revenue requirement

²⁵ As discussed below, PAWC's affiliates in other states have recently been denied rate recovery of their incentive compensation programs, both partially and completely. <u>Kentucky Public Serv. Comm'n, Electronic Application of Kentucky-American Water Co. for an Adjustment of Rates</u>, 2019 Ky. PUC LEXIS 663, *66-71 (June 27, 2019) (denying recovery of 50 percent of APP expense and 100 percent of LTPP for Kentucky-American Water Co.) (<u>KAWC</u> 2019); <u>Application of California-American Water Co. for Authorization to Increase its Revenues for Water Service</u>, 2018 Cal. PUC LEXIS 628, *118-19 (Dec. 20, 2018) (reducing California-American Water Co.'s APP request by 50%) (<u>CalAm 2018</u>).

reductions to the Company's APP expense and APP expense related to AWWSC. OCA App. A.2, Table II; OCA St. 2SR at 48-49; App.3, Exh. LA-8, Sch. C-6.

2. <u>Stock-Based Compensation Expense/LTPP</u>

The OCA submits that ratepayers should not be required to pay executive or management compensation which is based on the performance of PAWC's stock price (or the stock price of its parent company). The Company proposes to charge its ratepayers to fund the full amount of stock based compensation costs that are directly charged to PAWC and the stock based compensation costs that are included in the Service Company fees that are allocated to PAWC. OCA St. 2SR at 37. The Company's stock-based compensation plan is designed to benefit the Company's shareholders and does not provide any quantitative benefits to ratepayers. OCA St. 2 at 76. The Company, moreover, was not able to provide any studies that demonstrated a quantitative benefit to ratepayers from the provision of stock-based compensation to PAWC and affiliated service company executives. OCA St. 2 at 75.

The Kentucky Public Service Commission recently denied recovery of 50 percent of APP expense and 100 percent of Long Term Performance Plan (LTPP) expense for Kentucky-American Water Company related to the financial performance measures associated with both plans, stating:

The Commission has consistently disallowed recovery of the cost of employee incentive compensation plans that are tied to financial measures because such plans benefit shareholders while ratepayers receive little benefit. However, the Commission has also held that the amount removed for ratemaking purposes should be based on the <u>performance</u> measures and not the <u>funding</u> measures. This distinction is important because, while 100 percent of Kentucky-American's LTPP performance measures are tied to earnings measures, the APP <u>performance</u> measures are based on 50 percent on financial measures and 50 percent on non-financial measures.

The Commission finds that it is reasonable to remove 50 percent, or \$636,832, of the \$1,273,663 cost for the APP that is tied to financial measures, and 100 percent, or \$496,746 of the cost for the LTPP that is tied to financial measures for ratemaking purposes.

OCA St. 2 at 71 (citing KAWC 2019 at *69-71 (emphasis in original)).

The California Public Utilities Commission also recently denied recovery of a portion of incentive compensation expense for California-American Water Company (Cal-Am) that relates to the financial performance measures of APP expense. The California Decision states as follows:

In recent GRCs, the Commission reduced the expenses requested for incentive compensation when performance goals benefit both shareholders and ratepayers. Cal-Am's 2018 Proxy Statement states that the 2017 APP performance goals are based on (1) Adjusted Earnings Per Share (50%), (2) Customer Satisfaction (15%), (3) Occupational Safety and Health Administration (OSHA) Recordable Incident Rate (7.5%), (4) Days Away/Restricted or Job Transfer Rate (DART) (7.5%), (5) Environmental Leadership (10%), and (6) Operational Efficiency (10%). Upon reviewing the performance metrics that Cal-Am historically used for its APP, we find that shareholders and ratepayers equally benefit when these metrics are met because the safety, environmental, and operational goals benefit ratepayers while the financial goals benefit shareholders. Therefore, we find that shareholders should also share 50% of the costs in funding the APP and reduce Cal-Am's APP request by 50%.

OCA St. 2 at 72 (citing CalAm 2018 at *118-19).

It is neither reasonable nor appropriate regulatory policy to require ratepayers to fund a shareholder-oriented expense, especially when many ratepayers are struggling with financial difficulties due to the COVID-19 pandemic. OCA St. 2 at 76-77. For this and the reasons discussed above, the costs of the LTPP in which the PAWC and the affiliate Service Company participate should be eliminated from PAWC's cost of providing utility service to ratepayers. OCA St. 2SR at 38; see OCA App. A.2, Table II.

C. <u>Capitalization Rate</u>

The Company applied capitalization rates to its MYRP consisting of the average of the capitalization rates for 2017, 2018, and 2019. OCA St. 2 at 82; OCA St. 2SR at 36. OCA witness Smith noted that, if the capitalization rate were fluctuating up and down each year, it may be appropriate to apply an average. OCA St. 2 at 82. However, the Company's capitalization rate has consistently increased each consecutive year. OCA St 2 at 82; OCA St. 2SR at 39. As such, OCA

witness Smith recommended that, rather than using a historic 2017-2019 average, the most recent capitalization rate from 2019 should be used for 2021 Rate Year 1 and 2022 Rate Year 2, as they are both fully projected rate years. OCA St. 2 at 83-84; OCA St. 2SR at 53-54; <u>see</u> OCA App. A.2, Table III; OCA App. A.3, Exh. LA-8, Sch. C-8A.

D. <u>Annual Depreciation</u>

Following from OCA's recommendation to use an average rate base, OCA witness Smith recommended an adjustment to the Company's depreciation expense based on average 2022 plant in service. OCA St. 2 at 90-92; OCA St. 2SR at 56; see OCA App. A.3, Exh. LA-8, Sch. C-14.

VIII. TAXES

A. <u>Taxes Other Than Income Taxes</u>

Following from OCA's recommendation to use an average rate base, OCA witness Smith made an adjustment to the Company's property tax expense. OCA St. 2 at 89-90; OCA St. 2SR at 55-56; OCA App. A.3, Exh. LA-8, Sch. C-13.

B. <u>Income Taxes – Excess ADIT</u>

The Company has proposed to amortize its unprotected Excess Accumulated Deferred Income Taxes (EADIT), using an Average Rate Assumption Method (ARAM). OCA St. 2SR at 9. OCA witness Smith recommends that the Company's unprotected EADIT be amortized over a three-year period using the straight-line method, rather than the approximately 40-year period proposed by PAWC under the ARAM method. OCA St. 2 at 103; <u>see</u> OCA App. A.2, Table II; OCA St. 2SR at 9-10; OCA Exh. LA-7, Sch. C-11 at 1, Col. B; OCA Exh. LA-7 at 1, Col. C; OCA Exh. LA-7, Sch. C-11 at 4.

The Commission has discretion under the TCJA in determining the amortization period for all unprotected EADIT. OCA St. 2 at 107-08. The amortization period established in this case will

have a significant impact on rates. The longer the amortization period and the higher the allowed return on equity, the greater the increase to revenue requirement and, ultimately, customer rates. OCA Cross Exam. Exhs. 1-2; Tr. 756-57, 761-62 (Wilde). The OCA's adjustment would reduce revenue requirement by almost \$30 million on a total Company basis. OCA Exh. LA-7, Sch. B-3; OCA St. 2SR at 31.

The following table illustrates the effect of utilizing different amortization periods for unprotected EADIT, by comparing the OCA's recommended three-year amortization period for unprotected EADIT (at the OCA's recommended cost of capital and return on equity) to longer amortization periods:

Docket Nos. R-2020-3019369 and R-2020-3019371

\$ (68,333,994)

\$ (35,142,059)

\$ 33,191,935

\$ (68,333,994)

\$ (33,067,548)

\$ 35,266,446

\$30,906,901

\$34,161,728

\$ 3,254,827

\$30,906,901

\$34,365,127

\$ 3,458,226

Page 1 of 6 Revenue Requirement Impacts of EADIT Amortization Scenarios Differences From Surrebuttal - 3 Year Amortization Unprotected EADIT at OCA's Surrebuttal Cost of Capital Rate Year Ending December 31, 2021 Line Total Water Sewer Company Operations Operations No. Description (B) (C) (A) 6-Year Unprotected EADIT Amortization Revenue Requirement - 3 Years Unprotected EADIT Amortization (37,427,093) \$ (68,333,994) \$30,906,901 1 S 2 Revenue Requirement - 6 Years Unprotected EADIT Amortization (14,647,855) \$ (47,589,045) \$32,941,190 \$ 3 Difference 22,779,238 \$ 20,744,949 \$ 2,034,289 S 8-Year Unprotected EADIT Amortization 4 Revenue Requirement - 3 Years Unprotected EADIT Amortization \$ (37,427,093) \$ (68,333,994) \$30,906,901 Revenue Requirement - 8 Years Unprotected EADIT Amortization (8,953,006) \$ (42,402,767) \$33,449,761 5 \$ 6 Difference 28,474,087 \$ 25,931,227 \$ 2,542,861 **10-Year Unprotected EADIT Amortization** 7 Revenue Requirement - 3 Years Unprotected EADIT Amortization (37,427,093) \$ (68,333,994) \$30,906,901 s 8 Revenue Requirement - 10 Years Unprotected EADIT Amortization (5, 536, 225)\$ (39,291,081) \$33,754,856 9 Difference \$ 31,890,868 \$ 29,042,913 \$ 2,847,955

15-Year Unprotected EADIT Amortization

Pennsylvania American Water Company

- 10 Revenue Requirement 3 Years Unprotected EADIT Amortization
- 11 Revenue Requirement 15 Years Unprotected EADIT Amortization
- 12 Difference

20-Year Unprotected EADIT Amortization

- 13 Revenue Requirement 3 Years Unprotected EADIT Amortization
- 14 Revenue Requirement 20 Years Unprotected EADIT Amortization
- 15 Difference

S

\$

(37, 427, 093)

36,446,762

(37,427,093)

1,297,579

38,724,672

(980,331)

OCA Cross Exh. 1. If a higher return on equity and overall capital is allowed in this case than recommended by the OCA, it will increase the impact of lengthening the amortization period for unprotected EADIT, as shown by comparing the "Difference" line in the tables above and below.

Pennsylvania American Water Company Revenue Requirement Impacts of EADIT Amortization Scenarios Differences From Surrebuttal - 3 Year Amortization Unprotected EADIT and a 9.5% ROE Docket Nos. R-2020-3019369 and R-2020-3019371 Page 1 of 7

Rate Year Ending December 31, 2021

Line No.	Description	Total Company (A)	Water Operations (B)	Sewer Operations (C)
1 2 3	3-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 3 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 8,011,891 \$ 45,438,984	\$ (68,333,994) \$ (29,851,809) \$ 38,482,185	\$30,906,901 \$37,863,700 \$6,956,799
4 5 6	6-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 6 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 30,605,493 \$ 68,032,587	\$ (68,333,994) \$ (9,276,812) \$ 59,057,182	\$30,906,901 \$39,882,306 \$8,975,405
7 8 9	8-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 8 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 36,253,938 \$ 73,681,032	\$ (68,333,994) \$ (4,133,017) \$ 64,200,977	\$ 30,906,901 \$ 40,386,956 \$ 9,480,055
10 11 12	10-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 10 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 39,642,862 \$ 77,069,955	\$ (68,333,994) \$ (1,046,832) \$ 67,287,162	\$ 30,906,901 \$ 40,689,693 \$ 9,782,793
13 14 15	15-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 15 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 44,161,636 \$ 81,588,729	\$ (68,333,994) \$ 3,068,204 \$ 71,402,198	\$ 30,906,901 \$41,093,432 \$ 10,186,531
16 17 18	20-Year Unprotected EADIT Amortization Using a 9.5% ROE Revenue Requirement - 3 Years Unprotected EADIT Amortization - OCA Surrebuttal Revenue Requirement - 20 Years Unprotected EADIT Amortization and 9.5% ROE Difference	\$ (37,427,093) \$ 46,420,978 \$ 83,848,071	\$ (68,333,994) \$ 5,125,722 \$ 73,459,716	\$30,906,901 \$41,295,256 \$10,388,355

OCA Cross Exh. 2.

A three-year amortization period is reasonable and consistent with other amortization periods used by the Company in its proposed tariff. OCA St. 2 at 106. Amortizing the unprotected EADIT amount over a three year period promotes intergenerational equity as it returns the excess income tax money to the customers who paid rates based on the previous 35% corporate tax rate and it helps to mitigate the rate impact.²⁶ OCA St. 2SR at 19-20; OCA App. A.2, Table II; OCA App. A.3, Exh. LA-8, Sch. C-11 at 5.

The Company's position is unreasonable as it does not come close to matching the return of the unprotected EADIT to the ratepayers who paid the monies that contributed to the EADIT at issue. OCA St. 2SR at 18. PAWC claims that returning unprotected EADIT over a longer time frame benefits ratepayers, however, the analysis provided by Company witness Wilde is seriously flowed as each of the calculated revenue requirement amounts presented in PAWC's Exhibit JRW-3 fails to take into account the time value of money.²⁷ OCA St. 2SR at 10-12, 16-17, 22; OCA Exh. LA-9. Once the time value of money is taken into account, the three-year amortization is clearly

shown to financially benefit ratepayers. Id. Mr. Smith explained:

If the cost of consumer credit is approximately 8 percent or higher, consumers are financially better off with a three-year amortization of unprotected EADIT. For customers who have a high cost of consumer credit, such as those using credit card plan financing, such customers are far better off on a present value basis with a threeyear amortization of unprotected EADIT.

OCA St. 2SR at 12.28

²⁶ <u>Application of California-American Water Co.</u>, 2018 Cal. PUC LEXIS 628, *194-197 (Cal. P.U.C. Dec. 20, 2018); In Re: Tennessee American Water Co.'s Response to the Commission's Investigation on the Impact of Federal Tax Reform on the Public Utility Revenue Requirements, 2020 Tenn. PUC LEXIS 101, *4-10 (Aug. 3, 2020); Proceeding on Motion of the Commission on Changes in Law that May Affect Rates, 2018 N.Y. PUC LEXIS 393 *82-84 (Aug. 9, 2018); In the Matter of the Petition of New Jersey-American Water Co., Inc., with Calculation of Rates Under the Tax Cuts and Jobs Act of 2017, Docket Nos. AX18010001, WR18030233 at 3 (N.J. Bd. of Pub. Util., Oct. 28, 2020).

²⁷ OCA witness Smith testified as follows, on page 10 of OCA Statement 2SR:

The PAWC rebuttal presentation on Exhibit JRW-3 is not a valid analysis because it utterly fails to recognize or incorporate consideration of the time value of money. PAWC's presentation has essentially assumed a zero discount rate (i.e., that there is no time value of money). PAWC's presentation fails to recognize or account for the time value of money to customers during any year in the 40-year period covered by its presentation. PAWC's presentation essentially assumes that each dollar in 2021 has the exact same value as a dollar in remote years extending out through 2060. Failure to consider the time value of money is therefore a fatal flaw in PAWC's presentation. Only by erroneously assuming that there is no time value of money applicable to its customers is PAWC able to produce the amounts claimed in its rebuttal testimony in Exhibit JRW-3.

²⁸ As a frame of reference, the Federal Reserve recently reports a personal loan interest rate of 9.34%, credit card borrowing rates of 14.58% for all accounts, and 16.43% for accounts that are assessed interest. See OCA Exh. LA-10; OCA St. 2SR at 17.

The OCA submits that, both a traditional ratemaking approach and the realities of the current economic and public health situation due to the pandemic support returning customer supplied customers to the customers who supplied the capital in a reasonable, shorter time period than 40 years. As such, the OCA respectfully requests that the Commission adopt a three-year amortization period for PAWC's unprotected EADIT. The OCA's recommended adjustment to income tax expense can be found in OCA App. A.2, Table II and App. A.3, Exh.t LA-8, Sched. C-11, page 5.

IX. RATE OF RETURN

PAWC seeks an 8.02% overall rate of return, including a cost of equity of 10.80%, and a cost of debt of 4.47%. PAWC St. No. 13, Sch. 8. The Company's 10.8% return on common equity includes a premium for management performance of at least 25 basis points. PAWC St. No. 13 at 76. The Company's proposed cost of capital is excessive as illustrated by the testimony of OCA witness Aaron Rothschild. OCA St. 3 at 9-12, 58-74. Mr. Rothschild uses a Discounted Cash Flow (DCF) analysis and a Capital Asset Pricing Model (CAPM) as a check. OCA St. 3 at 31-58. His analysis demonstrates that under a business as usual approach for PAWC's water operations, the market-derived cost of common equity is 8.00%, and the overall rate of return is 6.30%, based upon a capital structure of 48.30% debt and 51.64% common equity. Id. at 2-7; OCA Schs. ALR-1, ALR-3. For PAWC's wastewater operations, a market-derived cost of common equity is 8.05%, and the overall rate of return is 6.08%, based upon a capital structure of 39.44% debt and 50.37% common equity. Id. The OCA submits that in the event the Commission determines PAWC is entitled to an increase at this time, Mr. Rothschild has presented a cost of capital proposal under a business as usual approach that accurately portrays the current low cost capital environment and reflects reasonable returns for investors (OCA St. 3 at 16-18, 29-30), balanced with the concern for PAWC consumers who will be paying the increased rates. Mr. Rothschild's approach also considers the financial hardships facing many PAWC consumers as a result of the COVID-19 pandemic. OCA St. 3 at 14-18.

If the OCA's recommendation that no increase be approved as a result of the ongoing COVID-19 pandemic and the related economic impact on PAWC's customers is adopted, the resulting overall rates of return of 7.70% for water (with a capital structure of 51.64% cost of common equity and 48.3% cost of debt), and 2.84% for wastewater (with a capital structure of 50.37% cost of common equity and 39.44% cost of debt) represent a fair rate of return that balances the interests of consumers and shareholders and would be in the public interest. <u>See</u>, *supra*, Section III; OCA App. A.1, Table I(A); App. A.1, Table I(A).

A. <u>Capital Structure</u>

PAWC proposes using a capital structure of 56.06% common equity and 43.88% debt. PAWC St. 13 at 77. The OCA disagrees with the use of this capital structure because the common equity ratio of PAWC's requested capital structure is significantly higher than the average of the seven regulated water utilities in the proxy group (51.6%), and the common equity ratio of its parent, American Water Works (41.4%). <u>See</u> Sch. ALR-5 at 5.

The Pennsylvania Superior Court has held the following regarding capital structure of utilities that are wholly owned subsidiaries:

Where, as here, the utility is a wholly owned subsidiary, its capital structure may not be one which it would maintain if it were obliged to obtain its debt and equity financing on the open market rather than from a parent company. In such instances the actual capital structure may be weighted too heavily on the debt side or the equity side...The use of the actual capital structure in such peculiar circumstances might be unfair to either the utility or its customers, depending upon whether debt or equity is disproportionately high. Under such circumstances the commission must make adjustments based upon substantial evidence in order to reach a fair result.

Riverton Consol. Water Co. v. Pa. P.U.C., 140 A.2d 114 at 121 (Pa. Super. 1958) (Riverton). A

utility is not entitled to have the cost of capital computed on an "ideal" capital structure, but rather,

one which is fair, reasonable, and stable. <u>Id.</u> at 121-22. Based on this analysis, the Court agreed with the Commission's decision to adjust the utility's capital structure downward. Similar to <u>Riverton</u>, the Commission should adjust PAWC's proposed common equity ratio downward because it is significantly higher than that of its parent company and the average of similar water companies in the OCA's proxy group.

For PAWC's water operations for the rate year ending December 31, 2021, OCA witness Rothschild recommends a capital structure of 51.64% common equity and 48.30% debt based upon comparisons to the companies in the proxy group which utilize common equity ratios between 41.4% and 58.7%. OCA St. 3 at 13. For PAWC's wastewater operations for the rate year ending December 31, 2021, Mr. Rothschild recommends a capital structure of 50.37% common equity and 39.44% debt. <u>Id.</u> at 3. The Commission should reject PAWC's proposed capital structure and adopt the OCA's recommendation.

B. <u>Cost of Long-Term Debt</u>

Ms. Bulkley proposed using a cost of long-term debt of 4.47% for the Year 1 ending December 31, 2021. PAWC St. 13 at 80. The OCA does not object to the use of this rate and has used it in the OCA's analysis. However, no long-term debt rate should be established now for Year 2. Mr. Rothschild cautions that if a Multi-Year Rate Plan were to be approved, PAWC should be required to update its cost of debt before Year 2 rates become effective because the projected debt cost rate could overstate the cost of debt during 2021 and 2022. OCA St. 3 at 13.

C. <u>Common Equity Cost Rate</u>

COVID-19 has made it more challenging to determine the current cost of capital because it has drastically increased the speed and intensity of capital market change. <u>Id.</u> Instead of relying solely on historical data and analyst forecasts, Mr. Rothschild uses current market prices (e.g., stocks, bonds, options, etc.), which measure investors' expectations directly. Id. PAWC witness

Bulkley utilizes a non-market based approach which relies on historical data. OCA St. 3SR at 3. Ms. Bulkley's approach is inappropriate, especially considering the current economic climate.

Ms. Bulkley proposes a 10.80% cost of equity. This is substantially higher than the returns allowed for utilities in other states in recent years.²⁹ OCA St. 3 at 12-13. Mr. Rothschild used a constant growth form of the Discounted Cash Flow (DCF) method, based on a water-only proxy group, that determines growth based on the sustainable retention growth procedure and a non-constant DCF method. OCA St. 3 at 31. Mr. Rothschild's constant growth form DCF analysis indicates a cost of equity range of between 7.84% and 7.96% for the Water Proxy Group. OCA St. 3 at 40-41; OCA Sch. ALR-3 at 1. As these results use analysts' forecasts to derive sustainable growth, in part, and analysts' forecasts of dividend growth and book value growth in the non-constant form of the DCF method, the results should be considered conservatively high. Id. This is because analysts' forecasts of such growth have been known to be overstated. Mr. Rothschild's non-constant growth DCF method indicates a cost of equity of between 5.30% and 6.09%. OCA St. 3 at 45. Mr. Rothschild implemented the Capital Asset Pricing Model (CAPM), as a check on his DCF analysis. OCA St. 3 at 31, 46-58.

1. <u>The Legal Framework for Determining What Rate of Return is Fair to</u> <u>PAWC Consumers and the Company's Investors</u>

The Commission is responsible for protecting the public interest. <u>City of Pittsburgh v. Pa.</u> <u>P.U.C.</u>, 126 A.2d 777, 785 (Pa. Super. 1956) (<u>City of Pittsburgh</u>). Generally, a public utility is entitled to no more than a reasonable opportunity to earn a fair rate of return on shareholder investment. The Court in <u>City of Pittsburgh</u> stated that "[i]t is the function of the commission in

²⁹ In recent cases in which OCA witness Rothschild testified, water utilities in South Carolina and California, including PAWC's affiliate, were authorized equity cost rates of 7.46%, 8.90%, and 9.20%. OCA St. 3 at 12-13.

fixing a fair rate of return to consider not only the interest of the utility but that of the general public

as well. The commission stands between the public and the utility." Id.

Typically, cost of capital is the starting point for determining a fair rate of return. <u>Pa. P.U.C.</u> <u>v. Philadelphia Suburban Water Co.</u>, 71 Pa. PUC 593, 623 (1989) (<u>PSWC 1989</u>). The Commission

has defined an appropriate rate of return as:

[T]he amount of money a utility earns, over and above operating expenses, depreciation expense and taxes, expressed as a percentage of the legally established net valuation of utility property, the rate base. Included in the 'return' are interest on long-term debt, dividends on preferred stock, and earnings on common stock equity. In other words, the return is the money earned from operations which is available for distribution among the capital. In the case of common stockholders, part of their share may be retained as surplus.

Pa. P.U.C. v. Emporium Water Co., 95 Pa. PUC 191, 196, 208 PUR4th 502, 507 (2001) (EWC

2001) (quoting Public Utility Economics, Garfield and Lovejoy, 116 (1964)). Further, "[t]he return

authorized must not be confiscatory, and must be based upon the evidence presented." PSWC 1989,

71 Pa. PUC at 623 (citing Pittsburgh v. Pa. P.U.C., 165 Pa. Super. 519, 69 A.2d 844 (1949)).

A public utility with facilities and assets used and useful in the public service is entitled to

no more than a reasonable opportunity to earn a fair rate of return on its investment. Pa. P.U.C. v.

Roaring Creek Water Co., 87 Pa. PUC 826, 844 (1997). The United States Supreme Court

established the standard with which to evaluate whether a rate of return is fair in <u>Bluefield</u>, stating:

The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management. . .to raise the money necessary for the proper discharge of public duties.

262 U.S. at 693. The Court also said that allowed rates of return should reflect the following:

[A] return on the value of the [utility's] property which it employs for the convenience of the public equal to that. . .being made at the same time... on investments in other business undertakings which are attended by corresponding risks and uncertainties.

<u>Id.</u> at 692. Twenty-one years later, the Court reviewed the issue of fair rate of return in <u>Hope</u>. Therein, the Court held that a fair rate of return "should be commensurate with returns on investments in other enterprises having corresponding risks" while being sufficient "to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital." <u>Hope</u> at 603. The Court noted that "[t]he rate-making process under the Act, *i.e.*, the fixing of 'just and reasonable' rates, involves a balancing of the investor and consumer interests . . . and does not insure that the business shall produce revenues." <u>Id.</u> More recently, the Court stated that consumers are obliged to rely upon regulatory commissions to protect them from excessive rates and charges. <u>See Permian Basin Area Rate Cases</u>, 390 U.S. 747, 794-95 (1968) (citing <u>Atlantic Refining Co. v.</u> Public Serv. Comm'n, 360 U.S. 378, 388 (1959)).

Finally, in Duquesne Light Co. v. Barasch, the Court stated:

whether a particular rate is 'unjust' or 'unreasonable' will depend to some extent on what is a fair rate of return given the risks under a particular rate setting, and on the amount of capital upon which the investors are entitled to earn on that return.

488 U.S. 299 at 310. In determining a fair rate of return this Commission has described its task as

follows:

A fair rate of return for a public utility, however, is not a matter which is to be determined by the application of a mathematical formula. It requires the exercise of informed judgment based upon an evaluation of the particular facts presented in each proceeding. There is no one precise answer to the question as to what constitutes the proper rate of return. The interests of the Company and its investors are to be considered along with those of the customers, <u>all to the end of assuring adequate service to the public at the least cost</u>, while at the same time maintaining the financial integrity of the utility.

Pa. P.U.C. v. Pennsylvania Power Co., 55 Pa. PUC 552, 579 (1982) (emphasis added). See Pa.

P.U.C. v. National Fuel Gas Dist. Corp., 73 Pa. PUC 552, 603-605 (1990).

2. <u>Cost of Equity Calculation</u>

a. <u>Proxy Group</u>

Mr. Rothschild included the following seven utility companies in the Water Proxy Group: 1) American States Water, 2) American Water Works, 3) Aqua America, 4) California Water Service Group, 5) Middlesex Water Company, 6) SJW Corp, and 7) York Water. OCA St. 3 at 30. Ms. Bulkley's proxy group includes 13 publicly traded water and natural gas companies. PAWC St. No. 13 at 40, Figure 11. Mr. Rothschild's proxy group represents a more accurate comparison group because all of the companies he included have significant water and wastewater operations. OCA St. 3 at 30. Seven of the 13 companies in Ms. Bulkley's proxy group are natural gas companies with potentially difference risk profiles and therefore a different cost of equity than PAWC. <u>Id.</u> As explained further below, Ms. Bulkley's proxy group represents an inappropriate comparison group and should not be utilized.

Ms. Bulkley acknowledges there is a trend towards consolidation in the utility industry. PAWC St. No. 13 at 40. Most of the companies included in her proxy group have been involved in mergers and acquisitions within the last several years, some as recently as early 2020. It is reasonable to conclude that this trend will continue resulting in stock volatility for the years to come. Comparing PAWC's risk profile to those of the natural gas companies included in Ms. Bulkley's proxy group which have been, and will likely continue to be, actively involved in mergers and acquisitions is inappropriate.

Furthermore, the Commission has rejected use of a non-water utility barometer group in a water rate case. <u>Pa. P.U.C. v. Philadelphia Suburban Water Co.</u>, 1991 Pa. PUC LEXIS 206, *126 (1991) (<u>Philadelphia Suburban</u>). In that case, Philadelphia Suburban Water Company (PSWC) utilized a small electric company barometer group. <u>Id.</u> The Commission found the Office of Trial Staff's argument concerning PSWC's use of an electric company barometer group as non-risk

similar to PSWC to be valid and rejected PSWC's electric company barometer group. <u>Id.</u> Instead, the Commission only focused on the water company barometer groups in its deliberations. <u>Id.</u> at 127. Similarly, the Commission should reject PAWC's proxy group as is because it includes natural gas companies which are non-risk similar to PAWC.

b. <u>Application of Constant Growth DCF Model</u>

Mr. Rothschild uses a constant growth form of the Discounted Cash Flow (DCF) method that determines growth based on the sustainable retention growth procedure and a non-constant DCF method. Mr. Rothschild's constant growth form DCF analysis indicates a cost of equity range of between 7.84% and 7.96% for the Water Proxy Group. See Sch. ALR-3 at 1.

Mr. Rothschild obtained the stock Price ("P") from the closing prices of the stocks on July 31, 2020. OCA St. 3 at 38. He also obtained an average stock price for the 12 months ending July 31, 2020. <u>Id.</u> The value of the future expected return on equity ("r") is based on the average return on book equity expected by Value Line, adjusted in consideration of recent returns. <u>Id.</u> Mr. Rothschild also made a computation that was based on a review of both the earned return on equity consistent with analysts' consensus earnings growth rate expectations and on the actual earned returns on equity. <u>Id.</u> For a stable industry such as utility companies, investors will typically look at actual earned returns on equity as one meaningful input into what can be expected for future earned returns on book equity. <u>See</u> OCA Sch. ALR-3 at 1.

Since the stock prices for the comparative companies are substantially higher than their book value, the return investors expect to receive on their market price investment is considerably less than whatever is the anticipated return on book value. OCA St. 3 at 38. If the market price is low relative to book value, the cost of equity will be higher than the future expected return on book equity, and if the market price is high, then the return on book equity will be less than the cost of equity. <u>Id.</u> at 38-39.

Utility companies also grow by selling new common stock. Mr. Rothschild quantified this growth by multiplying the amount that the actual market-to-book ratio exceeds 1.0, by the compound annual growth rate of stock that Value Line forecasts. <u>See</u> Sch. ALR-3 at 1. Mr. Rothschild presents DCF results based on the most recent stock pricing data from July 31, 2020 as well as the average of the high and low stick price over the past 12 months to arrive at a range of reasonable values. OCA St. 3 at 39. The DCF result based on the average of the high and low stock prices for the year ending July 31, 2020 is 7.84%, and the DCF result based on the stock price as of July 31, 2020 is 7.96%. <u>Id.</u>; OCA Sch. ALR-3 at 1.

The appropriate value of "r" is the value anticipated by investors to be maintained on average in the future. OCA St. 3 at 40. Based on the combination of the forecasted return on equity derived from the Zacks consensus, recent historical actual earned returns, and Value Line's forecast, Mr. Rothschild utilized a 10.60% value of "r" for the DCF growth computation. <u>Id.</u>

c. <u>Application of Non-Constant Growth DCF Model</u>

The non-constant growth form of the DCF model determines the return on investment expected by investors based on an estimate of each separate annual cash flow the investor expects to receive. OCA St. 3 at 41. For the purpose of this computation, Mr. Rothschild incorporated Value Line's detailed annual forecasts to arrive at the specific non-constant growth expectations that an investor who trusts Value Line would expect. <u>Id.</u>; Sch. ALR-3 at 3.

In the first stage, cash flow entry is the cash outflow an investor would experience when buying a share of stock at the market price. OCA St. 3 at 41. The subsequent years of cash flow are equal to the dividends per share that Value Line forecasts. <u>Id.</u> For the intermediate years of the forecast period in which Value Line does not provide a specific dividend, the annual dividends were obtained by estimating that dividend growth would persist at a compound annual rate. <u>Id.</u> The cash flow at the end of the forecast period consists of both the last year's dividend forecast by Value Line, and the proceeds from the sale of the stock. <u>Id.</u> The stock price used to determine the proceeds from selling the stock was obtained by estimating that the stock price would grow at the same rate at which Value Line forecasts book value to grow. <u>Id.</u>

Mr. Rothschild utilized annual expected cash flows in his DCF analysis because it is easier to input the data and for observers to visualize what is occurring. <u>Id.</u> at 42. Since dividends are paid quarterly and not annually, this produces a small overstatement of the cost of equity. <u>Id.</u> A quarterly model would show dividends being paid sooner and would also show earnings being available sooner. OCA St. 3 at 43. A company that receives its earnings sooner, rather than at the end of the year, has the opportunity to compound them. <u>Id.</u> Since revenues, and therefore earnings, are essentially received every day, a company that is supposed to earn an annual rate of 9.00% on equity would have to earn only 8.62% if the return were compounded daily. <u>Id.</u> This reduction from 9.00% to 8.62% would then be partially offset by the impact of the quarterly dividend payment to bring the result of switching from the simplifying annual model closer to, but still a bit below 9.00%. <u>Id.</u>

Ms. Bulkley utilizes an Expected Earnings analysis. She claims that Mr. Rothschild's DCF analysis does not rely on earnings growth rates. PAWC St. 13-R at 78-80. As explained by Mr. Rothschild, even though the non-constant DCF model uses cash flow expectations as the valuation parameter, it still relies on earnings. OCA St. 3 at 43. The model relies on an expectation of future cash flows. <u>Id.</u> Future cash flows are derived from dividends during the time the stock is owned and capital gains from the sale of the stock. <u>Id.</u> Since earnings impact both dividends and stock price, the non-constant DCF model relies on earnings. <u>Id.</u> A major strength of the DCF model is its recognition of the difference between earnings paid out as a dividend and earnings retained in the business. OCA St. 3 at 43-44.

Under the non-constant DCF model, it is not necessary for earnings and dividends to grow at a constant rate for the model to accurately determine the cost of equity because the non-constant form of the DCF model separately discounts each and every future expected cash flow and does not rely on any assumptions of constant growth. OCA St. 3 at 45.

d. <u>CAPM</u>

CAPM relates return to risk. OCA St. 3 at 46. Specifically, it relates the expected return on an investment in a security to the risk of investing in that security. <u>Id.</u> The riskier the investment, the greater the return. <u>Id.</u> Investors in a firm's equity face both firm-specific risk, such as management performance, and market risk, including impacts from the overall market such as recession. <u>Id.</u> The CAPM predicts that for a given equity security, the cost of equity has a positive linear relationship to the sensitivity of the stock's returns to movements in the overall market (e.g., S&P 500). OCA St. 3 at 46-47. A security's market sensitivity is measured by its beta. <u>Id.</u> at 47. The higher the beta of a stock, the higher the company's cost of equity—the return required by the investor to invest in the stock. <u>Id.</u>

To implement the CAPM, Mr. Rothschild determined the appropriate values for the three model inputs: Risk Free Rate, Beta, and Equity Risk Premium. OCA St. 3 at 47. How the three model inputs were calculated along with a summary of the CAPM cost of equity numbers derived from those inputs are discussed below.

i. <u>Risk Free Rates</u>

It is generally preferable to use the market yield on short-term U.S. Treasury yields as the risk-free rate because these bonds have a beta close to zero. OCA St. 3 at 48. However, Mr. Rothschild chose to use a risk-free rate based on both long- and short-term treasury yields because investors expect short-term interest rates to increase. <u>Id.</u> Based on short-term U.S. Treasury bills (3 months) as of July 31, 2020, Mr. Rothschild determined the short-term risk-free rate is 0.09%.

<u>Id.</u> He determined the long-term risk-free rate to be 1.20% based on the yield of long-term U.S. Treasury bonds (30 years) as of July 31, 2020. <u>Id.</u>

ii. <u>Betas</u>

Mr. Rothschild used two betas, a forward beta and a hybrid beta, since the cost of equity should be based on investor expectations. OCA St. 3 at 49. The forward beta is based on forward-looking investor expectations of non-diversifiable risk, and the hybrid beta is based on both forward-looking investor expectations and historical return data. <u>Id.</u>

The following illustrates the two betas used by Mr. Rothschild in his CAPM analysis:

- Hybrid Beta: 50% Option-Implied Beta (6 months) + 25% Historical Beta (6 months) + 15% Historical Beta (2 years) + 10% Historical Beta (5 years).
- 2. Forward Beta: 100% Option-Implied Beta (6 months).

OCA St. 3 at 51.

His option-implied betas were calculated by using publicly-available trading information for all the options for a given security (company or index) for a complete trading day. OCA St. 3 at 53. Calculating option-implied betas requires (1) obtaining stock option data for that company and a market index, (2) filtering the stock option data, (3) calculating the option-implied volatility for the company and for the index, (4) calculating the option-implied skewness for the company and for the index, and (5) calculating option-implied betas for the company based on implied volatility and skewness for the company and for the index. <u>Id.</u> Mr. Rothschild used the same methodology used by the Chicago Board of Options Exchange (CBOE) in calculating the Volatility Index (VIX) and SKEW Index. <u>Id.</u>

His historical betas were calculated by following the methodology used by Value Line. OCA St. 3 at 51-52. The only major difference between Mr. Rothschild's calculations and Value Line's calculations is that Value Line uses the NYSE Composite Index and Mr. Rothschild used the S&P 500 Index as the market index. <u>Id.</u> at 52.

iii. Stock Options

Stock options are the right to buy or sell a stock at a specific price for a specified amount of time. OCA St. 3 at 49. A call option is the right to buy a stock at a specified exercise or strike price or before a maturity date, and a put option is the right to sell a stock at a specified exercise or strike price on or before a maturity date. <u>Id.</u> The market prices of put options and call options provide information regarding the probability distribution of future stock prices expected by investors. OCA St. 3 at 50. This information can be used to determine investors' return expectations including the relationship between the return expectations for individual Water Proxy Group companies and those for the overall market. <u>Id.</u>

iv. <u>Equity Risk Premium</u>

Mr. Rothschild's equity risk premium is the expected return on the S&P 500 minus the riskfree rate as described above. OCA St. 3 at 56. The implied volatility changes over time as investors' perception of risk changes. <u>Id.</u> For example, during a crisis such as the COVID-19 pandemic and its implications on the market, implied volatility generally increases as investors expect that stock market prices have a greater change of large swings compared to times when there is no crisis. <u>Id.</u> Mr. Rothschild calculated his equity risk premium in two ways: a weighted risk premium which accounts for investors' expectations over the past three months, and a spot risk premium which is based on investors' expectations as of July 31, 2020. <u>See</u> OCA St. 3 at 56-58 (charts summarizing the results of the CAPM).

3. <u>Analysis of PAWC's Cost of Equity</u>

Ms. Bulkley recommends that the Company be allowed a return on equity of 10.80% and an overall cost of capital of 8.02%. PAWC St. No. 13 at 3. She made this determination by applying

her own version of the Discounted Cash Flow (DCF) Model, Risk Premium approach, and Capital

Asset Pricing Model (CAPM) to a proxy group of 13 publicly traded water and natural gas utilities.

PAWC St. No. 13 at 40, Fig. 11. She claims that it is appropriate to rely on several cost of equity

models because investors and regulators are concerned that DCF results are not reasonable in

current capital markets. PAWC St. No. 13 at 3.

Despite Ms. Bulkley's assertion, the Commission relies primarily on the use of the DCF

analysis, and has done so for many years.³⁰ In January 2004, the Commission wrote:

Historically, we have primarily relied on the DCF methodology in arriving at our determination of the proper cost of common equity. We have, in many recent decisions, determined the cost of common equity primarily based upon the DCF method and informed judgment. *See Pennsylvania Public Utility Commission v. Philadelphia Suburban Water Company*, 71 Pa. PUC 593, 623-632 (1989); *Pennsylvania Public Utility Commission v. Western Pennsylvania Water Company*, 67 Pa. PUC 529, 559-570 (1988); *Pennsylvania Public Utility Commission v. Roaring Creek Water Company*, 150 PUR4th 449, 483-488 (1994); *Pennsylvania Public Utility Commission v. York Water Company*, 75 Pa. PUC 134, 153-167 (1991); *Pennsylvania Public Utility Commission v. Equitable Company*, 73 Pa. PUC 345-346 (1990). We determine that the DCF method is the preferred method of analysis to determine a market based common equity cost rate.³¹

In its recent UGI-Electric decision, the Commission affirmed its primary reliance on the

DCF method, stating that it has "found no reason to deviate from the use of this method in the instant case."³² This Commission has stated that determining a fair rate of return is an exercise of

informed judgment, based upon the facts of each case.³³ "The interests of the Company and its

³⁰ See, e.g., Pa. P.U.C. v. City of Dubois, Docket No. R-2016-2554150, Order (Mar. 28, 2017); Pa. P.U.C. v. UGI Utilities, Docket No. R-2017-2640058, Order (Oct. 25, 2018); Pa. P.U.C. v. City of Lancaster – Bureau of Water, 2011 Pa. PUC LEXIS 1685 (2011); Pa. P.U.C. v. Emporium Water Co., 2008 Pa. PUC LEXIS 2076 (2006); EWC 2001, 95 Pa. PUC at 201, 208 PUR4th at 512; Pa. P.U.C. v. York Water Co., 75 Pa. PUC 134, 156-69 (1991); Pa. P.U.C. v. Philadelphia Suburban Water Co., 71 Pa. PUC 593, 631-32 (1989); Pa. P.U.C. v. Pennsylvania-American Water Co., 71 Pa. PUC 210, 279-82 (1989); Pa. P.U.C. v. The Peoples Natural Gas Co., 69 Pa. PUC 1, 167-68 (1989); Pa. P.U.C. v. Pennsylvania Power, 67 Pa. PUC 91, 164, 93 PUR4th 189, 266 (1988); Pa. P.U.C. v. National Fuel Gas Dist. Corp., 67 Pa. PUC 264, 332 (1988).

 ³¹ Pa. P.U.C. v. Pennsylvania-American Water Co., 99 Pa. PUC 38, 42 (2004), <u>aff'd on other grounds</u>, <u>Popowsky v.</u>
<u>Pa. P.U.C.</u>, 868 A.2d 606 (Pa. Commw. Ct. 2004); <u>accord Pa. P.U.C. v. Aqua Pa, Inc.</u>, 99 Pa. PUC 204, 233 (2004).
³² Pa. P.U.C. v. UGI Utilities, Inc. – Electric Div., Docket No. R-2017-2640058, Order at 106 (Oct 25, 2018).

³³ Pa. P.U.C. v. Pennsylvania Power Co., 55 Pa. PUC 552, 579 (1982).

investors are to be considered along with those of the customer, all to the end of assuring adequate service to the public at the least cost, while at the same time maintaining the financial integrity of the utility involved."³⁴

In coming to this informed judgment, the Commission has stated on numerous occasions its preference to rely upon the DCF methodology over other methods such as the Risk Premium (RP) and Capital Asset Pricing Model (CAPM) in determining the rate of return. In PPL's 2012 and 2004 base rate case, the Commission reaffirmed its reliance upon the DCF method.³⁵ The Commission additionally noted, however, that while it is not required, other methodologies can be used to check DCF results.³⁶

Ms. Bulkley admits that "the Commission has traditionally relied primarily on the DCF method to estimate the cost of equity for regulated utilities." PAWC St. 13-R at 103. However, she argues that a DCF-only approach should not be used in this case based upon one 2012 PPL Electric Utilities case. In that case, the Commission recognized that market conditions were causing the DCF model to produce results that were much lower than other models such as the CAPM and Risk Premium.³⁷ PAWC St. 13-R at 103-04. The OCA submits that market conditions are much different now, and likely will be in the foreseeable future, because of the COVID-19 pandemic. Furthermore, market conditions are unknown and therefore, immeasurable as a result of the pandemic, and consumers are facing significant financial hardship with no sign of immediate improvement. Therefore, the Commission should utilize its traditional DCF approach and reject PAWC's position.

³⁴ <u>Id.</u> at 579.

³⁵ <u>Pa. P.U.C. v. PPL Electric Util. Corp.</u>, Docket No. R-2012-2290597, Order (Dec. 28, 2012) (<u>PPL 2012</u>); <u>Pa. P.U.C.</u> <u>v. PPL Electric Util. Corp.</u>, 237 PUR4th 419 (PaPUC 2004).

³⁶ PPL 2012 at 80.

³⁷ <u>PPL 2012</u> at 81.

Ms. Bulkley's 10.80% cost of equity and 8.02% cost of capital recommendations significantly overstate PAWC's market-based cost of equity. OCA St. 3 at 61. If her recommendations are used to set rates, consumers will be considerably overcharged. <u>Id.</u> Her cost of equity recommendation is excessive because: 1) her cost of equity recommendation is based on a flawed analytical approach and an inappropriate definition of the cost of equity, despite defining it correctly in considerable portions of testimony, 2) her interpretation of current capital markets include knowable and/or speculative predictions, and 3) her comments about the relevance of the DCF method results in the current high market-to-book ratio environment. Id.

Instead, the OCA's cost of equity and capital recommendations, based on Mr. Rothschild's DCF analysis and use of CAPM as a check, should be adopted in the event the Commission determines PAWC is entitled to an increase at this time.

4. <u>PAWC's Proposed Multi-Year Rate Plan</u>

Mr. Rothschild discusses how PAWC's request for a MYRP relates to his cost of equity recommendation in two ways. OCA St. 3 at 75. First, if approved, the MYRP could impact the risk of investing in PAWC and therefore its cost of equity. <u>Id.</u> Second, there is a risk that this plan would lead to excessive earnings for PAWC and inflated customer rates. <u>Id.</u> OCA witness Rubin recommended the Commission reject PAWC's request for a MYRP.

If, however, the Commission approves PAWC's requested MYRP, Mr. Rothschild recommends that the Commission implement consumer protection measures in the form of an earnings sharing mechanism. <u>Id.</u> at 75. These measures are particularly important now because of increased uncertainty and concerns regarding consumers' ability to pay for basic living expenses, including utility bills. <u>Id.</u>

5. <u>Fair Market Value Legislation's Impact on Cost of Equity: Section 1329</u> <u>Reduces PAWC's Cost of Equity</u>

Section 1329 of the Code allows a public utility to utilize fair market valuation when acquiring water and wastewater systems that are owned by a municipality or authority. 66 Pa. C.S. § 1329 (Section 1329). The Commission has stated that "Section 1329 helps mitigate the risk that a utility will not be able to fully recover its investment when water or wastewater assets are acquired from a municipal or authority." <u>Application of Aqua Pennsylvania Wastewater</u>, Inc., A-2017-2605434, Order at 4 (Nov. 8, 2017).

The passage of Section 1329 significantly reduces the risk of an investor-owned utility as it will be able to include the purchase price of a municipal water or wastewater system into rate base. OCA St. 3 at 78. In recognizing that fair market value legislation reduces investment risk, Ryan Wobbrock, a senior analyst at Moody's stated that "[w]hat is most important from a credit perspective is clarity surrounding the recoverability of the investment, and this legislation definitely helps provide that."³⁸

In recognition of the risk-reducing influence of fair market value legislation, Mr. Rothschild recommends a cost of equity for PAWC of 8.00% which is below the midpoint of his cost of equity calculations for his Water Proxy Group (8.22%). <u>Id.</u> at 80. For additional discussion of OCA's recommendations related to the shift in revenue requirement for acquisitions made under Section 1329, please see OCA St. 1 and, *infra*, Section XII.D.

³⁸ OCA St. 3 at 78-79 (citing "Investor-owned utilities benefit as fair value legislation incentivizes system sales," <u>Global</u> <u>Water Intelligence</u> (Dec. 2016)). PAWC's proposed Regionalization and Consolidation Surcharge would further reduce the risk of purchasing municipal systems by allowing them to earn a return on the purchase price before the next rate case. OCA St. 3 at 79. OCA witness Rubin recommends that the Commission reject the proposed Regionalization and Consolidation Surcharge as contrary to the public interest and neither just nor reasonable. OCA St. 1 at 79.

D. <u>Business Risks and Management Performance</u>

PAWC witnesses Mr. Nevirauskas and Ms. Bulkley recommend that the Commission adopt a rate of return on equity in the upper end of Ms. Bulkley's range of ROE estimates (10.0%-10.8%) in recognition of PAWC's superior management performance. OCA St. 3 at 80. Mr. Nevirauskas stated that PAWC should receive the 10.8% ROE or at least 25 basis points added to the ROE determined by the Commission. PAWC St. 1 at 41. PAWC claims that its request for 25 basis points in recognition of management performance is consistent with the Commission's decision in Aqua's 2007 base rate case. <u>Id.</u>

The COVID-19 pandemic presents unique circumstances and hardship for many PAWC customers, and PAWC should not be permitted to receive both an acquisition premium and an ROE enhancement at this time. Mr. Rothschild recommends that the Commission consider the burden on consumers as a result of the pandemic. OCA St. 3 at 81. When the Commission approved a 25 basis point request for Aqua Pennsylvania, Pennsylvania was not experiencing the effects of a global pandemic. It is unconscionable to award a management bonus at a time when PAWC's customers—both residential and business—are suffering the significant economic impacts from COVID-19. Second, PAWC should not be permitted to receive both an acquisition premium and an ROE enhancement regarding its acquisition of Delaware Sewer Company. OCA St. 3 at 81. Finally, Ms. Bulkley's cost of equity recommendation of 10.80% is not market-based which results in a cost of equity that is significantly above a market-based rate. Id. Therefore, an allowed return on equity below Ms. Bulkley's range of ROE estimates (10.0%-10.8%) should not be the criteria for any ROE enhancements. Id.

For the reasons stated above, the Commission should reject the positions of PAWC and adopt the OCA's recommendations.

E. Other Parties' Equity Cost Rate Recommendations and Principal Areas of Dispute

The OCA has addressed its recommendations and the areas of dispute in Sections IX.A. through IX.D, above.

X. REGIONALIZATION AND CONSOLIDATION SURCHARGE

A. <u>Introduction</u>

PAWC has proposed a Regionalization and Consolidation Surcharge that will collect, from existing customers, Section 1329 acquisition costs upon closing and up to the end of the next rate case. OCA St. 1 at 70. As explained below, the OCA submits that the surcharge proposal should be denied because it is contrary to the provisions of Section 1329, and it is contrary to sound ratemaking policies. <u>Id.</u> at 70-79.

B. <u>PAWC's Surcharge Imposes Additional Burdens on Existing Customers Solely</u> <u>Due to Increased Costs Related to Section 1329 Acquisitions.</u>

The Regionalization and Consolidation Surcharge (RCS or surcharge) would collect the "revenue deficiency" from Section 1329 acquisitions that have closed since the Company's last rate case. OCA St. 1 at 70-71. The "revenue deficiency" is defined as the difference between the annual revenue requirement (return on the ratemaking rate base determined in the Section 1329 application, taxes, depreciation, and operation and maintenance expenses) and the revenue received from the acquired customers. <u>Id.</u> at 71. The surcharge would be revised each April. <u>Id.</u> at 70. There also would be a limit of no more than 5% of the revenues from existing water and wastewater customers, excluding public fire protection revenues and other surcharge revenues. <u>Id.</u> at 71. The surcharge would not apply to public fire protection customers. <u>Id.</u> at 70.

Mr. Rubin calculated an estimate of the maximum surcharge revenues to be \$38,850,794. OCA St. 1 at 71. Thus, the surcharge would permit PAWC to collect more than \$38 million annually between rate cases from all existing PAWC customers, as a result of Section 1329 acquisitions. His calculations are show in Table 7, replicated below:

Table 7: PAWC Proposed Subsidy UnderRegionalization and Consolidation Surcharge				
Rate Zone	Proposed Revenues (Excluding Public Fire)			
Main Water	\$694,179,269			
Steelton Water	288,607			
Main Wastewater (WW)	29,411,453			
Exeter WW	10,026,829			
Sadsbury WW	952,612			
Scranton WW	26,075,165			
McKeesport WW	14,298,866			
Kane WW	1,783,086			
Total revenue base	\$777,015,887			
x Maximum surcharge	5.00%			
= Max. surcharge revenues	\$ 38,850,794			

OCA St. 1 at 72. Mr. Rubin explained that the surcharge revenues of \$38 million (which would come from all PAWC Zone 1 water and wastewater customers) are two times the \$19.1 million subsidy that PAWC proposes to collect from water Zone 1 customers for Section 1329 acquisitions (discussed in Section XII.D, *infra*). OCA St. 1 at 71. If the surcharge **and** the proposed subsidies are approved, PAWC would collect more than \$57 million per year (\$38 million from the surcharge and \$19.1 million from the wastewater subsidies) to support Section 1329 acquisitions, which is 7.5% of its proposed revenue requirement. <u>Id.</u>

C. <u>PAWC's Proposed Surcharge Is Contrary to Section 1329 and Sound Regulatory</u> <u>Policy.</u>

1. <u>Section 1329</u>

Section 1329 provides that the ratemaking rate base of the selling utility shall be incorporated into the rate base of the acquiring public utility in its <u>next base rate case</u>. 66 Pa. C.S. § 1329(c). Further, the selling utility's cost of service "shall be incorporated into the revenue

requirement of the acquiring public utility as part of the acquiring utility's <u>next base rate case</u> proceeding." 66 Pa. C.S. § 1329(d)(5). If the selling utility's cost of service is not incorporated into the revenue requirement until the next base rate case, it would be inconsistent with the Section 1329 requirements to increase rates for existing customers based on that revenue requirement.³⁹ This is especially true given that the acquired customers' rates are required to stay at their current levels (i.e., not reflecting the revenue requirement associated with the ratemaking rate base approved as part of the Section 1329 filing or the proposed surcharge).

In addition, Section 1329 requires that acquired customers' rates will remain at current levels⁴⁰ and that those rates will not change until new rates are approved for the acquiring utility as a result of a base rate case. See 66 Pa. C.S. §§ 1329 (d)(1)(v) and (d)(4). It would be inconsistent and unfair to require existing customers' rates to increase during the time between closing and when new rates are approved in the next base rate case.

2. <u>PAWC Has Not Established That It Is Reasonable and Necessary to Have</u> an Automatic Rate Adjustment For the 1329 "Revenue Deficiency".

Mr. Rubin explained the conflict between the ratemaking process, and the automatic rate adjustment proposed by PAWC as follows:

[T]he ratemaking process involves a matching of revenues, expenses, investment, return, customers, and consumption. Automatic rate adjustments for specific expense or capital items break this relationship. The matching principle involves a synchronous examination of the cost of service and sources of revenue, as well other considerations such as the quality of service and efficiency of management. That synchronization is the reason why we use a test year when a rate case is filed.

OCA St. 1 at 72-73. Mr. Rubin stated:

³⁹ PAWC's proposed surcharge is calculated using the revenue requirement associated with the ratemaking rate base determined in the Section 1329 proceeding. Under its proposal, rates would be raised for existing customers using that revenue requirement. The OCA submits that the use of the revenue requirement through the surcharge would contravene the specific requirement of Section 1329(d)(5).

⁴⁰ Acquired customers can be charged the Distribution System Improvement Charge upon approval of the Commission. 66 Pa. C.S. § 1329(d)(4).
The use of automatic rate adjustment mechanisms for only certain aspects of the Company's revenue requirement violates the matching principle and helps to destroy the underlying relationship between utility rates and levels of cost and investment.

OCA St. 1 at 73. He explained that the general rule is that automatic rate adjustments should be used only for significant volatile expenses that are outside of the utility's control. OCA St. 1 at 73,

76. Examples include gas cost adjustment or a surcharge to reflect changes in income tax rates.⁴¹

Mr. Rubin explained that the utility's ability to control expenditures is an important consideration in determining whether an automatic adjustment clause should be adopted. Automatic rate adjustments remove any incentive for the utility to be efficient. OCA St. 1 at 74. He explained that the ratemaking process is "designed to foster management efficiency between rate cases." Id. He explained why there is a focus on achieving and maintaining efficiency:

A focus on achieving and maintaining efficiency is a pillar of informed ratemaking. Automatic rate adjustments, however, remove any incentive the utility has to achieve or maintain efficiencies. Under automatic rate adjustment mechanisms, any change in the unit cost of the product, and any change in the amount of the product purchased, would flow directly to captive customers. Failure to obtain available efficiencies, or failure to protect existing efficiencies, can only lead to ever-increasing utility rates. As an example, if a utility were allowed to automatically recover the cost of heating and cooling its office buildings, there would be no incentive for the utility to try to find a lower-cost energy supplier, invest in insulation or re-program the thermostats in its buildings – actions that most every other business would take in response to changes in energy costs.

OCA St. 1 at 74.42

Mr. Rubin found that the proposed surcharge failed to meet the criteria he discussed. OCA

St. 1 at 76. He found that the automatic rate adjustment would recover costs that are within the

⁴¹ See Pennsylvania Indus. Energy Coalition v. Pa. P.U.C., 653 A.2d 1336, 1350 (Pa. Commw. Ct. 1995) (<u>PIEC</u>); <u>National Fuel Gas Dist. Corp v. Pa. P.U.C.</u>, 76 Pa. Commw. 102, 147, 464 A.2d 546, 567 (1983) (<u>NFG 1983</u>); <u>Philadelphia Elec. Co. v. Pa. P.U.C.</u>, 93 Pa. Commw. 410, 422, 502 A.2d 722, 727-28 (1985) (<u>PECO</u>); <u>Popowsky v.</u> <u>Pa. P.U.C.</u>, 683 A.2d 958 (Pa. Cmwlth. 1996) (<u>Popowsky</u>).

 $^{^{42}}$ Other factors to consider include whether the cost is related to other expenditures that are not subject to the adjustment mechanism. OCA St. 1 at 75. An automatic adjustment clause could adversely impact the evaluation of technologies or processes that might improve efficiency and save costs. <u>Id.</u> Mr. Rubin explained that the "unreasonable trade-off occurs when one aspect of the cost is recognized automatically, but another aspect is not." <u>Id.</u>

Company's control (the amount and the timing). <u>Id.</u> He also found that there is a potential for significant trade-offs or efficiencies that come from the acquisition and those would not be captured in the surcharge. OCA St. 1 at 76. He also has a concern about the size of the subsidies that PAWC is asking water Zone 1 customers to pay. <u>Id.</u> at 77. Mr. Rubin also identified another problem with the surcharge because it includes revenues from all existing water and wastewater customers, yet PAWC already has the wastewater customers' rates subsidized under Section 1311(c). He concluded that is it neither just nor reasonable to require customers who, according to the Company, cannot pay their own cost of service to receive an additional rate increase that will be used to provide a subsidy to other, newly acquired customers. Mr. Rubin stated, "If wastewater and Steelton water customers can afford to pay higher rates that money should be used to reduce the subsidies paid by Zone 1 water customers; not to provide even more subsidies to newly acquired customers." Id.

Finally, Mr. Rubin discussed the policy reasons that undercut the proposed surcharge:

The underlying premise of Section 1329 is that acquisition prices will be based on an arms' length negotiations. An arms' length negotiation requires a tension between the buyer and seller -- the buyer wants to pay as little as possible and the seller wants to receive as much as possible. The arms' length negotiated price is a compromise between those two extremes. In Section 1329 negotiations, however, there is no incentive for the buyer to pay as little as possible. In fact, the profit motivation is for the buyer to pay as much as possible, subject only to the amount that can be justified by an appraisal. In other words, there is no tension between the buyer and seller -- both want the price to be as high as can be justified by the appraisals.

The only potential check on the process (as it currently exists) is that the utility's investors bear the cost of supporting a portion of the purchase price until the conclusion of its next base rate case. This does not appear to be much of a check on the process, but it at least provides a modest incentive to control the purchase price.

<u>The proposed Regionalization and Consolidation Surcharge would remove even that</u> <u>modest check on the process.</u> Rather than investors paying to support a portion of the purchase price between rate cases (perhaps for a year or two), investors would be at risk for only a few months (between the time of closing and the end of the calendar year). As I explained above, I would prefer for investors to have a greater incentive to control the size of the purchase price by being required to support the capital that cannot be supported by the rates of the acquired customers. Under no circumstances, however, should investors' risks be lessened further.

OCA St. 1 at 78. As a result of his review, Mr. Rubin recommended that the Commission reject the proposed Regionalization and Consolidation Surcharge "as being contrary to the public interest and neither just nor reasonable." <u>Id.</u> at 79.

In rebuttal, PAWC witness Grundusky characterized the surcharge as providing for earlier recovery to mitigate financial lag associated with acquisitions and that PAWC would recover a portion earlier but would recover a lesser amount later. Those statements are not correct. Currently, the return received by investors is based on the revenues received from the acquired customers between closing and the conclusion of the next rate case. OCA St. 1 SR at 14. The existing customers do not provide any subsidies during that time. <u>Id.</u> Nor is PAWC permitted to defer the return and its investors must bear the risk of putting capital to work between rate cases. <u>Id.</u> The surcharge would increase PAWC's revenues and existing customers' rates almost immediately upon closing, and as Mr. Rubin noted, the investors would benefit and existing customers would be harmed.

Mr. Rubin provided an example of how the proposed automatic adjustment rate will operate and explains how it will increase revenues from existing customers with no offsetting benefit in later years. OCA St. 1 SR at 15-17. Those increased revenues would flow directly to shareholders. Id. at 17. The Table is replicated below:

Table 1-S: Hypothetical Example Showing Effect of Proposed Regionalization and Consolidation Surcharge on Existing Customers and Investors						
	Without Surcharge With Surcharge					
Voor	Existing	Investors'	Existing	Investors'		
I eal	Customers'	Return	Customers'	Return		

г

	Revenues		Revenues	
2021	0	25,000	45,000	70,000
2022	0	25,000	43,250	68,250
2023	0	25,000	41,544	66,544
2024	39,880	64,880	39,880	64,880
2025	38,258	63,258	38,258	63,258
Total	78,138	203,138	207,932	332,932

The Table shows the first five years of additional revenues that would be paid with the surcharge and the impact that has on the investors' return. <u>See</u> OCA St. 1 SR at 16. It also shows that there is no reduction in future costs paid by PAWC's customers, but it does enhance the return to PAWC's investors between closing and the next base rate case. Id. Mr. Rubin concluded:

Mr. Grundusky is incorrect when he states the surcharge "does not increase the amount recovered by PAWC" or that it would "recover a lesser amount later." The surcharge would absolutely increase the amount recovered by PAWC, it would not decrease future recoveries, and it would do so to the detriment of existing customers.

OCA St. 1 SR at 14-15.

For the reasons set forth above, the OCA submits that the proposed Regionalization and

Consolidation Surcharge should be rejected.

XI. PENSION/OPEB TRACKER

The Company proposed a new tracker for Pension and Other Post-Employment Benefits (OPEB) expenses in which variations between projected and actual expenses would be recorded in deferral accounts. OCA St. 2 at 111; OCA St. 2SR at 57; PAWC St. 1 at 25-30. The OCA submits that PAWC's proposed Pension and OPEB tracker should be denied as it constitutes impermissible single issue ratemaking.⁴³

⁴³ <u>See PIEC</u> at 1350; <u>NFG 1983</u>, 76 Pa. Commw. 102 at 147, 464 A.2d 546 at 567 (holding that the consideration of expense and revenue items in isolation could result in confiscatory rates); <u>PECO</u>, 93 Pa. Commw. at 422, 502 A.2d at 727-28 (holding that there should be no line-by-line examination of items in a rate case); <u>Popowsky</u> at 958.

XII. RATE STRUCTURE AND RATE DESIGN

A. <u>Introduction</u>

OCA witness Rubin's recommended adjustments to PAWC's water cost of service studies have been resolved. He also provided recommendations regarding the combined sewer cost of service studies, rate design, including the scale back if PAWC is granted any increases in revenue requirement, the allocation of wastewater revenue requirement to water customers, the allocation of Steelton water revenue requirement to water customers, and the necessity for the development of a stormwater rate. OCA St. 1 at 35-95. The OCA submits that Mr. Rubin's recommendations should be adopted in this proceeding.

B. <u>Cost of Service Study</u>

PAWC prepared two water cost of service studies (COSS) (Water excluding Steelton and Rate Zone 5 (Steelton)). PAWC Exh. 12-B and PAWC Exh. 12-A. PAWC prepared three sanitary sewer COSS (Exeter, Sadsbury, and sanitary sewer excluding Exeter and Sadsbury). PAWC Exhs. 12-D, 12-E, 12-C. PAWC prepared three combined sewer COSS (Scranton, McKeesport, and Kane). PAWC Exhs. 12-F, 12-G, and 12-H. Each COSS has separate schedules for Rate Year 1 (2021) and Rate Year 2 (2022).⁴⁴ OCA St. 1 at 36.

OCA witness Rubin's adjustments to the water COSS were accepted and resolved. OCA St. 1 at 37-40, Sch. SJR-8; OCA St. 1SR at 17. Mr. Rubin did not have any adjustments to the sanitary sewer COSS. OCA St. 1 at 40. As discussed below (Section XII.F) with regard to stormwater rates, the separation of costs between sanitary sewer and stormwater is a key issue to ensure that the costs are accurately assigned. If the costs are not assigned, it requires sanitary sewer

⁴⁴ Mr. Rubin's analysis focused on Rate Year 1 (2021) for ease of presentation but changes would need to be made to the 2022 study if rates are set based on PAWC's proposed MYRP. OCA St. 1 at 37. His review of the COSS did not consider any subsidies to or from other rate areas because those issues are addressed *infra*.

customers and water customers if wastewater costs are shifted to water customers) to pay costs that are not related to wastewater service.

C. <u>Rate Design Proposals</u>

1. <u>Residential Rate Design-Water</u>

For 2021, PAWC projects that it will have 612,000 residential customers in Zone 1, 1,700 customers in Zone 5 (Steelton) and 1,300 customers in four additional zones. OCA St. 1 at 79. Mr. Rubin noted that all but 100 of those customers have meters that are 1-1/2-inch or smaller in diameter. <u>Id.</u> Mr. Rubin supports many of the changes proposed by PAWC and recommends a number of additional changes as discussed below. OCA St. 1 at 79-86.

a. <u>PAWC Proposed Changes to the Structure of Residential Rates.</u>

PAWC proposes two changes in the structure of residential rates. First, it proposes to charge the same customer charge to residential customers with meter sizes of 1-1/2 inches or smaller. OCA St. 1 at 80. However, it has not applied the same change in Zone 5 where it is still proposing higher customer charges for the residential customers with 1-inch and 1-1/2-inch meters. <u>Id.</u> at 81. Mr. Rubin recommended that the same change be applied to Zone 5 which would eliminate possible concerns about rate discrimination and would facilitate the eventual consolidation with Zone 1. <u>Id.</u> at 82. He also recommended that the minimum allowance should be eliminated for residential customers with 1-inch and 1-1/2-inch meters. <u>Id.</u>

Second, for Zone 4, PAWC proposed 1) a substantial reduction in the minimum charge, 2) to eliminate the minimum usage allowance of 3,000 gallons per month, and 3) to eliminate any rate blocks so that all consumption would be charged at the same rate. OCA St. 1 at 81. Mr. Rubin supported the proposed changes to Zone 4 because eliminating the minimum usage allowance gives customers more control over their bills, and lowers the bills for lower use customers without imposing a burden on higher-use customers. <u>Id.</u> at 82.

b. OCA Proposed Changes to the Structure of Residential Rates

In addition to PAWC's proposed changes, discussed above, Mr. Rubin proposed another change in the structure of residential rates. He recommended that the minimum usage allowance for 5/8-inch meters in Zone 5 be reduced from 1,700 gallons per month to 1,000 gallons per month. <u>Id.</u> at 83. Mr. Rubin explained that his recommendation will start a transition to the eventual elimination of the minimum allowance. <u>Id.</u>

Mr. Rubin made additional adjustments to Zone 5 residential rates to ease the impact of a smaller minimum allowance. First, Mr. Rubin recommends that the 40% increase,⁴⁵ proposed by PAWC to be divided between Rate year 1 and Rate year 2, should be used for the increase in 2021. OCA St. 1 at 84. Based on this recommendation and his recommended reduction in the minimum allowance, Mr. Rubin recommended that the existing 5/8-inch customer charge (\$14.78 per month) be kept at that level and that the volumetric rate be set at \$1.000 per 100 gallons for all residential usage. OCA St. 1 at 84-85. He provided examples of the impacts of his recommendations at the Company's proposed revenue requirement. The largest percentage increase would be for any customer who uses exactly 1,700 gallons in a month (the current minimum allowance). Id. at 85. That bill would increase from \$14.78 to \$21.78, an increase of \$7.00 per month, or 47.4%. Id. Most residential bills (those using more than 3,000 gallons per month) would have increases in the range of 25% to 35% according to Mr. Rubin. Id.

PAWC proposed a Zone 1 customer charge of \$18.00 per month for a 5/8-inch meter. Mr. Rubin explained that the proposed customer charge is higher than the direct customer-related cost for a 5/8-inch meter, which is \$17.06. OCA St. 1 at 83. He noted that when the calculation of direct costs is adjusted to reflect the same charge for residential customers with meter sizes up to

⁴⁵ Docket No. A-2019-3006880, Joint Petition for Approval of Settlement of All Issues, ¶ 25.

and including 1-1/2-inch, and to recognize the reduced rates paid by low-income customers, the direct cost Mr. Rubin calculated is approximately \$17.72 per month or about 9% higher than the currently effective charge of \$16.25 per month. <u>Id.</u> at 83-84. He explained that in context of the proposed Year 1 increase of 12.7%, he considered it reasonable to round this charge up to \$18.00 per month. <u>Id.</u> at 84. However, if the revenue requirement determined by the Commission is less than what the Company proposed, all Zone 1 charges should be scaled back proportionately. <u>Id.</u>

2. <u>Residential Rate Design - Wastewater</u>

Mr. Rubin addressed the Company's residential rate design for wastewater. OCA St. 1 at

86-94. Mr. Rubin provided an overview of the existing wastewater rates:

The Company has 10 different rate areas for wastewater service. The rates vary significantly from one area to another, with current customer charges ranging from \$7.50 in Turbotville (Zone 8) to \$30 or more per month in Koppel, McKeesport, and Kane. Often those higher customer charges are coupled with a large minimum usage allowance. PAWC also has a wastewater rate area where all customers receive flat-rate service at a cost of either \$75.10 or \$54.60 per month (Franklin Township) depending on the treatment used to serve the customer.

OCA St. 1 at 86. Mr. Rubin explained his understanding that the Company is guided by two main goals in setting wastewater rates: 1) complying with provisions of any commission orders or settlements for acquired systems, and 2) moving towards rate consolidation and the elimination of minimum usage allowances. <u>Id.</u> Mr. Rubin found those goals to be reasonable but explained that they should not be the only goals. <u>Id.</u> at 87. He explained what other goals need to be considered:

[T]here should be specific criteria that limit the costs transferred to Zone 1 water customers or that otherwise subsidize Section 1329 premiums paid by the Company. In addition, the Company has given more weight to a provision in its Asset Purchase Agreement with Scranton than the Commission is required to give to that provision (as I discuss below). I also find two instances where the Company has proposed extremely large rate increases (more than 50% for many customers).

Id. As discussed below, the OCA submits that its recommendations should be adopted.

a. Zone 3 (Scranton Area) Rates

The current rates in Zone 3 are a \$19.50 per month customer charge and a volumetric charge of \$0.6173 per 100 gallons. OCA St. 1 at 87. PAWC proposes no increase to the customer charge and a volumetric increase to \$0.7212 per 100 gallons, or 16.8%. Id. The increased revenues from residential wastewater customers, in Year 1, would be \$1.17 million, or 8.4% and the total increase in revenues would be \$2.83 million in Year 1. Id. Mr. Rubin explained that the COSS for Scranton shows a total cost of service of \$34.75 million, while current rates produce \$23.47 million, or a shortfall of \$11.3 million. Id. An increase of 50% would be needed to bring rates to cost of service. Id. at 87-88. Mr. Rubin explained that PAWC's proposal would make "very slow progress toward closing the gap between costs and revenues" while the remaining gap would be passed on to Zone 1 water customers. Id. at 88.

The Company's proposal to limit Zone 3 to less than a 12% increase, while proposing much larger increases in other zones, is based on its Asset Purchase Agreement pursuant to which it purchased the Scranton-area wastewater assets, and in which it agreed to limit the increase that it can propose during the first ten years of ownership. OCA St. 1 at 88. The agreement does not limit the increase the Commission can approve in this case or any other rate case. <u>Id.; see Joint Application of Pennsylvania-American Water Co. and the Sewer Authority of the City of Scranton, Docket No. A-2016-2537209, Order at 8, 71-72 (Oct. 19, 2016).</u>

Mr. Rubin recommends that the rate in Zone 3 be increased by approximately 20%. OCA St. 1 at 88. Although much less of an increase proposed by PAWC in other rate areas, it would begin to make progress toward moving rates to cost and lessen the subsidies paid by Zone 1 water customers. That 20% increase would increase revenues by \$4.66 million (compared to \$2.76 million under PAWC's proposal), which would reduce the Zone 1 water subsidy by \$1.9 million.

64

<u>Id.</u> Also important is that it would be a meaningful move towards cost of service which should make it feasible to have Zone 3 pay cost-based rates within the next two rate cases. <u>Id.</u>

To ensure that the rates collect these additional revenues, Mr. Rubin recommends that the rates be increased across-the-board. OCA St. 1 at 89. His recommendation is due to the significant stormwater costs that are included in the revenue requirement and PAWC's inability to charge those costs to customers, as discussed *infra*. <u>Id</u>.

b. <u>Zone 4 (Koppel) Rates</u>

The current rates in Zone 4 are a \$30.00 per month customer charge and a volumetric charge of \$0.6500 per 100 gallons. OCA St. 1 at 89. PAWC proposes to decrease the customer charge to \$11.00 per month and increase the volumetric charge to \$1.7631 per 100 gallons. <u>Id.</u> The increased revenues from residential wastewater customers, in Year 1, would be \$44,867, or 23.55%. <u>Id.</u> Mr. Rubin's concern with this proposal is that it results in "highly disparate" impacts on residential customers, with some customers receiving significant decreases while others would see increase of 50% or more. <u>Id.</u> In addition, the Company is proposing increases of 11% for other classes in Zone 4. OCA St. 1 at 90.

Mr. Rubin recommended a decrease of the residential customer charge to \$24.00 per month and an increase to the residential volumetric charge to \$0.9750, or 50%. <u>Id.</u> He explained that these changes would keep the bill impact for most customers to under 33%. <u>Id.</u> The resulting revenue shortfall is \$35,000 which he recommended be added to the \$2.4 million subsidy from the sanitary wastewater zones (excluding Sadsbury and Exeter). <u>Id.</u>

c. Zone 6 (McKeesport) Rates

Zone 6 has two service areas – McKeesport and Port Vue. In McKeesport, for most residential customers, the current rates in Zone 6 are a \$30.70 per month customer charge (includes the first 2,000 gallons per month) and a volumetric charge (for flows over 2,000 gallons per month)

of \$1.275 per 100 gallons. OCA St. 1 at 91. PAWC proposes to eliminate the minimum usage allowance, reduce the customer charge to \$11.00 per month, and increase the volumetric charge to \$1.7631 per 100 gallons. <u>Id.</u> Most residential customers would have bills increase by less than 40% and very low usage customers would have their bill decline. <u>Id.</u> Mr. Rubin did not have any changes to PAWC's proposal for the McKeesport service area. <u>Id.</u>

Port Vue customers are billed quarterly and the current rates are \$58.05 per quarter, which includes the first 4,000 gallons of water per quarter and a volumetric charge (for flows over 4,000 per quarter) of \$0.995 per 100 gallons. OCA St. 1 at 91. PAWC proposes to eliminate the minimum allowance and charge Port Vue customers the same as the McKeesport area customers. <u>Id.</u> The impact on Port Vue customers would be an increase of approximately 70%. <u>Id.</u>

Mr. Rubin agreed with setting the Port Vue customer charge at \$11.00 per month (\$33 per quarter) and eliminating the minimum usage allowance. OCA St. 1 at 93. However, he recommended limiting the increase to the volumetric charge to 40%, or \$1.393 per 100 gallons. <u>Id.</u> He explained that these changes would ensure that no customer bill would increase by more than 46% (most bills would increase by 40% or less). <u>Id.</u> The resulting revenue shortfall is approximately \$230,000 which he recommended be added to the water Zone 1 subsidy. <u>Id.</u> at 94.

3. OCA's Scale Back Proposal

Mr. Rubin provided a scale back proposal to be used if the Commission reduces the proposed revenue requirements in rates zones that are being subsidized by water Zone 1 customers. OCA St. 1 at 94-95. He recommended that the reduction in the revenue requirement first reduce the water Zone 1 subsidy in proportion to the subsidy paid by each customer class under PAWC's

proposal for Rate Year 1. <u>Id.</u> at 94. Any remaining reduction would be applied proportionally to the rates in the particular rate zone.⁴⁶ <u>Id.</u>

The OCA's accounting recommendations (OCA St. 2) result in a substantial reduction in water Zone 1, and some other zones, while some rate zones would have rate increases. OCA St. 1 at 94. Mr. Rubin explained that his recommendation would be the same – reductions in subsidized rate zones' revenue requirement should be applied to reduce the water Zone 1 subsidy for that zone. <u>Id.</u> If the subsidy is eliminated any remaining reduction would be applied to reduce the rates paid by customers in that zone. <u>Id.</u>

D. <u>Allocation of Wastewater Revenue Requirement to Water Operations</u>

1. <u>Introduction</u>

This is the first rate case that includes Section 1329 acquisitions and a request to subsidize those acquisitions by shifting costs to water customers pursuant to Section 1311(c) of the Public Utility Code. 66 Pa. C.S. §§ 1311(c) and 1329. The ratemaking interplay, as proposed by PAWC, would require its water Zone 1customers to pay a substantial subsidy that is primarily due to the six acquisitions completed by PAWC to date under Section 1329. Under PAWC's proposed subsidies water Zone 1 customers would pay an additional \$32,851,568⁴⁷ or 4.9%, to subsidize the wastewater rate zones as set forth below:

Table 2: PAWC Proposed Subsidies from Rate Zone 1 Water Customers						
Rate Area Revenue Requirement PAWC Revenues Proposed Subsidy						
Steelton water	\$ 5,189,852	\$ 3,413,023	\$ (1,776,829)			
Wastewater excl. Sadsbury & Exeter	33,213,134	30,785,011	(2,428,123)			

⁴⁶ If the reduction is to the water Zone 1 revenue requirement, then the reduction should be spread among customer classes in proportion to each class's cost of service under Mr. Rubin's COSS. OCA St. 1 at 94. He recommended that any reduction for the residential class be applied proportionally to both the customer charge and volumetric charge. <u>Id.</u> ⁴⁷ The Steelton water subsidy of \$1,776,829, shown on Table 2, will be discussed *infra*.

Exeter WW	15,130,505	11,071,133	(4,059,372)
Sadsbury WW	1,838,386	959,853	(878,533)
Scranton WW	34,754,312	26,297,265	(8,457,047)
McKeesport WW	30,047,582	14,503,073	(15,544,509)
Kane WW	3,287,466	1,803,482	(1,483,984)
Total	\$123,461,237	\$88,832,840	\$ (34,628,397)

OCA St. 1 at 53 (footnotes omitted). This subsidy, related to seven wastewater acquisitions, is equivalent to 41% of the total increase proposed by PAWC in this case for water Zone 1 customers in Rate Year 1. OCA St. 1 at 53. Mr. Rubin recommended that the Commission permit a limited subsidy from Rate Zone 1 water customers to be paid to each Section 1329 rate area, but that the subsidy should not compensate the Company for the full return on the purchase price increment it paid over the net original cost of the property.

2. The Impact on Water Customers of PAWC's Proposed Subsidies

Section 1311(c) allows, but does not require, the Commission to allocate a portion of the wastewater revenue requirement to a combined water and wastewater customer base if it is in the public interest. 66 Pa. C.S. § 1311(c). PAWC, as a utility providing both water and wastewater service, has proposed to shift wastewater revenue requirement to its water Zone 1 customers, as shown above. Section 1311(c) was enacted as part of Act 11 of 2012 and has been used by PAWC in its rate cases filed in 2013 and 2017 to propose a shift of wastewater revenue requirement to water Zone 1 customers. However, the issue of how the Commission should consider proposals made pursuant to Section 1311(c) has not been litigated because both of PAWC's cases were resolved by settlement.⁴⁸ In the 2013 and 2017 rate cases, as well as in this case, Mr. Rubin has provided criteria that can be used to evaluate the proposed Section 1311(c) subsidies.

⁴⁸ <u>Pa. P.U.C. v. Pennsylvania-American Water Co.</u>, Docket No. R-2013-2355276, Order (Dec. 19, 2013) <u>https://www.puc.pa.gov/pcdocs/1262225.docx; Pa. P.U.C. v. Pennsylvania-American Water Co.</u>, 2017 Pa. PUC LEXIS 249 (Dec. 7, 2017).

As noted above, this is the first case to include acquisitions filed under Section 1329 of the

Public Utility Code, which was enacted in 2016. 66 Pa. C.S. § 1329. Mr. Rubin described the

ratemaking impact of Section 1329:

Section 1329 allows a water or wastewater utility to pay more than depreciated original cost for the assets of other water or wastewater providers, and to include the purchase price (rather than net original cost) in the rate base. By including the purchase price in rate base, the Company is charging customers higher rates than would have been permitted under original-cost ratemaking. The Commission's policy of gradually moving toward rate consolidation (also known as single-tariff pricing), in conjunction with any rate increase limits that may be part of the acquisition transaction, can result in Rate Zone 1 water customers paying additional subsidies to support the acquired customers.

OCA St. 1 at 52 (footnote omitted). Mr. Rubin noted his concern about the proposed subsidies. He

described the impact of the acquisitions:

The Company makes it seem as if its investors are providing the compensation to selling municipalities, but in fact the Company is requiring its statewide water customers to pay most of the costs associated with the above-cost acquisitions.

OCA St. 1 at 53. He also explained that this is even more apparent with the Company's proposed

Regionalization and Consolidation Surcharge, as discussed in Section X, supra. Mr. Rubin

provided Table 3 that is a summary of the Section 1329 Transactions completed by PAWC. The

Table is replicated below:

Table 3: Summary of Section 1329 Transactions(\$ million, except customers)						
Rate AreaClosing DateCustomersNet Original Cost (\$ million)§ 1329 Rate Base (\$ million)Difference to Cust @ 1						PAWC Cost to Customers @ 14%
Steelton water	10/9/2019	2,415	14.43	20.50	6.07	0.85
Exeter WW	10/24/2019	9,015	40.06	92.00	51.94	7.27
Sadsbury WW	3/6/2019	998	7.48	8.30	0.82	0.11
McKeesport WW	12/18/2017	12,700	80.09	158.00	77.91	10.91
Kane WW	Not closed	2,019	12.07	17.56	5.49	0.77
Total		27,147	154.13	296.36	142.23	19.91

OCA St. 1 at 55 (footnote omitted). Mr. Rubin explained that the last column in Table 3 shows the amount of the increased revenue requirement to PAWC customers resulting from these acquisitions. For wastewater acquisitions under Section 1329, the increased revenue requirement is \$19,060,000.⁴⁹ When Mr. Rubin combined the Tables to determine how much of the total costs in the acquired systems are proposed to be transferred to water Zone 1 customer, he shows that "PAWC's water customers are being asked to bear 100% of the Section 1329 cost increase." OCA St. 1 at 55. Table 4 is set forth below:

Table 4: PAWC Proposed Percentage of Section 1329 Subsidyto be Paid by Rate Zone 1 Water Customers					
Rate Area	PAWC Proposed Subsidy by Zone 1 Customers (Table 2)	Section 1329 Revenue Requirement Increase (Table 3)	Percent of Section 1329 Increase Borne by Zone 1 Water Customers		
Steelton water	(\$1,776,829)	\$ 850,000	100%		
Exeter WW	(4,059,372)	7,270,000	56%		
Sadsbury WW	(878,533)	110,000	100%		
McKeesport WW	(15,544,509)	10,910,000	100%		
Kane WW	(1,483,984)	770,000	100%		
Total	(\$23,743,227)	\$19,910,000	100%		

⁴⁹ The revenue requirement associated with the Steelton water acquisition is not included in this figure and is discussed *infra*.

OCA St. 1 at 55. Mr. Rubin explained the import of this Table:

Zone 1 water customers are being asked to provide subsidies totaling \$23.74 million to the systems acquired under Section 1329. <u>That amount includes the entire</u> revenue requirement associated with the increase in rate base caused by Section 1329 (\$19.91 million), plus an additional \$3.8 million to subsidize operating costs in the acquired systems.

OCA St. 1 at 55 (emphasis added). PAWC's proposed subsidies must be reviewed under Section 1311 (c) to determine if they are in the public interest.

3. <u>A Framework for Determining Whether PAWC's Proposed Subsidies Are</u> in the Public Interest.

Mr. Rubin explained that he Commission has not issued any orders, policy statements, or regulations to establish criteria for how it would determine whether to use its discretion to permit an allocation of wastewater revenue requirement to water customers pursuant to Section 1311(c). OCA St. 1 at 56. The statute itself does not contain any directive or guidelines. <u>Id.</u> Absent such directives or guidance, Mr. Rubin reviewed basic regulatory principles to recommend a framework to determine whether a proposed allocation is in the public interest.

Mr. Rubin explained that defining the public interest can be difficult and that there can be more than one aspect of the public that is interested in or affected by any issue. OCA St. 1 at 56. Mr. Rubin identified "at least two distinct elements of the affected public: the utility's wastewater customers and the utility's water customers." <u>Id.</u> Mr. Rubin also explained that establishing a policy on this issue could affect future acquisitions so the "public interest" could "include a consideration of policies that promote the cost-effective provision of safe and reliable water and wastewater service throughout the Commonwealth." <u>Id.</u> at 57.

As Mr. Rubin pointed out, because Section 1311 (c) is discretionary, "At one extreme, the Commission could do nothing." Mr. Rubin concluded, "Such a decision would be lawful but would not accomplish an important purpose of the statute, which is to provide some relief to wastewater customers in relatively small service areas." OCA St. 1 at 57. He explained that at the other extreme, the entire wastewater revenue requirement could be allocated to water customers. He concluded that although that might be lawful, it would violate a number of established regulatory principles.⁵⁰ <u>Id.</u> at 57-58. Mr. Rubin recommends reviewing the regulatory principles provided by James Bonbright and noted that there is general agreement that the principles should be considered when establishing and evaluating utility rates. Id. at 58. Those principles are:

- Practicality, including simplicity, understandability, ability to implement, and public acceptability;
- Clarity in its interpretation;
- Effectiveness in yielding the total revenue requirement;
- Stability in revenues from year to year;
- Continuity of rates, including the concept of gradualism;
- Fairness in relation to the cost of serving different types of customers;
- Avoidance of undue discrimination among similarly situated customers; and
- Encouragement of efficient consumption practices.

Bonbright also suggests that the most important of these criteria are adequacy (collection of the revenue requirement), efficiency (encouragement of economically efficient consumption and discouragement of waste), and fairness to all customer classes. He notes that these criteria are primary "not only because of their widespread acceptance but also because most of the more detailed criteria are ancillary" to these three principles.

OCA St. 1 at 58-59 (footnotes omitted). Mr. Rubin considers the principles of efficiency and

fairness to be paramount and did not consider that the approach selected would have a major effect

on the utility's ability to collect its revenue requirement so he did not consider that principle further.

<u>Id.</u> at 59.

Regarding the principle of efficiency, Mr. Rubin explained that it relates to sending proper

price signals to customers so that the price paid "accurately reflects the cost of providing service."

OCA St. 1 at 59-60. To evaluate the efficiency principle, Mr. Rubin looked at "(1) the degree to

⁵⁰ The Commission could choose from a wide range of options when implementing Section 1311(c) that might not be consistent with well-established regulatory principles. OCA St. 1 at 57.

which water customers are also wastewater customers, (2) the amount by which wastewater rates would be reduced below cost, and (3) the amount by which water rates will be increased above cost." OCA St. 1 at 61. Allocating wastewater revenue requirement to water customers could result in setting wastewater rates below cost and water rates above cost which may be different from the utility's full cost of service. Mr. Rubin explained that, he "would consider a price that at least meets the basic cost of providing service under average (that is, non-peaking) conditions to be the minimum price that should be charged for utility service." <u>Id.</u> Estimating the highest price that should be one that is equal to the value of service received by the customer, however, there is the concern of affordability of service to the customer. <u>Id.</u> at 62.

Regarding the principle of fairness, Mr. Rubin explained that it applies when similarly situated customers are treated differently. OCA St. 1 at 62. He noted that when most customers are both water and wastewater customers of the same utility, then fairness is likely not a significant concern. <u>Id.</u> Where, most water customers are not also wastewater customers, then fairness could be a significant issue. Mr. Rubin provided the following explanation:

A water customer who receives its wastewater service from a different provider would be paying its own water costs, its own wastewater costs (to another provider), plus a portion of the costs of wastewater service for the few wastewater customers of the utility. Depending on the magnitude of the subsidy sought by the utility, it may be unfair to ask customers to pay their own wastewater costs plus a portion of wastewater costs for wastewater customers of the utility.

OCA St. 1 at 62. The evaluation of fairness depends on two of the same factors Mr. Rubin identified for the efficiency principle: (1) the degree to which water customers are also wastewater customers, and (2) the amount by which water rates will be increased above cost. <u>Id.</u> at 63. Mr. Rubin noted that the provision of stormwater service in Scranton, McKeesport, and Kane areas "exacerbate the concerns with fairness." Customers in other parts of PAWC's service territory already may pay separate stormwater charges from their municipalities and some may also pay wastewater charges

to other providers as well. <u>Id.</u> As Mr. Rubin explained, "This further tilts the fairness balance toward not requiring water customers to subsidize wastewater and stormwater costs." Id.

4. <u>Section 1311(c) Must Be Applied Cautiously When There Is a Significant</u> <u>Acquisition Adjustment.</u>

Mr. Rubin explained that Section 1311 (c) was enacted based on the assumption that the rate base in wastewater service areas, with minor exceptions, would be based on the net original cost of property. OCA St. 1 at 64. He noted that using net original cost serves as a check on the amounts that can be charged to customers, eliminates any significant profit motivation that sellers of wastewater systems may have to inflate the asking price for the utility assets. <u>Id.</u> He explained the impact of Section 1329:

The enactment of Section 1329 in 2016, however, significantly changes that calculus. Section 1329 authorizes the acquisition of water and wastewater systems at prices that could be significantly more than the net original cost of the property, as shown above.

OCA St. 1 at 64. Mr. Rubin notes that the potential of using Section 1311(c) in combination with a Section 1329 acquisition "might result in water customers throughout the Commonwealth subsidizing municipal government purposes in a few locations while also promoting profit growth for utility shareholders. <u>Id.</u> Mr. Rubin recommended that the Commission should be "extremely judicious in its use of its Section 1311(c) discretionary authority particularly when a Section 1329 acquisition is involved." <u>Id.</u>

Mr. Rubin provided an overview of regulatory mechanisms that have been used in other states to address similar concerns. Based on his review, Mr. Rubin found that in trying to balance fairness to new and existing customers, and to try to control the magnitude of resulting rate increases, it would be reasonable to require the Section 1329 premium to be paid only by customers in that service area. OCA St. 1 at 65. Mr. Rubin also explained that such a mechanism would not necessarily be permanent and that there could be consolidation over time as rates in separate areas

become closer (part of that would occur through the combination of new plant investment unrelated to Section 1329 along with the depreciation of the Section 1329 purchase price). <u>Id.</u> at 65-66. Table 5 shows the portion of the proposed subsidy that is unrelated to the rate base impact of Section 1329 and would cover system operations. Under that scenario, as shown in Table 5, there would a total wastewater subsidy of \$6,117,026. Mr. Rubin recommends that this type of subsidy would be reasonable even though it would still require water Zone 1 customers to subsidize these systems. <u>Id.</u> at 66. He characterized it as a transition to charging full-cost rates to newly acquired customers.

Mr. Rubin also reviewed the situation where the asset purchase agreement may contractually limit the Company's ability to increase rates. OCA St. 1 at 67. To the extent that a utility's customers subsidize the operating costs of the newly acquired systems, the utility's investors should bear the increased costs related to the ratemaking rate base through a reduced return. <u>Id.</u> Mr. Rubin explained that this approach is consistent with Section 1329 because the ratemaking rate base approved in the application is included in rates, but the statute does not mandate the rate of return that the utility is permitted to earn on the rate base. <u>Id.</u> at 68. "The effect of my recommendation would be to reduce the return allowed on the Section 1329 portion of the rate base until the acquired customers can fully support that investment." <u>Id.</u> He also noted that the return to the utility is based on the return on total rate base, not the return on a specific item of rate base. <u>Id.</u> at 69. It is Mr. Rubin's opinion that this approach would not result in a significant reduction in PAWC's overall return on its total rate base. <u>Id.</u>

Mr. Rubin recommended that the Commission implement the increases proposed by PAWC in each of the Section 1329 rate areas (except for the rate reduction in Sadsbury). OCA St. 1 at 69, Table 3. The subsidy for each 1329 rate area is also shown in Table 6, replicated below. The

estimated impact of these recommendations on the Company's income available for return and overall return, as a percentage of its total rate base, is shown in the last two columns below.

Table 6: Summary of OCA Recommendations for Section 1329 Rate Areas						
Rate Area	Increase in Sales Revenues	Subsidy paid by Zone 1 Water	Subsidy paid by Investors	Est. Change in Income	Est. Change in Return	
Steelton water	\$589,679	\$926,829	\$850,000	\$593,721	0.0149%	
Exeter	2,841,697	0	4,059,372	2,835,452	0.0713%	
Sadsbury	0	768,533	110,000	76,834	0.0019%	
McKeesport	2,024,332	4,634,509	10,910,000	7,620,583	0.1917%	
Kane	315,576	713,984	770,000	537,841	0.0135%	
Total	\$5,771,284	\$7,043,855	\$16,699,372	\$11,664,432	0.2934%	

OCA St. 1 at 70 (footnotes omitted). It is important to understand that the Company is not denied a return on the investment but rather the return is impacted by the numbers shown in the last column. Mr. Rubin concluded that this did not result in an unreasonable return to the utility's investors. OCA St. 1 at 69.

E. Allocation of Steelton Revenue Requirement to Other Water Operations

The subsidy proposed by PAWC for Steelton Water, also a Section 1329 acquisition, is \$1,776,829. Section 1311(c) does not apply to this situation because it is a proposed subsidy of a water revenue requirement by other water customers. However, it still must be examined to determine whether it is reasonable for water customers to pay a subsidy that goes beyond the operations costs and cover the ratemaking rate base and return for all of the reasons discussed above.

Mr. Rubin recommended that the subsidy to be paid by water Zone 1 customers for Steelton be set at \$926,829, while investors would cover \$850,000. OCA St. 1 at 70, Table 6. The resulting change in return is 0.0149%.

F. <u>Separate Stormwater Rate</u>

As noted above, the separation of costs between sanitary sewer and stormwater is a key issue to ensure that the costs are accurately assigned. If the costs are not assigned, it requires sanitary sewer customers and water customers if wastewater costs are shifted to water customers) to pay costs that are not related to wastewater service.

1. The Differences between Stormwater and Sanitary Sewer Services

A combined sewer system provides both sanitary sewage service and stormwater removal through a single network of pipes. OCA St. 1 at 36. Mr. Rubin explained what stormwater utility service is:

Stormwater utility service is designed to safely, and in compliance with environmental regulations, remove stormwater flows (also known as runoff) from a service area's streets, rights of way, parking lots, roofs, sidewalks, and other impervious surfaces. Unlike other utility services, stormwater flows are not subject to being separately metered, and they are not directly related to the consumption of another service that can be directly measured.

OCA St. 1 at 40-41. He noted two additional important differences between stormwater service and other utility services. First, a "significant portion of stormwater flows" come from public streets and rights of way which he called right-of-way flows. <u>Id.</u> at 41. There are different methods to recover right-of-way-related costs, but "the charge for that service is neither avoidable, controllable, nor caused by any individual customer." <u>Id.</u>

Mr. Rubin explained that stormwater and wastewater are fundamentally different services.

His testimony is summarized in the chart below:

Wastewater	Stormwater
The customer controls its wastewater production and disposal and collects wastewater produced in a building into a pipe (the service line) that connects to the utility's wastewater main	Stormwater is generated by precipitation (rainfall and the melting of snow and ice) and a customer may have some limited ability to control some of the stormwater that is generated
	Stormwater is not initially contained in pipes; some stormwater falls on pervious, unfrozen ground that can absorb some (but usually not all) of the stormwater. Other stormwater falls on roofs, streets, sidewalks, frozen ground, and other largely impervious surfaces where the stormwater is not absorbed and flows downhill.
	Stormwater is controlled by directing the flow of the runoff so that it does not create flooding on private property or public streets and highways. Stormwater control occurs by

	grading properties, parking	lots, and driveways to control	
	the flow of stormwater, designing streets to direct the flow		
	of stormwater (which is one reason curbs are so important		
	on urban streets). installing stormwater retention basins to		
	reduce peak storm flows, maintaining streets to ensure a		
	proper flows of stormwater	for example by cleaning streets,	
	repairing curbs, and cleanin	g storm drains), and	
Pipes lead from each property to the centralized	Stormwater enters storm dr	ains that collect stormwater in a	
wastewater treatment plant	network of pipes and that	may involve numerous facilities	
	including catch basins, st	reets and curbs, storm drains,	
	stormwater pipes (where the	here is a separate system), and	
	CSO control facilities	(in a combined stormwater-	
	wastewater system).		
The wastewater treatment plant treats the wastewater		If combined stormwater	
		flows commingle with	
		wastewater flows and are	
		directed to a wastewater	
		treatment plant. ⁵¹	
Treated wastewater is discharged into a	If separate stormwater		
receiving water (lake, stream, river, etc.)	system, the stormwater is		
	directly discharged to a		
	body of water with little or		
	no treatment.		

OCA St. 1 at 43-44. Mr. Rubin summarized the biggest difference between stormwater and

wastewater, as follows:

The biggest difference between stormwater and wastewater, therefore, is that a customer does not create stormwater but may have some ability to control it, and most stormwater flows above ground until it ultimately reaches a storm drain. In contrast, a customer directly creates and controls all wastewater flows and all of those flows are piped directly into the wastewater system.

OCA St. 1 at 43. The second significant difference is that the control of stormwater (described

above) is done by the entity responsible for the property and that entity may be different from the entity that uses other utility services on the property or the property may not be an existing water or wastewater customer.⁵² <u>Id.</u> For that reason, Mr. Rubin explained that it is important that the entity responsible for stormwater control be responsible for stormwater costs associated with the

⁵¹ Mr. Rubin explained that some older combined systems are not sized large enough to handle the combined flows, which results in "combined sewer overflows" (CSO) "that divert some of the combined flow before it reaches the wastewater treatment plant and directly discharges untreated wastewater and stormwater to the receiving water. One of the important clean-water initiatives of the past two decades is to greatly reduce or entirely eliminate the use of CSOs." ⁵² Mr. Rubin provided the examples of a tenant in a residence or a retail location who might be responsible for the water and wastewater bills but the tenant has no control over how the property handles stormwater control like gutters, parking lot and sidewalk runoff. OCA St. 1 at 43.

property. <u>Id.</u> Assigning cost to those responsible will give "an appropriate incentive to control stormwater flows from the property into the CSS." <u>Id.</u>

2. The Recognized Way to Charge for Stormwater Service

In 2019, there were more than 1,700 communities and utilities that have separate fees or charges for stormwater service, including 27 in Pennsylvania.⁵³ OCA St. 1 at 44. The Pennsylvania communities who had established stormwater fees ranged in population size from 1,931 to 1,536,471. OCA St. 1, Sch. SJR-8, W. Ky. Survey, Table A-1. Mr. Rubin noted that most of those fees in the United States, and nearly all fees in Pennsylvania, are based on measuring impervious surface area of the property. OCA St. 1 at 44. A typical or average residential area is calculated based on the impervious surface area for the properties and that Equivalent Residential Unit (ERU) is the basis for developing stormwater rates for larger, non-residential properties. <u>Id.</u> There may be fee reductions for properties that significantly control stormwater fees.

Mr. Rubin opined that this fee structure, based on impervious surfaces, is a fair way to collect stormwater costs. <u>Id.</u> He finds it to be consistent with "well-established regulatory and judicial precedents about principles of cost causation and the determination of rates that are just, reasonable, and non-discriminatory." OCA St. 1 at 44-45. Using property characteristics, like impervious surface area, rather than water use, to allocate and collect stormwater costs is important because there are properties that contribute to stormwater flows but are not water or wastewater customers, *e.g.*, parking lots or facilities, and some outdoor recreation facilities. <u>Id.</u> at 45. There could be a significant number of stormwater only customers. For example in the currently pending Pittsburgh Water and Sewer Authority (PWSA) rate case, PWSA estimates that it will have

⁵³ Every year, Western Kentucky University conducts a survey of stormwater fees and charges. The survey is publicly available. OCA St. 1 at 44 (citing C. Warren Campbell, *Western Kentucky University Stormwater Utility Survey 2019* (hereafter "W. Ky. Survey")).

https://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=1000&context=seas_faculty_pubs.

approximately 8,000 stormwater-only customers when it proposes stormwater rates later this year, compared to about 100,000 wastewater customers currently. <u>Id.</u> In a recent Halifax Regional Water Commission case, it had more than 19,000 stormwater-only customers compared to approximately 75,000 wastewater customers. <u>Id.</u>

3. <u>PAWC Collects Stormwater Costs From Water and Wastewater Customers.</u>

PAWC allocates all stormwater-related costs in the same way that it allocated infiltration and inflow (I&I) costs in a sanitary sewer system. OCA St. 1 at 45. It did not propose a separate rate for stormwater service in any rate area because it says that it has not been ordered to do so. OCA St. 1 at 45, 46. The result is that those costs of controlling and treating stormwater are collected from sanitary wastewater customers, through customer and flow charges, and from water customers through the wastewater subsidy. <u>Id.</u> at 46.

According to PAWC it is allocating stormwater costs in the same way as I&I based on the Manual of Practice No. 27, *Financing and Charges for Wastewater Systems* published by the Water Environment Federation ("WEF Manual").⁵⁴ OCA St. 1 at 47. However, Mr. Rubin explained that the WEF manual does **not** support allocating costs in same manner as I&I costs. OCA St. 1 at 47. The first problem with PAWC's reliance on the WEF manual is that PAWC witness Heppenstall cited to the third edition published in 2004. In the fourth edition, published in 2018, the WEF manual includes more information about allocating stormwater-related costs and how to collect those costs. Mr. Rubin noted that the 2018 edition has a new chapter on "Wet Weather Financing and Cost Recovery". OCA St. 1, Sch. SJR-9. Mr. Rubin explained that the chapter begins with an introduction which states, in part:

The characteristics of wet weather flows and their potential environmental, economic, and community effects are quite different from that of groundwater

⁵⁴ The WEF Manual is the standard reference on cost-of-service studies, rate design, and other ratesetting topics for wastewater utilities. OCA St. 1 at 46.

inflow and infiltration (I/I) that occur naturally in a wastewater system.' The text continues to explain that 'many wastewater utilities, especially those with a CSS' are facing significant stormwater control costs that it may not be reasonable or fair to collect through traditional wastewater rates. In addition, ratesetting principles such as fairness, along with providing incentives for property owners to reduce stormwater flows, suggest the need for a separate stormwater fee.

OCA St. 1 at 47 citing Sch. SJR-9, p. 3 (WEF Manual, p. 184).

The WEF Manual does not support the Company's position. The WEF manual states that although cost recovery through sewer charges may provide for "administrative simplicity", that approach may affect equity of cost recovery because of the "limited correlation" between the volume of water usage (used to develop sewer charges) and the magnitude of a property's wet weather contribution. OCA St. 1 at 47-48 *citing* Sch. SJR-9, pp. 8 and 9 (WEF Manual pp. 189-190). The WEF manual also points out the importance of providing property owners with an opportunity to reduce fees by reducing wet weather flows. Id. at 48. Mr. Rubin also pointed to a 2013 WEF manual that addresses approaches to stormwater programs including how to develop fees or charges for stormwater service. Id. *citing* Water Environment Federation, *User-Fee-Funded Stormwater Programs* (2nd ed. 2013). In the 2018 Western Kentucky survey, 19 of the 27 stormwater utilities in Pennsylvania use an ERU method based on impervious area or similar property characteristics. Id. at 50, Sch. SJR-8, Table 1A.

The definition of wastewater was added to the Public Utility Code in 2016, 66 Pa. C.S. § 102, indicated that it is not dispositive of the ratemaking treatment for the costs related to the provision of wastewater. OCA St. 1 at 48. Mr. Rubin explained that the "Commission has established separate rates and conditions for the provision of industrial wastewater service (requiring pretreatment and setting the costs of that service), as compared to domestic wastewater service, even though the flows are ultimately commingled in the same sewer mains." Id. at 49. He concluded that, "The explicit inclusion of stormwater as part of wastewater does not eliminate the

need for the Commission to determine the cost of providing stormwater service or determining who should pay those costs." <u>Id.</u>

This is not a theoretical difference of opinion regarding cost allocation. As Mr. Rubin explained the stormwater-related costs are "very significant" in the combined-sewer systems. The stormwater-related costs account for approximately 46% of the revenue requirement in those three rate zones, or \$31,148,927 of the total \$68,089,360 in combined-sewer system revenue requirements, as shown below:

Table 1: Stormwater-related costs as a percent of revenue requirement ⁵⁵					
Rate Area	Revenue Requirement	Stormwater Costs	Stormwater as Percent of Total		
Scranton WW	\$34,754,312	\$14,083,139	40.5%		
McKeesport WW	30,047,582	16,279,882	54.2%		
Kane WW	3,287,466	785,906	23.9%		
Total	\$68,089,360	\$31,148,927	45.7%		

OCA St. 1 at 50. PAWC's continued shift of these costs onto wastewater and water customers on the basis of their water usage is not just or reasonable, and it should not be the way that rates are set. However, PAWC has not done the work necessary to determine the impervious area of properties and has not identified stormwater-only customers. <u>Id.</u>

In this case, Mr. Rubin recommends that existing rates in the combined-sewer rate areas should be increased by an equal percentage, or across-the-board.⁵⁶ OCA St. 1 at 51. He acknowledges that his recommendation will perpetuate the inequity that is inherent in the existing rates, but without the necessary data, he concluded that any attempt to modify those rates would

⁵⁵ From Schedule D of each COSS, PAWC Exhibits 12-F, 12-G, and 12-H.

⁵⁶ One exception is the Port Vue rate areas of McKeesport that is discussed *infra*.

suffer from the same problems as the existing rates and could cause the rates to move further away from the cost of service. <u>Id.</u>

Regarding a path forward, Mr. Rubin recommends that, in this case, the Commission order PAWC to develop a stormwater fee to collect stormwater-related costs in the three CSS rate zones (Scranton, McKeesport, and Kane). This recommendation is important to address the inequity that exists in the current rates and that would continue under PAWC's failure to address this issue. Mr. Rubin explained:

Collecting stormwater costs based on water consumption or on a per-customer basis is grossly unfair, especially to tenants and smaller properties with little impervious surface area. Moreover, failing to recognize that properties that are not wastewater customers (such as parking lots and others I mentioned above) can contribute significantly to stormwater flows makes the collection of stormwater costs through wastewater rates unduly discriminatory and grossly unreasonable.

OCA St. 1 at 50. The OCA submits that these recommendations should be adopted as being consistent with the general ratemaking principles. PAWC has failed to provide any evidence that its current or proposed rates for the combined-sewer systems are just and reasonable.

XIII. RECOMMENDATIONS FOR ACTIONS RELATED TO THE COVID-19 EMERGENCY

The OCA will not address the matters raised under Section XIII but reserves the right to

respond in its Reply Brief, as necessary, to matters raised by other parties.

XIV. LOW-INCOME CUSTOMER ASSISTANCE

Mr. Colton reviewed PAWC's current low-income bill discount program (BDP) to examine its impact on bill payment outcomes. He also examined the affordability of PAWC low income bills at the current discounts, and PAWC's proposed discounts, and recommends modifications. OCA St. 4 at 3, 16-43. He also recommends three steps that PAWC should take to improve enrollment in its BDP. Id. at 3, 43-68. Based on his review of the data available and his analysis,

he made the following recommendations:

- That PAWC maintain the basic structure of its low-income bill assistance program. By maintaining the basic structure, what I mean is that I recommend preserving PAWC's structure of providing a discount on the customer charge and volumetric charge for water service, and providing a volumetric discount for wastewater service.
- That rather than using a uniform across-the-board discount as PAWC currently proposes, where the discount does not vary based on income, PAWC should adopt a three-tier discount. The discounts currently proposed by PAWC would be retained for customers with income at or above 100% of Poverty. Modified discounts would be provided to customers with income at: (1) below 50% of Poverty; and (2) between 50% and 100% of Poverty.
- That, no later than six months after a final order in this proceeding, PAWC should present an Arrearage Management Plan to the Commission for review and approval. The AMP should be designed through a multi-party stakeholder consultative process, with BCS specifically invited to participate as a stakeholder;
- That PAWC be directed to budget \$50,000 to hire an expert consultant to develop, within twelve months of a final order in this proceeding, a grass-roots, boots-on-the-ground outreach plan for its low-income bill discount that relies on community-based "trusted messengers" to help identify and enroll eligible customers in its bill discount. The outreach program should be directed to explicitly identify how it implements each of the principles set forth below: (1) using the community as a "boots-on-the-ground" means of identifying and engaging the hard-to-reach population; (2) going to the community (reaching them "where they live, work, shop, play and pray") rather than making the community come to you; and (3) relying on grassroots "trusted messengers" from within the community.
- That PAWC's new outreach plan should reflect focused consumer education and outreach efforts, tailored to the demographics of its individual service territory. The plan should, in particular, identify efforts to educate and enroll eligible and interested customers at or below 50% of the Federal Poverty Level.
- That PAWC identify the 2,159 low-income customers who were found to be eligible for its low-income bill discount between January 2018 and April 2020 (or an updated number as of the date of a final order in this proceeding) and, without further action on the part of the customer, enroll those customers in the bill discount to the extent they remain PAWC customers. Moreover, PAWC should retroactively provide these customers who applied for the discount, been found to be eligible, and nonetheless were not enrolled, with benefits

retroactive to the month in which they were found to be eligible. To the extent that customers are found to have had service disconnected, they should be reconnected without cost and enrolled in the bill discount.

• That PAWC delete the following language both from its water and from its wastewater tariffs: "To remain eligible for this rate, such customer must continually make timely payments on the discounted bills."

OCA St. 4 at 4-5. PAWC has agreed to address the 2,159 low-income customers who were found to be eligible but not enrolled in the BDP. PAWC St. 17-R at 9; OCA St. 4SR at 10-11. Also resolved is the tariff revision recommended by Mr. Colton. <u>Id.</u>; OCA St. 4SR at 12-13. The OCA submits that the remaining recommendations are reasonable and should be adopted.

A. <u>H2O Discount Program Design</u>

Mr. Colton used a series of metrics to assess the effectiveness of PAWC's BDP in promoting more affordable bill payments by its low-income customers. OCA St. 4 at 8-16. Specifically he looked at the level of complete payments, the timeliness of payments, and the level of unsolicited payments. <u>Id.</u> at 8. As detailed in his testimony, the BDP has not been effective in generating payments from BDP customers. OCA St. 4 at 15.

Mr. Colton measures the completeness of payments through a Payment Coverage Ratio. OCA St. 4 at 9. This is a ratio of dollars of payments received divided by dollars of bills issued to customers. <u>Id.</u> Mr. Colton explained the results, as follows:

Even given the bill discounts PAWC provides to its low-income customers, the lowincome Payment Coverage Ratio is consistently lower than the residential Payment Coverage Ratio as a whole. For the 29-month period (January 2018 through May 2020), while the average residential Payment Coverage Ratio is 96.7%, the average low-income Payment Coverage Ratio is 76.8% (a difference of 19.9%).

OCA St. 4 at 9 (footnote omitted).

The second metric that Mr. Colton used to assess the effectiveness of the current BDP was the timeliness of payments made by the BDP participants. Using PAWC's data for the time period from January 2018 through May 2020, there was only one month (April 2020 when more than half of the participants made a full and on-time payment. OCA St. 4 at 12. Generally, between 43% and 46% of the participants made full and on-time payments. <u>Id.</u> Mr. Colton also reviewed the "Bills Behind" statistic to assess the timeliness of payments. OCA St. 4 at 12. That metric puts the level of arrearage in the numerator and the average bill in the denominator to assess how many bill payments were missed. <u>Id.</u> at 12-13. Mr. Colton found that PAWC's low-income customers are two more Bills Behind (5.85 in 2018 and 5.31 in 2019) than its residential customers in (3.15 in 2018 and 3.29 in 2019).

Regarding the third metric to measure the effectiveness of the PAWC BDP, Mr. Colton looked at the collection efforts that are required for PAWC to generate the payments it receives. He found that PAWC performs more than four times more nonpayment disconnections for every \$1,000 in payments from its BDP participants than its total residential customers and about 3 times more disconnections for each 1,000 payments than it performs for its total residential customer population. OCA St. 4 at 15. The data demonstrates that PAWC's BDP is not successful in assisting low-income customers to afford their water and wastewater bills, despite PAWC's assertion to the contrary.

Mr. Colton, using the income ranges from the PAWC service territory zip codes, shows the burdens of PAWC water bills and PAWC water and wastewater bills at the specific level of FPL, with no discount. OCA St. 4 at 20-21. This data shows the need for a bill discount and for enrolling customers in the bill discount program. <u>Id.</u> at 20. Water bill burdens⁵⁷ range from 7% to more than 10% of income for customers below 50% of FPL and from 2% to more than 4% for customers between 125-150% of FPL. OCA St. 4 at 20; Table 5. For a combined water/wastewater bill, the

⁵⁷ The OCA has not recommended, and the Pennsylvania PUC has not yet prescribed, a specific percentage of income by which to define an "affordable" water and/or wastewater bill. OCA St. 4 at 20, n. 5.

bill burden for all customers at 50% of FPL is 15% or more and ranges from more than 4% to more than 6% for customers at 125-150% of FPL. <u>Id.</u> Mr. Colton then applied the proposed PAWC bill discount to these same FPL income ranges and found that it improves the affordability of water and combined water/wastewater bills but not for those at the lowest brackets of the FPL.⁵⁸ OCA St. 4 at 22-24, Table 6. He noted that the data demonstrates the problem with a uniform across-the-board discount:

While the PAWC proposed discount largely addresses the water burdens being experienced at the two higher levels of Poverty (100% to 125%; 125% to 150%) for low-income customers who income-qualify for the PAWC discount, the discount falls short for the two lower ranges of Poverty.

OCA St. 4 at 23 (emphasis added).

Mr. Colton recommended the basic structure of the BDP be maintained (discounts applied to customer charge and to the volumetric charge for water and to the volumetric charge for wastewater). OCA St. 4 at 24. He recommended that PAWC modify its discount and implement a three-tiered discount that varies based on income, rather than maintaining the across-the-board discount used by PAWC. <u>Id.</u> A three-tier discount would be structured to yield bill burdens for service, whether water, combined water and wastewater, or wastewater only, that allow PAWC's low-income customers to see a "more sustainably payable bill burden." <u>Id.</u> at 25. Mr. Colton's discounts are set forth in OCA Statement 4, on page 25. Mr. Colton recommended a three-tiered discount for wastewater bills also. His discount levels are set forth in OCA Statement 4, on page 43.⁵⁹

⁵⁸ For customers with income between 50% and 100% of Poverty, nearly three-of-ten (27%) have water burdens exceeding 4% of income, while nearly 100% (99.2%) of customers with income between 50% and 100% of Poverty have water burdens between 6% and 9% of income (with the remainder having burdens exceeding 9% of income.

⁵⁹ Mr. Colton also recommends that PAWC establish an arrearage management program (AMP) to address existing arrearages that most customers in its BDP have when they enroll and to address arrearages that future participants may have when they enroll. OCA St. 4 at 29-39. According to Mr. Colton, addressing pre-existing arrearages is interrelated to providing bills that are sustainably payable. <u>Id.</u> at 30. As he noted, customers do not make separate payments for current service and their arrearages. If the total bill is beyond a customer's ability to pay, the bill discount addresses

B. <u>Hardship Fund</u>

Mr. Colton reviewed PAWC's existing Hardship Grant Fund and found that it is not funded at a sufficient level and is significantly inadequate to address the shortcomings in the uniform across-the-board discount that PAWC provides. OCA St. 4 at 35-41.

C. Low-Income Customer Outreach, Data Collection and Reporting

Mr. Colton provided three administrative improvements that he recommends PAWC be directed to pursue to improve the delivery of its low-income assistance program, irrespective of whether any other changes are ordered. OCA St. 4 at 44-68. He recommended improvement in outreach, communications between income eligibility confirmation and enrollment, and eliminating program dismissal for nonpayment.

PAWC enrolls a small fraction of its customers who are income-eligible for the BDP. OCA St. 4 at 44. Specifically, PAWC enrolls approximately 22,000 low-income customers each year. <u>Id.</u>, Table 11. That is a fraction of the 119,859 eligible low-income customers (income below 150% of FPL).⁶⁰ <u>Id.</u> at 45. This means that about 16.7% of PAWC's income-eligible customers are enrolled in the BDP.⁶¹ <u>Id.</u> This low level of enrollment exists even though PAWC has operated its low-income BDP for 29 years. <u>Id.</u> Mr. Colton noted that in comparison to energy utilities, this rate is substantially lower than those utilities' enrollment rates. OCA St. 4 at 45. Mr. Colton

the current service and the AMP can address the preexisting arrearages. That is why an arrearage management program is a key component, along with a better BDP, to addressing bills that are sustainably payable.

From January 2018 to March 2020, 10,317 customers were enrolled in the BDP. OCA St. 4 at 29. Of those, 7,254 (70.3%) had preprogram arrears at the time of enrollment that brought \$3,539,956 of preprogram arrears into the program. <u>Id.</u> That is an average of \$488 per customer. That average appears to be increasing. For the 12 months ending December 2018 the average was \$481 and for the 12 months ending December 2019, the average was \$516. <u>Id.</u> ⁶⁰Mr. Colton estimated this number by multiplying PAWC's residential customers in each zip code by the percentage of the population at various poverty ranges in each zip code. OCA St. 4 at 44. This BCS-prescribed process is used for Pennsylvania's energy utilities as well. <u>Id.</u>

⁶¹ Mr. Colton also looked at the percentage of PAWC customers who would be income-eligible by zip codes in the PAWC territory and found that there are zip codes that have no income-eligible customers enrolled in the BDP, while even the zip codes with higher percentage of enrollments still have a large amount of income-eligible customers who are not enrolled. OCA St. 4 at 46-49, Table 12.

recommended that PAWC should target outreach towards areas of its service territory with the greatest number of income-eligible customers but also to areas with the greatest proportion of the lowest income customers, which is not something PAWC currently does. OCA St. 4 at 49. PAWC does not know the number of customers who are income-eligible but are not enrolled. OCA St. 4 at 51. PAWC also does not attempt to target its outreach towards areas that might have more income-eligible customers. <u>Id.</u> at 50. Mr. Colton concluded, "[T]he common thread that runs throughout PAWC's outreach efforts is the fact that the outreach is system-wide and untargeted." OCA St. 4 at 52.

Mr. Colton recommended that PAWC budget \$50,000 to hire an independent expert consultant to develop an outreach plan within twelve months of an Order in this proceeding. He recommended that the report explicitly identify how it implements the following principles:

- 1. Using the community as a "boots-on-the-ground" means of identifying and engaging the hard-to-reach population.
- 2. Going to the community (reaching them "where they live, work, shop, play and pray") rather than making the community come to you.
- 3. Relying on grassroots "trusted messengers" from within the community.

Moreover, I recommend that PAWC's new outreach plan should reflect focused consumer education and outreach efforts, tailored to the demographics of its individual service territory. The plan should, in particular, identify efforts to educate and enroll eligible and interested customers at or below 50% of the Federal Poverty Level.

OCA St. 4 at 58-59.

D. <u>Comprehensive Universal Service Plan</u>

The OCA will not address the matters raised under Section XIV.D but reserves the right to

respond in its Reply Brief, as necessary, to matters raised by other parties.

E. <u>Winter Shut-Off Moratorium</u>

The OCA will not address the matters raised under Section XIV.E but reserves the right to

respond in its Reply Brief, as necessary, to matters raised by other parties.

XV. SERVICE QUALITY AND CUSTOMER SERVICE ISSUES

Based on the review of PAWC's customer service performance and service quality

conducted by OCA witnesses Alexander and Fought, the OCA makes the following

recommendations:

- PAWC should establish minimum performance standards for several aspects of customer service, including call center, leaks, main breaks, kept field appointments and response to complaints. Objective standards and monitoring of those standards are a means to ensure that PAWC maintains and, where necessary, improves its level of performance relative to other major Pennsylvania utilities. OCA St. 5 at 7-14, 18-19, 30; OCA St. 5SR at 6, 8-9, 12, 14-15.
- PAWC should be required to take steps to improve the monthly performance of its call center. While the 2019 performance improved compared to 2018, the wide swings in performance and the generally below average performance in all areas should be corrected. Customers who call in any month should be provided with reasonable customer service. Specific performance standards should be implemented. OCA St. 5 at 7-8; OCA Exh. BA-2; OCA St. 5SR at 15.
- PAWC should be required to conduct regular audits of the third-party call centers to ensure that the rights and remedies available to Pennsylvania residential customers pursuant to Chapter 56 are affirmatively offered and presented when making contact with such customers who have received a termination notice. OCA St. 5 at 13; OCA St. 5SR at 17. The documentation regarding BCS-verified infractions shows repeated instances of PAWC representatives threatening termination prior to resolution of a dispute. OCA St. 5 at 11. The results of such audits should be reported to BCS as part of the quarterly customer complaint analysis that the OCA recommends below.
- PAWC should be required to submit a quarterly analysis of its complaint trends, identify the underlying root cause of the complaints, and document the steps taken to respond to this analysis. A closer supervision of this information is warranted to ensure that ongoing improvements are made to customer service, particularly, in light of the existence of the multi-state management structure and operation of four call centers that serve Pennsylvania customers. OCA St. 5 at 11-14.
- PAWC should provide its customer logs in live Excel format because a searchable format will facilitate review. OCA St. 6 at 13. The logs should also include information about the

final disposition of the complaint because that is required by Commission regulation. Id.

- PAWC should be required to develop a program of routine customer satisfaction surveys that conform to the unified approach and methodology used by the larger Pennsylvania electric and natural gas utilities. The current one-sentence request for determining customer satisfaction is insufficient. OCA St. 5 at 18; OCA St. 5SR at 9-10
- PAWC should modify its training materials to explicitly empower the employee to use their discretion to withdraw and seek guidance from management before terminating service, when they do observe an unusual condition that could result in danger or harm from termination. OCA St. 5 at 17-18; OCA St. 5SR at 10-11.

A. <u>Customer Performance Service Standards</u>

PAWC does not have specific internal standards for many essential performance areas. OCA St. 5 at 25, 29-30. OCA witness Alexander testified that this is a serious concern and unusual for a utility of the size of PAWC in Pennsylvania and an affiliate of a 16-state parent company. OCA St. 5SR at 2-3, 5-6. PAWC has acquired many Pennsylvania water and wastewater systems in recent years so that increasing numbers of customers are dependent on this entity for essential services. <u>Id.</u> Those customers are entitled to reasonable and reliable customer service, despite the growing size of their utility. Objective standards and monitoring of those standards is a means to ensure that PAWC maintains and, where necessary, improves its level of performance relative to other major Pennsylvania utilities.

The OCA recommends minimum performance standards for several aspects of customer service, including call center, leaks, main breaks, kept field appointments and response to complaints. Specifically, the OCA requests that the Commission require PAWC to meet the following standards:
Service Quality and Customer Service Standard	Performance Standard	Basis for Proposed Standard
Call Center Annual Average Speed of Answer	1 minute (60 seconds)	Pennsylvania typical performance; requires significant annual average improvement
Call Center Annual Abandonment Rate	4%	Pennsylvania typical performance; requires improvement
Average Monthly Response Time for Leaks (damage)		Track this information and propose a standard within 60 days
Frequency of Main Breaks	0.19 main breaks per mile	PAWC 2019 performance
Kept Field Appointments	98%	PAWC current performance
Justified Complaints (per 1,000 customers)	20% reduction in complaints and payment arrangement requests from 2019	Improvement required
Complaint Infractions	20% reduction from 2019	Improvement required
Response Time to BCS Complaints	<20 days	PAWC current performance
Customer Billing Inquiries	90% resolved w/in 20 days	PAWC objective

OCA St. 5 at 30; OCA St. 5SR at 6. Each recommended standard is discussed below.

The Commission has broad authority to consider a utility's customer service and quality of

service performance.⁶² Section 1504 of the Public Utility Code provides:

The commission may, after reasonable notice and hearing, upon its own motion or upon complaint:

(1) Prescribe as to service and facilities, including the crossing of facilities, just and reasonable standards, classifications, regulations and practices to be furnished, imposed, observed and followed by any or all public utilities.

66 Pa. C.S. § 1504. In the context of a base rate case, evaluation of the "efficiency, effectiveness, and adequacy of service" by the Commission is affirmatively required.⁶³ Further, in its consideration whether to maintain existing rates or as a condition of any rate increase, the

⁶² 66 Pa. C.S. § 1501.

⁶³ 66 Pa. C.S. § 523(a).

Commission has authority to order improvements to service. <u>Pa. P.U.C. v. Pennsylvania Gas &</u> <u>Water Co.</u>, 61 PaPUC 409, 415-16, 74 PUR4th 238, 244-45 (1986) (<u>PG&W 1986</u>); 66 Pa. C.S. § 1501 (every public utility shall make all changes and improvements to service as shall be necessary to make such service adequate, efficient, safe and reasonable).

By way of example, in a Philadelphia Gas Works rate case, the Commission approved specific service quality and customer service performance standards similar to those recommended by the OCA in this proceeding. The Commission conditioned PGW's interim rate increase as follows:

PGW must show improvement in its customer service functions and report on its progress to the Commission on a quarterly basis. Such reports should include: monthly call center access reports for customer service and collection call centers (to include average speed of answer, average abandonment time, number of abandoned calls, average delay in queue and the percentage of calls answered); monthly customer dispute reports (to include the number of customer disputes filed, the number and percentage of disputes responded to in under thirty days, and the average response time); the number and percentage of residential bills which PGW failed to render during the relevant billing cycles; the number and percentage of residential meters for which PGW has failed to obtain actual or customer supplied readings during the prior six months; and, monthly reports showing the number and percentage of missed customer service appointments.⁶⁴

The Commission has also approved specific service quality and customer service performance

standards in the context of merger and acquisition proceedings.⁶⁵ OCA St. 5 at 25.

As such, in this rate proceeding, PAWC must justify its existing and proposed rates, in part, based on its ability to perform its essential quality of service and customer service functions at a reasonable performance level. In determining what is a reasonable performance level, OCA witness Alexander compared PAWC's performance to that of other major Pennsylvania utilities. OCA St.

⁶⁴ Pa. P.U.C. v. Philadelphia Gas Works, Docket No. R-00005654, Order at 33-34 (Nov. 22, 2000).

⁶⁵ OCA St. 5 at 25; <u>see, e.g.</u>, <u>Application of Aqua America, Inc., Aqua Pennsylvania, Inc., and Aqua Pennsylvania</u> <u>Wastewater, Inc.</u>, Docket Nos. A-2018-3006061, A-2018-3006062, A-2018-3006063, Order at 151-54 (Jan. 24, 2020); <u>Joint Application of T.W. Phillips Gas and Oil Co.</u>, Docket No. A-2010-2210326, Order (May 23, 2011).

5 at 7, 10, 23, 27-30. The OCA recommends that PAWC be required to submit quarterly reports regarding its performance in the customer service areas addressed by the standards. The OCA submits that Commission should open an investigation if the reports show a persistent failure to meet reasonable performance standards.^{66, 67}

1. <u>Average Answer Time and Call Abandonment Rate</u>

The OCA addresses its recommended performance standard for call answer time and abandonment rate under Section XV.B.1, *infra*, in the context of a broader discussion of PAWC's call centers.

2. <u>Response Time to Leaks and Outage Restoration, Keeping Customer</u> <u>Appointments</u>

Ensuring that the utility's distribution system is operating to prevent loss of service and to respond promptly to correct leaks and disruptions is an essential duty of any water utility. 66 Pa. C.S. § 1501 (service "shall be reasonably continuous and without unreasonable interruptions or delay"); 52 Pa. Code § 65.20 ("Leak detection. A system of leak detection should be utilized on a regular basis, with leaks being repaired as expeditiously and economically as possible"); OCA St. 5 at 9. OCA witness Alexander raised a concern that PAWC does not currently track the response time for leaks, *i.e.* the amount of time from the utility becoming aware of the incident until the

⁶⁶ The literature applicable to alternative rate plans specifically recognizes the potential for deterioration of or lack of improvement in customer service under multiyear rate plans. For example, Ms. Alexander published a seminal article on the need for a service quality index to accompany multiyear rate plans, providing an example of a recently adopted price cap plan with a service quality index applicable to Central Maine Power Company in Maine in 1996. OCA Exh. BA-4 (Electricity Journal (Apr. 1996)). More recent research articles have confirmed the reasonableness of including service quality performance standards for multiyear rate plans. OCA St. 5 at 26 (citing Costello, Ken, <u>Multi-Year Rate Plans and the Public Interest</u>, NRRI (Oct. 2016) at 21. <u>https://pubs.naruc.org/pub/FA86999D-D03F-2858-7228-A6353560E5B9</u>).

⁶⁷ The OCA has also opposed PAWC's request for approval of a multiyear rate plan. If the Commission determines to approve the request, however, the OCA recommends that the MYRP should include penalties for non-compliance with the customer service performance standards. The Company's proposal to automatically increase rates in the second year, without a review of its customer service performance, carries the risk that customer service quality will deteriorate because the utility has "a two-year time frame to exercise its discretion to alter internal expenditures and without a check on whether it is improving or even maintaining service quality performance." OCA St. 5 at 24-25.

repair is completed. OCA St. 5 at 9; PAWC St. 2R at 4. PAWC witness William Andrew Clarkson objected to applying the same standard to all types of leaks because some are not addressed as quickly, such as breaks that do not result in an outage and leaks on customer-owned service lines that are not the Company's responsibility to repair. PAWC St. 2R at 4-5. Consistent with that information, the OCA recommends that PAWC begin to track leak information for breaks that disrupt service and, based on that data, propose a performance standard within 60 days of the entry of the Commission's final Order in this proceeding.

The OCA also recommends using PAWC's 2019 level of performance as the standard for keeping appointments. The Company reported that it met 98% of its customer field appointments in 2019 and has an internal goal to maintain this level of performance. OCA St. 5 at 9 (citing PAWC Response to OCA-I-001, Att. 4, 5). OCA witness Alexander agreed that a 98% standard is reasonable and typical of major utilities. <u>Id.</u>

PAWC witness Clarkson objected to setting minimum performance standards for leaks, outages, or appointments on the grounds that there are no "industry" standards or regulatory requirements. PAWC Statement No. 2R. It remains, however, that preventing and mitigating service disruptions and keeping appointments with customers are fundamental aspects of providing adequate and reasonable service. Moreover, the specific performance standards that the OCA recommended are based on the Company's own historical performance. OCA St. 5SR at 12. PAWC witness Bruce Aiton provided updated data on the frequency of main breaks showing a decrease in their frequency, both system-wide and in the Pittsburgh system. PAWC St. 3R at 29. This is a positive development and further indication that the standard for main break rates proposed by the OCA is reasonable and achievable. The OCA's proposed standards should be adopted, to maintain existing quality of service in these areas.

3. <u>Customer Billing Accuracy and Resolution of Inquiries</u>

The OCA also recommends establishing a performance standard for PAWC's billing accuracy and timeliness of resolving billing inquiries. PAWC already tracks certain billing performance metrics, such as "out of balance invoices," "customer billing inquiries," and "account resolution follow-up." OCA St. 5 at 18-19. Based on review of the data provided, Ms. Alexander observed that PAWC's "baseline" appears to set a target for 90% to 95% of these customer contacts and concerns to be resolved in less than 20 days. During the last two years, the Company generally met or exceeded that baseline. <u>Id.</u> Accordingly, the OCA recommends that PAWC should be required to continue its objective to resolve 90% of its billing inquiries within 20 days.

B. <u>Call Centers</u>

PAWC relies on customer call centers as the main method by which customers can communicate individually with PAWC. OCA St. 5 at 6-7. Therefore, the operation of its call centers is crucial to the Company's ability to deliver a reasonable level of customer service.

1. <u>Average Answer Time and Call Abandonment Rate</u>

PAWC provided combined, monthly data for its four call centers⁶⁸ from January 2018 through April 2020, which OCA witness Alexander used to calculate annual average results for three key indicators of performance:

Year	Percent Calls Answered in 60 Seconds	Abandonment Rate	Average Speed of Answer (minutes)
2018	55.89%	18.36%	06:40
2019	67.83%	5.99%	02:33
2020 (Jan-April)	71%	5.91%	02:28

⁶⁸ PAWC has four call centers that handle calls from Pennsylvania customers as well as customers in 15 other states, which are managed by American Water Works Service Company (AWWSC) and located in Illinois, Florida, Kentucky and Tennessee. OCA St. 5 at 6-7, 13 (citing PAWC St. 18R at 1-2). The staffing for these offices totals 284 representatives, from 41 in Tennessee to 99 in Kentucky.

OCA St. 5 at 7; OCA Exh. BA-2. As discussed by Ms. Alexander, the data shows extremely poor performance in PAWC's ability to answer calls in a timely manner and avoid a significant abandonment rate (the percentage of calls in the queue to be answered by a customer service representative that are abandoned due to a long wait time). OCA St. 5 at 7.

In addition, the monthly results reflect a dramatic swing in call center performance that is masked in the annual averages. OCA St. 5 at 8. For example, although the average abandonment rate for 2019 and 2020 was roughly 6.0%, in certain months during 2019 and 2020, the abandonment rate ranged from 9% to 12%. <u>Id.</u> While the average speed of answer has significantly improved from 6:40 (minutes) in 2018 to approximately 2:30 in 2019 and 2020, the monthly results indicate an ongoing difficulty in meeting a reasonable target performance on a routine basis. OCA St. 5 at 7; OCA Exh. BA-2. In certain months, the speed of answer was over 4 and 5 minutes. <u>Id.</u> at 8. Ms. Alexander determined that the key variable in call center performance is the volume of calls and the number of available call center representatives on hand to answer the calls, such that PAWC can improve performance with better prediction of call volume and ensuring adequate, trained personnel are available to respond to call volume at predicted high call volume days and times. <u>Id.</u>

Currently, PAWC does not have any specific performance metrics or targets for its call center performance. OCA St. 5 at 8, n. 8. Ms. Alexander recommended that PAWC should be required to take steps to improve the monthly performance of its call center and, specifically, to bring its performance in line with other Pennsylvania utilities. <u>Id.</u> at 7, 30. Specifically, the OCA recommends that PAWC's call centers should establish the following performance standards: (1) an average time of answer of 60 seconds or less and (2) a call abandonment rate of less than 4%.

2. <u>Pennsylvania-Specific Audits of Third-Party Call Centers</u>

PAWC's call centers located in Kentucky and Tennessee are operated by third parties under contract with American Water Works Service Company (AWWSC).⁶⁹ PAWC St. 18R at 1-2. Representatives from the two third-party call centers make outbound calls to customers who have received a termination notice for nonpayment or other legal reasons, to seek payment or resolution of the cause of the notice. OCA St. 5SR at 13, 16. These two call centers make a significant percentage of their outbound calls to Pennsylvania customers: 65% for the Kentucky call center and 35% for the Tennessee call center. <u>Id.</u> at 16 (citing PAWC Response to OCA-XXIII-13).

OCA witness Alexander raised a concern whether these representatives are adequately trained and supervised to provide all of the Pennsylvania-specific rights and remedies to customers when discussing how to respond to a termination notice. OCA St. 5SR at 16. Her concern is based on the realistic and reasonable difficulty in properly supervising over 200 customer service representatives, in four different call centers that serve 16 different states and handle calls for thousands of customers on a daily basis, particularly in light of BCS's findings of verified complaints and those with infractions. Id. at 16; OCA St. 5 at 13. To address that concern, the OCA recommends that PAWC be required to conduct regular audits of the third-party call centers to ensure that the rights and remedies available to Pennsylvania residential customers pursuant to Chapter 56 are affirmatively offered and presented when making contact with such customers who have received a termination notice. The results of such audits should be reported to BCS as part of the quarterly customer complaint analysis that the OCA recommends. See Section XV.C.1, below.

⁶⁹ PAWC's other two call centers, located in Illinois and Florida, are staffed by AWWSC employees. PAWC St. 18R at 1-2.

C. <u>Customer Complaints</u>

1. <u>Reporting on PAWC's Analysis of Root Causes of Disputes and</u> <u>Complaints and Response to Identified Trends</u>

The Commission's Bureau of Consumer Services (BCS) publishes a quarterly Utility

Consumer Activities Report and Evaluation (UCARE) for major Pennsylvania electric, gas,

telephone and water utilities,⁷⁰ which summarizes and compares historical data regarding informal

complaints.⁷¹ Review of the 2019 calendar year data for PAWC⁷² raises several concerns:

- 15% of the residential customer complaints were "justified" ⁷³
- 24% of the payment arrangement requests were "justified," that is, reflected PAWC's failure to apply the proper policies in handling the customer's interaction prior to the customer's informal appeal to BCS.
- The percentage of PAWC's payment arrangement appeals was the highest of any Pennsylvania water utility.
- The response time by PAWC to provide the necessary documentation requested by BCS to resolve customer complaints decreased slightly from 24.1 days in 2018 to 20.6 days in 2019.⁷⁴
- BCS recorded 62 (of which 61 related to Chapter 56 of the Commission's regulations) verified "infractions"⁷⁵ based on its analysis of PAWC informal customer complaints filed with BCS in 2019. A review of the communications sent by BCS to PAWC to document these infractions shows a repeated instance of PAWC threatening termination prior to resolution of a dispute.

OCA St. 5 at 10-11.

⁷² Utility Consumer Activities Report and Evaluation Report for Quarters 1-4 (2019) at 11-13 (Q4 2019 UCARE Report). This report is available at (<u>https://www.puc.pa.gov/General/publications_reports/pdf/UCARE_2019-4Q.pdf</u>).

⁷⁰ <u>http://www.puc.state.pa.us/filing_resources/consumer_activities_report_evaluation.aspx</u>.

⁷¹ PAWC receives a variety of complaints, the most voluminous being "disputes" registered directly with the utility. OCA St. 5 at 9-10. If the customers is dissatisfied with PAWC's response, the dispute may be elevated to an informal complaint resolved by the Commission's BCS or, by virtue of making a formal filing, to a formal complaint handled by the Commission. Id.

⁷³ Q4 2019 UCARE Report at 12, 18 ("Justified Consumer Complaints – A consumer complaint case where, prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs or guidelines when the consumer brought the complaint to the company's attention. The justified consumer complaint rate equals the number of justified consumer complaints for each 1,000 residential customers").
⁷⁴ Q4 2019 UCARE Report at 13.

 $^{^{75}}$ <u>Id.</u> at 17, 18 ("Infraction – A misapplication or infringement of a Commission regulation, particularly the standards and billing practices for residential utility service").

While some improvements have resulted from PAWC's review of informal complaints, the 2019 data from the UCARE Report shows that further improvements are needed. Tracking and evaluating disputes and informal or formal complaints are key to ensuring ongoing improvements in customer service "because that evaluation is likely to spot the "red flag" that indicates a systemic issue or concern that requires management's attention and, in some cases, a change in policy or procedure" and may also identify violations of the Commission's regulations. <u>Id.</u> PAWC relies on identifying "red flags" to ensure that call center representatives are providing proper information and offering the required consumer protections to Pennsylvania customers. OCA St. 5 at 13-14. This need is underscored by PAWC's multi-state management structure and operation of four call centers that serve Pennsylvania customers. <u>Id.</u>

To ensure that ongoing improvements are made to customer service, a closer supervision of PAWC's complaints and disputes and associated trends and causes is necessary. OCA St. 5 at 10-13, 16. Specifically, the OCA recommends that PAWC be required to submit a quarterly analysis to BCS of its complaint trends, which identifies the underlying root cause of the disputes and complaints and documents the steps taken to respond to this analysis. <u>Id.</u> at 28. The root cause analysis should review why the customer's communication with PAWC resulted in a dispute and how the PAWC customer service representative handled the initial communication, as well as the evaluation of the PAWC training materials and the integration of PAWC's field and maintenance staff for investigations of leaks and billing issues. <u>Id.</u> at 12.

2. <u>Complaint Logs</u>

In accordance with the PUC's requirements, a public utility must make a full and prompt investigation of complaints made by the Commission or others, including customers, relating to service or facilities and keep these records for at least five years. 52 Pa. Code § 65.3 (Complaints);

OCA St. 6 at 10. The written records⁷⁶ must show the name and address of the complainant, the date and character of the complaint and the final disposition of the complaint. <u>Id.</u>

For purposes of complying with the requirement to identify the "character" of the complaint, PAWC started with categories used by BCS and has supplemented that list to include an additional 66 categories. Mr. Fought proposed that an additional 10 categories be included for water systems and an additional 6 categories for wastewater systems. PAWC agreed to add all of the requested categories to those it will use for its customer logs beginning with complaints received on and after January 2, 2021. PAWC St. 17R at 15; Tr. 791-92. OCA witness Fought made two additional recommendations. First, PAWC should provide the logs in live Excel format. OCA St. 6 at 13. The logs are extensive and a searchable format will facilitate review of the logs. Second, PAWC's customer logs should include information about the final disposition of the complaint. <u>Id.</u> This request is expressly required by Section 65.3 of the Commission's regulations. 52 Pa. Code § 65.3 (utility complaint records should include "the final disposition of the complaint").

D. <u>Customer Satisfaction Surveys</u>

Currently, PAWC measures customer satisfaction with its performance by asking customers whether they are "overall satisfied with American Water" and about the "overall performance" by the customer service representative. OCA St. 5 at 18 (citing PAWC Response to OCA-I-001, Att. 7). The actual results of these one-time questions shows a significant deterioration in 2020 (to date) compared to 2019 with regard to satisfaction with the call center representative's handling of the call and overall with American Water.⁷⁷ OCA St. 5SR at 9. Further, the questions are insufficient because they do not obtain more detailed information concerning the customer's review of the

⁷⁶ These are neither formal complaints filed with the PUC nor informal complaints filed with the BCS.

⁷⁷ The satisfaction rating with the call center decreased from 95% in 2019 to 69% in 2020 (through September 18) and the satisfaction rating with American Water overall decreased from 86% to 70% in 2020 (through September 18). OCA St. 5SR at 9, n.8 (citing PAWC Response to OCA-XXIII-7).

actual recent transaction. OCA St. 5 at 18. OCA witness Alexander noted that BCS has approved survey instruments for major Pennsylvania electric and gas utilities, which obtain information from customers about their experience in reaching the utility, using the automated phone system and interacting with the customer representative, in addition to their overall satisfaction.⁷⁸ OCA St. 5 at 18. The OCA recommends that PAWC develop routine customer satisfaction surveys consistent with those approved by BCS for other major utilities. <u>Id.</u>; OCA St. 5SR at 9-10.

E. <u>Training on Termination of Service</u>

PAWC witness Dean accepted Ms. Alexander's recommendation to enhance and expand PAWC's training of its field representatives to include scenarios and written instructions when there is an allegation of pending dispute or complaint, or allegation relating to domestic abuse. PAWC St. 17R at 14.

PAWC, however, does not train personnel to detect conditions that would result in danger or harm to those at the residence if water service is terminated at that time. OCA St. 5 at 18. This issue has serious consequences for vulnerable customers whose health or safety depends on water service (and home heating, where water is required by the heating system). <u>Id.</u> at 18; OCA St. 5SR at 10-11. The OCA recommends that PAWC revise its training documents to expressly include these additional situations.

PAWC has acknowledged that when field representatives "encounter circumstances not specifically identified in the law or PUC regulation, they are instructed to contact their supervisor and/or business performance team members before terminating service." OCA St. 5SR at 11. The

<u>http://www.puc.state.pa.us/filing_resources/customer_service_performance_reports.aspx</u>. The report for 2019, for example, discusses the common survey process, questions and results on pages 18 to 26. <u>https://www.puc.pa.gov/media/1187/customer-service-report2019.pdf</u>. Reports are posted for the past 20 years and indicate the same questions related to customer satisfaction have been utilized since 2002.

⁷⁸ The BCS customer satisfaction surveys for electric and gas utilities are described and presented in the annual Customer Service Performance Reports available at

OCA agrees with this overall approach and recommends that PAWC modify its training materials to expressly include this instruction. Specifically, where field personnel observe an unusual condition at the premises which raises a question whether termination at that time may adversely impact the health and safety of the occupants of the dwelling, or the safety of PAWC's employee or the public, the training materials should explicitly empower the employee to use their discretion to withdraw and seek guidance from management before terminating service. <u>Id.</u>

F. <u>Pressure Surveys and Pressures</u>

The OCA recommends that, to protect customer service lines and inside plumbing in situations where PAWC elects to provide higher than 125 p.s.i.g. static pressure, the Company should either (1) provide a pressure reducer protecting the customer's service line or (2) provide an insurance policy covering repair or replacement of the service line. OCA St. 6 at 6; OCA St. 6SR at 10-11. As Mr. Fought explained: "If this approach was implemented, the cost of protecting service lines with pressures over 125 psi would be taken into account in deciding the most economical way to provide service to higher ground elevations." OCA St. 6SR at 11.

G. <u>Main Extensions</u>

1. <u>Introduction</u>

PAWC's tariff contains an exception to the general rule requiring a Contribution in Aid of Construction (CIAC) for main extensions. Under PAWC's tariff, main extensions may be provided to customers without a CIAC where there is a substantial public need, and the public health and safety may be compromised without access to a public water supply. PAWC's Tariff Rule 27.1(F) provides:

Where substantial public need exists and the public health and safety may be compromised by the absence of a public water supply in a portion of the Company's authorized service territory, the Company, subject to the Commission's prior approval, may install main extensions and Special utility services facilities without the payment of the Customer Contribution that would otherwise be required under subparagraphs (A)(3) and (D)(2), respectively of the Rule $27.1.^{79}$

In this case, OCA witness Fought recommended two projects for main extensions that meet the criteria set forth in Tariff Rule 27.1(F). OCA St. 6 at 7-8; OCA St. 6-SR at 16-17. In each project, designated as Area 1 and Area 2, the impacted consumers must have water hauled in to serve their needs and otherwise lack access to potable water. Pursuant to the provisions of Tariff Rule 27.1(F), the potential consumers have significant health and/or safety impacts due to the lack of available potable water.

2. <u>PAWC Should Extend a Main to Serve Area 1.</u>

OCA witness Fought recommended a main extension for Area 1 in the area of 51 Ullom Road, Washington County. The Company has made two previous main extensions to the area as a result of the settlements in the prior 2013 and 2017 base rate proceedings. The impacted potential consumer, Robert Teagarden, testified at the August 18, 2020, 6 p.m. Public Input Hearing in this proceeding. Tr. 197-98. Mr. Teagarden testified:

Approximately five years ago I lost my well. A neighbor down the road also lost their well the same day. Since that time, I've had the DEP involved. I had State Representative Jesse White involved. I'm finding out, there's some fracking in the area. I have a well within probably 1,400 feet of my house. Of course, everything was denied. So I had no choice. It was getting close to wintertime. I put a 1,500-gallon concrete tank in my yard, currently having water hauled in since that time. In the meantime, the neighbor next door sold her property, and I have had five houses built in that time, and every one of those houses has received public water. Right now, I'm the only one within my house – this area that does not have public water to their house.

My understanding, because if I want water to my house, it's going to cost me \$30,000, and I can't justify why. Everybody else got their water, I have no water.

The whole township is -it's -some of it's -some of it's rural, some of it's not, but most of the rural town has water except for my residence. Now I have my neighbor,

⁷⁹ Pennsylvania-American Water Co. Water Tariff, Supplement No. 2 to Tariff Water Pa. PUC No. 5, First Revised Tariff Page No. 89 (effective Jan. 1, 2018).

he had on, other neighbors had on, they've got their water. There's only two other houses on this road, we have no water.

And I feel I deserve to have water in my house. Why do I have to live like a pioneer? But everybody turned their back, DEP turned their back, the representative turned [his] back. So I was left with no choice but to do what I had to do to get water to my home.

Tr. 197-98; see OCA St. 6 at 7. As OCA witness Fought testified, the potential consumer in Area

1 meets the public health and safety requirements for a main extension and he continued to

recommend that the main extension be evaluated and approved if needed to solve the health and

safety issues. OCA St. 6-SR at 13.

Mr. Teagarden's property is located in the area of two prior main extensions that were

completed pursuant to Tariff Rule 27.1(F) as a result of the settlements of the 2013 and 2017 base

rate proceedings.⁸⁰ OCA witness Fought testified:

Mr. Teagarden testified that he believed that he is the only possible customer in the area in need of water service. A main was extended in the area two other times pursuant to Tariff Rule 27.1 as a result of the settlements of the 2013 and 2017 base rate proceedings. Even though Mr. Teagarden is unaware of other potential customers in the area, I would encourage the Company to survey the area and identify possible additional opportunities to extend the main to similarly-situated customers. His situation is worse than many of the others that were served by the Company with the two previous main extensions because he has to have water hauled in to support his needs and due to the cost of [the] system, the system is under-sized for his needs.

OCA St. 6-SR at 14.

The OCA submits that Area 1 meets the requirement of substantial public needs requirement

under Tariff Rule 27.1 (F). The OCA recommends that the Company proceed with a proposed main

extension to the area of 51 Ullom Road, Washington, Pa. The Company should continue to explore

whether other connections are possible in the area.

⁸⁰ See Pennsylvania-American Water Company Water Tariff, Supplement No. 2 to Tariff Water Pa. PUC No. 5, First Revised Tariff Page No. 89 (effective January 1, 2018); <u>Pa. P.U.C. v. Pennsylvania-American Water Co.</u>, Docket No. R-2013-2355276, Order (Dec. 19, 2013); <u>Pa. P.U.C. v. Pennsylvania-American Water Co.</u>, Docket No. R-2017-2595853 (Dec. 7, 2017).

3. <u>The Company Should Extend a Main to Serve Area 2.</u>

The potential consumers in Area 2 also meet the requirements for a main extension under

Tariff Rule 27.1(F). OCA witness Fought recommended a main extension in the area of Campbell

Road and Old Steubenville Pike in Bulger, Pa. (Area 2). OCA witness Fought testified:

The OCA was recently contacted by two potential customers located on Old Steubenville Pike and Campbell Road who desire public water supplied to their property. They believe that their well water was adversely affected by a fracking incident is currently the subject of a grand jury investigation by the Office of Attorney General. In addition to the 121 Campbell Road property (that was addressed in the 2017 rate settlement), there may be other homes in need of water service in the area due to the fracking incident.

OCA St. 6 at 7.

OCA witness Fought described two potential consumers in the area. The first is the Old

Steubenville Pike household. Mr. Fought testified:

The household at Old Steubenville Pike has had many illnesses possibly due to environmental reasons and possibly due to the contamination of their well. The potential customer's testimony is included beginning at page 18 of the Attorney General's Grand Jury Report. They do not believe that their water is potable due to the fracking incident. They only use the well water for household purposes and do not use the water for drinking or cooking. At times, they smell sulphur when they run the water. They claim staining of their toilets with a pinkish-orange color. The potential customer claims that a pinkish plastic like substance accumulates in the back of commode. The household also claims that they have had damage to their washing machine due to the water and that their whites have become dingy as a result of the water.

At the time they were building their house, they understood that there was a contract for PAWC to provide the area where their property was located with public water service. However, after an election, the new Robinson Township Supervisors and PAWC decided to void that contract. As part of the settlement of its last rate case, PAWC provided service to a neighbor at 121 Campbell Road.

OCA St. 6 at 7-8.

While the Old Steubenville Road area is outside of its service territory, the Company could

apply for a certificate of public convenience under Sections 1102(a) and 1103(a) of the Public

Utility Code to extend its service territory to serve these potential customers. 66 Pa. C.S. §§

1102(a), 1103(a). Since PAWC is already a certificated public utility in Pennsylvania, the

Commission may apply the standard of "continuing fitness to serve" to the application.⁸¹

Moreover, the Company appears to have also previously explored the idea of serving customers on Steubenville Pike. OCA witness Fought testified:

It is my understanding, in 2014, the Company had an agreement with Robinson Township to install 4,250 feet of water main to provide service to nine customers along the Steubenville Pike. This agreement was cancelled after new Township Supervisors were elected. If that 4,250 feet of main were installed, it could now serve 9812 Old Steubenville Pike and another potential 20 customers in the area along or nearby that main.

OCA St. 6-SR at 15-16.

In addition to the Old Steubenville Pike potential consumers, OCA witness Fought also

recommended a main extension to the adjacent Campbell Road. OCA witness Fought described

the Campbell Road household:

The household located on Campbell Road, Bulger, Pa. is adjacent to the 121 Campbell Road property that received a main extension as a result of PAWC's last base rate proceeding. This household seeks two taps, one for the farm and one for the house.

They claim that the water quality in their well changed five years ago. It previously was crystal clear and now they sometimes have a white swirl in their water that eventually settles. They also sometimes smell a sulphur odor from the water and their toilets have been stained an orange color.

The family continued to consume the well water until July of 2020. Three of the four household members have serious kidney and adrenal gland health issues, including their 12 year old daughter, and they attribute the health issues to consumption of the water over the last five year.

The water has also impacted their animals and livestock. They have had several kittens that have had to be put down due to kidney failure. The calves that consume the well water have not flourished and have started to atrophy. When the potential customer has moved them to another field not fed by the well water, the calves have rebounded.

⁸¹ <u>Blue Bird Coach Lines, Inc.</u>, 72 PaPUC 262 (1990); <u>Re V.I.P. Travel Servs., Inc.</u>, 56 PaPUC 625, 631 (1982).

OCA St. 6 at 7-8.

Company witness Aiton testified that an extension to serve Campbell Road would cost an estimated \$205,000. PAWC St. 3R at 13. The Company argued that the proposed main extension should not be approved because of quality of service issues raised by only serving two customers on the Area 2 main extension. PAWC St. 3R at 13-14. The OCA submits that PAWC witness Aiton has misunderstood the OCA's testimony regarding Area 2. The OCA also believes that additional potential customers may be served in the area, but has only been directly contacted by two of the customers in the area. OCA witness Fought testified that a review of Google Earth maps shows approximately 20 possible customers in or nearby Area 2. OCA St. 6SR at 16.

The consumers in Area 2 meet the requirements of Tariff Rule 27.1 (F). There may potentially be 20 other customers located in the area. The potential consumers have identified health and safety impacts from the lack of potable water. Moreover, due to on-going litigation, there may be a potential for financial compensation from the third party drilling companies for a main extension to this area. The OCA submits that a main extension for the Area 2 customers should be considered under Tariff Rule 27.1(F).

H. <u>Sewage Backups</u>

OCA witness Fought addressed sewers backing up into basements in areas served by combined sewers. OCA St. 6SR at 5. The OCA recommends that PAWC be required to ensure that implementation of the Long Term Control Plans does not cause more sewage backups in existing or new service areas. OCA St. 6SR at 6. Also, the Company should be directed to provide information to its customers that have basements connected to combined sewers informing them on how to eliminate sewage backups. <u>Id.</u> PAWC did not address these recommendations in its testimony. Therefore, the OCA's position should be adopted.

I. <u>Tenant Issues and Protections</u>

The OCA will not address the matters raised under Sections XV.I through XV.K but reserves the right to respond in its Reply Brief, as necessary, to matters raised by other parties.

J. Language Access

K. <u>Protection for Victims of Domestic Violence</u>

XVI. TARIFF CHANGES

A. <u>Limitation of Liability</u>

PAWC proposes new limitation of liability provisions in its water and wastewater tariffs.⁸²

The OCA opposes the proposed tariff changes because they are overly broad and would (1) limit

liability for negligent actions for injury or damages that are not related to interruption or cessation

of service, (2) limit liability for injury or damage resulting from intentional actions (i.e. reckless or

intentional behavior) and (3) contains so many conditions that it effectively exculpates PAWC from

liability.⁸³ OCA St. 5 at 21-22; OCA St. 5SR at 18-19.

The Company's proposed language improperly limits PAWC's liability for reckless and

intentional actions. Proposed Rule 15 states, in relevant part:

[t]he Company shall not be liable to any Customer or third party for any loss or damage due to any negligent, **reckless or intentional act of omission or commission**, by the Company, its employees or agents

(1) where the loss or damage involves an act of God, accident, strike, storm, riot, fire, flood, epidemic, pandemic, or any other cause beyond the Company's control;

(2) where the loss or damage does not involve a duty of the Company, its employees or agents, including breaks or leaks on facilities that are not owned by the Company,

⁸² Supplement No. 19 to Tariff Water – Pa. P.U.C. No. 5 at 64-65 (modifying the language to Rule 15, Liability of Company and eliminating Rules 15.1-15.3); Supplement No. 19 to Tariff Wastewater – Pa. P.U.C. No. 16 at 35, 52 (modifying the language to Rule Q, Liability of Company and eliminating Rules Q,1-Q.3).

⁸³ A tariff may limit a utility's liability for interruption or cessation of service due to negligence but only in narrowlydefined circumstances. <u>See Tariff Provisions that Limit the Liability of Utilities for Injury or Damage as a Result of Negligence or Intentional Torts</u>, Policy Statement, 29 Pa. Bull. 2147-2149 (Nov. 19, 1998); <u>DeFrancesco v. West Penn</u> <u>Water Co</u>, 329 Pa. Superior Ct. 508, 478 A.2d 1295 (1984) (<u>DeFrancesco</u>); <u>Behrend v. Bell</u>, 242 Pa. Super. Ct. 47, 363 A.2d 1752 (1976), <u>vacated on other grounds</u>, 473 Pa. 320, 374 A.2d 536 (1977) (<u>Behrend</u>); OCA St. 5 at 22-23.

such as breaks, leaks, defects or conditions in facilities of other utilities located in the same trench or in the Customer's own service line, meter vault, pressure reducing valve, back flow prevention device, check valve, pressure relief valve, or any other control valve, internal plumbing or fixture, or any other device installed on the customer facility, or due to the materials out of which those facilities are made;

(3) where the loss or damage does not involve a breach of a duty of the Company, its employees or agents, including where the Company does not receive actual notice, either written or oral, that a Company facility (located within the public right-of-way, in a sidewalk or on a Customer's property) is in need of repair, such as the condition or elevation of a vault, meter pit, curb box or valve box that is not proven to have been in that condition at the time of installation or that is caused by a plumber, developer, facility owner or other person or event; or

(4) where the claim involves strict products liability, breach of contract, or breach of actual or implied warranties of merchantability or fitness for a particular purpose, express or implied.⁸⁴

This proposed language also appears to exculpate PAWC from liability for negligent (as well as reckless and intentional) actions. OCA St. 5 at 22; OCA St. 5SR at 18-19. Accordingly, PAWC's tariffs should be revised to eliminate the overly broad limitation of liability proposed.

PAWC witness Everette opposed the OCA's recommended revisions to PAWC's proposed limitation of liability language. PAWC St. 4-R at 19-23. First, Ms. Everette contends that the proposed tariff does not in fact eliminate liability, but only under certain conditions. <u>Id.</u> at 19. As stated by OCA witness Alexander, however, it is not readily apparent to what circumstances one or more of these conditions would <u>not</u> apply. OCA St. 5 at 21-22; OCA St. 5SR at 18-19. Further, the extensive list of conditions is not the type of "narrow and limited" exception for negligent behavior allowed by the Courts. <u>See DeFrancesco; Behrend</u>. PAWC's language also improperly expands the scope of the limitation of liability beyond actions relating to the "interruption or cessation of service" authorized by the Commission's policy statement, 52 Pa. Code § 69.87.

⁸⁴ Supplement No. 19 to Tariff Water-PA P.U.C. No. 5 at 64 (emphasis added). While the OCA's argument focuses on the proposed revisions to PAWC's water tariff, the discussion is also applicable to PAWC's wastewater tariff provisions.

Second, Ms. Everette contends that the Company's proposed limitation of liability is not out of line with other Pennsylvania utilities. PAWC St. 4-R at 21-22. PAWC's proposed tariff, however, is the only one that expressly limits liability for reckless or intentional actions. None of the utilities that Ms. Everette references contain that express limitation. In fact, National Fuel Gas Distribution Corporation's (NFG) tariff specifically rejects that limitation. NFG's tariff states:

[t]he Company shall not be liable in any amount for damages, direct or consequential, where service meets requirements of the Public Utility Code. This limitation of liability, however, shall not apply to Company conduct which is found to be willful, wanton or reckless.

PAWC St. 4-R at 21-22. Ms. Everette recognizes that PECO Energy Company's tariff expressly excludes willful misconduct from its limitation of liability provision. <u>Id.</u> at 21, n. 10. Other Pennsylvania utilities, including UGI Electric and UGI Central Penn Gas, also expressly exclude negligent actions from their limitation of liability provisions.⁸⁵

PAWC's proposed limitation provisions are also broader than tariffs approved for its American Water affiliates. OCA St. 5 at 22-23. New Jersey American Water does not include any generic limitation on liability and its limitation for liability for multi-use service provides that the Company may be liable if the harm was caused by its own negligence. <u>Id.</u> at 22. West Virginia American Water limits liability for acts "beyond its control," but not for reckless or negligent acts of its employees or agents. <u>Id.</u> at 23. For these reasons, PAWC's proposed revisions to the limitation of liability provisions in its tariff should be denied.

B. <u>Chapter 56 Customer Protections to Be Included in Tariff</u>

PAWC's existing and proposed tariff rules and regulations do not reference, identify or describe, even at a high level, how the Company applies Chapter 56 and other essential consumer

⁸⁵ <u>http://gasmngmt.ugi.com/ELEC/doc/tariff/EStariff6.pdf</u> (Tariff Page 7); <u>http://gasmngmt.ugi.com/UGIU/doc/tariff/GSTariff7.pdf</u> (Tariff Page 25).

protections required for residential customers. OCA St. 5 at 20-21; OCA St. 5SR at 11; 52 Pa. Code Ch. 56. As such, the OCA recommends that PAWC's tariffs should be revised to include the essential consumer protections required by Chapter 56.

C. <u>Align Tariff Language on Low-Income Customers with Actual Practice</u>

This issue has been resolved.

XVII. CONCLUSION

For the reasons set forth in the OCA's Main Brief, the OCA respectfully requests the Commission deny any rate increase to Pennsylvania-American Water Company at this time. The Company's customers are experiencing substantial economic and personal hardships as a result of the continuing COVID-19 pandemic, and any rate increase at this time would not result in just and reasonable rates. Should the Commission determine, however, that some increase is needed, then the OCA's alternative positions and adjustments should be adopted and Pennsylvania-American should receive a rate reduction in water and minimal increases in wastewater, and its request for a multiyear rate plan should be denied. In addition, its proposed trackers should be denied and other actions taken as set forth in the OCA's Main Brief.

Respectfully submitted,

Erin L. Gannon Senior Assistant Consumer Advocate PA Attorney I.D. # 83487 E-Mail: <u>EGannon@paoca.org</u>

Counsel For: Tanya J. McCloskey Acting Consumer Advocate Office of Consumer Advocate 555 Walnut Street 5th Floor, Forum Place Harrisburg, PA 17101-1923 Phone: (717) 783-5048 Fax: (717) 783-7152

Dated: November 18, 2020 299617

<u>/s/Christine Maloni Hoover</u> Christine Maloni Hoover Senior Assistant Consumer Advocate PA Attorney I.D. # 50026 E-Mail: <u>CHoover@paoca.org</u>

Harrison W. Breitman Assistant Consumer Advocate PA Attorney I.D. # 320580 E-Mail: <u>HBreitman@paoca.org</u>

Lauren E. Guerra Assistant Consumer Advocate PA Attorney I.D. # 323192 E-Mail: <u>LGuerra@paoca.org</u>

Christy M. Appleby Assistant Consumer Advocate PA Attorney I.D. # 85824 E-Mail: CAppleby@paoca.org

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Total Water

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		OCA	OCA	Total
	Original Filing	Company	Filing	OCA	Pro Forma	Revenue	Allowable
		Adjustments	-	Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates	-	Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	642,348,898	366,536	642,715,434	0	642,715,434	0	642,715,434
Expenses:							
O & M Expense	213,937,875	(437,627)	213,500,249	(7,043,113)	206,457,136	0	206,457,136
Depreciation	144,092,856	2,229,045	146,321,901	0	146,321,901	0	146,321,901
Amortizations	(6,771,123)	(51,743)	(6,822,866)		(6,822,866)		(6,822,866)
Taxes, Other	11,354,620	420,317	11,774,937	(132,068)	11,642,869	0	11,642,869
Income Taxes:							
State	15,569,030	(29,484)	15,539,546	(277,092)	15,262,454	0	15,262,454
Federal	30,496,528	(34,956)	30,461,572	(27,562,128)	2,899,444	0	2,899,444
Amort of ITC and Excess DFIT	(233,592)	0	(233,592)		(233,592)		(233,592)
Total Expenses	408,446,194	2,095,552	410,541,746	(35,014,401)	375,527,345	0	375,527,345
Net Inc. Available for Return	233,902,704	(1,729,016)	232,173,688	35,014,401	267,188,089	(0)	267,188,089
Rate Base	3,328,329,601	116,473,294	3,444,802,895	25,134,328	3,469,937,223		3,469,937,223
Rate of Return	7.03%		6.74%		7.70%		7.70008422%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Water Operations

·	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.19%		
Long-term Debt	48.30%	4.53%	2.19%		2.19%
Short-term Debt	0.00%	0.00%	0.00%		
Preferred Stock	0.06%	8.73%	0.01%	0.711160	0.01%
Common Equity	51.64%	10.66%	5.51%	0.711160	7.74%
	100.00%		7.70008422%		9.94%
Pre-Tax Interest Coverage	4.54				
After-Tax Interest Coverage	3.52				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Total Wastewater

	PAWC Pro Forma Original Filing Present Rates (1)	Company Adjustments (1)	PAWC Pro Forma Rebuttal Filing Present Rates	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	73,100,482	0	73,100,482	0	73,100,482	(73,100,482
Expenses:							
O & M Expense	29,701,245	21,121	29,722,366	(1,011,274)	28,711,091	(28,711,091
Depreciation	25,944,030	736,371	26,680,401	0	26,680,401	(26,680,401
Amortizations	(105,637)	67,791	(37,846)		(37,846)		(37,846)
Taxes, Other	2,616,818	658,973	3,275,790	(16,981)	3,258,809	(3,258,809
Income Taxes:							
State	(1,094,710)	(71,461)	(1,166,171)	76,715	(1,089,456)	((1,089,456)
Federal	(673,745)	(133,170)	(806,915)	(2,503,799)	(3,310,714)	((3,310,714)
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	56,388,001	1,279,624	57,667,625	(3,455,339)	54,212,286	(54,212,286
Net Inc. Available for Return	16,712,481	(1,279,624)	15,432,857	3,455,339	18,888,196	(0)	18,888,196
Rate Base	647,008,274	16,206,465	663,214,739	2,534,509	665,749,248		665,749,248
Rate of Return	2.58%		2.33%		2.84%		2.83713362%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	1.63%	0.82%	0.711174	1.15%
	100.00%		2.83713363%		2.91%
Pre-Tax Interest Coverage	1.65				
After-Tax Interest Coverage	1.61				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		OCA	OCA	Total
	Original Filing	Company	Filing	OCA	Pro Forma	Revenue	Allowable
		Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	639,540,327	366,536	639,906,863	0	639,906,863	0	639.906.863
Expenses:							· · · · · ·
O & M Expense	212,205,637	(437,302)	211,768,335	(7,015,863)	204,752,471	0	204,752,471
Depreciation	143,245,719	2,187,393	145,433,112	Ó	145,433,112	0	145,433,112
Amortizations	(6,789,516)	(51,743)	(6,841,259)		(6,841,259)		(6,841,259)
Taxes, Other	11,236,002	342,222	11,578,224	(131,764)	11,446,460	0	11,446,460
Income Taxes:							
State	15,651,149	(21,699)	15,629,450	(273,231)	15,356,219	0	15,356,219
Federal	30,564,448	(20,225)	30,544,223	(27,554,821)	2,989,402	0	2,989,402
Amort of ITC and Excess DFIT	(233,592)	0	(233,592)		(233,592)		(233,592)
Total Expenses	405,879,846	1,998,646	407,878,492	(34,975,679)	372,902,813	0	372,902,813
Net Inc. Available for Return	233,660,481	(1,632,110)	232,028,371	34,975,679	267,004,050	0	267,004,050
Rate Base	3,304,569,811	115,885,108	3,420,454,919	25,144,500	3,445,599,419		3,445,599,419
Rate of Return	7.07%		6.78%		7.75%		7.74913208%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

	_Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.18786057%		
Long-term Debt	48.30%	4.53%	2.18786057%		2.19%
Short-term Debt	0.00%	0.00%	0.0000000%		
Preferred Stock	0.06%	8.73%	0.00523800%	0.711160	0.01%
Common Equity	51.64%	10.76%	5.55603351%	0.711160	7.81%
	100.00%		7.74913208%		10.01%
Pre-Tax Interest Coverage	4.57				
After-Tax Interest Coverage	3.54				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205000 0.00575930 0.00000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998718
Effective State Income Tax Rate	0.0980932
Factor After Local and State Taxes	0.8840975
Federal Income Tax Rate (*)	0.2099342
Effective Federal Income Tax Rate	0.1856023
Revenue Factor (100% - Effective Tax Rates)	0.6984952

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(1,207,000) 0 (686,340)						
Excess Accumulated Deferred income Taxes	27,037,840						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(1,722,407) (1,859,403) (1,801,885) (1,647,068) 14,899		(131,764)	185,232 185,754 180,008 164,542 (1,488)	350,477 351,466 340,594 311,330 (2,816)
Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)						(987,279)	(27,037,840) (1,868,032)
TOTALS	25,144,500	0	(7,015,863)	0	(131,764)	(273,231)	(27,554,821)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton	Amount \$
Company Rate Base Claim	\$ 3,420,454,919
OCA Rate Base Adjustments	25,144,500
OCA Rate Base	\$ 3,445,599,419
Weighted Cost of Debt	2.19%
OCA Interest Expense	\$ 75,384,911
Company Claim (1)	\$ 65,499,454
Total OCA Adjustment	\$ (9,885,457)
Company Adjustment	\$ -
Net OCA Interest Adjustment	\$ (9,885,457)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(987,279)
Net OCA Interest Adjustment	(9,885,457)
State Income Tax Adjustment	(987,279)
Net OCA Adjustment for F.I.T.	(8,898,178)
Federal Income Tax Rate	20.99%
Federal Income Tax Adjustment	(1,868,032)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

Accrued Interest Preferred Stock Dividends Long-Term Debt Short-Term Debt Company Rate Base Claim \$3,420,454,919 Company Rate Base Claim \$3,420,454,919 \$3,420,454,919 OCA Rate Base Adjustments \$25,144,500 \$25,144,500 OCA Rate Base Adjustments \$25,144,500 OCA Rate Base \$3,445,599,419 \$3,445,599,419 OCA Rate Base \$3,445,599,419 Weighted Cost of Debt 2.18786057% 0.00% Weighted Cost Pref. Stock 0.00523800% OCA Annual Interest Exp. \$75,384,911 \$0 OCA Preferred Dividends \$180,480 0.0 Average Revenue Lag Days 0.0 0.0 Average Revenue Lag Days Average Expense Lag Days 0.0 0.0 0.0 Average Expense Lag Days Net Lag Days -41.7 0.0 Net Lag Days 4.5 Working Capital Adjustment OCA Daily Dividends \$494 S206,534 OCA Daily Interest Exp. \$0 0.0 Net Lag Days Net Lag Days -41.7 4.5 \$2,223 OCA Working Capital (\$8,612,468) \$0 \$0 \$0 Company Claim (1) \$0 Company Claim (1) \$2,223 (\$8,612,468) \$0 OCA Adjustment

 Total Interest & Dividend Adj.
 (\$8,610,245)

 Less: Company Claim (1)
 (\$7,402,977)

 OCA Adjustment
 (\$1,207,268)

 Rounded to \$1,000
 (\$1,207,000)

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0		\$0	\$0.00	0,00	\$0
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	(\$273,231)	(\$273,231)	\$0	(\$273,231)	(\$748.58)	0.00	\$0
Federal Income Tax	\$0	(\$27,554,821)	(\$27,554,821)	\$0	(\$27,554,821)	(\$75,492.66)	0.00	\$0
	\$0	(\$27,828,052)	(\$27,828,052)	\$0	(\$27,828,052)			

ALJ Allowance 0

Company Claim (1) 0

ALJ Adjustment _____0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

	Company Pro forma F.T.Y.	OCA	OCA Pro forma		
Description	Expense	Adjustments	Expenses	Lag Days	Lag Dollars
Service Company	\$56,686,235	(\$3,448,953)	\$53,237,282	12.14	\$646,300,609
Chemicals	\$11,198,264	\$0	\$11,198,264	48.81	\$546,587,278
Group Insurance	\$9,765,865	\$0	\$9,765,865	10.92	\$106,643,246
Insurance, Other	\$13,166,870	\$0	\$13,166,870	-53.43	(\$703,505,837)
Labor	\$59,611,870	(\$1,854,171)	\$57,757,699	12.14	\$701,178,471
Leased Equip./Rent	\$390,060	\$0	\$390,060	42.65	\$16,636,059
Leased Vehicles	\$2,476,857	\$0	\$2,476,857	39.23	\$97,167,100
Miscellaneous	\$31,413,610	(\$1,844,504)	\$29,569,106	31.01	\$916,937,973
Natural Gas	\$994,248	\$0	\$994,248	18.90	\$18,791,287
Power	\$11,746,309	\$0	\$11,746,309	24.97	\$293,305,336
Purchased Water	\$2,965,191	\$0	\$2,965,191	34.69	\$102,862,480
Telephone	\$3,798,036	\$0	\$3,798,036	8.71	\$33,080,894
Waste Disposal	\$1,830,364	\$0	\$1,830,364	45.65	\$83,556,117
Post Retirement Benefits	(\$2,529,410)	\$0	(\$2,529,410)	0.00	\$0
Pensions	(\$390,013)	\$0	(\$390,013)	13.14	(\$5,124,771)
	\$203,124,356	(\$7,147,627)	\$195,976,729	14.60	\$2,854,416,242
	50.7				
Less: OCA Avg. Expense Lag	14.6				
Net Difference OCA Pro forma	36.1	Days			
O & M Expense per Day	\$536,923				
OCA CWC for O & M	\$19,403,491				
Less: Company Claim (1)	\$20,089,831				
OCA Adjustment	(\$686,340)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Water Operations Steelton

	PAWC Pro Forma Original Filing Present Rates (1)		Company Adjustments (1)		PAWC Pro Forma Rebuttal Filing Present Rates		OCA Adjustments		OCA Pro Forma Present Rates		OCA Revenue Increase		Total Allowable Revenues
		\$		\$		\$		\$		\$		\$	\$
Operating Revenue	\$	2,808,571	\$	-	\$	2,808,571	\$	-	\$	2,808,571	\$		\$ 2,808,571
Expenses:													
O & M Expense	\$	1,732,238	\$	(324)	\$	1,731,914	\$	(27,250)	\$	1,704,664	\$	-	\$ 1,704,664
Depreciation	\$	847,137	\$	41,652	\$	888,789	\$	-	\$	888,789	\$	-	\$ 888,789
Amortizations	\$	18,393	\$	-	\$	18,393			\$	18,393			\$ 18,393
Taxes, Other	\$	118,618	\$	78,095	\$	196,713	\$	(304)	\$	196,409	\$	-	\$ 196,409
Income Taxes:													
State	\$	(82,119)	\$	(7,785)	\$	(89,904)	\$	(3,861)	\$	(93,765)	\$	-	\$ (93,765)
Federal	\$	(67,920)	\$	(14,731)	Ş	(82,651)	\$	(7,307)	\$	(89,958)	\$	-	\$ (89,958)
Amort of ITC and Excess DFIT	\$	-	\$	-	Ş	-			\$	-			\$ -
Total Expenses	\$	2,566,348	\$	96,906	\$	2,663,254	\$	(38,722)	\$	2,624,532	\$	-	\$ 2,624,532
Net Inc. Available for Return	\$	242,223	\$	(96,906)	\$	145,317	\$	38,722	\$	184,039	\$		\$ 184,039
Rate Base	\$	23,759,790	\$	588,186	\$	24,347,976	\$	(10,172)	\$	24,337,804			\$ 24,337,804
Rate of Return		1.019%				0.60%				0.76%			0.75618403%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Water Operations Steelton

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.19%		
Long-term Debt	48.30%	4.53%	2.19%		2.19%
Short-term Debt	0.00%	0.00%	0.00%		
Preferred Stock	0.06%	8.73%	0.01%	0.711160	0.01%
Common Equity	51.64%	-2.78%	-1.44%	0.711160	2.02%
	100.00%		0.75618403%		0.18%
Pre-Tax Interest Coverage	0.08				
After-Tax Interest Coverage	0.35				
TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Water Operations Steelton

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205024 0.00575951 0.00000000 0.00000000 0.9821903
State Income Tax Rate (*)	0.0998721
Effective State Income Tax Rate	0.0980934
Factor After Local and State Taxes	0.8840968
Federal Income Tax Rate (*)	0.2099343
Effective Federal Income Tax Rate	0.1856022
Revenue Factor (100% - Effective Tax Rates)	0.6984946

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

----- -

Water Operations Steelton

Adjustments	Rate Base	Revenues	Expenses	_Depreciation_	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: int. & Div. (Table IV) Taxes (Table V) O & M (Table V!)	(8,000) 0 (2,172)						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(3,970) (11,110) (6,392) (5,843) 65		(304)	427 1,110 639 584 (7)	808 2,100 1,208 1,104 (12)
Interest Synchronization (Table III)						(6,614)	(12,515)
TOTALS	(10,172)	0	(27,250)	0	(304)	(3,861)	(7,307)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Water Operations Steelton		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	24,347,976 (10,172)
OCA Rate Base Weighted Cost of Debt	\$	24,337,804 2.18786057%
OCA Interest Expense Company Claim (1)	\$ \$	532,477 466,248
Total OCA Adjustment Company Adjustment	\$ \$	(66,230)
Net OCA Interest Adjustment State Income Tax Rate	\$	(66,230) 9.99%
State Income Tax Adjustment		(6,614)
Net OCA Interest Adjustment State Income Tax Adjustment		(66,230) (6,614)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(59,616) 20.99%
Federal Income Tax Adjustment		(12,515)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Water Operations Steelton

Accrued Interest Preferred Stock Dividends Long-Term Debt Short-Term Debt \$24,347,976 Company Rate Base Claim \$24,347,976 Company Rate Base Claim \$24,347,976 OCA Rate Base Adjustments OCA Rate Base Adjustments (\$10,172) (\$10,172) (\$10,172) OCA Rate Base \$24,337,804 \$24,337,804 OCA Rate Base \$24.337,804 Weighted Cost of Debt 2.18786057% 0.00% Weighted Cost Pref. Stock 0.00523800% \$532,477 OCA Annual Interest Exp. \$O OCA Preferred Dividends \$1,275 Average Revenue Lag Days Average Revenue Lag Days 0.0 0.0 0.0 Average Expense Lag Days 0.0 0.0 Average Expense Lag Days 0.0 Net Lag Days Net Lag Days -41.7 0.0 4.5 Working Capital Adjustment OCA Daily Dividends OCA Daily Interest Exp. \$1,459 \$0 \$3 Net Lag Days -41.7 0.0 Net Lag Days 4.5 OCA Working Capital (\$60,840) \$0 \$14 \$0 \$0 Company Claim (1) \$0 Company Claim (1) \$14 OCA Adjustment (\$60,840) \$0 Total Interest & Dividend Adj. (\$60,826) Less: Company Claim (1) (\$53,238) OCA Adjustment (\$7,588) Rounded to \$1,000 (\$8,000)

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	_Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$O	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$ 0	\$0.00	0.00	\$0
State Income Tax	\$0	(\$3,861)	(\$3,861)	\$0	(\$3,861)	(\$10.58)	0.00	\$0
Federal Income Tax	\$0	(\$7,307)_	(\$7,307)	\$0	(\$7,307)	(\$20.02)	0.00	\$0
	\$0	(\$11,168)	(\$11,168)	\$0	(\$11,168)			

ALJ Allowance 0

Company Claim (1) 0

ALJ Adjustment 0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL -- O & M EXPENSE R-2020-3019369, R-2020-3019371

Water Operations Steelton

	Company Pro forma		OCA.		
	F.T.Y.	OCA	Pro forma		
Description	Expense	Adjustments	Expenses	Lag Days	Lag Dollars
Service Company	\$201,087	(\$12,235)	\$188,853	12,14	\$2.292.671
Chemicals	\$92,159	\$0	\$92,159	48.81	\$4,498,281
Group Insurance	\$64,179	\$0	\$64,179	10.92	\$700.835
Insurance, Other	\$67,894	\$0	\$67,894	-53,43	(\$3,627,576)
Labor	\$341,794	(\$4,274)	\$337,520	12.14	\$4,097,492
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$16,149	\$0	\$16,149	39.23	\$633.525
Miscellaneous	\$817,828	(\$11,045)	\$806,783	31.01	\$25.018.335
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$107,438	\$0	\$107,438	24.97	\$2.682.727
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$3,023	\$0	\$3.023	8.71	\$26,330
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	\$3,456	\$0	\$3,456	0.00	\$0
Pensions	\$6,360	\$0	\$6,360	13.14	\$83,570
	\$1,721,367	(\$27,554)	\$1,693,813	21.50	\$36,406,190
OCA Average Revenue Lag	50.7				
Less: OCA Avg. Expense Lag	21.5				
Net Difference OCA Pro forma	29.2	Days			
0.8 M Evnense ner Dav	\$1 611				

O & M Expense per Day	\$4,041
OCA CWC for O & M	\$135,535
Less: Company Claim (1)	\$137,707
OCA Adjustment	(\$2,172)

1

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

	PAWC Pro Forma Original Filing	Company Adjustments	PAWC Pro Forma Rebuttal Filing	OCA Adjustments	OCA Pro Forma	OCA Revenue Increase	Total Allowable Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	26,594,302	0	26,594,302	0	26,594,302	00	26,594,302
Expenses:				(004 750)	0 570 000	0	9 579 022
O & M Expense	8,805,616	5,069	8,810,685	(231,752)	8,578,933	0	0,070,933
Depreciation	9,056,728	612,347	9,669,075	0	9,669,075	U	9,009,075
Amortizations	(328,512)	67,565	(260,947)		(260,947)		(260,947)
Taxes, Other	558,636	14,602	573,238	(4,955)	568,283	0	568,283
Income Taxes:					(5.0.40)	0	(5.042)
State	(3,090)	(16,164)	(19,254)	13,311	(5,943)	U	(0,943)
Federal	(133,012)	(28,798)	(161,810)	(2,290,678)	(2,452,488)	0	(2,452,488)
Amort of ITC and Excess DFIT	\$ -	\$-	\$		\$ <u> </u>		<u>\$</u>
Total Expenses	17,956,366	654,621	18,610,986	(2,514,074)	16,096,913	00	16,096,913
Net Inc. Available for Return	8,637,936	(654,621)	7,983,316	2,514,074	10,497,389	0	10,497,389
Rate Base	184,077,745	11,309,431	195,387,176	2,267,447	197,654,623		197,654,623
Rate of Return	4.69%		4.09%		5.31%		5.31097586%

(1) Company Main Brief

.

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

Wastewater 555 Excluding	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt Long-term Debt WW-Specific LTD Preferred Stock Common Equity	39.44% 10.14% 0.05% 50.37%	4.46% 2.55% 8.80% 6.54%	2.018% 1.760% 0.260% 0.000% 3.293%	0.711173 0.711173	1.76% 0.00% <u>4.63%</u>
	100.00%		5.31097586%		6.39%
Pre-Tax Interest Coverage	3.63				
After-Tax Interest Coverage	3.02				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205003 0.00536014 0.00000000 0.00000000
	0.9825898
State Income Tax Rate (*)	0.0998674
Effective State Income Tax Rate	0.0981287
Factor After Local and State Taxes	0.8844611
Federal Income Tax Rate (*)	0.2099242
Effective Federal Income Tax Rate	0.1856698
Revenue Factor (100% - Effective Tax Rates)	0.698791

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

<u>Adjustments</u>	Rate Base	Revenues	Expenses	_Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table Vi) Excess Accumulated Deferred Income Taxes	(31,000) 0 (17,419) 2,315,866						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs			(64,768) (153,844) (7,189) (6,571) 619		(4,955)	6,965 15,369 718 656 (62)	13,179 29,080 1,359 1,242 (117)
Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)						(10,335)	(2,315,866) (19,555)
TOTALS	2,267,447	0	(231,752)	0	(4,955)	13,311	(2,290,678)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	195,387,176 2,267,447
OCA Rate Base Weighted Cost of Debt	\$	197,654,623 1.76000000 <u>%</u>
OCA Interest Expense Company Claim (1)	\$ \$	3,478,721 3,375,237
Total OCA Adjustment Company Adjustment	\$ \$	(103,484)
Net OCA Interest Adjustment State Income Tax Rate	\$	(103,484) <u>9.99%</u>
State Income Tax Adjustment		(10,335)
Net OCA Interest Adjustment State Income Tax Adjustment		(103,484) (10,335)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(93,149) 20.99%
Federal Income Tax Adjustment		(19,555)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

ebt - WW Specific \$195,387,176 \$2,267,447 \$197,654,623 0.26% \$513,902 0.0	Company Rate Base Claim OCA Rate Base Adjustments OCA Rate Base Weighted Cost Pref. Stock OCA Preferred Dividends Average Revenue Lag Days	\$195,387,176 \$2,267,447 \$197,654,623 0.00% \$0
\$195,387,176 \$2,267,447 \$197,654,623 0.26% \$513,902 0.0	Company Rate Base Claim OCA Rate Base Adjustments OCA Rate Base Weighted Cost Pref. Stock OCA Preferred Dividends Average Revenue Lag Days	\$195,387,176 \$2,267,447 \$197,654,623 0.00% \$0
\$197,654,623 0.26% \$513,902 0.0	OCA Rate Base Weighted Cost Pref. Stock OCA Preferred Dividends Average Revenue Lag Days	\$197,654,623 0.00% \$0
\$513,902 0.0	OCA Preferred Dividends Average Revenue Lag Days	<u>\$0</u>
0.0	Average Revenue Lag Days	0.0
0.0		0.0
	Average Expense Lag Days	0.0
-41.7	Net Lag Days	4.5
\$1,408 -41.7_	OCA Daily Dividends Net Lag Days	\$0 4.5
(\$58,712) \$0	Company Claim (1)	\$0 \$0
(\$58,712)		\$0
	0.0 -41.7 \$1,408 -41.7 (\$58,712) \$0 (\$58,712)	<u>0.0</u> Average Expense Lag Days <u>-41.7</u> Net Lag Days \$1,408 OCA Daily Dividends <u>-41.7</u> Net Lag Days (\$58,712) <u>\$0</u> Company Claim (1) (\$58,712)

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			Accord Tax
	Present	ALJ	Present	ALJ	Present	Daily Exercise	Net Leau/	Adjustment
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
ouplial block fait	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$13,311	\$13,311	\$0	\$13,311	\$36.47	0.00	\$0
Federal Income Tax	\$0	(\$2,290,678)	(\$2,290,678)	\$0\$0	(\$2,290,678)	(\$6,275.83)	0.00	\$0
	\$0	(\$2,277,367)	(\$2,277,367)	\$0	(\$2,277,367)			

ALJ Allowance	0
---------------	---

Company Claim (1) 0_

ALJ Adjustment

0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Sonvice Company	\$226 150	(\$13,760)	\$212.391	12.14	\$2,578,424
Chemicale	\$676 129	\$0	\$676.129	48.81	\$33,001,871
Group Insurance	\$450 101	\$0	\$450,101	10.92	\$4,915,103
Insurance Other	\$805,473	\$0	\$805.473	-53.43	(\$43,036,422)
Labor	\$2,196,944	(\$69,723)	\$2,127,221	12.14	\$25,824,464
Leased Equip./Rent	\$4,544	\$0	\$4,544	42.65	\$193,802
Leased Vehicles	\$74,819	\$0	\$74,819	39.23	\$2,935,149
Miscellaneous	\$1,583,304	(\$153,224)	\$1,430,080	31.01	\$44,346,767
Natural Gas	\$57,141	\$0	\$57,141	18.90	\$1,079,965
Power	\$1,097,164	\$0	\$1,097,164	24.97	\$27,396,185
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$142,321	\$0	\$142,321	8.71	\$1,239,616
Waste Disposal	\$1,189,447	\$0	\$1,189,447	45.65	\$54,298,237
Post Retirement Benefits	\$24,290	\$0	\$24,290	0.00	\$0
Pensions	\$119,003	\$0	\$119,003	13.14	\$1,563,699
	\$8,646,830	(\$236,707)	\$8,410,123	18.60	\$156,336,860
	50 6				
OCA Average Revenue Lag	50.0 19.6				
Less: OCA Avg. Expense Lag	10.0				
Net Difference OCA Pro forma	32.0	Days			
O & M Expense per Day	\$23,041				
OCA CWC for O & M	\$738,292				
Less: Company Claim (1)	\$755,711				
OCA Adjustment	(\$17,419)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

	PAWC Pro Forma Original Filing	Company	PAWC Pro Forma Rebuttal Filing	OCA	OCA Pro Forma	OCA Revenue	Total Allowable Revenues
	Present Rates (1)	(1)	Present Rates	Aujustinents	Present Rates	moroado	
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	1,019,361	0	1,019,361	0	1,019,361	0	1,019,361
Expenses:							
O & M Expense	132,092	335	132,427	(4,085)	128,341	0	128,341
Depreciation	200,484	(705)	199,779	0	199,779	0	199,779
Amortizations	27,024	Ŭ.	27,024		27,024		27,024
Taxes. Other	8,513	574	9,087	(43)	9,044	0	9,044
Income Taxes:							
State	40,615	402	41,017	147	41,164	0	41,164
Federal	97,150	760	97,910	277	98,187	0	98,187
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	505,877	1,366	507,243	(3,704)	503,539	0	503,539
Net Inc. Available for Return	513,484	(1,366)	512,117	3,704	515,822	0	515,822
Rate Base	8,266,613	(65,973)	8,200,640	(328)	8,200,312		8,200,312
Rate of Return	6.212%		6.24%		6.29%		6.29027157%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

.....

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted _Cost Rate_
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711181	0.00%
Common Equity	50.37%	8.48%	4.27%	0.711181	6.01%
	100.00%		6.29027157%		7.77%
Pre-Tax Interest Coverage	4.41				
After-Tax Interest Coverage	3.57				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205403 0.00576644 0.0000000 0.00000000 0.9821795
State Income Tax Rate (*)	0.0998633
Effective State Income Tax Rate	0.0980837
Factor After Local and State Taxes	0.8840958
Federal Income Tax Rate (*)	0.2099193
Effective Federal Income Tax Rate	0.1855888
Revenue Factor (100% - Effective Tax Rates)	0.6985071

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	0 0 (328)						
REVENUES:		٥				Ο	Û
EXPENSES:		0				v	Ū
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(572) (1,764) (926) (847) 24		(43)	61 176 93 85 (2)	116 334 175 160 (5)
Interest Synchronization (Table III)						(266)	(503)
TOTALS	(328)	0	(4,085)	0	(43)	147	277

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations	Amount \$		
Company Rate Base Claim OCA Rate Base Adjustments	\$	8,200,640 (328)	
OCA Rate Base Weighted Cost of Debt	\$	8,200,312 1.76%	
OCA Interest Expense Company Claim (1)	\$ \$	144,325 141,663	
Total OCA Adjustment Company Adjustment	\$ \$	(2,663)	
Net OCA Interest Adjustment State Income Tax Rate	\$	(2,663) 9.99%	
State Income Tax Adjustment		(266)	
Net OCA Interest Adjustment State Income Tax Adjustment		(2,663) (266)	
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(2,397) 20.99%	
Federal Income Tax Adjustment		(503)	

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

···-- -- ·

Wastewater SSS Sadsbury Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$8,200,640 (\$328)	\$8,200,640 (\$328)	Company Rate Base Claim OCA Rate Base Adjustments	\$8,200,640 (\$328)
OCA Rate Base Weighted Cost of Debt	\$8,200,312 1.76%	\$8,200,312 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$8,200,312 0.00%
OCA Annual Interest Exp.	\$144,325	\$21,321	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$395 -41.7	\$58 4 <u>1.7</u>	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$16,472) \$0	(\$2,419) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$16,472)	(\$2,419)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$18,891) (\$19,094) \$204			
Rounded to \$1,000	\$0			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
•	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$147	\$147	\$0	\$147	\$0.40	0.00	\$0
Federal Income Tax	\$0	\$277_	\$277_	\$0	\$277_	\$0.76	0.00	\$0
	\$0_	\$424	\$424	\$0	\$424			

0
C

Company Claim (1) _____0

0

ALJ Adjustment

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$29,143	(\$1,773)	\$27,370	12.14	\$332.271
Chemicals	\$0	\$0	\$0	48.81	\$0
Group Insurance	\$3.272	\$0	\$3.272	10.92	\$35,730
Insurance, Other	\$27,775	\$0	\$27,775	-53,43	(\$1,484,018)
Labor	\$20,593	(\$615)	\$19,978	12.14	\$242,532
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$4,254	\$0	\$4,254	39.23	\$166,884
Miscellaneous	\$25,805	(\$1,741)	\$24,065	31.01	\$746,240
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$9,017	\$0	\$9,017	24.97	\$225,154
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$0	\$0	\$0	8.71	\$0
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	\$0	\$0	\$0	0.00	\$0
Pensions	\$0	\$0	\$0	13.14	\$0
	\$119,859	(\$4,128)	\$115,730	2.30	\$264,793
OCA Average Revenue Lag	50.7				
Less: OCA Avg. Expense Lag	2.3				
Net Difference OCA Pro forma	48.4	Days			
O & M Expense per Day	\$317				
OCA CWC for O & M	\$15,350				
Less: Company Claim (1)	\$15,678				
OCA Adjustment	(\$328)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

			PAWC Pro		004		Total
	Original Filing	Company Adjustments	Filing	OCA Adjustments	Pro Forma	Revenue Increase	Allowable Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	8,186,390	0	8,186,390	0	8,186,390	00	8,186,390
Expenses:	-						
O & M Expense	2,373,934	2,589	2,376,522	(73,902)	2,302,620	0	2,302,620
Depreciation	3,621,605	21,475	3,643,080	0	3,643,080	0	3,643,080
Amortizations	30,983	0	30,983		30,983		30,983
Taxes Other	443,735	622,803	1,066,537	(1,491)	1,065,046	0	1,065,046
Income Taxes:							
State	(202.755)	(59,385)	(262,140)	4,573	(257,567)	0	(257,567)
Eederal	(13,501)	(112.363)	(125,864)	8,653	(117,211)	0	(117,211)
Amort of ITC and Excess DEIT	0	Ó	Ó		0		0
Total Expenses	6.254.000	475.118	6,729,118	(62,167)	6,666,951	0	6,666,951
Net Inc. Available for Return	1,932,390	(475,118)	1,457,272	62,167	1,519,439	0	1,519,439
Rate Base	90,923,800	466,051	91,389,851	(6,412)	91,383,439		91,383,439
Rate of Return	2.125%		1.59%		1.66%		1.66270707%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

•

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt Long-term Debt	39.44%	4.46%	2.02% 1.76% 0.26%		1.76%
WW-Specific LTD Preferred Stock Common Equity	10.14% 0.05% 50.37%	2.55% 8.80% -0.70%	0.20% 0.00% -0.35%	0.711174 0.711174	0.00% _0.50%
	100.00%		1.66270707%		1.26%
Pre-Tax Interest Coverage	0.72				
After-Tax Interest Coverage	0.94				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205006 0.00575927 0.0000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998671
Effective State Income Tax Rate	0.0980885
Factor After Local and State Taxes	0.8841021
Federal Income Tax Rate (*)	0.2099229
Effective Federal Income Tax Rate	0.1855933
Revenue Factor (100% - Effective Tax Rates)	0.6985088

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

.....

<u>Adjustments</u>	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(1,000) 0 (5,412)						
REVENUES:		0				0	0
EXPENSES: Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(19,477) (44,686) (5,188) (4,742) 191		(1,491)	2,095 4,464 518 474 (19)	3,963 8,447 981 896 (36)
Interest Synchronization (Table III)						(2,959)	(5,598)
TOTALS	(6,412)	0	(73,902)	0	(1,491)	4,573	8,653

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations	Amount \$		
Company Rate Base Claim OCA Rate Base Adjustments	\$	91,389,851 (6,412)	
OCA Rate Base Weighted Cost of Debt	\$	91,383,439 <u>1.76%</u>	
OCA Interest Expense Company Claim (1)	\$ \$	1,608,349 1,578,724	
Total OCA Adjustment Company Adjustment	\$ \$	(29,624)	
Net OCA Interest Adjustment State Income Tax Rate	\$	(29,624) 9.99%	
State Income Tax Adjustment		(2,959)	
Net OCA Interest Adjustment State Income Tax Adjustment		(29,624) (2,959)	
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(26,665) 20.99%	
Federal Income Tax Adjustment		(5,598)	

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$91,389,851 (\$6,412)	\$91,389,851 (\$6,412)	Company Rate Base Claim OCA Rate Base Adjustments	\$91,389,851 (\$6,41 <u>2)</u>
OCA Rate Base Weighted Cost of Debt	\$91,383,439 1.76%	\$91,383,439 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$91,383,439 0.00%
OCA Annual Interest Exp.	\$1,608,349	\$237,597	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$4,406 41.7	\$651 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$183,730) \$0	(\$27,147) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$183,730)	(\$27,147)		<u>\$0</u>
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$210,877) (\$209,951) (\$926)			
Rounded to \$1,000	(\$1,000)			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at		hts://seat/	A d Toy
	Present	ALJ	Present	ALJ	Present	Daile Francisco	Net Lead/	Accrued Tax
Description	Rates	_Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Aujustment
PLIC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Litility Realty	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Tay	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Olook Tax	\$0	ŝõ	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	φ0 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$0.00	0.00	\$0
State Income Tay	\$0 \$0	\$4 573	\$4 573	\$0	\$4,573	\$12.53	0.00	\$0
Federal Income Tax	\$0 \$0	\$8,653	\$8,653	\$0	\$8,653	\$23.71	0.00	\$0
	<u>\$0</u>	\$13,226	\$13,226	\$0	\$13,226			

ALJ Allowance	0
---------------	---

Company Claim (1) ____0

ALJ Adjustment _____0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$163 201	(\$9,930)	\$153.272	12.14	\$1.860.718
Chemicals	\$153 451	\$0	\$153,451	48.81	\$7,489,943
Group Insurance	\$124,830	\$0	\$124,830	10,92	\$1,363,144
Insurance. Other	\$302,439	\$0	\$302,439	-53.43	(\$16,159,316)
Labor	\$617,187	(\$20,968)	\$596,219	12.14	\$7,238,099
Leased Equip./Rent	\$123	\$0	\$123	42.65	\$5,246
Leased Vehicles	\$29,885	\$0	\$29,885	39.23	\$1,172,389
Miscellaneous	\$414,198	(\$44,495)	\$369,702	31.01	\$11, 46 4,473
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$283,577	\$0	\$283,577	24.97	\$7,080,918
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$2,740	\$0	\$2,740	8.71	\$23,865
Waste Disposal	\$216,103	\$0	\$216,103	45.65	\$9,865,115
Post Retirement Benefits	\$779	\$0	\$779	0.00	\$0
Pensions	\$4,114	\$0	\$4,114	13.14	\$54,058
	\$2,312,627	(\$75,393)	\$2,237,234	14.10	\$31,458,652
	50.7				
Less: OCA Avg. Expense Lag	14.1				
Net Difference OCA Pro forma	36.6	Days			
O & M Expense per Day	\$6,129				
OCA CWC for O & M	\$224,585				
Less: Company Claim (1)					

OCA Adjustment (\$5,412)

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

.

	PAWC Pro Forma Original Filing	Company Adjustments	PAWC Pro Forma Rebuttal Filing	ALJ Adjustments	ALJ Pro Forma	ALJ Revenue Increase	Total Allowable Revenues
	Present Rates (1)	(1)	Present Rates			¢	¢
	Ş	\$	\$	\$	φ	φ	φ
Operating Revenue	23,457,185	0	23,457,185	0	23,457,185	0	23,457,185
Expenses:							40.440.705
O & M Expense	10,879,177	7,297	10,886,474	(437,689)	10,448,785	0	10,448,785
Depreciation	6,312,629	119,583	6,432,212	0	6,432,212	0	6,432,212
Amortizations	(156,664)	0	(156,664)		(156,664)		(156,664)
Taxes, Other	967,922	13,207	981,129	(7,346)	973,783	0	973,783
Income Taxes:						_	
State	(129,026)	(2,258)	(131,284)	38,039	<u>(</u> 93,245)	0	(93,245)
Federal	227.983	(4,015)	223,968	(261,113)	(37,145)	0	(37,145)
Amort of ITC and Excess DEIT	, 0	Ó	0		0		0
Total Expanses	18 102 021	133.814	18.235.835	(668,109)	17,567,726	0	17,567 <u>,726</u>
Net Inc. Available for Return	5,355,164	(133,814)	5,221,350	668,109	5,889,459	0	5,889,459
Rate Base	177,564,450	4,059,090	181,623,540	294,675	181,918,215		181,918,215
Rate of Return	3.02%		2.87%		3.24%		3.23742129%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
	Olidolaio				
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	2.42%	1.22%	0.711174	1.72%
	100.00%		3.23742129%		3.48%
Pre-Tax Interest Coverage	1.98				
After-Tax Interest Coverage	1.84				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204997 0.00575925 0.00000000 0.00000000
	0.9821908
State Income Tax Rate (*)	0.0998670
Effective State Income Tax Rate	0.0980885
Factor After Local and State Taxes	0.8841023
Federal Income Tax Rate (*)	0.2099230
Effective Federal Income Tax Rate	0.1855934
Revenue Factor (100% - Effective Tax Rates)	0.6985089

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

<u>Adjustments</u>	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI) Excess Accumulated Deferred Income Taxes	(10,000) 0 (28,410) 333,086						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs			(96,038) (334,573) (3,983) (3,641) 546		(7,346)	10,328 33,424 398 364 (55)	19,542 63,241 753 688 (103)
TAXES: Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)						(6,420)	(333,086) (12,148)
TOTALS	294,676	0	(437,689)	0	(7,346)	38,039	(261,113)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	181,623,540 294,675
OCA Rate Base Weighted Cost of Debt	\$	181,918,215 1.76%
OCA Interest Expense Company Claim (1)	\$ \$	3,201,761 3,137,476
Total OCA Adjustment Company Adjustment	\$ \$	(64,285)
Net OCA Interest Adjustment State Income Tax Rate	\$	(64,285) 9.99%
State Income Tax Adjustment		(6,420)
Net OCA Interest Adjustment State Income Tax Adjustment		(64,285) (6,420)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(57,865) 20.99%
Federal Income Tax Adjustment		(12,148)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$181,623,540 \$294,675	\$181,623,540 \$294,675	Company Rate Base Claim OCA Rate Base Adjustments	\$181,623,540 <u>\$294,675</u>
OCA Rate Base Weighted Cost of Debt	\$181,918,215 <u>1.76%</u>	\$181,918,215 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$181,918,215 0.00%
OCA Annual Interest Exp.	\$3,201,761	\$472,987	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$8,772 41.7	\$1,296 4 <u>1.7</u>	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$365,792) \$0	(\$54,043) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$365,792)	(\$54,043)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$419,835) (\$409,983)(\$9,852)			
Rounded to \$1,000	(\$10,0 <u>0</u> 0)			
TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense	A 1 I	ALJ Pro forma Tax Expense Present	AI J	ALJ Adjusted Taxes at Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
BUC Assocsment	\$0.	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
PUC Assessment	90 \$0	\$0 \$0	ŝÕ	• -	\$0	\$0.00	0.00	\$0
Conital Stack Tax	\$0 \$0	\$0	\$O		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	90 \$0	90 \$0	\$0		\$0	\$0.00	0.00	\$0
	00 02	\$Ŭ	\$0		\$0	\$0.00	0.00	\$0
	90 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	90 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	90 ©0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
	00 \$0	\$0 \$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tex	\$0 \$0	\$38 039	\$38.039	\$0	\$38,039	\$104.22	0.00	\$0
State income Tax	\$0 \$0	(\$261,113)	(\$261,113)	\$0	(\$261,113)	(\$715.38)	0.00	\$0
regerar income rax	ψΟ	(\v201,110)_						
	\$0	(\$223,074)	(\$223,074)	\$0	(\$223,074)			

ALJ Allowance	0	

Company Claim (1) 0

0_

ALJ Adjustment

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL -- O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

Description	Company Pro forma F.T.Y. Expense	OCA _Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company Chemicals	\$125,315 \$1,450,898	(\$7,625) \$0	\$117,691 \$1,450,898	12.14 48.81	\$1,428,766 \$70,818,313
Group Insurance	\$849,157 \$521,551	\$0 \$0	\$849,157 \$521,551	10.92 -53.43	\$9,272,794 (\$27,866,470)
Labor	\$4,905,473	(\$103,384)	\$4,802,089	12.14	\$58,297,360
Leased Equip./Rent Leased Vehicles Miscellaneous Natural Gas Power Purchased Water Telephone Waste Disposal Post Retirement Benefits Pensions	\$17,206 \$328,934 \$1,001,510 \$53,395 \$392,644 \$0 \$55,286 \$953,470 \$57,341 \$194,373 \$10,906,553	\$0 \$0 (\$334,027) \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$17,206 \$328,934 \$667,484 \$53,395 \$392,644 \$0 \$55,286 \$953,470 \$57,341 \$194,373 \$10,461,518	42.65 39.23 31.01 18.90 24.97 34.69 8.71 45.65 0.00 13.14 19.50	\$733,836 \$12,904,081 \$20,698,664 \$1,009,166 \$9,804,321 \$0 \$481,541 \$43,525,906 \$0 \$2,554,061 \$203,662,339
OCA Average Revenue Lag Less: OCA Avg. Expense Lag	50.7 19.5				
Net Difference OCA Pro forma O & M Expense per Day	31.2 \$28,662	Days			
OCA CWC for O & M Less: Company Claim (1)	\$894,913 \$923,3 <u>23</u>	894,913	\$0		
OCA Adjustment	(\$28,410)				
(1) Company Main Brief		31.2229693 31.2000000 0.02296925			

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

.

	PAWC Pro Forma Original Filing	Company Adjustments	PAWC Pro Forma Rebuttal Filing	OCA Adjustments	OCA Pro Forma	OCA Revenue Increase	Total Allowable Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		<u> </u>
	\$	\$	\$	\$	\$	þ	ф.
Operating Revenue	12,369,057	0	12,369,057	0	12,369,057	0	12,369,057
Expenses:					a aaa 707	0	0 000 707
O & M Expense	6,945,160	5,487	6,950,647	(263,880)	6,686,767	0	0,000,707
Depreciation	5,946,797	(27,552)	5,919,245	0	5,919,245	0	5,919,245
Amortizations	301.857	2,231	304,088		304,088		304,088
Taxes, Other	573,586	6,956	580,542	(3,146)	577,396	0	577,396
Income Taxes:				04.000	(004 757)	0	(694 757)
State	(721,886)	5,849	(/16,037)	21,280	(094,757)	0	(725 149)
Federal	(786,478)	11,066	(775,412)	40,264	(735,148)	U	(155,140)
Amort of ITC and Excess DFIT	0	0	0		0		<u> </u>
Total Expenses	12,259,036	4,037	12,263,073	(205,482)	12,057,591	0	12,057,591
Net Inc. Available for Return	110,021	(4,037)	105,984	205,482	311,466	0	311,466
Rate Base	167,005,729	118,981	167,124,710	(19,881)	167,104,829		167,104,829
Rate of Return	0.066%		0.06%		0.19%		0.18638953%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	-3.64%	-1.83%	0.711174	-2.57%
	100.00%		0.18638953%		-0.81%
Pre-Tax Interest Coverage	-0.46				
	• • • •				

After-Tax Interest Coverage 0.11

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204999 0.00575936 0.0000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998670
Effective State Income Tax Rate	0.0980884
Factor After Local and State Taxes	0.8841022
Federal Income Tax Rate (*)	0.2099230
Effective Federal Income Tax Rate	0.1855934
Revenue Factor (100% - Effective Tax Rates)	0.6985088

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

<u>Adjustments</u>	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	0 0 (19,881)						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(41,135) (171,009) (27,180) (24,844) 288		(3,146)	4,424 17,084 2,715 2,482 (29)	8,370 32,324 5,138 4,696 (54)
Interest Synchronization (Table III)						(5,396)	(10,210)
TOTALS	(19,881)	0	(263,880)	0	(3,146)	21,280	40,264

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations	Amount \$			
Company Rate Base Claim OCA Rate Base Adjustments	\$	167,124,710 (19,881)		
OCA Rate Base Weighted Cost of Debt	\$	167,104,829 1.76%		
OCA Interest Expense Company Claim (1)	\$ \$	2,941,045 2,887,014		
Total OCA Adjustment Company Adjustment	\$ \$	(54,031)		
Net OCA Interest Adjustment State Income Tax Rate	\$	(54,031) 9.99%		
State Income Tax Adjustment	<u> </u>	(5,396)		
Net OCA Interest Adjustment State Income Tax Adjustment		(54,031) (5,396)		
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(48,635) 20.99%_		
Federal Income Tax Adjustment		(10,210)		

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$167,124,710 (\$19,881)	\$167,124,710 (\$19,881)	Company Rate Base Claim OCA Rate Base Adjustments	\$167,124,710 (\$19,881)
OCA Rate Base Weighted Cost of Debt	\$167,104,829 <u>1.76%</u>	\$167,104,829 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$167,104,829 0.00%
OCA Annual Interest Exp.	\$2,941,045	\$434,473	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$8,058 41.7	\$1,190 41 <u>.7</u>	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$336,019) \$0	(\$49,623) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$336,019)	(\$49,623)		\$0\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$385,642) (\$385,593)_ (\$49)			
Rounded to \$1,000	\$0			

TABLE V Pennsyivania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

.

	Company Proforma Tax Expense Present	ALJ	ALJ Pro forma Tax Expense Present	ALJ	ALJ Adjusted Taxes at Present	Della Frances	Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Kates	Daily Expense	Lag Days	Adjustment
	¢A	02	\$0	\$0	\$0	\$0.00	0.00	\$0
PUC Assessment	30 80	90 \$0	\$0 \$0	40	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0 40	90 ©0	\$Q		\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0 \$0	90 ¢0	00 60		\$0	\$0.00	0.00	\$0
	\$U \$0	ψψ ΦΩ	\$0 \$0		\$0	\$0.00	0.00	\$0
	\$U	φ0 ©0	φ0 \$0		\$0	\$0.00	0.00	\$0
	\$U \$0	φ0 ©0	\$0 \$0		\$0 \$0	\$0.00	0.00	\$0
	\$U \$0	φ0 60	90 \$0		\$0	\$0.00	0.00	\$0
	ېں د	90 \$0	\$0 \$0		\$0	\$0.00	0.00	\$0
	\$U \$0	90 ¢0	90 02		\$0	\$0.00	0.00	\$0
	\$U \$0	დი დი	90 SÚ		\$0 \$0	\$0.00	0.00	\$0
	\$U \$0	- ¢01.090	\$0 \$21.280	\$0	\$21 280	\$58.30	0.00	\$0
State Income I ax	\$U \$0	⇒∠1,200 ¢40,264	921,200 \$40.264	φ0 \$0	\$40,264	\$110.31	0.00	\$0
Federal Income Tax	\$0	<u> </u>		<u>_</u>	___	<i>,</i>		
	\$0	\$61,544	\$61,544	\$0	\$61,544			

ALJ Allowance	0	ļ
---------------	---	---

Company Claim (1) 0

ALJ Adjustment 0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Convine Company	\$855.058	(\$52.024)	\$803.034	12.14	\$9,748,836
Service Company	\$14,999	\$0	\$14,999	48.81	\$732,111
	\$464 322	\$0	\$464,322	10.92	\$5,070,396
	\$538,525	\$0	\$538,525	-53.43	(\$28,773,391)
Labor	\$2,402,835	(\$44,281)	\$2,358,555	12.14	\$28,632,852
Leased Equip./Rent	\$11,471	\$0	\$11,471	42.65	\$489,238
Leased Vehicles	\$76,772	\$0	\$76,772	39.23	\$3,011,766
Miscellaneous	\$1,014,556	(\$170,721)	\$843,835	31.01	\$26,167,311
Natural Gas	\$34,387	\$0	\$34,387	18.90	\$649,914
Power	\$1,000,836	\$0	\$1,000,836	24.97	\$24,990,875
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$88,795	\$0	\$88,795	8.71	\$773,404
Waste Disposal	\$284,760	\$0	\$284,760	45.65	\$12,999,294
Post Retirement Benefits	\$40,192	\$0	\$40,192	0.00	\$0
Pensions	\$128,152	\$0	\$128,152	13.14	<u>\$1,683,917</u>
	\$6,955,661	(\$267,026)	\$6,688,635	12.90	\$86,176,523
OCA Average Revenue Lag	50.7				
Less: OCA Avg. Expense Lag	12.9				
Net Difference	37.8	Days			
O & M Expense per Day	\$18,325				
OCA CWC for O & M Less: Company Claim (1)	\$692,851 \$712,732				
OCA Adjustment	(\$19,881)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

			Pro Forma				
	Pro Forma	Company Adjustments	Present Rates	OCA Adjustments	OCA Pro Forma	OCA Revenue	Total Allowable Revenues
	Present Rates (1)	(1)	(Revised) (1)	, lajaoanionio	Present Rates	morocoo	Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	1,474,187	0	1,474,187	0	1,474,187	0	1.474.187
Expenses:	,				· · ·		
O & M Expense	565,267	344	565,611	34	565,645	0	565,645
Depreciation	805,787	11,223	817,010	0	817,010	0	817,010
Amortizations	19,675	(2,005)	17,670		17,670		17,670
Taxes, Other	64,427	831	65,258	0	65,258	0	65,258
Income Taxes:							-
State	(78,568)	95	(78,473)	(635)	(79,108)	0	(79,108)
Federal	(65,887)	180	(65,707)	(1,202)	(66,909)	· 0	(66,909)
Amort of ITC and Excess DFIT	0	0	0		0		Ó
Total Expenses	1,310,701	10,668	1,321,369	(1,803)	1,319,566	0	1,319,566
Net Inc. Available for Return	163,486	(10,668)	152,818	1,803	154,621	0	154,621
Rate Base	19,169,938	318,884	19,488,822	(992)	19,487,830		19,487,830
Rate of Return	0.853%		0.78%		0.79%		0.79342203%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

.

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2 02%		
Long-term Debt	39,44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	-2.43%	-1.22%	0.711174	-1.72%
-	100.00%		0.79342203%		0.04%
Pre-Tax Interest Coverage	0.02				
After-Tax Interest Coverage	0.45				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

- ----

Wastewater CSS Kane Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204999 0.00575973 0.00000000 0.00000000 0.9821903
State Income Tax Rate (*)	0.0998672
Effective State Income Tax Rate	0.0980886
Factor After Local and State Taxes	0.8841017
Federal Income Tax Rate (*)	0.2099227
Effective Federal Income Tax Rate	0.1855931
Revenue Factor (100% - Effective Tax Rates)	0.6985086

(*) Company Main Brief

- } -

.

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

<u>Adjustments</u>	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(1,000) 0 8						
REVENUES:						_	_
EXPENSES:		U				0	0
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			34			0 0 0 (3)	0 0 0 (7)
Interest Synchronization (Table III)						(632)	(1,195)
TOTALS	(992)	0	34	0	0	(635)	(1,202)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations		Amount \$
Company Rate Base Claim ALJ Rate Base Adjustments	\$	19,488,822 (992)
ALJ Rate Base Weighted Cost of Debt	\$	19,487,830 <u>1.76%</u>
ALJ Interest Expense Company Claim (1)	\$ \$	342,986 336,662
Total ALJ Adjustment Company Adjustment	\$ \$	(6,324)
Net ALJ Interest Adjustment State Income Tax Rate	\$	(6,324) 9.99%
State Income Tax Adjustment		(632)
Net ALJ Interest Adjustment State Income Tax Adjustment		(6,324) (632)
Net ALJ Adjustment for F.I.T. Federal Income Tax Rate		(5,692) 20.99%
Federal Income Tax Adjustment		(1,195)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$19,488,822 (\$992)	\$19,488,822 (\$992)_	Company Rate Base Claim OCA Rate Base Adjustments	\$19,488,822 (\$992)
OCA Rate Base Weighted Cost of Debt	\$19,487,830 1.76%	\$19,487,830 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$19,487,830 <u>0.00%</u>
OCA Annual Interest Exp.	\$342,986	\$50,668	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days =	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$940 41.7	\$139	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$39,198) \$0	(\$5,796) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$39,198)	(\$5,796)	-	<u>\$0</u>
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$44,994) (\$44,276) (\$718)			
Rounded to \$1,000	(\$1,000)			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
	¢0	20	••					
PUC Assessment	\$U	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Reality	\$U	\$0	\$0		\$0	\$0.00	0.00	\$0
Capital Stock Lax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	(\$635)	(\$635)	\$0	(\$635)	(\$1,74)	0.00	\$0
Federal Income Tax	\$0	(\$1,202)	(\$1,202)	\$0	(\$1,202)	(\$3.29)	0.00	\$0
	\$0	(\$1,837)	(\$1,837)	\$0	(\$1,837)			

ALJ Allowance 0

Company Claim (1) 0

ALJ Adjustment _____0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
		· · · · ·			
Service Company	\$0	\$0	\$0	12.14	\$U
Chemicals	\$0	\$0	\$0	48.81	\$U \$0
Group Insurance	\$0	\$0	\$0	10.92	\$U
Insurance, Other	\$0	\$0	\$0	-53.43	\$0
Labor	\$12,057	\$0	\$12,057	12.14	\$146,372
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$0	\$0	\$0	39.23	\$0
Miscellaneous	\$543,965	\$34	\$543,999	31.01	\$16,869,417
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$0	\$0	\$0	24.97	\$0
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$0	\$0	\$0	8.71	\$0
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	\$0	\$0	\$0	0.00	\$0
Pensions	\$0	\$0	\$0	13.14	\$0
	\$556,022	\$34	\$556,056	30.60	\$17,015,789
	50.7				
	30.6				
Less. OOA Avy. Expense Lay	00.0				
Net Difference	20.1	Days			
OCA Pro forma					
O & M Expense per Day	\$1,523				
OCA CWC for O & M	\$30,620				
Less: Company Claim (1)	\$30,612				
OCA Adjustment	\$8				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		OCA	OCA	Total
	Original Filing	Company	Filing	OCA	Pro Forma	Revenue	Allowable
		Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	639,540,327	366,536	639,906,863	0	639,906,863	(70,274,181)	569,632,682
Expenses:						· · · · · · · · · · · · · · · · · · ·	
O & M Expense	212,205,637	(437,302)	211,768,335	(7,015,863)	204,752,471	(846,804)	203,905,667
Depreciation	143,245,719	2,187,393	145,433,112	0	145,433,112	0	145,433,112
Amortizations	(6,789,516)	(51,743)	(6,841,259)		(6,841,259)		(6,841,259)
Taxes, Other	11,236,002	342,222	. 11,578,224	(131,764)	11,446,460	(404,730)	11,041,730
Income Taxes:							
State	15,651,149	(21,699)	15,629,450	(273,231)	15,356,219	(6,893,418)	8,462,801
Federal	30,564,448	(20,225)	30,544,223	(27,554,821)	2,989,402	(13,043,052)	(10,053,650)
Amort of ITC and Excess DFIT	(233,592)	0	(233,592)		(233,592)		(233,592)
Total Expenses	405,879,846	1,998,646	407,878,492	(34,975,679)	372,902,813	(21,188,004)	351,714,809
Net Inc. Available for Return	233,660,481	(1,632,110)	232,028,371	34,975,679	267,004,050	(49,086,179)	217,917,871
Rate Base	3,304,569,811	115,885,108	3,420,454,919	25,144,500	3,445,599,419		3,445,599,419
Rate of Return	7.07%		6.78%				6.32%

(1) Company Main Brief

6.32%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

	Othersteine	Cash	After-Tax Weighted	Effective Tax Rate	Pre-Tax Weighted Cost Pate
	Structure		Cost	Complement	
Total Cost of Debt			2.18786057%		
Long-term Debt	48.30%	4.53%	2.18786057%		2.19%
Short-term Debt	0.00%	0.00%	0.0000000%		
Preferred Stock	0.06%	8.73%	0.00523800%	0.711160	0.01%
Common Equity	51.64%	8.00%	4.13142857%	0.711160	5.81%
	100.00%		6.32452714%		8.01%
Pre-Tax Interest Coverage	3.66				
After-Tax Interest Coverage	2.89				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205000 0.00575930 0.00000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998718
Effective State Income Tax Rate	0.0980932
Factor After Local and State Taxes	0.8840975
Federal Income Tax Rate (*)	0.2099342
Effective Federal Income Tax Rate	0.1856023
Revenue Factor (100% - Effective Tax Rates)	0.6984952

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income <u>Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI) Excess Accumulated Deferred Income Taxes	(1,207,000) 0 (686,340) 27,037,840						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs			(1,722,407) (1,859,403) (1,801,885) (1,647,068) 14,899		(131,764)	185,232 185,754 180,008 164,542 (1,488)	350,477 351,466 340,594 311,330 (2,816)
Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)					·	(987,279)	(27,037,840) (1,868,032)
TOTALS	25,144,500	0	(7,015,863)	0	(131,764)	(273,231)	(27,554,821)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	3,420,454,919 25,144,500
OCA Rate Base Weighted Cost of Debt	\$	3,445,599,419 2.19%
OCA Interest Expense Company Claim (1)	\$ \$	75,384,911 65,499,454
Total OCA Adjustment Company Adjustment	\$	(9,885,457)
Net OCA Interest Adjustment State Income Tax Rate	\$	(9,885,457) <u>9.99%</u>
State Income Tax Adjustment		(987,279)
Net OCA Interest Adjustment State Income Tax Adjustment		(9,885,457) (987,279)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(8,898,178) 20.99%
Federal Income Tax Adjustment		(1,868,032)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

......

Water Operations Excluding Steelton

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim OCA Rate Base Adjustments	\$3,420,454,919 \$25,144,500	\$3,420,454,919 \$25,144,500	Company Rate Base Claim OCA Rate Base Adjustments	\$3,420,454,919 \$25,144,500
OCA Rate Base Weighted Cost of Debt	\$3,445,599,419 2.18786057%	\$3,445,599,419 0.00%	OCA Rate Base Weighted Cost Pref. Stock	\$3,445,599,419 0.00523800%
OCA Annual Interest Exp.	\$75,384,911	\$0	OCA Preferred Dividends	\$180,480
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$206,534 41.7	\$0 0.0	OCA Daily Dividends Net Lag Days	\$494 <u>4.5</u>
OCA Working Capital Company Claim (1)	(\$8,612,468) \$0	\$0 \$0	Company Claim (1)	\$2,223 \$0
OCA Adjustment	(\$8,612,468)	\$0		\$2,223
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$8,610,245) (\$7,402,977) (\$1,207,268)			
Rounded to \$1,000	(\$1,207,000)			

TABLE V
Pennsylvania-American Water Company
CASH WORKING CAPITAL -TAXES
R-2020-3019369, R-2020-3019371

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Canital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
ouplial oronic lan	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance	0
Company Claim (1)	0
ALJ Adjustment	0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Water Operations Excluding Steelton

-	Company				
	Pro forma		OCA		
	F.T.Y.	OCA	Pro forma		
Description	Expense	Adjustments	Expenses	Lag Days	Lag Dollars
Service Company	\$56 686 235	(\$3,448,953)	\$53,237,282	12.14	\$646,300,609
Chemicals	\$11 198,264	\$0	\$11,198,264	48.81	\$546,587,278
Group Insurance	\$9,765,865	\$0	\$9,765,865	10.92	\$106,643,246
Insurance Other	\$13,166,870	\$0	\$13,166,870	-53.43	(\$703,505,837)
Labor	\$59,611,870	(\$1,854,171)	\$57,757,699	12.14	\$701,178,471
Leased Fouin /Rent	\$390,060	\$0	\$390,060	42.65	\$16,636,059
Leased Vehicles	\$2.476.857	\$0	\$2,476,857	39.23	\$97,167,100
Miscellaneous	\$31,413,610	(\$1,844,504)	\$29,569,106	31.01	\$916,937,973
Natural Gas	\$994,248	\$0	\$994,248	18.90	\$18,791,287
Power	\$11,746,309	\$0	\$11,746,309	24.97	\$293,305,336
Purchased Water	\$2,965,191	\$0	\$2,965,191	34.69	\$102,862,480
Telephone	\$3,798,036	\$0	\$3,798,036	8.71	\$33,080,894
Waste Disposal	\$1,830,364	\$0	\$1,830,364	45.65	\$83,556,117
Post Retirement Benefits	(\$2,529,410)	\$0	(\$2,529,410)	0.00	\$0
Pensions	(\$390,013)	\$0	(\$390,013)	13.14	(\$5,124,771)
	\$203,124,356	(\$7,147,627)	\$195,976,729	14.60	\$2,854,416,242
	50.7				
Less: OCA Avg. Expense Lag	14.6				
Net Difference	36.1	Days			
O & M Expense per Day	\$536,923				

 OCA CWC for O & M
 \$19,403,491

 Less: Company Claim (1)
 \$20,089,831

 OCA Adjustment
 (\$686,340)

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Water Operations Steelton

						PAWC Pro							
	PA۱	NC Pro Forma			Fo	orma Rebuttal				OCA		OCA	Total
	С	riginal Filing	(Company		Filing		OCA		Pro Forma	Revenue		Allowable
			Ac	djustments			Ac	ljustments				Increase	Revenues
	Pre	sent Rates (1)	(1)		Present Rates				Present Rates				
		\$		\$		\$		\$		\$		\$	\$
Operating Revenue	\$	2,808,571	\$	-	\$	2,808,571	\$	-	\$	2,808,571	\$	1,940,190	\$ 4.748.761
Expenses:		· · ·								- ,		• • • -	 , , , , , , , , , , , , , , , , , , ,
O & M Expense	\$	1,732,238	\$	(324)	\$	1,731,914	\$	(27,250)	\$	1,704,664	\$	23,380	\$ 1,728,044
Depreciation	\$	847,137	\$	41,652	\$	888,789	\$	-	\$	888,789	\$	-	\$ 888,789
Amortizations	\$	18,393	\$	-	\$	18,393			\$	18,393			\$ 18,393
Taxes, Other	\$	118,618	\$	78,095	\$	196,713	\$	(304)	\$	196,409	\$	11,175	\$ 207,584
Income Taxes:													
State	\$	(82,119)	\$	(7,785)	\$	(89,904)	\$	(3,861)	\$	(93,765)	\$	190,320	\$ 96,555
Federal	\$	(67,920)	\$	(14,731)	\$	(82,651)	\$	(7,307)	\$	(89,958)	\$	360,103	\$ 270,145
Amort of ITC and Excess DFIT	\$	-	\$	-	\$	-			\$	-			\$ -
Total Expenses	\$	2,566,348	\$	96,906	\$	2,663,254	\$	(38,722)	\$	2,624,532	\$	584,978	\$ 3,209,510
Net Inc. Available for Return	\$	242,223	\$	(96,906)	\$	145,317	\$	38,722	\$	184,039	\$	1,355,212	\$ 1,539,251
Rate Base	\$	23,759,790	\$	588,186	\$	24,347,976	\$	(10,172)	\$	24,337,804			\$ 24,337,804
Rate of Return		1.019%				0.60%							6.32%

(1) Company Main Brief

6.32%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Water Operations Steelton

•	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.19%		
Long-term Debt	48.30%	4.53%	2.19%		2.19%
Short-term Debt	0.00%	0.00%	0.00%		
Preferred Stock	0.06%	8.73%	0.01%	0.711160	0.01%
Common Equity	51.64%	8.00%	4.13%	0.711160	5.81%
	100.00%		6.32%		8.01%
Pre-Tax Interest Coverage	3.66				
After-Tax Interest Coverage	2.89				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Water Operations Steelton

100%	1.00000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205024 0.00575951 0.00000000 0.00000000
State Income Tax Rate (*)	0.0998721
Effective State Income Tax Rate	0.0980934
Factor After Local and State Taxes	0.8840968
Federal Income Tax Rate (*)	0.2099343
Effective Federal Income Tax Rate	0.1856022
Revenue Factor (100% - Effective Tax Rates)	0.6984946

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Water Operations Steelton

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	Ş	\$	\$	\$	\$	Ş	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(8,000) 0 (2,172)						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(3,970) (11,110) (6,392) (5,843) 65		(304)	427 1,110 639 584 (7)	808 2,100 1,208 1,104 (12)
Interest Synchronization (Table III)						(6,614)	(12,515)
TOTALS	(10,172)	0	(27,250)	0	(304)	(3,861)	(7,307)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Water Operations Steelton		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	24,347,976 (10,172)
OCA Rate Base Weighted Cost of Debt	\$	24,337,804 2.18786057%
OCA Interest Expense Company Claim (1)	\$ \$	532,477 466,248
Total OCA Adjustment Company Adjustment	\$ \$	(66,230)
Net OCA Interest Adjustment State Income Tax Rate	\$	(66,230) 9.99%
State Income Tax Adjustment		(6,614)
Net OCA Interest Adjustment State Income Tax Adjustment		(66,230) (6,614)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(59,616) 20.99%
Federal Income Tax Adjustment		(12,515)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Water Operations Steelton

Accrued Interest Preferred Stock Dividends Long-Term Debt Short-Term Debt Company Rate Base Claim \$24,347,976 \$24,347,976 Company Rate Base Claim \$24,347,976 OCA Rate Base Adjustments OCA Rate Base Adjustments (\$10,172) (\$10,172) (\$10,172) OCA Rate Base \$24,337,804 \$24,337,804 OCA Rate Base \$24,337,804 Weighted Cost of Debt 2.18786057% 0.00% Weighted Cost Pref. Stock 0.00523800% OCA Annual Interest Exp. \$532,477 OCA Preferred Dividends \$0 \$1,275 Average Revenue Lag Days 0.0 0.0 Average Revenue Lag Days 0.0 Average Expense Lag Days 0.0 0.0 Average Expense Lag Days 0.0 -41.7 Net Lag Days 0.0 Net Lag Days 4.5 Working Capital Adjustment OCA Daily Interest Exp. \$1,459 OCA Daily Dividends **S**0 \$3 Net Lag Days -41.7 0.0 Net Lag Days 4.5 OCA Working Capital (\$60,840) **\$**0 \$14 Company Claim (1) \$0 \$0 Company Claim (1) \$0 OCA Adjustment (\$60,840) \$0 \$14 Total Interest & Dividend Adj. (\$60,826) Less: Company Claim (1) (\$53,238) OCA Adjustment (\$7,588) Rounded to \$1,000 (\$8,000)

TABLE VPennsylvania-American Water CompanyCASH WORKING CAPITAL -TAXESR-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0_	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0_			

ALJ Allowance	0
Company Claim (1)	0
ALJ Adjustment	0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Water Operations Steelton

	Company				
	Pro forma		OCA		
	F.T.Y.	OCA	Pro forma		
Description	Expense	_Adjustments_	Expenses	Lag Days	Lag Dollars
Service Company	\$201,087	(\$12,235)	\$188,853	12.14	\$2,292,671
Chemicals	\$92,159	\$0	\$92,159	48.81	\$4,498,281
Group Insurance	\$64,179	\$0	\$64,179	10.92	\$700,835
Insurance, Other	\$67,894	\$0	\$67,894	-53.43	(\$3,627,576)
Labor	\$341,794	(\$4,274)	\$337,520	12.14	\$4,097,492
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$16,149	\$0	\$16,149	39.23	\$633,525
Miscellaneous	\$817,828	(\$11,045)	\$806,783	31.01	\$25,018,335
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$107,438	\$0	\$107,438	24.97	\$2,682,727
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$3,023	\$0	\$3,023	8.71	\$26,330
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	\$3,456	\$0	\$3,456	0.00	\$0
Pensions	\$6,360	\$0	\$6,360	13.14	\$83,570
	\$1,721,367	(\$27,554)	\$1,693,813	21.50	\$36,406,190

OCA Average Revenue Lag Less: OCA Avg. Expense Lag	50.7 21.5	
Net Difference	29.2	Days
OCA Pro forma O & M Expense per Day	\$4,641	
OCA CWC for O & M	\$135,535	
Less: Company Claim (1)	\$137,707	
OCA Adjustment	(\$2,172)	

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

.

	PAWC Pro Forma	Compony	PAWC Pro Forma Rebuttal	004	OCA	OCA	Total
	Original Filing	Adjustments	Fining	Adjustments	Pro Forma	Revenue	Allowable
	Present Rates (1)	(1)	Present Rates		Present Rates		i covendes
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	26,594,302	0	26,594,302	0	26,594,302	2,175,201	28,769,503
O & M Expense	8,805,616	5,069	8,810,685	(231,752)	8,578,933	26,211	8.605.144
Depreciation	9,056,728	612,347	9,669,075	Ó	9,669,075	0	9,669,075
Amortizations	(328,512)	67,565	(260,947)		(260,947)		(260,947)
Taxes, Other Income Taxes:	558,636	14,602	573,238	(4,955)	568,283	11,659	579,942
State	(3,090)	(16,164)	(19,254)	13,311	(5,943)	213,450	207.507
Federal	(133,012)	(28,798)	(161,810)	(2,290,678)	(2,452,488)	403.869	(2.048.619)
Amort of ITC and Excess DFIT	\$	\$ -	\$ -	,	\$ -	\$	(_,,_,,,,
Total Expenses	17,956,366	654,621	18,610,986	(2,514,074)	16,096,913	655,189	16.752.102
Net Inc. Available for Return	8,637,936	(654,621)	7,983,316	2,514,074	10,497,389	1,520,012	12,017,401
Rate Base	184,077,745	11,309,431	195,387,176	2,267,447	197,654,623		197,654,623
Rate of Return	4.69%		4.09%				6.08%

(1) Company Main Brief

6.08%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

-

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.018%		
Long-term Debt	39.44%	4.46%	1.760%		1.76%
WW-Specific LTD	10.14%	2.55%	0.260%		
Preferred Stock	0.05%	8.80%	0.000%	0.711173	0.00%
Common Equity	50.37%	8.05%	4.060%	0.711173	5.71%
	100.00%		6.080%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45				
TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205003 0.00536014 0.0000000 0.00000000
	0.9825898
State Income Tax Rate (*)	0.0998674
Effective State Income Tax Rate	0.0981287
Factor After Local and State Taxes	0.8844611
Federal Income Tax Rate (*)	0.2099242
Effective Federal Income Tax Rate	0.1856698
Revenue Factor (100% - Effective Tax Rates)	0.698791

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

<u>Adjustments</u>	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	S	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI) Excess Accumulated Deferred Income Taxes	(31,000) 0 (17,419) 2,315,866						
REVENUES:		0				0	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(64,768) (153,844) (7,189) (6,571) 619		(4,955)	6,965 15,369 718 656 (62)	13,179 29,080 1,359 1,242 (117)
Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)						(10,335)	(2,315,866) (19,555)
TOTALS	2,267,447	0	(231,752)	0	(4,955)	13,311	(2,290,678)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	195,387,176 2,267,447
OCA Rate Base Weighted Cost of Debt	\$	197,654,623 1.76000000%
OCA Interest Expense Company Claim (1)	\$ \$	3,478,721 3,375,237
Total OCA Adjustment Company Adjustment	\$ \$	(103,484)
Net OCA Interest Adjustment State Income Tax Rate	\$	(103,484) 9.99%
State Income Tax Adjustment		(10,335)
Net OCA Interest Adjustment State Income Tax Adjustment		(103,484) (10,335)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(93,149) 20.99%
Federal Income Tax Adjustment		(19,555)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	LT Debt - WW Specific		
Company Rate Base Claim OCA Rate Base Adjustments	\$195,387,176 \$2,2 <u>67,447</u>	\$195,387,176 \$2,267,447	Company Rate Base Claim OCA Rate Base Adjustments	\$195,387,176 \$2,267,447
OCA Rate Base Weighted Cost of Debt	\$197,654,623 <u>1.76%</u>	\$197,654,623 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$197,654,623 0.00%
OCA Annual Interest Exp.	\$3,478,721	\$513,902	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	41.7	-41.7	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$9,531 41.7	\$1,408 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$397,443) \$0	(\$58,712) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$397,443)	(\$58,712)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$456,155) (\$425,033) (\$31,122)			
Rounded to \$1,000	(\$31,000)			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance	0
Company Claim (1)	0
ALJ Adjustment	00

ALJ Adjustment

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL -- O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Excluding Sadsbury and Exeter Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$226 150	(\$13.760)	\$212 391	12 14	\$2 578 424
Chemicals	\$676 129	\$0	\$676 129	48.81	\$33,001,871
Group Insurance	\$450,101	\$0 \$0	\$450 101	10.92	\$4,915,103
Insurance Other	\$805 473	\$0	\$805 473	-53 43	(\$43,036,422)
Labor	\$2,196,944	(\$69,723)	\$2,127,221	12.14	\$25,824,464
Leased Equip./Rent	\$4,544	\$0	\$4,544	42.65	\$193,802
Leased Vehicles	\$74,819	\$0	\$74,819	39.23	\$2,935,149
Miscellaneous	\$1,583,304	(\$153,224)	\$1,430,080	31.01	\$44,346,767
Natural Gas	\$57,141	\$0	\$57,141	18.90	\$1,079,965
Power	\$1,097,164	\$0	\$1,097,164	24.97	\$27,396,185
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$142,321	\$0	\$142,321	8.71	\$1,239,616
Waste Disposal	\$1,189,447	\$0	\$1,189,447	45.65	\$54,298,237
Post Retirement Benefits	\$24,290	\$0	\$24,290	0.00	\$0
Pensions	\$119,003	\$0	\$119,003	13.14	\$1,563,699
	\$8,646,830	(\$236,707)	\$8,410,123	18.60	\$156,336,860
	50.6				
Less: OCA Avg. Expense Lag	18.6				
Net Difference OCA Pro forma	32.0	Days			
O & M Expense per Day	\$23,041				
OCA CWC for O & M	\$738,292				
Less: Company Claim (1)	\$755,711				
OCA Adjustment	(\$17,419)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		OCA	OCA	Total
	Original Filing	Company	Filing	OCA	Pro Forma	Revenue	Allowable
		Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	1,019,361	0	1,019,361	0	1,019,361	(24,685)	994,675
Expenses:							
O & M Expense	132,092	335	132,427	(4,085)	128,341	(298)	128,043
Depreciation	200,484	(705)	199,779	0	199,779	0	199,779
Amortizations	27,024	0	27,024		27,024		27,024
Taxes, Other	8,513	574	9,087	(43)	9,044	(142)	8,902
Income Taxes:							
State	40,615	402	41,017	147	41,164	(2,421)	38,743
Federal	97,150	760	97,910	277	98,187	(4,581)	93,606
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	505,877	1,366	507,243	(3,704)	503,539	(7,442)	496,097
Net Inc. Available for Return	513,484	(1,366)	512,117	3,704	515,822	(17,243)	498,579
Rate Base	8,266,613	(65,973)	8,200,640	(328)	8,200,312		8,200,312
Rate of Return	6.212%		6.24%				6.08%

(1) Company Main Brief

6.08%

•

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711181	0.00%
Common Equity	50.37%	8.05%	4.06%	0.711181	5.71%
	100.00%		6.08%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205403 0.00576644 0.00000000 0.00000000
	0.9821795
State Income Tax Rate (*)	0.0998633
Effective State Income Tax Rate	0.0980837
Factor After Local and State Taxes	0.8840958
Federal Income Tax Rate (*)	0.2099193
Effective Federal Income Tax Rate	0.1855888
Revenue Factor (100% - Effective Tax Rates)	0.6985071

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	0 0 (328)						
REVENUES:		_					
EXPENSES:		0				0	0
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(572) (1,764) (926) (847) 24		(43)	61 176 93 85 (2)	116 334 175 160 (5)
Interest Synchronization (Table III)						(266)	(503)
TOTALS	(328)	0	(4,085)	0	(43)	147	277

-

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations		Amount \$	
Company Rate Base Claim OCA Rate Base Adjustments	\$	8,200,640 (328)	
OCA Rate Base Weighted Cost of Debt	\$	8,200,312 <u>1.76%</u>	
OCA Interest Expense Company Claim (1)	\$ \$	144,325 141,663	
Total OCA Adjustment Company Adjustment	\$ \$	(2,663)	
Net OCA Interest Adjustment State Income Tax Rate	\$	(2,663) <u>9,99%</u>	
State Income Tax Adjustment		(266)	
Net OCA Interest Adjustment State Income Tax Adjustment		(2,663) (266)	
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(2,397) 20.99%	
Federal Income Tax Adjustment		(503)	

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$8,200,640 (\$328)	\$8,200,640 (\$328)	Company Rate Base Claim OCA Rate Base Adjustments	\$8,200,640 (\$328)
OCA Rate Base Weighted Cost of Debt	\$8,200,312 1.76%	\$8,200,312	OCA Rate Base Weighted Cost Pref. Stock	\$8,200,312 0.00%
OCA Annual Interest Exp.	\$144,325	\$21,321	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$395 41.7	\$58 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$16,472) \$0	(\$2,419) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$16,472)	(\$2,419)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$18,891) (\$19,094) \$204			
Rounded to \$1,000	\$0			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
•	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance	0
---------------	---

Company Claim (1) 0

ALJ Adjustment 0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Sadsbury Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$29 143	(\$1.773)	\$27 370	12 14	\$220.074
Chemicale	φ20,140 ¢Ω	(ψ1,130) ¢0	φ <u>2</u> 7,570 ¢0	12.14	\$332,271 ¢0
Group Insurance	φυ ¢3.070	40 ¢0	\$U \$2,270	40.01	¢25 720
Insurance Other	\$3,272 \$27,775	40 60	\$3,272 \$37,775	10.9Z	400,/00
l abor	\$21,775 \$20,502	कु0 (୧၉୯୩ ୮୦)	Φ21,110 \$10.079	-33.43	(\$1,484,018)
Labor	\$20,593	(\$015)	\$19,978	12.14	\$242,532
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$4,254	\$0	\$4,254	39.23	\$166.884
Miscellaneous	\$25,805	(\$1,741)	\$24,065	31.01	\$746,240
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$9.017	\$0	\$9.017	24.97	\$225,154
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$0	\$0	\$0	8 71	\$0
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	ŝõ	\$0	\$0	0.00	\$0
Pensions	\$0	\$0 \$0	\$0	13 14	\$0 \$0
					
	\$119,859	(\$4,128)	\$115,730	2.30	\$264,793
OCA Average Revenue Lag	50.7				
Less: OCA Avg. Expense Lag	2.3				
<u> </u>					
Net Difference OCA Pro forma	48.4	Days			
O & M Expense per Day	\$317				
OCA CWC for O & M	\$15,350				
Less: Company Claim (1)	\$15,678				
OCA Adjustment	(\$328)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		OCA	OCA	⊤otal
	Original Filing	Company	Filing	OCA	Pro Forma	Revenue	Allowable
		Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates	-	Present Rates		
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	8,186,390	0	8,186,390	0	8,186,390	5,778,988	13,965,378
Expenses:			,				
O & M Expense	2,373,934	2,589	2,376,522	(73,902)	2,302,620	69,637	2,372,257
Depreciation	3,621,605	21,475	3,643,080	0	3,643,080	0	3,643,080
Amortizations	30,983	0	30,983		30,983		30,983
Taxes, Other	443,735	622,803	1,066,537	(1,491)	1,065,046	33,283	1,098,329
Income Taxes:							
State	(202,755)	(59,385)	(262,140)	4,573	(257,567)	566,852	309,285
Federal	(13,501)	(112,363)	(125,864)	8,653	(117,211)	1,072,541	955,330
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	6,254,000	475,118	6,729,118	(62,167)	6,666,951	1,742,313	8,409,264
Net Inc. Available for Return	1,932,390	(475,118)	1,457,272	62,167	1,519,439	4,036,674	5,556,113
Rate Base	90,923,800	466,051	91,389,851	(6,412)	91,383,439		91,383,439
Rate of Return	2.125%		1.59%				6.08%

(1) Company Main Brief

6.08%

. .

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

-	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	8.05%	4.06%	0.711174	5.71%
	100.00%		6.08%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01205006 0.00575927 0.0000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998671
Effective State Income Tax Rate	0.0980885
Factor After Local and State Taxes	0.8841021
Federal Income Tax Rate (*)	0.2099229
Effective Federal Income Tax Rate	0.1855933
Revenue Factor (100% - Effective Tax Rates)	0.6985088

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

-

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(1,000) 0 (5,412)						
REVENUES:		0				0	
EXPENSES:		U				U	0
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(19,477) (44,686) (5,188) (4,742) 191		(1,491)	2,095 4,464 518 474 (19)	3,963 8,447 981 896 (36)
Interest Synchronization (Table III)						(2,959)	(5,598)
TOTALS	(6,412)	0	(73,902)	0	(1,491)	4,573	8,653

.

· ·

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	91,389,851 (6,412)
OCA Rate Base Weighted Cost of Debt	\$	91,383,439 1.76%
OCA Interest Expense Company Claim (1)	\$ \$	1,608,349 1,578,724
Total OCA Adjustment Company Adjustment	\$; \$;	(29,624)
Net OCA Interest Adjustment State Income Tax Rate	\$	(29,624) 9.99%
State Income Tax Adjustment		(2,959)
Net OCA Interest Adjustment State Income Tax Adjustment		(29,624) (2,959)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(26,665) 20.99%
Federal Income Tax Adjustment		(5,598)

(1) Company Main Brief

.

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$91,389,851 (\$6,412)	\$91,389,851 (\$6,412)	Company Rate Base Claim OCA Rate Base Adjustments	\$91,389,851 (\$6,412)
OCA Rate Base Weighted Cost of Debt	\$91,383,439 <u>1.76%</u>	\$91,383,439 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$91,383,439 0.00%
OCA Annual Interest Exp.	\$1,608,349	\$237,597	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$4,406 	\$651 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$183,730) \$0	(\$27,147) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$183,730)	(\$27,147)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$210,877) (\$209,951) (\$926)			
Rounded to \$1,000	(\$1,000)			

.

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$O	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance

0

Company Claim (1) 0

ALJ Adjustment 0

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater SSS Exeter Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$163 201	(\$9,930)	\$153.272	12.14	\$1,860,718
Chemicals	\$153,451	so	\$153,451	48.81	\$7,489.943
Group Insurance	\$124,830	\$0	\$124.830	10.92	\$1,363,144
Insurance. Other	\$302,439	\$0	\$302,439	-53.43	(\$16,159,316)
Labor	\$617,187	(\$20,968)	\$596,219	12.14	\$7,238,099
Leased Equip./Rent	\$123	\$0	\$123	42.65	\$5,246
Leased Vehicles	\$29,885	\$0	\$29,885	39.23	\$1,172,389
Miscellaneous	\$414,198	(\$44,495)	\$369,702	31.01	\$11,464,473
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$283,577	\$0	\$283,577	24.97	\$7,080,918
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$2,740	\$0	\$2,740	8.71	\$23,865
Waste Disposal	\$216,103	\$0	\$216,103	45.65	\$9,865,115
Post Retirement Benefits	\$779	\$0	\$779	0.00	\$0
Pensions	\$4,114	\$0	\$4,114	13.14	\$54,058
	\$2,312,627	(\$75, <u>393)</u>	\$2,237,234	14.10	\$31,458,652
OCA Average Revenue Lag	50.7				
Less: OCA Avg. Expense Lag	14.1				
Net Difference	36.6	Days			
O & M Expense per Day	\$6,129				
OCA CWC for O & M	\$224,585				
Less: Company Claim (1)	\$229,997				
OCA Adjustment	(\$5,412)				

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

			PAWC Pro				
	PAWC Pro Forma		Forma Rebuttal		ALJ	ALJ	Total
	Original Filing	Company	Filing	ALJ	Pro Forma	Revenue	Allowable
	-	Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	Present Rates		Present Rates		
	\$	\$	\$	\$	\$	Ş	\$
Operating Revenue	23,457,185	0	23,457,185	0	23,457,185	7,403,153	30,860,338
Expenses:	·· · _ · _ · _ · _ · _ · _ ·						
O & M Expense	10,879,177	7,297	10,886,474	(437,689)	10,448,785	89,208	10,537,993
Depreciation	6,312,629	119,583	6,432,212	0	6,432,212	0	6,432,212
Amortizations	(156,664)	0	(156,664)		(156,664)		(156,664)
Taxes, Other	967,922	13,207	981,129	(7,346)	973,783	42,637	1,016,420
Income Taxes:							
State	(129,026)	(2,258)	(131,284)	38,039	(93,245)	726,164	632,919
Federal	227,983	(4,015)	223,968	(261,113)	(37,145)	1,373,976	1,336,831
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	18,102,021	133,814	18,235,835	(668,109)	17,567,726	2,231,985	19,799,711
Net Inc. Available for Return	5,355,164	(133,814)	5,221,350	668,109	5,889,459	5,171,168	11,060,628
Rate Base	177,564,450	4,059,090	181,623,540	294,675	181,918,215		181,918,215
Rate of Return	3.016%		2.87%				6.08%

(1) Company Main Brief

6.08%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	8.05%	4.06%	0.711174	5.71%
	100.00%		6.08%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204997 0.00575925 0.00000000 0.00000000
	0.9821908
State Income Tax Rate (*)	0.0998670
Effective State Income Tax Rate	0.0980885
Factor After Local and State Taxes	0.8841023
Federal Income Tax Rate (*)	0.2099230
Effective Federal Income Tax Rate	0.1855934
Revenue Factor (100% - Effective Tax Rates)	0.6985089

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI) Excess Accumulated Deferred Income Taxes	(10,000) 0 (28,410) 333,086						
REVENUES:		0				o	0
EXPENSES:							
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			(96,038) (334,573) (3,983) (3,641) 546		(7,346)	10,328 33,424 398 364 (55)	19,542 63,241 753 688 (103)
Excess Accumulated Deferred Income Tax Amortization Interest Synchronization (Table III)						(6,420)	(333,086) (12,148)
TOTALS	294,676	0	(437,689)	0	(7,346)	38,039	(261,113)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	181,623,540 294,675
OCA Rate Base Weighted Cost of Debt	\$	181,918,215 <u>1.76%</u>
OCA Interest Expense Company Claim (1)	\$ \$	3,201,761 3,137,476
Total OCA Adjustment Company Adjustment	\$ \$	(64,285)
Net OCA Interest Adjustment State Income Tax Rate	\$	(64,285) 9.99%
State Income Tax Adjustment		(6,420)
Net OCA Interest Adjustment State Income Tax Adjustment		(64,285) (6,420)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(57,865) 20.99%
Federal Income Tax Adjustment		(12,148)

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

.

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$181,623,540 \$294,675	\$181,623,540 \$294,675	Company Rate Base Claim OCA Rate Base Adjustments	\$181,623,540 <u>\$2</u> 94,675
OCA Rate Base Weighted Cost of Debt	\$181,918,215 <u>1.76%</u>	\$181,918,215 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$181,918,215 0.00%
OCA Annual Interest Exp.	\$3,201,761	\$472,987	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$8,772 41.7	\$1,296 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$365,792) \$0	(\$54,043) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$365,792)	(\$54,043)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$419,835) (\$409,983) (\$9,852)			
Rounded to \$1,000	(\$10,000)			

TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
Description	Present Rates	ALJ Adjustments	Present Rates	ALJ Allowance	Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
·								
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
•	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$ 0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0_	\$0	\$0\$0	\$0	\$0			

ALJ Allowance	
---------------	--

Company Claim (1) ____0

0

0

ALJ Adjustment

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS Scranton Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$125,315	(\$7,625)	\$117,691	12.14	\$1,428,766
Chemicals	\$1,450,898	\$0	\$1,450,898	48.81	\$70,818,313
Group Insurance	\$849,157	\$0	\$849,157	10.92	\$9,272,794
Insurance, Other	\$521,551	\$0	\$521,551	-53.43	(\$27,866,470)
Labor	\$4,905,473	(\$103,384)	\$4,802,089	12.14	\$58,297,360
Leased Equip./Rent	\$17,206	\$0	\$17,206	42.65	\$733,836
Leased Vehicles	\$328,934	\$0	\$328,934	39.23	\$12,904,081
Miscellaneous	\$1,001,510	(\$334,027)	\$667,484	31.01	\$20,698,664
Natural Gas	\$53,395	\$0	\$53,395	18.90	\$1,009,166
Power	\$392, 6 44	\$0	\$392,644	24.97	\$9,804,321
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$55,286	\$0	\$55,286	8.71	\$481,541
Waste Disposal	\$953,470	\$0	\$953,470	45.65	\$43,525,906
Post Retirement Benefits	\$57,341	\$0	\$57,341	0.00	\$0
Pensions	\$194,373	\$0	\$194,373	13.14	\$2,554,061
	\$10,906,553	(\$445,035)	\$10,461,518	19.50	\$203,662,339
OCA Average Revenue Lag Less: OCA Avg. Expense Lag	50.7 19.5				
Net Difference	31.2	Days			
O & M Expense per Day	\$28,662				
OCA CWC for O & M Less: Company Claim (1)	\$894,913 <u>\$923,323</u>	894,913	\$0		
OCA Adjustment	(\$28,410)				
(1) Company Main Brief		31.2229693 31.2000000 0.02296925			

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

	PAWC Pro Forma Original Filing	Company Adjustments	PAWC Pro Forma Rebuttal Filing	OCA Adjustments	OCA Pro Forma	OCA Revenue Increase	Total Allowable Revenues
	Present Rates (1)	(1)	Present Rates	¢		¢	¢
	\$	\$	φ	Φ	Φ	φ	φ
Operating Revenue	12,369,057	0	12,369,057	0	12,369,057	14,099,332	26,468,389
Expenses:							
O & M Expense	6,945,160	5,487	6,950,647	(263,880)	6,686,767	169,897	6,856,664
Depreciation	5,946,797	(27,552)	5,919,245	0	5,919,245	0	5,919,245
Amortizations	301,857	2,231	304,088		304,088		304,088
Taxes, Other	573,586	6,956	580,542	(3,146)	577,396	81,203	658,599
Income Taxes:							
State	(721,886)	5,849	(716,037)	21,280	(694,757)	1,382,981	688,224
Federal	(786,478)	11,066	(775,412)	40,264	(735,148)	2,616,743	1,881,595
Amort of ITC and Excess DFIT	0	0	0		0		0
Total Expenses	12,259,036	4,037	12,263,073	(205,482)	12,057,591	4,250,824	16,308,415
Net Inc. Available for Return	110,021	(4,037)	105,984	205,482	311,466	9,848,508	10,159,974
Rate Base	167,005,729	118,981	167,124,710	(19,881)	167,104,829		167,104,829
Rate of Return	0.066%		0.06%				6.08%

(1) Company Main Brief

6.08%

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	8.05%	4.06%	0.711174	5.71%
	100.00%		6.08%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45			·	

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204999 0.00575936 0.0000000 0.00000000
	0.9821907
State Income Tax Rate (*)	0.0998670
Effective State Income Tax Rate	0.0980884
Factor After Local and State Taxes	0.8841022
Federal Income Tax Rate (*)	0.2099230
Effective Federal Income Tax Rate	0.1855934
Revenue Factor (100% - Effective Tax Rates)	0.6985088

OCA Table A.2: End of Rate Year 2021, Recommended Adjustments with No Multiyear Rate Plan

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State	Federal Income Tax
	Ş	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	0 0 (19,881)						
REVENUES:		0				0	0
EXPENSES:		_					
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES			(41,135) (171,009) (27,180) (24,844) 288		(3,146)	4,424 17,084 2,715 2,482 (29)	8,370 32,324 5,138 4,696 (54)
Interest Synchronization (Table III)						(5,396)	(10,210)
TOTALS	(19,881)	0	(263,880)	0	(3,146)	21,280	40,264

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations		Amount \$
Company Rate Base Claim OCA Rate Base Adjustments	\$	167,124,710 (19,881)
OCA Rate Base Weighted Cost of Debt	\$	167,104,829 1.76%
OCA Interest Expense Company Claim (1)	\$	2,941,045 2,887,014
Total OCA Adjustment Company Adjustment	\$ \$	(54,031)
Net OCA Interest Adjustment State Income Tax Rate	\$	(54,031) 9.99%
State Income Tax Adjustment		(5,396)
Net OCA Interest Adjustment State Income Tax Adjustment		(54,031) (5,396)
Net OCA Adjustment for F.I.T. Federal Income Tax Rate		(48,635) 20.99%
Federal Income Tax Adjustment		(10,210)

(1) Company Main Brief

,

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$167,124,710 (\$19,881)	\$167,124,710 (\$19,881)	Company Rate Base Claim OCA Rate Base Adjustments	\$167,124,710 (\$19,881)
OCA Rate Base Weighted Cost of Debt	\$167,104,829 1.76%	\$167,104,829 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$167,104,829 0.00%
OCA Annual Interest Exp.	\$2,941,045	\$434,473	OCA Preferred Dividends	\$0
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$8,058 41.7	\$1,190 	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$336,019) \$0	(\$49,623) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$336,019)	(\$49,623)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$385,642) (\$385,593) (\$49)			
Rounded to \$1,000	<u>\$0</u>			
TABLE V Pennsylvania-American Water Company CASH WORKING CAPITAL -TAXES R-2020-3019369, R-2020-3019371

	Company Proforma Tax Expense		ALJ Pro forma Tax Expense		ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PUC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Utility Realty	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0	\$0	\$0	\$0_	\$0_	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance	0

Company Claim (1) 0

ALJ Adjustment 0

(1) Company Main Brief

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS McKeesport Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	\$855.058	(\$52,024)	\$803.034	12.14	\$9,748,836
Chemicals	\$14,999	\$0	\$14,999	48.81	\$732,111
Group Insurance	\$464,322	\$0	\$464.322	10.92	\$5,070,396
Insurance Other	\$538,525	SO	\$538,525	-53.43	(\$28,773,391)
Labor	\$2,402,835	(\$44,281)	\$2,358,555	12.14	\$28,632,852
Leased Equip./Rent	\$11,471	\$0	\$11,471	42.65	\$489,238
Leased Vehicles	\$76,772	\$0	\$76,772	39.23	\$3,011,766
Miscellaneous	\$1,014,556	(\$170,721)	\$843,835	31.01	\$26,167,311
Natural Gas	\$34,387	\$0	\$34,387	18.90	\$649,914
Power	\$1,000,836	\$0	\$1,000,836	24.97	\$24,990,875
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$88,795	\$0	\$88,795	8.71	\$773,404
Waste Disposal	\$284,760	\$0	\$284,760	45.65	\$12,999,294
Post Retirement Benefits	\$40,192	\$0	\$40,192	0.00	\$0
Pensions	\$128,152	\$0_	\$128,152	13.14	\$1,683,917
	\$6,955,661	(\$267,026)	\$6,688,635	12.90	\$86,176,523
	50.7				
Less: OCA Avg. Expense Lag	12.9				
Net Difference	37.8	Days			
O & M Expense per Day	\$18,325				
OCA CWC for O & M	\$692,851				
Less: Company Claim (1)	\$712,732				
OCA Adjustment	(\$19,881)				

(1) Company Main Brief

TABLE I Pennsylvania-American Water Company INCOME SUMMARY R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

•			Pro Forma				
					OCA	OCA	Total
	Pro Forma	Company	Present Rates	OCA	Pro Forma	Revenue	Allowable
		Adjustments		Adjustments		Increase	Revenues
	Present Rates (1)	(1)	(Revised) (1)		Present Rates	-	
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	1,474,187	0	1,474,187	0	1,474,187	1,474,913	2,949,100
Expenses:							
O & M Expense	565,267	344	565,611	34	565,645	17,773	583,418
Depreciation	805,787	11,223	817,010	0	817,010	0	817,010
Amortizations	19,675	(2,005)	17,670		17,670		17,670
Taxes, Other	64,427	831	65,258	0	65,258	8,495	73,753
Income Taxes:							
State	(78,568)	95	(78,473)	(635)	(79,108)	144,672	65,564
Federal	(65,887)	180	(65,707)	(1,202)	(66,909)	273,734	206,825
Amort of ITC and Excess DFIT	Ŭ.	0	0		0		0
Total Expenses	1,310,701	10,668	1,321,369	(1,803)	1,319,566	444,674	1,764,240
Net Inc. Available for Return	163,486	(10,668)	152,818	1,803	154,621	1,030,239	1,184,860
Rate Base	19,169,938	318,884	19,488,822	(992)	19,487,830		19,487,830
Rate of Return	0.853%		0.78%				6.08%

(1) Company Main Brief

6.08%

. .

TABLE I(A) Pennsylvania-American Water Company RATE OF RETURN R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

-	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.02%		
Long-term Debt	39.44%	4.46%	1.76%		1.76%
WW-Specific LTD	10.14%	2.55%	0.26%		
Preferred Stock	0.05%	8.80%	0.00%	0.711174	0.00%
Common Equity	50.37%	8.05%	4.06%	0.711174	5.71%
	100.00%		6.08%		7.47%
Pre-Tax Interest Coverage	4.24				
After-Tax Interest Coverage	3.45				

TABLE I(B) Pennsylvania-American Water Company REVENUE FACTOR R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

.....

- --

100%	1.0000000
Less: Uncollectible Accounts Factor (*) PUC, OCA, OSBA Assessment Factors (*) Gross Receipts Tax Other Tax Factors	0.01204999 0.00575973 0.00000000 0.00000000
	0.9821903
State Income Tax Rate (*)	0.0998672
Effective State Income Tax Rate	0.0980886
Factor After Local and State Taxes	0.8841017
Federal Income Tax Rate (*)	0.2099227
Effective Federal Income Tax Rate	0.1855931
Revenue Factor (100% - Effective Tax Rates)	0.6985086

(*) Company Main Brief

TABLE II Pennsylvania-American Water Company SUMMARY OF ADJUSTMENTS R-2020-3019369, R-2020-3019371

.

Wastewater CSS Kane Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	\$	\$	\$	\$	\$	\$	\$
RATE BASE: CWC: Int. & Div. (Table IV) Taxes (Table V) O & M (Table VI)	(1,000) 0 8						
REVENUES: EXPENSES:		0				0	0
Annual Performance Plan Expense Capitalization Rate Annual Performance Plan - AWWSC Stock-Based Compensation Expense - AWWSC Amortization of Outreach Consultant Costs TAXES:			34			0 0 0 (3)	0 0 0 (7)
Interest Synchronization (Table III)						(632)	(1,195)
TOTALS	(992)	0	34	0	0	(635)	(1,202)

TABLE III Pennsylvania-American Water Company INTEREST SYNCHRONIZATION R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations		Amount \$
Company Rate Base Claim ALJ Rate Base Adjustments	\$	19,488,822 (992)
ALJ Rate Base Weighted Cost of Debt	\$	19,487,830 <u>1.76%</u>
ALJ Interest Expense Company Claim (1)	\$ \$	342,986 336,662
Total ALJ Adjustment Company Adjustment	\$ \$	(6,324)
Net ALJ Interest Adjustment State Income Tax Rate	\$	(6,324) 9.99%
State Income Tax Adjustment		(632)
Net ALJ Interest Adjustment State Income Tax Adjustment		(6,324) (632)
Net ALJ Adjustment for F.I.T. Federal Income Tax Rate		(5,692) 20.99%
Federal Income Tax Adjustment	<u> </u>	(1,195)

(1) Company Main Brief

TABLE IV Pennsylvania-American Water Company CASH WORKING CAPITAL - Interest and Dividends R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

- ---

Accrued Interest

	Long-Term Debt	LT Debt - WW Specific	Preferred Stock Dividends	
Company Rate Base Claim OCA Rate Base Adjustments	\$19,488,822 (\$992)	\$19,488,822 (\$992)	Company Rate Base Claim OCA Rate Base Adjustments	\$19,488,822 (\$992)
OCA Rate Base Weighted Cost of Debt	\$19,487,830 1.76%	\$19,487,830 0.26%	OCA Rate Base Weighted Cost Pref. Stock	\$19,487,830 0.00%
OCA Annual Interest Exp.	\$342,986	\$50,668	OCA Preferred Dividends	<u>\$0</u>
Average Revenue Lag Days	0.0	0.0	Average Revenue Lag Days	0.0
Average Expense Lag Days	0.0	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.7	0.0	Net Lag Days	4.5
Working Capital Adjustment				
OCA Daily Interest Exp. Net Lag Days	\$940 41.7	\$139 41.7	OCA Daily Dividends Net Lag Days	\$0 4.5
OCA Working Capital Company Claim (1)	(\$39,198) \$0	(\$5,796) \$0	Company Claim (1)	\$0 \$0
OCA Adjustment	(\$39,198)	(\$5,796)		\$0
Total Interest & Dividend Adj. Less: Company Claim (1) OCA Adjustment	(\$44,994) (\$44,276) (\$718)			
Rounded to \$1,000	(\$1,000)			

(1) Company Main Brief.

TABLE V
Pennsylvania-American Water Company
CASH WORKING CAPITAL -TAXES
R-2020-3019369, R-2020-3019371

.

	Company Proforma Tax Expense	ompany 'roforma x Expense			ALJ Adjusted Taxes at			
	Present	ALJ	Present	ALJ	Present		Net Lead/	Accrued Tax
Description	Rates	Adjustments	Rates	Allowance	Rates	Daily Expense	Lag Days	Adjustment
PLIC Assessment	\$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Public Litility Realty	ŝõ	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Stock Tax	50	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Capital Olook Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	50	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0 \$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	ŝ	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$0 \$0	\$0	\$0	\$0	\$0	\$0.00	0.00	\$0
Federal Income Tax	\$0 \$0	<u>\$0</u>	\$0	\$0	\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0	\$0	\$0			

ALJ Allowance	0
---------------	---

Company Claim (1) ____0

ALJ Adjustment 0

(1) Company Main Brief

TABLE VI Pennsylvania-American Water Company CASH WORKING CAPITAL – O & M EXPENSE R-2020-3019369, R-2020-3019371

Wastewater CSS Kane Operations

Description	Company Pro forma F.T.Y. Expense	OCA Adjustments	OCA Pro forma Expenses	Lag Days	Lag Dollars
	02	\$0	\$0	12 14	\$0
Service Company	0Ę 0	φ0 \$0	\$0 \$0	48.81	\$0
	90 \$0	00 80	\$0 \$0	10.92	\$0
Group Insurance	40 ¢0	0¢ 0	\$0	-53 43	\$0
Labor	\$12,0 5 7	\$0 \$0	\$12,057	12.14	\$146,372
Leased Equip./Rent	\$0	\$0	\$0	42.65	\$0
Leased Vehicles	\$0	\$0	\$0	39.23	\$0
Miscellaneous	\$543,965	\$34	\$543,999	31.01	\$16,869,417
Natural Gas	\$0	\$0	\$0	18.90	\$0
Power	\$0	\$0	\$0	24.97	\$0
Purchased Water	\$0	\$0	\$0	34.69	\$0
Telephone	\$0	\$0	\$0	8.71	\$0
Waste Disposal	\$0	\$0	\$0	45.65	\$0
Post Retirement Benefits	\$0	\$0	\$0	0.00	\$0
Pensions	\$0	\$0	\$0	13.14	\$0
	\$556,022	\$34	\$556,056	30.60	\$17,015,789
	50.7				
Less: OCA Avg. Expense Lag	30.6				
Net Difference	20.1	Days			
O & M Expense per Day	\$1,523				
OCA CWC for O & M	\$30,620				
Less: Company Claim (1)	\$30,612				
OCA Adjustment	\$8				

(1) Company Main Brief

Pennsylvania American Water Company Docket Nos. R-2020-3019369 and R-2020-3019371 Exhibit LA-8

Adjustment Schedules Relating to Rate Year 2 (2022) of a MultiYear Rate Plan on an Average Basis Accompanying the Direct Testimony of Ralph Smith

			No of	
Number	Description	Revised	Pages	Page No.
Revised	Net Operating Income Adjustments			
C-4	Interest Synchronization	Yes	6	2-10
C-5	Salary and Wages Expense	Yes	L	11-17
C-6	Annual Performance Plan Expense	Yes	L	18-24
C-7	Group Insurance	Yes	L	25-31
C-8	401K, Defined Contribution Plan and Employee Stock Purchase Plan	Yes	7	32-38
C-8A	Capitalization Rate	Yes	7	39-45
C-9	Annual Performance Plan - American Water Works Service Company	No	1	46
C-10	Stock-Based Compensation Expense - American Water Works Service Company	No	1	47
C-11	Excess Accumulated Deferred Income Tax Amortization	Yes	5	48-52
C-13	Property Tax Expense	No	7	53-59
C-14	Depreciation Expense	No	8	60-67
	Total Pages (including Contents page)		67	

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

Pennsylvania American Water Company Interest Synchronization

Rate Year Ending December 31, 2022

Exhibit LA-8 Exhibit LA-8 Schedule C-4 Docket Nos. R-2020-3019369 and R-2020-3019371 Page 1 of 9

Wastewater CSS Kane	Operations	(H)		\$ 1,949	\$ 3,688	\$ 5,636
astewater CSS McKeesport	Operations	(<u></u>		1,441	2,726	4,167
vater CSS W anton	rations	(F)		12,065 \$	22,828 \$	34,894 \$
Wastev Scr	Ope	-		S	s	s
Vastewater SSS Exeter	Operations	(E)		279	527	806
ewater SSS V adsbury	perations	<u>(</u>		(102) \$	(193) \$	(296) \$
S S	5			S	s	S
Wastewater SSS Sxcl. Sadsbury and	Exeter Operations	(C)		1,757	3,324	5,081
Water Steelton	Operations	(B)		\$ (4,440) \$	\$ (8,402) \$	\$ (12,842) \$
Water Operations	Excl. Steelton	(A)		\$ (574,417)	\$ (1,086,855)	\$ (1,661,272)
:	Description		Rate Year Ending December 31, 2022	Increase (Decrease) to State Income Tax Expense	Increase (Decrease) to Federal Income Tax Expense	Increase (Decrease) to Income Tax Expense
Line	No.			-	0	ŝ

Notes and Source: See pages 2 through 8 of this schedule Exhibit LA-8 Page 2 of 67

	an	
ŕ	2	•
	ate	
٩	Y	
	car	
•	2	2
-		
2	5	
	_	
	WIL	
	tments	
	Ë	5
-	AG	5
-	c	;
-	nmende	
	5	5
ŕ	Kecot	
	UZZ. Kecot	
	· 2022. Kecot	
	Y ear 2022. Recot	
	ate Year 2022. Recon	
	ge Kate Year 2022. Kecot	
	Average Kate Year 2022. Kecot	to and the of the tank taken to the
	A.5: Average Kate Year 2022. Recon	
	E A.3: Average Kate Year 2022. Kecon	
	ble A.3: Average Kate Year 2022. Kecon	
	able A.3: Average Kate Year 2022. Recon	
	I able A.3: Average Kate Year 2022. Kecon	
)(A Table A.3: Average Kate Year 2022. Kecon	

Penns Intere	ylvania American Water Company st Synchronization				Wate	Exhibit LA-8 r Operations Excl. Steelton
Rate J	Year Ending December 31, 2022			Docket	t Nos. R-2020-301	Schedule C-4 9369 and R-2020-3019371 Page 2 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 12/31/2022	Reference
					(A)	
1	Adjusted Year End Rate Base, per OCA	↔	3,420,454,919	S	3,538,818,484	Schedule B, page 1
7	Weighted Cost of Debt, per OCA		1.91%		2.10%	Per OCA - Sch. D, page 1
ŝ	Going-Level Interest Deduction for Tax Purposes			\$	74,315,188	L1 x L2
4	Interest Deduction per Company	S	65,499,454	S	68,563,650	Note A
5	Decrease in Deductible Interest			S	5,751,538	L3 - L4
9	State Income Tax Rate				9.99%	
٢	Increase to State Income Tax			S	(574,417)	L5 x L6
8	Federal Taxable Income			\mathbf{S}	5,177,122	LS + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	(1,086,855)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			S	(1,661,272)	L7 + L10
Notes / Note /	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "Water Excluding	g Stee	lton" tab			

43.82%	4.37%	1.91%
Debt Porportion per Company	Cost of Long-Term Debt per Company	Weighted Cost of Debt

	27	Int	
٢	1	-	
	<3t⊳		
	-93r	TIN	
	112	111	
	Ξ	5	
•	2	Ľ.	
	ţ		
	12	2	
	nente		
		100	
	ć	ì,	
	4	1	
		5	
	5	5	
	5		
	7	-	
	ç	Ş	
4			
۲ ۵		1, IVVVI	
		111111111111111111111111111111111111111	
		1011, 10000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000, 1000,	
	Par //// Ker	Val 2022, 10000	
	Vear //// Kecv	1 car 2022, 1000	
	Kate Year /II/ Kern	1/mr 1 /m 2/2/2 1///	
	The Kate Year //// Kern	50 IVAILO I VAIL 2022, IVOU	
	race Kate Year //// Kero	10001 1001 1 001 4044, 1000	
	A Versoe Kate Vear /11/ Kern	11 VIUES INUIS I VUI 2024, INVOU	
	4. Average Rate Vear /11/ Reco	J. 11101450 11410 1 041 4044, 11000	
	A 4. Average Rate Ver /11/ Reco	11.7. 111 VIUGO IVUIN I VUI 2022, IVOU	
	A 4. AVERAGE Kate Vear /11/ Kern	10 11.1. 11.1.1 and 1 min 1 min 1.000 11.000	
	Iable A 3: Average Kate Ver /I// Kero	1 auto 11:3: 111 alugo 12ano 1 cal 2022, 12000	
	A lable A 4. Average Kate Year //// Keco	1 1 auto 1 1:3: 1 11 clube 1 vale 1 cal 2022, 1000	
	A lable A 4. Average Rate Vear /11/ Reco	011 1 anis 1 1:0: 111 sings inais 1 sai 2022, 1000	
	10 A Lable A 3 Average Rate Year /11 / Keco	0.011 1 anto 1 1:3: 1 1 voluço 1 vai 2022, 1000	

Penns Intere	ylvania American Water Company st Synchronization					Exhibit LA-8 Water Steelton Operations
Rate 1	<i>i</i> ear Ending December 31, 2022		D	ocket	Nos. R-2020-301	9369 and R-2020-3019371 Page 3 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 2/31/2022 (A)	Reference
1	Adjusted Year End Rate Base, per OCA	S	24,347,976	S	24,244,159	Schedule B , page 2
7	Weighted Cost of Debt, per OCA		1.91%		2.10%	Per OCA - Sch. D, page 1
б	Going-Level Interest Deduction for Tax Purposes			S	509,127	L1 x L2
4	Interest Deduction per Company	S	466,248	S	464,667	Note A
S	Decrease in Deductible Interest			S	44,460	L3 - L4
9	State Income Tax Rate				9.99%	
٢	Increase to State Income Tax			S	(4,440)	L5 x L6
8	Federal Taxable Income			S	40,020	LS + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	(8,402)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			Ś	(12,842)	L7 + L10
Notes Note	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "Water - Steeltor	ı" tab				

Debt Por Cost of Long-Ter

43.82%	4.37%	1.91%
orportion per Company	erm Debt per Company	Weighted Cost of Debt

Exhibit LA-8 Page 4 of 67

Plan	
Rate	
tiyear	
I Mul	
s with	
stment	
5	1
Ž	
-	
ndec	
nme	
Recor	
, Recor	
22, Recor	
)22, Recor	
2022, Recor	
ear 2022, Recor	
Y ear 2022, Recor	
ate Year 2022, Recor	
Rate Year 2022, Recor	
Average Rate Year 2022, Recor	
A.3: Average Rate Year 2022, Recor	
: A.3: Average Rate Year 2022, Recor	
ole A.3: Average Rate Year 2022, Recor	
able A.3: Average Rate Year 2022, Recor	
Table A.3: Average Rate Year 2022, Recor	
A Table A.3: Average Rate Year 2022, Recor	
CA Table A.3: Average Rate Year 2022, Recor	

Penns Intere	ylvania American Water Company st Synchronization	Was	tewater SSS I	Excl. Sadsl	Exhibit LA-8 bury and Exeter Operations
Rate 7	ear Ending December 31, 2022		ocket Nos. R.	-2020-301	9369 and R-2020-3019371 Page 4 of 9
Line No.	Description	Per PAWC Rebuttal	Rate Ye Endin 12/31/2((A)	ear g 022	Reference
1	Adjusted Rate Base, per OCA	\$ 195,387,176	\$ 202,2	47,827	Schedule B, page 3
7	Weighted Cost of Debt, per OCA	1.73%		1.73%	Per OCA - Sch. D, page 2
Э	Going-Level Interest Deduction for Tax Purposes		\$ 3,4	98,887	L1 x L2
4	Interest Deduction per Company	\$ 3,375,237	\$ 3,5	16,478	Note A
5	Decrease in Deductible Interest		•	[17,591]	L3 - L4
9	State Income Tax Rate			9.99%	
٢	Increase to State Income Tax		\$	1,757	L5 x L6
8	Federal Taxable Income		•	[15,834]	L5 + L7
6	Federal Income Tax Rate			20.99%	
10	Increase to Federal Income Tax Expense		\$	3,324	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense		÷	5,081	L7 + L10
Notes Note 1	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "WW SSS exl St	adsbury_Exeter" tab			

39.53% 4.37% 73% Debt Porportion per Company Cost of Long-Term Debt per Company Weighted Cost of Debt

Exhibit LA-8 Page 5 of 67

7	lan	
۲	<u>ب</u>	
ŕ	Kat	
	'ear	
•	£	
	n	
	Σ	
	vith	
	s	
	nent	
	Stin	
	Ē	
•	Ă	
-	ש	
-	g	
	en	
	Ξ	
	Я	
	Ξ.	
	CO1	
4	Kecoi	
۲ ۲	2, Kecoi	
	122, Kecol	
	2022, Kecoi	
	(ear 2022, Kecoi	
	e Y ear 2022, Kecoi	
	Kate Y ear 2022, Kecol	
	ge Kate Y ear 2022, Kecoi	
	Average Kate Y ear 2022, Kecoi	
	Average Kate Y car 2022, Kecoi	
	A.3: Average Kate Y ear 2022, Kecon	
	e A.3: Average Kate Y ear 2022, Kecoi	
	ible A.3: Average Kate Y ear 2022, Kecoi	
	I able A.5: Average Kate Y ear 2022, Kecoi	
	A 1 able A.3: Average Kate Y ear 2022, Kecoi	
	ICA 1 able A.3: Average Kate Y ear 2022, Kecoi	
	UCA I able A.3: Average Kate Y ear 2022, Kecoi	

Penns Intere	ylvania American Water Company st Synchronization				Wastewate	Exhibit LA-8 rr SSS Sadsbury Operations
Rate 1	Year Ending December 31, 2022			ocket	Nos. R-2020-301	9369 and R-2020-3019371 Page 5 of 9
Line No.	Description		Per PAWC Rebuttal	_	Rate Year Ending 2/31/2022 (A)	Reference
1	Adjusted Rate Base, per OCA	S	8,200,640	S	8,074,507	Schedule B , page 4
7	Weighted Cost of Debt, per OCA		1.73%		1.73%	Per OCA - Sch. D, page 2
Э	Going-Level Interest Deduction for Tax Purposes			S	139,689	L1 x L2
4	Interest Deduction per Company	S	141,663	S	138,665	Note A
S	Decrease in Deductible Interest			S	1,024	L3 - L4
9	State Income Tax Rate				9.99%	
٢	Increase to State Income Tax			S	(102)	L5 x L6
8	Federal Taxable Income			S	922	LS + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	(193)	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			÷	(296)	L7 + L10
Notes	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "WW SSS Sadsb	oury" tab				

Cost of

39.53%	4.37%	1.73%
Debt Porportion per Company	of Long-Term Debt per Company	Weighted Cost of Debt

Exhibit LA-8 Page 6 of 67

lan	
Ч	
Sate	
<u> </u>	
/ear	
Ξ.	
=	
4	
4	
Ч	
÷.	
≍	
Ś	
E	
Ð	
Ξ	
st	
Ξ	
Ð	
\checkmark	
<u> </u>	
ŏ	
p	
E.	
ă	
H	
_	
H.	
SOL	
ecor	
Recor	
2, Recor	
22, Recor	
022, Recor	
2022, Recor	
ar 2022, Recor	
ear 2022, Recor	
Year 2022, Recor	
e Year 2022, Recor	
ate Year 2022, Recor	
Rate Year 2022, Recor	
s Rate Year 2022, Recor	
ge Rate Year 2022, Recor	
rage Rate Year 2022, Recor	
erage Rate Year 2022, Recor	
verage Rate Year 2022, Recor	
Average Rate Year 2022, Recor	
: Average Rate Year 2022, Recor	
Average Rate Year 2022, Recor	
A.3: Average Rate Year 2022, Recor	
a A.3: Average Rate Year 2022, Recor	
ole A.3: Average Rate Year 2022, Recor	
able A.3: Average Rate Year 2022, Recor	
Table A.3: Average Rate Year 2022, Recor	
A Table A.3: Average Rate Year 2022, Recor	
A Table A.3: Average Rate Year 2022, Recor	
DCA Table A.3: Average Rate Year 2022, Recor	
OCA Table A.3: Average Rate Year 2022, Recor	
OCA Table A.3: Average Rate Year 2022, Recor	

Penns Intere	ylvania American Water Company st Synchronization				Wastew	Exhibit LA-8 ater SSS Exeter Operations
Rate	Year Ending December 31, 2022			Docket	Nos. R-2020-301	Schedule C-4 9369 and R-2020-3019371 Page 6 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 2/31/2022 (A)	Reference
-	Adjusted Rate Base, per OCA	\$	91,389,851	\mathbf{S}	90,884,577	Schedule B, page 5
2	Weighted Cost of Debt, per OCA		1.73%		1.73%	Per OCA - Sch. D, page 2
С	Going-Level Interest Deduction for Tax Purposes			S	1,572,303	L1 x L2
4	Interest Deduction per Company	S	1,578,724	S	1,575,092	Note A
5	Decrease in Deductible Interest			S	(2,789)	L3 - L4
9	State Income Tax Rate				9.99%	
L	Increase to State Income Tax			S	279	L5 x L6
8	Federal Taxable Income			S	(2,510)	L5 + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	527	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			S	806	L7 + L10
Notes Note	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "WW SSS Exete	r" tab				

2021" Excel file, "WW SSS Exeter" tab 2 NEUULIAI INIU

Debt Porportion per Company Cost of Long-Term Debt per Company Weighted Cost of Debt

39.53% 4.37% 1.73%

Exhibit LA-8 Page 7 of 67

D125	r lall
Doto	Nalc
+111001	пусаг
, N	TNTAT T
	nin s
100000000	Induction
. 5	2
- <	ń Y n
200	וחמר
0000	
Docod	Necol
Dood	", Necol
	ton vecor
D_{22}	177, NGCUL
	EUZZ, NGCUL
V_{abs} (1) D_{abs}	I Cal 2022, NeCOL
$D_{oto} V_{oou} \gamma 0 \gamma \gamma D_{obout}$	Naig I cal 2022, Necul
A TOMORON Data Vacuation $D_{0000000}$	AVELAGE NAIS I CAL 2022, NECUL
Λ 3. Amonomo Data Van 1033 Danam	A.J. AVGIAGE NAIC I CAI 2022, NGCUI
$\mathbf{b}_{10} \wedge 2$. Amazon $\mathbf{D}_{afo} \mathbf{V}_{abs} \gamma 0 \gamma 1$ $\mathbf{D}_{abs} \gamma 0 \gamma 1$	UIC A.J. AVGIAGE NAIC I CAI 2022, NGCUI
$r_{obl} = A_{2}$, $A_{100} = D_{obl} = D_{obl} = V_{obl} = A_{100} = D_{obl} = D_{ob$	aule A.J. Avelage Nale I cal 2022, Necul
A Table A 3. Amore Date Vace 10.12 Dare	A I aulo A.J. Avelage Nate I cal 2022, Necul
$\mathbf{C} \wedge \mathbf{T}_{c} \mathbf{b} \mathbf{l}_{c} \wedge 2$. A $\mathbf{T}_{c} \mathbf{u}_{c} \mathbf{u}_{c} \mathbf{v}_{c} \mathbf{u}_{c} \mathbf{u}$	CA LAUIC A.J. AVGIAGE NAIG I CAL 2022, NGCOL

Penns Intere	ylvania American Water Company st Synchronization				Wastewate	Exhibit LA-8 rr CSS Scranton Operations
Rate	Year Ending December 31, 2022			Docket	Nos. R-2020-301	9369 and R-2020-3019371 Page 7 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 12/31/2022	Reference
1	Adjusted Rate Base, per OCA	S	181,623,540	\boldsymbol{S}	(A) 187,247,054	Schedule B, page 6
7	Weighted Cost of Debt, per OCA		1.73%		1.73%	Per OCA - Sch. D, page 2
б	Going-Level Interest Deduction for Tax Purposes			S	3,239,374	L1 x L2
4	Interest Deduction per Company	S	3,137,476	S	3,360,180	Note A
5	Decrease in Deductible Interest			S	(120,806)	L3 - L4
9	State Income Tax Rate				9.99%	
٢	Increase to State Income Tax			S	12,065	L5 x L6
8	Federal Taxable Income			S	(108,741)	L5 + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	22,828	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			\sim	34,894	L7 + L10
Notes	and Source:	1-7 H				

Note A: Company's "Rebuttal Model EOY 2021" Excel file, "WW CSS Scranton" tab

Debt Porportion per Company39.53%Cost of Long-Term Debt per Company4.37%Weighted Cost of Debt1.73%

Exhibit LA-8 Page 8 of 67

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate F	lan	
OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear I	Sate P	
OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multi	year F	
OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with	Multi	
OCA Table A.3: Average Rate Year 2022, Recommended Adjustments	with	
OCA Table A.3: Average Rate Y ear 2022, Recommended A	djustments	
OCA Table A.3: Average Rate Year 2022, Recommende	q p	
OCA Table A.3: Average Rate Year 2022,	mmende	
OCA Table A.3: Average Rate Year 2	Recc	
OCA Table A.3: Average Rate	022, Recc	
OCA Table A.3: Average	Year 2022, Recc	
OCA Table A.3:	Rate Year 2022, Recc	
OCA Table /	Average Rate Year 2022, Recc	
OCA	A.3: Average Rate Year 2022, Recc	
	Table A.3: Average Rate Year 2022, Recc	

Penns Intere	ylvania American Water Company st Synchronization				Wastewater C	Exhibit LA-8 SS McKeesport Operations
Rate 7	ear Ending December 31, 2022		Ι	Docket	Nos. R-2020-301	Schedule C-4 9369 and R-2020-3019371 Page 8 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 2/31/2022	Reference
-	Adjusted Rate Base, per OCA	S	167,124,710	S	165,494,500	Schedule B, page 7
7	Weighted Cost of Debt, per OCA		1.73%		1.73%	Per OCA - Sch. D, page 2
С	Going-Level Interest Deduction for Tax Purposes			S	2,863,055	L1 x L2
4	Interest Deduction per Company	÷	2,887,014	S	2,877,482	Note A
S	Decrease in Deductible Interest			↔	(14,427)	L3 - L4
9	State Income Tax Rate				9.99%	
Г	Increase to State Income Tax			S	1,441	L5 x L6
8	Federal Taxable Income			↔	(12,986)	LS + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			↔	2,726	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			$\boldsymbol{\diamond}$	4,167	L7 + L10
Notes	and Source:					

Note A: Company's "Rebuttal Model EOY 2021" Excel file, "WW CSS McKeesport" tab

Debt Porportion per Company Cost of Long-Term Debt per Company Weighted Cost of Debt

39.53% 4.37% 73%

Exhibit LA-8 Page 9 of 67

Penns Intere Rate S	ylvania American Water Company st Synchronization 7 ear Ending December 31, 2022		Ι	Docket	Waste ⁻ Nos. R-2020-301	Exhibit LA-8 water CSS Kane Operations Schedule C-4 19369 and R-2020-3019371 Page 9 of 9
Line No.	Description		Per PAWC Rebuttal		Rate Year Ending 12/31/2022 (A)	Reference
-	Adjusted Rate Base, per OCA	S	19,488,822	S	20,355,302	Schedule B , page 8
7	Weighted Cost of Debt, per OCA		1.73%		1.73%	Per OCA - Sch. D, page 2
б	Going-Level Interest Deduction for Tax Purposes			\mathbf{S}	352,147	L1 x L2
4	Interest Deduction per Company	S	336,662	S	371,661	Note A
S	Decrease in Deductible Interest			S	(19,514)	L3 - L4
9	State Income Tax Rate				9.66.6	
٢	Increase to State Income Tax			S	1,949	L5 x L6
8	Federal Taxable Income			S	(17,565)	L5 + L7
6	Federal Income Tax Rate				20.99%	
10	Increase to Federal Income Tax Expense			S	3,688	L8 x L9
11	Overall Increase (Decrease) to Income Tax Expense			\mathbf{S}	5,636	L7 + L10
Notes Note /	and Source: A: Company's "Rebuttal Model EOY 2021" Excel file, "WW CSS Kane'	" tab				

Debt Porportion per Company Cost of Long-Term Debt per Company Weighted Cost of Debt

39.53% 4.37% 1.73% OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

enns alary	ylvania American Water Company and Wages Expense								Water Oper	Exhibit LA-8 ations Excl. Steelton Schedule C-5
ate	ear Ending December 31, 2022 (Docket No	os. R-2	2020-3019369 a	nd R-2020-3019371 Page 1 of 7 Revised
ine	Description	N N N N	n-Collective argaining init Salary 2/31/2022	СЦ –	Collective Bargaining Unit 2/31/2022	IO R B D T	-Collective argaining nit Hourly 2/31/2022	E m C	otal Salary nd Wages Expense 2/31/2022	Reference
į	Rate Year Ending December 31, 2022 I Salary and Warses - Non-Ilnion Salary and Hourly Employaes		(A)		(B)		(C)		(D)	
- ~	Annualized Salary and Wages Per Company Salary and Wages Per OCA	\$ \$	24,007,421 23 872 117	\$ \$	45,988,159 45 792,074	\$	16,120,984 16 037 234	\$ \$	86,116,564 85 701 424	Vol. 4, Exhibit 3-B Worknaner
1 m 4	OCA Adjustment to Total Salary and Wages Canitalization Rate Percentage	÷ S	(135,304) 37.18%	\$	(196,085) 37 18%	\$	(83,751) 37 18%	Ś	(415,139)	L2 - L1 Vol 4 Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	÷	50,307	÷	72,905	Ś	31,139	÷	154,351	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	S	(84,997)	Ś	(123,180)	S	(52,612)	S	(260,788)	L3 + L5
Р 8	II. Payroll Taxes Adjustment to Salary and Wages Charged to Operating Expense FICA Social Security Rate*	\mathbf{S}	(84,997) 6.20%	\mathbf{S}	(123,180) 6.20%	\mathbf{S}	(52,612) 6.20%	S	(260,788)	Line 6
6	Adjustment to FICA Social Security	S	(5,270)	S	(7,637)	\sim	(3,262)	S	(16,169)	L7 x L8
11	Adjustment to Salary and Wages Charged to Operating Expense FICA Medicare Rate	\$	(84,997) 1.45%	\$	(123,180) 1.45%	\mathbf{S}	(52,612) 1.45%	\$	(260,788)	Line 6
12	Adjustment to FICA Medicare	S	(1,232)	S	(1,786)	S	(763)	S	(3,781)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(6,502)	Ś	(9,423)	\sim	(4,025)	S	(19,950)	L9 + L12

Notes and Source: Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing

* The Company's estimate of the amount of wages in 2022 subject to the 6.20% Social Security tax is \$145,198, which is based on a three-year average of historical actual. increases of the Social Security tax. To the extent that the salaries of certain individuals included in the adjustments listed are above the estimated FICA tax threshold \$145,198, this adjustment to Payroll Tax expense could be modified accordingly.

	lan
۴	7
c	Kate
	Ц
	/ea
•	Ð
	Ξ
•	2
	ίth
•	Ā
	\mathbf{ts}
	en
	Ē
1	lSt
	F
•	ĕ
-	d D
-	g
	en
	Ĕ
	В
	_
	õ
<i>c</i>	Keco
4	r, Keco
	177, Kecol
	ZUZZ, Kecol
	ar 2022, Kecoi
	ear 2022, Kecol
	2 Y ear 2022, Kecol
	ate Y ear 2022, Kecoi
	Kate Y car 2022, Kecol
	ge Kate Y ear 2022, Kecoi
	rage Kate Y ear 2022, Kecoi
	verage Kate Y ear 2022, Kecoi
	Average Kate Y ear 2022, Kecon
	.: Average Kate Y ear 2022, Kecon
	1.3: Average Kate Y ear 2022, Kecon
	: A.3: Average Kate Y ear 2022, Kecon
	ole A.5: Average Kate Y ear 2022, Kecon
	able A.3: Average Kate Y ear 2022, Kecol
	I able A.3: Average Kate Y ear 2022, Kecon
	OA 1 able A.3: Average Kate Y ear 2022, Kecol
	JCA I able A.3: Average Kate Y ear 2022, Kecol

Penns Salary	ylvania American Water Company and Wages Expense	Water	Exhibit LA-8 Steelton Operations
Rate	ear Ending December 31, 2022	Docket Nos. R-2020-3019369 ar	Journal C-3 Journal C-3019371 Page 2 of 7 Revised
Line		Collective Bargaining Unit	
No.	Description	12/31/2022	Reference
	Rate Year Ending December 31, 2022	(A)	
1	1. Salary and wages - Non-Union Salary and Hourty Employees Annualized Salary and Wages Per Company	\$ 509.277	Vol. 4, Exhibit 3-B
0	Salary and Wages Per OCA	\$ 507,363	Workpaper
б	OCA Adjustment to Total Salary and Wages	\$ (1,914)	L2 - L1
4 v	Capitalization Rate Percentage Canitalized Dortion Not Characed to Onersting Evnence	37.18% © 712	Vol. 4, Exhibit 3-B
n	Сариандся гонион тоо Спандся ю Орстаний рарсизе	A11/	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	\$ (1,202)	L3 + L5
	II. Payroll Taxes		
г x	Adjustment to Salary and Wages Charged to Operating Expense FICA Social Security Rate	\$ (1,202) 6 20%	Line 6
6	Adjustment to FICA Social Security	\$ (75)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense FICA Medicare Rate	\$ (1,202) 1 45%	Line 6
12	Adjustment to FICA Medicare	\$ (17)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$ (92)	L9 + L12

Penns Salary	ylvania American Water Company , and Wages Expense				Wastewater 3	SSS E ₂	kcl. Sadsbury a	Exhibit LA-8 nd Exeter Operations
Rate	lear Ending December 31, 2022				Docket N	os. R-2	2020-3019369 a	Schedule C-5 and R-2020-3019371
								Page 3 of 7 Revised
eni I		Non- Bai	Collective rgaining it Salary	Non- Ba	-Collective rgaining it Hourky	ar	otal Salary Id Wages Evnense	
No.	Description	12/	31/2022	12/	'31/2022	1	2/31/2022	Reference
	Rate Year Ending December 31, 2022		(Y)		(B)		(C)	
,	I. Salary and Wages - Non-Union Salary and Hourly Employees	÷		ł		4		
-	Annualized Salary and Wages Per Company Solory and Words Dar OCA	2 9	350,771 248 761	S 9	2,027,081	S 9	2,377,852 2 365 175	Vol. 4, Exhibit 3-B Worknamer
1 ო	OCA Adjustment to Total Salary and Wages	9 ((2.011)	•	(10.367)	÷ ~	(12.378)	VULNPAPEL L2 - L1
4	Capitalization Rate Percentage	ł	17.07%	÷	17.07%	ł		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$	343	S	1,770	S	2,113	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	S	(1,668)	S	(8,597)	S	(10,265)	L3 + L5
	II. Pavroll Taxes							
r 8	Adjustment to Salary and Wages Charged to Operating Expense FICA Social Security Rate	S	(1,668) 6.20%	S	(8,597) 6.20%	\$	(10,265)	Line 6
6	Adjustment to FICA Social Security	\$	(103)	S	(533)	S	(636)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense FICA Medicare Rate	S	(1,668) 1.45%	S	(8,597) 1.45%	\mathbf{S}	(10,265)	Line 6
12	Adjustment to FICA Medicare	\$	(24)	S	(125)	S	(149)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(127)	S	(658)	S	(785)	L9 + L12

an
te Pl
Rai
year
luti
h M
wit
ents
ıstm
Adjı
led ,
nenc
omn
Rec
22,
r 20
Yea
late
ge F
vera
À.
A.3
able
ΑTέ
0C1

Penns Salary	ylvania American Water Company and Wages Expense	Wastewater SSS Sad	Exhibit LA-8 Isbury Operations
Rate 1	(ear Ending December 31, 2022	Docket Nos. R-2020-3019369 and	Schedule C-5 R-2020-3019371
			Page 4 of 7 Revised
		Non-Collective	
Line		Bargaining Unit Hourly	
No.	Description	12/31/2022	Reference
	Rate Vear Ending December 31–2012	(Y)	
	I. Salary and Wages - Non-Union Salary and Hourly Employees		
1	Annualized Salary and Wages Per Company	\$ 22,364 Vo	ol. 4, Exhibit 3-B
0	Salary and Wages Per OCA	\$ 22,248	Workpaper
с	OCA Adjustment to Total Salary and Wages	\$ (116)	L2 - L1
4	Capitalization Rate Percentage	<u> </u>	ol. 4, Exhibit 3-B
S	Capitalized Portion Not Charged to Operating Expense	\$ 20	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	\$ (96)	L3 + L5
	II. Payroll Taxes		
	Adjustment to Salary and Wages Charged to Operating Expense	\$ (96)	Line 6
8 Q	FICA Social Security Rate Adjustment to FICA Social Security	<u>6.20%</u> \$ (6)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense	(96)	Line 6
11	FICA Medicare Rate	1.45%	
12	Adjustment to FICA Medicare	\$ (1)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$ (7)	L9 + L12

Penns Salary	ylvania American Water Company • and Wages Expense					F	Wastewater SS	Exhibit LA-8 SS Exeter Operations
Rate V	Zear Finding December 31-2020				Docket N	oc R_20	00-3010360 9	Schedule C-5 nd R_2020_3019371
Nat						09. IV-20		Page 5 of 7 Revised
Line		Non-I Bar Uni	Collective gaining t Salary	Non-Bar Bar Uni	Collective rgaining t Hourly	Tot anc E	al Salary I Wages xpense	
No.	Description	12/	31/2022 (A)	12/	31/2022 (B)	12/	31/2022 (C)	Reference
	<u>Rate Year Ending December 31, 2022</u> I. Salary and Wages - Non-Union Salary and Hourly Employees							
	Annualized Salary and Wages Per Company	\$ 6	168,501	\$ 6	496,323	\$ 6	664,824	Vol. 4, Exhibit 3-B
7 6	Salary and wages Fer OCA OCA Adjustment to Total Salary and Wages	∩	10/,01 (966)	~ ↔	493,713 (7,610)	÷	(3 576)	w orkpaper 1.2 - 1.1
04	Capitalization Rate Percentage	÷	17.07%	•	17.07%	•	(010,0)	Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$	165	\$	446	\$	611	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	S	(801)	S	(2,164)	S	(2,965)	L3 + L5
	II. Payroll Taxes							
8 1	Adjustment to Salary and Wages Charged to Operating Expense FICA Social Security Rate	S	(801) 6.20%	S	(2,164) 6.20%	\$	(2,965)	Line 6
6	Adjustment to FICA Social Security	S	(50)	S	(134)	S	(184)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense FICA Medicare Rate	\$	(801) 1.45%	S	(2,164) 1.45%	S	(2,965)	Line 6
12	Adjustment to FICA Medicare	S	(12)	S	(31)	S	(43)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(62)	S	(165)	S	(227)	L9 + L12

Penns Salary	sylvania American Water Company v and Wages Expense							А	Vastewater CSS	Exhibit LA-8 Scranton Operations
										Schedule C-5
Rate	Year Ending December 31, 2022						Docket N	los. R-	2020-3019369 8	ind R-2020-3019371
										Page 6 of 7 Revised
		Non- Ba	Collective roaining	Ощ	Collective Jaroainino	Non R:	-Collective roaining	T.	otal Salary nd Wages	
Line	: ; ;	n d	it Salary		Unit	553	it Hourly	3 -	Expense	ç
No.	Description	12/	31/2022		2/31/2022 (R)	12	/31/2022		2/31/2022	Reterence
	Rate Year Ending December 31, 2022		(***)				$\hat{\mathbf{D}}$			
	I. Salary and Wages - Non-Union Salary and Hourly Employees									
-	Annualized Salary and Wages Per Company	S	933,005	S	4,332,488	S	113,947	S	5,379,440	Vol. 4, Exhibit 3-B
2	Salary and Wages Per OCA	s	927,657	S	4,319,547	S	113,294	S	5,360,499	Workpaper
ŝ	OCA Adjustment to Total Salary and Wages	\$	(5, 347)	\$	(12,941)	S	(653)	\$	(18,941)	L2 - L1
4	Capitalization Rate Percentage		17.07%		17.07%		17.07%			Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$	913	S	2,209	S	111	S	3,233	
9	OCA Adjustment to Salary and Wages Charged to Operating Expense	\$	(4,434)	S	(10,732)	s	(542)	s	(15,708)	L3 + L5
	II. Payroll Taxes									
r 0	Adjustment to Salary and Wages Charged to Operating Expense	S	(4,434) 6 2002	\$	(10,732) 6 2002	\mathbf{S}	(542) 6 2002	\$	(15,708)	Line 6
6	Adjustment to FICA Social Security	S	(275)	S	(665)	S	(34)	S	(974)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense	S	(4, 434)	\$	(10,732)	\$	(542)	S	(15,708)	Line 6
= :	FICA Medicare Rate	÷	1.45%	÷	1.45%	÷	1.45%	÷	(900)	110 ~ 111
17		9	(14)	9	(001)	9	(0)	9	(077)	
13	Total Adjustment to Payroll Tax Expense	\$	(339)	S	(821)	S	(42)	S	(1,202)	L9 + L12

Notes and Source:

Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing

* The Company's estimate of the amount of wages in 2022 subject to the 6.20% Social Security tax is \$145,198, which is based on a three-year average of historical actual. increases of the Social Security tax. To the extent that the salaries of certain individuals included in the adjustments listed are above the estimated FICA tax threshold \$145,198, this adjustment to Payroll Tax expense could be modified accordingly.

Penns	ylvania American Water Company							117-11		Exhibit LA-8
Dala	y allu wages Expellise							W ast	UNI CCU INI	Schedule C-5
Rate	Year Ending December 31, 2022						Docket N	os. R-3	2020-3019369 8	nd R-2020-3019371 Page 7 of 7
										Revised
		Non- Ba	Collective rgaining	Ощ	Collective largaining	Non B2	-Collective rgaining	ar ar	otal Salary nd Wages	
Line No.	Description	Un 12/	it Salary 31/2022	1	Unit 2/31/2022	Un 12	it Hourly /31/2022	1	Expense 2/31/2022	Reference
	Rate Year Ending December 31, 2022		(A)		(B)		(C)		(D)	
	I. Salary and Wages - Non-Union Salary and Hourly Employees									
	Annualized Salary and Wages Per Company	S	353,746	S	2,186,883	S	135,562	S	2,676,191	Vol. 4, Exhibit 3-B
0	Salary and Wages Per OCA	S	351,718	\$	2,177,278	\$	134,784	\$	2,663,780	Workpaper
Э	OCA Adjustment to Total Salary and Wages	S	(2,028)	S	(9,605)	s	(677)	s	(12, 411)	L2 - L1
4	Capitalization Rate Percentage		17.07%		17.07%		17.07%			Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$	346	\$	1,640	S	133	\$	2,119	
2		6	(00) 1)	6		6	(010)	6		31-61
0	UCA Aujustment to Satary and wages Charged to Operating Expense	0	(1,002)	9	(006.7)	0	(040)	0	(10,292)	CJ + CJ
	II. Pavroll Taxes									
L 0	Adjustment to Salary and Wages Charged to Operating Expense	\$	(1,682)	S	(7,965)	S	(646)	\$	(10, 292)	Line 6
×	FICA Social Security Rate		6.20%		6.20%		6.20%			
6	Adjustment to FICA Social Security	S	(104)	S	(494)	S	(40)	S	(638)	L7 x L8
10	Adjustment to Salary and Wages Charged to Operating Expense	S	(1,682)	S	(1,965)	÷	(646)	S	(10, 292)	Line 6
11	FICA Medicare Rate		1.45%		1.45%		1.45%			
12	Adjustment to FICA Medicare	\$	(24)	S	(115)	S	(6)	S	(148)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$	(128)	\$	(609)	\$	(49)	\$	(786)	L9 + L12

Rate Plan
Multiyear
nts with
Adjustmeı
ommended .
S
22, Rec
ear 2022, Rec
Rate Year 2022, Rec
Average Rate Year 2022, Rec
ole A.3: Average Rate Year 2022, Rec
OCA Table A.3: Average Rate Year 2022, Rec

Penns _. Annua	lvania American Water Company I Performance Plan Expense						Water Ope	Exhibit LA-8 rations Excl. Steelton
Rate J	ear Ending December 31, 2022				Docke	t Nos. R-	-2020-3019369	and R-2020-3019371 Page 1 of 7 Daricod
			н	tate Year	2			revised
		Non-Collective	Collectiv	ve]	Non-Collectiv	/e	Total	
		Bargaining	Bargaini	ng	Bargaining		APP	
Line No.	Description	Unit Salary 12/31/2022	Unit 12/31/20	22	Unit Hourly 12/31/2022		Expense 12/31/2022	Reference
		(E)	(F)		(6)		(H)	
	Annualized Performance Plan and Long Term Performance Plan							
- ~	APP and LTPP Expense Per Company APP Exnemse Per OCA	\$ 3,392,175 \$ 1,567,672	\$ 1,140 \$ 567	,734 433	5 945,50 5 470.04	6 0 8 8	5,478,418 2,605,155	Vol. 4, Exhibit 3-B see line 16
1 ლ	OCA Adjustment to APP Expense	\$ (1,824,503)	\$ (573	,301)	6 (475,46	s (0	(2,873,263)	L2 - L1
4	Capitalization Rate Percentage	37.18%	37	.18%	37.18	%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$ 678,358	\$ 213	,156	\$ 176,77	8	1,068,292	
9	OCA Adjustment to APP Expense charged to Operating Expense	\$ (1,146,145)	\$ (360	,145) 5	\$ (298,68	2) \$	(1,804,971)	L3 + L5
	II. Pavroll Taxes							
7	Adjustment to APP Expense Charged to Operating Expense	\$ (1,146,145)	\$ (360	,145) 5	\$ (298,68	2) \$	(1, 804, 971)	Line 6
0 6	FICA Social Security rate Adjustment to FICA Social Security	\$ (71,061)	\$ (22	329) 5	6 (18,51	8)	(111,908)	L7 x L8
10	Adjustment to APP Expense Charged to Operating Expense	\$ (1,146,145)	\$ (360	,145) 5	\$ (298,68	2) \$	(1,804,971)	Line 6
11	FICA Medicare Rate Adjustment to FICA Medicare	1.45% \$ (16,619)	\$ (5	<u>45%</u> 222) <u>5</u>	(4,33 (4,33	<u>%</u>	(26,172)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$ (87,680)	\$ (27	,551) 5	\$ (22,84	9) \$	(138,080)	L9 + L12
<u>Notes</u> Amou	and Source: its below calculated using the data from Volume 4, Exhibit 3-B from PAWC's	filing						
		Non-Collective	Collectiv	ve	Non-Collectiv	/e	Total	
		Bargaining	Bargaini	ng	Bargaining		APP	

APP Expense Per OCA Workpaper OCA Recommended Disallowance Percentage* 14 15

50% 1,567,672 Ś OCA Recommended APP Expense

5,210,310

\$

940,099

÷ A

1,134,867

\$

3,135,344

Ś

12/31/2022

Unit

Bargaining Unit Salary 12/31/2022

Bargaining Unit Hourly 12/31/2022 50% 470,049

50% 567,433

12/31/2022 Expense

2,605,155

\$

^ The Company's estimate of the amount of wages in 2022 subject to the 6.20% Social Security tax is \$145,198, which is based on a three-year average of historical actual. increases of the Social Security tax. To the extent that the salaries of certain individuals included in the adjustments listed are above the estimated FICA tax threshold \$145,198, this adjustment to Payroll Tax expense could be modified accordingly.

* See the Direct Testimony of OCA witness Ralph C. Smith

Penns _: Annua	ylvania American Water Company I Performance Plan Expense		Wate	Exhibit LA-8 r Steelton Operations
Rate Y	ear Ending December 31, 2022 (ocket Nos. R-2	2020-3019369	and R-2020-3019371 Page 2 of 7 Revised
Line		Cc Ba	ollective rgaining Unit	
No.	Description	12/	31/2022 (B)	Reference
	Annualized Performance Plan and Long Term Performance Plan			
	APP Expense Per Company	\$	13,142	Vol. 4, Exhibit 3-B
r) r	APP Expense Per OCA OCA A divisitment to APP Exmense	s s	6,542 (6,600)	see line 16 12 - 11
04	Capitalization Rate Percentage	÷	37.18%	Vol. 4, Exhibit 3-B
S	Capitalized Portion Not Charged to Operating Expense	\$	2,454	
9	OCA Adjustment to APP Expense charged to Operating Expense	\$	(4,146)	L3 + L5
	II. Payroll Taxes			
	Adjustment to APP Expense Charged to Operating Expense	S	(4, 146)	Line 6
x 0	FICA Social Security Rate Adjustment to FICA Social Security	\$	6.20% (257)	L7 x L8
10	Adjustment to APP Expense Charged to Operating Expense	\$	(4,146)	Line 6
11	FICA Medicare Rate Adjustment to FICA Medicare	\$	1.45%	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$	(317)	L9 + L12
Notes	and Source.			

INDIES ALLA SOULCE.

Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing

13,08450% 6,542 Bargaining Unit Collective 12/31/2022 S

* See the Direct Testimony of OCA witness Ralph C. Smith

APP Expense Per OCA Workpaper OCA Recommended Disallowance Percentage* OCA Recommended APP Expense

15 16

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

Penns Annuí	ylvania American Water Company Il Performance Plan Expense			-	Wastewater	SSS Exc	el. Sadsbury a	Exhibit LA-8 nd Exeter Operations
Rate 1	/ ear Ending December 31, 2022				Docket N	os. R-20	120-3019369 s	benchmer C-0 and R-2020-3019371 Page 3 of 7 Revised
				Rate	Year 2			
;		Non-Ba	-Collective rgaining	Non-C Bar	Collective gaining		[otal APP	
Line No.	Description	12 Ur	ut Salary /31/2022	Unit 12/3	Hourly 1/2022	E) 12/	xpense 31/2022	Reference
			(D)		(E)		(F)	
	Annualized Performance Plan							
-	APP Expense Per Company	S	35,078	S	126,655	S	161,733	Vol. 4, Exhibit 3-B
7	APP Expense Per OCA	S	17,438	s	62,965	S	80,403	see line 16
ω 4	OCA Adjustment to APP Expense Canitalization Rate Decontage	S	(17,640)	S	(63,690)	S	(81,330)	L2 - L1 Vol 4 Fyhihit 3-R
· v	Capitalized Portion Not Charged to Operating Expense	S	3,011	Ś	10,873	S	13,884	
9	OCA Adjustment to APP Expense charged to Operating Expense	÷	(14,629)	Ś	(52,817)	S	(67,446)	L3 + L5
	II. Payroll Taxes							
r 8	Adjustment to APP Expense Charged to Operating Expense FICA Social Security Rate	S	(14,629) 6.20%	Ś	(52,817) 6.20%	S	(67,446)	Line 6
6	Adjustment to FICA Social Security	S	(907)	÷	(3,275)	÷	(4, 182)	L7 x L8
10 11	Adjustment to APP Expense Charged to Operating Expense FICA Medicare Rate	S	(14,629) 1.45%	\$	(52,817) 1.45%	S	(67,446)	Line 6
12	Adjustment to FICA Medicare	S	(212)	Ś	(766)	S	(978)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(1, 119)	Ś	(4,041)	S	(5,160)	L9 + L12
Notes	and Source.							

Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing

Total	APP	Expense	2/31/2022	160,805		80,403
			-	÷		Ś
n-Collective	argaining	nit Hourly	2/31/2022	125,929	50%	62,965
No	щ	D	-	Ś		Ś
-Collective	rgaining	uit Salary	/31/2022	34,876	50%	17,438
Non-	Ba	Un	12/	s		S

* See the Direct Testimony of OCA witness Ralph C. Smith

APP Expense Per OCA Workpaper OCA Recommended Disallowance Percentage* OCA Recommended APP Expense

 $\begin{array}{c}11\\15\\16\end{array}$

Penns _. Annua	ylvania American Water Company Il Performance Plan Expense	Waste	ewater SSS	Exhibit LA-8 Sadsbury Operations
Rate 5	'ear Ending December 31, 2022 Doch	t Nos. R-202()-3019369 a	ocneaule C-0 nd R-2020-3019371 Page 4 of 7 Revised
Line No.	Description	Non-C Barg Unit 12/3	ollective gaining Hourly 1/2022 B)	Reference
	Iu 3 u 1 1 I Iu 3 u 1			
- 0 0 4 v	Annualized Performance Plan and Long Term Performance Plan APP Expense Per Company APP Expense Per OCA OCA Adjustment to APP Expense Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	ઝ ઝ ઝ ઝ	1,428 710 (718) 17.07% 123	Vol. 4, Exhibit 3-B see line 16 L2 - L1 Vol. 4, Exhibit 3-B
9	OCA Adjustment to APP Expense charged to Operating Expense	S	(595)	L3 + L5
Р 8 6	II. Payroll Taxes Adjustment to APP Expense Charged to Operating Expense FICA Social Security Rate Adjustment to FICA Social Security	s s	(595) 6.20% (37)	Line 6 L7 x L8
10 11 12	Adjustment to APP Expense Charged to Operating Expense FICA Medicare Rate Adjustment to FICA Medicare	રુ છ	(595) 1.45% (9)	Line 6 L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(46)	L9 + L12
Notor	and Courses.			

1,42050% 710 Collective Bargaining Unit 12/31/2022

* See the Direct Testimony of OCA witness Ralph C. Smith

APP Expense Per OCA Workpaper OCA Recommended Disallowance Percentage* OCA Recommended APP Expense

15 16

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

Penns _. Annua	vlvania American Water Company I Performance Plan Expense					-	Vastewater SS	Exhibit LA-8 SS Exeter Operations
Rate Y	ear Ending December 31, 2022				Docket N	os. R-20	20-3019369 s	ounce U-0 and R-2020-3019371 Page 5 of 7 Revised
				Rat	e Year 2			
		Non-C Barş	Collective gaining	Non-I Bar	Collective gaining	L ,	Cotal APP	
Line No.	Description	Unit 12/3	Salary 1/2022	Uni 12/	t Hourly 31/2022	E3 12/3	kpense 3 1/2022	Reference
			(D)		(E)		(F)	
	Annualized Performance Plan							
- 0	APP Expense Per Company	\$	16,850 8,277	\$	31,786	\$	48,636	Vol. 4, Exhibit 3-B
2	APP Expense Per OCA	~ (8,377	s S	15,802	∽ (24,1/9	see line 16
ω4	OCA Adjustment to APP Expense Canitalization Rate Percentage	s	(8,473) 17 07%	S	(15,984) 17 07%	S	(24,457)	L2 - L1 Vol 4 Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$	1,446	Ś	2,729	\$	4,175	
9	OCA Adjustment to APP Expense charged to Operating Expense	S	(7,027)	S	(13,255)	Ś	(20,282)	L3 + L5
	II. Pavroll Taxes							
г x	Adjustment to APP Expense Charged to Operating Expense FICA Social Security Rate	\$	(7,027) 6 20%	S	(13,255) 6 20%	S	(20,282)	Line 6
6	Adjustment to FICA Social Security	\$	(436)	S	(822)	S	(1,258)	L7 x L8
10	Adjustment to APP Expense Charged to Operating Expense FICA Medicare Rate	S	(7,027) 1 45%	Ś	(13,255) 1 45%	S	(20,282)	Line 6
12	Adjustment to FICA Medicare	\$	(102)	S	(192)	ss	(294)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	S	(538)	Ś	(1,014)	S	(1,552)	L9 + L12
Notes	and Source:							

Amounts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing

Total	APP	Expense	2/31/2022	48,358		24,179
			1	S		Ś
on-Collective	Bargaining	Unit Hourly	12/31/2022	31,604	50%	15,802
Ž		_		S		Ś
-Collective	rgaining	uit Salary	/31/2022	16,753	50%	8,377
Non-	Ba	Un	12/	÷		÷

* See the Direct Testimony of OCA witness Ralph C. Smith

OCA Recommended Disallowance Percentage* OCA Recommended APP Expense

 $\begin{array}{c}11\\15\\16\end{array}$

APP Expense Per OCA Workpaper

Plan
Rate
Multiyear
with
Adjustments
Recommended
33,
0
e Year 200
Rate Year 202
Average Rate Year 200
A.3: Average Rate Year 20%
Table A.3: Average Rate Year 202

Pennsy Annua	lvania American Water Company . Performance Plan Expense						3	'astewater CSS	Exhibit LA-8 Scranton Operations
Rate Y	ear Ending December 31, 2022					Docket 1	Nos. R-2	:020-3019369 a	scneaule C-o nd R-2020-3019371 Page 6 of 7
				Rat	te Year 2				Revised
		Non-Colle	ective	Collective	ž	on-Collective		Total	
		Bargain	ing	Bargaining		Bargaining		APP	
Line		Unit Sal	lary	Unit		Jnit Hourly	÷	Expense	ç
NO.	Description	(E)	770	(F)		(G)		(H)	Kelerence
	Annualized Performance Plan and Long Term Performance Plan								
- 0	APP Expense Per Company	\$ 125	5,171	109,11	6 8 6	4,182	\$	238,472	Vol. 4, Exhibit 3-B
11	APP Expense Per OCA	8 8 8	2,227	54,36	<u>8</u>	2,079	<u>ب</u>	118,669	see line 16
v 4	OCA Aglustment to AFP Expense Capitalization Rate Percentage	(07 (07	2,944) 7.07%	c/, 4c) 4	¢ (0)	(2,103) 17.07%	A	(119,803)	L2 - L1 Vol. 4. Exhibit 3-B
S.	Capitalized Portion Not Charged to Operating Expense	\$ 10	0,745	9,34	17 \$	359	S	20,451	
9	OCA Adjustment to APP Expense charged to Operating Expense	\$ (52	2,199)	\$ (45,40	8 (6	(1,744)	\$	(99,352)	L3 + L5
⊳ 8	II. Payroll Taxes Adjustment to APP Expense Charged to Operating Expense FICA Social Security Rate^	\$ (52	2,199) 5.20%	\$ (45,40 6.20	8 (6(%	(1,744) 6.20%	\$	(99,352)	Line 6
6	Adjustment to FICA Social Security	\$	3,236)	\$ (2,81	(5) \$	(108)	s	(6,159)	L7 x L8
10	Adjustment to APP Expense Charged to Operating Expense	\$ (52	2,199)	\$ (45,40	s (60	(1,744)	\$	(99,352)	Line 6
12	FICA Medicare Rate Adjustment to FICA Medicare	\$	(757)	(65) (65	<u>58)</u>	1.45% (25)	~	(1, 440)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	\$	3,993)	\$ (3,47	73) \$	(133)	~	(7,599)	L9 + L12
Notes	ind Source:								
Amou	its below calculated using the data from Volume 4, Exhibit 3-B from $PAWC$	s filing							
		Non-Colle Bargain Unit Sal	ective ing lary	Collective Bargaining Unit	ž	on-Collective Bargaining Jnit Hourly		Total APP Expense	

[^] The Company's estimate of the amount of wages in 2022 subject to the 6.20% Social Security tax is \$145,198, which is based on a three-year average of historical actual. increases of the Social Security tax. To the extent that the salaries of certain individuals included in the adjustments listed are above the estimated FICA tax threshold \$145,198, this adjustment to Payroll Tax expense could be modified accordingly.

118,669

Expense 12/31/2022 237,338

> 4,158 50%

12/31/2022

108,726 50% 54,363

124,454 50% 62,227

Ś

APP Expense Per OCA Workpaper OCA Recommended Disallowance Percentage*

14 15

OCA Recommended APP Expense

 $\boldsymbol{\diamond}$

12/31/2022

12/31/2022

2,079

* See the Direct Testimony of OCA witness Ralph C. Smith

Pennsy Annua	lvania American Water Company Performance Plan Expense							Wast	ewater CSS Mo	Exhibit LA-8 Keesport Operations
Rate Y	ear Ending December 31, 2022						Docket N	os. R-2	2020-3019369 s	Define the second secon
					Rate Vo	ear 2				Kevised
		Non-(Collective	Ŭ	ollective	Non	-Collective		Total	
eni I		Bai	gaining it Salary	Ba	rgaining Unit	B. L	rgaining it Hourly	_	APP	
No.	Description	12/.	31/2022	12,	31/2022	12	/31/2022	11	2/31/2022	Reference
			(E)		(F)		(G)		(H)	
	Annualized Performance Plan and Long Term Performance Plan									
-	APP Expense Per Company	\$	40,184	\$	58,068	\$	4,529	\$	102,781	Vol. 4, Exhibit 3-B
C1 (APP Expense Per OCA	s 6	19,977	<u>ه</u>	28,891	ه ه	2,252	ۍ ف	51,120	see line 16
v 4	OCA Adjustment to AFF Expense Capitalization Rate Percentage	•	(20,207) 17.07%	•	(29,177) 17.07%	•	(2,211) 17.07%	•	(100,1C)	L2 - L1 Vol. 4. Exhibit 3-B
·ν	Capitalized Portion Not Charged to Operating Expense	\$	3,450	S	4,981	S	389	S	8,820	
9	OCA Adjustment to APP Expense charged to Operating Expense	S	(16,757)	S	(24,196)	S	(1,888)	Ś	(42,841)	L3 + L5
	II. Pavroll Taxes									
۲ o	Adjustment to APP Expense Charged to Operating Expense	S	(16,757)	\$	(24,196) 6 2002	∽	(1,888) 6 2002	\$	(42, 841)	Line 6
° 6	Adjustment to FICA Social Security	Ś	(1,039)	Ś	(1.500)	Ś	(117)	Ś	(2,656)	L7 x L8
0	A diversity to A DD Farmers Channel to Onendine Farmers	6	(222,21)	6	(106)	6	(000)	6		1 <i>1</i>
11	Adjustment to APP Expense Charged to Operating Expense FICA Medicare Rate	•	(10,72) 1.45%	A	(24,196) 1.45%	A	(1,888) 1.45%	A	(42,841)	Line o
12	Adjustment to FICA Medicare	S	(243)	S	(351)	S	(27)	S	(621)	L10 x L11
13	Total Adjustment to Payroll Tax Expense	s	(1,282)	S	(1,851)	S	(144)	S	(3,277)	L9 + L12
Notes	nd Source:									
Amou	its below calculated using the data from Volume 4, Exhibit 3-B from PAWC's	filing								
		Non-	Collective	Ŭ	ollective	Non	-Collective		Total	
		Bai	gaining t Salary	Ba	rgaining Unit	B2	it Hourly	-	APP	
		12/	31/2022	12,	31/2022	12	/31/2022	121	2/31/2022	
14	APP Expense Per OCA Workpaper	S	39,954	S	57,783	Ś	4,504	S	102,241	
15	OCA Recommended Disallowance Percentage*	ł	50%	4	50%	4	50%	ł		
16	OCA Recommended APP Expense	S	19,977	S	28,891	\$	2,252	\$	51,120	

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

* See the Direct Testimony of OCA witness Ralph C. Smith

Exhibit LA-8 Page 24 of 67

Ś

Pen Gro	sylvania American Water Company p Insurance				Water Oper	Exhibit LA-8 rations Excl. Steelton
Ratí	Year Ending December 31, 2022			Docket	Nos. R-2020-3019369	and R-2020-3019371 Page 1 of 7 Revised
Line No.	Description	Non-Collective Bargaining Unit Salary 12/31/2022	Collective Bargaining Unit 12/31/2022	Non-Collective Bargaining Unit Hourly 12/31/2022	Total Group Insurance Expense 12/31/2022	Reference
	Rate Year Endine December 31. 2022	(A)	(B)	(C)	(D)	
- 7	Group Insurance Expense Per Company Group Insurance Expense Per OCA	\$ 4,643,059 \$ 4,616,891	\$ 8,231,676 \$ 8,196,578	\$ 3,684,259 \$ 3,665,118	<pre>\$ 16,558,994 \$ 16,478,588</pre>	Vol. 4, Exhibit 3-B see line 10
ω4	OCA Adjustment to Group Insurance Expense Canitalization Rate Percentage	\$ (26,168) 3718%	\$ (35,098) 37.18%	\$ (19,140) 37 18%	\$ (80,406)	L2 - L1 Vol 4 Exhibit 3-B
S.	Capitalized Portion Not Charged to Operating Expense	\$ 9,729	\$ 13,050	\$ 7,116	\$ 29,895	
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (16,439)	\$ (22,048)	\$ (12,024)	\$ (50,511)	L3 + L5
Not	s and Source:					
Am	unts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	Non Colloctino	Collootivo	Non Colloctino	Totol	
		Bargaining	Bargaining	Bargaining	Group Insurance	
		Unit Salary 12/31/2022	Unit 12/31/2022	Unit Hourly 12/31/2022	Expense 12/31/2022	
7	Group Insurance Expense Per Company	\$ 4,643,059	\$ 8,231,676	\$ 3,684,259	\$ 16,558,994	
8 G	retreentage Ditretence between UCA recommended and FA WC Proposed Salaries and Wages Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	<u>-0.20%</u> \$ (26,168)	$\frac{-0.43\%}{(35,098)}$	<u>-0.32%</u> \$ (19,140)	\$ (80,406)	
10	Adjusted Group Insurance Expense Per OCA	\$ 4,616,891	\$ 8,196,578	\$ 3,665,118	\$ 16,478,588	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022	2022	2022		
		Non-Collective Bargaining	Collective Bargaining	Non-Collective Bargaining		
;		Unit Salary	Unit Contraction	Unit Hourly	Reference	
112	Salary and Wages per UCA Salary and Wages per Company	\$ 23,872,117 \$ 24,007,421	\$ 45,792,074 \$ 45,988,159	S 16,037,234 S 16,120,984	Sch. C-5, p. 1, line2 Sch. C-5, p. 1, line1	
13	Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	-0.56%	-0.43%	-0.52%	·····	

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

Exhibit LA-8 Page 25 of 67

Penns) Group	lvania American Water Company Insurance	Water	Exhibit LA-8 Steelton Operations		
Rate Y	ear Ending December 31, 2022 Docket	: Nos. R-2020-3019369 a	ound R-2020-3019371 Page 2 of 7 Revised		
Line No.	Description	Collective Bargaining Unit 12/31/2022	Reference		
	11011d114047	(A)			
- 0 6 4 0	Rate Year Ending December 31. 2022 Group Insurance Expense Per Company Group Insurance Expense Per OCA OCA Adjustment to Group Insurance Expense Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	(A) \$ 108,473 \$ 108,066 \$ (408) \$ 37.18% \$ 152	Vol. 4, Exhibit 3-B see line 10 L2 - L1 Vol. 4, Exhibit 3-B		
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (256)	L3 + L5		
Notes a	nd Source:				
Amoui	ts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	Non-Collective Bargaining Unit Salary 12/31/2022			
С 8 6	Group Insurance Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	\$ 108,473 -0.38% \$ (408)			
10	Adjusted Group Insurance Expense Per OCA	\$ 108,066			
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Collective Bargaining			
11 12 13	Salary and Wages per OCA Salary and Wages per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit \$ 507,363 \$ 509,277 -0.38%	Reference Sch. C-5, p. 2, line2 Sch. C-5, p. 2, line1		
Penns	ylvania American Water Company				Exhibit LA-8
-------	---	------------------------------	------------------------------	---	---
Grout	Insurance		Wastewate	r SSS Excl. Sadsbury ar	nd Exeter Operations
					Schedule C-7
Rate	ear Ending December 31, 2022		Docket	Nos. R-2020-3019369 a	ind R-2020-3019371
					Page 3 of 7 Revised
		Non-Collective	Non-Collective	Total	PACIA AN
		Bargaining	Bargaining	Group Insurance	
Line		Unit Salary	Unit Hourly	Expense	
No.	Description	12/31/2022	12/31/2022	12/31/2022	Reference
	Rate Vear Ending December 31. 2022	(A)	(C)	(D)	
-	Groun Incurance Evnence Der Comnany	C 70 737	\$ 505 536	\$76 773	Vol 4 Evhihit 3_B
- c	Oroup illourance Lapende I et Company Groun Incurance Evnance Dar OCA	\$ 70.331	\$ 502 051	C12,010 0	vor. 7 , LAIMUR J-U see line 10
1 (1	Orup Insurative Expense 1 vi OCA OCA Adinetment to Groun Insurance Evenses	1001 \$	\$ 102,201 \$	\$ (1001)	
04	Contrationum we used in transmiss in points	÷ 17 07%	+ (2)23) 17 07%	(1// / /	Vol 4 Exhibit 3-B
s.	Capitalized Portion Not Charged to Operating Expense	\$ 69	\$ 441	\$ 510	
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (336)	\$ (2,144)	\$ (2,481)	L3 + L5
Notes	and Source:				
Amor	the below calculated using the data from Volume 4. Exhibit 3.R from DAWC's filing				
		Non-Collective Bargaining	Non-Collective Bargaining	Total Group Insurance	
		Unit Salary 12/31/2022	Unit Hourly 12/31/2022	Expense	
7	Group Insurance Expense Per Company	\$ 70,737	\$ 505,536	\$ 576,273	
×	Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	-0.57%	-0.51%		
6	Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	\$ (405)	\$ (2,585)	\$ (2,991)	
10	Adjusted Group Insurance Expense Per OCA	\$ 70,331	\$ 502,951	\$ 573,282	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022	2022		
		Non-Collective	Non-Collective		
		Bargaining	Bargaining		
-		© DIII Salary		Kelerence	
1 5	Salary and Wages per UCA Selery and Wages her Commeny	φ 340,/01 φ 350.771	\$ 2,010,/14 \$ 2,027,081	Sch. C-5, p. 5, line2 Sch. C-5 n. 2, line1	
1 1	Data and wages per Company Describes Difference Detriver OCA Decommended and DAWC Describes and Worker	111,000 0	0 510/, 120/, 201	ouii. v-v, p. v, iiiu i	
сI	Fercentage Difference between UCA recommended and rAWC rioposed Samiles and wages	0/2 / C.U-	0/1C.U-		

Exhibit LA-8 Page 27 of 67

Pennsy Group	Ivania American Water Company Insurance	Exhibit LA-8 Wastewater SSS Sadsbury Operations	~ ~ ~
Rate Y	ear Ending December 31, 2022 Docke	Schedule C-7 Nos. R-2020-3019369 and R-2020-3019371 Page 4 of 7 Revised	
Line No.	Description	Non-Collective Bargaining Unit Hourly 12/31/2022 Reference	_
		(A)	1
- 0 m 4 v	Rate Year Ending December 31. 2022 Group Insurance Expense Per Company Group Insurance Expense Per OCA OCA Adjustment to Group Insurance Expense Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	(A) \$ 4,189 Vol. 4, Exhibit 3-B \$ 4,167 see line 10 \$ (22) L2 - L1 17.07% Vol. 4, Exhibit 3-B	
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (18) L3 + L5	
Notes	ind Source:		
Amou	its below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	Non-Collective Bargaining Unit Salary 12/31/2022	1
Р 8 9	Group Insurance Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	\$ 4,189 -0.52% \$ (22)	
10	Adjusted Group Insurance Expense Per OCA	\$ 4,167	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Collective Bargaining	
11 12 13	Salary and Wages per OCA Salary and Wages per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Reference \$ 22,248 Sch. C-5, p. 4, line2 \$ 22,364 Sch. C-5, p. 4, line1 -0.52% Sch. C-5, p. 4, line1	

Penn	ylvania American Water Company				Exhibit LA-8
Grou	Insurance			Wastewater SS	SS Exeter Operations
					Schedule C-7
Rate	ear Ending December 31, 2022		Docket	Nos. R-2020-3019369 a	and R-2020-3019371
					Page 5 of 7 Revised
		Non-Collective Bargaining	Non-Collective Bargaining	Total Group Insurance	
Line	Descrimtion	Unit Salary	Unit Hourly	Expense 12/21/2022	Reference
.0.1	Rate Vear Ending December 31, 2022	(A)	(C)	(D)	
	Group Insurance Expense Per Company	\$ 26,646	\$ 133.177	\$ 159.823	Vol. 4, Exhibit 3-B
2	Group Insurance Expense Per OCA	\$ 26,493	\$ 132,477	\$ 158,970	see line 10
ŝ	OCA Adjustment to Group Insurance Expense	\$ (153)	\$ (700)	\$ (853)	L2 - L1
4	Capitalization Rate Percentage	17.07%	17.07%		Vol. 4, Exhibit 3-B
5	Capitalized Portion Not Charged to Operating Expense	\$ 26	\$ 120	\$ 146	
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (127)	\$ (580)	\$ (707)	L3 + L5
Notes	and Source:				
Amoi	nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	Non-Collective Bargaining Unit Salary	Non-Collective Bargaining Unit Hourly	Total Group Insurance Expense	
		12/31/2022	12/31/2022	12/31/2022	
⊾ 8	Group Insurance Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	\$ 26,646 -0.57%	\$ 133,177 -0.53%	\$ 159,823	
6	Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	\$ (153)	\$ (700)	\$ (853)	
10	Adjusted Group Insurance Expense Per OCA	\$ 26,493	\$ 132,477	\$ 158,970	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022	2022		
		Non-Collective	Non-Collective		
		Bargaining Unit Salarv	Bargaining Unit Hourly	Reference	
11	Salary and Wages per OCA	\$ 167,534	\$ 493,713	Sch. C-5, p. 5, line2	
12	Salary and Wages per Company	\$ 168,501	\$ 496,323	Sch. C-5, p. 5, line1	
13	Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	-0.57%	-0.53%		

Exhibit LA-8 Page 29 of 67

Penn Grou	ylvania American Water Company Insurance				Wastewater CSS	Exhibit LA-8 Scranton Operations
Rate	'ear Ending December 31, 2022			Docket	Nos. R-2020-3019369 a	benedule C-7 and R-2020-3019371 Page 6 of 7 Revised
Line No.	Description	Non-Collective Bargaining Unit Salary 12/31/2022	Collective Bargaining Unit 12/31/2022	Non-Collective Bargaining Unit Hourly 12/31/2022	Total Group Insurance Expense 12/31/2022	Reference
.	Rate Year Ending December 31, 2022	(A)	(B)	(C)	(D)	
- 0 m	Group Insurance Expense Per Company Group Insurance Expense Per OCA OCA Adjustment to Group Insurance Expense	\$ 152,396 \$ 151,523 \$ (873)	\$ 900,000 \$ 897,312 \$ (2,688)	\$ 34,795 \$ 34,596 \$ (199)	\$ 1,087,192 \$ 1,083,431 \$ (3,761)	Vol. 4, Exhibit 3-B see line 10 L2 - L1
4 v	Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	<u>17.07%</u> \$ 149	<u> </u>	17.07% \$ 34	\$ 642	Vol. 4, Exhibit 3-B
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (724)	\$ (2,229)	\$ (165)	\$ (3,119)	L3 + L5
Note:	and Source: we kalow calculated wing the Aste from Vylume 4. Exhibit 3. D. from DAW/"s filing					
		Non-Collective Bargaining Unit Salary 12/31/2022	Collective Bargaining Unit 12/31/2022	Non-Collective Bargaining Unit Hourly 12/31/2022	Total Group Insurance Expense 12/31/2022	
7 8 9	Group Insurance Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	\$ 152,396 -0.57% \$ (873)	\$\$ 900,000 -0.30% \$\$ (2,688)	\$ 34,795 -0.57% (199)	\$ 1,087,192 \$ (3,761)	
10	Adjusted Group Insurance Expense Per OCA	\$ 151,523	\$ 897,312	\$ 34,596	\$ 1,083,431	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective Bargaining	2022 Collective Bargaining	2022 Non-Collective Bargaining	ç	
11 13 13	Salary and Wages per OCA Salary and Wages per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary \$ 927,657 \$ 933,005 -0.57%	Unit \$ 4,319,547 \$ 4,332,488 -0.30%	Unit Hourly \$ 113,294 \$ 113,947 -0.57%	Keterence Sch. C-5, p. 6, line2 Sch. C-5, p. 6, line1	

Exhibit LA-8 Page 30 of 67

Penns Grouj	/vania American Water Company Insurance				Wastewater CSS Mc	Exhibit LA-8 Keesport Operations
Rate	ear Ending December 31, 2022			Docket]	Vos. R-2020-3019369 a	nd R-2020-3019371 Page 7 of 7 Revised
Line No.	Description	Non-Collective Bargaining Unit Salary 12/31/2022	Collective Bargaining Unit 12/31/2022	Non-Collective Bargaining Unit Hourly 12/31/2022	Total Group Insurance Expense 12/31/2022	Reference
		(Y)	(B)	(C)	(D)	
1	Rate Year Ending December 31, 2022 Group Insurance Expense Per Company	\$ 78,882	\$ 456,072	\$ 59,525	\$ 594,479	Vol. 4, Exhibit 3-B
0 m	Group Insurance Expense Per OCA OCA Adjustment to Group Insurance Expense	<u>\$ 78,430</u> <u>\$ (452)</u>	\$ 454,069 \$ (2,003)	<u>\$ 59,183</u> <u>\$ (342)</u>	<u>\$ 591,682</u> \$ (2,797)	see line 10 L2 - L1
4 v	Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	<u> </u>	<u> </u>	<u> </u>	\$ 477	Vol. 4, Exhibit 3-B
9	OCA Adjustment to Group Insurance Expense charged to Operating Expense	\$ (375)	\$ (1,661)	\$ (284)	\$ (2,320)	L3 + L5
Notes	and Source:					
Amo	nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	Non-Collective Bargaining Unit Salary 12/31/2022	Collective Bargaining Unit 12/31/2022	Non-Collective Bargaining Unit Hourly 12/31/2022	Total Group Insurance Expense 12/31/2022	
L	Group Insurance Expense Per Company	\$ 78,882	\$ 456,072	\$ 59,525	\$ 594,479	
8 G	Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Group Insurance Expense Proportional to OCA Recommended Salaries and Wages	<u>-0.57%</u> \$ (452)	<u>-0.44%</u> \$ (2,003)	<u>-0.57%</u> \$ (342)	\$ (2,797)	
10	Adjusted Group Insurance Expense Per OCA	\$ 78,430	\$ 454,069	\$ 59,183	\$ 591,682	
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective Bargaining	2022 Collective Bargaining	2022 Non-Collective Barsaining		
11 12 13	Salary and Wages per OCA Salary and Wages per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary \$ 351,718 \$ 353,746 -0.57%	Unit \$ 2,177,278 \$ 2,186,883 -0.44%	Unit Hourly \$ 134,784 \$ 135,562 -0.57%	Reference Sch. C-5, p. 7, line2 Sch. C-5, p. 7, line1	

Exhibit LA-8 Page 31 of 67

Penn 401K	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan				M	/ater Operato	Exhibit LA-8 ons Excl. Steelton
Rate	rear Ending December 31, 2022			Docket	Nos. R-2020-3	019369 and	Schedule C-8 R-2020-3019371 Dage 1 of 7
Line	Descrintion	Non-Collective Bargaining Unit Salary	Collective Bargaining Unit	Non-Collective Bargaining Unit Hourly	Total		Revised
.041	nceribini	(Y)	(B)	(C)	(D)		IN IN INC.
- 0 0	 401 K and Defined Contribution Plan OCA Adjustment to Total 401 K Expense OCA Adjustment to Total Defined Contribution Expense OCA Adjustment to Total adjust and Defined Benefit Contribution Expense 	\$ (3,686) \$ (3,622) \$ (7,308)	\$ (4,806) \$ (5,767) \$ (10,572)	\$ (2,078) \$ (2,473) \$ (4,551)	s s s	10,569) <u>11,862)</u> 22,431)	Line 11 Line 15
4 %	Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	<u>37.18%</u> \$ 2,717	<u>37.18%</u> \$ 3,931	<u>37.18%</u> \$ 1,692	s s	4,409 V	ol. 4, Exhibit 3-B L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (4,591)	\$ (6,641)	\$ (2,859)	\$ (1	14,091)	L3 + L5
٢	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	\$ (393)	\$ (249)	\$ (112)	S	(754)	Line 19
~	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	\$ (4,984)	\$ (6,890)	\$ (2,970)	\$ (]	14,845)	L6+L7
Note	and Source:						
Amo	mts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	2022 Non-Collective Bargaining	2022 Collective Bargaining	2022 Non-Collective Bargaining	E		ç
	Description 401 K	Unit Salary	Unit	Unit Hourly	I otal		Keterence
9 11	401K Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ 654,017 -0.56% \$ \$ (3,686)	\$ 1,127,105 -0.43% \$ (4,806)	\$\$ 399,916 -0.52% \$\$ (2,078)	\$ 2,18 \$ (1	81,037 V. 10,569)	ol. 4, Exhibit 3-B Line 23 L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 650,331	\$ 1,122,299	\$ 397,838	\$ 2,17	70,468	L9 + L11
13 15 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$ 642,694 -0.56% \$ (3,622)	\$ 1,352,437 -0.43% \$ (5,767)	\$ 476,014 -0.52% \$ (2,473)	s 2,47 s (1	71,146 V	ol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 639,072	\$ 1,346,671	\$ 473,541	\$ 2,45	59,285	L13 + L15
17 18 19	Employce Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	\$ 69,796 -0.56% \$ (393)	\$ 58,378 -0.43% \$ (249)	\$ 21,476 -0.52% \$ (112)	s 1 ²	49,650 V. (754)	ol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	\$ 69,402	\$ 58,129	\$ 21,365	\$ 14	48,896	L17 + L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective Bargaining	2022 Collective Bargaining	2022 Non-Collective Bargaining			
23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary 23,872,117 24,007,421 -0.56%	Unit \$ 45,792,074 \$ 45,988,159 -0.43%	Unit Hourly 16,037,234 16,120,984 -0.52%	Referen Sch. C-5, p. Sch. C-5, p.	1, line 1, line 1	

Penns 401K.	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan	Exhibit LA-8 Water Steelton Operations
Rate '	(ear Ending December 31, 2022	chedule C-8 Schedule C-8 tet Nos. R-2020-3019369 and R-2020-3019371 Page 2 of 7 Revised
Line		Collective Bargaining Unit
No.	Description	12/31/2022 Reference
- 0 m	 401K and Defined Contribution Plan OCA Adjustment to Total 401K Expense OCA Adjustment to Total Defined Contribution Expense OCA Adjustment to Total 401K and Defined Benefit Contribution Expense 	(x) \$ (54) Line 11 \$ (61) Line 15 \$ (115)
4 v	Capitalization Kate Percentage Capitalized Portion Not Charged to Operating Expense	<u>57.18%</u> Vol. 4, Exhibit 3-B \$ 43 L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (72) L3 + L5
٢	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	S - Line 19
~	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	<u>\$ (72)</u> L6 + L7
<u>Notes</u> Amou	and Source: nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	
	Description	Collective Bargaining Unit Reference
9 11 11	401K 401K Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ 14,377 Vol. 4, Exhibit 3-B -0.38% Line 23 \$ (54) L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 14,323 L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$ 16,215 Vol. 4, Exhibit 3-B -0.38% Line 23 \$ (61) L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 16,154 L13 + L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wa	S Vol. 4, Exhibit 3-B -0.38% Line 23 S -
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	\$ - L17+L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Collective Brgaining
23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Resterates \$ 507,363 Sch. C-5, p. 2, line2 \$ 509,277 Sch. C-5, p. 2, line1 -0.38%

Exhibit LA-8 Page 33 of 67

Penr 401F	sylvania American Water Company , Defined Contribution Plan and Employee Stock Purchase Plan		Wastew	ater SSS Excl	. Sadsbury ar	Exhibit LA-8 ad Exeter Operations
Rate	Year Ending December 31, 2022		Dock	et Nos. R-202	0-3019369 aı	Schedule C-8 nd R-2020-3019371 Doco 2 of 7
Line		Non-Collective Bargaining Unit Salary	Non-Collective Bargaining Unit Hourly			Revised
No.	Description	12/31/2022 (A)	12/31/2022 (B)	C	lal ()	Reference
- 0	1. 401K and Defined Contribution Plan OCA Adjustment to Total 401K Expense	\$ (58)	\$ (261)		(319)	Line 11
1 m z	OCA Adjustment to Total Defined Contribution Expense OCA Adjustment of Total 401K and Defined Benefit Contribution Expense	(C2) \$ (83) 17 020(\$ (403) \$ (664) 17 0702	~ ~	(747)	CI PLINE IO
5 1	Capitalization kate Percentage Capitalized Portion Not Charged to Operating Expense	<u>\$ 17.07%</u>	<u>\$ 11.07%</u>	s	128	vol. 4, exnibit <i>3-1</i> 5 L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (69)	\$ (551)	\$	(620)	L3 + L5
Г	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	\$ (11)	\$ (11)	\$	(22)	Line 19
8	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	\$ (80)	\$ (562)	\$	(642)	L6+L7
Note Amo	t and Source: ants below calculated using the data from Volume 4. Exhibit 3-B from PAWC's filing					
	Description	2022 Non-Collective Bargaining Unit Salary	2022 Non-Collective Bargaining Unit Hourly	Tol	al	Reference
9 10	401K 401K Expense Per Company Percentaree Difference Between OCA Recommended and PAWC Pronosed Salaries and Wares	\$ 10,034 -0.57%	\$ 51,099 -0.51%	÷	61,133	Vol. 4, Exhibit 3-B Line 23
Ξ	Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ (58)	\$ (261)	↔	(319)	L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 9,976	\$ 50,838	s	60,814	L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$ 4,425 -0.57% \$ (25)	\$ 78,788 -0.51% \$ (403)	~ ~	83,213 (428)	Vol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 4,399	\$ 78,385	\$	82,785	L13 + L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	\$ 1,903 -0.57% \$ (11)	\$ 2,147 -0.51% -0.51% \$ (11)	~ ~	4,050 (22)	Vol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	\$ 1,893	\$ 2,136	S	4,029	L17 + L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective Bargaining	2022 Non-Collective Bargaining			
23 23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary 348,761 350,771 -0.57%	Unit Hourly 2,016,714 2,027,081 -0.51%	Sch. C-5, I Sch. C-5, I	ence 5. 3, line2 5. 3, line1	

Penns 401K.	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan	Wastewater SSS Sads	Exhibit LA-8 sbury Operations
Rate '	car Ending December 31, 2022 Doc	: Nos. R-2020-3019369 and F	Schedule C-8 R-2020-3019371 Page 4 of 7 Revised
Line	Description	Non-Collective Bargaining Unit Hourly	Reference
.041	interference	(Y)	
- 0 n 4 n	I. 401K and Defined Contribution Plan OCA Adjustment to Total 1401K Expense OCA Adjustment to Total Defined Contribution Expense OCA Adjustment to Total Defined Benefit Contribution Expense Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	S (2) S (6) S (8) S 17,07%	Line 11 Line 15 J. 4, Exhibit 3-B L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (7)	L3 + L5
Г	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan		Line 19
~	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	\$ (7)	L6+L7
Notes	and Source		
Amot	nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	2022	
		Collective Bargaining	
	Description 401K	Unit	Reference
9 11	401K Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ 449 Vo -0.52% \$ (2)	ol. 4, Exhibit 3-B Line 23 L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	S 447	L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$ 1,071 Vo -0.52% \$ (6)	ol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 1,065	L13 + L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wage	S - Vo s -0.52% s -	ol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	۰ ۲	L17 + L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Collective Bargaining	
21 23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit \$ 22,248 Scl \$ 22,364 Scl -0.52%	Reference h. C-5, p. 4, line2 h. C-5, p. 4, line1

Exhibit LA-8 Page 35 of 67

Penns 401K	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan			Wastewat	Exhibit LA-8 rr SSS Exeter Operations
Rate	(ear Ending December 31, 2022		Dock	et Nos. R-2020-30193	Schedule C-8 59 and R-2020-3019371 D2005 5 067
Line	Description	Non-Collective Bargaining Unit Salary	Non-Collective Bargaining Unit Hourly	T	Revised
.01	rescription	(V)	(B)	(C)	vereience
-	I. 401K and Defined Contribution Plan OCA Adjustment to Total 401K Expense	\$ (34)	\$ (85)	\$ (11)) Line 11
0 m	OCA Adjustment to Total Defined Contribution Expense OCA Adjustment to Total 401K and Defined Benefit Contribution Expense	<u>s (51)</u> (85)	<u>s (110)</u> (195)	<u>s</u> (16 (28)) Line 15
4 v	Capitalization Rate Percentage Capitalized Portion Not Charged to Operating Expense	<u>\$ 17.07%</u>	\$ 17.07% \$ 33	s	Vol. 4, Exhibit 3-B L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (71)	\$ (162)	\$ (23)	$\overline{1}$ L3 + L5
Г	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	۔ ج	، ج	۔ ج	Line 19
8	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	\$ (71)	\$ (162)	\$ (23) TP + L7
Notes	and Source:				
Amo	nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing Description	2022 Non-Collective Bargaining Unit Salarv	2022 Non-Collective Bargaining Unit Hourly	[[ota]	Reference
6 0	401K 401K Expense Per Company Derventate Difference Raturen OCA Recommended and DAWC Pronoced Salarize and Warne	\$ 5,979	\$ 16,084 -0.53%	\$ 22,06	Vol. 4, Exhibit 3-B T ine 23
II II	references prevent occurrence and travelations and the comparison particle and wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ (34)	\$ (85)	\$ (11)	$\overline{)}$ L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 5,945	\$ 15,999	\$ 21,94	L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$ 8,846 -0.57% \$ (51)	\$ 20,975 -0.53% \$ (110)	\$ 29,82 \$ (16	Vol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 8,796	\$ 20,864	\$ 29,66	L13+L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	\$ -0.57%	\$ -0.53%	ч Улагана Улагана Улагана	Vol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	۔ ج	-	, \$	L17+L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective	2022 Non-Collective		
21 23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary Unit Salary 167,534 167,534 -0.57%	Direction of the construction of the construct	Reference Sch. C-5, p. 5, line Sch. C-5, p. 5, line	6

Penr 401k	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan				Waster	water CSS Sc	Exhibit LA-8 stanton Operations
Rate	fear Ending December 31, 2022			Docke	t Nos. R-2020-3	3019369 and	Schedule C-8 R-2020-3019371
		Non-Collective	ollective	Non-Collective			Page 6 of 7 Revised
Line		Bargaining B Unit Salary	Unit	Bargaining Unit Hourly	E		
.0NI		(A)	(B)	(C)	(D)		Vereience
1	1. 40 LK and Defined Contribution Fian OCA Adjustment to Total 40 LK Expense	\$ (154) \$	(38)	\$ (26)	s	(218)	Line 11
00	OCA Adjustment to Total Defined Contribution Expense	\$ (195) \$	(260)	\$ (34)	s e	(789)	Line 15
ν4	OCA Adjustment to 1 otal 401K and Defined Benefit Contribution Expense Capitalization Rate Percentage	\$ (349) \$ 17.07%	(86C) 17.07%	\$ (60) 17.07%	A	(1,007) V	ol. 4. Exhibit 3-B
S.	Capitalized Portion Not Charged to Operating Expense	\$ 60 \$	102	\$ 10	\$	70	L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	\$ (289)	(496)	\$ (50)	S	(835)	L3 + L5
7	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	\$ (14) \$	(6)	\$	S	(23)	Line 19
~	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	\$ (303) \$	(205)	\$ (50)	÷	(858)	L6 + L7
Note	and Source:						
Amc	ints below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing	2022 Non-Collective C Barraining B	2022 Collective	2022 Non-Collective Barraining			
	Description	Unit Salary	Unit	Unit Hourly	Total		Reference
9 10	401K 401K Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	\$ 26,848 \$ -0.57% \$ (154) \$	12,585 -0.30% (38)	\$ 4,551 -0.57% \$ \$ (26)	8 9 9	43,984 V (218)	ol. 4, Exhibit 3-B Line 23 L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 26,694 \$	12,547	\$ 4,525	s S	43,766	L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	S 34,059 S -0.57% 5 (195) 5	187,479 -0.30% (560)	\$ 5,973 -0.57% \$ (34)	e e	27,511 V (789)	ol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 33,864 \$	186,919	\$ 5,939	\$ 2.	26,722	L13 + L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	$\frac{s + 2,417}{-0.57\%} = \frac{2,417}{-0.57\%}$	3,095 -0.30% (9)	\$ -0.57%	& &	5,512 V (23)	ol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	\$ 2,403 \$	3,086	۰ ۶	S	5,489	L17 + L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 Non-Collective C Bargaining B	2022 Collective argaining	2022 Non-Collective Bargaining			
21 23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	Unit Salary 927,657 \$ 933,005 \$ -0.57%	Unit 4,319,547 4,332,488 -0.30%	Unit Hourly 113,294 113,947 -0.57%	Referen Sch. C-5, p. (Sch. C-5, p. (ice 6, line2 6, line1	

Penr 401k	ylvania American Water Company Defined Contribution Plan and Employee Stock Purchase Plan			Wastewater CSS N	Exhibit LA-8 fcKeesport Operations
Rate	rear Ending December 31, 2022		Docket	Nos. R-2020-3019369	Schedule C-8 and R-2020-3019371 Page 7 of 7
Line	Dominician	Non-Collective Collective Bargaining Bargaining Unit Salary Unit	Non-Collective Bargaining Unit Hourly	Loto T	Revised
.0N		(A) (B) (B)	(C)	100al (D)	Reference
1 2	A PUL AND CONCOMPTION FINITION OF A Adjustment to Total 401K Expense OCA Adjustment to Total 401K Expense OCA Adjustment to Total Defined Contribution Expense	\$ (58) \$ (315) \$ \$ (106) \$ (446) \$	(27) (41)	\$ (400) \$ (594)	Line 11 Line 15
ω4	OCA Adjustment to Total 401K and Defined Benefit Contribution Expense Capitalization Rate Percentage	\$ (164) \$ (762) \$ 17.07% 17.07%	(68) 17.07%	\$ (994)	Vol. 4, Exhibit 3-B
Ś	Capitalized Portion Not Charged to Operating Expense	\$ 28 \$ 130 \$	12	\$ 40	L3 x L4
9	OCA Adjustment to 401K and Defined Contribution Plan Charged to Operating Expenses	<u>\$ (136)</u> <u>\$ (632)</u> <u>9</u>	(57)	\$ (824)	L3 + L5
٢	II. Employee Stock Purchase Plan OCA Adjustment to Employee Stock Purchase Plan	<u>\$ (1)</u>	'	\$ (21)	Line 19
8	III. 401K, DCP and ESPP Expense OCA Adjustment to 401K, DCP and ESPP Expense Charged to Operating Expense	<u>\$ (137)</u> <u>\$ (652)</u> <u>9</u>	(57)	\$ (846)	L6+L7
Note	and Source:				
Amc	nts below calculated using the data from Volume 4, Exhibit 3-B from PAWC's filing Description	2022 2022 Non-Collective Collective Bargaining Bargaining Unit Salary Unit	2022 Non-Collective Bargaining Unit Hourly	Total	Reference
9 10	401K 401K Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to 401K Expense Proportional to OCA Recommended Salaries and Wages	S 10,066 S 71,799 8 -0.57% -0.44% -0.	4,772 -0.57%	\$ 86,637 \$ (400)	Vol. 4, Exhibit 3-B Line 23 L9 x L10
12	Adjusted 401K Insurance Expense Per OCA	\$ 10,008 \$ 71,484 \$	4,744	\$ 86,236	L9 + L11
13 14 15	Defined Contribution Plan Defined Contribution Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Defined Contribution Expense Proportional to OCA Recommended Salaries and Wages	\$\$\$ 18,572 \$\$\$ 101,624 \$\$ -0.57% -0.44% -0.44% \$\$\$\$ (106) \$\$\$\$\$ (446) -	$\begin{array}{c} 7,112\\ -0.57\%\\ (41)\end{array}$	\$ 127,308 \$ (594)	Vol. 4, Exhibit 3-B Line 23 L13 x L14
16	Adjusted Defined Contribution Plan Expense Per OCA	\$ 18,465 \$ 101,178 \$	7,071	\$ 126,714	L13 + L15
17 18 19	Employee Stock Purchase Plan Employee Stock Purchase Plan Expense Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages Reduction to Employee Stock Purchase Plan Expense Proportional to OCA Recommended Salaries and Wages	$\begin{array}{c ccccc} s & 139 & s & 4,665 & 5 \\ \hline & & -0.57\% & & -0.44\% \\ \hline s & (1) & s & (20) & 5 \end{array}$	-0.57%	\$ 4,804 \$ (21)	Vol. 4, Exhibit 3-B Line 23 L17 x L18
20	Adjusted Employee Stock Purchase Plan Expense Per OCA	\$ 138 \$ 4,645 \$	1	\$ 4,783	L17 + L19
	Difference between PAWC's Proposed and OCA's Recommended Salaries and Wages	2022 2022 Non-Collective Collective Bargaining Bargaining Unit Salary Unit	2022 Non-Collective Bargaining Unit Hourly	Reference	
3 23 23	Salary and Wages Per OCA Salary and Wages Per Company Percentage Difference Between OCA Recommended and PAWC Proposed Salaries and Wages	351,718 \$ 2,177,278 353,746 \$ 2,186,883 -0.57% -0.44%	134,784 135,562 -0.57%	Sch. C-5, p. 7, line2 Sch. C-5, p. 7, line1	

Pennsy Capita	Avania American Water Company lization Rate	Water Operat	Exhibit LA-8 tions Excl. Steelton
Rate Y	ear Ending December 31, 2022	Docket Nos. R-2020-3019369 an	A R-2020-3019371 Page 1 of 7
Line		2022	Revised
No.	Description	Amount	Reference
	OCA Adjusted Amounts	(B)	
1	Salary and Wages	\$ 85,701,424	Sch. C-5, page 1
0	Annual Performance Plan	\$ 2,605,155	Sch. C-6, page 1
ς	Group Insurance	\$ 16,478,588	Sch. C-7, page 1
4	401K and Defined Contribution Plan	\$ 4,629,752	Sch. C-8, page 1
5	Transportation Expense	\$ 4,099,571	Exh. 3-A, page 53
9	Insurance Other Than Group	\$ 2,363,091	Exh. 3-A, page 54
٢	Total	\$ 115,877,581	
8	Difference in Capitalization Rate	1.67%	Line 12
6	Capitalized Portion Not Charged to Operating Expense	\$ (1.931,118)	
Notor	and Correct		

Notes and Source

Col. A: All amounts are PAWC except for Line 2, which OCA adjusted Col. B: OCA adjusted amounts are shown on Line 4

Capitalization rates below from Volume 4, Exhibit 3-B from PAWC's filing

		Water
		Capitalization
		Rate
10	Three-Year Average Capitalization Rate Per PAWC	37.18%
11	2019 Capitalization Rate Per OCA	38.85%
12	Difference in Capitalization Rate	1.67%
	PAWC Capitalization Rates	
13	2017 Actual Capitalization Rate	34.27%
14	2018 Actual Capitalization Rate	38.42%
15	2019 Actual Capitalization Rate	38.85%
16	Three-Year Average Capitalization Rate	37.18%

L11 - L10

Line 16

Penns. Capita	/lvania American Water Company lization Rate	Exhibit LA-8 Water Steel Operations
Rate)	ear Ending December 31, 2022	Schedule C-5A Docket Nos. R-2020-3019369 and R-2020-3019371 Page 2 of 7 Revised
Line		2022
No.	Description	Amount Reference
	OCA Adjusted Amounts	
-	Salary and Wages	\$ 507,363 Sch. C-5, page 2
7	Annual Performance Plan	\$ 6,542 Sch. C-6, page 2
ω	Group Insurance	\$ 108,066 Sch. C-7, page 2
4	401K and Defined Contribution Plan	\$ 30,477 Sch. C-8, page 2
S	Transportation Expense	\$ 26,210 Exh. 3-A, page 103
9	Insurance Other Than Group	<u>\$ 12,185</u> Exh. 3-A, page 104
7	Total	\$ 690,844
8 0	Difference in Capitalization Rate Capitalized Portion Not Charged to Operating Expense	1.67% Line 12 \$ (11,513)
Notes	and Source	
Col. A Col. B	: All amounts are PAWC except for Line 2, which OCA adjusted : OCA adjusted amounts are shown on Line 4	
Capita	lization rates below from Volume 4, Exhibit 3-B from PAWC's filing	
4		Water Capitalization
•		Rate
10	Ihree-Year Average Capitalization Kate Per PAWC	3/.18% Line 16
11	2019 Capitalization Rate Per OCA Difference in Canitalization Rate	<u></u>
1		
	PAWC Capitalization Kates	
13	2017 Actual Capitalization Rate	34.27%
4	2018 Actual Capitalization Rate	38.42%
c1 16	2019 Actual Capitalization Kate Three-Year Average Capitalization Rate	<u>37.18%</u>

Three-Year Average Capitalization Rate

Penns Capiti	ylvania American Water Company alization Rate	Wastewater SSS Excl. Sadsbury a	Exhibit LA-8 und Exeter Operations
Rate	Year Ending December 31, 2022	Docket Nos. R-2020-3019369	Schedule C-8A and R-2020-3019371 Page 3 of 7 Revised
Line		2022	
No.	Description	Amount	Reference
		(B)	
1	OCA AUJUSTED ALIDOULUS Salary and Wages	\$ 2,365,475	Sch. C-5, page 3
0	Annual Performance Plan	\$ 80,403	Sch. C-6, page 3
ς	Group Insurance	\$ 573,282	Sch. C-7, page 3
4	401K and Defined Contribution Plan	\$ 143,599	Sch. C-8, page 3
S	Transportation Expense	\$ 91,977	Exh. 3-A, page 159
9	Insurance Other Than Group	\$ 144,560	Exh. 3-A, page 160
٢	Total	\$ 3,399,295	
~ ~	Difference in Capitalization Rate	4.68%	Line 12
6	Capitalized Portion Not Charged to Operating Expense	\$ (158,942)	
Notes	and Source		
Col. <i>i</i> Col. E	X: All amounts are PAWC except for Line 2, which OCA adjusted3: OCA adjusted amounts are shown on Line 4		
Capiti	alization rates below from Volume 4, Exhibit 3-B from PAWC's filing		
		Wastewater Capitalization	
		Rate	
10	Three-Year Average Capitalization Rate Per PAWC	17.07%	Line 16
12	Difference in Capitalization Rate	4.68%	L11 - L10
	PAWC Capitalization Rates		
13	2017 Actual Capitalization Rate	13.52%	
14	2018 Actual Capitalization Rate	15.94%	
15 16	2019 Actual Capitalization Rate Three-Veer Average Canitalization Rate	21.75%	
10	1111CC-1 Cal Average Capitalization Nate	11.01/0	

Exhibit LA-8 Page 41 of 67

Penns Capita	ylvania American Water Company alization Rate	Wastewater SSS	Exhibit LA-8 Sadsbury Operations
Rate	rear Ending December 31, 2022	Docket Nos. R-2020-3019369	Schedule C-8A and R-2020-3019371 Page 4 of 7 Revised
Line		2022	
No.	Description	Amount	Reference
		(B)	
	OCA Adjusted Amounts		
1	Salary and Wages	\$ 22,248	Sch. C-5, page 4
0	Annual Performance Plan	\$ 710	Sch. C-6, page 4
ω	Group Insurance	\$ 4,167	Sch. C-7, page 4
4	401K and Defined Contribution Plan	\$ 1,512	Sch. C-8, page 4
5	Transportation Expense	\$ 5,231	Exh. 3-A, page 203
9	Insurance Other Than Group	\$ 4,985	Exh. 3-A, page 204
٢	Total	\$ 38,853)
× ×	Difference in Capitalization Rate	4.68%	Line 12
6	Capitalized Portion Not Charged to Operating Expense	\$ (1,817)	
Notes	and Source		
Col. A Col. B	 x: All amounts are PAWC except for Line 2, which OCA adjusted OCA adjusted amounts are shown on Line 4 		
Capiti	alization rates below from Volume 4, Exhibit 3-B from FAWC'S filing		
		Wastewater Capitalization	
		Rate	
10	Three-Year Average Capitalization Rate Per PAWC	17.07%	Line 16
11	2019 Capitalization Rate Per OCA	21.75%	
12	Difference in Capitalization Rate	4.68%	L11 - L10
	PAWC Capitalization Rates		
13	2017 Actual Capitalization Rate	13.52%	
14	2018 Actual Capitalization Rate	15.94%	
15	2019 Actual Capitalization Rate	21.75%	
16	I hree-Year Average Capitalization Kate	1/.U/%	

Penns	ylvania American Water Company	Wootowod	Exhibit LA-8 or SSS Evotor Onerations
Capit		W aslew al	Schedule C-8A
Rate	/ear Ending December 31, 2022	Docket Nos. R-2020-3019.	869 and R-2020-3019371 Page 5 of 7 Revised
Line		2022	
No.	Description	Amount	Reference
		(B)	
-	OCA Adjusted Amounts	UC 177 Ø	
- c	Sataty and wages	6 001,24 6 01,24	Scil. C-J, page J
1 (Sch. C-0, page 3
J.	Group Insurance	1/6,8CI) Sch. C-/, page 5
4	401K and Defined Contribution Plan	\$ 51,60	I Sch. C-8, page 5
S	Transportation Expense	\$ 36,742	Exh. 3-A, page 248
9	Insurance Other Than Group	\$ 54,279	<u>Exh.</u> 3-A, page 249
٢	Total	\$ 987,02	
×	Difference in Capitalization Rate	4.68	<u>%</u> Line 12
6	Capitalized Portion Not Charged to Operating Expense	\$ (46,15	
Notes	and Source		
Col. <i>F</i> Col. F	t: All amounts are PAWC except for Line 2, which OCA adjusted : OCA adjusted amounts are shown on Line 4		
Capiti	ilization rates below from Volume 4, Exhibit 3-B from PAWC's filing		
		Wastewater	
		Capitalization	-
10	Three-Vear Average Canitalization Rate Per PAWC	17 07 ⁰	Line 16
11	2019 Capitalization Rate Per OCA	21.75	0
12	Difference in Capitalization Rate	4.68	<u>%</u> L11 - L10
	PAWC Capitalization Rates		
13	2017 Actual Capitalization Rate	13.52	%
14	2018 Actual Capitalization Rate	15.94	%
15	2019 Actual Capitalization Rate	21.75	~
10	I hree-Year Average Capitalization Kate	1/.U/	0

	OCA Table A.3: Average Rate Year 2022, Recom	ended Adjust	ments with Mu	ıltiyear Rate Plan
Penns Capita	ylvania American Water Company hitzation Rate	M	astewater CSS	Exhibit LA-8 Scranton Operations
ŕ				Schedule C-8A
Kate	r ear Ending December 31, 2022	sket Nos. K-2	020-3019369 8	nd K-2020-30193/1 Page 6 of 7
Line			2022	Kevised
No.	Description		Amount	Reference
			(B)	
	OCA Adjusted Amounts			
1	Salary and Wages	\$	5,360,499	Sch. C-5, page 6
0	Annual Performance Plan	\$	118,669	Sch. C-6, page 6
e	Group Insurance	\$	1,083,431	Sch. C-7, page 6
4	401K and Defined Contribution Plan	\$	270,488	Sch. C-8, page 6
5	Transportation Expense	\$	404,442	Exh. 3-A, page 297
9	Insurance Other Than Group	\$	93,604	Exh. 3-A, page 298
٢	Total	\$	7,331,133	1
8	Difference in Capitalization Rate		4.68%	Line 12
6	Capitalized Portion Not Charged to Operating Expense	S	(342,785)	

Notes	and Source		
Col. A Col. B	: All amounts are PAWC except for Line 2, which OCA adjusted : OCA adjusted amounts are shown on Line 4		
Capite	lization rates below from Volume 4, Exhibit 3-B from PAWC's filing		
		Wastewater	
		Capitalization	
		Rate	
10	Three-Year Average Capitalization Rate Per PAWC	17.07%	Line 16
11	2019 Capitalization Rate Per OCA	21.75%	
12	Difference in Capitalization Rate	4.68%	L11 - L10
	PAWC Canitalization Rates		
13	2017 Actual Capitalization Rate	13.52%	
14	2018 Actual Capitalization Rate	15.94%	
15	2019 Actual Capitalization Rate	21.75%	
16	Three-Year Average Capitalization Rate	17.07%	

Penns Capita	ylvania American Water Company Jization Rate	Wastewater CSS Mo	Exhibit LA-8 SKeesport Operations
Rate 5	ear Ending December 31, 2022	Docket Nos. R-2020-3019369	Schedule C-8A and R-2020-3019371 Page 7 of 7 Revised
Line		2022	
No.	Description	Amount	Reference
		(B)	
1	OCA Adjusted Amounts Salary and Wages	\$ 2,663,780	Sch. C-5, page 7
7	Annual Performance Plan	\$ 51,120	Sch. C-6, page 7
Э	Group Insurance	\$ 591,682	Sch. C-7, page 7
4	401K and Defined Contribution Plan	\$ 212,951	Sch. C-8, page 7
5	Transportation Expense	\$ 94,376	Exh. 3-A, page 345
9	Insurance Other Than Group	\$ 96,650	Exh. 3-A, page 346
٢	Total	\$ 3,710,559	
8 0	Capitalization Rate Capitalized Portion Not Charged to Operating Expense	4.68% \$ (173,496)	Line 12
Notes	and Source		
Col. A Col. B	.: All amounts are PAWC except for Line 2, which OCA adjusted :: OCA adjusted amounts are shown on Line 4		
Capita	dization rates below from Volume 4, Exhibit 3-B from PAWC's filing		
		Wastewater Capitalization	
10	Three-Vear Average Canitalization Rate Der DAWC	Rate 17 07%	I ine 16
11	2019 Capitalization Rate Per OCA	21.75%	
12	Difference in Capitalization Rate	4.68%	L11 - L10
	PAWC Capitalization Rates		
13	2017 Actual Capitalization Rate	13.52%	
14	2018 Actual Capitalization Rate	15.94%	
15 16	2019 Actual Capitalization Rate Three-Year Average Capitalization Rate	21.75%	

Penns	ylvania American Water Company				_	Exhibit LA-8
Annuê	al Performance Plan - American Water Works Service Company					Schedule C-9
			Docket Nos. F	R-2020-3019369 ar	nd R-20	20-3019371
Rate A	(ear Ending December 31, 2022					Page 1 of 1
			Annual		OC∕	Adjustment
			Performance	OCA	tc	Annual
			Plan	Recommended	Perfo	rmance Plan
Line		Allocation	Charged from	Disallowance	Chi	arged from
No.	Description	Factor	AWWSC	Percentage*	A	WWSC
		(A)	(B)	(C)		(D)
	Rate Year Ending December 31, 2022					
1	Water Operations Excluding Steelton	97.26%	\$ 3,706,498	50%	S	(1, 853, 249)
ы	Water Steelton Operations	0.35%	\$ 13,148	50%	S	(6, 574)
ω	Wastewater SSS Excluding Sadsbury and Exeter Operations	0.39%	\$ 14,787	50%	S	(7, 394)
4	Wastewater SSS Sadsbury Operations	0.05%	\$ 1,906	50%	S	(953)
5	Wastewater SSS Exeter Operations	0.28%	\$ 10,671	50%	S	(5, 336)
9	Wastewater CSS Scranton Operations	0.22%	\$ 8,194	50%	S	(4,097)
7	Wastewater CSS McKeesport Operations	1.47%	\$ 55,909	50%	S	(27, 955)
		100.00%	\$ 3,811,113		S	(1,905,557)

Notes and Source:

Col. A: Allocation factors from Exhibit 3-B, page 379 Col. B: Amounts calculated using the amounts below from the response to I&E-RE-46:

Projected Annual Performance Plan Expense For Rate Year 1
Projected Annual Performance Plan Expense For Rate Year 2

* See the Direct Testimony of OCA witness Ralph C. Smith

\$3,705,485 \$3,811,113 Exhibit LA-8 Page 46 of 67

OCA Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

Plan
: Rate
Multiyear
with
Adjustments
Recommended
2022,
Year
Rate
Average
: A.3:
∆ Table
OC∕

Penns	ylvania American Water Company						Щ	xhibit LA-8
Stock	-Based Compensation Expense - American Water Works Service Company						Scl	nedule C-10
			Docket N	Vos. R	-2020-	3019369 an	d R-20	20-3019371
Rate	Year Ending December 31, 2022							Page 1 of 1
			Projected		Proje	ected		Total
			Stock		Resti	ricted	Sto	ck-Based
			Options		Stock	: Units	Com	pensation
Line		Allocation	Charged fror	u	Charge	ed from	Chai	rged from
No.	Description	Factor	AWWSC		AW	WSC	Ā	WWSC
		(Y)	(B)))	C)		(D)
	Rate Year Ending December 31, 2022							
1	Water Operations Excluding Steelton	97.26%	\$ (18	6	\$ (1,	(693,666)	Ś	(1, 693, 846)
0	Water Steelton Operations	0.35%	`	1)	Æ	(6,008)	Ś	(6006)
ω	Wastewater SSS Excluding Sadsbury and Exeter Operations	0.39%) s	1)	Æ	(6,757)	Ś	(6,758)
4	Wastewater SSS Sadsbury Operations	0.05%	• •	6	Æ	(871)	Ś	(871)
S	Wastewater SSS Exeter Operations	0.28%) s	1)	Æ	(4, 876)	Ś	(4, 877)
9	Wastewater CSS Scranton Operations	0.22%	s S	6	Æ	(3,744)	S	(3,745)
7	Wastewater CSS McKeesport Operations	1.47%	\$ 	3)	4	(25,547)	\$	(25,550)
		100.00%	\$ (18)	5)	\$ (1,	741,469)	S	(1, 741, 654)

Col. B: Amounts calculated using the amounts below from the response to I&E-RE-46: Notes and Source: Col. A: Allocation factors from Exhibit 3-B, page 379

2021
r 31,
Decembei
Ending
Year
Rate

	Expense
)	Options
	Stock
	Projected

- Projected Restricted Stock Units 8 9 10
- Total Stock-Based Compensation Charged from AWWSC

Rate Year Ending December 31, 2022	Projected Stock Options Expense
	-

Total Stock-Based Compensation Charged from AWWSC Projected Restricted Stock Units 11 12 13

180	593,376 593,556		185	741,469	741,654
S	\$1,5	; ;	S	\$1,	\$1,

Plar
r Rate
Multiyea
with
Adjustments
Recommended
22, I
ear 201
ate Year 202
Average Rate Year 202
A.3: Average Rate Year 202
Table A.3: Average Rate Year 202

Penns. Excess	ylvania American Water Company s Accumulated Deferred Income Tax Amortization			Dooloot Moc.	0,000,20102,60 m	Exhibit LA-8 Schedule C-11
Rate Y	ear Ending December 31, 2022			DUCKET INUS. 1	1111 LOCATOC-0707-V	Page 1 of 5 Revised
		PAWC	PAWC			
		Proposed	Adjustment	PAWC		
		Amount	From Original	Proposed	OCA	
Line		Original	Application to	Amount	Adjusted	OCA
No.	Description	Application	Rebuttal	(Rebuttal)	Amount	Adjustment
		(Y)	(A1)	(A2)	(B)	(C) = B-A2
	2022 EADIT Amortization - Increase (Reduction) to Income Tax Expense					
1	Plant-Related	\$ (6,352,721)	\$ (7,550)	\$ (6,360,272)	\$ (36,163,002)	\$ (29,802,730)
7	Non-Plant	\$ 50,878	\$ 18,831	\$ 69,709	\$ 395,019	\$ 325,310
С	Catch-up	\$ (5,963,487)	\$ 11,683	\$ (5,951,804)	\$ (5,951,804)	•
4	Net EADIT Amortization - Increase (Reduction) to Income Tax Expense	\$ (12,265,330)	\$ 22,963	\$ (12,242,367)	\$ (41,719,788)	\$ (29,477,421)

Notes and Source

Col.A: PAWC Exhibit JRW-1, amounts are reproduced on page 2 of this Schedule

Col. A1: Col. A2 less Col. A amounts Col. A2: PAWC's revised amounts are from PAWC Exhibit JRW-1-R, as reproduced on page 3 of this Schedule Col.B: Derivation of OCA adjusted amounts are shown on page 4 of this Schedule

Plan
Rate
Aultiyear
with N
Adjustments
Recommended
022,
ear 2
ate Y
e R;
Averag
A.3: Averag
Table A.3: Averag
OCA Table A.3: Averag

Pennsylvania American Water Company Excess Accumulated Deferred Income Tax Amortization

Rate Year Ending December 31, 2022

Line No.

- 2 6 4 9 5 8

Exhibit LA-8 Exheadule C-11 Docket Nos. R-2020-3019369 and R-2020-3019371 Page 2 of 5 Revised

													Catchup Am	ortization	
					PAWC	C Proposed Am	ortization						2018-2020	2021-20)23
			Categorization Pursuant to Tax	~ 4	Net Excess ccumulated				Subtotal Net						
i	Amortization		Normalization	Def	erred Income	2018	2019	2020	EADIT at	2021	2022			Three Yo	ear
Item	Method (A)	Period (B)	Kules (C)		(D)	Amortization (E)	Amortization (F)	Amortization (G)	12/31/2020 (H)=D-E-F-G	Amortizatior (])	I Amortizati (J)	U	Total (K)	Amortiza (L)	ation
Plant Related from PowerTax	~	~			~	~	~	~		2			~	~	
Method / Life	ARAM	Asset Life	Protected	Ś	206,658,250	\$ 2,344,452	\$ 2,847,516	\$ 2,409,335	\$ 199,056,946	\$ 2,327,941	\$ 2,013,1	91 \$	7,601,303	\$ 2,533	3,768
Cost of Removal	ARAM	Asset Life	Uncertain	\$	5,587,890	\$ (104)	\$ (0)	•	\$ 5,587,993		۰ ج	s.	(104)	\$	(35)
Repairs	ARAM	Asset Life	Unprotected	Ś	140,081,147	\$ 3,209,210	\$ 4,759,346	\$ 4,739,009	\$ 127,373,581	\$ 4,847,910	\$ 5,077,2	60 S	12,707,566	\$ 4,235	5,855
Taxable CIAC	ARAM	Asset Life	Protected	Ś	(3, 371, 573)	\$ (233,870)	\$ (233,870)	\$ (233,870)	\$ (2,669,963)	\$ (233,870) \$ (233,8	(20) \$	(701, 610)	\$ (233	3,870)
All Other Federal	ARAM	Asset Life	Uncertain	Ś	(975,857)	\$ 235,686	\$ 100,915	\$ 299,181	\$ (1,611,638)	\$ 302,834	\$ 329,0	12 \$	635,781	\$ 211	1,927
Federal Benefit of State	ARAM	Asset Life	Unprotected	\$	(13,651,713)	\$ (301,575)	\$ (455,891)	\$ (448,728)	\$ (12,445,518)	\$ (459,763	() \$ (483,0	(22) \$	(1,206,195)	\$ (402	2,065)
Sub-Total (UPIS)				÷	334,328,143	\$ 5,253,799	\$ 7,018,016	\$ 6,764,926	\$ 315,291,401	\$ 6,785,053	\$ 6,702,5	70 \$	19,036,742	\$ 6,345	5,581
CWIP, CAC, and other Non-L	IPIS Plant items														
Item	Amortization Method	Life													
Plant Customer Advances	ARAM	Asset Life	Unprotected	\$	(10, 382, 270)	\$ (163,152)	\$ (217,938)	\$ (210,079)	\$ (9,791,101)	\$ (210,70	i) \$ (208,1	42) \$	(591, 169)	\$ (197	7,056)
Plant CWIP	ARAM	Asset Life	Unprotected	\$	446,724	\$ 7,020	\$ 9,377	\$ 9,039	\$ 421,287	\$ 9,066	\$ 8,9	56 \$	25,437	\$	8,479
CIAC WIP	ARAM	Asset Life	Unprotected	S	(206, 590)	\$ (3,246)	\$ (4,337)	\$ (4,180)	\$ (194,827)	\$ (4,193	(4,1) \$	42) \$	(11,763)	\$ (3	3,921)
Plant 481	ARAM	Asset Life	Unprotected	S	745,845	\$ 11,721	\$ 15,656	\$ 15,092	\$ 703,376	\$ 15,137	s 14,9	53 \$	42,469	\$ 14	4,156
CAC Reserve	ARAM	Asset Life	Unprotected	Ś	1,031,707	\$ 16,213	\$ 21,657	\$ 20,876	\$ 972,961	\$ 20,938	: \$ 20,6	84 S	58,746	\$ 19	9,582
Net Operating Loss Carryover	ARAM	Asset Life	Uncertain	s	(9,086,082)	\$ (142,783)	\$ (190,730)	\$ (183,851)	\$ (8,568,718)	\$ (184,398	(182,1	57) \$	(517,364)	\$ (172	2,455)
Sub-Total (Non-UPIS)				s	(17,450,666)	\$ (274,228)	\$ (366,314)	\$ (353,104)	\$ (16,457,020) :	\$ (354,152	i) \$ (349,8	(49) \$	(993,646)	\$ (331	1,215)
Sub-Total Plant	M	X 00	111	<u>د</u>	316,877,477	\$ 4,979,571	\$ 6,651,702	\$ 6,411,823	\$ 298,834,381	\$ 6,430,898	\$ 6,352,7	21 \$	18,043,096	\$ 6,014	4,365
Total	INOFIMALIZATION	20 I CAIS	Unprotected	~ ~	315,859,913	\$ 4,928,693	\$ 6,600,824	\$ 6,360,945	\$ 297,969,452	\$ 6,380,020	0,00) & (00,0 8,6,301,8	(8) 8	17,890,461	s 5.963	3,487
								Catch up		\$ 5,963,487	* \$ 5,963,4	.87			
								Total	1 1	\$ 12,343,507	\$ 12,265,3	30			

Notes and Source: PAWC Exhibit JRW-1

Total

Exhibit LA-8 Page 49 of 67

20

21

Pennsylvania American Water Company Excess Accumulated Deferred Income Tax Amortization

Rate Years Ending December 31, 2021 and December 31, 2022

Line No.

-00400

Exhibit LA-7 Schedule C-11 Docket Nos. R-2020-3019369 and R-2020-3019371 of 5 'ised

C610C-0707-	Page 3 o	Revis
N N		
al al		
19.00		
00-1		

Ē	rage 3	De	2

Catchup Amortization

					PAWC	Proposed Reb	uttal Amortizati	U				Π	2018-2	020	2021-2023	
				ž	st Excess											
	Amortization		Categorization Pursuant to Tax	Defer	cumuted red Income	2018	2019	2020	EADIT at	2021	2022				Three Yea	L
Item	Method	Period	Normalization Rules	- 1	Taxes A	mortization	Amortization A	Amortization	12/31/2020	Amortization	Amortizat	tion	Tot	u A	mortizatio	Ξ
	(¥)	(B)	(C)		(Q)	(E)	(F)	(<u></u> C)	(H)=D-E-F-G	Ξ	ſ		E	_	(J	
Method / Life	ARAM	Asset Life	Protected	Ś	206,658,250 \$	2,344,452	\$ 2,847,516 \$	3 2,409,335 S	199,056,946 \$	2,327,941	\$ 2,013,	,191	\$ 7,6	01,303 \$	2,533,76	8
Cost of Removal	ARAM	Asset Life	Unprotected	\$	5,587,890 \$	(104)	S (0) S	- 8	5,587,993 \$	1	s	,	s	(104) \$	Ξ	2
Repairs	ARAM	Asset Life	Unprotected	Ś	140,081,147 \$	3,209,210	\$ 4,759,346 \$	3 4,739,009 S	127,373,581 \$	4,847,910	\$ 5,077,	,260	\$ 12,7(07,566 \$	4,235,85	2
Taxable CIAC	ARAM	Asset Life	Protected	S	(3,371,573) \$	(233, 870)	\$ (233,870) \$	3 (233,870) \$	(2,669,963) \$	(233,870)	\$ (233,	,870)	s (7	01,610) \$	(233,87	0
All Other Federal	ARAM	Asset Life	Unprotected	s	(975,857) \$	235,686	\$ 100,915 \$	3 299,181 \$	(1,611,638) \$	302,834	\$ 329,	,012	\$ 6	35,781 \$	211,92	5
Federal Benefit of State	ARAM	Asset Life	Unprotected	S	(13,651,713) \$	(301, 575)	\$ (455,891) \$	5 (448,728) S	(12,445,518) \$	(459,763)	\$ (483,	,022)	\$ (1,20	06,195) \$	(402,06	2
													S			
Sub-Total (UPIS)				s	334,328,143 \$	5,253,799	\$ 7,018,016 \$	\$ 6,764,926 \$	315,291,401 \$	6,785,053	\$ 6,702,	,570	\$ 19,00	36,742 \$	6,345,58	=
CWIP, CAC, and other Non-UPI	S Plant items															
Item	Amortization Method	Life														
Plant Customer Advances	ARAM	Asset Life	Unprotected	Ś	(10,382,270) \$	(163,152)	\$ (217,938) \$	(210,079) S	(9,791,101) \$	(210,704)	\$ (208,	,142)	\$ (5 ⁰	91,169) \$	(197,05	9
Plant CWIP	ARAM	Asset Life	Unprotected	s	446,724 \$	7,020	\$ 9,377 \$	3 9,039 S	421,287 S	9,066	s S	,956	S	25,437 \$	8,47	6
CIAC WIP	ARAM	Asset Life	Unprotected	S	(206,590) \$	(3,246)	\$ (4,337) \$	3 (4,180) S	(194,827) \$	(4,193)	\$ (4,	,142)	s	11,763) \$	(3,92	Ē
Plant 481	ARAM	Asset Life	Unprotected	S	745,845 \$	11,721	\$ 15,656 \$	\$ 15,092 \$	703,376 \$	15,137	\$ 14,	,953	s	42,469 S	14,15	9
CAC Reserve	ARAM	Asset Life	Unprotected	S	1,031,707 \$	16,213	\$ 21,657 \$	3 20,876 S	972,961 S	20,938	\$ 20,	,684	s	58,746 S	19,58	2
Net Operating Loss Carryover	ARAM	Asset Life	Protected	Ś	(3,780,416) \$	(59,407)	\$ (79,356) \$	5 (76,494) S	(3,565,158) \$: (76,722)	\$ (75,	,789)	\$ (2)	15,258) \$	(71,75	3
Net Operating Loss Carryover	ARAM	Asset Life	Unprotected	s	(4,929,046) \$	(77,457)	\$ (103,468) \$	\$ (99,736) \$	(4,648,384) \$	(100,033)	s (98,	,817)	\$ (2	80,661) \$	(93,55	5
Sub-Total (Non-UPIS)			I	s	(17,074,045) \$	(268,310)	\$ (358,408) \$	345,483) \$	(16,101,844) \$	(346,511)	\$ (342,	,298)	\$ (9'	72,201) \$	(324,06	Ē

×	Item	Amortization Method	Life									
6	Plant Customer Advances	ARAM	Asset Life	Unprotected	s	(10,382,270) \$	(163,152) \$	(217,938) \$	(210,079) \$	(9,791,101) \$	(210,704) \$	(208, 142)
10	Plant CWIP	ARAM	Asset Life	Unprotected	\$	446,724 S	7,020 \$	9,377 \$	9,039 S	421,287 \$	9,066 \$	8,956
Ξ	CIAC WIP	ARAM	Asset Life	Unprotected	S	(206,590) \$	(3,246) \$	(4,337) \$	(4,180) \$	(194,827) \$	(4,193) \$	(4, 142)
12	Plant 481	ARAM	Asset Life	Unprotected	\$	745,845 \$	11,721 \$	15,656 \$	15,092 S	703,376 \$	15,137 \$	14,953
13	CAC Reserve	ARAM	Asset Life	Unprotected	\$	1,031,707 \$	16,213 \$	21,657 \$	20,876 S	972,961 \$	20,938 \$	20,684
14	Net Operating Loss Carryover	ARAM	Asset Life	Protected	\$	(3,780,416) \$	(59,407) \$	(79,356) \$	(76,494) \$	(3,565,158) \$	(76,722) \$	(75, 789)
15	Net Operating Loss Carryover	ARAM	Asset Life	Unprotected	s	(4,929,046) \$	(77,457) \$	(103,468) \$	(99,736) \$	(4,648,384) \$	(100,033) \$	(98, 817)
16	Sub-Total (Non-UPIS)				s	(17,074,045) \$	(268,310) \$	(358,408) \$	(345,483) \$	(16,101,844) \$	(346,511) \$	(342,298)
17	Sub-Total Plant				s	317,254,098 \$	4,985,489 \$	6,659,608 \$	6,419,443 \$	299,189,557 \$	6,438,542 \$	6,360,272
18	Non-Plant	Normalization	20 Years	Unprotected	s	(1,394,184) \$	(60,709) \$	(69,709) \$	(60.709) \$	(1,185,057) \$	(69,709) \$	(69, 709)
19	Total				s	315,859,914 \$	4,915,780 \$	6,589,899 \$	6,349,734 \$	298,004,501 \$	6,368,833 \$	6,290,563
00									Cato	h in	5 951 804	5 951 804
1									(m)	dn 110	00,100,0	100,100,0
21									Tota	al	12,320,637	12,242,367

(197,056) 8,479 (3,921) 14,156 19,582 (71,753) (93,554)

 \$
 18,064,541
 \$
 6,021,514

 \$
 (209,128)
 \$
 (69,709)

5,951,804

\$

17,855,413

ss

Notes and Source: PAWC Exhibit JRW-1-R, page 2

Plar
r Rate
Multiyea
with
Adjustments
commended
Ř
022, R
Year 2022, R
Rate Year 2022, R
Average Rate Year 2022, R
e A.3: Average Rate Year 2022, R
Table A.3: Average Rate Year 2022, R

Pennsylvania American Water Company Excess Accumulated Deferred Income Tax Amortization

3 Years Amortization for Unprotected EADIT

Rate Year Ending December 31, 2022

Exhibit LA-8 Schedule C-11 d R-2020-3019371 Docket Nos. R-2020-3019369 a

1/66106-0	Page 4 of 2	Davicar
1707-Y DU	I	
IB 6066100		

Page 4 of	Revier

Page 4 of	Revis

														Catchup Amo	tization.	
						0CA P	roposed Amorti	zation						2018-2020	2021-202)23
				Categorization	~	Vet Excess										
				Pursuant to Tax	Ā	ccumulated				Subtotal Net						
Line		Amortization		Normalization	Defe	erred Income	2018	2019	2020	EADIT at	2021	2022			Three Ye	ear
No.	Item	Method	Period	Rules		Taxes	Amortization	Amortization	Amortization	12/31/2020	Amortization	Amortization		Total	Amortizat	atio
		(¥)	(B)	(C)		(Î)	(E)	E	(<u></u>)	(H)=D-E-F-G	€	(f)		(X)	Ð	
	Plant Related from PowerTax															
-	Method / Life	ARAM	Asset Life	Protected	\$	206,658,250	\$ 2,344,452	\$ 2,847,516	\$ 2,409,335	\$ 199,056,946	\$ 2,327,941	\$ 2,013,191	S	7,601,303	\$ 2,533,	3,76
0	Cost of Removal	ARAM	Asset Life	Uncertain	S	5,587,890	\$ (104) §	(0)	' S	\$ 5,587,993	\$	s.	S	(104)	~	Ξ
ŝ	Repairs	Straight-Line	3 Years	Unprotected	\$	140,081,147	\$ 3,209,210	\$ 4,759,346	\$ 4,739,009	\$ 127,373,581	\$ 42,457,860	\$ 42,457,860	S	12,707,566	\$ 4,235,	5,85
4	Taxable CIAC	ARAM	Asset Life	Protected	\$	(3, 371, 573)	\$ (233,870) \$	\$ (233,870)	\$ (233,870)	\$ (2,669,963)	\$ (233,870)	\$ (233,870)	\$	(701, 610)	\$ (233,	3,87
S	All Other Federal	ARAM	Asset Life	Uncertain	\$	(975,857)	\$ 235,686	\$ 100,915	\$ 299,181	\$ (1,611,638)	\$ 302,834	\$ 329,012	\$	635,781	\$ 211,	.92
9	Federal Benefit of State	Straight-Line	3 Years	Unprotected	S	(13,651,713)	\$ (301,575) \$	\$ (455,891)	\$ (448,728)	\$ (12,445,518)	\$ (4,148,506)	\$ (4,148,506)	S	(1,206,195)	\$ (402,	2,06
1													S	,		
8	Sub-Total (UPIS)				S	334,328,143	\$ 5,253,799	5 7,018,016	\$ 6,764,926	\$ 315,291,401	\$ 40,706,260	\$ 40,417,687	s	19,036,742	\$ 6,345,	5,58
	CWIP, CAC, and other Non-U	JPIS Plant items														
	Item	Amortization Method	Life													
6	Plant Customer Advances	Straight-Line	3 Years	Unprotected	s	(10, 382, 270)	\$ (163,152) \$	\$ (217,938)	\$ (210,079)	\$ (9,791,101)	\$ (3,263,700)	\$ (3,263,700)	\$	(591,169)	\$ (197,	7,05
10	Plant CWIP	Straight-Line	3 Years	Unprotected	\$	446,724	\$ 7,020 \$	\$ 9,377	\$ 9,039	\$ 421,287	\$ 140,429	\$ 140,429	S	25,437	s,	8,47
Ξ	CIAC WIP	Straight-Line	3 Years	Unprotected	\$	(206, 590)	\$ (3,246) \$	\$ (4,337)	\$ (4,180)	\$ (194,827)	\$ (64,942)	\$ (64,942)	S	(11,763)	\$ (3,	3,92
12	Plant 481	Straight-Line	3 Years	Unprotected	S	745,845	\$ 11,721 \$	\$ 15,656	\$ 15,092	\$ 703,376	\$ 234,459	\$ 234,459	S	42,469	\$ 14,	4,15
13	CAC Reserve	Straight-Line	3 Years	Unprotected	\$	1,031,707	\$ 16,213 \$	\$ 21,657	\$ 20,876	\$ 972,961	\$ 324,320	\$ 324,320	S	58,746	\$ 19,	9,58
14	Net Operating Loss Carryover	ARAM	Asset Life	Protected	S	(3,780,416)	\$ (59,407) \$	\$ (79,356)	\$ (76,494)	\$ (3,565,158)	\$ (76,722)	\$ (75,789)	S	(215,258)	\$ (71,	1,75
15	Net Operating Loss Carryover	Straight-Line	3 Years	Unprotected	S	(4, 929, 046)	\$ (77,457) \$	\$ (103,468)	\$ (99,736)	\$ (4,648,384)	\$ (1,549,461)	\$ (1,549,461)	\$	(280, 661)	\$ (93,	3,55
16																
17	Sub-Total (Non-UPIS)				\$	(17,074,045)	\$ (268,310) \$	\$ (358,408)	\$ (345,483)	\$ (16,101,844)	\$ (4,255,618)	\$ (4,254,685)	s	(972,201)	\$ (324,	t,06
18	Sub-Total Plant				s	317,254,098	\$ 4,985,489	6,659,608	\$ 6,419,443	\$ 299,189,557	\$ 36,450,643	\$ 36,163,002	s	18,064,541	\$ 6,021,	51
19	Non-Plant	Straight-Line	3 Years	Unprotected	s	(1, 394, 184)	\$ (69,709) \$	\$ (69,709)	\$ (69,709)	\$ (1,185,057)	\$ (395,019)	\$ (395,019)	s	(209,128)	\$ (69.	9,70
20	Total				s	315,859,914	\$ 4,915,780	5 6,589,899	\$ 6,349,734	\$ 298,004,501	\$ 36,055,624	\$ 35,767,983	S	17,855,413	\$ 5,951,	.80

(197,056) 8,479 (3,921) 14,156 19,582 (71,753) (93,554)

(69, 709)

\$ 5,951,804 \$ 5,951,804 \$ 42,007,428 \$ 41,719,788

> $\overline{21}$ 53

Catch up 349,

Total

6,021,514 951,804

(324,067)

2,533,768 (35) 4,235,855 (233,870) 211,927 (402,065)

6,345,581

Three Year Amortization

Notes and Source: Columns 1 and J: PAWC-proposed amounts used for protected EADIT. Three-year straight-line amortization used for unprotected balances; amortization is applied to 12/31/2020 EADIT amounts for 2021 and 2022 amortizations Lines 14, 15 and 19, columns D-G: Amounts from PAWC Rebuttal Exhibit JRW-1-R, page 2

Pennsylvania American Water Company Allocation of OCA EADIT Amortization Adjustment Among PAWC Utility Systems

31 2023 4 Č ÷ 2 Ц Ve Rate

Page 5 of 5 Revised Exhibit LA-8 Schedule C-11 Docket Nos. R-2020-3019369 and R-2020-3019371

Kate 1	ear Ending December 31, 2022							
Line	Description	OCA Adjustment Total Company	Water Operations Excl. Steelton	Wastewater (Excl. Sadsbur Exeter Onerat	SSS y and tions	Wastewa Scrar Onerat	ter CSS ton tons	
	2022 EADIT Amortization - Increase (Reduction) to Income Tax Expense	(Y)	(B)	(C)		Ð		
-	Allocation Percentage	100.00%	91.19%	7.57%	"	1.24	%	
64 6	Plant-Related Non-Plant	\$ (29,802,730) \$ 375,310	\$ (27,176,812) \$ 796.647	\$ (2,257 \$	7,258) 1.639	\$ ()	68,660) 4.024	
04	Catch-up	\$		÷ \$)		
5	OCA Adjustment	\$ (29,477,421)	\$ (26,880,165)	\$ (2,232	2,619)	\$ (3	64,636)	
9	2022 Rate Base Adjustment OCA Adjustment to Rate Base for EADIT	\$ (44,425,502)	\$ (40,511,171)	\$ (3,364	1,787)	\$ (5	49,544)	
L	Plant-Related	2022 EADIT Amortization \$ (29 802 730)						
~ ~~	Non-Plant	\$ 325,310						
6	Catch-up	S.						
10	OCA Adjustment to EADIT Amortization Expense Divided by Half to Beflect Average Pate Base	(29,477,421)						
12	Adjustment to ADIT for Rate Year 2	\$ (14,738,710)						
13 14	OCA Adjustment to EADIT Amortization Expense for Rate Year 1 Overall Adjustment to ADIT for Rate Year 2	\$ (29,686,791) \$ (44,425,502)						

Notes and Source Col. A, lines 1-5: Page 1 of this Schedule Cols. B-D: Allocation percentages for utility operations per PAWC response to I&E-RE-62

	lan
٢	7
	tate
ŀ	ř.,
	year
•	Ξ.
	Ξ.
	Ξ.
	5
	-
	q
	WIt
	\mathbf{ts}
	8
	ă
•	Ħ.
	R
•	ಗ
	ק
1	٩,
	<u>ರ</u>
	B.
	ă
	Ð.
	Ξ
	В
	Ξ.
	0
	000
	Yeco
4	Kecc
۹ •	z, Kecc
	ZZ, Kecc
	JZZ, Kecc
	2022, Kecc
	2022, Kecc
	ar 2022, Reco
	ear 2022, Kecc
	Y ear 2022, Kecc
	e Y ear 2022, Kecc
	ate Y ear 2022, Kecc
	tate Y ear 2022, Recc
	: Kate Y ear 2022, Kecc
	ge Kate Y ear 2022, Kecc
	age Kate Y ear 2022, Kecc
	rage Kate Y ear 2022, Kecc
	rerage Kate Y ear 2022, Kecc
	Average Kate Y ear 2022, Kecc
	Average Kate Y ear 2022, Kecc
	S: Average Kate Y ear 2022, Kecc
	.3: Average Kate Y ear 2022, Kecc
	A.3: Average Kate Y ear 2022, Kecc
	e A.3: Average Kate Y ear 2022, Kecc
	ole A.5: Average Kate Y ear 2022, Kecc
	able A.5: Average Kate Y ear 2022, Kecc
	I able A.3: Average Kate Y ear 2022, Kecc
	A I able A.5: Average Kate Y ear 2022, Kecc
	A 1 able A.3: Average Kate Y ear 2022, Kecc
	ICA I able A.3: Average Kate Y ear 2022, Recc
	UCA 1 able A.3: Average Kate Y ear 2022, Kecc

Penns Prope	sylvania American Water Company arty Tax Expense					Wat	er Opera	Exhibit LA-8 trions Excl. Steelton
Rate	Year Ending December 31, 2022				Dock	cet Nos. R-2020-30	19369 an	or a criteria c-13 rd R-2020-3019371 Page 1 of 7
		Per Co Prese	ompany nt Rates	Pe	r Company esent Rates	Per OCA	C	OCA Adjustment
Line No.	Description	Amo 12/3	ount at 1/2021	1	Amount at 2/31/2022	Average for 2022	l	to Property Tax Expense
)	A)		(B)	(C)=AVG.(A,B)		(D)=(C)-(B)
- 7	Property Subject to Tax Property Tax Rate	\$ \$ 27	4,891,948 0.005715	s s	612,851,355 0.005715	\$ 593,871,65 \$ 0.00571	2 5	
б	Property Tax Expense	S	3,285,508	S	3,502,446	\$ 3,393,97	7	(108,469)

Exhibit LA-8 Page 53 of 67

	lan	
F	-	
	(ate	
	-	
	/ear	
•	Ξ.	
	Ξ	
	2	
	2	
	8	
•	Μ	
	Ś	
Ì	B	
	5	
	ă	
	B	
Ì	S.	
	Ľ	
	F	
	7	
1	Ч	
	d	
	õ	
	D.	
	Ц	
	O)	
	В	
	Ξ.	
	Ĕ	
	ÖÜ	
	scon	
	cecon	
4	Kecon	
	2, Kecon	
	22, Kecon	
	JZZ, Kecon	
	2022, Kecon	
	. 2022, Kecon	
	ar 2022, Kecon	
	ear 2022, Kecon	
	Y ear 2022, Kecon	
	Year 2022, Kecon	
	te Y ear 2022, Kecon	
	ate Y ear 2022, Kecon	
	Kate Y ear 2022, Kecon	
	: Kate Y ear 2022, Kecom	
	ge Kate Y ear 2022, Kecom	
	age Kate Y ear 2022, Kecom	
	rage Kate Y ear 2022, Kecon	
	erage Kate Y ear 2022, Kecon	
	verage Kate Y ear 2022, Kecon	
	Average Kate Y ear 2022, Kecon	
	Average Kate Y ear 2022, Kecon	
	i: Average Kate Y ear 2022, Kecon	
	.3: Average Kate Y ear 2022, Kecon	
	A.3: Average Kate Y ear 2022, Kecon	
	A.3: Average Kate Y ear 2022, Kecon	
	le A.3: Average Kate Y ear 2022, Kecon	
	ble A.5: Average Kate Y ear 2022, Kecon	
	able A.3: Average Kate Y ear 2022, Kecon	
	I able A.3: Average Kate Y ear 2022, Kecom	
	I able A.3: Average Kate Y ear 2022, Kecon	
	A I able A.5: Average Kate Y ear 2022, Kecon	
	CA I able A.3: Average Kate Y car 2022, Kecon	
	JCA I able A.3: Average Kate Y ear 2022, Kecon	
	UCA 1 able A.3: Average Kate Y ear 2022, Kecon	

Penns Prope:	ylvania American Water Company rty Tax Expense						M	Exhibit LA-8 ater Steelton Operations	~ ~
Rate 1	Year Ending December 31, 2022				Docl	cet Nos. R	2-2020-30193	59 and R-2020-3019371 Page 2 of 7	• •
		44	er Company resent Rates	Pe Pi	er Company esent Rates	Pei	r OCA verage	OCA Adjustment	
Line No.	Description		Amount at 12/31/2021	1	Amount at 2/31/2022		for 2022	to Property Tax Expense	
			(Y)		(B)	(C)=A	.VG.(A,B)	(D)=(C)-(B)	1
- 0 m	Property Subject to Tax Property Tax Rate Property Tax Expense	$\sim \sim \sim$	13,496,642 0.005715 77,134	$\sim \sim \sim$	13,510,387 0.005715 77,213	8 8 8	13,503,514 0.005715 77,174	\$ (39)	1 - 1

Exhibit LA-8 Page 54 of 67

ear Rate Plan
vith Multiy
Adjustments w
Recommended.
: Year 2022,
Average Rate
OCA Table A.3:

Penns	ylvania American Water Company rty Tax Expense				Wastew	ater SSS	S Excl. Sadsbur	Exhib / and Exeter Op	it LA-8 erations
Rate)	rear Ending December 31, 2022				Docl	cet Nos.	R-2020-301936	o and R-2020-3 Pag	019371 e 3 of 7
Line No. 3	Description Property Subject to Tax Property Tax Rate Property Tax Expense	<u>е п</u>	er Company resent Rates Amount at 12/31/2021 (A) 75,634,522 0.003274 247,628	a T P L L L	rr Company esent Rates Amount at 2/31/2022 (B) 80,453,417 0.003274 263,405	C)= C)= C)= C)=	er OCA Average for 2022 AVG.(A,B) 78,043,969 0.003274 255,517	OCA Adjust to Property Expense (D)=(C)-(ment Tax B) (7,889)

Exhibit LA-8 Page 55 of 67

e Plan
ar Rati
Multiye
with
Adjustments
Recommended
ır 2022,
Yea
Rate
Average
A Table A.3:
OC∕

Pennsy Proper	ylvania American Water Company ty Tax Expense					м	/astewater S	Exhibit LA-8 SS Sadsbury Operations
Rate Y	ear Ending December 31, 2022				Dock	cet Nos. R-	2020-301930	59 and R-2020-3019371 Page 4 of 7
Line No. 3 2	Description Property Subject to Tax Property Tax Rate Property Tax Expense	ж ж т т	 Fer Company Tresent Rates Amount at 12/31/2021 (A) 341,622 0.003274 1,119 	s s s s s	rr Company esent Rates Amount at 2/31/2022 (B) 363,070 0.003274 1,190	Per (fr f(C)=AV \$ \$	OCA trage or 'G.(A,B) 352,346 0.003274 1,155	OCA Adjustment to Property Tax Expense (D)=(C)-(B)

Adjustments with Multiyear Rate Plan	
Recommended	
Average Rate Year 2022,	
OCA Table A.3:	

Pennsy Propert	/lvania American Water Company ty Tax Expense					Wastewat	Exhibit LA-8 ter SSS Exeter Operations
Rate Y	ear Ending December 31, 2022				Dock	cet Nos. R-2020-3019	Schedule C-13 369 and R-2020-3019371 Page 5 of 7
Line			Per Company Present Rates Amount at	Pe Pr	r Company esent Rates Amount at	Per OCA Average for	OCA Adjustment to Property Tax
.01	nondroco		(A)		(B)	c)=AVG.(A,B)	(D)=(C)-(B)
n v n	Property Subject to Tax Property Tax Rate Property Tax Expense	ડ	108,898,452 0.003274 356,535	<u>s s s</u>	109,936,993 0.003274 359,935	\$ 109,417,722 \$ 0.003274 \$ 358,235	\$ (1,700)

Exhibit LA-8 Page 57 of 67

e Plan
ar Rati
Multiye
with
Adjustments
Recommended
ır 2022,
Yea
Rate
Average
A Table A.3:
OC∕

Pennsy Proper	ylvania American Water Company tty Tax Expense					Waste	water C	Exhibit LA-8 SS Scranton Operations
Rate Y	/ear Ending December 31, 2022				Docl	cet Nos. R-2020	-301936	9 and R-2020-3019371 Page 6 of 7
Line No. 1	Description Property Subject to Tax	e	Per Company Present Rates Amount at 12/31/2021 (A) 70,346,094	Pr Pr	er Company resent Rates Amount at 2/31/2022 (B) 78,491,169	Per OCA Average for 2022 (C)=AVG.(1	A,B) 8,631	OCA Adjustment to Property Tax Expense (D)=(C)-(B)
0 N	Property Tax Rate Property Tax Expense	S S	0.006748 474,696	\sim	0.006748 529,659	\$ 0.00 \$ 500	6748 2,178	\$ (27,481)

Exhibit LA-8 Page 58 of 67

ts with Multiyear Rate Plan
, Recommended Adjustmen
Average Rate Year 2022,
OCA Table A.3:

Exhibit LA-8 Page 59 of 67

Khibit	2000
Ĥ	ŕ
Multivear Rate Plan	•
Adiustments with	
Recommended /	
Average Rate Year 2022.	0
OCA Table A.3:	

Pennsylvania American Water Company Depreciation Expense Rate Year Ending December 31, 2022

Exhibit LA-8

Water Operations Excl. Steelton	Schedule C-14	Docket Nos. R-2020-3019369 and R-2020-3019371	Page 1 of 8	
---------------------------------	---------------	---	-------------	--

Line No.		Description	Per Co Net O Cos 12/31	mpany riginal t at /2021	Per Com Net Orig Cost 4	pany ginal at 022	Average Net Origin for 2022	al	Per Company Annual Accrual Amount Based on 12/31/2022 Plant	Annual Accrual Rate, Percent	Annu Pe Ba A 202	al Accrual sr OCA ased on verage 22 Plant	OCA Adjustment to Depreciation Expense
- 0 % 4	Intangible 301.00 302.00 303.00	tart Organization Frantisca and concerts Miscellaneous intrangible Plant Total Intangible Plant	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	A) 766,405 2,404,599 .453,021 .624,025	(B) S 7, S 2,4 S 2,0 S 5,2	66,405 04,599 19,616 9,616	(C)=AVu.(/ 76 2,40 5 2,40 5 4,92	0,405 6,405 4,599 0,816 1,820	(n)	(E)	1	(L)*(E)	(U)=(F)+(D)
6 5 4 6 5 10 8 8 7 6 5 11 10 10 10 10 10 10 10 10 10 10 10 10 1	Nondepreci 303.20 303.30 303.40 303.50 303.51 303.51 303.51 303.51	able Plant Power and Pumping Land Power and Pumping Land Turnission and Distribution Land and Rights of Way Burthubtion Reservoirs and Standpipe Land Transmission and Distribution - Land Transmission and Distribution - Rights of Way Office Land Total Nondepreciable Plant	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	15,412 15,412 15,412 ,508,143 ,001,790 ,001,790 ,762,423 ,762,423 ,762,423 ,268,948 ,152,866	\$ 4,3 \$ 4,3 \$ 3,5 \$ 2,0 \$ 5,2 \$ 5,2 1,7 \$ 5,2 1,7	15,318 5 15,412 5 08,143 5 01,790 5 62,423 5 60,833 5 52,866 5 50,833 5 50,855 505 505 505 505 505 505 505 505 505	4,31: 1 1: 3,500 5,268	5,318 5,412 8,143 1,790 8,948 8,948 8,948 8,948 8,948					
113 114 115 116 117 118 118 118 118 118 118 118 118 118	Depreciable 303.14 303.35 303.39 304.15 304.20 304.30 304.36 304.36 304.36 304.38	Part Water Rights - Hibbernia Water Rights - Hibbernia Water Brunding and Treatment Land Comprehensive Planning Studies Comprehensive Planning Studiers Power and Pumping Structures Power and Pumping Structures Power and Pumping Structures Lange Structures Purification Buildings Lange Structures Water Handling and Treatment Structures Water Handling and Treatment Structures Purification Buildings - Tank Painting Purification Buildings - Tank Painting	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	,942,823 ,155,025 ,710,061 ,248,708 ,567,252 0,920,111 ,266,812 ,668,887 ,65,958 65,958	 \$ 1,9 \$ 255,7 \$ 255,7 \$ 11,6 \$ 255,7 \$ 255,7 \$ 11,6 \$ 11,6 \$ 11,6 \$ 11,6 	42,823 55,025 88,561 58,789 67,252 67,611 68,887 19,363 19,363 19,363 19,363	1,94 15 9,94 45,15 6,56 6,56 53,6105,610 53,6100 53,6100 53,6100 53,61000000000000000000000000000000000000	2,823 5,025 5,025 5,025 5,025 5,025 5,025 5,025 5,025 5,025 5,025 11 5,025 11 2,025 11 2,025 12 5,058 5,025 5,058	- 695,908 986,605 986,605 11,769,879 11,375,963 5,823,863 789,885 789,885 789,886 789,886 789,886 733,714 2,338	0.00 0.00 2.14 2.54 2.54 2.54 2.58 2.79 2.79	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	- 679,333 966,290 966,290 1,767,008 1,308,090 5,746,145 760,157 760,157 3,330 3,330	 2 5 5 5 2 2 2 3 3 4 4
25 55 24 29 28 28	304.61 304.62 304.63 305.00	Office Buildings Large Structures Large Structures Stores, Shop and Garage Buildigns Large Structures Other Structures Misceleanous Structures and Improvements Collecting and Improvements Large Reservoirs	81 82 83 84 85 84 85 84 85 85 85 85 85 85 85 85 85 85	,024,748 ,907,725 ,973,109 ,138,205 ,132,816 ,132,816	S 31,0 S 13,6 S 48,9 S 48,9 S 4,3 S 4,3 S 28,0 S 128,0 S 128,0	24,748 31,561 73,109 13,786 13,786 13,786 13,786 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 13,778 14,7488 14,7488 14,7488 14,7488 14,74888 14,748888 14,74888888885	31,02 13,260 6,297 6,297 5 4,227 5 4,227 5 128,04	4,748 \$ 9,643 \$ 3,109 \$ 0,092 \$ 3,301 \$ 5,778 \$ 4,778 \$	945,949 308,741 1,303,358 93,366 93,366 1,782,940	3.05 2.26 2.66 1.45 2.16 1.39		946,255 299,894 1,302,685 91,206 91,223 91,223	S 306 S 306 S 8847) S (573) S (2,116) S (2,116) S (2,116) S (3,118) S (3,118)
33 33 33 33 33 33 33 33 33 33 33 33 33	306.00 307.00 311.20 311.50 311.52 311.53 311.53	Lake, River and Other Inalkes Lage indekso Under Tinakes Wells and Springs weet Generation Equipment Pemping Equipment Pertric Soure of Supply Soure of Supply Transmission and Distribution	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	,029,065 (029,065 (623,183 (809,563 (758,421 (758,421 (758,421 (758,421 (758,5937 (7711)	2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2	86,722 52,065 55,150 65,150 65,150 88,458 88,097 88,097 88,097 88,097 87,711	20,18 4,180 11,82 20,18 20,28 20,18 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,29 20,20 20,20 20,20 20,20 20,20 20,20 20,20 20,20 20,200	9,065 \$ 9,065 \$ 9,065 \$ 9,065 \$ 9,065 \$ 9,0645 \$ 9,645 \$ 9,458 \$ 9,458 \$ 9,458 \$ 7,733 \$ 5,7,935 \$ 5,7,935 \$ 5,7,935 \$ 5,7,955	330,188 331,075,075 314,002 558,058 774,502 774,502 72,146 489,246 1,352,578 190,941	2.35 2.71 2.71 3.12 3.22 3.22 2.81 2.81		72, 683 29, 683 107, 180 285, 047 547, 077 72, 162 72, 162 72, 162 72, 162 1, 326, 559 190, 735	<pre>5 5 5 605) 5 5 103 5 5 (10,981) 5 5 (10,981) 5 5 (16,9⁻⁷) 5 5 (16,9⁻⁷) 5 5 (10,545) 5 5 (26,019) 5 5 (206)</pre>
58 57 58 58 58 59 50 50 50 50 50 50 50 50 50 50 50 50 50	320.10 320.19 320.19 320.20 320.20 330.20 330.20 330.40 330.40 330.40 330.55 330.40 330.40 330.55 330.40 330.50 330.40 330.40 330.50 330.50 330.40 330.50 300.50 300.50 300.50 300.50 30	Purification System Large Structures Bhuit Large Structures Bhuit Large Structures Bhuit Large Structures Bhuit Chemical Treatment Chemical Treatment Structures Reservoirs and Standpipes - Painting Below Grade Facilities Below Grade Facilities Be	255 256 257 258 258 258 251 257 257 257 257 257 257 257 257 257 257	(675,564 (875,564 (872,523,545 (801,165) (101,165) (101,165) (101,167) (101,171) (101,477) (101,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	14,513 51,977 51,247 51,247 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,243 51,244 51,747 51	256,29 23,929 23,522 23,522 24,577 16,522 16,522 16,522 16,525 20,679 20,575	 \$6039 \$5039 \$2543 \$2554 \$2543 \$2543 \$2543 \$2543 \$2543 \$2543 \$2543 \$2543 \$2543 \$2544 \$2543 \$2544 \$2543 \$2544 \$2543 \$2543 \$2544 \$2545 \$2554 \$2554 \$2554 \$2555 \$2556 	8.29,750 8.4,024 2.5 2.146,226 383,027 383,027 383,027 383,027 383,027 383,027 383,027 383,027 383,027 383,027 384,024 354,024,024 354,024,024 354,024,024,024 354,024,024,024,024,024,024,024,024,024,02	2 92 2 00 0 00 0 00 0 00 1 165 1 165 1 197 1 197	~~~~~~	7,863,415 445,550 446,52465 2,700,644 3,2465 3,2465 3,2465 3,2465 3,245 16,292 2,023,840 16,292 2,203,840 3,420,209 10,434,451 10,445 10,445 10,445 10,445 10,445 10,445 10,445 10,445 10,451	 S (387.¹) S (47.373) S (47.373) S (47.373) S (7.23) S (275) S (275) S (275) S (215.090) S
60 61 63 65 65 65 65 65 65 65 65 65 65 65 65 65	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Furniture Furniture Computes and Peripheral Equipment Computer Software Computer Software Computer Software Computer Software Computer Software Computer Software Computer Software Computer Software Transportation Equipment Light Daty Trucks Equipment Light Daty Trucks Equipment Code and Work Equipment Tools and Work Equipment Ladonasp Equipment Ladonasp Equipment	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	,475,865 ,594,770 ,994,770 ,994,770 ,7,291 ,7,291 ,7,291 ,430,311 ,4339,226 ,4339,226 ,4339,226 ,4339,226 ,4339,226 ,4339,226 ,4339,236 ,4339,236 ,4339,236 ,4339,236 ,4339,34 ,435,034 ,338,55 ,439,55 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,439,555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,5555 ,539,55555 ,539,5555 ,539,5555 ,539,55555 ,539,55555 ,539,55555 ,539,55555 ,539,555555 ,539,555555555 ,539,5555555555	9,7 9,7 9,7 9,7 9,7 9,7 9,7 9,7	17, 626 5 62, 464 5 12, 364 5 7, 291 5 349 5 56, 945 5 349 5 56, 945 5 56, 945 5 349 5 56, 945 5 349 5 56, 945 56, 945 5 56, 945 56, 945	8,59 28,988 5,024,922 5,024,023 11,16 5,24,02 2,400 2,400 2,400 2,400	6,745 5 6,950 5 5,834 5 7,291 5 7,291 5 8,9628 5 8,946 5 8,946 5 8,946 5 8,946 5 8,946 5 8,946 5 8,946 5 8,034 5 8,0356 5 8,03	6,978,136 6,978,136 8,900,868,234 739 739 739 739 739 739 739 739 739 739	5.09 2.085 19.49 7.49 10.14 9.62 9.62 9.62 11.04 11.04 11.04 11.04 11.67 5.52 5.52 5.52 5.52	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	437,574 6.043,779 8,946,605 3,763,413 3,763,413 2,879,230 2,879,230 1,302,634 1,302,634 1,302,634 1,917,270 137,119 86,128	\$ (57,462) \$ (34,462) \$ (34,457) \$ (34,457) \$ (34,457) \$ (34,457) \$ (34,457) \$ (34,457) \$ (34,457) \$ (106,964) \$ (106,964) \$ (106,964) \$ (106,964) \$ (47,451) \$ (47,453) \$ (47,453) \$ (47,453) \$ (47,453) \$ (47,453) \$ (47,453) \$ (49,533) \$ (39,533) \$ (39,533) \$ (39,533) \$ (39,533) \$ (39,533) \$ (39,533)
73 74 75	346	Communisation Equipment Equipment Non-Telephone Remote Control and Instantentation Telephone	0000	1,459,420 1,770,729 1,790,902 188,391	8 8 8 8 8 8 9 9 9 1	22,855 58,371 04,508 62,806	3,99 7,86 2,59 17	1,137 S 4,550 S 7,705 S 5,598 S	295,540 601,348 223,565 16,502	6.53 6.71 9.30 10.14	~ ~ ~ ~ ~ ~	260,621 527,711 241,587 17,806	S (34,919) S (73,637) S 18,022 S 1,304
77 78 79	347 348	Miscellancous Equipment Other Tangible Equipment Total Depreciable Plant	s 11 s s 5,478	,604,345 793,797 ,296,131	\$ 11,5 \$ 7 \$ 5,727,3	49,792 5 93,797 5 03,234 5	5 11,57 5 79 5 5,602,799	7,068 S 3,797 S 9,682 S	780,429 31,945 127,944,938	6.76 4.02	s s 1	782,610 31,911 25,197,467	S 2,181 S (34) S (2,747,471)
81 80		Amoriization of Net Salvage Total Utility Plantin Service	\$ 5,505	,073,023	\$ 5,754,6	75,716	\$ 5,629,874	4,369 S	18,884,076 146,829,014		s I	18.884.076 44.081.543	S (2,747,471)
Notes Col. A Cols. E	and Source: : Company w 3, D & E: Cot	iness Spanos, Exhibit No. 11-C 2021, Table 2 Estimated Survivor Curves, Origin npany witness Spanos, Exhibit No. 11-D 2022, Table 2 Estimated Survivor Curv	aal Cost, Boo es, Original C	k Reserve al Ost, Book R	nd Calculate teserve and 0	d Annual D Calculated A	epreciation A unnual Deprec	ccruals Rela	tted to Utility Plant in uals Related to Utility	Service at Dece Plant in Service	mber 31, 2 e at Decem	021 ber 31, 2022	

Exhibit LA-8 Page 60 of 67

Plan
Rate
ıltiyear
h Mu
s witl
djustments
ed A
ecommende
Å,
2
2022
Year 2022
Rate Year 2022
Average Rate Year 2022
A.3: Average Rate Year 2022
ble A.3: Average Rate Year 2022
A Table A.3: Average Rate Year 2022
OCA Table A.3: Average Rate Year 2022
OCA Table A.3: Average Rate Year 2022
OCA Table A.3: Average Rate Year 2022

Pennsy Deprec	Ivania Amei ation Exper	rican Water Company nse											Water	Ey Steelton	chibit LA-8 Operations
Rate Ye	ar Ending l	December 31, 2022									Dock	tet Nos. R	-2020-3019369 a	sch d R-202	edule C-14 0-3019371
												Ar	nual Accrual		Page 2 of 8
				Per Company Net Original	ц	⁹ er Company Net Original	z	Average let Original		Per Company 	Annual		Per OCA Based on	OCA ⊿	djustment
Line No.		Description		Cost at 12/31/2021		Cost at 12/31/2022		for 2022	4 CI	nount Based on 1/31/2022 Plant	Accrual Rat Percent	é	Average 2022 Plant	to Dej Ex	pense
				(Y)		(B)	(C	=AVG.(A,B)		(D)	(E)		F)=(C)*(E)	(G)=	(E)-(D)
-	Nondeprec 303-00	ciable Plant Miscellaneous Intangible Plant	~	"	÷		÷.	"							
. 6	303.30	Purification Land	• • •	26,988	÷ \$	26,988		26,988							
б	303.50	Distribution Reservoirs and Standpipe Land	s	1	\$	1	Ś	1							
4	303.61	Office Land	\$	1	\$	1	s	1							
5		Total Nondepreciable Plant	\$	26,993	÷	26,993	S	26,993							
	Depreciabl	e Plant													
9	304.15	Other Water Source Structures	s	6,843	\$	6,843	Ś	6,843	S	162	2.37	S	162	÷	0
7	304.30	Purification Buildings	\$	13,467,398	∽	13,476,555	Ś	13,471,976	Ś	290,230	2.15	S	289,647	÷	(583)
8	306.00	Lake, River and Other Intakes	\$	112,013	↔	112,013	Ś	112,013	Ś	491	0.44	S	493	÷	2
6	310.00	Power Generation Equipment	÷	416,789	\$	416,789	Ś	416,789	Ş	12,090	2.90	s	12,087	÷	(3)
10	311.53	Pumping Equipment - Water Treatment	÷	5,704,191	\$	5,704,191	÷	5,704,191	S	70,702	1.24	s	70,732	÷	30
11	320.10	Purification System - Large Structures	÷	675,611	\$	687,057	S	681,334	Ś	23,405	3.41	\$	23,233	ŝ	(172)
12	320.20	Purification System - Chemical Treatment		1,495,921	÷	1,530,259	÷	1,513,090	Ś	60,640	3.96	S	59,918	÷	(722)
13	330.00	Distribution Reservoirs and Standpipes	÷	2,560,030	\$	2,560,030	S	2,560,030	S	20,280	0.79	s	20,224	÷	(56)
14	331.00	Mains and Accessories	÷	21,128,093	\$	21,655,024	S	21,391,558	S	185,190	0.86	s	183,967	÷	(1, 223)
15	333.00	Services	\$	340,000	∽	510,000	S	425,000	Ś	9,500	1.86	÷	7,905	Ś	(1, 595)
16	334.00	Meters and Meter Installations	÷	1,134,429	Ś	1,134,429	÷	1,134,429	S	82,072	7.23	s	82,019	÷	(53)
17	335.00	Fire Hydrants	÷	1,075,253	Ś	1,112,723	Ś	1,093,988	S	14,343	1.29	s	14,112	Ś	(231)
18	341.20	Transportation Equipment - Equipment	\$	300,000	Ś	300,000	Ś	300,000	Ş	47,509	15.84	S	47,520	Ś	11
19	343.00	Tools and Work Equipment	s	224,968	Ś	244,968	Ś	234,968	Ş	12,248	5.00	S	11,748	Ś	(200)
20	344.00	Laboratory Equipment	S	22,624	∽	22,624	Ś	22,624	Ś	1,450	6.41	S	1,450	÷	0
21	346.00	Communication Equipment	S	75,000	∽	75,000	Ś	75,000	Ś	5,011	6.68	S	5,010	÷	(])
22	347.00	Miscellaneous Equipment	S	403,532	Ś	403,532	Ś	403,532	Ś	16,177	4.01	Ś	16,182	s	5
23		Total Depreciable Plant	\$	49,142,696	Ś	49,952,036	S	49,547,366	S	851,500		S	846,412	s	(5,088)
24		Amortization of Net Salvage							\$	32,118		s	32,118		
25			\$	49,169,689	÷	49,979,029	s	49,574,359	S	883,618		S	878,530	s	(5,088)

Notes and Source: Col. A: Company witness Spanos, Exhibit No. 11-G 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-H 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021

Plan
Rate I
lutiyear
with M
Adjustments
Recommended ⊭
_
⁷ ear 2022, I
vverage Rate Year 2022, I
OCA Table A.3: Average Rate Year 2022, I

Exhibit LA-8

Wastewater SSS Excl. Sadsbury and Exeter Operations Schedule C-14

Pennsylvania American Water Company Depreciation Expense

Rat

	0													Page	e 3 of 8
			Per	Company	Per C	ompany	<	verage	Per Compan			Annual Acc Per OCA	rual		
;			Ž	t Original	Net 0	Driginal	Net	Original	Annual Accru	al	Annual	Based or		DCA Adjus	stment
Line No.		Description	12	Cost at 2/31/2021	Cc 12/3	st at 1/2022		for 2022	Amount Based 12/31/2022 PI	on Ac	crual Rate, Percent	Average 2022 Plai	at .	to Depreci Expens	lation se
				(Y)		(B)	(C)=/	AVG.(A,B)	(D)		(E)	(F)=(C)*(E)	(G)=(F)-	(D)
1	303.20	iable riant Franchises	S	221,140	S	221,140	÷	221,140							
7	303.30	Land and Land Rights - Collection	S	1,093,483	Ś	1,093,483	÷	1,093,483							
ς.	303.40	Land and Land Rights - SPP	\$	85,560	∽ (85,560	\$	85,560							
4 %	06.505	Land and Land Kights - 1DP Total Nondepreciable Plant	~ ~	1,592,020 2,992,203	<u>s</u> s	1, <u>592,020</u> 2,992,203	<u>s</u> s	1,592,020 2,992,203							
	Depreciabl	e Plant													
9	354.20	Structures and Improvements - Collection	\$	1,350,156	S	1,372,711	s	1,361,434	\$ 38	,320	2.79	\$ 37	,984 \$		(336)
L :	354.30	Structures and Improvements - SPP	6 9 (14,958,114	s •	5,253,684	\$	15,105,899	\$ 300	,957	1.97	\$ 297	,586 \$		(3,371)
× ×	354.40	Structures and Improvements - TDP	se ∉	52,285,165	vi e> e	3,189,590	6 4	52,737,377	\$ 1,254	,377	2.36	\$ 1,244	1,602 S	<u> </u>	(9,775)
۲ م 5	355.00	Structures and Improvements - General Downer Generation Equipment	A 9	5,102,005 4 036 077	A 4	5,125,827 1 036 077	A 9	5,127,916 4 036 072	ъ со со со со	171 در 171	1.57	20 20 20 20 20 20 20 20 20 20 20 20 20 2	366 5		(439) (105)
11	360.10	r ower Octication Equipricut Collection Sewers - Force Mains	• •∕	38 161 242	• •	4,000,000 +	• •	38 663 807	\$ 678	,+/1 631	1 73		884 S		(201)
12	361.10	Collection Sewers - Gravity Mains	•	99.296.641	s 10	6.666.374	÷ •	102,981,507	s 1.691	826	1.59	\$ 1.637	.406 S	(5)	54.420)
13	361.20	Manholes	s	12,812,001	\$	3.269.957	s	13,040,979	\$ 348	535	2.63	\$ 342	.978 S		(5,557)
14	363.00	Services	s	18,663,546	\$	0,832,795	÷	19,748,171	\$ 531	,451	2.55	\$ 503	,578 \$	0	27,873)
15	364.00	Flow Measuring Devices	s	356,425	÷	356,425	\$	356,425	\$ 36	,426	10.22	\$ 36	6,427 \$	(1
16	365.00	Flow Measuring Installations	s	14,938	÷	14,938	\$	14,938	\$ 1	,154	7.73	\$,155 \$		-
17	370.00	Receiving Wells	s,	143,420	S	143,420	S	143,420	\$,219	2.24	8	,213 \$	~	(9)
18	371.00	Pumping Equipment	se i	13,154,873	\$	3,307,401	S	13,231,137	\$ 602	,548	4.53	\$ 599	,371 \$	Č	(3, 177)
19	380.00	Treatment Equipment	s,	64,581,620	9 \$	5,707,707	s.	65,144,663	\$ 2,355	,132	3.58	\$ 2,332	:,179 \$	0	22,953)
20	381.00	Plant Sewers	\$	6,182,348	<u>م</u>	6,182,348	\$	6,182,348	\$ 140	418	2.27	\$ 140),339 \$		(62)
21	382.00	Outfall Sewer Lines	\$	604,389	∽ (604,389	∽ ↔	604,389	\$ 5. 12	,727	2.11	s •	:,753 \$		26
52	389.10	Other Plant and Miscellaneous Equipment - Intangibles	\$	582,205	<u>م</u>	582,205	<u>م</u>	582,205	s 31	,102	5.34	s 31	,090 S		(12)
57	389.60 00.001	Other Plant and Miscellaneous Equipment - CPS	<u>م</u> د	1,655,000	<u>م</u> د	1 69 705	~ 6	1,681,250	105 8 105 8	,00/	20.94	205 8 205	,054 S		(ççç,c)
47 C	00.066	OLITICE FURTILITIE and Equipment	e e	00/ °01	A 6	100,/U0	A 6	00/'001 2 704 807	0 I C I C I C I C I C I C I C I C I C I	040, 201	21.1		041	5	(7)
07 96	307.00	I ransportation Equipment Stores Equipment	A 9	2,004,7745	A 4	5,U54,841 107 351	• •	2,194,801 107 351	CC7 & 3	504, 575	2.08	017 •	272 S		(07C,81
07	302.00	Joole Shon and Garage Equipment	9 6	100,001	• •	100,101	• •	126,101	e e	C17	5 21	• •	0 158 0 2 17,1		(0)
28	394.00	1 outs, sure and Gatage Equipinent I aboratory Equipment	• •	628 337	÷	729 306	• •	678 821	s 70 43	,420 556	17:0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1,400 J		(0/6/1) (3 (3())
07 07	395.00	Power Onerated Faminment	÷ •	787 629	÷	902,645	÷	847.637	- 5 .	364	434		787		() 577)
30	396.00	Communication Equipment	÷ •∕:	1.669.700) (1.744.214	÷	1.706.957	s 107	830	6.18	\$ 105	.490 \$		(2.340)
31	397.00	Miscellaneous Equipment	\$	496,493	\$	632.594	\$	564.543	\$ 33	372	5.28	\$ 29	808 \$		(3.564)
32	398.00	Other Tangible Plant	S	14,232	\$	14,232	\$	14,232	· • •	547	3.84	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	546 \$		Ξ
33		Total Depreciable Plant	s	339,566,996	\$ 35	4,391,700	\$	346,979,348	\$ 9,067	,027		\$ 8,885	,640 \$	\$ (18	31,387)
ć		A montionation of NTet Colleges							500 0	100		000 0	001		
5								•	160 ¢	061		¢	,120		
35		Total Utility Plant in Service	s	342,559,199	\$ 35	7,383,903	s	349,971,551	\$ 9,964	,217		\$ 9,782	.830 \$	(18	31,387)
	5														
Col. A	: Company v	vitness Spanos, Exhibit No. 11-K 2021, Table 2 Estimated Survivor Curves, Ori	ginal Cos	t, Book Reserve	and Cal	culated Annu	al Depre	eciation Accrual	s Related to Utili	y Plant in S	ervice at Dec	ember 31, 202	1		
Cols. 1	3, D & E: Cc	ompany witness Spanos, Exhibit No. 11-L 2022, Table 2 Estimated Survivor Cur	ves, Orig	inal Cost, Book	Reserve	and Calculat	ed Annu	al Depreciation	Accruals Related	to Utility F	lant in Servic	e at December	r 31, 2022		
			`					-		• 		1			

Exhibit LA-8 Page 62 of 67
Recommended Adjustments with Multiyear Rate Plan	
OCA Table A.3: Average Rate Year 2022,	

Pennsy	Ivania American Water Company										Ex	hibit LA-8
Depre	iation Expense								Was	tewater SSS	Sadsbury (Dperations
Rate Y	ear Ending December 31, 2022							Docket	Nos. R-202	20-3019369 a	nd R-202	0-3019371
											ц	age 4 of 8
									Annua	I Accrual		
		Per Company	Per C	ompany	Average	ц	er Company		Per	- OCA		
		Net Original	Net (Driginal	Net Original	A	nnual Accrual	Annual	Bas	sed on	OCA A	djustment
Line		Cost at	ů S	ost at	for	An	nount Based on	Accrual Rate,	AV	erage	to Dep	reciation
NO.	Description	12/31/2021	12/3	D)	2022 (C)-AVG (A B)	12	/31/2022 Plant	Percent (E)	202	Z Plant	EX1	T) (D)
	Nondepreciable Plant			n)						(1).(2)		(m)-(.r
-	353.30 Land and Land Rights - SPP	\$ 18,3	45 \$	18,345	\$ 18,34;	10						
7	Total Nondepreciable Plant	\$ 18,3	45 \$	18,345	\$ 18,34:	امرا						
	Depreciable Plant											
ŝ	354.30 Structures and Improvements - SPP	\$ 332,8	46 \$	344,725	\$ 338,780	s	6,857	1.99	S	6,742	÷	(115)
4	355.00 Power Generation Equipment	\$ 70,8	32 \$	75,923	\$ 73,37	s	2,155	2.84	S	2,084	S	(71)
5	360.10 Collection Sewers - Force Mains	\$ 207,7	86 \$	211,227	\$ 209,50'	\$	3,069	1.45	S	3,038	S	(31)
9	361.10 Collection Sewers - Gravity Mains	\$ 8,063,1	97 \$	8,094,168	\$ 8,078,682	s	111,987	1.38	S	111,486	S	(501)
٢	361.20 Manholes	\$ 1,319,6	71 \$	1,319,671	\$ 1,319,67	s	29,067	2.20	s	29,033	S	(34)
8	363.00 Services	\$ 847,4	55 \$	858,298	\$ 852,870	\$	17,590	2.05	S	17,484	S	(106)
6	364.00 Flow Measuring Devices	126,	118 \$	126,118	\$ 126,118	\$	8,693	6.89	S	8,690	S	(3)
10	371.00 Pumping Equipment	\$ 517,4	65 \$	517,465	\$ 517,46;	\$	17,022	3.29	s	17,025	\$	3
Ξ	Total Depreciable Plant	\$ 11,485,3	70 \$ 1	1,547,595	\$ 11,516,480	s	196,440		s	195,580	\$	(860)
12	Amortization of Net Salvage					÷	1,107		S	1,107		
13		\$ 11,503,7	15 \$ 1	1,565,940	\$ 11,534,82	\$	197,547		\$	196,687	s	(860)
Notes	ind Source-											

Col. A: Company witness Spanos, Exhibit No. 11-0 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021 Col. B, D & E: Company witness Spanos, Exhibit No. 11-P 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021

Plan
Rate
Multiyear
with
Adjustments
Recommended
2022,
Year
Rate
Average
A.3:
Table
OCA '

Penns. Depred	ylvania Amer ciation Expen	ican Water Company Se										И	/astewater SS	Exete	Exhibit LA-8 r Operations
Rate Y	'ear Ending D	becember 31, 2022									Docket	Nos. R-20	20-3019369 а	d R-20	20-3019371 Page 5 of 8
			Pe Pe	et Original	Per	Company t Original	A	verage Original	Ar P	er Company nual Accrual	Annual	Annua Per Bas	ul Accrual : OCA sed on	0CA	Adjustment
Line No.		Description	1	Cost at 2/31/2021	12	Jost at /31/2022		for 2022	Am 12/	ount Based on 31/2022 Plant	Accrual Rate, Percent	Av 202	erage 2 Plant	to D E	spreciation xpense
	Nondenreci	able Plant		(Y)		(B)	(C)=/	AVG.(A,B)		(D)	(E)	(F)=	(C)*(E)	(<u>G</u>)	=(F)-(D)
-	303.20	Land and Land Rights - Collection	÷	749,405	Ś	749,405	\$	749,405							
7	303.30	Land and Land Rights - SPP	÷	99,930	Ś	99,930	Ś	99,930							
ŝ	303.40	Land and Land Rights - TDP	÷	2,261,697	Ś	2,261,697	s	2,261,697							
4		Total Nondepreciable Plant	÷	3,111,032	S	3,111,032	÷	3,111,032							
	Depreciable	e Plant													
5	354.20	Structures and Improvements - Collection	S	71,425	Ś	71,674	Ş	71,549	Ś	1,838	2.56	S	1,832	Ś	(9)
9	354.30	Structures and Improvements - SPP	S	2,180,185	Ś	2,218,764	Ş	2,199,475	÷	37,823	1.70	S	37,391	Ś	(432)
7	354.40	Structures and Improvements - TDP	÷	104,203,025	Ś	04,535,522	Ś	104,369,274	Ś	1,586,643	1.52	÷	1,586,413	S	(230)
8	355.00	Power Generation Equipment	S	65,932	S	65,932	Ş	65,932	Ś	1,407	2.13	S	1,404	÷	(3)
6	360.10	Collection Sewers - Force Mains	S	1,327,403	÷	1,327,403	Ş	1,327,403	s	18,482	1.39	S	18,451	÷	(31)
10	361.10	Collection Sewers - Gravity Mains	Ś	48,053,836	÷	49,387,060	Ş	48,720,448	÷	675,442	1.37	Ś	667,470	÷	(7, 972)
11	361.20	Manholes		11,451,568	÷	11,488,738	S	11,470,153	÷	373,877	3.25	÷	372,780	÷	(1,097)
12	363.00	Services	÷	25,360,113	÷	25,430,397	S	25,395,255	÷	652,321	2.57	S	652,658	÷	337
13	364.00	Flow Measuring Devices	÷	36,936	÷	36,936	Ś	36,936	÷	2,564	6.94	÷	2,563	÷	(1)
14	365.00	Flow Measuring Installations	Ś	227,265	Ś	227,265	Ś	227,265	÷	8,248	3.63	S	8,250	Ś	7
15	371.00	Pumping Equipment	Ś	840,166	Ś	840,166	Ś	840,166	\$	33,870	4.03	s	33,859	Ś	(11)
16	380.00	Treatment Equipment	Ś	1,026,218	Ś	1,026,218	Ś	1,026,218	÷	38,030	3.71	Ś	38,073	Ś	43
17	389.60	Other Plant and Miscellaneous Equipment - CPS	6 +	200,000	\$	1,437,040	\$	818,520	s i	318,166	22.14	6 9 (181,220	ŝ	(136,946)
18	390.00	Office Furniture and Equipment	s +	84,102	\$	94,102	s +	89,102	se +	4,676	4.97	\$	4,428	\$	(248)
19	391.00	I ransportation Equipment	s ·	25,437	~	25,437	÷ •	25,437	se ·	204	0.80	\$	203	~	Ē
20	393.00	Tools, Shop and Garage Equipment	\$	438,938	\$	458,938	\$	448,938	\$	23,416	5.10	s	22,896	s	(520)
21	394.00	Laboratory Equipment	Ś	52,784	Ś	42,354	S	47,569	Ś	5,191	12.26	S	5,832	Ś	641
22	396.00	Communication Equipment	Ś	267,604	Ś	277,604	S	272,604	÷	18,480	6.66	Ś	18,155	Ś	(325)
23	397.00	Miscellaneous Equipment	÷	333,239	s	343,239	s	338,239	S	22,571	6.58	s	22,256	s	(315)
24		Total Depreciable Plant	÷	196,246,179	Ś	99,334,792	\$	197,790,486	S	3,823,249		\$	3,676,135	Ś	(147,114)
25		Amortization of Net Salvage						·	S	14,922		S	14,922		
26		Total Utility Plant in Service	÷	199,357,211	Ś	02,445,824	s	200,901,518	s	3,838,171		s	3,691,057	÷	(147,114)

Notes and Source: Col. A: Company witness Spanos, Exhibit No. 11-S 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-T 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021

Plan
Rate
Multiyear
with
d Adjustments
Recommende
2022,
Year
Rate
Average
Table A.3:
OCA '

Pennsy Deprec	lvania Amei iation Exper	ican Water Company Ise										Was	stewater CSS	Scranton	xhibit LA-8 Operations
Rate Y.	ear Ending I	December 31, 2022									Docket	Nos. R-20	20-3019369 a	ocr nd R-20	20-3019371
Line No.		Description		Per Company Net Original Cost at 12/31/2021	Ne Ne	Company t Original Cost at (31/2022	Av	erage Original for (022	Per C Annus Amoun 12/31/2	ompany I Accrual t Based on 022 Plant	Annual Accrual Rate, Percent	Annu: Pe Ba Ar	al Accrual r OCA ised on verage 22 Plant	to De Ey	Page 6 of 8 Adjustment preciation coense
				(Y)		(B)	(C)=A	VG.(A,B)		D)	(E)	(F)=	=(C)*(E)	(<u>G</u>)	=(F)-(D)
-	303-20	able riant I and and I and Rights - Collection	9	599 223	¢.	500 223	a	599 223							
. 61	303.30	Land and Land Rights - SPP	⇒ ∽	43,570	e e e	43,570	• ••	43.570							
ю	303.40	Land and Land Rights - TDP	S	110,020	\$	110,020	\$	110,020							
4		Total Nondepreciable Plant	S	752,812	s	752,812	s	752,812							
	Depreciable	e Plant													
5	354.20	Structures and Improvements - Collection	S	4.265.676	S	4,611,493	s	4,438,585	s	120,358	2.61	s	115,847	S	(4.511)
9	354.30	Structures and Improvements - SPP	S	7,208,750	\$	7,793,161	s	7,500,956	\$	197,535	2.53	s	189,774	S	(7,761)
7	354.40	Structures and Improvements - TDP	S	57,934,318	÷	62,833,703	S	60,384,011	\$	1,525,207	2.43	S	1,467,331	÷	(57,876)
8	360.10	Collection Sewers - Force Mains	\$	355,955	÷	355,955	s	355,955	\$	4,477	1.26	\$	4,485	÷	8
6	361.10	Collection Sewers - Gravity Mains	\$	103,914,007	\$	07,847,717	\$ 1	05,880,862	\$	1,532,376	1.42	s	1,503,508	÷	(28, 868)
10	361.20	Manholes	\$	17,292,376	S	17,476,642	s	17,384,509	\$	331,151	1.89	s	328,567	÷	(2,584)
11	362.00	Special Collection Structures		12,631,539	S	14,093,316	s	13,362,428	\$	296,864	2.11	s	281,947	÷	(14,917)
12	363.00	Services	S	10,500,495	Ś	10,853,294	÷	10,676,894	÷	232,314	2.14	s	228,486	Ś	(3, 828)
13	364.00	Flow Measuring Devices	S	1,168,414	Ś	1,168,414	÷	1,168,414	÷	94,130	8.06	s	94,174	Ś	44
14	371.00	Pumping Equipment	S	5,866,135	Ś	6,863,524	ŝ	6,364,829	\$	308,356	4.49	S	285,781	Ś	(22, 575)
15	380.00	Treatment Equipment	÷	21,618,340	÷	25,607,897	÷	23,613,119	÷	953,351	3.72	÷	878,408	÷	(74, 943)
16	382.00	Outfall Sewer Lines	÷	1,554,032	÷	3,015,810	s	2,284,921	s	71,806	2.38	s	54,381	÷	(17,425)
17	389.10	Other Plant and Miscellaneous Equipment - Intangibles	\$	4,279,906	∽	4,279,906	\$	4,279,906	\$	244,548	5.71	∽	244,383	\$	(165)
18	389.60	Other Plant and Miscellaneous Equipment - CPS	S	120,000	\$	120,000	S	120,000	8	24,000	20.00	\$	24,000	Ś	
19	390.00	Office Furniture and Equipment	S 1	1,007,994	\$	1,007,994	se +	1,007,994	8 4	61,262	6.08	\$	61,286	\$	24
20	391.00	Transportation Equipment	\$	5,078,208	\$	5,100,708	s,	5,089,458	69	307,893	6.04	\$	307,403	\$	(490)
21	393.00	Tools, Shop and Garage Equipment	\$	1,429,131	6 9 (1,631,631	6 9 +	1,530,381	6 9 +	95,025	5.82	6 9 (89,068	6 9 +	(5,957)
22	394.00	Laboratory Equipment	s	146,329	\$	145,260	s	145,794	\$	12,373	8.52	\$	12,422	s	49
23	395.00	Power Operated Equipment	S	718,832	Ś	718,832	ŝ	718,832	\$	15,587	2.17	S	15,599	Ś	12
24	396.00	Communication Equipment	S	442,161	Ś	442,161	s	442,161	÷	30,576	6.92	S	30,598	Ś	22
25	397.00	Miscellaneous Equipment	S	330,887	s	330,887	s	330,887	\$	22,479	6.79	s	22,467	s	(12)
26		Total Depreciable Plant	\$	257,863,485	s	16,298,306	\$ 2	67,080,895	s	6,481,668		s	6,239,915	s	(241,753)
27		Amortization of Net Salvage						I	S	360,842		S	360,842		
28		Total Utility Plant in Service	\$	258,616,297	\$:77,051,118	\$ 2	67,833,707	\$	6,842,510		\$	6,600,757	s	(241,753)
Notes &	nd Source:														

Col. A: Company witness Spanos, Exhibit No. 11-W 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-X 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021

Plan
Rate
Multiyear
with
Adjustments
Recommended
2022,
Year
Rate
Average
A.3:
Table
OCA '

Exhibit LA-8 Wastewater CSS McKeesport Operations

Pennsylvania American Water Company Depreciation Expense

, ,	- - -										- - -	4 4		Sch	iedule C-14
Nale	r car Enumg .	December 31, 2022									DOCKEL	105. K-20	18 6066106-07	07-VI DI	Page 7 of 8
												Annu	al Accrual		ı
			_	Per Company Net Original	Per o	Company Original	√ a	t Original	Per (Company al Accrual	Annual	Pe Ba	r OCA sed on	OCA /	Adiustment
Line				Cost at	0	ost at		for	Amou	it Based on	Accrual Rate,	Ą	verage	to De	preciation
No.		Description		12/31/2021	12/	31/2022		2022	12/31/	2022 Plant	Percent	202	2 Plant	Ê	cpense
	North Street Street	2.415 Min.44		(Y)		(B)	(C)=	AVG.(A,B)		(D)	(E)	(F)=	(C)*(E)	(<u></u>	=(F)-(D)
-	353.30	table rtant Land and Land Rights - SPP	~	1.110.000	6	1.110.000	~	1.110.000							
7		Total Nondepreciable Plant	Ś	1,110,000	s	1,110,000	÷	1,110,000							
	Depreciabl	e Plant													
ю	354.30	Structures and Improvements - SPP	\$	15,401,686	÷	15,866,547	Ş	15,634,117	S	327,093	2.06	Ş	322,063	Ś	(5,030)
4	354.40	Structures and Improvements - TDP	s	54,867,532	S	56,523,570	Ş	55,695,551	s	816,795	1.45	S	807,585	S	(9,210)
5	355.00	Power Generation Equipment	\$	1,009,702	÷	1,009,702	s	1,009,702	s	34,975	3.46	s	34,936	Ś	(39)
9	360.10	Collection Sewers - Force Mains	s	2,134,629	s	2,480,880	÷	2,307,755	s	39,366	1.59	S	36,693	S	(2, 673)
7	361.10	Collection Sewers - Gravity Mains	\$	237,618,667	\$	40,734,922	s	239,176,795	s	2,850,187	1.18	s	2,822,286	Ś	(27, 901)
8	361.20	Manholes	s	15,499,015	s	15,561,433	s	15,530,224	s	136,240	0.88	s	136,666	s	426
6	364.00	Flow Measuring Devices		558,990	\$	558,990	÷	558,990	s	43,245	7.74	s	43,266	Ś	21
10	371.00	Pumping Equipment	S	8,297,806	\$	8,297,806	÷	8,297,806	s	317,388	3.82	s	316,976	Ś	(412)
11	380.00	Treatment Equipment	S	31,447,713	\$	31,447,713	÷	31,447,713	s	874,820	2.78	s	874,246	Ś	(574)
12	382.00	Outfall Sewer Lines	S	45,000	\$	45,000	÷	45,000	s	1,036	2.30	s	1,035	Ś	(1)
13	390.00	Office Furniture and Equipment	S	518,495	\$	565,475	÷	541,985	s	27,107	4.79	s	25,961	Ś	(1, 146)
14	391.00	Transportation Equipment	S	1,211,655	\$	1,211,655	÷	1,211,655	s	70,224	5.80	s	70,276	Ś	52
15	393.00	Tools, Shop and Garage Equipment	\$	517,615	\$	682,045	Ś	599,830	÷	34,293	5.03	S	30,171	÷	(4, 122)
16	394.00	Laboratory Equipment	S	107,670	\$	107,670	÷	107,670	s	10,671	9.91	s	10,670	Ś	(1)
17	395.00	Power Operated Equipment	S	714,356	\$	714,356	Ś	714,356	s	25,592	3.58	s	25,574	Ś	(18)
18	396.00	Communication Equipment	s	1,128,585	s	1,152,075	\$	1,140,330	s	67,034	5.82	s	66,367	s	(667)
19		Total Depreciable Plant	S	371,079,117	з З	76,959,839	S	374,019,478	s	5,676,066		s	5,624,773	÷	(51, 293)
20		Amortization of Net Salvage						•	\$	231,191		S	231,191		
21		Total Utility Plant in Service	\$	372,189,117	\$ 3	78,069,839	\$	375,129,478	\$	5,907,257		\$	5,855,964	\$	(51,293)
Motor	and Course.														

Notes and Source: Col. A: Company winess Spanos, Exhibit No. 11-AA 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-AB 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accruals Related to Utility Plant in Service at December 31, 2021

Plan
Rate
Multiyear
with
Adjustments
Recommended
2022,
Year
Average Rate J
Table A.3:
OCA

Exhibit LA-8

Wastewater CSS Kane Operations

Pennsylvania American Water Company Depreciation Expense

Rate Y	/ear Ending I	December 31, 2022									Docket	Nos. R-20	20-3019369 ai	Sc nd R-20	hedule C-14 20-3019371 Page 8 of 8
												Annua	ıl Accrual		-
				Per Company Net Original	3 Z	er Company Let Original	√ Ne	Average 4 Original	A P	r Company mual Accrual	Annual	Per Ba	: OCA sed on	OCA	Adiustment
Line		Description		Cost at 12/31/2021	. –	Cost at 2/31/2022		for 2022	Am /21	ount Based on 31/2022 Plant	Accrual Rate, Percent	A1 202	erage 2 Plant	to Do	preciation
		round i soor		(A)		(B)	(C)=	AVG.(A,B)	Ĩ	(D)	(E)	(F)=	(C)*(E)	9	=(F)-(D)
-	Nondepreci 353-20	iable Plant I and and I and Richte - Collection	÷	38 022	¥	38 027	¥	38.027							
- 6	04.000	Total Nondepreciable Plant	÷ ~	38,022	• •	38,022	e ee	38,022							
	Depreciable	e Plant													
ŝ	354.30	Structures and Improvements - SPP	s	2,239,223	S	2,273,000	s	2,256,112	Ś	44,358	1.95	÷	43,994	Ś	(364)
4	354.40	Structures and Improvements - TDP	\$	11,278,627	S	11,448,759	S	11,363,693	Ś	222,749	1.95	S	221,592	Ś	(1, 157)
5	360.10	Collection Sewers - Force Mains	S	551,256	S	551,256	Ś	551,256	Ś	7,392	1.34	÷	7,387	S	(5)
9	361.10	Collection Sewers - Gravity Mains	S	10,524,980	S	11,222,180	Ś	10,873,580	÷	151,451	1.35	÷	146,793	Ś	(4,658)
٢	361.20	Manholes	S	997,356	S	1,080,438	Ś	1,038,897	Ś	31,240	2.89	÷	30,024	S	(1,216)
8	363.00	Services	S	348,675	S	381,253	\$	364,964	÷	9,908	2.60	÷	9,489	÷	(419)
6	364.00	Flow Measuring Devices		29,601	S	29,601	÷	29,601	÷	1,897	6.41	Ş	1,897	S	0
10	371.00	Pumping Equipment	S	1,571,391	S	1,571,391	\$	1,571,391	÷	48,916	3.11	÷	48,870	÷	(46)
11	380.00	Treatment Equipment	s	6,168,082	S	6,168,082	s	6,168,082	÷	197,904	3.21	Ś	197,995	Ś	91
12	381.00	Plant Sewers	S	1,576,345	S	1,576,345	\$	1,576,345	÷	31,988	2.03	÷	32,000	÷	12
13	389.10	Other Plant and Miscellaneous Equipment - Intangibles	S	733	S	733	\$	733	÷	68	9.28	÷	68	÷	0)
14	389.60	Other Plant and Miscellaneous Equipment - IntangibCPS	S		S	1,438,800	\$	719,400	÷	317,069	22.04	÷	158,556	÷	(158,513)
15	390.00	Office Furniture and Equipment	S	22,475	S	32,475	÷	27,475	÷	1,085	3.34	Ş	918	S	(167)
16	391.00	Transportation Equipment	S	33,668	S	33,668	\$	33,668	÷	1,403	4.17	÷	1,404	÷	1
17	392.00	Stores Equipment	S	6,403	S	6,403	Ś	6,403	Ś	275	4.29	S	275	Ś	0)
18	393.00	Tools, Shop and Garage Equipment	S	116,859	S	130,246	÷	123,552	÷	8,605	6.61	÷	8,167	Ś	(438)
19	395.00	Power Operated Equipment	S	2,684	\$	2,684	Ś	2,684	Ś	120	4.47	S	120	Ś	0)
20	396.00	Communication Equipment	\$	379,045	S	389,045	Ś	384,045	Ś	26,516	6.82	S	26,192	S	(324)
21	397.00	Miscellaneous Equipment	\$	264,000	s	406,000	s	335,000	\$	27,843	6.86	s	22,981	\$	(4, 862)
		Total Depreciable Plant	S	36,111,404	÷	38,742,360	s	37,426,882	s	1,130,787		s	958,722	s	(172,065)
22		Amortization of Net Salvage							s	8,120		÷	8,120		
23		Total Utility Plant in Service	S	36,149,426	s	38,780,382	÷	37,464,904	s	1,138,907		s	966,842	s	(172,065)

Notes and Source: Col. A: Company witness Spanos, Exhibit No. 11-AD 2021, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accuals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-AE 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accuals Related to Utility Plant in Service at December 31, 2021 Cols. B, D & E: Company witness Spanos, Exhibit No. 11-AE 2022, Table 2 Estimated Survivor Curves, Original Cost, Book Reserve and Calculated Annual Depreciation Accuals Related to Utility Plant in Service at December 31, 2022

Ι	LIST OF APPENDICES TO OCA ABRIDGED MAIN BRIEF
Appendix A	A.1: OCA Rate Case Tables, Zero IncreaseA.2: OCA Rate Case Tables, End of Rate Year 2021A.3: OCA Rate Case Tables, Average Rate Year 2022
Appendix B	Proposed Findings of Fact - PUBLIC
Appendix C	Proposed Conclusions of Law and Ordering paragraphs
Appendix D	List of OCA-Sponsored Testimony and Exhibits admitted into the record
Appendix E	Summary of Public Input Hearing Testimony
Appendix F	Supplement to OCA Main Brief I. Introduction and Overview I.B. Procedural History

APPENDIX A

OCA RATE CASE TABLES

- Table A.1: Zero Increase
- Table A.2: End of Rate Year 2021, Recommended Adjustments with No Multiyear Rate Plan
- Table A.3: Average Rate Year 2022, Recommended Adjustments with Multiyear Rate Plan

OCA PROPOSED FINDINGS OF FACT

OVERALL POSITION ON RATE INCREASE

- 1. PAWC could continue operations, recover all of its expenses, and earn a profit with no revenue increase. OCA St. 1 at 28.
- 2. While perhaps not as much profit as PAWC would like but more than the OCA's accounting and financial experts recommend, the overall rate of return of 7.70% for water and 2.84% for wastewater without any change in rates is more than adequate. See OCA App. A.1, Table I Total Water and Table I Total Wastewater.
- 3. Most Pennsylvania businesses would be absolutely thrilled if they could pay all their bills (including various increases in expenses that may or may not occur next year), make all of their debt payments, and still have enough left over to earn a profit on their equity investment. OCA St. 1 at 28-29.
- 4. The Commission should not rely on essentially every aspect of the Company's projections PAWC's FPFTY projections and related assumptions which were developed before the pandemic emerged. OCA St. 1 at 29.
- 5. Interest rates have dropped to near zero, oil prices have plunged and consumer prices have barely changed. OCA St. 1 at 29.
- 6. If PAWC is concerned about operating revenues during this uncertain time and moving forward, PAWC could defer new construction projects that are not necessary to ensure the current provision of safe and reliable service to existing customers. OCA St. 1. at 30.
- 7. Some utilities are refinancing and issuing debt at historically low levels. OCA St. 1. at 30.
- 8. PAWC could file rate cases after the pandemic once the "dust settles" and reliable and complete evidence of the full effect of the pandemic will be available to determine just and reasonable rates. OCA St. 1. at 30.
- 9. There is precedent supporting the Commission's authority to determine that raising rates would not be just and reasonable during this time of extreme economic hardship for ratepayers. OCA St. 1 SR at 21-22.
- 10. The economic repercussions of the COVID-19 pandemic—to the extent yet known—are real and significant in PAWC's service territory and the OCA submits that the Commission must give great weight to the circumstances of consumers during these extraordinary times. OCA St. 1 at 14.

- 11. As of mid-July, the unemployment rates in the counties served in whole or in part by PAWC ranged from 8.8% in Centre County to 17.4% in Monroe County. OCA St. 1 at 14-15, Fig. 4, Sch. SJR-1.
- 12. In mid-August, the picture was not substantially better, with unemployment rates in the counties served in whole or in part by PAWC ranging from 6% to 13.1%. Figure 4 updated at Sch. SJR-10-SR at 2.
- 13. As a consequence of the massive job losses across Pennsylvania, there were 30 times as many initial unemployment claims during the week ending March 21, 2020 and 33 times as many during the next week ending March 28, 2020 than the amount during the week ending March 7, 2020 as shown in shown in OCA St. 1 SR, Sch. SJR-10-SR at 1.
- 14. At the end of September, initial unemployment claims have declined since peaking in March at 400,000 claims in one week, but the level of initial unemployment claims in September were still about 50% higher than it was in February 2020. OCA St. 1 SR at 3.
- 15. During September, between 22,000 and 23,000 Pennsylvania workers filed initial unemployment claims each week. OCA St. 1 SR at 3.
- 16. In the space of 6.5 months (mi-March to the end of September), more than 39 percent of Pennsylvania's workforce filed an unemployment claim. OCA St. 1 SR at 3.
- According to a survey conducted by the U.S. Census Bureau, roughly 50% of Pennsylvania households experienced wage loss from March 13, 2020 through July 21, 2020 as shown in Figure 5 below and while down a bit at the end of September, the number of households experiencing wage loss was still approximately 45%. OCA St. 1 SR at 3; Sch. SJR-10-SR at 3, Figure 5 (Updated).
- 18. Only 60% of Pennsylvanians who lost income said they used their normal source of income to pay bills in the previous week. OCA St. 1 at 18.
- 19. About 26% of Pennsylvanians who lost income said they used unemployment benefits and 27% referred to the CARES Act stimulus payments. OCA St. 1 at 18. More people relied on credit card debt or loans (including loans from family or friends) (40%) or money from savings or asset sales (35%) than relied on short-term government benefits. OCA St. 1 at 18.
- 20. A recent survey conducted by the Electric Power Research Institute ("EPRI") found that about two-thirds of people who lost their jobs during the pandemic are concerned about being able to pay their energy bills. OCA St. 1 at 18-19.
- 21. More than 20% of the EPRI survey respondents reported that their energy bills were higher because of the pandemic. OCA St. 1 at 18-19.

- 22. The EPRI survey found that more than 25% of people who lost their jobs are planning to skip at least one utility bill payment, but a much lower percentage were planning to contact their utilities for assistance. OCA St. 1 at 18-19, Sch. SJR-5, pp. 3, 7, 12.
- 23. The economic repercussions of the pandemic are affecting minorities and individuals of lower income the most. OCA St. 1 at 17-18.
- 24. The lower a household's income, the greater the impact of the pandemic on income loss. OCA St. 1 at 17-18.
- 25. Households headed by a person who the Census Bureau categorizes as being Black or Hispanic are much more likely to have experienced an income loss -- and to expect additional income loss into mid-August -- than are households headed by a White, Non-Hispanic. OCA St. 1 at 17-18.
- 26. Water and wastewater rate increases in the PAWC service territory will not only increase the financial burden faced by customers experiencing job and wage loss due to the pandemic, but will likely increase that burden particularly on those individuals belonging to low-income and Black or Hispanic households. OCA St. 1 at 17-18.
- As of September 28 only 50% of Pennsylvania households were able to use their regular source of income to pay their bills. OCA St. 1 SR at 20, SJR-10-SR, p. 8.(updated SJR-4).
- 28. About 21% of Pennsylvania households cited unemployment benefits and 28% referred to the CARES Act stimulus payments as sources of income to pay their bills. OCA St. 1 SR at 20, SJR-10-SR, p. 8.(updated SJR-4).
- 29. More people had to rely on credit card debt or loans (including loans from family or friends) (39%) or money from savings or asset sales (27%) than relied on short-term government benefits. OCA St. 1 SR at 20, SJR-10-SR, p. 8.(updated SJR-4).
- 30. At the end of August, the Census Bureau's Small Business Pulse Survey for Pennsylvania. reported that 46% of Pennsylvania's small businesses expected it to take six months or more to return to a normal level of operations, with another 11% saying their business would never fully recover. OCA Statement 1, at 19-20.
- 31. In the week ending October 3, 44% of Pennsylvania's small businesses said they would take at least six months to recover. OCA St. 1 SR at 3; see also OCA St. 1 at 19-20.
- 32. Based on the data drawn from surveys and reports on the economic well-being of households and businesses both in PAWC's service territory and in Pennsylvania from the start of the pandemic, rates in PAWC's service territories not be raised at this time. OCA St. 1 at 4-5.

- 33. The economic hardships faced by customers in PAWC's service territories should not be added to by any increase in PAWC's rates at this time.
- 34. In February 2020, the last full month before the economic collapse, the Consumer Price Index (CPI) was 258.678. OCA St. 1 SR at 22
- 35. The CPI dropped to 256.389 or by 0.9%, in April. OCA St. 1 SR at 22.
- 36. In July, the CPI had increased to 259.101 or where it had been prior to the shut-down of segments of the economy in March. OCA St. 1 SR at 22.
- 37. The producer price index (PPI) measures the price suppliers are able to charge to businesses for goods and services used by the business in its retail products. OCA St. 1 at 22.
- 38. The PPI has been recovering more slowly than the CPI, indicating that the economy is still far from having fully recovered. OCA St. 1 at 22.
- 39. The PPI was 118.6 in February 2020, fell to 116.6, or by 1.7%, in April 2020 and had "recovered" to 118.0 in July 2020, or 0.5% below the pre-pandemic level. OCA St. 1 at 22-23.
- 40. In September, the PPI was at 118.9, or 0.3% higher than February 2020. OCA St. 1 at 23.
- 41. The CPI and PPI numbers show a return to near-February 2020 levels. OCA St. 1 at 23.
- 42. The Commission must focus on what rates are reasonable for consumers to pay under these extraordinary conditions. OCA St. 1 at 22.
- 43. There are many examples where utilities have either withdrawn or deferred filing rate increase requests to provide relief to their customers who are likely spending more time at home and/or experiencing some level of income loss during this pandemic. OCA St. 1 at 25-26.
- 44. Minnesota Power significantly reduced its requested rate increase and is refunding more than \$12 million to customers to help alleviate pandemic-related financial concerns. OCA St. 1 at 25-26.
- 45. California Water Service Co. is eliminating all scheduled rate increases during 2020. OCA St. 1 at 25-26.
- 46. Chelan County (Washington) Public Utility District is postponing previously approved increases in electric, water, and wastewater rates by six months to provide customers some relief during the pandemic. OCA St. 1 at 25-26.

- 47. The City of Austin (Texas) reduced its electricity rates by about 4%, eliminated the residential price increment for usage in excess of 1,000 kilowatt-hours per month, and reduced rates for residential water and wastewater consumption by 10%. OCA St. 1 at 25-26.
- 48. PEPCO, the electric utility serving the District of Columbia and surrounding areas, announced on June 1st that it would forego a \$25 million rate increase scheduled for this year in D.C., make a shareholder donation to its low-income assistance fund, and take other actions to assist customers during the pandemic. OCA St. 1 at 25-26.
- 49. A report by Moody's Investors Service expects similar delays in numerous electric, gas, and water utility rate proceedings throughout the U.S. as a way of providing some relief to consumers during the pandemic. OCA St. 1 at 25-26.
- 50. Minnesota Power significantly reduced its requested rate increase and is refunding more than \$12 million to customers to help alleviate pandemic-related financial concerns. OCA St. 1 at 25-26.
- 51. California Water Service Co. is eliminating all scheduled rate increases during 2020. OCA St. 1 at 25-26.
- 52. Philadelphia Water Department withdrew its pending request for increases in water, wastewater, and stormwater rates that would have become effective in September 2020 and September 2021. In a June 2020 filing, the utility cited "the on-going pandemic and the uncertainty over the anticipated duration of continuing emergency measures. OCA St. 1 at 25-26
- 53. PAWC would have enough revenue to continue safe and reliable operations if its rates were to remain unchanged. OCA St. 1 at 28 citing PAWC Exh. 3-A, pp. 1, 70.
- 54. In the historic test year (twelve months ending December 31, 2019), under its existing rates, PAWC had per books net income of \$173.9 million for water operations (excluding Steelton). This provided the Company with a return on common equity of approximately 8.69%. OCA St. 1 at 28 citing PAWC Exh. 3-A, pp. 1, 70.
- 55. Even assuming some of PAWC's FPFTY projections are accurate, OCA Witness Ralph Smith concluded that PAWC had a revenue sufficiency for water of \$68,333,994 and a rate increase of \$30,906,901 for wastewater under traditional ratemaking, but that number remains speculative given the uncertainty of the projections and future operations. OCA St. 2SR at 5-6; OCA Exh. LA-6, Sch. A.
- 56. The current and projected ratepayer affordability of rates gives strong weight to the conclusion that granting PAWC's rate requests in this proceeding would unnecessarily harm ratepayers and not result in just and reasonable rates. OCA St. 1 at 30.

- 57. If the economic situation worsens significantly and cash flow becomes a concern for PAWC, the Company could preserve cash by deferring for several months certain construction projects, such as growth-related projects or longer-term system rehabilitation activities, which are not needed to ensure the current provision of safe and reliable service to existing customers. OCA St. 1 at 30.
- 58. Other large utilities have been taking advantage of the very low cost of debt and issuing 10-year notes or bonds at what are historically low interest rates. OCA St. 1 at 30.
- 59. Low-cost, long-term financing can help provide cash flow needed to keep existing rates in effect throughout the pandemic without suffering significant economic harm. OCA St. 1 at 30.
- 60. Recent headlines show a gas utility issuing debt at a 2.2% interest rate and a utility in the southern U.S. issuing debt at 1.75%. OCA St. 1 at 30, ftnote 38 and 39.
- 61. PAWC's weighted cost of debt is in the range of 4.5%. OCA St. 1 at 30, at ftnote 40; PAWC Exh. 3-A, p. 70.
- 62. The OCA's calculations demonstrate that, at PAWC's current rates, it will still earn a 7.70% and 2.84% rate of return for water and wastewater, respectively. See OCA App. A.1, Table I Total Water and Table I Total Wastewater.
- 63. At its core, regulation is designed to protect utility consumers from what otherwise would be the unfettered power of a monopoly to set prices and the conditions of service." OCA St. 1 at 7.
- 64. Utility regulators should attempt to set rates within the "zone of reasonableness" which captures the interests of the ratepayers, the utility's investors, officers and employees, and local governments whose residents are served by the utility. OCA St. 1 at 8.
- 65. Under normal conditions, there is often an area of overlap of interests between utility customers and the utility, including its investors. OCA St. 1 at 8.
- 66. Regulators are provided a range of rates that utility customers would be willing and able to pay for service and investors would consider a reasonable return on their investment. OCA St. 1 at 9.
- 67. Under certain conditions the two ranges may not overlap—creating no "zone of reasonableness" at all. OCA St. 1 at 9-10.
- 68. When the two ranges do not overlap, regulators are tasked with setting rates outside of one of the ranges, or both. OCA St. 1 at 10.
- 69. Under the above-described economic conditions faced by PAWC's customers brought on by the pandemic, the range of rates the customers would be willing and able to pay for

service has shifted away from the range of rates which would, in the eyes of the utility, provide a reasonable return on investment. OCA St. 1 at 10.

- 70. Utility regulators must recognize the economic environment in which utilities operate. OCA St. 1 SR at 21.
- 71. Utility's regulators' recognition of the economic environment in which utilities operate is supposed to be reflected not just in the authorized rate of return, but also in the ultimate rates determined to be just and reasonable. OCA St. 1 SR at 21.
- 72. Whether a rate is just and reasonable is a function not just of the utility's costs but also of the value and affordability of service to the customer. OCA St. 1 SR at 21.
- 73. Importantly, though, regulation is not designed to insulate the utility or its investors from normal market forces, technological improvements, or general economic conditions. OCA St. 1 at 7-8.
- 74. If market forces (such as technological change) result in significant reductions in the demand for service, then the utility may not be able to recover its costs. That is not a failure of regulation, but a natural evolution of the market -- businesses fail if they cannot keep up with changes in consumers' preferences or respond to technological innovations. OCA St. 1 at 7-8.
- 75. If economic conditions change such that rates become unaffordable to many customers, rates may need to be reduced in order to remain "just and reasonable from the perspective of customers. OCA St. 1 at 7-8.
- 76. PAWC's FPFTY projections in its filing submitted just weeks after the pandemic reached its service territory is another basis for PAWC's rate increases to be rejected. OCA St. 1 at 12.
- 77. The Company filed this case on April 29, 2020, when its service area -- indeed the entire world -- was being devastated with the worst pandemic in a century. OCA St. 1 at 12
- 78. It takes months to prepare a rate filing, and PAWC prepared this case assuming "business as usual," there was nothing that compelled it to actually file the case. OCA St. 1 at 12.
- 79. Changes and uncertainties in FPFTY assumptions, including interest rates, inflation, and how much consumption for each customer classes and other elements that enter into the ratemaking process, could not be accurately projected in the months leading up to PAWC's April filing or relied on to make reasonable findings or conclusions in this proceeding.. OCA St. 1 at 27.
- 80. The use of the FPFTY is discretionary and, the Commission may, at its discretion, adjust the Company's rates on the basis of it FPFTY data evidencing the accuracy of its estimates. OCA St. 1 at 29-30.

- 81. The Commission cannot have any certainty about the appropriate, ongoing level of expenses, interest rates, consumption patterns, and the numerous other factors that affect the determination of an appropriate level of rates. OCA St. 1 at 29-30.
- 82. The Commission must focus on what rates are reasonable for consumers to pay under these extraordinary conditions. OCA St. 1 at 22.

PAWC'S PROPOSED MULTI-YEAR RATE PLAN

- 83. PAWC has proposed to increase its water and wastewater rates in January 2021 by \$92.4 million (12.9%) and by \$46.2 million (5.8% above the January 2021 level) in January 2022. OCA St. 1 at 32.
- 84. There are three factors that make a MYRP inappropriate in this case. OCA St. 1 at 33-35.
- 85. The first factor that makes a MYRP inappropriate in this case is that Pennsylvania is in the midst of the COVID-19 pandemic. OCA St. 1 at 33.
- 86. The pandemic affects nearly all aspects of daily life, there is uncertainty about how long it will last, and how long it will take the economy to recover. OCA St. 1 at 33.
- 87. There are serious doubts about the reliability of PAWC's projections for 2021 and 2022. OCA St. 1 at 33.
- 88. The second factor that makes a MYRP inappropriate in this case is that one of the stated purposes of a MYRP is to delay the filing of the next rate case, while providing benefits to customers. OCA St. 1 at 33.
- 89. The types of benefits a MYRP (or other alternative ratemaking might provide) were addressed by the Commission in a 2019 Policy Statement. OCA St. 1 at 33.
- 90. PAWC did not discuss any of the factors in the Commission's 2019 Policy Statement in its testimony. OCA St. 1 at 33.
- 91. The fourth factor listed in the Policy Statement regarding how the [alternative] "ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting." 52 Pa. Code § 69.3302(a)(4).
- 92. PAWC failed to propose a separate stormwater rate in the three service areas that have combined sewer systems which are systems that transport sanitary sewage and stormwater through the same pipes. OCA St. 1 at 34.
- 93. The three combined sewer systems are Kane, McKeesport, and Scranton. OCA St. 1 at 34.

- 94. PAWC does not currently charge any stormwater-related costs to properties that cause those costs to be incurred. OCA St. 1 at 34.
- 95. PAWC has all stormwater-related costs paid either through sewer rates or by water customers. OCA St. 1 at 34.
- 96. To the extent that the MYRP would delay the next case, it would defer the implementation of separate stormwater rates. OCA St. 1 at 34.
- 97. In other jurisdictions, when a MYRP is used rates for the years beyond the test year are often based on specific cost increases like a contractual wage increases or specific capital plans. OCA St. 1 at 34.
- 98. In a MYRP, future rate levels are not set years in advance; but a process is established that allows the utility to update particular elements of its cost of service, and to prove that the increases actually occurred, before implementing a future rate increase. OCA St. 1 at 34.
- 99. PAWC's proposed MYRP process is that the Commission determine in this case what rates will be for 2022 and nothing can change that. OCA St. 1 at 35.
- 100. Under PAWC's proposed MYRP, it will not matter if the Company installs the plant it is projecting, whether costs increase or decrease, whether the Company reduces its capital costs by taking advantage of historically low interest rates, whether sales change, or anything else changes, before 2022. OCA St. 1 at 35.
- 101. No one can accurately forecast an entire revenue requirement two years in advance. OCA St. 1 at 35.
- 102. This lack of accuracy in forecasting two years in advance is exacerbated in the midst of the pandemic because the impact on water demand commodity prices, inflation, interest rates, or other components of the revenue requirement are unknown. OCA St. 1 at 35.
- 103. PAWC's filed case does not reflect the impact that the ongoing pandemic has had during 2020, and that it may continue to have during 2021 and 2022, (PAWC's Rate Years 1 and 2) on all aspects of the components of the revenue requirements. OCA St. 1 at 29.

APPENDIX B - PUBLIC

RATE OF RETURN

Capital Structure

- 104. PAWC seeks an 8.02% overall rate of return, including a cost of equity of 10.80%, and a cost of debt of 4.47%. PAWC St. No. 13, Sch. 8.
- 105. The Company's 10.8% return on common equity includes a premium for management performance of at least 25 basis points. PAWC St. No. 13 at 76.
- 106. Mr. Rothschild uses a Discounted Cash Flow (DCF) analysis and a Capital Asset Pricing Model (CAPM) as a check. OCA St. 3 at 5.
- 107. His analysis demonstrates that under a business as usual approach for PAWC's water operations, the cost of common equity is 8.00%, and the overall rate of return is 6.30%, based upon a capital structure of 48.30% debt and 51.64% common equity. OCA St. 3 at 2-3.
- 108. For PAWC's wastewater operations, the OCA recommends a cost of common equity of 8.05%, and an overall rate of return of 6.08%, based upon a capital structure of 39.44% debt and 50.37% common equity. <u>Id.</u>
- 109. Mr. Rothschild's approach considers the financial hardships facing many PAWC consumers as a result of the COVID-19 pandemic. OCA St. 3 at 14-18.
- 110. The OCA recommends that PAWC receive no increase at this time to reflect the hardship and uncertainty faced by PAWC's customers; however, is this recommendation is not approved the resulting overall rates of return of 7.70% for water and 2.84% for wastewater, comprised of a 51.64% cost of common equity and 48.3% cost of debt, represent a fair rate of return that balances the interests of the its consumers and shareholders and would be in the public interest. App. A.1, Table I(A); App. A.1, Table I(A).
- 111. PAWC proposes using a capital structure of 56.06% common equity and 43.88% debt. PAWC St. 13 at 77.
- 112. The OCA disagrees with the use of this capital structure because the common equity ratio of PAWC's requested capital structure is significantly higher than the average of the seven regulated water utilities in the proxy group (51.6%), and the common equity ratio of its parent, American Water Works (41.4%). See Schedule ALR-5 at 5.
- 113. The Pennsylvania Superior Court has held that utilities that are wholly owned subsidiaries may require adjustments to their capital structure if debt or equity is disproportionately high. Riverton Consolidated Water Company v. Pa. P.U.C., 140 A.2d 114 at 121 (Pa. Super. 1958) (Riverton).

APPENDIX B - **PUBLIC**

- 114. A utility is not entitled to have the cost of capital computed on an "ideal" capital structure, but rather, one which is fair, reasonable, and stable. <u>Id.</u> at 121-22.
- 115. PAWC is a wholly owned subsidiary of American Water Works Company (AWWC). PAWC St. No. 13-R at 1.
- 116. Similar to in Riverton, the Commission should adjust PAWC's proposed common equity ratio downward because it is significantly higher than that of its parent company and the average of similar water companies in the OCA's proxy group. Riverton at 121.
- 117. PAWC witness Bulkley bases her capital structure recommendation on the actual debt and equity ratios of the companies in her proxy group. See PAWC St. No. 13 at 4.
- 118. For PAWC's water operations for the rate year ending December 31, 2021, OCA witness Rothschild recommends a capital structure of 51.64% common equity and 48.30% debt based upon comparisons to the companies in the proxy group which utilize common equity ratios between 41.4% and 58.7%. OCA St. 3 at 3.
- 119. For PAWC's wastewater operations for the rate year ending December 31, 2021, Mr. Rothschild recommends a capital structure of 50.37% common equity and 39.44% debt. <u>Id.</u>

Cost of Long-Term Debt

- 120. Ms. Bulkley proposed using a cost of long-term debt of 4.47% for the Year 1 ending December 31, 2021. PAWC St. 13 at 80.
- 121. The OCA does not object to the use of this rate and has used it in the OCA's analysis; however, Mr. Rothschild cautions that if a MRP were to be approved, PAWC should be required to update its cost of debt before Year 2 rates become effective because the projected debt cost rate could overstate the cost of debt during 2021 and 2022. OCA St. 3 at 13.

Common Equity Cost Rate

- 122. Ms. Bulkley proposes a 10.80% cost of equity. PAWC St. 13 at 5-6.
- 123. Returns have not been as high as PAWC requests in recent years. OCA St. 3 at 12.
- 124. The cost of capital is the return investors require to provide capital to PAWC based on current capital markets. OCA St. 3 at 28.
- 125. COVID-19 has made it more challenging to determine the current cost of capital because it has drastically increased the speed and intensity of capital market change. <u>Id.</u>

- 126. Instead of relying solely on historical data and analyst forecasts, Mr. Rothschild uses current market prices (e.g., stocks, bonds, options, etc.), which measure investors' expectations directly. <u>Id.</u>
- 127. PAWC witness Bulkley utilizes a non-market-based approach which relies on historical data and overstates the cost of equity. OCA St. 3SR at 3.
- 128. A cost of equity based on market prices is superior to a non-market-based approach for the following reasons: first, the cost of equity that PAWC has to pay investors is based on capital markets. OCA St. 3 at 29.
- 129. Interest rates remain at historically low levels after a persistent downtrend since the early 1980s. Id. at 29-30.
- 130. Interest rates may increase, but if the market expected interest rates to change then that would already be reflected in current prices. <u>Id.</u> at 30.
- 131. Second, capital markets are unpredictable. It is nearly impossible to predict what the market is going to do in the short-term or long-term future; therefore, the cost of equity should be based on current capital markets which represent the most accurate source of investor expectations. Id.
- 132. Therefore, the cost of equity should be based on current capital markets which represent the most accurate source of investor expectations. OCA St. 3 at 29.
- Mr. Rothschild included the following seven utility companies in the Water Proxy Group:
 1) American States Water, 2) American Water Works, 3) Aqua America, 4) California
 Water Service Group, 5) Middlesex Water Company, 6) SJW Corp, and 7) York Water.
 OCA St. 3 at 30.
- 134. Ms. Bulkley's proxy group includes 13 publicly traded water and natural gas companies. PAWC St. No. 13 at 40, Figure 11.
- 135. Mr. Rothschild's proxy group represents a more accurate comparison group because all of the companies he included have significant water and wastewater operations. OCA St. 3 at 30.
- 136. Seven of the 13 companies in Ms. Bulkley's proxy group are natural gas companies with potentially difference risk profiles and therefore a different cost of equity than PAWC. <u>Id.</u>
- 137. As explained further below, Ms. Bulkley's proxy group represents an inappropriate comparison group and should not be utilized. <u>Id.</u>
- 138. Ms. Bulkley acknowledges there is a trend towards consolidation in the utility industry, PAWC St. No. 13 at 40, which leads to volatility.

- 139. In that case, Philadelphia Suburban Water Company (PSWC) utilized a small electric company barometer group. <u>Id.</u>
- 140. The Commission found the Office of Trial Staff's argument concerning PSWC's use of an electric company barometer group as non-risk similar to PSWC to be valid and rejected PSWC's electric company barometer group. <u>Id.</u>
- 141. Instead, the Commission only focused on the water company barometer groups in its deliberations. <u>Id.</u> at 127.
- 142. Similarly, the Commission should reject PAWC's proxy group as is because it includes natural gas companies which are non-risk similar to PAWC. OCA St. 3 at 31.
- 143. Mr. Rothschild uses a constant growth form of the Discounted Cash Flow (DCF) method that determines growth based on the sustainable retention growth procedure and a non-constant DCF method. Id.
- 144. Mr. Rothschild's constant growth form DCF analysis indicates a cost of equity range of between 7.84% and 7.96% for the Water Proxy Group. See Schedule ALR-3 at 1.
- 145. As these results use analysts' forecasts to derive sustainable growth, in part, and analysts' forecasts of dividend growth and book value growth in the non-constant form of the DCF method, the results should be considered conservatively high. <u>Id.</u>
- 146. This is because analysts' forecasts of such growth have been known to be overstated. Id.
- 147. The non-constant growth form of the DCF model determines the return on investment expected by investors based on an estimate of each separate annual cash flow the investor expects to receive. OCA St. 3 at 41.
- 148. For the purpose of this computation, Mr. Rothschild incorporated Value Line's detailed annual forecasts to arrive at the specific non-constant growth expectations that an investor who trusts Value Line would expect. <u>Id.</u>; Schedule ALR-3 at 3.
- 149. Ms. Bulkley utilizes an Expected Earnings analysis. PAWC St. 13 at 60-63.
- 150. She claims that Mr. Rothschild's DCF analysis does not rely on earnings growth rates. PAWC St. 13-R at 78-80.
- 151. As explained by Mr. Rothschild, even though the non-constant DCF model uses cash flow expectations as the valuation parameter, it still relies on earnings. OCA St. 3 at 43-44.
- 152. The DCF model relies on an expectation of future cash flows. Id.
- 153. Future cash flows are derived from dividends during the time the stock is owned and capital gains from the sale of the stock. OCA St. 3 at 43-44.

- 154. Since earnings impact both dividends and stock price, the non-constant DCF model relies on earnings. <u>Id.</u>
- 155. In fact, a major strength of the DCF model is its recognition of the difference between earnings paid out as a dividend and earnings retained in the business. OCA St. 3 at 43-44.
- 156. Mr. Rothschild's non-constant growth DCF method indicates a cost of equity of between 5.30% and 6.09%. OCA St. 3 at 45.
- 157. Ms. Bulkley recommends that the Company be allowed a return on equity of 10.80% and an overall cost of capital of 8.02%. PAWC St. No. 13 at 3.
- 158. She made this determination by applying her own version of the Discounted Cash Flow (DCF) Model, Risk Premium approach, and Capital Asset Pricing Model (CAPM) to a proxy group of 13 publicly traded water and natural gas utilities. PAWC St. No. 13 at 40, Figure 11.
- 159. She claims that it is appropriate to rely on several cost of equity models because investors and regulators are concerned that DCF results are not reasonable in current capital markets. PAWC St. No. 13 at 3.
- 160. Despite Ms. Bulkley's assertion, the Commission relies primarily on the use of the DCF analysis, and has done so for many years. See, e.g., Pa. P.U.C. v. City of Dubois, Docket No. R-2016-2554150, Order (March 28, 2017); Pa. P.U.C. v. UGI Utilities, Docket No. R-2017-2640058, Order (October 25, 2018); Pa. P.U.C. v. City of Lancaster Bureau of Water, 2011 Pa. PUC LEXIS 1685 (2011); Pa. P.U.C. v. Emporium Water Co., 2008 Pa. PUC LEXIS 2076 (2006); Pa. P.U.C. v. York Water Co., 75 Pa. PUC 134, 156-69 (1991); Pa. P.U.C. v. Pennsylvania-American Water Co., 71 Pa. PUC 210, 279-82 (1989); Pa. P.U.C. v. The Peoples Natural Gas Co., 69 Pa. PUC 1, 167-68 (1989); Pa. P.U.C. v. Pennsylvania Power, 67 Pa. PUC 91, 164, 93 PUR4th 189, 266 (1988); Pa. P.U.C. v. National Fuel Gas Distribution Corp., 67 Pa. PUC 264, 332 (1988).
- 161. In its recent UGI-Electric decision, the Commission affirmed its primary reliance on the DCF method, stating that it has "found no reason to deviate from the use of this method in the instant case." <u>Pa P.U.C. v. UGI Utilities, Inc. Electric Div.</u>, Docket No. R-2017-2640058, et al., Order at 106 (Oct 25, 2018).
- 162. This Commission has stated that determining a fair rate of return is an exercise of informed judgment, based upon the facts of each case. Pa. P.U.C. v. Pennsylvania Power Co., 55 Pa. PUC 552, 579 (1982).
- 163. In PPL's 2012 and 2004 base rate case, the Commission reaffirmed its reliance upon the DCF method. <u>Pa. P.U.C. v. PPL Electric Util. Corp.</u>, Docket No. R-2012-2290597, Order (Dec. 28, 2012); <u>Pa. P.U.C. v. PPL Electric Util. Corp.</u>, 237 P.U.R.4th 419, 2004 Pa. PUC LEXIS 40.

- 164. The Commission additionally noted, however, that while it is not required, other methodologies can be used to check DCF results. PPL 2012 at 80.
- 165. Ms. Bulkley admits that "the Commission has traditionally relied primarily on the DCF method to estimate the cost of equity for regulated utilities." PAWC St. 13-R at 103.
- 166. However, she argues that a DCF-only approach should not be used in this case based upon one 2012 PPL Electric Utilities case. <u>Pa. P.U.C. v. PPL Electric Utilities Corp.</u>, Docket No. R-2012-2290597, Opinion and Order at 77 (December 5, 2012).
- 167. In that case, the Commission recognized that market conditions were causing the DCF model to produce results that were much lower than other models such as the CAPM and Risk Premium. PAWC St. 13-R at 103-104; PPL at 77.
- 168. As explained by the OCA, market conditions are much different now, and likely will be into the foreseeable future because of the COVID-19 pandemic. OCA St. 13 at 16-18.
- 169. OCA witness Rubin emphasized that no one is able to project an entire revenue requirement two years from now, particularly where we do not know how the pandemic and its aftermath might affect each component of the revenue requirement. OCA St. 1 at 35.
- 170. Ms. Bulkley's 10.80% cost of equity and 8.02% cost of capital recommendations significantly overstate PAWC's market-based cost of equity. OCA St. 3 at 61.
- 171. If her recommendations are used to set rates, consumers will be considerably overcharged. <u>Id.</u>
- 172. Her cost of equity recommendation is excessive because it is based upon a flawed DCF model which utilizes inflated "projected" data instead of investor expectations as indicated by capital market data. OCA St. 3 at 82.
- 173. Ms. Bulkley's approach is inconsistent with the principles she states in her testimony. OCA St. 3 at 62.
- 174. She states that the cost of equity is market-based, but when applying her approaches, she fails to use market data in key instances. OCA St. 3 at 62.
- 175. Two thirds of her CAPM results (4 of 6) are based on interest rate forecasts. Id.
- 176. Using these forecasts instead of market-based data adds over 150 basis points to two of her CAPM results. PAWC St. No. 13 at 11.
- 177. Ms. Bulkley correctly explains that the constant growth DCF method "assumes" a single growth rate in perpetuity and that "one must assume that the dividend payout ratio remains constant and that earnings per share, dividends per share, and book value per share all grow at the same constant rate." PAWC St. No. 13 at 50.

- 178. However, her DCF method, as applied, relies entirely on analysts' five-year EPS growth forecasts. Id. at Schedule 3.
- 179. The correct application of the DCF method requires that the dividend yield be computed properly and that the growth rate used be derived from what future sustainable growth in cash flow is anticipated by investors. OCA St. 3 at 63.
- 180. Major financial institutions such as J.P. Morgan Chase do not use a growth rate based on analyst 5-year EPS growth rates as Ms. Bulkley has done. <u>Id.</u>
- 181. Ms. Bulkley uses analyst five-year earnings per share growth without attempting to reconcile the retention rate used for computing growth with the retention rate she used to compute the dividend yield, which is analogous to failing to reconcile money withdrawn from your account with your future balance. <u>Id.</u> at 64.
- 182. Mr. Rothschild implemented the Capital Asset Pricing Model (CAPM), as a check on the reasonableness of his DCF analysis. OCA St. 3 at 5.
- 183. To implement the CAPM, the appropriate values were determined for the three model inputs: Risk Free Rate, Beta, and Equity Risk Premium and discussed herein. OCA St. 3 at 47.
- 184. It is generally preferable to use the market yield on short-term U.S. Treasury yields as the risk-free rate because these bonds have a beta close to zero. OCA St. 3 at 48.
- 185. However, Mr. Rothschild chose to use a risk-free rate based on both long- and short-term treasury yields because investors expect short-term interest rates to increase. <u>Id.</u>
- 186. Based on short-term U.S. Treasury bills (3 months) as of July 31, 2020, Mr. Rothschild determined the short-term risk-free rate is 0.09%. <u>Id.</u>
- 187. He determined the long-term risk-free rate to be 1.20% based on the yield of long-term U.S. Treasury bonds (30 years) as of July 31, 2020. <u>Id.</u>
- 188. Mr. Rothschild used two betas, a forward beta and a hybrid beta, since the cost of equity should be based on investor expectations. OCA St. 3 at 49.
- 189. The forward beta is based on forward-looking investor expectations of non-diversifiable risk, and the hybrid beta is based on both forward-looking investor expectations and historical return data. <u>Id.</u>
- 190. His option-implied betas were calculated by using publicly-available trading information for all the options for a given security (company or index) for a complete trading day. OCA St. 3 at 53.
- 191. Calculating option-implied betas requires (1) obtaining stock option data for that company and a market index, (2) filtering the stock option data, (3) calculating the option-implied volatility for the company and for the index, (4) calculating the option-

implied skewness for the company and for the index, and (5) calculating option-implied betas for the company based on implied volatility and skewness for the company and for the index. Id.

- 192. Mr. Rothschild used the same methodology used by the Chicago Board of Options Exchange (CBOE) in calculating the Volatility Index (VIX) and SKEW Index. <u>Id.</u>
- 193. His historical betas were calculated by following the methodology used by Value Line. <u>Id.</u> at 51-52.
- 194. The only major difference between Mr. Rothschild's calculations and Value Line's calculations is that Value Line uses the NYSE Composite Index and Mr. Rothschild used the S&P 500 Index as the market index. <u>Id.</u> at 52.
- 195. Stock options are the right to buy or sell a stock at a specific price for a specified amount of time. <u>Id.</u>
- 196. A call option is the right to buy a stock at a specified exercise or strike price or before a maturity date, and a put option is the right to sell a stock at a specified exercise or strike price on or before a maturity date. <u>Id.</u>
- 197. The market prices of put options and call options provide information regarding the probability distribution of future stock prices expected by investors. OCA St. 3 at 50.
- 198. This information can be used to determine investors' return expectations including the relationship between the return expectations for individual Water Proxy Group companies and those for the overall market. <u>Id.</u>
- 199. Mr. Rothschild's equity risk premium is the expected return on the S&P 500 minus the risk-free rate as described above. <u>Id.</u> at 56.
- 200. The implied volatility changes over time as investors' perception of risk changes. OCA St. 3 at 56.
- 201. For example, during a crisis such as the COVID-19 pandemic and its implications on the market, implied volatility generally increases as investors expect that stock market prices have a greater change of large swings compared to times when there is no crisis. <u>Id.</u>
- 202. Mr. Rothschild calculated his equity risk premium in two ways: a weighted risk premium which accounts for investors' expectations over the past three months, and a spot risk premium which is based on investors' expectations as of July 31, 2020. See OCA St. 3 at 56-58 (charts summarizing the results of the CAPM).
- 203. Ms. Bulkley considers an Empirical CAPM (ECAPM). PAWC St. 13-A at 54.
- 204. She claims that the ECAPM is necessary because academic research indicates that the risk return relationship is different than the one estimated by the CAPM. <u>Id.</u> at 59.

- 205. This method includes the same four components as the CAPM, but she applies a 75% weighting to the beta coefficient and the market risk premium portion of the equation and a 25% weighting to the market risk premium, without the beta coefficient impact. Id. at 58.
- 206. Mr. Rothschild does not agree with the results (mean: 10.76% 11.87%) of Ms. Bulkley's CAPM analysis because they are not based on investor expectations. OCA St. 3 at 71.
- 207. She uses historical data and analyst forecasts instead of investor expectations as revealed by market data. <u>Id.</u>
- 208. Ms. Bulkley's use of historical and non-market-based data in her "forward-looking" CAPM analysis contradicts her statement that the cost of equity should rely on "market-based data to quantify investor expectations." <u>Id.</u>
- 209. Additionally, the risk-free rate in Ms. Bulkley's CAPM is not appropriate because it is based primarily on economist published projections and not investors' expectations as indicated by current market yields. <u>Id.</u> at 72.
- 210. Further, Ms. Bulkley's beta coefficients overstate the cost of equity. OCA St. 3 at 73.
- 211. Option implied betas indicate that investors expect water utility stock price movements to be less correlated with the overall market than before the pandemic. Id.
- 212. In January 2020, the average option implied beta of the 7 water companies in Mr. Rothschild's proxy group was under 0.40; in other words, investors expect water utility stocks to move less than half a percent for every percent the market moves. <u>Id.</u>
- 213. Mr. Rothschild states that the cost of equity should be based on investor expectations, including what they expect market conditions will be in the future. OCA St. 3SR at 43.
- 214. A market-based approach is superior to one based on "expert" forecasts, e.g., Blue Chip Financial Forecasts, for the following reasons. OCA St. 3 at 29-30.
- 215. First, the actual cost of equity PAWC will pay when it raises money will be determined by the market and not by financial publications. <u>Id.</u>
- 216. Second, evidence supports that predicting capital markets, e.g., interest rates, stock prices, is virtually impossible. <u>Id.</u>
- 217. It is almost impossible for Ms. Bulkley, or anyone, to determine what share prices will be in the future. OCA St. 3 at 30.
- 218. PAWC's cost of equity should be based on the more measurable investor expectations as indicated by current market prices, not on opinions of analysts or equity experts. <u>Id.</u> at 43-44.

- 219. Further, stock price trends, interest rates, increasing credit spreads, volatility expectations, and the stability of water utilities even during the pandemic all affect the cost of equity in this case. OCA St. 3 at 16-28.
- 220. Ms. Bulkley claims that Mr. Rothschild focuses only on interest rates stating that "analysts who are only focused on interest rates and where the cost of debt has gone are missing the critical signs on the cost of equity." PAWC St. 13-RJ at 3.
- 221. In fact, Mr. Rothschild utilizes not only interest rates, but also investors' volatility, skew and variance expectations as indicated by stock options throughout his testimony. See OCA St. 3.
- 222. OCA witness Rubin recommends that the Commission reject PAWC's request for a multi-year rate plan. OCA St. 1 at 35.
- 223. If approved, the MRP could impact the risk of investing in PAWC and therefore its cost of equity. <u>Id.</u>
- 224. Second, there is a risk that this plan would lead to excessive earnings for PAWC and inflated customer rates. <u>Id.</u>
- 225. OCA witness Rubin recommended the Commission reject PAWC's request for a MRP because, among other reasons, the COVID-19 pandemic has significantly increased uncertainty about future economic conditions. OCA St. 1 at 29-30.
- 226. Because an MRP would expand forecasting time beyond the rate effective year (12 months) to two years, the accuracy of the forecasts may become compromised. OCA St. 3 at 76.
- 227. Mr. Rothschild states that utility companies generally have more information about variables that influence forecasting accuracy and are therefore in a better position to protect themselves from excessive losses than regulators are positioned to protect consumers from excessive rates. OCA St. 3 at 77.
- 228. If, however, the Commission approves PAWC's requested MRP, Mr. Rothschild recommends that the Commission implement consumer protection measures in the form of an earnings sharing mechanism. <u>Id.</u> at 75.
- 229. These measures are particularly important now because of increased uncertainty and concerns regarding consumers' ability to pay for basic living expenses, including utility bills. <u>Id.</u>
- 230. Section 1329 of the Code allows a public utility to utilize fair market valuation when acquiring water and wastewater systems that are owned by a municipality or authority. 66 Pa. C.S. § 1329 (Section 1329).
- 231. The Commission has stated that "Section 1329 helps mitigate the risk that a utility will not be able to fully recover its investment when water or wastewater assets are acquired

from a municipal or authority." <u>Application of Aqua Pennsylvania Wastewater, Inc.</u> <u>Pursuant to Section 1102 and 1239 of the Public Utility Code for Approval of its</u> <u>Acquisition of the Wastewater System Assets of Limerick Township</u>, Docket No. A-2017-2605434, Opinion and Order at 4 (November 8, 2017).

- 232. The passage of Section 1329 significantly reduces the risk that an investor-owned utility will be able to include the purchase price of a municipal water or wastewater system into rate base. OCA St. 3 at 78.
- 233. In recognizing that fair market value legislation reduces investment risk, Ryan Wobbrock, a senior analyst at Moody's stated that "[w]hat is most important from a credit perspective is clarity surrounding the recoverability of the investment, and this legislation definitely helps provide that." <u>Investor-owned utilities benefit as fair value legislation incentivizes system sales</u>, Global Water Intelligence, December 2016.
- 234. PAWC's proposed Regionalization and Consolidation Surcharge would further reduce the risk of purchasing municipal systems by allowing them to earn a return on the purchase price before the next rate case. OCA St. 3 at 79.
- 235. OCA witness Rubin recommends that the Commission reject the proposed Regionalization and Consolidation Surcharge as contrary to the public interest and neither just nor reasonable. OCA St. 1 at 79.
- 236. In recognition of the risk-reducing influence of fair market value legislation, Mr. Rothschild recommends a cost of equity for PAWC of 8.00% which is below the midpoint of his cost of equity calculations for his Water Proxy Group (8.22%). Id. at 80.

Business Risks and Management Performance

- 237. The COVID-19 pandemic presents unique circumstances and hardship for many PAWC customers, and PAWC should not be permitted to receive both an acquisition premium and an ROE enhancement at this time. OCA St. 3 at 81.
- 238. Mr. Rothschild recommends that the Commission consider the burden on consumers as a result of the pandemic. <u>Id.</u>
- 239. When the Commission approved a 25 basis point request for Aqua Pennsylvania, Pennsylvania was not experiencing the effects of a global pandemic. OCA St. 3 at 81.
- 240. Second, PAWC should not be permitted to receive both an acquisition premium and an ROE enhancement regarding its acquisition of Delaware Sewer Company. <u>Id.</u>
- 241. Finally, Ms. Bulkley's cost of equity recommendation of 10.80% is not market-based which results in a cost of equity that is significantly above a market-based rate. <u>Id.</u>
- 242. Therefore, an allowed return on equity below Ms. Bulkley's range of ROE estimates (10.0%-10.8%) should not be the criteria for any ROE enhancements. OCA St. 3 at 81.

APPENDIX B - PUBLIC

REGIONALIZATION AND CONSOLIDATION SURCHARGE

- 243. The Regionalization and Consolidation Surcharge (RCS or surcharge) would collect the "revenue deficiency" from Section 1329 acquisitions that have closed since the Company's last rate case. OCA St. 1 at 70-71.
- 244. The "revenue deficiency" is defined as the difference between the annual revenue requirement (return on the ratemaking rate base determined in the Section 1329 application, taxes, depreciation, and operation and maintenance expenses) and the revenue received from the acquired customers. OCA St. 1 at 70-71.
- 245. The surcharge would be revised each April. OCA St. 1 at 70-71.
- 246. The RCS would have a limit of no more than 5% of the revenues from existing water and wastewater customers, excluding public fire protection revenues and other surcharge revenues. OCA St. 1 at 70-71.
- 247. The maximum surcharge revenues are \$38,850,794. OCA St. 1 at 71.
- 248. These surcharge revenues would be collected between rate cases from all existing PAWC customers. OCA St. 1 at 70.

Rate Zone	Proposed Revenues
Nate Lone	(Excluding Public Fire)
Main Water	\$694,179,269
Steelton Water	288,607
Main Wastewater (WW)	29,411,453
Exeter WW	10,026,829
Sadsbury WW	952,612
Scranton WW	26,075,165
McKeesport WW	14,298,866
Kane WW	1,783,086
Total revenue base	\$777,015,887
x Maximum surcharge	5.00%
= Max. surcharge revenues	\$ 38,850,794

249. Revenues would be collected from customers in the rate zones as follows:

OCA St. 1 at 72, Table 7.

250. The surcharge revenues of \$38 million are two times the \$19.1 million subsidy that PAWC proposes to collect from water Zone 1 customers for Section 1329 acquisitions (discussed in Section XIII, infra). OCA St. 1 at 71.

- 251. If the surcharge and the proposed subsidies are approved, PAWC would collect more than \$57 million per year (\$38 million from the surcharge and \$19.1 million from the wastewater subsidies) to support Section 1329 acquisitions, which is 7.5% of its proposed revenue requirement. OCA St. 1 at 71.
- 252. The ratemaking process involves a matching of revenues, expenses, investment, return, customers, and consumption. OCA St. 1 at 72-73.
- 253. Automatic rate adjustments for specific expense or capital items break this relationship. OCA St. 1 at 72-73.
- 254. The matching principle involves a synchronous examination of the cost of service and sources of revenue, as well other considerations such as the quality of service and efficiency of management. OCA St. 1 at 72-73.
- 255. The synchronization of the cost of service as well as other considerations such as the quality of service and efficiency of management is the reason why a test year is used when a rate case is filed. OCA St. 1 at 72-73.
- 256. The use of automatic rate adjustment mechanisms for only certain aspects of the Company's revenue requirement violates the matching principle and helps to destroy the underlying relationship between utility rates and levels of cost and investment. OCA St. 1 at 73.
- 257. The general rule is that automatic rate adjustments should be used only for significant volatile expenses that are outside of the utility's control. OCA St. 1 at 73.
- 258. If an expense is relatively stable, it does not need special ratemaking treatment. OCA St. 1 at 76.
- 259. The less volatility, the less it is necessary to establish a special rate adjustment between rate cases. OCA St. 1 at 76.
- 260. The utility's ability to control expenditures is an important consideration in determining whether an automatic adjustment clause should be adopted. OCA St. 1 at 74.
- 261. Automatic rate adjustments remove any incentive for the utility to be efficient. OCA St. 1 at 74.
- 262. The ratemaking process is designed to foster management efficiency between rate cases. OCA St. 1 at 74.
- 263. A focus on achieving and maintaining efficiency is a pillar of informed ratemaking. OCA St. 1 at 74.

- 264. Automatic rate adjustments remove any incentive the utility has to achieve or maintain efficiencies. OCA St. 1 at 74.
- 265. Under automatic rate adjustment mechanisms, any change in the unit cost of the product, and any change in the amount of the product purchased, would flow directly to captive customers. OCA St. 1 at 74.
- 266. Failure to obtain available efficiencies, or failure to protect existing efficiencies, can only lead to ever-increasing utility rates. OCA St. 1 at 74.
- 267. Other factors to consider in reviewing the proposed RCS include whether the cost is related to other expenditures that are not subject to the adjustment mechanism. OCA St. 1 at 75.
- 268. An automatic adjustment clause could adversely impact the evaluation of technologies or processes that might improve efficiency and save costs. OCA St. 1 at 75.
- 269. An unreasonable trade-off occurs when one aspect of the cost is recognized automatically, but another aspect is not. OCA St. 1 at 75.
- 270. The RCS would recover costs that are within the Company's control (the amount and the timing). OCA St. 1 at 76.
- 271. There is a potential for significant trade-offs or efficiencies that come from the acquisition and those would not be captured in the surcharge. OCA St. 1 at 76.
- 272. The surcharge would be calculated using revenues from all existing water and wastewater customers. OCA St. 1 at 76.
- 273. The wastewater customers' rates are subsidized by existing water customers under Section 1311(c).
- 274. The underlying premise of Section 1329 is that acquisition prices will be based on an arms' length negotiations. OCA St. 1 at 78.
- 275. An arms' length negotiation requires a tension between the buyer and seller -- the buyer wants to pay as little as possible and the seller wants to receive as much as possible. OCA St. 1 at 78.
- 276. The arms' length negotiated price is a compromise between those two extremes. OCA St. 1 at 78.
- 277. In Section 1329 negotiations, there is no incentive for the buyer to pay as little as possible. OCA St. 1 at 78.

- 278. The profit motivation is for the buyer to pay as much as possible, subject only to the amount that can be justified by an appraisal. OCA St. 1 at 78.
- 279. There is no tension between the buyer and seller -- both want the price to be as high as can be justified by the appraisals. OCA St. 1 at 78.
- 280. The only potential check on the process is that the utility's investors bear the cost of supporting a portion of the purchase price until the conclusion of its next base rate case. OCA St. 1 at 78.
- 281. The proposed Regionalization and Consolidation Surcharge would remove even that modest check on the process. OCA St. 1 at 78.
- 282. Rather than investors paying to support a portion of the purchase price between rate cases (perhaps for a year or two), investors would be at risk for only a few months (between the time of closing and the end of the calendar year). OCA St. 1 at 78.
- 283. Under a Section 1329 acquisition, the return received by investors is based on the revenues received from the acquired customers between closing and the conclusion of the next rate case. OCA St. 1 SR at 14.
- 284. The existing customers do not provide any subsidies during the time between closing and the conclusion of the next rate case. OCA St. 1 SR at 14.
- 285. PAWC is not permitted to defer the return and its investors must bear the risk of putting capital to work between rate cases. OCA St. 1 SR at 14.
- 286. The surcharge would increase PAWC's revenues and existing customers' rates almost immediately upon closing which would provide a benefit to the investors and existing customers would be harmed. OCA St. 1 SR at 14.
- 287. The following example shows the effect of the proposed RCS:

Table 1-S: Hypothetical Example Showing Effect of Proposed Regionalization and Consolidation Surcharge on Existing Customers and Investors				
	Without Surcharge		With Surcharge	
Year	Existing Customers' Revenues	Investors' Return	Existing Customers' Revenues	Investors' Return
2021	0	25,000	45,000	70,000
2022	0	25,000	43,250	68,250
2023	0	25,000	41,544	66,544
2024	39,880	64,880	39,880	64,880
2025	38,258	63,258	38,258	63,258
Total	78,138	203,138	207,932	332,932

- 288. As a result of the surcharge, there is no reduction in future costs paid by PAWC's customers. OCA St. 1 SR at 16.
- 289. The surcharge enhances the return to PAWC's investors between closing and the next base rate case. OCA St. 1 SR at 16.

RATE STRUCTURE AND RATE DESIGN

- 290. A COSS is an analysis that breaks down a utility's costs and investments into numerous categories, known as functions and classifications. OCA St. 1 at 35-36.
- In a COSS, the classified costs are allocated among the utility's different classes of customers to estimate the cost of serving different types of customers. OCA St. 1 at 35-36.
- 292. In a COSS, cost relationships are then used as a guide in two additional steps: (1) determining each class's share of the utility's revenue requirement, and (2) designing rates that reasonably reflect the reasons why costs are incurred to serve a class of customers. OCA St. 1 at 35-36.
- 293. PAWC prepared two water COSS (Water excluding Steelton and Rate Zone 5 (Steelton)). PAWC Exh. 12-B and PAWC Exh. 12-A. OCA St. 1 at 36.
- 294. PAWC prepared three sanitary sewer COSS (Exeter, Sadsbury, and sanitary sewer excluding Exeter and Sadsbury). PAWC Exhs. 12-D, 12-E, 12-C. OCA St. 1 at 36.
- 295. PAWC prepared three combined sewer COSS (Scranton, McKeesport, and Kane). PAWC Exhs. 12-F, 12-G, and 12-H.
- 296. Each COSS has separate schedules for Rate Year 1 (2021) and Rate Year 2 (2022). OCA St. 1 at 36.
- 297. For 2021, PAWC projects that it will have 612,000 residential customers in Zone 1, 1,700 customers in Zone 5 (Steelton) and 1,300 customers in four additional zones. OCA St. 1 at 79.
- 298. All but 100 of those customers have meters that are 1-1/2-inch or smaller in diameter. OCA St. 1 at 79.
- 299. PAWC proposes to charge the same customer charge to residential customers with meter sizes of 1-1/2 inches or smaller. OCA St. 1 at 80.
- 300. PAWC did not apply the same change in Zone 5; it is proposing higher customer charges for the residential customers with 1-inch and 1-1/2-inch meters. OCA St. 1 at 81.

- 301. The customer charge proposal should be applied to Zone 5 which would eliminate possible concerns about rate discrimination and would facilitate the eventual consolidation with Zone 1. OCA St. 1 at 82.
- 302. The minimum allowance should be eliminated for residential customers with 1-inch and 1-1/2-inch meter sizes.
- 303. The minimum usage allowance for 5/8-inch meters in Zone 5 should be reduced from 1,700 gallons per month to 1,000 gallons per month because it will start a transition to the eventual elimination of the minimum allowance. OCA St. 1 at 79, 83.
- 304. To ease the impact of a smaller minimum allowance in Rate Zone 5, the 40% increase proposed by PAWC to be divided between Rate year 1 and Rate year 2, should be used for the increase in 2021. OCA St. 1 at 84.
- 305. If the minimum allowance is reduced and the increase is used for 2021, the existing 5/8inch customer charge (\$14.78 per month) should be kept at the current level and the volumetric rate be set at \$1.000 per 100 gallons for all residential usage. OCA St. 1 at 84-85.
- 306. PAWC's proposed Zone 1 customer charge of \$18.00 per month for a 5/8-inch meter is higher than the direct customer-related cost for a 5/8-inch meter, which is \$17.06. OCA St. 1 at 83.
- 307. If the calculation of direct costs is adjusted to reflect the same charge for residential customers with meter sizes up to and including 1-1/2-inch, and to recognize the reduced rates paid by low-income customers, the direct cost is approximately \$17.72 per month or about 9% higher than the currently effective charge of \$16.25 per month. OCA St. 1 at 83-84.
- 308. If the revenue requirement determined by the Commission is less than what the Company proposed, all Zone 1 charges should be scaled back proportionately. OCA St. 1 at 83-84.
- 309. PAWC has 10 different rate areas for wastewater service. OCA St. 1 at 86.
- 310. Current customer charges range from \$7.50 in Turbotville (Zone 8) to \$30 or more per month in Koppel, McKeesport, and Kane. OCA St. 1 at 86.
- 311. Some of the higher customer charges are coupled with a large minimum usage allowance. OCA St. 1 at 86.
- 312. PAWC also has a wastewater rate area where all customers receive flat-rate service at a cost of either \$75.10 or \$54.60 per month (Franklin Township) depending on the treatment used to serve the customer. OCA St. 1 at 86.

- 313. PAWC is guided by two main goals in setting wastewater rates: 1) complying with provisions of any commission orders or settlements for acquired systems, and 2) moving towards rate consolidation and the elimination of minimum usage allowances. OCA St. 1 at 86.
- 314. Those goals should not be the only goals. OCA St. 1 at 87.
- 315. Other goals to be considered include specific criteria that limit the costs transferred to Zone 1 water customers or that otherwise subsidize Section 1329 premiums paid by the Company. OCA St. 1 at 87.
- 316. PAWC has given more weight to a provision in its Asset Purchase Agreement with Scranton than the Commission is required to give to that provision. OCA St. 1 at 87.
- 317. There are two instances where PAWC has proposed extremely large rate increases (more than 50% for many customers). OCA St. 1 at 87.
- 318. Current rates in Zone 3 are a \$19.50 per month customer charge and a volumetric charge of \$0.6173 per 100 gallons. OCA St. 1 at 87.
- 319. PAWC proposes no increase to the customer charge and a volumetric increase to \$0.7212 per 100 gallons, or 16.8%. OCA St. 1 at 87.
- 320. The increased revenues from residential wastewater customers, in Year 1, would be \$1.17 million, or 8.4% and the total increase in revenues would be \$2.83 million in Year 1. OCA St. 1 at 87.
- 321. The COSS for Scranton shows a total cost of service of \$34.75 million, while current rates produce \$23.47 million, or a shortfall of \$11.3 million. OCA St. 1 at 87.
- 322. An increase of 50% would be needed to bring rates to cost of service. OCA St. 1 at 87-88.
- 323. PAWC's proposal would does not close the gap between costs and revenues and requires the remaining gap to be passed on to Zone 1 water customers. OCA St. 1 at 88.
- 324. The rate in Zone 3 should be increased by approximately 20%. OCA St. 1 at 88.
- 325. A 20% increase in the Zone 3 rate would increase revenues by \$4.66 million (compared to \$2.76 million under PAWC's proposal), which would reduce the Zone 1 water subsidy by \$1.9 million. OCA St. 1 at 88.
- 326. Also important is that it would be a meaningful move towards cost of service which should make it feasible to have Zone 3 pay cost-based rates within the next two rate cases. OCA St. 1 at 88.

- 327. To ensure that the rates collect these additional revenues, Mr. Rubin recommends that the rates be increased across-the-board. OCA St. 1 at 89.
- 328. The current rates in Zone 4 are a \$30.00 per month customer charge and a volumetric charge of \$0.6500 per 100 gallons. OCA St. 1 at 89.
- 329. PAWC proposes to decrease the customer charge to \$11.00 per month and increase the volumetric charge to \$1.7631 per 100 gallons. OCA St. 1 at 89.
- 330. The increased revenues from residential wastewater customers, in Year 1, would be \$44,867, or 23.55%. OCA St. 1 at 89.
- 331. Under PAWC's proposal some residential customers would receive significant decreases while others would see increases of 50% or more. OCA St. 1 at 89.
- 332. PAWC is proposing increases of 11% for other classes in Zone 4. OCA St. 1 at 90.
- 333. Zone 6 has two service areas McKeesport and Port Vue. OCA St. 1 at 91.
- 334. In McKeesport, for most residential customers, the current rates in Zone 6 are a \$30.70 per month customer charge (includes the first 2,000 gallons per month) and a volumetric charge (for flows over 2,000 gallons per month) of \$1.275 per 100 gallons. OCA St. 1 at 91.
- 335. PAWC proposes to eliminate the minimum usage allowance, reduce the customer charge to \$11.00 per month, and increase the volumetric charge to \$1.7631 per 100 gallons. OCA St. 1 at 91.
- 336. Most residential customers would have bills increase by less than 40% and very low usage customers would have their bill decline. OCA St. 1 at 91.
- 337. Port Vue customers are billed quarterly and the current rates are \$58.05 per quarter, which includes the first 4,000 gallons of water per quarter and a volumetric charge (for flows over 4,000 per quarter) of \$0.995 per 100 gallons. OCA St. 1 at 91.
- 338. PAWC proposes to eliminate the minimum allowance and charge Port Vue customers the same as the McKeesport area customers, which would be an increase of approximately 70%. OCA St. 1 at 91.
- 339. The Port Vue customer charge could be set at \$11.00 per month (\$33 per quarter) and the minimum usage allowance be eliminated. OCA St. 1 at 93.
- 340. The increase to the volumetric charge could be limited to 40%, or \$1.393 per 100 gallons. OCA St. 1 at 93.

- 341. These changes would ensure that no customer bill would increase by more than 46% (most bills would increase by 40% or less). OCA St. 1 at 93.
- 342. The resulting revenue shortfall is approximately \$230,000 which should be added to the water Zone 1 subsidy. OCA St. 1 at 94.
- 343. If the Commission reduces the proposed revenue requirements in rates zones that are being subsidized by water Zone 1 customers the reduction in the revenue requirement first reduce the water Zone 1 subsidy in proportion to the subsidy paid by each customer class under PAWC's proposal for Rate Year 1. OCA St. 1 at 94-95.
- 344. Any remaining reduction would be applied proportionally to the rates in the particular rate zone. OCA St. 1 at 94-95.
- 345. If the Commission reduces the water Zone 1 revenue requirement, then the reduction should be spread among customer classes in proportion to each class's cost of service under Mr. Rubin's COSS. OCA St. 1 at 94-95.
- 346. Any reduction for the residential class should be applied proportionally to both the customer charge and volumetric charge. OCA St. 1 at 94-95.
- 347. Under PAWC's proposed subsidies water Zone 1 customers would pay an additional \$32,851,568, or 4.9%, to subsidize the wastewater rate zones. OCA St. 1 at 53.
- 348. This \$32,851,568 subsidy, related to seven wastewater acquisitions, is equivalent to 41% of the total increase proposed by PAWC in this case for water Zone 1 customers in Rate Year 1. OCA St. 1 at 53.
- 349. Zone 1 water customers are being asked to provide subsidies totaling \$23.74 million to the systems acquired under Section 1329. OCA St. 1 at 55.
- 350. That amount includes the entire revenue requirement associated with the increase in rate base caused by Section 1329 (\$19.91 million), plus an additional \$3.8 million to subsidize operating costs in the acquired systems. OCA St. 1 at 55.
- 351. A combined sewer system provides both sanitary sewage service and stormwater removal through a single network of pipes. OCA St. 1 at 36.
- 352. Stormwater utility service is designed to safely, and in compliance with environmental regulations, remove stormwater flows (also known as runoff) from a service area's streets, rights of way, parking lots, roofs, sidewalks, and other impervious surfaces. OCA St. 1 at 40-41.
- 353. Unlike other utility services, stormwater flows are not subject to being separately metered, and they are not directly related to the consumption of another service that can be directly measured. OCA St. 1 at 40-41.
- 354. A significant portion of stormwater flows come from public streets and rights of way, known as right-of-way flows. OCA St. 1 at 41.
- 355. There are different methods to recover right-of-way-related costs, but the charge for that service is neither avoidable, controllable, nor caused by any individual customer. OCA St. 1 at 41.
- 356. The customer controls its wastewater production and disposal and collects wastewater produced in a building into a pipe (the service line) that connects to the utility's wastewater main. OCA St. 1 at 43-44.
- 357. Pipes lead from each property to the centralized wastewater treatment plant. OCA St. 1 at 43-44.
- 358. The wastewater treatment plant treats the wastewater. OCA St. 1 at 43-44.
- 359. Treated wastewater is discharged into a receiving water (lake, stream, river, etc). OCA St. 1 at 43-44.
- 360. Stormwater is generated by precipitation (rainfall and the melting of snow and ice) and a customer may have some limited ability to control some of the stormwater that is generated. OCA St. 1 at 43-44.
- 361. Stormwater is not initially contained in pipes; some stormwater falls on pervious, unfrozen ground that can absorb some (but usually not all) of the stormwater. Other stormwater falls on roofs, streets, sidewalks, frozen ground, and other largely impervious surfaces where the stormwater is not absorbed and flows downhill. OCA St. 1 at 43-44.
- 362. Stormwater is controlled by directing the flow of the runoff so that it does not create flooding on private property or public streets and highways. Stormwater control occurs by grading properties, parking lots, and driveways to control the flow of stormwater, designing streets to direct the flow of stormwater (which is one reason curbs are so important on urban streets). installing stormwater retention basins to reduce peak storm flows, maintaining streets to ensure a proper flows of stormwater (for example by cleaning streets, repairing curbs, and cleaning storm drains). OCA St. 1 at 43-44.
- 363. Stormwater enters storm drains that collect stormwater in a network of pipes and that may involve numerous facilities including catch basins, streets and curbs, storm drains, stormwater pipes (where there is a separate system), and CSO control facilities (in a combined stormwater-wastewater system). OCA St. 1 at 43-44.
- 364. If combined stormwater flows commingle with wastewater flows and are directed to a wastewater treatment plant. OCA St. 1 at 43-44.

- 365. If separate stormwater system, the stormwater is directly discharged to a body of water with little or no treatment. OCA St. 1 at 43-44.
- 366. The control of stormwater is done by the entity responsible for the property and that entity may be different from the entity that uses other utility services on the property or the property may not be an existing water or wastewater customer. OCA St. 1 at 43-44.
- 367. It is important that the entity responsible for stormwater control be responsible for stormwater costs associated with the property. OCA St. 1 at 43-44.
- 368. Assigning cost to those responsible will give an appropriate incentive to control stormwater flows from the property into the CSS. OCA St. 1 at 43-44.
- 369. In 2019, there were more than 1,700 communities and utilities that have separate fees or charges for stormwater service, including 27 in Pennsylvania. OCA St. 1 at 44.
- 370. The Pennsylvania communities who had established stormwater fees ranged in population size from 1,931 to 1,536,471. OCA St. 1, Sch. SJR-8, W. Ky. Survey, Table A-1.
- 371. Most of the stormwater fees in the United States, and nearly all fees in Pennsylvania, are based on measuring impervious surface area of the property. OCA St. 1 at 44.
- 372. A typical or average residential area is calculated based on the impervious surface area for the properties and that Equivalent Residential Unit (ERU) is the basis for developing stormwater rates for larger, non-residential properties. OCA St. 1 at 44.
- 373. There may be fee reductions for properties that significantly control stormwater fees. OCA St. 1 at 43-44.
- 374. Using property characteristics, like impervious surface area, rather than water use, to allocate and collect stormwater costs is important because there are properties that contribute to stormwater flows but are not water or wastewater customers, e.g., parking lots or facilities, and some outdoor recreation facilities. OCA St. 1at 45.
- 375. There could be a significant number of stormwater only customers. OCA St. 1 at 45.
- 376. PAWC allocates all stormwater-related costs in the same way that it allocated infiltration and inflow (I&I) costs in a sanitary sewer system. OCA St. 1 at 45.
- 377. PAWC did not propose a separate rate for stormwater service in any rate area because it says that it has not been ordered to do so. OCA St. 1 at 45, 46.
- 378. The costs of controlling and treating stormwater are collected from sanitary wastewater customers, through customer and flow charges, and from water customers through the wastewater subsidy. OCA St. 1 at 46.

- 379. The Manual of Practice No. 27, Financing and Charges for Wastewater Systems published by the Water Environment Federation ("WEF Manual"). is the standard reference on cost-of-service studies, rate design, and other ratesetting topics for wastewater utilities. OCA St. 1 at 46.
- 380. PAWC relied on the third edition of the WEF manual published in 2004. OCA St. 1 at 46.
- 381. The fourth edition of the WEF manual, published in 2018, includes more information about allocating stormwater-related costs and how to collect those costs. OCA St. 1 at 46.
- 382. The 2018 edition has a new chapter on "Wet Weather Financing and Cost Recovery". OCA St. 1, Sch. SJR-9.
- 383. The WEF manual states that although cost recovery through sewer charges may provide for "administrative simplicity", that approach may affect equity of cost recovery because of the "limited correlation" between the volume of water usage (used to develop sewer charges) and the magnitude of a property's wet weather contribution. OCA St. 1 at 47-48 citing Sch. SJR-9, pp. 8 and 9 (WEF Manual pp. 189-190).
- 384. The WEF manual also points out the importance of providing property owners with an opportunity to reduce fees by reducing wet weather flows. OCA St. 1at 48.
- 385. A separate 2013 WEF manual addresses approaches to stormwater programs including how to develop fees or charges for stormwater service. OCA St. 1at 48 citing Water Environment Federation, User-Fee-Funded Stormwater Programs (2nd ed. 2013).
- 386. In the 2018 Western Kentucky survey, 19 of the 27 stormwater utilities in Pennsylvania use an ERU method based on impervious area or similar property characteristics. OCA St. 1 at 50, Sch. SJR-8, Table 1A.
- 387. The Commission has established separate rates and conditions for the provision of industrial wastewater service (requiring pretreatment and setting the costs of that service), as compared to domestic wastewater service, even though the flows are ultimately commingled in the same sewer mains." OCA St. 1 at 49.
- 388. The stormwater-related costs account for approximately 46% of the revenue requirement in three rate zones, or \$31,148,927 of the total \$68,089,360 in combined-sewer system revenue requirements. OCA St. 1 at 50.
- 389. PAWC has not done the work necessary to determine the impervious area of properties and has not identified stormwater-only customers. OCA St. 1 at 50.

- 390. Any attempt to modify those combined sewer rate zone rates would suffer from the same problems as the existing rates and could cause the rates to move further away from the cost of service. OCA St. 1 at 50.
- 391. The development of a stormwater fee to collect stormwater-related costs in the three CSS rate zones (Scranton, McKeesport, and Kane) is important to address the inequity that exists in the current rates and that would continue under PAWC's failure to address this issue. OCA St. 1 at 50.
- 392. Collecting stormwater costs based on water consumption or on a per-customer basis is grossly unfair, especially to tenants and smaller properties with little impervious surface area. OCA St. 1 at 50.
- 393. Failing to recognize that properties that are not wastewater customers (such as parking lots) can contribute significantly to stormwater flows makes the collection of stormwater costs through wastewater rates unduly discriminatory and grossly unreasonable. OCA St. 1 at 50.

LOW-INCOME CUSTOMER ASSISTANCE

H2O Discount Program Design

- 394. The current program discounts the customer charge and the volumetric charge and is an across-the-board discount program for water and wastewater discounts, meaning that it is one-tier and the same amount regardless of usage. OCA St. 4 at 5-8.
- 395. Customers at different levels of Federal Poverty Level (FPL) receive the same discount. OCA St. 4 at 5-8.
- 396. PAWC has never assessed the affordability of the low-income bills after its existing across-the-board discount. OCA St. 4 at 7.
- 397. PAWC has never conducted a formal or informal needs assessment for low-income assistance programming in its service territory. OCA St. 4 at 7.
- 398. PAWC also has not evaluated its current program, informally or formally, through an internal evaluation or with an external, independent third party evaluation. OCA St. 4 at 7-8.
- 399. A Payment Coverage Ratio is a ratio of dollars of payments received divided by dollars of bills issued to customers. OCA St. 4 at 9.
- 400. From January 2018 through March 2020, the average arrears of residential customers was \$206 while the average arrears of a low-income customer was \$333. OCA St. 4 at 11.
- 401. Timeliness of payments is another metric used to assess the effectiveness of the current BDP. OCA St. 4 at 11.

- 402. Using PAWC's data for the time period from January 2018 through May 2020, there was only one month (April 2020 when more than half of the participants made a full and on-time payment. OCA St. 4 at 12.
- 403. Generally, between 43% and 46% of the participants made full and on-time payments. OCA St. 4 at 12.
- 404. The "Bills Behind" statistic assesses the timeliness of payments. OCA St. 4 at 12.
- 405. The Bills Behind metric puts the level of arrearage in the numerator and the average bill in the denominator to assess how many bill payments were missed. OCA St. 4 at 12.
- 406. PAWC's low-income customers are two more Bills Behind (5.85 in 2018 and 5.31 in 2019) than its residential customers in (3.15 in 2018 and 3.29 in 2019). OCA St. 4 at 12.
- 407. The third metric to measure the effectiveness of the PAWC BDP is the collection efforts that are required for PAWC to generate the payments it receives. OCA St. 4 at 14.
- 408. The number of nonpayment disconnections per 1,000 payments received and the number of nonpayment disconnections per \$1,000 in payments received, are collectively called the Collection Efficiency. OCA St. 4 at 14.
- 409. Generally, a lower number indicates that the utility is working less hard to generate payments. OCA St. 4 at 14.
- 410. PAWC performs more than four times more nonpayment disconnections for every \$1,000 in payments from its BDP participants than its total residential customers and about 3 times more disconnections for each 1,000 payments than it performs for its total residential customer population. OCA St. 1 at 15.
- 411. PAWC does not have information on the various income ranges (of Federal Poverty Guidelines or FPL) for the participants in its BDP. OCA St. 4 at 20-21.
- 412. The OCA has not recommended, and the Pennsylvania PUC has not yet prescribed, a specific percentage of income by which to define an "affordable" water and/or wastewater bill. OCA St. 4 at 20, n. 5.
- 413. Water bill burdens range from 7% to more than 10% of income for customers below 50% of FPL and from 2% to more than 4% for customers between 125-150% of FPL. OCA St. 4 at 20; Table 5.
- 414. For a combined water/wastewater bill, the bill burden for all customers at 50% of FPL is 15% or more and ranges from more than 4% to more than 6% for customers at 125-150% of FPL. OCA St. 4 at 20; Table 5.
- 415. The proposed PAWC bill discount applied to these same FPL income ranges improves the affordability of water and combined water/wastewater bills but not for those at the lowest brackets of the FPL. OCA St. 4 at 22-24, Table 6.

- 416. A three-tier discount would be structured to yield bill burdens for service, whether water, combined water and wastewater, or wastewater only, that allow PAWC's low-income customers to see a "more sustainably payable bill burden." OCA St. 4 at 25.
- 417. The current wastewater discount is of the volumetric charge (20%) and PAWC proposes to increase it to 30% as part of this case. OCA St. 4 at 43.
- 418. Addressing pre-existing arrearages is interrelated to providing bills that are sustainably payable. OCA St 4 at 30.
- 419. Customers do not make separate payments for current service and their arrearages. OCA St 4 at 30.
- 420. If the total bill is beyond a customer's ability to pay, the bill discount addresses the current service and the AMP can address the preexisting arrearages. OCA St 4 at 30.
- 421. The average arrearage for enrolled customers (\$488) added to the current average annual water bill (\$612) means that customers would be charged an additional \$41 per month simply for the arrearage which would increase the average monthly bill by 80%. OCA St. 4 at 30-31.

Low-Income Customer Outreach, Data Collection and Reporting

- 422. PAWC enrolls a small fraction of its customers who are income-eligible for the BDP. OCA St. 4 at 44.
- 423. PAWC enrolls approximately 22,000 low-income customers each year. OCA St. 4 at 44, Table 11.
- 424. There are 119,859 eligible low-income customers (income below 150% of FPL). OCA St. 1 at 45.
- 425. PAWC has operated its low-income BDP for 29 years. OCA St. 1 at 45.
- 426. PAWC does not know the number of customers who are income-eligible but are not enrolled. OCA St. 4 at 51.
- 427. PAWC also does not attempt to target its outreach towards areas that might have more income-eligible customers. OCA St. 4 at 50.
- 428. A problem arises between the point at which a customer is found to be income-eligible for PAWC's BDP and the point at which a customer is enrolled in that program which results in customers not being enrolled, despite being identified as eligible. OCA St. 4 at 59-60, Sch. RDC-2.
- 429. There were 2,159 customers who were income-eligible but not enrolled for the period from January 2018 through April 2020. OCA St. 4 at 59-60, Sch. RDC-2.

APPENDIX B - PUBLIC

SERVICE QUALITY AND CUSTOMER SERVICE ISSUES

Customer Performance Service Standards

- 430. PAWC does not have specific internal standards for many essential performance areas. OCA St. 5 at 25, 29-30.
- 431. OCA witness Alexander testified that this is a serious concern and unusual for a utility of the size of PAWC in Pennsylvania and an affiliate of a 16-state parent company. OCA St. 5R at 2-3, 5-6.
- 432. PAWC has acquired many Pennsylvania water and wastewater systems in recent years so that increasing numbers of customers are dependent on this entity for essential services. <u>Id.</u>
- 433. The OCA recommends minimum performance standards for several aspects of customer service, including call center, leaks, main breaks, kept field appointments and response to complaints.
- 434. The OCA responds to PAWC's blanket objection to setting any customer service standards, based on the claim by PAWC witness Rod Nevirauskas that the Commission lacks authority to impose performance based standards in the context of a base rate case or request for a multi-year rate plan. PAWC St. 1-R at 60-61.
- 435. To the contrary, the Commission has broad authority to consider a utility's customer service and quality of service performance. 66 Pa. C.S. § 1501.
- 436. Section 1504 of the Public Utility Code provides: The commission may, after reasonable notice and hearing, upon its own motion or upon complaint: (1) Prescribe as to service and facilities, including the crossing of facilities, just and reasonable standards, classifications, regulations and practices to be furnished, imposed, observed and followed by any or all public utilities. 66 Pa. C.S. § 1504.
- 437. In the context of a base rate case, evaluation of the "efficiency, effectiveness, and adequacy of service" by the Commission is affirmatively required. 66 Pa. C.S. § 523(a).
- 438. Further, in its consideration whether to maintain existing rates or as a condition of any rate increase, the Commission has authority to order improvements to service. Pa. P.U.C. v. Pennsylvania Gas & Water Co., 61 PaPUC 409, 415-16, 74 PUR4th 238, 244-45 (1986) (PG&W 1986); 66 Pa. C.S. § 1501 (every public utility shall make all changes and improvements to service as shall be necessary to make such service adequate, efficient, safe and reasonable).
- 439. By way of example, in a Philadelphia Gas Works rate case, the Commission approved specific service quality and customer service performance standards similar to those recommended by the OCA in this proceeding. Pa. P.U.C. v. Philadelphia Gas Works, Docket No. R-00005654, Order at 33-34 (Nov. 22, 2000).

- 440. The Commission conditioned PGW's interim rate increase as follows: PGW must show improvement in its customer service functions and report on its progress to the Commission on a quarterly basis. Such reports should include: monthly call center access reports for customer service and collection call centers (to include average speed of answer, average abandonment time, number of abandoned calls, average delay in queue and the percentage of calls answered); monthly customer dispute reports (to include the number of customer disputes filed, the number and percentage of disputes responded to in under thirty days, and the average response time); the number and percentage of residential bills which PGW failed to render during the relevant billing cycles; the number and percentage of residential meters for which PGW has failed to obtain actual or customer supplied readings during the prior six months; and, monthly reports showing the number and percentage of missed customer service appointments. Id.
- 441. The Commission has also approved specific service quality and customer service performance standards in the context of merger and acquisition proceedings. OCA St. 5 at 25.
- 442. In determining what is a reasonable performance level to which PAWC should be held, OCA witness Alexander compared PAWC's performance to that of other major Pennsylvania utilities. OCA St. 5 at 7, 10, 23, 27-30.
- 443. The OCA recommends that PAWC be required to submit quarterly reports regarding its performance in the customer service areas addressed by the standards. The OCA submits that Commission should open an investigation if the reports show a persistent failure to meet reasonable performance standards. OCA St. 5Sr at 6-7.
- 444. The OCA opposes a multi-year rate request, however, if Commission accepts the request, the OCA recommends that the MYRP should include penalties for non-compliance with the customer service performance standards. OCA St. 5 at 26.
- 445. The Company's proposal to automatically increase rates in the second year, without a review of its customer service performance, carries the risk that customer service quality will deteriorate because the utility has "a two-year time frame to exercise its discretion to alter internal expenditures and without a check on whether it is improving or even maintaining service quality performance." OCA St. 5 at 24-25.
- 446. Ms. Alexander explained that this risk is even more heightened (1) because PAWC does not have internal performance standards for many essential programs and (2) due to the impact of COVID-19 on customers' ability to pay their bills at current or higher proposed rates. <u>Id.</u>
- 447. As such, penalty provisions are warranted to ensure that PAWC is improving service quality performance while increased rates under the MYRP are in effect. OCA St. 5 at 26.
- 448. Ensuring that the utility's distribution system is operating to prevent loss of service and to respond promptly to correct leaks and disruptions is an essential duty of any water utility.

66 Pa. C.S. § 1501 (service "shall be reasonably continuous and without unreasonable interruptions or delay"); 52 Pa. Code § 65.20 ("Leak detection. A system of leak detection should be utilized on a regular basis, with leaks being repaired as expeditiously and economically as possible"); OCA St. 5 at 9.

- 449. OCA witness Alexander raised a concern that PAWC does not currently track the response time for leaks, i.e. the amount of time from the utility becoming aware of the incident until the repair is completed. OCA St. 5 at 9; PAWC St. 2R at 4.
- 450. PAWC witness William Andrew Clarkson objected to applying the same standard to all types of leaks because some are not addressed as quickly, such as breaks that do not result in an outage and leaks on customer-owned service lines that are not the Company's responsibility to repair. PAWC St. 18R at 4-5.
- 451. Consistent with that information, the OCA recommends that PAWC begin to track leak information for breaks that disrupt service and, based on that data, propose a performance standard within 60 days of the entry of the Commission's final Order in this proceeding. OCA St. 5 at 30.
- 452. PAWC does track "main breaks" or larger service outages and documents that its replacement strategy has resulted in a reduction in the statewide main break frequency rate from 0.37 main breaks per mile in 2009 to an average of 0.19 main breaks per mile in 2019. OCA St. 5 at 9; OCA Exh. BA-3 (PAWC response to OCA-I-001, Att. 6).
- 453. This data also shows that main break rates in Pittsburgh are significantly higher than PAWC's statewide average. <u>Id.</u>
- 454. The OCA recommends using PAWC's actual statewide main break frequency rate for 2019, of 0.19 main breaks per mile, as the standard for future performance. Id.
- 455. The OCA also recommends using PAWC's 2019 level of performance as the standard for keeping appointments. OCA St. 5 at 9.
- 456. The Company reported that it met 98% of its customer field appointments in 2019 and has an internal goal to maintain this level of performance. <u>Id.</u> (citing PAWC Response to OCA-I-001, Att. 4 and 5.
- 457. OCA witness Alexander agreed that a 98% standard is reasonable and typical of major utilities. <u>Id.</u>
- 458. PAWC witness Clarkson objected to setting minimum performance standards for leaks, outages, or appointments on the grounds that there are no "industry" standards or regulatory requirements. PAWC Statement No. 2R.
- 459. The specific performance standards that the OCA recommended are based on the Company's own historical performance. OCA St. 5R at 12.

- 460. PAWC witness Bruce Aiton provided updated data on the frequency of main breaks showing a decrease in their frequency, both system-wide and in the Pittsburgh system, which is further indication that the standard for main break rates proposed by the OCA is reasonable and achievable. PAWC St. 3R at 29.
- 461. The OCA also recommends establishing a performance standard for PAWC's billing accuracy and timeliness of resolving billing inquiries. OCA St. 5 at 30.
- 462. PAWC already tracks certain billing performance metrics, such as "out of balance invoices," "customer billing inquiries," and "account resolution follow-up." OCA St. 5 at 18-19.
- 463. Based on review of the data provided, OCA witness Alexander observed that PAWC's "baseline" appears to set a target for 90% to 95% of these customer contacts and concerns to be resolved in less than 20 days. OCA St. 5 at 18-19.
- 464. During the last two years, the Company generally met or exceeded that baseline. <u>Id.</u>
- 465. Accordingly, the OCA recommends that PAWC should be required to continue its objective to resolve 90% of its billing inquiries within 20 days. <u>Id.</u> at 30.
- 466. Adopting this standard, like the standards recommended above, is an appropriate and reasonable measure to help ensure that the Company maintains existing quality of service with regard to the accuracy of its billing and resolution of customer billing inquiries. <u>Id.</u>

Call Centers

- 467. PAWC relies on customer call centers as the main method by which customers can communicate individually with PAWC. OCA St. 5 at 6-7.
- 468. PAWC provided combined, monthly data for its four call centers from January 2018 through April 2020, which OCA witness Alexander used to calculate annual average results for three key indicators of performance including percent of calls answered within 60 seconds, abandonment rate, and average speed of answer. <u>Id.</u> at 7; OCA Exh. BA-2.
- 469. As discussed by Ms. Alexander, the data shows extremely poor performance in PAWC's ability to answer calls in a timely manner and avoid a significant abandonment rate (the percentage of calls in the queue to be answered by a customer service representative that are abandoned due to a long wait time). OCA St. 5 at 7.
- 470. The data supports the following conclusions: the 2018 results are not reasonable and significantly below what is tolerated at other Pennsylvania utilities; the 2019 results show improvement but are still below best practices; and the 2020 results reflect a very poor performance in January with some improvement due in part to the reduced volume of calls evident in April associated with the COVID-19 pandemic and the moratorium on termination of service. OCA St. 5 at 7-8.

- 471. In addition, the monthly results reflect a dramatic swing in call center performance that is masked in the annual averages. OCA St. 5 at 8.
- 472. For example, although the average abandonment rate for 2019 and 2020 was roughly 6.0%, in certain months during 2019 and 2020, the abandonment rate ranged from 9% to 12%. Id.
- 473. While the average speed of answer has significantly improved from 6:40 (minutes) in 2018 to approximately 2:30 in 2019 and 2020, the monthly results indicate an ongoing difficulty in meeting a reasonable target performance on a routine basis. Id.
- 474. In certain months, the speed of answer was over 4 and 5 minutes. OCA St. 5 at 8.
- 475. Ms. Alexander determined that the key variable in call center performance is the volume of calls and the number of available call center representatives on hand to answer the calls, such that PAWC can improve performance with better prediction of call volume and ensuring adequate, trained personnel are available to respond to call volume at predicted high call volume days and times. <u>Id.</u>
- 476. Currently, PAWC does not have any specific performance metrics or targets for its call center performance. OCA St. 5 at 8, n. 8.
- 477. Ms. Alexander recommended that PAWC should be required to take steps to improve the monthly performance of its call center and, specifically, to bring its performance in line with other Pennsylvania utilities. Id. at 7, 30.
- 478. Specifically, the OCA recommends that PAWC's call centers should establish the following performance standards: (1) an average time of answer of 60 seconds or less and (2) a call abandonment rate of less than 4%. Id. at 30.
- 479. PAWC objects to these standards on the basis that it considers its current performance to be satisfactory and it should not be compared with gas and electric utilities. PAWC St. 18R at 5-10.
- 480. PAWC witness Pallas contends that the Company's call center performance was worse in 2018 and generally, in winter months, due to unusually high levels of calls relating to winter weather and higher than normal incidence of main breaks. <u>Id.</u> at 6, 9.
- 481. Mr. Pallas also points to the impact of its interactive voice response (IVR) system on answer time and abandonment rates. PAWC St. 18R at 6-8.
- 482. Finally, Mr. Pallas asserts that general customers' satisfaction is a better measure of performance than specific metrics. <u>Id.</u> at 10-11.
- 483. The OCA addresses the insufficiency of the Company's one question survey in Section XV.D., infra.

- 484. OCA witness Alexander explained why Mr. Pallas' excuses for actual performance as measured by standard industry practices and methodologies should be rejected. OCA St. 5R at 14-15.
- 485. First, high levels of calls should not impact call center performance because the stated advantage of having call centers employed by third-party agencies located in Kentucky and Tennessee is that those customer service representatives (CSRs) "are available to take customer calls during high call volume periods or when CSRs at the Illinois or Florida call centers are unavailable due to weather events." PAWC St. 18R at 4; OCA St. 5R at 15.
- 486. Second, with regard to abandonment rates, Ms. Alexander disagreed with Mr. Pallas's suggestion on page 6 of his rebuttal, that the option to speak with a representative by accepting a future call back should not be considered an "abandoned" call or that the option mitigates the failure to promptly answer the call. OCA St. 5R at 14.
- 487. The call is "abandoned" when the customer abandons their attempt to wait in the queue to speak with a customer service representative. <u>Id.</u>
- 488. Third, OCA witness Alexander acknowledged PAWC's improved call center performance in 2019, however, "that improvement did not achieve results that are more typical of Pennsylvania gas and electric utilities with far fewer resources for handling calls compared to PAWC." OCA St. 5R at 15.
- 489. The OCA's recommended performance standards are reasonable and clearly achievable because they reflect actual performance by other Pennsylvania utilities. OCA St. 5R at 14-15.
- 490. As summarized by Ms. Alexander: While the 2019 performance improved compared to 2018, the wide swings in performance and the generally below average performance in all areas over this time period should be corrected. Customers who call in any month should be provided with reasonable customer service. OCA St. 5R at 3.
- 491. PAWC's call centers located in Kentucky and Tennessee are operated by third parties under contract with American Water Works Service Company (AWWSC). PAWC St. 18R at 1-2.
- 492. Representatives from the two third-party call centers make outbound calls to customers who have received a termination notice for nonpayment or other legal reasons, to seek payment or resolution of the cause of the notice. OCA St. 5R at 13, 16.
- 493. These two call centers make a significant percentage of their outbound calls to Pennsylvania customers: 65% for the Kentucky call center and 35% for the Tennessee call center. Id. at 16 (citing PAWC Response to OCA-XXIII-13).

- 494. OCA witness Alexander raised a concern whether these representatives are adequately trained and supervised to provide all of the Pennsylvania-specific rights and remedies to customers when discussing how to respond to a termination notice. OCA St. 5R at 16.
- 495. Her concern is based on the realistic and reasonable difficulty in properly supervising over 200 customer service representatives, in four different call centers that serve 16 different states and handle calls for thousands of customers on a daily basis, particularly in light of BCS's findings of verified complaints and those with infractions. <u>Id.</u> at 16; OCA St. 5 at 13.
- 496. To address that concern, the OCA recommends that PAWC be required to conduct regular audits of the third-party call centers to ensure that the rights and remedies available to Pennsylvania residential customers pursuant to Chapter 56 are affirmatively offered and presented when making contact with such customers who have received a termination notice. OCA St. 5SR at 17.
- 497. The results of such audits should be reported to BCS as part of the quarterly customer complaint analysis that the OCA recommends, which is addressed in Section XV.C.1, below. <u>Id.</u>
- 498. In OCA witness Alexander's direct testimony, she raised several concerns regarding the training materials provided to call center employees interacting with Pennsylvania customers. OCA St. 5 at 14-16.
- 499. In response, PAWC witness Pallas testified that the Company has developed new script modules called "MyWater V2" that the Company anticipates rolling out in November 2020. PAWC St. 18R at 14.
- 500. Mr. Pallas indicates that the new modules will provide Pennsylvania-specific scripts for customer service representatives. <u>Id.</u>
- 501. This upcoming reform is likely to be an important development and may resolve the OCA's concerns regarding the content and adequacy of the current training materials. OCA St. 5R at 18.
- 502. The OCA recommends that PAWC be required to provide these proposed script modules to the stakeholders prior to their implementation, to accommodate a review of these instructions and scripts to ensure compliance with Chapter 56 and PAWC's commitments to offer its low-income program to customers with payment difficulties. <u>Id.</u>

Customer Complaints

- 503. A review of the 2019 calendar year data for PAWC in the UCARE Report showed 15% of residential customer complaints were "justified." OCA St. 5 at 10.
- 504. A review of the 2019 calendar year data for PAWC in the UCARE Report showed 24% of the payment arrangement requests were "justified." OCA St. 5 at 10.

- 505. OCA witness Alexander testified that the data demonstrated PAWC's failure to apply the proper policies in handling the customer's interaction prior to the customer's informal appeal to BCS. OCA St. 5 at 10.
- 506. A review of the 2019 calendar year data for PAWC in the UCARE Report showed that PAWC's percentage of payment arrangement appeals was the highest of any Pennsylvania water utility. OCA St. 5 at 10-11.
- 507. BCS recorded 62 (of which 61 related to Chapter 56 of the Commission's regulations) verified "infractions" based on its analysis of PAWC informal customer complaints filed with BCS in 2019. OCA St. 5 at 10-11.
- 508. The data showed repeated instances of PAWC threatening termination prior to resolution of a dispute. OCA St. 5 at 10-11.
- 509. In 2018-2019 timeframe, PAWC implemented process changes that achieved PAWC's internal target to reduce customer complaints informally appealed to BCS by 10% in 2019. OCA St. 5 at 13 (citing PAWC Response to OCA-I-001).
- 510. PAWC relies on identifying "red flags" to ensure that call center representatives are providing proper information and offering the required consumer protections to Pennsylvania customers. OCA St. 5 at 13-14.
- 511. The OCA recommends that PAWC be required to submit a quarterly analysis to BCS of its complaint trends, which identifies the underlying root cause of the disputes and complaints and documents the steps taken to respond to this analysis. OCA St. 5 at 28.
- 512. The root cause analysis performed should review why the customer's communication with PAWC resulted in a dispute and how the PAWC customer service representative handled the initial communication, as well as the evaluation of the PAWC training materials and the integration of PAWC's field and maintenance staff for investigations of leaks and billing issues. OCA St. 5 at 12.
- 513. Based on PAWC's existing reporting BCS found that PAWC failed to apply the proper policies in handing the customer's interaction in 15% of customer complaints and 24% of payment arrangement requests, or that the percentage of PAWC's payment arrangement appeals was the highest of any Pennsylvania water utility. OCA St. 5SR at 8.
- 514. A public utility must make a full and prompt investigation of complaints made by the Commission or others, including customers, relating to service or facilities and keep these records for at least five years. 52 Pa. Code § 65.3 (Complaints); OCA St. 6 at 10.
- 515. The written records of these complaints must show the name and address of the complainant, the date and character of the complaint and the final disposition of the complaint. <u>Id.</u>

- 516. PAWC agreed to add the additional 10 categories for water systems and 6 categories for wastewater systems recommended by Mr. Fought to those it will use for its customer logs beginning with complaints received on and after January 2, 2021. PAWC St. 17R at 15.
- 517. PAWC should provide the logs in live Excel format. OCA St. 6 at 13.
- 518. PAWC's customer logs should include information about the final disposition of the complaint. <u>Id.</u>
- 519. This request is expressly required by Section 65.3 of the Commission's regulations. 52 Pa. Code § 65.3 (utility complaint records should include "the final disposition of the complaint").

Customer Satisfaction Surveys

- 520. Currently, PAWC measures customer satisfaction with its performance by asking customers whether they are "overall satisfied with American Water" and about the "overall performance" by the customer service representative. OCA St. 5 at 18.
- 521. The actual results of these one-time questions shows a significant deterioration in 2020 (to date) compared to 2019 with regard to satisfaction with the call center representative's handling of the call and overall with American Water. OCA St. 5SR at 9.
- 522. The current survey questions are insufficient because they do not obtain more detailed information concerning the customer's review of the actual recent transaction. OCA St. 5 at 18.
- 523. OCA witness Alexander noted that BCS has approved survey instruments for major Pennsylvania electric and gas utilities, which obtain information from customers about their experience in reaching the utility, using the automated phone system and interacting with the customer representative, in addition to their overall satisfaction. OCA St. 5 at 18.
- 524. The OCA recommends that PAWC develop routine customer satisfaction surveys consistent with those approved by BCS for other major utilities. OCA St. 5 at 18; OCA St. 5SR at 9-10.
- 525. PAWC's existing one or two questions are not an adequate measurement of its customers' satisfaction with their interactions with PAWC. OCA St. 5 at 18.

Training on Termination of Service

526. OCA witness Alexander identified two concerns regarding the instructions and training provided to PAWC's field personnel for this personal contact prior to termination. OCA St. 5 at 17-18; OCA St. 5SR at 10-11.

- 527. PAWC witness Dean accepted Ms. Alexander's recommendation to enhance and expand PAWC's training of its field representatives to include scenarios and written instructions when there is an allegation of pending dispute or complaint, or allegation relating to domestic abuse. PAWC St. 17R at 14; OCA St. 5SR at 10-11.
- 528. The second concern is that PAWC does not train personnel to detect conditions that would result in danger or harm to those at the residence if water service is terminated at that time. OCA St. 5 at 18.
- 529. This issue has serious consequences for vulnerable customers whose health or safety depends on water service (and home heating, where water is required by the heating system). Id. at 18; OCA St. 5SR at 10-11.
- 530. The employee may observe potential situations where it may be appropriate, even if not mandated, to halt the termination process. OCA St 5SR at 10-11.
- 531. The OCA recommends that PAWC modify its training materials to expressly include the instruction that when field representatives "encounter circumstances not specifically identified in the law or PUC regulation, they are instructed to contact their supervisor and/or business performance team members before terminating service." OCA St. 5SR at 11.
- 532. Where field personnel observe an unusual condition at the premises which raises a question whether termination at that time may adversely impact the health and safety of the occupants of the dwelling, or the safety of PAWC's employee or the public, the training materials should explicitly empower the employee to use their discretion to withdraw and seek guidance from management before terminating service. OCA St. 5SR at 11.

Pressure Surveys and Pressures

- 533. The Commission requires utilities to maintain normal operating pressures of no more than 125 pounds per square inch gauge (p.s.i.g.) at the main, with limited exceptions. 52 Pa. Code § 65.6(a).
- 534. PAWC witness Aiton stated that the Company tries to design its distribution systems to maintain pressures at less than 125 p.s.i.g., but there are circumstances that necessitate higher pressures; for example, to serve high elevation areas without otherwise unnecessary booster pump stations that would add capital costs and maintenance costs. PAWC St. No. 3R at 10.
- 535. Mr. Aiton recognized that higher pressures may lead to higher damage claims and more lost water due to leaks, and stated that the Company reviews its individual systems during its Comprehensive Planning Study reviews to see where it can reduce pressures. <u>Id.</u> at 10-11.

- 536. In order to protect customer service lines and inside plumbing, where normal operating pressures exceed 125 p.s.i.g. at the main, OCA witness Fought recommended the Company should either reduce pressures in the mains to less than 125 p.s.i.g. or provide pressure reducing valves approved for water supply with the applicable pressure to customers. OCA St. 6 at 6.
- 537. PAWC objected to this recommendation on the basis that it is not necessary for PAWC to furnish and install pressure reducing valves because the Company's tariff puts that burden on customers. Section 4.7 of the Company's water tariff states that the customer is required to provide for the installation and maintenance of a pressure regulator on their service line. PAWC St. 3R at 8-11; OCA St. 6SR at 10.
- 538. Section 4.7 requires the customer to install the pressure regulator on the inlet side of the meter. OCA St. 6SR at 11.
- 539. Mr. Fought explained that if, as in many instances, the pressure regulator is installed inside the building it will protect the meter and the interior plumbing from high pressures. OCA St. 6 SR at 11.
- 540. This does not, however, protect the customer's service line between the curb box and the building from the higher pressures. OCA St. 6SR at 11.
- 541. Thus, the OCA recommends that, if PAWC elects to provide higher than 125 p.s.i.g. static pressure to some customers in order to serve other customers, the Company should either (1) provide a pressure reducer protecting the customer's service line or (2) provide an insurance policy covering repair or replacement of the service line. <u>Id.</u>
- 542. As Mr. Fought explained: "If this approach was implemented, the cost of protecting service lines with pressures over 125 psi would be taken into account in deciding the most economical way to provide service to higher ground elevations." <u>Id.</u>

Main Extensions

- 543. OCA witness Fought recommended a main extension for Area 1 in the area of 51 Ullom Road, Washington County. OCA St. 6 at 7.
- 544. PAWC has made two previous main extensions to the area as a result of the settlements in the prior 2013 and 2017 base rate proceedings. OCA St. 6-SR at 14.
- 545. The Area 1 impacted potential consumer, Robert Teagarden, testified at the August 18, 2020, 6 p.m. Public Input Hearing in this proceeding. Tr. 197-198.
- 546. Mr. Teagarden and his neighbor down the road lost their wells approximately 5 years ago. Tr. 197-198; OCA St. 6 at 7.
- 547. Mr. Teagarden put a camera down his well and discovered the water was gone. OCA St. 6-SR at 13-14.

- 548. Mr. Teagarden put in a 1,500-gallon concrete tank in my yard and currently has water hauled in since that time. Tr. 197; OCA St. 6 at 7.
- 549. Company witness Aiton estimates that the proposed cost to extend service to Area 1 is \$225,000.PAWC St. 3-R at 13.
- 550. OCA witness Fought recommended a main extension in the area of Campbell Road and Old Steubenville Pike in Bulger, Pa. (Area 2). OCA St. 6 at 7.
- 551. The Area 2 customers believe that their well water was adversely affected by a fracking incident that is currently the subject of a grand jury investigation by the Office of Attorney General. OCA St. 6 at 7.
- 552. The Area 2 household at Old Steubenville Pike has had many illnesses possibly due to environmental reasons and possibly due to the contamination of their well. OCA St. 6 at 7.
- 553. The Area 2 household at Old Steubenville Pike does not believe that their water is potable due to the fracking incident. OCA St. 6 at 7.
- 554. The Area 2 household at Old Steubenville Pike only uses the well water for household purposes and do not use the water for drinking or cooking. OCA St. 6 at 7.
- 555. At times, the Area 2 household at Old Steubenville Pike smells sulphur when they run the water. OCA St. 6 at 7.
- 556. The Area 2 household at Old Steubenville Pike claims staining of their toilets with a pinkish-orange color, and that a pinkish plastic like substance accumulates in the back of commode. OCA St. 6 at 7.
- 557. The Area 2 household at Old Steubenville Pike also claims that they have had damage to their washing machine due to the water and that their whites have become dingy as a result of the water. OCA St. 6 at 7-8.
- 558. As part of the settlement of PAWC's 2017 base rate proceeding, PAWC provided service to a neighbor at 121 Campbell Road. OCA St. 6 at 8.
- 559. Witness Aiton claims that the cost of an extension to Old Steubenville Road would be \$235,000. PAWC St. 3R at 12-13.
- 560. PAWC's service territory includes a nearby customer who received a main extension as a result of the 2017 base rate proceeding, and based upon Mr. Aiton's testimony, it appears that the Campbell Road property in Area 2 is within the Company's service territory. OCA St. 6SR at 15.
- 561. Additional potential customers may be located within the Company's service territory. OCA St. 6SR at 15.

- 562. In Surrebuttal Testimony, OCA witness Fought testified that it is his understanding that PAWC had an agreement with Robinson Township to install 4,250 feet of water main to provide service to nine customers along the Steubenville Pike. OCA St. 6-SR at
- 563. In Surrebuttal Testimony, OCA witness Fought testified that it is his understanding that the agreement was cancelled after new Township Supervisors were elected. OCA St. 6-SR at 16.
- 564. OCA witness Fought testified that if that 4,250 feet of main were installed, it could now serve 9812 Old Steubenville Pike and another potential 20 customers in the area along or nearby that main. OCA St. 6SR at 15-16.
- 565. OCA witness Fought also recommended a main extension to the Area 2 household located on Campbell Road, Bulger, Pa. which is adjacent to the 121 Campbell Road property that received a main extension as a result of PAWC's last base rate proceeding. OCA St. 6 at 8.
- 566. The Area 2 Campbell Road household seeks two taps, one for the farm and one for the house. OCA St. 6 at 8.
- 567. The Area 2 Campbell Road household claims that the water quality in their well changed five years ago. OCA St. 6 at 8.
- 568. The Area 2 Campbell Road household claims that their water was previously, crystal clear and now they sometimes have a white swirl in their water that eventually settles. OCA St. 6 at 8.
- 569. The Area 2 Campbell Road household also claims that sometimes smell a sulphur odor from the water and their toilets have been stained an orange color. OCA St. 6 at 8.
- 570. The Area 2 Campbell Road household continued to consume the well water until July of 2020. OCA St. 6 at 8.
- 571. Three of the four Area 2 Campbell Road household members have serious kidney and adrenal gland health issues, including their 12 year old daughter, and they attribute the health issues to consumption of the water over the last five year. OCA St. 6 at 8.
- 572. The water has also impacted the animals and livestock at the Area 2 Campbell Road household. OCA St. 6 at 8.
- 573. The Area 2 Campbell Road household had several kittens that have had to be put down due to kidney failure. OCA St. 6 at 8.
- 574. The Area 2 Campbell Road household's calves that consume the well water have not flourished and have started to atrophy. OCA St. 6 at 8.
- 575. When the Area 2 Campbell Road household moved the calves to another field not fed by the well water, the calves have rebounded. OCA St. 6 at 8.

- 576. Company witness Aiton testified that an extension to serve Campbell Road would cost an estimated \$205,000. PAWC St. 3-R at 13.
- 577. The Settlement of the 2017 base rate proceeding included an extension to 121 Campbell Road. OCA St. 6 at 9.
- 578. The customers in Area 2 have alleged serious health consequences due to the lack of potable water. OCA St. 6SR at 17.

Sewage Backups

579. Based on information provided by PAWC, two wastewater customers in Dunmore, PA registered informal complaints. OCA St. 6 at 12; PAWC St. 2R at 30-33.



- 582. OCA witness Fought generally addressed sewers backing up into basements in areas served by combined sewers. OCA St. 6SR at 5.
- 583. He explained that a combined sewer system collects surface runoff and sewage water in a shared system. <u>Id.</u>
- 584. PAWC has acquired some combined sewer systems for which they are in the process of implementing Long Term Control Plans (LTCP) for reducing the amount of Combined Sewer Overflows (CSO) in compliance with the federal Clean Water Act. OCA St. 6SR at 6.
- 585. One procedure for reducing CSOs is to reduce the peak flows so that existing downstream pipes do not overflow, by delaying flows (by providing storage), or rerouting flows. OCA St. 6SR at 6.

OCA PROPOSED CONCLUSIONS OF LAW

- 1. Pennsylvania-American Water Co. is a public utility as defined in Section 102 of the Public Utility Code. 66 Pa. C.S. § 102.
- 2. The Commission has jurisdiction over the parties and the subject matter of this proceeding. 66 Pa. C.S. § 101, *et seq*.
- 3. The utility requesting the rate increase has the burden of establishing the justness and reasonableness of every element of its requested rate increase. 66 Pa. C.S. §§ 315(a), 1301; Lower Frederick Twp. v. Pa. PUC, 48 Commw. 222, 226-27 (1980).
- 4. PAWC has the burden of proving that the rate involved is just and reasonable. 66 Pa. C.S. §§ 315(a), 1301, and 1308(e).
- 5. The Commission has broad authority to consider a utility's customer service and quality of service and is required to evaluate the "efficiency, effectiveness and adequacy of service" in reviewing existing and proposed rates. 66 Pa. C.S. §§ 523(a), 1501.
- 6. The Commission has authority to prescribe just and reasonable standards and practices to be furnished by a utility and to require changes and improvements, as necessary to make such service and facilities adequate, efficient, safe and reasonable. 66 Pa. C.S. §§ 1501, 1504.
- 7. As a consequence of the COVID-19 pandemic's impact on the health and economy of the Commonwealth and the world, many of the Fully Projected Future Test Year projections for Year 1 (2021) and Year 2 (2022) included in PAWC's filing cannot be found to be just and reasonable.
- 8. As a result of the COVID-19 pandemic, it cannot be found to be just or reasonable to impose any rate increase at this time when unemployment numbers are close to record highs and the economic effects of the pandemic will not be fully known for some time.
- 9. If, in the alternative, the Commission deems it necessary to review PAWC's rate increase under traditional ratemaking provisions, the revenue increase shall be limited to a one-time decrease of one-time revenue decrease of \$68,333,991 for water operations and \$ 30,906,732 million rate increase for wastewater.

The Company has not met its burden of proving the proposed multiyear rate plan will produce just and reasonable rates.

- 10. PAWC has not met its burden of proving the proposed tracker for Pension and Other Post Employment Benefit expenses will produce just and reasonable rates.
- 11. PAWC has not met its burden of proving the proposed Regional Consolidation Surcharge will produce just and reasonable rates.
- 12. PAWC has not met its burden of proving that the rates, rules and regulations in its existing and proposed tariffs are just and reasonable.
- 13. Under PAWC's tariff, main extensions may be provided to customers without a CIAC where there is a substantial public need, and the public health and safety may be compromised without access to a public water supply. Pennsylvania-American Water

Company Water Tariff, Supplement No. 2 to Tariff Water Pa. PUC No. 5, First Revised Tariff Page No. 89 (effective Jan. 1, 2018).

- 14. Subject to Commission approval, PAWC could apply for a certificate of public convenience under Sections 1102(a) and 1103(a) of the Public Utility Code to extend its service territory to serve new main extension customers located outside of its existing service territory. 66 Pa. C.S. §§ 1102(a), 1103(a).
- Since PAWC is already a certificated public utility in Pennsylvania, the Commission may apply the standard of "continuing fitness to serve" to the application. <u>Blue Bird Coach</u> <u>Lines, Inc.</u>, 72 Pa. P.U.C. 262 (1990); <u>Re V.I.P. Travel Servs., Inc.</u>, 56 Pa. P.U.C. 625, 631 (1982).

OCA PROPOSED ORDERING PARAGRAPHS

It is hereby ORDERED THAT:

- 16. Pennsylvania-American Water Co. shall not place into effect the rates, rules and regulations contained in Supplement Nos. 19 (water) or 16 (wastewater), which have been found to be unjust, unreasonable and, therefore, unlawful.
- 17. In light of the impact of the COVID-19 pandemic, Pennsylvania-American Water Co. shall not be authorized to file tariffs, tariff supplements, or tariff revisions containing rates, provisions, rules and regulations, consistent with the findings herein, to produce any revenue increase.
- 18. If in the alternative, Pennsylvania-American Water Co. is permitted to increase its base rate revenues under traditional ratemaking provisions, Pennsylvania-American Water Co. shall be authorized to file tariffs, tariff supplement, or tariff revisions limited to a one-time revenue decrease of \$68,333,991 for water operations and \$ 30,906,732 million rate increase for wastewater.
- 19. Pennsylvania-American Water Co. shall amortize the unprotected EADIT over a threeyear period.
- 20. Pennsylvania-American Water Co. shall no later than six months after a final order in this proceeding, present an Arrearage Management Plan to the Commission for review and approval. The AMP should be designed through a multi-party stakeholder consultative process, with BCS specifically invited to participate as a stakeholder.
- 21. Pennsylvania-American Water Co. shall be directed to budget \$50,000 to hire an expert consultant to develop, within twelve months of a final order in this proceeding, a grass-roots, boots-on-the-ground outreach plan for its low-income bill discount that relies on community-based "trusted messengers" to help identify and enroll eligible customers in its bill discount. The outreach program should be directed to explicitly identify how it implements each of the principles set forth below: (1) using the community as a "boots-on-the-ground" means of identifying and engaging the hard-to-reach population; (2) going to the community (reaching them "where they live, work, shop, play and pray")

rather than making the community come to you; and (3) relying on grassroots "trusted messengers" from within the community. PAWC's new outreach plan should reflect focused consumer education and outreach efforts, tailored to the demographics of its individual service territory. The plan should, in particular, identify efforts to educate and enroll eligible and interested customers at or below 50% of the Federal Poverty Level.

- 22. Pennsylvania-American Water Co. shall PAWC identify the 2,159 low-income customers who were found to be eligible for its low-income bill discount between January 2018 and April 2020 (or an updated number as of the date of a final order in this proceeding) and, without further action on the part of the customer, enroll those customers in the bill discount to the extent they remain PAWC customers. Moreover, PAWC should retroactively provide these customers who applied for the discount, been found to be eligible, and nonetheless were not enrolled, with benefits retroactive to the month in which they were found to be eligible. To the extent that customers are found to have had service disconnected, they should be reconnected without cost and enrolled in the bill discount.
- 23. Pennsylvania-American Water Co. shall delete the following language both from its water and from its wastewater tariffs: "To remain eligible for this rate, such customer must continually make timely payments on the discounted bills."
- 24. Pennsylvania-American Water Co. shall meet the performance standards as set forth above and as reflected in OCA Statement 6.
- 25. Pennsylvania-American Water Co. shall be required to conduct regular audits of the third-party call centers to ensure that the rights and remedies available to Pennsylvania residential customers pursuant to Chapter 56 are affirmatively offered and presented when making contact with such customers who have received a termination notice. The results of such audits should be reported to BCS as part of the quarterly customer complaint analysis that the OCA recommends.
- 26. Pennsylvania-American Water Co. shall be required to provide these proposed script modules to the stakeholders prior to their implementation, to accommodate a review of these instructions and scripts to ensure compliance with Chapter 56 and PAWC's commitments to offer its low-income program to customers with payment difficulties.
- 27. Pennsylvania-American Water Co. shall provide the customer complaint logs in live Excel format and include information about the final disposition of the complaint.
- 28. Pennsylvania-American Water Co. shall develop routine customer satisfaction surveys consistent with those approved by BCS for other major utilities.
- 29. Pennsylvania-American Water Co. shall modify its training of its call center employees and field personnel consistent with the recommendations made by OCA.
- 30. Pennsylvania-American Water Co. shall, if PAWC elects to provide higher than 125 p.s.i.g. static pressure to some customers in order to serve other customers, either (1) provide a pressure reducer protecting the customer's service line or (2) provide an insurance policy covering repair or replacement of the service line.
- 31. Pennsylvania-American Water Co. shall provide main extensions under Tariff Rule 27.1 (F) to two areas as set forth in OCA's testimony.

- 32. Pennsylvania-American Water Co. shall file detailed calculations with its tariff filing, which shall demonstrate to this Commission's satisfaction that the filed rates comply with the proof of revenue, in the form and manner customarily filed in support of compliance tariffs.
- 33. Pennsylvania-American Water Co. shall comply with all directives, conclusions and recommendations contained in this Commission's Opinion and Order that are not the subject of individual ordering paragraphs as fully as if they were the subject of specific ordering paragraphs.
- 34. Pennsylvania-American Water Co. shall allocate the authorized increase in operating revenues to each customer class and rate schedule within each class in the manner set forth in this Order.
- 35. The Complaints filed by the various parties to this proceeding at Docket Numbers R-2020-3019369 and R-2020-3019371 are granted in part and denied in part, to the extent consistent with this Commission's Opinion and Order.

DATE: _____

Administrative Law Judge Conrad A. Johnson

APPENDIX D

LIST OF OCA-SPONSORED TESTIMONY AND EXHIBITS ADMITTED INTO THE RECORD

OCA Statement 1, Direct Testimony of Scott J. Rubin

Appendix A:	Curriculum vitae
Schedule SJR-1:	Pandemic-related data for counties served by PAWC
Schedule SJR-2:	Excerpt from Board of Governors of the Federal Reserve System, Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data from April 2020 (released May 14, 2020)
Schedule SJR-3:	Experienced loss of employment income since mid-March, and expected income loss in the next four weeks, Pennsylvania households by selected characteristics, as of the week ending July 21, 2020
Schedule SJR-4:	How Pennsylvania households who lost employment income since mid-March paid their bills in the past 7 days, as of the week ending July 21, 2020
Schedule SJR-5:	Impact of COVID-19 on Consumer Energy Use & Outlook: Results of EPRI National Survey (April 29, 2020)
Schedule SJR-6:	Water COSS: Allocation of late payment fees based on actual 2019
Schedule SJR-7:	Water COSS: Allocation of Citizens Acquisition CIAC and CAC
Schedule SJR-8:	Results of OCA Proposed Changes in Water COSS Before Subsidies
Schedule SJR-9:	Excerpt from Water Environment Federation Manual of Practice No. 27, <i>Financing and Charges for Wastewater Systems</i> (4 th edition)

Copies of Interrogatory Answers Referenced in the Testimony

OCA-04-005	OCA-08-003	OCA-08-010
OCA-04-018	OCA-08-004	OCA-08-012
OCA-04-025	OCA-08-006	I&E-RS-16-D
OCA-07-001	OCA-08-009	I&E-RS-23-D

OCA Statement 1SR, Surrebuttal Testimony of Scott J. Rubin

Schedule SJR-10-SR: Updated pandemic-related figures and tables

OCA Statement 2, Direct Testimony of Ralph C. Smith – Confidential and Public Versions

Attachment RCS-1:	Background and Qualifications
Exhibit LA-1:	Schedules showing Revenue Requirement, Rate Base, Net Operating Income and Adjustments for the Water and Wastewater utility operations
Exhibit LA-2:	Schedules Showing Recommended Adjustments

Exhibit LA-3:	Selected Non-Confidential Documents Referenced in the Testimony and Exhibits LA-1 and LA-2
Exhibit LA-4:	Selected <u>Confidential</u> Documents Referenced in the Testimony and Exhibits LA-1 and LA-2
Exhibit LA-5:	American Water Works, Inc. Form 10-K for the period ending December 31, 2019

OCA Statement 2SR, Surrebuttal Testimony of Ralph C. Smith – <u>Confidential</u> and Public Versions

Exhibit LA-6:	Revised Revenue Requirement Summary Schedules showing Revenue Requirement, Rate Base, Net Operating Income, Cost of Capital, and Summarized Adjustments for the Water and Wastewater Utility Operations Relating to FPFTY 2021 on a Year-End Basis
Exhibit LA-7:	Schedules Showing Recommended Adjustments Relating to FPFTY 2021 on a Year-End Basis
Exhibit LA-8:	Schedules showing Recommended and/or Corrected Adjustments Relating to Rate Year 2022 on an Average Basis
Exhibit LA-9:	Present Value Analysis Applied to PAWC's JRW-3 Presentation re Unprotected EADIT amortization
Exhibit LA-10:	Federal Reserve Statistical Release Consumer Credit August 2020 – released 10/7/2020

OCA Statement 3, Direct Testimony of Aaron L. Rothschild

Appendix A:	Resume of Aaron L. Rothschild
Appendix B:	Testifying Experience of Aaron L. Rothschild
Schedule ALR-1:	Cost of Capital – Water and Wastewater 2021 and 2022
Schedule ALR-2:	Cost of Equity
Schedule ALR-3:	Discounted Cash Flow - Indicated Cost of Equity
Schedule ALR-4:	Capital Asset Pricing Model - Indicated Cost of Equity
Schedule ALR-5:	Water Proxy Group
Exhibit 1:	Value Line Water Utility Industry Report - July 10, 2020

OCA Statement 3SR, Surrebuttal Testimony of Aaron L. Rothschild

Schedule ALR-SR4: Capital Asset Pricing Model – Working Papers

OCA Statement 4, Direct Testimony of Roger D. Colton		
Schedule RDC-1:	Collections Efficiency	
Schedule RDC-2:	PAWC Income Eligibility Determinations and Enrollment	

APPENDIX D

Appendix A: Colton Vitae

OCA Statement 4SR, Surrebuttal Testimony of Roger D. Colton

Schedule RDC-1SR: PAWC Response to OCA-05-002

OCA Statement 5, Direct Testimony of Barbara R. Alexander - Confidential and Public Versions

Exhibit BA-1:	Curriculum Vitae
Exhibit BA-2: Results	PAWC Customer Call Center Data and Calculation of the Annual Average
Exhibit BA-3:	PAWC Response to OCA-01-001, Attachment 6
Exhibit BA-4:	"How to Construct a Service Quality Index in Performance-Based Ratemaking", The Electricity Journal, April, 1996

OCA Statement 5SR, Surrebuttal Testimony of Barbara R. Alexander - <u>Confidential</u> and Public Versions

OCA Statement 6, Direct Testimony of Terry L. Fought

Appendix A:	Background & Qualifications
Exhibit TLF-1:	Listing of Complaints Received by PAWC Water System

OCA Statement 6SR, Surrebuttal Testimony of Terry L. Fought - Confidential and Public Versions

OCA Hearing Exhibit 1

List of OCA Sponsored Testimony and Exhibits Admitted into the Record

OCA Cross Examination Exhibit 1

Comparison of the Revenue Requirement Impact of Varied EADIT Amortization Periods at OCA ROE

OCA Cross Examination Exhibit 2

Comparison of the Revenue Requirement Impact of Varied EADIT Amortization Periods at Higher ROE

SUMMARY OF PUBLIC INPUT HEARING TESTIMONY

- 1. Pennsylvania State Senator Judith Schwank testified that she was concerned over the fact that rate increase requests by Pennsylvania-American Water Company "seem to have become a biennial ritual." Tr. 82. She also expressed being "very disturbed" that proceedings discussing "significant water and wastewater rate increases" were taking place "in the middle of an economic catastrophe caused by COVID-19." Tr. 82-83. Senator Schwank testified that she is "quite sure that in this environment, few if any ratepayers can afford any rate increase request." Tr. 83.
- 2. Dennis Gore testified that he is worried he will not be able to afford to pay the proposed rate increase. Tr. 93. Mr. Gore is retired and is already finding it difficult to survive off of his "limited" income, which consists of Social Security benefits. Tr. 93.
- 3. Stephen Sutter objected to the Company's proposed rate increase, testifying that the water provided by Pennsylvania-American Water Company to his home smelled and had an "awful taste." Tr. 99. He also testified that the Company tested the water multiple times and did not inform Mr. Sutter of any issues with it. Tr. 99. However, because the smell and the taste continued to be an issue, Mr. Sutter began buying bottled water and bagged ice. Tr. 100-02.
- 4. John Papalia, the Director of Chamber Operations with the Warren County Chamber of Business and Industry, testified that Pennsylvania-American Water Company "has been a key partner . . . in Warren County" and has "supported a number of different initiatives" Tr. 113.
- 5. John Norton objected to the Company's proposed rate increase, testifying that "[i]n these difficult times when many have lost their jobs and many smaller businesses are struggling to survive, it is inappropriate to grant unfair and excessive increases to Pennsylvania-American Water Company." Tr. 121.
- 6. Roseanne Milazzo, testifying on behalf of West Norriton Township, requested that the PUC "deny any increase in rates because water rates have become not just unreasonable, but exorbitant." Tr. 150. Ms. Milazzo testified that "[t]he company and its investors can afford to forego any rate increase, especially in this time of economic difficulty and COVID-19 pandemic." Tr. 157. Ms. Milazzo also stated that the Company's rates are "already too expensive" and that "West Norriton residents should not be forced to subsidize this giant company's growth, especially when we need to pay for maintenance and upgrades of our own [sewer] system." Tr. 152, 156. Ms. Milazzo further stated that "West Norriton residents have complained to [her] of a vile, chlorine smell of their water. Some, including resident Amy Gallagher, are afraid to drink it." Tr. 155.
- 7. Sheila McMillen, whom relies on disability benefits for income, objected to the Company's proposed rate increase. Tr. 163. Ms. McMillen testified that her family of three is already doing "everything possible" to lower their water bills, including flushing their toilet less frequently, using bottled water, and doing laundry elsewhere. Tr. 163.

However, they are still receiving high water bills. Tr. 163. When asked whether she was enrolled in the Company's low income assistance program (Help to Others Program), Ms. McMillen testified that she was, but that because of an increase in taxes, the price remains virtually unchanged. Tr. 166.

- 8. Leroy James Watters, III, a veteran of the Pennsylvania National Guard whom retired from Verizon in 2003, objected to the Company's proposed rate increase. Tr. 171-72. Mr. Watters testified that "Pennsylvania-American Water Company does nothing to protect and improve the natural resource it draws its product from." Tr. 172.
- 9. Paula Mercuri objected to the Company's proposed rate increase, testifying that the Company should rescind their request for a rate increase because of COVID-19. Tr. 187. Ms. Mercuri stated that her water bill is already "very high" and that while she held two part-time jobs before COVID-19, she is currently unemployed and "afraid to go back to work" because of her age. Tr. 188.
- 10. Robert Teagarden called into the hearing to complain about not having a public water connection to his home. Tr. 197-98.
- 11. Maureen Madden, representative of the 115 legislative district in Monroe County, testified that "as best as I can figure out this rate increase is going to cost my constituents approximately \$15 a month more in their water bill." Tr. 228. Representative Madden added that even before COVID-19, "a \$15 a month increase was going to be a lot" for her constituents to bear. Tr. 228. Representative Madden asked that the increase be spread over more than two years. Tr. 229.
- 12. Mary Sally, testifying as an employee of Dollar Energy Fund, stated that the Company has partnered with Dollar Energy Fund to establish the Help to Others Program to provide assistance for consumers who struggle to pay their monthly water bills. Tr. 233.
- 13. Chad Yurisic, testifying on behalf of the City of Warren, stated that the Company "is proposing to combine the revenue requirements for their drinking water systems and wastewater systems." Tr. 237. Mr. Yurisic added that because the City "owns and operates their own wastewater treatment plan," the Company "is proposing to charge city residents for a service that the city provides and not the water company." Tr. 237-38. Mr. Yurisic also testified that the Company's additional regionalization and consolidation surcharge should be delayed because of the "economic conditions resulting from the COVID-19 pandemic." Tr. 238.
- 14. Donna Kaczmarek complained about her high monthly bill and the Company's lack of transparency in how her rates are calculated. Tr. 242. Ms. Kaczmarek testified that she has a well on her property which produces the water that her household uses, but pays a monthly bill for her household's wastewater. Tr. 243.
- 15. Robin Romanelli expressed her confusion as to why her water bill has doubled in the last several months, even though she "downsized to a much smaller home" and her two

daughters moved out. Tr. 246. Further, Ms. Romanelli testified that her water "comes out of the faucet like foam for the first 30 seconds" and "smells like rotten eggs." Tr. 247.

- 16. Johnie Perryman testified the following: the "increase in water prices is putting me back in the hole deeper than I want to get into. Right now I cut off my cable television because I don't want to pay that bill. I don't have long distance on my phone I don't know how I can cut back any further for paying this increase in the water bill." Tr. 256-57.
- 17. Jay Walker, a community organizer for Clean Air Council, testified that everyone he spoke to in Clairton was "shocked to hear how large" the increase in water rates would be. Tr. 260. Mr. Walker also testified that only one of the residents he spoke to "was properly notified about the rate increase and none of them knew about the Pennsylvania Utility Commission hearings." Tr. 260-61. Mr. Walker added that the poverty rate in Clairton is 28.2%. Tr. 261.
- 18. Pennsylvania State Representative Austin Davis objected to the Company's proposed rate increase, expressing his concern over the Company's "willingness to push for this increase . . . while our Commonwealth and its residents currently face financial hardships many of us have never seen before." Tr. 289.
- 19. Jeanne Hoffman objected to the Company's proposed rate increase, expressing her frustration at the frequency of rate increases. Tr. 319-20.
- 20. Linda Nitch, an employee at the Lawrence County Regional Chamber of Commerce, testified in favor of the Company's rate increase, arguing that "the investment that is occurring as a result of PA-American Water receiving their funding and being able to invest these dollars is helpful to us." Tr. 322-24.
- 21. Becky Boyle read a letter authored by Senator Lindsay Williams in which she objected to the Company's proposed rate increase. Tr. 405. Senator Williams' letter stated that while she would "strenuously object to raising rates for the average customer, nearly 20 percent over the course of two years in ordinary times, Allegheny County residents are not living in ordinary times," referring to the effects of the COVID-19 pandemic. Tr. 405.
- 22. James Mascioli complained about his and his mothers' water service, the condition of roads, and proposed a method for apportioning increases. Tr. 410-12.
- 23. James Torakeo objected to the Company's proposed rate increase. Tr. 419. Mr. Torakeo argued that the size of the rate increases proposed are unreasonable, the rate increases have not been communicated with sufficient clarity to customers, and that the rate increases proposed are unjust and discriminatory in nature. Tr. 419. Mr. Torakeo further argued that the rate increases in their current format are not consistent with sound public policy and that other options exist to fund capital improvements. Tr. 419.
- 24. Frederick Bickerton objected to the Company's proposed rate increase, calling it "ridiculous." Tr. 429. He also stated that "[t]he elderly and the poor in this area cannot afford" the increase. Tr. 429.

- 25. Betty Ramseur objected to the Company's proposed rate increase, stating that "[w]e are in the midst of a pandemic and because I'm a nurse, hand washing is really important to me. Tr. 432. Not only hand washing, but you got to do clean and double clean every day just to keep the germs at bay." Tr. 432. Ms. Ramseur further added that it is "ridiculous for them to request approximately \$350 a year . . . I just feel the amount is way too high. And I know I'm on a pension. The pension does not increase." Tr. 432.
- 26. Kim Meacham objected to the Company's proposed rate increase, stating that a rate increase would be "greatly difficult" for her. Tr. 435. Ms. Meacham further stated that she has been a resident at her home for 35 years and is now retired and "on a fixed income." Tr. 435.
- 27. James Lentz, testifying on behalf of the Lower Providence Fire Department, stated that the Company has a good working relationship with the fire department. Tr. 441.
- 28. Jessica Benham objected to the Company's proposed rate increase, citing the effects of the COVID-19 pandemic. Tr. 444.
- 29. Nicholas Letta, an employee of Pennsylvania-American Water and a union representative for the Utility Workers United Association, objected to the Company's proposed rate increase. Tr. 473. Mr. Letta testified as follows: "I feel like the proposed base rate increase . . . discriminately affects our most disadvantaged customers, which are those with either fixed incomes, low-income or and indeed, they have no income. The pandemic has also affected these folks from the same group most. And at this time, I feel like this form of rate increase cannot be allowed to happen." Tr. 473. Mr. Letta also testified about noticing "a change in the Company" since it went public "from one that was customer-driven to one that now seems to be profit-driven." Tr. 473. Further, Mr. Letta expressed concerns over slow responses to emergencies and bad hydrants. Tr. 473-74.
- 30. Kimberly Haymans-Geisler objected to the Company's proposed rate increase. Tr. 490. Ms. Haymans-Geisler expressed concern over the financial effects of COVID-19 and the "uncertainly about how new company revenues enabled by the rate increase will translate into greatly needed infrastructure upgrades across West Norriton Township." Tr. 491-92. Ms. Haymans-Geisler elaborated by stating that her "uncertainty about needed infrastructure upgrades was dramatically highlighted by a water main break on February 22nd, 2018, directly in front of my own driveway" which caused water to flow continuously for about 90 minutes. Tr. 493. Ms. Haymans-Geisler added that permanent repairs did not occur for over eight months after the incident. Tr. 492.

SUPPLEMENT TO OCA MAIN BRIEF

Section I. INTRODUCTION AND OVERVIEW Section I.B. Procedural History

I. INTRODUCTION AND OVERVIEW

On April 29, 2020, Pennsylvania-American Water Company (PAWC or the Company) filed Supplement No. 19 to Tariff Water – PA P.U.C. No 5 and Supplement No. 19 to Tariff Wastewater – PA P.U.C. No. 16 to become effective June 28, 2020. Through these filings, PAWC requests that the Commission approve multiyear rate increases to its water and wastewater rates pursuant to Section 1308(d), 66 Pa. C.S. § 1308(d). PAWC's tariffs propose to increase the Company's total annual operating revenues by approximately \$138.6 million over a two-year period: \$92.4 million in 2021 or 12.9% over the amount of annual revenues at present rates and \$46.2 million in 2022 or 5.8% over the amount of annual revenues at present rates. The effective date of the proposed rates is January 28, 2021.

Due to the unprecedented impact of COVID-19 on the people and businesses of the Commonwealth, the Office of Consumer Advocates recommends that no rate increase be authorized at this time for either water or wastewater operations. If that recommendation is not adopted, the OCA recommends that PAWC's multiyear rate plan (MYRP) be rejected and that rates be set using the end of year 2021 FPFTY. Using the 2021 FPFTY, the OCA's analyses show that the Company would need a water revenue reduction of \$68,333,944 and would need an increase of no more than \$30,906,901 in wastewater revenues. App. A.2, OCA Table I, for each of the revenue requirements. If the Commission considers the MYRP, the OCA has provided recommended water and wastewater revenue requirements for Year 1 (2021) and Year 2 (2022),

which are calculated on an average basis for Year 2. For water revenue requirements, the OCA has identified a revenue decrease of \$91.22 million for Year 1, and a revenue decrease of roughly \$128.817 million for Year 2. OCA Exh. LA-1, at 5, 7. For wastewater revenue requirements, OCA calculated a revenue increase of roughly \$26.805 million for Year 1, and a revenue decrease of \$16.572 million for Year 2. OCA Exh. LA-1 at 6, 8. The OCA also recommends that the Commission utilize a Fully Projected Future Test Year (FPFTY) 2021 on a year-end basis and reject the Company's multiyear rate plan (MYRP) at this time.

As discussed in greater detail below, the OCA has proposed adjustments to the Company's proposed capital structures for water and wastewater, cost of equity; the average test year approach to the 2022 rate year as a second rate year in a multiyear rate plan; rate base adjustments to the Excess Accumulated Deferred Income Taxes and the associated amortization expense adjustment; revenue adjustments related to the declining residential and commercial consumption and changes in revenues due to changes in the number of customers; and net operating income items, including changes in power and chemical costs, salaries and wages expenses, the Annual Incentive Plan and Stock Based Compensation (including the Service Company costs), group insurance expenses, 401K Defined Contribution Plan and Employee Stock Purchase Plan, capitalization rate, property tax expense, and depreciation expense. These adjustments result in the OCA's recommended revenue requirements for water and wastewater. The OCA also proposes adjustments to the Company's cost of service studies and proposed allocation of water and wastewater revenues, including the Company's proposed shift of wastewater revenue requirement to water customers.

The Office of Consumer Advocate (OCA) hereby submits this Main Brief regarding the water and wastewater rate increases proposed by Pennsylvania-American Water Company (PAWC or Company).

F-2

B. <u>History of the Proceeding</u>

PAWC serves customers located in 36 counties across Pennsylvania. As of December 31, 2019, the Company provides water service to approximately 665,829 customers in portions of Adams, Allegheny, Armstrong, Beaver, Berks, Bucks, Butler, Centre, Chester, Clarion, Clearfield, Clinton, Columbia, Cumberland, Dauphin, Fayette, Indiana, Jefferson, Lackawanna, Lancaster, Lawrence, Lebanon, Luzerne, McKean, Monroe, Montgomery, Northampton, Northumberland, Pike, Schuylkill, Susquehanna, Union, Warren, Washington, Wayne, Wyoming, and York Counties. The Company also provides wastewater service to approximately 74,354 customers in portions of Adams, Allegheny, Beaver, Berks, Chester, Clarion, Cumberland, Lackawanna, McKean, Monroe, Northumberland, Pike, Washington, and York Counties.

On May 7, 2020, the OCA filed its Formal Complaint and Public Statement at Docket Nos. C-2020-3019751 and C-2020-3019754, and on the same date, the Bureau of Investigation and Enforcement (I&E) filed its Notice of Appearance. On May 11, 2020, the Office of Small Business Advocate (OSBA) filed its Formal Complaint and Public Statement at Docket Nos. C-2020-3019767 and C-2020-3019772. Petitions to Intervene were filed by the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), Commission on Economic Opportunity (CEO), AK Steel Corporation (AK Steel), and Pennsylvania-American Water Large Users Group (PAWLUG). Rate Protests were filed by Pennsylvania State Representative Austin Davis and Pennsylvania Senator Judith L. Schwank. Formal Complaints have been filed by 49 consumers, including active Formal Complainants, Jan K. Vroman, Mr. and Mrs. Gerald S. Lepre, Jr., Charles and Jennifer Spryn, and Jessica and Jeffrey LaBarge. Formal Complaints have also been filed by East Norriton Township and West Norriton Township.

Pursuant to the Commission's Order entered May 21, 2020, the Commission suspended Tariff Supplement No. 19 to Tariff Water – PA P.U.C. No 5 and Supplement No. 19 to Tariff Wastewater – PA P.U.C. No. 16 until January 28, 2021, pursuant to Section 1308(d) of the Public Utility Code, 66 Pa. C.S. § 1308(d), and initiated an investigation into the lawfulness, justness, and reasonableness of the rates, rules, and regulations proposed in the proposed Supplements and existing rates. Subsequently, the matter was assigned to Administrative Law Judge (ALJ) Conrad A. Johnson.

On May 28, 2020, the OCA filed an Expedited Motion for an Extension of the Statutory Period of PAWC's base rate proceeding asserting that a 45 day extension of the statutory suspension was necessary to meet the mounting challenges from the COVID-19 pandemic. On June 1, 2020, the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA) filed an Answer in Support of OCA's Motion for Extension, and on June 4, 2020, I&E also filed an Answer in Support of OCA's Motion for Extension.

On June 4, 2020, a Prehearing Conference was held, and Motion for Extension was addressed. The Motion for Extension was addressed by Chief Administrative Law Judge (CALJ) Charles E. Rainey, Jr. Also, on June 4, 2020, Chief ALJ Rainey issued the Order Granting the Office of Consumer Advocate's Expedited Motion for an Extension of the Statutory Suspension Period of Pennsylvania-American Water Company's Base Rate Proceeding, which was issued to the Parties on June 4, 2020. Chief ALJ Rainey's Order suspended the proposed rate increase until March 15, 2021. On June 15, 2020, a Prehearing Order was issued. On June 26, 2020, ALJ Johnson issued the First Interim Order Granting Respondent's Request for Protective Order.

On June 24, 2020, PAWC filed its Petition seeking reversal of the June 4, 2020 Order of Chief ALJ Rainey. On July 6, 2020, the OCA and I&E filed Answers to the Petition. On July 8,

F-4

2020, CAUSE-PA filed an Answer to the Petition, and the OSBA filed an Answer to the Petition

on July 14, 2020. On August 20, 2020, the Commission issued its Order affirming the Chief ALJ's

decision to grant the request for the additional forty-five days. The Commission, however, stated:

Because we are only authorizing the extension or suspension of *deadlines* and not of substantive rights, failure to meet the seven-month deadline would result in the proposed rates going into effect by operation of law. Therefore, we find that PAWC is entitled to the appropriate rate relief in accordance with Section 1308(d) of the Code immediately following the end of the original statutory rate suspension period, which, in this case, is January 28, 2021.

Additionally, we shall reserve the following issues to be addressed at the appropriate stages in this proceeding for final adjudication: (1) the appropriate rate recovery immediately following the end of the Section 1308(d) suspension period until the date the final rates are approved in a final Commission order and take effect in the utility's compliance tariff filing; and (2) the appropriate mechanism for implementing such rate recovery. We shall direct the Parties to address the foregoing rate recovery issues at the appropriate stages in this proceeding and direct the OALJ to fully address the issues and provide a recommended disposition thereof in the Recommended Decision.

Extension Order at 20-21.

On August 18, 25, 26, and 27, 2020 at 1:00 p.m. and 6:00 p.m. Video/Telephonic Public

Input Hearings were held, at which approximately 30 customers testified.
On September 8, 2020, the OCA served the Direct Testimony of its witnesses: Scott J.

Rubin,¹ Ralph C. Smith (Public and Confidential),² Aaron L. Rothschild,³ Roger D. Colton,⁴

Barbara R. Alexander (Public and Confidential),⁵ and Terry L. Fought.⁶ On October 20, 2020, the

OCA served the Surrebuttal Testimony of its witnesses: Ralph C. Smith (Public and Confidential),

Scott J. Rubin, Aaron L. Rothschild, Roger D. Colton, Barbara R. Alexander (Public and

Confidential), and Terry L. Fought (Public and Confidential).

On October 23, 2020, a Second Prehearing Conference was held to address procedural

issues.

¹ Mr. Rubin is an independent attorney and public utility industry consultant who has testified as an expert witness before utility commissions and courts in twenty states and the District of Columbia and province of Nova Scotia. Since 1984, Mr. Rubin has provided legal and consulting services to a variety of parties interested in public utility regulatory proceedings. A complete description of Mr. Rubin's qualifications is provided in OCA Statement 1, Appendix A.

² Mr. Smith is a Certified Public Accountant, attorney, and Senior Regulatory Consultant at Larkin & Associates, PLLC. Most of Mr. Smith's 39 years of work experience has involved utility regulation, and Mr. Smith has previously testified before this Commission, as well as 38 other state utility commissions, federal courts, and the Federal Energy Regulatory Commission. A complete description of Mr. Smith's qualifications is provided in OCA Statement 2, Appendix A.

³ Mr. Rothschild is a financial consultant specializing in cost of capital issues in utility regulation. He has 22 years of experience providing utility financial analysis. Mr. Rothschild has applied his expertise and testified in numerous proceedings before the Pennsylvania Public Utility Commission, over twenty other state public service commissions, and the Federal Energy Regulatory Commission. A complete description of Mr. Rothschild's qualifications is provided in OCA Statement 3, Appendix A.

⁴ Mr. Colton is a Principal of Fisher Sheehan & Colton, Public Finance and General Economics in Belmont, Massachusetts. He provides technical assistance to public utilities and primarily works on low income utility issues. Mr. Colton has devoted his professional career to helping public utilities, community-based organizations and state and local governments design, implement and evaluate energy assistance programs to help low income households better afford their home energy bills. He has been involved with the development of the vast majority of ratepayerfunded affordability programs in the nation. A more complete description of Mr. Colton's education and experience is provided in OCA Statement 4, Appendix A.

⁵ Ms. Barbara R. Alexander is a Consumer Affairs Consultant who runs her own consulting practice, Barbara Alexander Consulting LLC. She received her Bachelor of Arts degree from the University of Michigan and her J.D. from the University Of Maine School Of Law. Ms. Alexander's professional experiences and qualifications are provided in OCA Statement 5, Exhibit BA-1.

⁶ Mr. Fought is a consulting engineer with more than forty years' experience as a civil engineer. Mr. Fought is a registered Professional Engineer in Pennsylvania, New Jersey and Virginia and is a Professional Land Surveyor in Pennsylvania. Mr. Fought has prepared studies related to, and designed, water supply, treatment, transmission, distribution and storage for private and municipal wastewater agencies. He has also served as a consultant to the OCA for numerous water and sewer matters since 1984. Mr. Fought's background and qualifications are attached to OCA Statement 6 as Appendix A.

APPENDIX F

Evidentiary Hearings were held telephonically on October 27 and 28, 2020. At the Evidentiary Hearing, the Company entered pre-filed rejoinder testimony for two witnesses and orally entered its rejoinder testimony for five witnesses into the record and were cross-examined.