

COMMONWEALTH OF PENNSYLVANIA



DARRYL A. LAWRENCE
Consumer Advocate

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

✕ @pa_oca
f /pennoca
FAX (717) 783-7152
consumer@paoca.org
www.oca.pa.gov

November 17, 2025

Via Electronic Filing

Matthew L. Homsher, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v.
Pittsburgh Water and Sewer Authority d/b/a
Pittsburgh Water
Docket No. R-2025-3055010 (Water)
R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)

Dear Secretary Homsher:

Enclosed for filing please find the Admitted PreServed Testimony, Exhibits, and Verifications, on behalf of the Office of Consumer Advocate ("OCA"), pursuant to the Interim Order, that was issued on November 6, 2025.

OCA Direct Testimony	Witness	Exhibits
Corrected OCA Statement 1	Corrected Direct Testimony of Michael Deupree consisting of written testimony with signed verification of Michael Duepree, Senior Research Consultant, Acadian Consulting Group	- Appendix A (Witness Qualifications) - Exhibit MWD-1 - Errata to OCA's Corrected St. No. 1, Direct Testimony of Michael W. Deupree
OCA Statement 2	Direct Testimony of Dante Mugrace consisting of written testimony with signed verification of Dange Mugrace, Senior Consultant, PCMB and Associates, LLC	- Appendix A (Witness Qualifications) - Exhibits DM-1 to DM-21
Corrected OCA Statement 3	Corrected Direct Testimony of	Appendix A (Witness Qualifications)

OCA Direct Testimony	Witness	Exhibits
	Christopher C. Walters ¹ consisting of written testimony along with a signed verification of Christopher C. Walters, Consultant, Brubaker & Associates, Inc.	Exhibit CCW-1
OCA Statement 4	Direct Testimony of Jerome D. Mierzwa consisting of written testimony along with a signed verification of Jerome D. Mierzwa, Principal and President, Exeter Associates, Inc.	None
OCA Statement 5	Direct Testimony of LeeAnn Wise consisting of written testimony along with a signed verification of LeeAnn Wise, Senior Regulatory Analyst, OCA	Exhibits LMW-1 and LMW-2
OCA Statement 6	Direct Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton	Exhibits OCA-Colton-1 and OCA-Colton-2
OCA Statement 7	Direct Testimony of Barbara R. Alexander consisting of written testimony along with a signed verification of Barbara R. Alexander, Sole Member Manager, Barbara Alexander Consulting LLC	Exhibits BA-1 to BA-4

OCA Rebuttal Testimony	Witness	Exhibits
OCA Statement 1R	Rebuttal Testimony of Michael Deupree consisting of written testimony along with a signed	None

¹ On September 5, 2025, the OCA inadvertently omitted Mr. Walters' Exhibit CCW-1 from OCA Statement 4 which was served. On September 8, 2025, the OCA served Corrected OCA Statement 4 which included Exhibit CCW-1 that is referenced on page 15 of Mr. Walters' Direct Testimony.

	verification of Michael Deupree, Senior Research Consultant, Acadian Consulting Group	
OCA Statement 6R	Rebuttal Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton	None

OCA Surrebuttal Testimony	Witness	Exhibits
OCA Statement 1SR	Surrebuttal Testimony of Micheal Deupree consisting of written testimony with signed verification of Michael Deupree, Senior Research Consultant, Acadian Consulting Group	None
OCA Statement 2SR	Surrebuttal Testimony of Dante Mugrace consisting of written testimony with signed verification of Dante Mugrace, Senior Consultant, PCMG and Associates, LLC	Exhibits DM-SR-1 to DM-SR-21
OCA Statement 3SR	Surrebuttal Testimony of Christopher C. Walters consisting of written testimony along with a signed verification of Christopher C. Walters, Consultant, Brubaker & Associates, Inc.	None
OCA Statement 4SR	Surrebuttal Testimony of Jerome D. Mierzwa consisting of written testimony along with a signed verification of Jerome D. Mierzwa, Principal and President, Exeter Associates, Inc.	None
OCA Statement 5SR	Surrebuttal Testimony of LeeAnn Wise consisting of written testimony along with a signed verification of LeeAnn Wise, Senior Regulatory Analyst, OCA	None

Matthew L. Homsher, Secretary
Pennsylvania Public Utility Commission
November 17, 2025
Page 4

OCA Statement 6SR	Surrebuttal Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton	None
OCA Statement 7SR	Surrebuttal Testimony of Barbara R. Alexander consisting of written testimony along with a signed verification of Barbara R. Alexander, Sole Member Manager, Barbara Alexander Consulting LLC.	None
OCA Hearing Exhibits		
OCA Hearing Exhibit 1	List of OCA Evidence (Testimony and Exhibits)	

Copies have been served on the parties as indicated on the enclosed Certificate of Service.

Respectfully submitted,

/s/ Christy M. Appleby
Christy M. Appleby, Esq.
Senior Assistant Consumer Advocate
PA Attorney I.D. # 85824
Email: CAppleby@paoca.org

Enclosures

cc: Administrative Law Judge Emily I. DeVoe (Email: edevoe@pa.gov)
Administrative Law Judge Ann Quimby (Email: aquimby@pa.gov)
Certificate of Service

CERTIFICATE OF SERVICE

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

I hereby certify that I have this day filed electronically on the Commission's electronic filing system and served a true copy of the following documents, the Office of Consumer Advocate's Admitted Pre-Served Testimony, 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 17th day of November 2025.

SERVICE BY E-MAIL ONLY

Deanne M. O'Dell, Esq.
Daniel Clearfield, Esq.
Lauren Burge, Esq.
Eckert Seamans Cherin & Mellott, LLC
213 Market Street, 8th Floor
Harrisburg, PA 17101
dodell@eckertseamans.com
dclearfield@eckertseamans.com
lburge@eckertseamans.com
Counsel for Pittsburgh Water

John W. Sweet, Esq.
Elizabeth R. Marx, Esq.
Ria M. Pereira, Esq.
The Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
pulp@pautilitylawproject.org
*Counsel for Pittsburgh United Our
World Table*

Scott B. Granger, Esq.
Michael A. Podskoch, Jr., Esq.
Pennsylvania Public Utility Commission
Bureau of Investigation & Enforcement
Commonwealth Keystone Building
400 North Street, 2nd Floor West
Harrisburg, PA 17120
sgranger@pa.gov
mpodskoch@pa.gov
Counsel for I&E

Steven C. Gray, Esq.
Rebecca Lyttle, Esq.
Office of Small Business Advocate
Forum Place
555 Walnut Street, 1st Floor
Harrisburg, PA 17101
sgray@pa.gov
relyttle@pa.gov
Counsel for OSBA

Jesse I. Exilus, Deputy City Solicitor
Krysia M. Kubiak, City Solicitor
City of Pittsburgh
Department of Law
414 Grant Street, Suite 313
Pittsburgh, PA 15219
Jesse.exilus@pittsburghpa.gov
Krysia.kubiak@pittsburghpa.gov
Counsel for the City of Pittsburgh

Counsel for:
Darryl A. Lawrence
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 17, 2025

/s/ Christy M. Appleby
Christy M. Appleby
Senior Assistant Consumer Advocate
PA Attorney I.D. # 85824
Email: CAppleby@paoca.org

Harrison W. Breitman
Katie Kennedy
Assistant Consumer Advocates
Email: OCAPWSA2025@paoca.org

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2025-3055010 (WATER)
v.	:	R-2025-3055011 (WASTEWATER)
	:	R-2025-3055012 (STORMWATER)
The Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water	:	

DIRECT TESTIMONY

OF

Michael Deupree

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

OCA Statement 1

Date Served: September 5, 2025

Table of Contents

I. INTRODUCTION	1
II. SUMMARY OF RECOMMENDATIONS	2
III. REGULATORY LAG AND ALTERNATIVE REGULATION	3
IV. MULTI-YEAR RATE PLAN	10
V. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE	27
VI. ELIMINATION OF THE MINIMUM CHARGE	37
VII.CONCLUSION AND RECOMMENDATIONS.....	40

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?**

3 A. My name is Michael W. Deupree. My business address is 5800 One Perkins Place
4 Drive, Suite 5-F, Baton Rouge, Louisiana, 70808.

5 **Q. PLEASE STATE YOUR OCCUPATION AND CURRENT PLACE OF**
6 **EMPLOYMENT?**

7 A. I am a Senior Research Consultant with the Acadian Consulting Group (“ACG”), a
8 research and consulting firm that specializes in the analysis of regulatory, economic,
9 financial, accounting, statistical, and public policy issues associated with regulated and
10 energy industries. ACG is a Louisiana-registered partnership, formed in 1995, and is
11 located in Baton Rouge, Louisiana.

12 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.**

13 A. I hold a Bachelor of Arts degree in Business Economics from Buena Vista
14 University in Storm Lake, Iowa, and a Master of Arts degree in Economics from the
15 University of Kansas in Lawrence, Kansas. I began my professional career with the Staff
16 of the Kansas Corporation Commission in 2008 while in graduate school conducting
17 analyses of topics related to energy and economy as a Research Assistant, eventually
18 being promoted to a Research Analyst and later Senior Research Economist after
19 graduation. I left the Kansas Corporation Commission to take a position with ACG in late
20 2011, where I have been promoted to positions of increasing responsibility since,
21 including my current position which I started earlier this year. Appendix A provides my
22 professional resume, which includes a listing of my publications, presentations, pre-filed
23 expert witness testimony, expert reports, and expert legislative testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been retained by the Pennsylvania Office of Consumer Advocate (OCA) to address certain regulatory and policy issues related to the general rate case filed by the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water (Pittsburgh Water, PW, or Authority). I specifically have been asked to address the Authority's proposed multi-year rate plan (MYRP), proposed increase to the Authority's existing distribution system improvement charge (DSIC) cap, and the Authority's request to delay elimination of minimum charges until Fiscal Year (FY) 2027.

II. SUMMARY OF RECOMMENDATIONS

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S PROPOSED MYRP?

A. I recommend the Commission reject the Authority's proposed MYRP. The Authority has not shown that the existing regulatory process has been unable to provide adequate financial support to the Authority. Likewise, the Authority has not shown that the existing regulatory process has been unable to adequately support the Authority's annual capital investments.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S PROPOSAL TO INCREASE ITS EXISTING DSIC CAP?

A. I recommend the Commission reject the Authority's proposal to increase the existing DSIC cap from five percent to 7.5 percent. The Authority has not shown that the current DSIC cap has impacted the Authority financially, or that it will be unable to finance projected future capital investments under the existing five percent DSIC cap.

1 **Q. WHAT IS YOUR RECOMMENDATION ASSOCIATED WITH THE AUTHORITY'S**
2 **PROPOSAL TO DELAY THE IMPLEMENTATION OF ITS ELIMINATION OF MINIMUM**
3 **CHARGES UNTIL FY 2027?**

4 A. I recommend the Commission heavily scrutinize the Authority's compliance with
5 the delayed implementation of a stipulation included in the 2023 Settlement Agreement.
6 The Commission should make clear to the Authority that its admission that it cannot meet
7 its own prior agreement with parties is not viewed favorably, and that further delays
8 beyond FY 2027 will not be accepted.

9 **III. REGULATORY LAG AND ALTERNATIVE REGULATION**

10 **Q. PLEASE DISCUSS GENERALLY THE AUTHORITY'S RATEMAKING**
11 **PROPOSALS.**

12 A. The Authority proposes a series of ratemaking changes that are generally
13 designed to address perceived challenges with regulatory lag. Notably, the Authority's
14 proposal to implement a MYRP and increase its cap on allowed capital cost recoveries
15 through the DSIC can be viewed as addressing these perceived regulatory lag concerns.

16 **Q. PLEASE DEFINE REGULATORY LAG.**

17 A. Regulatory lag can be defined in a number of different ways. One definition holds
18 that regulatory lag is the time period between when a utility's rates go into effect, after the
19 course of an evidentiary hearing process and its next rate case.¹ Another definition holds
20 that regulatory lag can be represented as the period between when a utility investment is

¹ Scott E. Atkinson and Clifford Nowell. (1994). "Explaining Regulatory Commission Behavior in the Electric Utility Industry." *Southern Economic Journal*. Vol. 60, No. 3: 634-643.

undertaken and the time it enters into rates.² Yet another definition holds that regulatory lag is the time period in which a utility's achieved rate of return differs from that allowed by regulators.³ At the heart of all these definitions is one theme: the frequency and timing of rate cases can impact, positively or negatively, utility earnings.

Q. IN UTILITY RATE REGULATION, WHICH PARTY CONTROLS REGULATORY LAG OR THE DURATION OF TIME BETWEEN RATE CASES?

A. Typically, utilities control the duration between rate cases. In most states, utilities have the statutory ability to request rate increases if they believe that their rates are not affording them the opportunity to earn a fair return on and of their investments and prudently incurred costs. While state utility commissions and other stakeholders can, in theory, request a utility be "brought in" for a rate case, my experience is, and research indicates, that this event rarely happens. For instance, research on the topic of regulatory lag conducted in the early 1980s by Ronald Braeutigam and James Quirk, surveyed state utility rate cases during the period 1948 to 1978 and found that over 350 of the 363 surveyed rate cases (96 percent) were brought by a regulated utility, with the smaller number attributable to regulators or consumer groups. While this is an older, dated study, the results are likely to ring true even over the past two decades.

Q. DO UTILITIES REGULATED ON THE BASIS OF CASH-FLOW HAVE THE ABILITY TO CONTROL THE DURATION BETWEEN RATE CASES?

² Elizabeth E. Bailey and Roger D. Coleman.(1971). "The Effect of Lagged Regulation in an Averch-Johnson Model." *Bell Journal of Economics and Management Sciences*. 2 (Spring): 278-292.

³ A.K. Klevorick. (1973). "The Behavior of a Firm Subject to Stochastic Regulatory Review," *Bell Journal of Economics and Management Science* 4 (Spring): 82.

A. Yes. Under the cash flow method utilities are not regulated on the basis of a fair rate of return on rate base within a rate case. However, these utilities still retain control on when to file for changes in rates, and will likely chose not to if it projects adequate cash flow to fund operations including anticipated capital investments.

Q. DOES A UTILITY’S ABILITY TO DETERMINE THE TIMING OF A RATE CASE SHIFT A CERTAIN DEGREE OF REGULATORY RISK ONTO RATEPAYERS?

A. Yes. When the timing of a rate case is left in the hands of the utility, it has the ability to effectively shift the risk of regulation and regulatory lag away from itself and onto ratepayers. Paul Joskow, writing as early as 1973, concluded in a frequently referenced regulatory article, that utility commissions tend to defend against rate increases, but are less aggressive in pursuing rate decreases when rates are stable or decreasing in real terms.⁴ This outcome has often been thought to have occurred in the post-war period until about the late 1960s, and arguably throughout the 1990s.

Q. IS REGULATORY LAG UNFAIR OR CONFISCATORY TO UTILITIES?

A. No. The premise that regulatory lag is somehow unfair is simply antithetical to most of the research in utility regulation over the past 50 years. Regulatory lag has long been recognized as a key component of the overall regulatory compact given the discipline it can impose on utility operational and investment decisions. Regulation acts as a substitute for the disciplines of competition.⁵ Regulatory lag prevents utility regulation from devolving into a “cost-plus” approach that simply passes through costs on a dollar-

⁴ Paul L. Joskow. (1973) “Pricing Decisions of Regulated Firms: A Behavioral Approach.” *The Bell Journal of Economics and Management Science*. 4 (Spring):118-140.

⁵ Charles F. Phillips, *The Regulation of Public Utilities: Theory and Practice*, (Arlington, VA: Public Utilities Reports, Inc., 1984), p. 154.

for-dollar basis to ratepayers and can lead to cost and investment inefficiencies. The cost-plus regulatory approach also shifts a considerable amount of performance-related risk away from utilities and onto ratepayers and leads to inefficient outcomes, which was recognized as early as the 1960s and has come to be known as the “Averch-Johnson” or “A-J” effect.

Q. HOW ARE THE CONCLUSIONS REGARDING REGULATORY LAG RELATED TO WHAT IS COMMONLY REFERRED TO AS THE “A-J EFFECT”?

A. In the early 1960s, a seminal article was published that dramatically influenced the theory and practice of utility regulation and economic thinking regarding the optimal regulation of natural monopolies. This article, authored by Professors Harvey Averch and Leland Johnson, and published in the *American Economic Review* in 1962, posited that rate of return regulation creates an incentive for regulated utilities to overcapitalize, resulting in an inefficient utilization of resources and higher-than-optimal rates.⁶ This finding; however, was premised upon a model with a number of assumptions, one of which presumed there was no regulatory lag and that rates were set on a period-to-period basis: in other words, rates were set on a “cost-plus” regulatory approach.

Q. HOW IS REGULATORY LAG RELATED TO THIS RESEARCH?

A. Soon after its publication, Averch’s and Johnson’s article was met with a flurry of scholarly research attempting to empirically verify the A-J effect, as well as examining the conditions under which the effect would, and would not, be sustained.⁷ Rejoinders to the

⁶ H. Averch and L. Johnson. (1962) “Behavior of the Firm under Regulatory Constraint,” *American Economic Review*. 52:1052-1069.

⁷ These works are surveyed in Graeme Guthrie. (2006). “Regulating Infrastructure: The Impact on Risk and Investment.” *Journal of Economic Literature*. 44 (December):925-972.

research noted that two characteristics of the regulatory process tended to temper the likelihood and prevalence of the A-J effect: (1) the possibility of disallowances through the prudence review process⁸ and (2) the positive efficiency incentives created by regulatory lag.⁹ In fact, a series of articles published soon afterwards noted that regulatory lag typically creates incentives for utilities to seek efficiency opportunities between rate cases since the gains (profits) from those investments inure to shareholders instead of ratepayers.¹⁰ While municipal-owned utilities differ from investor-owned utilities in that municipal-owned utilities are not driven by profits, these academic findings can be seen as saying that regulatory lag creates incentives for even municipal-owned utilities to seek efficiency opportunities that reduce costs between rate cases in order to improve financial stability.

Q. HOW DID THE FINDINGS IDENTIFYING THE BENEFITS OF REGULATORY LAG ARISE?

⁸ A.K. Klevorick. (1973). "The Behavior of a Firm Subject to Stochastic Regulatory Review," *Bell Journal of Economics and Management Science*. 4 (Spring): 82. P. Joskow. (1974). "Inflation and Environmental Concern: Structural Change in the Process of Public Utility Regulation." *Journal of Law and Economics*, Vol. 17: 291-327. R.J. Gilbert and D.M. Newbery.(1988). *Regulation Games*. Working Paper 8879, University of California Berkeley, June 16. T.P. Lyons. (1991.) "Regulation with 20-20 Hindsight: 'Heads I Win, Tails You Lose'?" *Rand Journal of Economics*. Vol. 22 (Winter): 581-595.

⁹ Elizabeth E. Bailey and Roger D. Coleman.(1971). "The Effect of Lagged Regulation in an Averch-Johnson Model." *Bell Journal of Economics and Management Sciences*. 2 (Spring): 278-292.

¹⁰ W.K. Viscusi, J.M. Vernon, J.R. Harrington, Jr. (1997) *Economics of Regulation and Antitrust*, Second Edition. Cambridge: MA: MIT Press, 380. See also the works surveyed in Graeme Guthrie. (2006). "Regulating Infrastructure: The Impact on Risk and Investment." *Journal of Economic Literature*. 44 (December):925-972.

A. One of the earliest works on the impact of regulatory lag was published in 1971 by William Baumol and Alvin Klevorick.¹¹ Their work was the first of what was to become a series of articles showing that regulatory lag actually diminished incentives for overcapitalization, since the earnings gained by avoiding these inefficient actions passed directly to shareholders. Soon after, Klevorick, writing separately from Baumol, built upon this model by explaining how multi-year regulatory lags, coupled with demand and cost uncertainty, created strong incentives for efficiency to maintain profitability.¹² One of his additional findings at the time, however, was that these incentives might also discourage regulated firms from investing in research and development.

Q. HOW IS THIS DISCUSSION RELEVANT TO THE AUTHORITY'S CURRENT FILING?

A. The Authority's filing attempts to portray its current ratemaking structure as a structural impairment to cost recovery and revenue stability, particularly in the context of its infrastructure investments. However, as discussed above, regulatory lag can and does serve a beneficial regulatory function. The Authority's ability to file rate cases at will, utilize FPFTYs, and recover infrastructure costs through the existing DSIC already provide mechanisms to reduce lag without requiring additional changes to these mechanisms.

Q. DOES THE PRESENCE OF REGULATORY LAG CREATE ANY POLICY SUPPORT FOR THE AUTHORITY'S PROPOSALS?

¹¹ William J. Baumol and Alvin K. Klevorick. (1970). "Input Choices and Rate-of-Return Regulation: An Overview of the Discussion." *The Bell Journal of Economics and Management Science*. 1 (Autumn):162-190.

¹² A.K. Klevorick. (1973). "The Behavior of a Firm Subject to Stochastic Regulatory Review," *Bell Journal of Economics and Management Science*. 4 (Spring): 82.

1 A. No. The presence of regulatory lag in and of itself does not create policy
2 justification for the Authority's proposed MYRP or an increase in the DSIC cap.
3 Regulatory lag can lead to both costs and benefits for a regulated utility. Regulatory lag
4 creates opportunities for utilities to achieve gains as well as losses. The simple fact that
5 regulatory lag creates "opportunities" and not guarantees, is one of the reasons why
6 regulatory lag is considered efficiency enhancing. There is a long and rich history in the
7 practice and theory of utility regulation supporting these efficiency-enhancing
8 conclusions.

9 **Q. WHAT IS YOUR OVERALL RECOMMENDATION REGARDING REGULATORY**
10 **LAG?**

11 A. The Authority has not demonstrated that the existing regulatory framework in
12 Pennsylvania is failing to support timely and adequate cost recovery. Rather, the
13 evidence suggests that regulatory lag is already being effectively managed. The
14 Commission should reaffirm the value of regulatory lag as a structural feature of traditional
15 ratemaking and recognize that further erosion of this principle is neither necessary nor
16 justified in this case.

17 **Q. HAS THE COMMISSION ADOPTED A STATEMENT OF POLICY REGARDING**
18 **ALTERNATIVE RATEMAKING MECHANISMS LIKE THE MYRP?**

19 A. Yes. In 52 Pa. Code § 69.3302(a) the Commission established 14 separate
20 distribution rate considerations in determining just and reasonable alternative ratemaking
21 distribution mechanisms and rate design. Exhibit MWD-1 presents these 14
22 considerations, along with the relevant effect of the MYRP on each consideration.

1 **IV. MULTI-YEAR RATE PLAN**

2 **Q. PLEASE SUMMARIZE PITTSBURGH WATER'S PROPOSED MULTI-YEAR**
 3 **RATE PLAN IN THE CURRENT PROCEEDING.**

4 A. The Authority in the current proceeding is proposing a two-year rate increase which
 5 includes a proposed increase in revenues of \$63.7 million for the Fully-Projected Future
 6 Test Year (FPFTY) covering fiscal year (FY) 2026 and an additional \$20.7 million increase
 7 for the subsequent FY 2027.¹³ Pittsburgh Water's proposed increase for FY 2027,
 8 covering the proposed MYRP, that is limited to the increase required for annual debt
 9 service, debt service coverage costs, and incremental Distribution System Improvement
 10 Charge (DSIC) percentage increase.¹⁴ The Authority proposes its two-year rate increase
 11 as a multi-year rate plan (MYRP) as laid out in Section 1330 of the Public Utility Code.¹⁵

12 **Q. DOES THE AUTHORITY'S PROPOSED INCREASE REPRESENT A PHASE-IN**
 13 **OF ITS PROPOSED RATE INCREASE?**

14 A. No. The Authority's proposed increase for FY 2027 is associated with projected
 15 expenses that will occur outside of the FPFTY, which under 60 PA. C.S. §315(e)
 16 represents the 12-month period after proposed rates go into effect.¹⁶ It is therefore
 17 distinct from proposals to phase-in a rate increase required to meet projected expenses
 18 in a FPFTY.

¹³ Pittsburgh Water (PW) St. 2 at 51:19-22.

¹⁴ *Id.* at 53:1-2.

¹⁵ *Id.* at 53:5-20.

¹⁶ 60 PA. C.S. §315(e).

Q. WHY IS THE AUTHORITY PROPOSING A MYRP IN THE CURRENT PROCEEDING?

A. The Authority notes that, unlike most utilities regulated by the Commission, Pittsburgh Water is a municipal utility regulated using the “cash flow” method which only allows the utility to recover operating expenses, debt costs, and capital expenditures.¹⁷ The Authority also notes that it is in the midst of a massive capital investment plan (CIP) to modernize its facilities to keep water and wastewater services safe and adequate, as well as to mitigate the effects of stormwater runoff.¹⁸ Pittsburgh Water therefore argues that, because of these reasons, its costs in subsequent years will not reflect its test year.¹⁹ Effectively, the Authority argues that the proposed MYRP is required to address regulatory lag issues present in the Authority’s operations.

Q. HAS PENNSYLVANIA ADOPTED REGULATORY MEASURES THAT REDUCE THE UTILITY BURDEN OF REGULATORY LAG?

A. Yes. In 2012 the General Assembly enacted an omnibus amendment amending several sections of Title 66 of the Pennsylvania Consolidated Statutes.²⁰ These included Section 315(e) which allows utilities to utilize a fully projected future test year (FPFTY) within rate case filings covering the 12 month period after proposed rates go into effect.²¹ Also included in the 2012 omnibus amendments to Title 66 was the addition of Sections

¹⁷ *Id.* at 54:3-7.

¹⁸ *Id.* at 54:7-10.

¹⁹ *Id.* at 54:10-15.

²⁰ See Act No. 2012-11, P. L. 72.

²¹ 66 Pa. C.S. § 315(e).

1350 through 1360, which allows for utilities to petition the Commission for establishment of a DSIC to provide for the timely recovery of reasonable and prudent costs incurred to repair, improve or replace eligible property between rate case filings.²² Importantly, under 66 PA Section 1358, a utility's DSIC may not exceed five percent of customers' bills, unless specifically amended by the Commission,²³ in which case a utility's DSIC may not exceed 7.5 percent of customers' bills.²⁴

Q. HAS THE AUTHORITY BEEN ABLE TO TAKE ADVANTAGE OF FPFTY AND DSIC OPPORTUNITIES?

A. Yes. The Authority has relied on a FPFTY in each of its last two rate cases, and likewise has had a DSIC in place for many years. This is in addition to outside funding sources the Authority has been able to take advantage of such as that provided through PENNVEST.²⁵

Q. HAS THE AUTHORITY LISTED THE MAIN EFFICIENCY IT HOPES TO SEE WITH THE ADOPTION OF A MYRP?

A. Yes. The Authority states that the main reason for it proposing a MYRP is to "break the cycle of having to file a rate increase every 2-3 years in order to recover increased costs."²⁶ The Authority notes that its planned capital budget increases are a certainty due to existing commitments, and that it is also certain that Pittsburgh Water will have to issue

²² 66 Pa. C.S. §§ 1350-1360.

²³ 66 Pa. C.S. § 1358(a)(1).

²⁴ 66 Pa. C.S. § 1358(a)(2).

²⁵ PW St. 2 at 34:1-9.

²⁶ *Id.* at 54:22-24.

1 additional debt to pay for this additional construction.²⁷ Pittsburgh Water states that
2 approval of a rate increase in FY 2027 to cover future debt costs will give the Authority
3 the assurance to fully commit to planned capital investments.²⁸

4 **Q. DOES THE AUTHORITY LIST ANY OTHER PRESUMED BENEFITS**
5 **ASSOCIATED WITH THE PROPOSED MYRP?**

6 A. Yes. The Authority argues that the proposed MYRP will provide more certainty to
7 its capital budgeting process, expediting the ability to complete needed infrastructure
8 improvements.²⁹

9 **Q. HAS THE AUTHORITY SEEN DETERIORATING FINANCIALS UNDER ITS**
10 **EXISTING FPFTY AND DSIC REGULATORY REGIMES?**

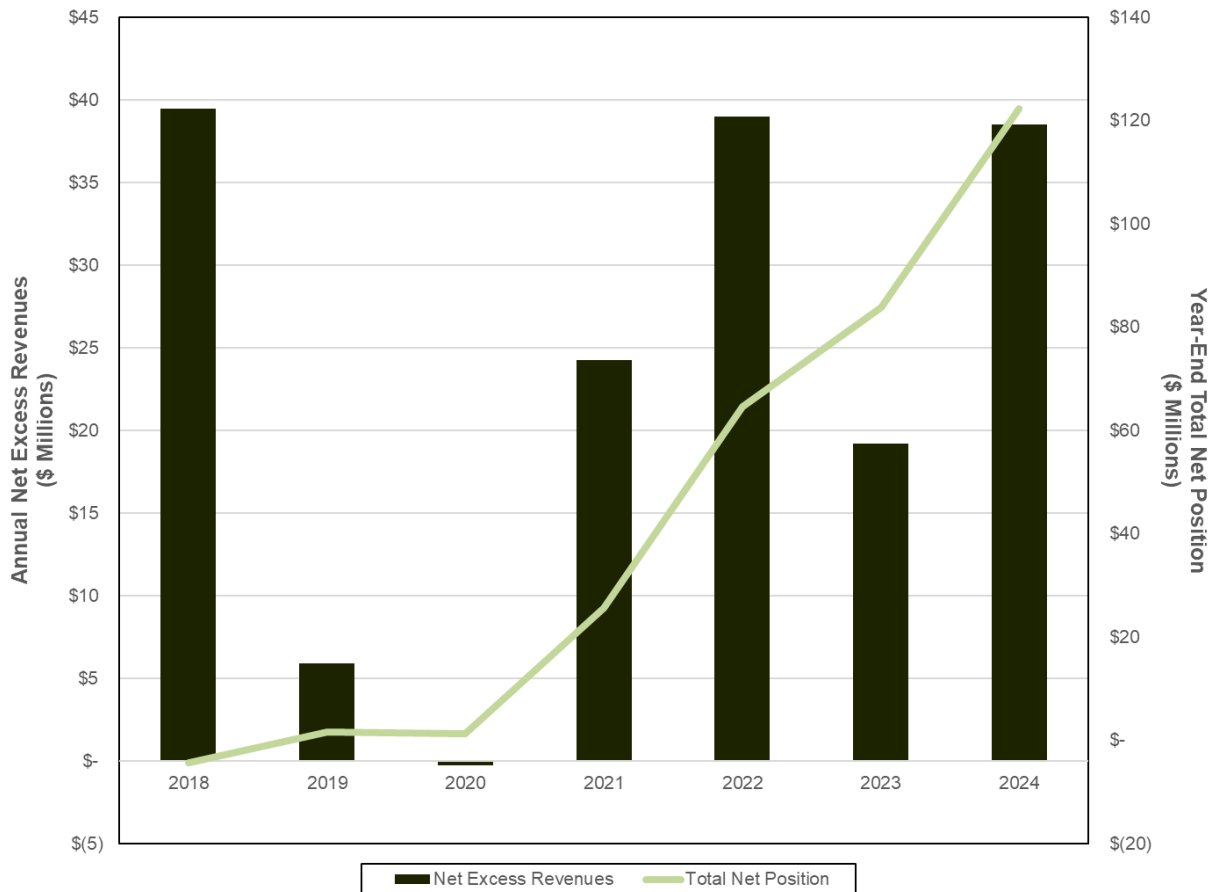
11 A. No. A review of the Authority's financials show a healthy ability of the Authority to
12 maintain and even improve its financials in recent years through efficient rate case filings
13 using the statutorily allowed FPFTY, and to fund capital investments through the DSIC
14 between rate cases. This is readily apparent when reviewing the Authority's historic
15 revenues and other financial metrics.

²⁷ *Id.* at 54:24-25.

²⁸ *Id.* at 54:25 to 55:2.

²⁹ *Id.* at 55:5-10.

Figure 1: Annual Net Excess Revenues and Total Net Position, 2018-2024



Source: 2019-2024 Pittsburgh Water Audited Financial Reports

Q. HAVE YOU EXAMINED THE TREND IN THE AUTHORITY ANNUAL REVENUES?

A. Yes. Figure 1 shows the Authority's annual revenues in excess of expenses for each year since 2018. Since Pittsburgh Water began being regulated by the Commission, it has seen marked improvements in its overall financials, reporting net revenues for each year of operations with the exception of anomalous 2020 operations caused by the ongoing global pandemic. Indeed, as shown by Figure 1, the Authority's total net position – measured as cumulative carried over excess revenues – has increased from a negative

\$4.4 million in 2018 when Pittsburgh Water came under Commission oversight to a positive \$122.3 million by the end of 2024.

Table 1: Pittsburgh Water's Fund Balances, 2018-2027

Year	Cash and Cash Equivalents	Debt Service and Reserve Funds	Operating Reserve Account	Self Insured Escrow	Total Balances
Historic					
2018	\$ 46,920,000	\$ 6,937,000	\$ 15,792,000	\$ 596,000	\$ 70,245,000
2019	\$ 64,680,000	\$ 6,643,000	\$ 18,712,000	\$ 608,000	\$ 90,643,000
2020	\$ 60,210,000	\$ 6,444,000	\$ 18,851,000	\$ 610,000	\$ 86,115,000
2021	\$ 76,422,000	\$ 6,417,000	\$ 18,856,000	\$ 610,000	\$ 102,305,000
2022	\$ 83,695,000	\$ 6,517,000	\$ 19,178,000	\$ 617,000	\$ 110,007,000
2023	\$ 67,966,000	\$ 9,735,000	\$ 20,284,000	\$ 640,000	\$ 98,625,000
Projected					
2024	\$ 80,119,000	\$ 10,506,000	\$ 21,361,000	\$ 666,000	\$ 112,652,000
2025	\$119,146,000	\$ 10,980,000	\$22,322,000	\$ 696,000	\$ 153,144,000
2026	\$127,372,000	\$ 11,474,000	\$23,327,000	\$ 727,000	\$ 162,900,000
2027	\$137,109,000	\$ 11,990,000	\$25,266,000	\$ 760,000	\$ 175,125,000

Source: 2019-2024 Pittsburg Water Audited Financial Reports

Q. HAS PITTSBURGH WATER BEEN ABLE TO MAINTAIN SUFFICIENT FINANCES?

A. Yes. Table 1 shows the balances of financial accounts maintained by the Authority in its operations. The overall balance of all financial accounts held by Pittsburgh Water has grown from approximately 40 percent over the period 2018-2023, from approximately \$70 million in 2018 to nearly \$99 million in 2023. The Authority's financial reserves are expected to grow by a further 77.6 percent over the period 2024-2027, mainly due to growing cash and cash equivalents.

Q. HAS THE AUTHORITY SEEN DETERIORATIONS IN ITS CREDIT STANDINGS IN RECENT YEARS?

1 A. No. The Authority has provided four credit rating opinions from Moody's Investors
2 Service ("Moody's") and three credit ratings from S&P Global Ratings ("S&P") in this
3 proceeding spanning the period from January 1, 2020 to the end of calendar year 2024.
4 All of these credit rating opinions are mostly positive for the Authority, not negative.

5 **Q. CAN YOU SUMMARIZE MOODY'S OPINION ON THE CREDIT RATING OF THE**
6 **AUTHORITY?**

7 A. Yes. On November 5, 2020, Moody's reaffirmed its prime grade rating of A3 for
8 the Authority, noting that the Authority's "credit profile continues to improve, with financial
9 metrics steadily strengthening over the last three years."³⁰ On October 22, 2022, Moody's
10 again reaffirmed this rating noting that Authority "favorably, provided relatively stable
11 customer revenues through the pandemic, a credit strength compared to regional
12 peers."³¹ Moody's again on May 29, 2023, noted the favorable position of the Authority,
13 noting that "The Authority has also benefitted from proactive steps to strengthen two key
14 credit areas – its management and governance and its financial position. [Pittsburgh
15 Water's] governance structure has been materially improved by oversight from the
16 [Commission], initiated in 2018."³² Finally, while Moody's did downgrade the Authority to
17 A2 in its December 16, 2024, update, Moody's noted that the Authority's cash position
18 was much improved but that the Authority overall showed some weakness due to a major
19 ramp-up in capital spending.³³

³⁰ Authority Response to Discovery Request OCA-XI-1, Attachment A.

³¹ Authority Response to Discovery Request OCA-XI-1, Attachment B.

³² Pittsburgh Water Exhibit CF-8.

³³ Pittsburgh Water Exhibit CF-9.

Q. CAN YOU SUMMARIZE S&P'S OPINION ON THE CREDIT RATING OF THE AUTHORITY?

A. Yes. S&P assigned an A rating to Pittsburgh Water in its November 10, 2020, rating, noting the Authority's "very strong enterprise risk profile and [the Authority's] strong financial risk profile."³⁴ S&P upgraded Pittsburgh Water's rating to A+ in its October 12, 2022, rating, noting that "the upgrade reflects the management team's continued maturation and conservative budgeting practices as it works through a \$1.4 billion [CIP] from 2022-2026, along with seeing continued successful rate cases with the [Commission]."³⁵ S&P reaffirmed this rating in its December 19, 2024, rating, again referencing the Authority management's conservative approach to capital investments and its ability to successfully utilize rate increases through the traditional regulatory process to fund these capital improvements.³⁶

A very conservative approach to long-term planning has enabled management to successfully get four rate increases from the [Commission], with the last being for fiscal [year] 2024. These rate increases have enabled management to continue funding the [CIP] while dealing with rising costs from its suppliers and will continue doing so.³⁷

Q. HAS THE AUTHORITY BEEN ABLE TO MAKE IMPROVEMENTS TO ITS OPERATING RESERVES IN RECENT YEARS?

³⁴ Authority Response to Discovery Request OCA-XI-1, Attachment C.

³⁵ Authority Response to Discovery Request OCA-XI-1, Attachment D.

³⁶ Pittsburgh Water Exhibit CF-10.

³⁷ *Id.*

1 A. Yes. In Fiscal Year 2020, in the wake of negative revenue impacts of the COVID-
2 19 pandemic, the Authority established the Rate Stabilization Fund (RSF).³⁸ Under the
3 RSF, the Authority transferred operating revenues in excess of expectations into the RSF,
4 which is held as a separate account and segregated from other Pittsburgh Water funds.³⁹
5 The Authority manages funds included in the RSF consistent with Pittsburgh Water's
6 investment policy.⁴⁰ The RSF provides an additional source of funding available to the
7 Authority to meet debt service coverage requirements during times of unexpected
8 revenue shortfalls.⁴¹

9 **Q. HAS THE AUTHORITY BEEN ABLE TO MAKE CONTRIBUTIONS TO THE RSF**
10 **FROM ITS ANNUAL OPERATIONS?**

11 A. Yes. Created with an initial investment of \$2 million in 2020, the Authority was
12 subsequently able to contribute an additional \$3 million in 2022 and \$15 million in 2024.
13 The Authority notes in testimony that the RSF currently has a balance of approximately
14 \$24.7 million from these contributions and gains on the Authority's investment.⁴² Indeed,
15 by 2024 the RSF balance represented approximately 7.2 percent of the Authority's 2024
16 operating revenues, beating the Authority's target for the fund of 5 percent of annual
17 operating revenues. The Authority in the current proceeding states that it recently revised
18 its goal for the RSF balance to represent no less than 10 percent of the Authority's annual

³⁸ PW St. 2, Exhibit EB-9.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² PW St. 2 at 49:14-15.

operating revenues, and preferably 15 percent.⁴³ The Authority states that its proposed rate increase in the current proceeding will allow the RSF to grow to equal 8.9 percent of the Authority's annual operating revenues by the end of the FPFTY.⁴⁴ The Authority has been able to create and expand the RSF to meet unexpected financial challenges without an MYRP or other form of alternative regulation beyond the FPFTY and DSIC.

Table 2: Pittsburgh Water Historic Debt Coverage Ratios, 2018-2024

Year	Debt Service Coverage	Bond Indenture Requirements	Coverage In Excess Of Requirement
2018	1.71	1.20	0.51
2019	1.58	1.25	0.33
2020	1.23	1.00	0.23
2021	1.44	1.15	0.29
2022	1.45	1.15	0.30
2023	1.36	1.15	0.21
2024	1.37	1.15	0.22

Source: 2019-2024 Pittsburg Water Audited Financial Reports

Q. HAS THE AUTHORITY BEEN ABLE TO MEET ITS DEBT OBLIGATIONS?

A. Yes. Table 2 presents the Authority's historic debt service coverage and its debt service requirements for the years 2018-2024. The Authority has never failed to meet its financial requirements, maintaining healthy margins of 0.21 to 0.51 bps for the entirety of this seven-year period. Importantly, revenues transferred to the RSF are not counted as net revenues for purposes of calculating the Authority's debt service coverage ratios.

⁴³ *Id.* at 49:15-18.

⁴⁴ *Id.* at 49:21-23.

**Q. HAS THE AUTHORITY BEEN ABLE TO FUND ITS CAPITAL IMPROVEMENT
PLAN INVESTMENTS?**

A. Yes. The Authority has been able to fund over \$100 million in annual capital improvements every year since FY 2019.⁴⁵ Indeed, the Authority highlights the fact that FY 2024 marked both the largest annual increase in its budgeted capital improvements, and also the first time in recent history that Pittsburgh Water was able to fully finance its planned CIP budget.⁴⁶ The Authority was able to accomplish this strengthening of its capital investment efforts without any additional alternative regulation regime beyond the FPFTY and DSIC approved by the General Assembly.

**Q. DOES THE AUTHORITY REQUIRE THE PROPOSED MYRP TO MEET
SIGNIFICANT FINANCIAL COSTS IN FY 2027?**

A. No. The Authority limits its proposed FY 2027 rate increase to only that required for annual debt service, debt service coverage costs, and incremental DSIC percentage increase.⁴⁷ Because of this, the proposed incremental FY 2027 revenue increase represents only \$20.7 million of its total requested revenue increase of \$84.4 million.⁴⁸ In other words, the Authority's proposed rate increase in the current proceeding, using only a FPFTY without the proposed MYRP, would allow the Authority to recover more than 75 percent of its requested revenue increase for the two years requested.

Q. HAS THE AUTHORITY PROPOSED AN MYRP IN PRIOR RATE CASES?

⁴⁵ *Id.* at 31:2-3.

⁴⁶ *Id.* at 31:3-6 and Authority Response to Discovery Request OCA-I-7.

⁴⁷ *Id.* at 53:1-2.

⁴⁸ *Id.* at 52:20-21.

1 A. Yes. The current proceeding is the third request by Pittsburgh Water for approval
2 of an MYRP, having proposed similar requests in each of its two prior rate cases. In both
3 its 2020 and 2023 rate case proceedings,⁴⁹ the Authority's MYRP proposals were
4 withdrawn by Pittsburgh Water after intervening parties raised concerns with the
5 proposals in the context of the Authority's unreliable budget projections, lack of customer
6 benefits, reduced regulatory oversight of Pittsburgh Water investments that the
7 Authority's proposed MYRP would allow, and the lack of an annual reconciliation
8 mechanism.

9 **Q. HAS THE AUTHORITY ADDRESSED THE CONCERN THAT ITS PROPOSAL**
10 **IS BASED ON UNRELIABLE BUDGET PROJECTIONS?**

11 A. No. The Authority's requested increase for FY 2027 is limited to only debt costs
12 related to Pittsburgh Water's capital budget.⁵⁰ This limits the concerns related to the
13 proposed rate increase being reliant on unreliable budget projections, but does not
14 eliminate such concerns as the Authority's debt costs are still reliant on the Authority's
15 capital budget and its projections of rates associated with its future debt issuances.

16 **Q. DOES THE PROPOSED \$20.7 MILLION INCREASE IN FY 2027 REPRESENT**
17 **A PHASE-IN OF RATES?**

18 A. No. Pittsburgh Water's rate increase request is based on a projected revenue
19 requirement increase of \$63.7 million for the FY 2026 FPFTY as defined by 30 PA. C.S.

⁴⁹ See, *Pennsylvania Public Utilities Commission v. Pittsburgh Water and Sewer Authority*, Docket No. R-2020-3017951 *et. seq.*, Recommended Order at 22; and *Pennsylvania Public Utilities Commission v. Pittsburgh Water and Sewer Authority*, Docket No. R-2023-2023-3039919 *et. seq.*, Recommended Order at 54.

⁵⁰ PW St. 2 at 53:1-2.

1 § 315(e). The Authority's FY 2027 rate increase request represents additional revenue
2 requirement that falls fully outside of this FPFTY as defined by statute, and therefore is
3 distinct from a two-year phase-in of a revenue requirement increase that is sometimes
4 utilized by utilities in Pennsylvania. Instead, the requested \$20.7 million rate increase for
5 FY 2027 represents a second proposed rate increase on top of the Authority's requested
6 increase based on its FPFTY allowed by statute.

7 **Q. ARE THE AUTHORITY'S PROJECTIONS OF DEBT COSTS A POTENTIAL**
8 **CAUSE OF CONCERN?**

9 A. Yes. As explained in the testimony of OCA witness Chris Walters, there are
10 concerns with the Authority's estimated costs of future debt issuance in the current
11 proceeding. Specifically, it is unclear if the premium the Authority included in its
12 calculation based on current market volatility are appropriate for debt that is expected to
13 be issued in 2026 and 2027.

14 **Q. HAS THE AUTHORITY ADDRESSED THE CONCERN THAT ITS PROPOSAL**
15 **LACKS CUSTOMER BENEFITS?**

16 A. The Authority disputes the argument that an MYRP inherently does not result in
17 benefits to Pittsburgh Water customers. The Authority argues that if it fails to recover all
18 of the costs it incurs in providing reasonable and adequate service, it will be forced to
19 reduce needed expenditures or file a future rate increase.⁵¹ The Authority also argues
20 that both of these possibilities hurt customers by either reducing the level of service

⁵¹ *Id.* at 56:22-25.

1 provided or adding additional costs.⁵² The Authority also argues that, to the extent actual
2 debt costs turn out to be lower than that projected, this will offset the requirement of future
3 rate increases.⁵³

4 **Q. DO YOU AGREE THAT AN MYRP INHERENTLY PROVIDES BENEFITS TO**
5 **CUSTOMERS?**

6 A. No. The Authority's argument is illogical as it argues that ratepayers benefit from
7 known future rate increases because they may alleviate unknown future rate increases.
8 Furthermore, as I have shown here, the current regulatory regimen allowing for the use
9 of FPFTY in rate cases and the DSIC to recover expenses associated with applicable
10 capital investments between rate cases has allowed the Authority stable access to
11 financial resources and stable capital investments.

12 **Q. HAS THE AUTHORITY PROPOSED A STAY OUT PROVISION AS PART OF**
13 **ITS PROPOSED MYRP?**

14 A. No. The Authority's proposed rate increase, including the proposed rate increase
15 for FY 2027, is not premised on any stay out provision on the part of the Authority. The
16 Authority states that its proposed MYRP is premised on removing the need to file for a
17 future rate case in the next 2-3 years, but its request does not include any agreement on
18 the part of the Authority that it will refrain from seeking a rate increase in the near term if
19 the MYRP is approved.

⁵² *Id.* at 56:25 to 57:2.

⁵³ *Id.* at 57:2-5.

Q. DOES THE AUTHORITY PROPOSE ANY IMPROVEMENT IN SYSTEM RELIABILITY METRICS AS PART OF ITS PROPOSED MYRP?

A. No. Beyond being intended to break the need for frequent rate case filings, the Authority references large capital investments it seeks to undertake as part of its CIP in order to modernize its water and wastewater facilities. However, the Authority fails to tie itself to any improvements in system reliability as a component of its proposed MYRP. This is particularly problematic since, as discussed in the Direct Testimony of OCA Witness Alexander, it is a known concern that utilities may allow service quality to deteriorate in the context of MYRPs.

Q. HAS THE AUTHORITY INCLUDED AN ANNUAL RECONCILIATION MECHANISM?

A. No. The Authority argues that the Legislature would have required the inclusion of a reconciliation mechanism in its discussion of alternative regulation mechanisms available to the Commission if it felt that an MYRP was only reasonable if it had a reconciliation mechanism as part of the plan.⁵⁴ The Authority further notes that the proposed mechanism only applies to base rates, and that base rates, by their nature, are not reconcilable.⁵⁵

Q. DOES THE AUTHORITY LEAVE OPEN POSSIBLE SUPPORT FOR INCLUSION OF A RECONCILIATION MECHANISM AND INCREASED COMMISSION OVERSIGHT?

⁵⁴ *Id.* at 57:19-21.

⁵⁵ *Id.* at 57:21-23.

A. Yes. The Authority requests that the Commission allow, in the current proceeding, a fixed \$20.7 million rate increase in FY 2027 to cover projected debt costs, but alludes to the fact that its proposed MYRP could be structured to refund customers if this request exceeds its actual debt costs.⁵⁶ The Authority notes that it envisions a potential “mini-proceeding” that will be filed with the Commission prior to the issuance of new debt in FY 2027 to allow the Commission to review and comment before it becomes effective.⁵⁷ However, the Authority argues that, under such a mechanism, Pittsburgh Water should also be allowed to collect under collection of revenues to the extent actual debt costs are higher than projected.⁵⁸

Q. HOW WILL THE AUTHORITY’S PROPOSED FUTURE ‘MINI-PROCEEDING’ WORK?

A. The Authority proposes to submit, prior to the issuance of new debt, a copy of its cost-of-service model with estimated debt service, debt service coverage costs, and not-to-exceed revenue amounts approved in this rate case for FY 2027.⁵⁹ The Commission will then have 60 days upon receipt to review and ask questions about the proposed debt issuance.⁶⁰ 30 days after closing on the new debt issuance, Pittsburgh Water will again submit updated cost-of-service models to the Commission that include both the final debt costs and the rate increase needed to support the new debt.⁶¹

⁵⁶ *Id.* at 57:23-24.

⁵⁷ *Id.* at 58:7-11.

⁵⁸ *Id.* at 57:24-25.

⁵⁹ *Id.* at 58:14-18.

⁶⁰ *Id.* at 58:18-20.

⁶¹ *Id.* at 58:22-24.

Q. IS THE AUTHORITY PROPOSAL FOR A SYMMETRIC RECONCILIATION MECHANISM PROBLEMATIC?

A. Yes. It is far easier for the Authority to under collect revenues through the MYRP than it is to over collect revenues, since the allowed debt collection is tied to the Authority's capital expenditures. In other words, Pittsburgh Water can assure that it under collects its debt costs by simply expanding its capital budget subsequent to this rate case. Allowing for a symmetric reconciliation mechanism would make it far more likely that ratepayers will see future rate increases in excess of that projected by the Authority in the current filing. In other words, as proposed, the Authority can manipulate its metrics without being held accountable for improving or even maintaining service levels between rate cases. This decouples cost from value to the customer.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S PROPOSED MYRP?

A. I recommend the Commission reject the Authority's proposed MYRP. The Authority has not shown that the existing regulatory process, which includes both FPFTY within rate cases and the ability to recover costs associated with qualifying capital investments between rate cases through the existing DSIC, has been unable to provide adequate financial support to the Authority. Instead, the Authority has seen growing excess revenues and has been able to create and expand the RSF. Likewise, the Authority has not shown that the existing regulatory process has been unable to adequately support the Authority's annual capital investments. Indeed, the Authority highlights how FY 2024 marked both the largest annual increase in the Authority's

1 budgeted capital improvements, and the first year in recent history that Pittsburgh Water
2 was able to fully finance its planned capital budget.

3 **V. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE**

4 **Q. PLEASE SUMMARIZE PITTSBURGH WATER'S PROPOSED CHANGES TO**
5 **THE CURRENT DSIC.**

6 A. Pittsburgh Water seeks to increase the DSIC cap for its water and wastewater
7 operations from the current 5.0 percent level to 7.5 percent in the current rate case for
8 the purpose of generating additional revenue to fund the Authority's long-term
9 infrastructure improvement plan.⁶² The Authority states that the expansion of the DSIC
10 cap will allow Pittsburgh Water to access approximately \$10.1 million in additional
11 revenue over two years, allowing the Authority to address a current backlog of capital
12 improvements.⁶³

13 **Q. WHY DOES THE AUTHORITY PROPOSE TO INCREASE THE EXISTING DSIC**
14 **CAP?**

15 A. The Authority justifies its proposed increase three ways. First, the Authority states
16 that the proposed increase in the DSIC cap will allow the Authority to accelerate capital
17 investments included in its infrastructure plan.⁶⁴ Second, the Authority notes that inflation
18 in construction costs over the past five years has resulted in a loss of purchasing power
19 at current DSIC rates.⁶⁵ Finally, the Authority notes that the increase in DSIC funding has

⁶² PW St. 2 at 36:3-6.

⁶³ *Id.* at 36:7-9.

⁶⁴ *Id.* at 36:11-12.

⁶⁵ *Id.* at 36:12-14.

the added benefit of reducing its financial leverage represented by its debt coverage ratios.⁶⁶

Q. WHAT IS THE HISTORY BEHIND THE DSIC IN PENNSYLVANIA?

A. The DSIC was established by the General Assembly in a 2012 omnibus amendment to several sections of Title 66 of the Pennsylvania Consolidated Statutes. The DSIC allows for timely recovery of costs between rate cases to fund the repair, improvement, or replacement of eligible property included in long-term infrastructure improvement plans in order to ensure and maintain adequate, efficient, safe, reliable and reasonable service.⁶⁷ The DSIC is limited by statute to five percent of a customer's bill, and can only be increased to 7.5 percent, as requested by Pittsburgh Water here, by the Commission if the increase is needed "in order to ensure and maintain adequate, efficient, safe, reliable and reasonable service."⁶⁸

Q. WHAT ARE THE PENNSYLVANIA STATUTORY AND REGULATORY PROVISIONS RELEVANT TO PWSA'S DSIC PROPOSALS?

A. 66 Pa. C.S. Chapter 32 Water and Sewer Authorities of the Second Class sets forth the overall statutory requirements for the regulation of a Water and Sewer Authority such as PWSA, specifically providing for (1) on request waiver of any provision⁶⁹ and (2)

⁶⁶ *Id.* at 35:14-16.

⁶⁷ See Act No. 2012-11, P. L. 72.

⁶⁸ 66 Pa. C.S. § 1358(a)(1).

⁶⁹ **§3202. Application of provisions of title. (a) Application.--** ... **(b) Exception.--**Upon request of an authority, the commission may suspend or waive the applicability of any provision of this title to the authority, except for this section.

1 the establishment of a DSIC.⁷⁰ 66 Pa CS Chapter 13 Subchapter B Distribution Systems
 2 sets forth the DSIC statutory framework. The provisions relevant to PWSA's DSIC
 3 proposals define the components and frequency of the calculation of recoverable costs
 4 and the DSIC charge,⁷¹ provide for audit and annual reconciliation,⁷² and set a
 5 percentage cap on the amount billed to customers.⁷³ Finally, 52 Pa. Code §121.

⁷⁰ **§3205. Maintenance, repair and replacement of facilities and equipment. ... (b) Petition.**--An authority may petition the commission for the establishment of a distribution system improvement charge. An authority which establishes a distribution system improvement charge shall comply with all applicable requirements of Subchapter B of Chapter 13 (relating to distribution systems).

⁷¹ **§1357 Computation of charge. (a) Recovery.**--The following shall apply: ... (2) After calculation of the initial charge under paragraph (1), the distribution system improvement charge must be updated on a quarterly basis to reflect eligible property placed in service during the three-month period ending one month prior to the effective date of each distribution system improvement charge update. (3) The fixed cost of eligible property shall consist of depreciation and pretax return, except as provided for in subsection (c) for city natural gas distribution operation.

§1357 Computation of charge. (c) Recovery of costs.--Utilities may file tariffs establishing a sliding scale of rates or other method for the automatic adjustment of the rates of the utility to provide for recovery of the depreciation and pretax return fixed costs of eligible property, as approved by the commission, that are completed and placed in service between base rate proceedings. For city natural gas distribution operations, recoverable costs shall be amounts reasonably expended or incurred to purchase and install eligible property and associated financing costs, if any, including debt service, debt service coverage and issuance costs.

§1357 Computation of charge. (d) Calculation.-- (1) The distribution system improvement charge shall be expressed as a percentage carried to two decimal places and shall be applied in a manner consistent with section 1358 (relating to customer protections) to each customer under the utility's applicable rates and charges. The charge shall not be applied to amounts billed for public fire protection service by water utilities and the State tax adjustment surcharge. (2) The distribution system improvement charge shall be calculated by dividing one-fourth of the annual fixed costs associated with all eligible property under the distribution system improvement charge by the projected revenue for the quarterly period during which the distribution system will be collected. The projected revenues shall not include revenues from public fire protection service earned by water utilities and the State tax adjustment surcharge.

⁷² **§1358 Customer protections. (e) Audit and reconciliation.**--The following shall apply: (1) The distribution system improvement charge shall be subject to the following: (i) Audit at intervals determined by the commission. (ii) Annual reconciliation based on a reconciliation period consisting of the 12 months ending December 31 of each year. The commission may also permit quarterly reconciliation. (2) The revenue received under the distribution system improvement charge for the reconciliation period shall be compared to the utility's eligible costs for that period. The difference between revenue and costs shall be recouped or refunded, as appropriate, in accordance with section 1307(e), over a one-year period or quarterly period commencing April 1 of each year. (3) If revenues received from the distribution system improvement charge exceed eligible costs, the over collections shall be refunded with interest. Interest on the over collections shall be calculated at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the act of January 30, 1974 (P.L.13, No.6), referred to as the Loan Interest and Protection Law, and shall be refunded in the same manner as an over collection.

⁷³ **§1358 Customer protections. (a) Limitation.**-- ... (2) A distribution system improvement charge granted to a water utility under former section 1307(g) (relating to sliding scale of rates; adjustments) or this subchapter may not exceed 7.5% of the amount billed to customers.

DSIC/LTIIP conditions utility DSIC eligibility on an approved long-term infrastructure investment plan (“LTIIP”) that accelerates replacement of aging infrastructure⁷⁴ and terminates the DSIC upon a utility’s non-compliance with its approved LTIIP.⁷⁵

Q. HAS THE AUTHORITY BEEN ABLE TO MEET ITS BUDGETED CAPITAL OUTLAYS UNDER THE CURRENT FIVE PERCENT DSIC CAP?

A. Yes. As stated previously, the Authority has been able to fund over \$100 million in annual capital improvements every year since FY 2019,⁷⁶ in part by utilizing the existing DSIC. Indeed, in FY 2024 the Authority was able to make more than \$200 million in capital investments to its system, and, by the Authority’s own admission, represented the first year in recent history where Pittsburgh Water was able to meet its planned capital budgets.⁷⁷ Pittsburgh Water was able to accomplish this acceleration in capital investments in the absence of any increase in the DSIC cap.

Q. DOES THE AUTHORITY ARGUE THAT AN INCREASE OF THE DSIC CAP WOULD ALLOW PITTSBURGH WATER TO ACCELERATE EXISTING CAPITAL INVESTMENTS?

A. Yes. The Authority argues that increasing the water DSIC cap to 7.5 percent would generate an additional \$6.5 million in revenue for the FPFTY and nearly a \$1.0 for FY

⁷⁴ **Section 121.1 - Purpose** To be eligible to recover the reasonable and prudently incurred costs regarding the repair, improvement and replacement of eligible property from a DSIC, a utility shall submit an LTIIP for Commission approval. See 66 Pa. C.S. § 1353 (relating to distribution system improvement charge). The LTIIP must show the acceleration of the replacement of aging infrastructure by the utility and be sufficient to ensure and maintain adequate, efficient, safe, reliable and reasonable service to customers.

⁷⁵ **Section 121.8 - Enforcement of LTIIP implementation** (c) The remedy for noncompliance with an approved LTIIP is the termination of the utility's approved DSIC mechanism.

⁷⁶ PW St. 2 at 31:2-3.

⁷⁷ *Id.* at 31:3-6.

2027.⁷⁸ Using this revenue, the Authority argues that it could accelerate the replacement of an additional 6,220 linear feet of small diameter water mains.⁷⁹ Likewise, the Authority argues that increasing the sewer DSIC cap to 7.5 percent would generate an additional \$2.3 million for the FPFTY and nearly \$400,000 for FY 2027.⁸⁰ This would allow the Authority to accelerate the replacement of 15,550 linear feet of sewer mains.⁸¹ The Authority argues that the use of DSIC revenues as “PAY-GO” ultimately provides cost savings to ratepayers.⁸²

Q. WHAT IS MEANT BY “PAY-GO?”

A. PAY-GO, or “pay-as-you-go,” refers to the funding of capital investments directly through revenues received through rates. This is in contrast to the traditional approach where expenses associated with capital investments are capitalized, and thus financed by the utility – in the case of the Authority through the issuance of long-term bonds – with ratepayer funds being used to pay off the investment and financing costs over the life of the capital investment.

Q. DOES THE USE OF PAY-GO PRESENT CONCERNS RELATIVE TO TRADITIONAL CAPITAL FINANCING?

A. Yes. The most obvious concern presented from the use of PAY-GO compared to traditional capital financing is the negative effects such financing has on intergenerational

⁷⁸ *Id.* at 64:11-13.

⁷⁹ *Id.* at 64:14-15.

⁸⁰ *Id.* at 64:16-18.

⁸¹ *Id.* at 64:18-20.

⁸² *Id.* at 64:21-23.

equity. Utility capital investments have operational life spans that can stretch decades. For example, it is my experience that replaced water mains are often depreciated for accounting purposes for at least 30 years. This is because these assets are expected to have operational lives of at least this amount of time. Ratepayers for decades will receive benefits from the capital investment, but under PAY-GO only current ratepayers will be actually paying for this investment. In this manner current ratepayers subsidize future ratepayers under this system. This is contrasted by traditional financing where all ratepayers who receive service from the capital investment during its operations contribute to paying for the investment.

Q. DO YOU AGREE THAT PAY-GO NECESSARILY REDUCES COSTS TO RATEPAYERS?

A. No. Use of PAY-GO effectively shifts financing responsibility from the Authority to ratepayers. Retail financing costs are higher than the Authority, often much higher. As reported by the Board of Governors of the Federal Reserve System, the average interest rate on a 24-month personal loan in the summer of 2025 was 11.57 percent.⁸³ Likewise, the average credit card interest rate in the summer of 2025 was 21.16 percent.⁸⁴ In both cases these sources of capital for customers is much higher than the Authority's interest rate on issued long-term bonds.

Q. ARE THERE OTHER CONCERNS WITH THE USE OF DSIC FUNDS AS PAY-GO?

⁸³ "Terms of Credit at Commercial Banks and Finance Companies," Board of Governors of the Federal Reserve System.

⁸⁴ *Id.*

A. Yes. Pennsylvania statutes are specific in its enumeration of DSIC process, which does not appear to permit the use of DSIC funds as PAY-GO. Specifically, 60 PA. C.S. §1357(c) notes that the DSIC tariff allows for the automatic recovery of depreciation and pretax rate of return associated with eligible capital investments.⁸⁵ This includes municipal natural gas utilities where the DSIC represents the recovery of capital investments and associated financing costs of debt instruments over a number of years.⁸⁶

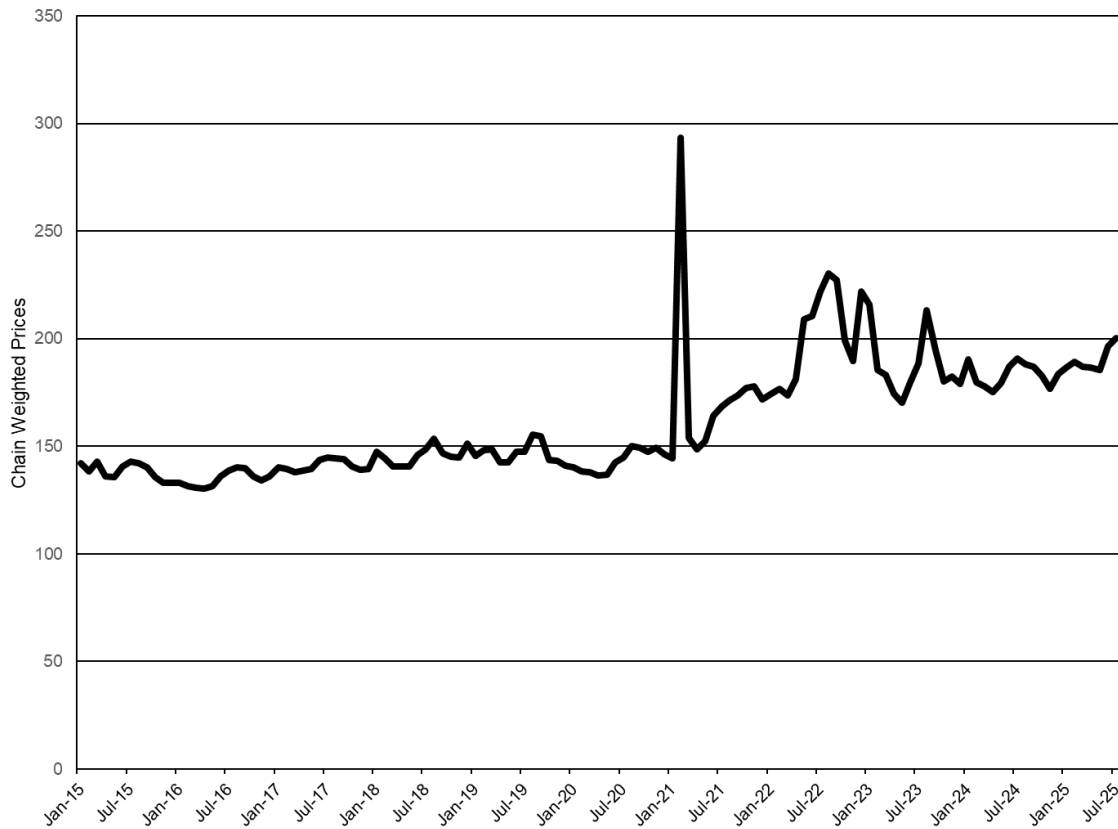
Recovery of costs – Utilities may file tariffs establishing a sliding scale of rates or other method for the automatic adjustment of the rates of the utility to provide for recovery of the depreciation and pretax return fixed cost of eligible property, as approved by the commission, that are completed and placed in service between base rate proceedings. For city natural gas distribution operations, recoverable costs shall be amounts reasonably expended or incurred to purchase and install eligible property and associated financing costs, if any, including debt service, debt service coverage and issuance costs.⁸⁷

⁸⁵ 60 PA. C.S. §1357(c).

⁸⁶ *Id.*

⁸⁷ *Id.*

Figure 2 – Monthly Utility Producer Price Index (PPI), Jan. 2015 – Jul. 2025



Source: U.S. Bureau of Labor Statistics

Q. DO YOU AGREE THAT FUTURE INCREASES IN INFLATION WILL REDUCE THE PURCHASING POWER AVAILABLE UNDER THE DSIC?

A. No. Figure 2 presents the historic monthly producer price index (PPI) for the utilities sector as reported by the U.S. Bureau of Labor Statistics (BLS). Utilities, like many other industries, saw significant input price inflation starting in early 2021 due to constrictions of global supply chains in the aftermath of the 2020 COVID-19 pandemic. However, as can be seen in Figure 2, this inflation began to moderate by late 2022, returning to normal ranges by the start of 2024.

1 **Q. DO YOU AGREE THAT CURRENT UTILITY INPUT PRICES ARE HIGHER**
2 **THAN THEY WERE PRE-PANDEMIC?**

3 A. Yes, however the fact that input prices are greater today than they were five years
4 ago is not relevant to DSIC recovery since the DSIC is only used to recover the costs of
5 capital investments made between rate cases. Long-term escalation in costs will be
6 incorporated into base rates through rate increases such as the one the Authority
7 requests in the current proceeding. Based on current moderated pattern in utility input
8 prices, there is no reason with significant certainty to believe that Pittsburgh Water will
9 experience significant price inflation prior to its next base rate case filing that will
10 noticeably limit the ability of the Authority to make required capital investments.

11 **Q. HOW DOES THE AUTHORITY FINANCIALLY UTILIZE DSIC REVENUES?**

12 A. The Authority states that, as a municipal utility, its capital structure differs from
13 investor-owned utilities in that its main sources of capital funding are debt instruments
14 and internally generated funds (or PAY-GO).⁸⁸ The Authority thus utilizes DSIC revenues
15 as a source of internally generated funds to supplement its required debt issuances and
16 reduce the leverage required to fund its budgeted capital investments.⁸⁹

17 **Q. HAS PITTSBURGH WATER HISTORICALLY BEEN ABLE TO MEET ITS DEBT**
18 **OBLIGATIONS?**

19 A. Yes. As I noted previously, the Authority has never failed to meet its financial
20 requirements, maintaining healthy margins of 0.21 and 0.51 bps for the entirety of the

⁸⁸ *Id.* at 32:15-17.

⁸⁹ *Id.* at 32:17-19.

1 period 2018-2024. Furthermore, since 2020 Pittsburgh Water has been able to utilize its
2 excess operating revenues to develop and expand the RSF while maintaining a healthy
3 financial position. This was all accomplished under the current DSIC caps. Thus the
4 Authority provides no evidence in the current proceeding that it cannot maintain healthy
5 financial margins even without the proposed increase in DSIC caps.

6 **Q. HOW WOULD AN INCREASE IN THE DSIC CAPS POTENTIALLY ALLOW THE**
7 **AUTHORITY TO IMPROVE ITS DEBT RATIO?**

8 A. The Authority argues that it can utilize DSIC revenues as a source of internally
9 generated funds as PAY-GO to supplement its required debt issuances. However, as I
10 discussed previously, it is unclear if PAY-GO is permitted under the DSIC, which further
11 undermines the Authority's advocacy of utilizing DSIC to improve financial metrics.

12 **Q. DOES THE AUTHORITY MAKE ANY ADDITIONAL ARGUMENT SUPPORTING**
13 **ITS PROPOSAL TO INCREASE THE DSIC CAPS?**

14 A. Yes. The Authority argues that increasing the DSIC caps will mean that more of
15 its CIP is covered by its LTIIP. The Authority argues that this would expand the portion
16 of its capital expenditures that are recovered through reconcilable surcharge,⁹⁰ and would
17 give the Commission and interested parties greater insight into the Authority's capital
18 investments.⁹¹

⁹⁰ *Id.* at 65:13-16.

⁹¹ *Id.* at 65:20-22.

Q. WHAT IS YOUR RESPONSE TO THE AUTHORITY'S ARGUMENTS THAT AN INCREASE IN DSIC CAPS WOULD BENEFIT RATEPAYERS BY ALLOWING ADDITIONAL RECONCILIATIONS AND INCREASED TRANSPARENCY?

A. The Authority's arguments are red herrings. Ratepayers only benefit from reconciliations under the DSIC due to the historic over projection of Authority capital investments. The Authority can improve the accuracy of its capital budgeting process without an increase in the DSIC caps. Likewise, the Authority can increase transparency to its CIP without an increase in the DSIC caps.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S PROPOSAL TO INCREASE ITS EXISTING DSIC CAP?

A. I recommend the Commission reject the Authority's proposal to increase the existing DSIC cap from five percent to 7.5 percent. The Authority has not shown that the current DSIC cap has impacted the Authority financially, or that it will be unable to finance projected future capital investments under the existing five percent DSIC cap.

VI. ELIMINATION OF THE MINIMUM CHARGE

Q. PLEASE SUMMARIZE PITTSBURGH WATER'S PROPOSAL TO ELIMINATE THE MINIMUM WATER AND WASTEWATER CHARGE STARTING IN FY 2027.

A. Pittsburgh Water proposes to eliminate the current minimum water and wastewater charges and shift the recovery of those costs to volumetric rates starting in FY 2027.⁹² The Authority's proposal is in furtherance of the Settlement Agreement that resolved

⁹² PW St. 2 at 66:13-14.

1 issues between the parties to the Authority's prior rate case, Docket Nos. R-2023-
2 3039919 to R-2023-3039921.⁹³

3 **Q. HAVE YOU REVIEWED THE SETTLEMENT AGREEMENT RESOLVING**
4 **ISSUES IN THE AUTHORITY'S 2023 RATE CASE?**

5 A. Yes. The 2023 Settlement Agreement included three stipulations related to existing
6 minimum charges. First, the 2023 Settlement Agreement required the Authority to
7 undertake the software and billing system changes necessary to implement a rate
8 structure change to remove the minimum allowance included in the customer charge.⁹⁴
9 Second, the 2023 Settlement Agreement required the Authority to include a customer bill
10 impact analysis illustrating the effect of the removal of the minimum allowance on
11 customer rates.⁹⁵ Finally, the 2023 Settlement Agreement required Pittsburgh Water to
12 include a rate proposal supported by a customer cost analysis that fully eliminated usage
13 allowances.⁹⁶

14 **Q. IS THE AUTHORITY'S PROPOSAL TO ELIMINATE CURRENT MINIMUM**
15 **WATER AND WASTEWATER CHARGES BY FY 2027 IN COMPLIANCE WITH THE**
16 **2023 SETTLEMENT AGREEMENT?**

17 A. No. The Authority states that it cannot eliminate the minimum charges for FY 2026
18 due to time constraints. Specifically, the Authority notes that removing the minimum
19 charges will require an overhaul of Pittsburgh Water's entire rate structure and that it

⁹³ *Pennsylvania Public Utilities Commission v. Pittsburgh Water and Sewer Authority*, Docket Nos. R-2023-3039919 *et. seq.*, Joint Petition for Settlement of All Issues with All Parties.

⁹⁴ *Id.* at ¶19(3)(a)(i).

⁹⁵ *Id.* at ¶19(3)(a)(ii).

⁹⁶ *Id.* at ¶19(3)(a)(iii).

believes that a change of this magnitude will require public outreach to inform customers of the change to prevent customer confusion.⁹⁷ The Authority states that elimination of the minimum charges in FY 2026 will not allow it sufficient time to both change its billing system and run additional tests of its billing system to prevent billing errors.⁹⁸ Likewise, the Authority states that elimination of the minimum charges in FY 2026 will leave virtually no time for appropriate customer outreach required to inform its customer base of the change in rate structure.⁹⁹

Q. DO CONSUMER ADVOCATES GENERALLY SUPPORT LOWER FIXED CHARGES FOR UTILITY SERVICE?

A. Yes. Lower fixed charges promote the long-run efficient use of resources by allowing consumers greater agency over their monthly utility bills, thus encouraging conservation. Furthermore, research has generally shown that utility service represents a ‘normal’ good, where household usage increases with household income, since much of utility service is associated with the dwelling size. Therefore, high unavoidable charges, such as monthly customer charges, which negatively impact low-use customers are generally viewed as also negatively impacting low-income customers.

Q. DO UTILITIES GENERALLY SUPPORT HIGHER FIXED CHARGES?

A. Yes. Higher fixed charges reduce a utility’s risk from revenue fluctuations that may occur due to monthly changes in water usage. In this manner higher fixed charges reduce utility risks, and associated benefits, associated with regulatory lag as discussed above.

⁹⁷ PW St. 2 at 66:15-21.

⁹⁸ *Id.* at 66:22-24.

⁹⁹ *Id.* at 66:15-21.

1 **Q. WHAT IS YOUR RECOMMENDATION ASSOCIATED WITH THE AUTHORITY'S**
2 **PROPOSAL TO DELAY THE IMPLEMENTATION OF ITS ELIMINATION OF MINIMUM**
3 **CHARGES UNTIL FY 2027?**

4 A. I recommend the Commission heavily scrutinize the Authority's compliance with
5 the delayed implementation of a stipulation included in the 2023 Settlement Agreement.
6 The Commission should make clear to the Authority that its admission that it cannot meet
7 its own prior agreement with parties is not viewed favorably, and the further delays beyond
8 FY 2027 will not be accepted.

9 **VII. CONCLUSION AND RECOMMENDATIONS**

10 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S**
11 **PROPOSED MYRP?**

12 A. I recommend the Commission reject the Authority's proposed MYRP. The
13 Authority has not shown that the existing regulatory process has been unable to provide
14 adequate financial support to the Authority. Likewise, the Authority has not shown that
15 the existing regulatory process has been unable to adequately support the Authority's
16 annual capital investments.

17 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE AUTHORITY'S**
18 **PROPOSAL TO INCREASE ITS EXISTING DSIC CAP?**

19 A. I recommend the Commission reject the Authority's proposal to increase the
20 existing DSIC cap from five percent to 7.5 percent. The Authority has not shown that the
21 current DSIC cap has impacted the Authority financially, or that it will be unable to finance
22 projected future capital investments under the existing five percent DSIC cap.

1 **Q. WHAT IS YOUR RECOMMENDATION ASSOCIATED WITH THE AUTHORITY'S**
2 **PROPOSAL TO DELAY THE IMPLEMENTATION OF ITS ELIMINATION OF MINIMUM**
3 **CHARGES UNTIL FY 2027?**

4 A. I recommend the Commission heavily scrutinize the Authority's compliance with
5 the delayed implementation of a stipulation included in the 2023 Settlement Agreement.
6 The Commission should make clear to the Authority that its admission that it cannot meet
7 its own prior agreement with parties is not viewed favorably, and the further delays beyond
8 FY 2027 will not be accepted.

9 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 A. Yes.

Michael William Deupree
Research Consultant
Acadian Consulting Group
5800 One Perkins Place Drive, Suite 5-F
Baton Rouge, LA 70808

EDUCATION

M.A. in Economics, Kansas University, 2009

B.A. in Business Economics, Buena Vista University, 2007

PROFESSIONAL EXPERIENCE

Acadian Consulting Group, Baton Rouge, Louisiana

Spring 2025 – Present	Senior Research Consultant
Summer 2021 – Spring 2025	Research Consultant
Summer 2016 – Summer 2021	Research Associate
Winter 2011 – Summer 2016	Senior Research Analyst

Kansas Corporation Commission, Topeka, Kansas

Utilities Division

Summer 2011 – Winter 2011	Senior Research Economist

Research Division

Spring 2009 – Summer 2011	Research Analyst

Kansas Energy Council

Summer 2008 – Spring 2009	Research Assistant

PUBLICATIONS AND REPORTS

1. The challenges of the regulatory review of diversification mergers. With Dr. David E. Dismukes. *The Electricity Journal* 29 (2016) 8-14. (May 2016)

PROFESSIONAL AND CIVIC PRESENTATIONS

1. “Natural Gas Distribution” (2025). Prepared for the Louisiana State University, Center for Energy Studies, Energy Fundamentals 2025. June 24 and July 8, 2025.
2. “Development Trends, Issues, and Challenges with Clean Hydrogen Production” (2025). Prepared for the Michigan State University, Institute of Public Utilities, Annual Regulatory Studies Program. April 15, 2025.

3. "Status and Future of Natural Gas Supply and Infrastructure" (2025). Prepared for the Michigan State University, Institute of Public Utilities, Annual Regulatory Studies Program. April 8, 2025.
4. "Observed Impact of Formula Rate Plans Across the United States" (2024). Prepared for Arizona Corporation Commission Formula Rate Plan Workshop. October 3, 2024.

EXPERT WITNESS, LEGISLATIVE, AND PUBLIC TESTIMONY; EXPERT REPORTS, RECOMMENDATIONS, AND AFFIDAVITS

1. Expert Testimony. Docket No. R-2025-3054394. (2025). Before the Pennsylvania Public Utilities Commission. *Pennsylvania Public Utility Commission v. Citizens' Electric Company of Lewisburg*. On Behalf of the Pennsylvania Office of Consumer Advocate. Issues: Cost of Service, Rate Design.
2. Expert Testimony. Docket No. R-2025-3054393. (2025). Before the Pennsylvania Public Utilities Commission. *Pennsylvania Public Utility Commission v. Valley Energy, Inc.* On Behalf of the Pennsylvania Office of Consumer Advocate. Issues: Cost of Service, Rate Design.
3. Expert Testimony. Docket No. R-2025-3054392. (2025). Before the Pennsylvania Public Utilities Commission. *Pennsylvania Public Utility Commission v. Wellsboro Electric Company*. On Behalf of the Pennsylvania Office of Consumer Advocate. Issues: Cost of Service, Rate Design.
4. Expert Testimony. Docket No. R-2025-3053499. (2025). Before the Pennsylvania Public Utilities Commission. *Pennsylvania Public Utility Commission v. Columbia Gas of Pennsylvania, Inc.* On Behalf of the Pennsylvania Office of Consumer Advocate. Issues: Decoupling, Regulatory Lag.
5. Expert Testimony. Cause No. 46120. (2025). Before the Indiana Utility Regulatory Commission. *Verified Petition of NIPSCO Generation LLC for Certain Determinations by the Commission with Respect to its Jurisdiction Over Petitioner's Activities as a Non-Retail Generator of Electric Power*. On Behalf of the Indiana Office of Utility Consumer Counselor. Issues: Rate Design, Large Data Center Loads.
6. Expert Testimony. Case No. U-21859. (2025). Before the Michigan Public Service Commission. *In the matter of the application of Consumers Energy Company for Ex Parte Approval of Certain Amendments to Rate GPD*. On Behalf of the Michigan Attorney General. Issues: Rate Design, Large Data Center Loads.
7. Expert Testimony. Docket No. R-2025-3053112. (2025). Before the Pennsylvania Public Utilities Commission. *Pennsylvania Public Utility Commission v.*

Philadelphia Gas Works. On Behalf of the Pennsylvania Office of Consumer Advocate. Issues: Decoupling, Regulatory Lag.

8. Expert Testimony. Docket No. E-01773A-24-0220. (2025). Before the Arizona Corporation Commission. *In the Matter of the Application of Arizona Electric Power Cooperative, Inc. for a Hearing to Determine the Fair Value of its Property for Ratemaking Purposes, to Fix a Just and Reasonable Return Thereon and To Approve Rates Designed to Develop Such Return*. On Behalf of Arizona Corporation Commission Staff. Issues: Cost of Service, Qualifying Facilities.
9. Expert Testimony. Case No. U-21816. (2025). Before the Michigan Public Service Commission. *In the matter of Consumer Energy Company's application for the regulatory reviews, revisions, determinations, and/or approvals necessary to fully comply with Public Act 295 of 2008, as amended by Public Act 235 of 2023*. On Behalf of the Attorney General. Issues: Capital Expense, Cost Recovery
10. Expert Testimony. Cause No. 46120. (2024). Before the Indiana Utility Regulatory Commission. *Petition of Northern Indiana Public Service Company LLC Pursuant to Ind. Code §§ 8-1-2-42.4, 8-1-2-61 and 8-1-2.5-6 for (1) Authority to Modify its Retail Rates and Charges for Electric Utility Service Through a Phase in of Rates; (2) Approval of New Schedules of Rates and Charges, General Rules and Regulations, and Riders (both Existing and New); (3) Approval of Revised Common and Electric Depreciation Rates Applicable to its Electric Plant in Service; (4) Approval of Necessary and Appropriate Accounting Relief, Including, but Limited to, Authority to Capitalize as Rate Base All Expenditures for Improvements to Petitioner's Information Technology Systems through the Design, Development, and Implementation of a Work and Asset Management ("WAM") Program, to the Extent Necessary; and (5) Approval of Alternative Regulatory Plans for the Partial Waiver of 170 IAC 4-1-16(f) and Proposed Remote Disconnection and Reconnection Process and, to the Extent Necessary, Implementation of a Low Income Program*. On Behalf of the Indiana Office of Utility Consumer Counselor. Issues: Cost of Service, Rate Design.
11. Expert Testimony. Cause No. 46097. (2024). Before the Indiana Utility Regulatory Commission. *In the Matter of the Verified Petition of Indiana Michigan Power Company for Approval of Modifications to its Industrial Power Tariff – Tariff I.P.* On Behalf of the Indiana Office of Utility Consumer Counselor. Issues: Rate Design, Large Data Center Loads.
12. Expert Report. Docket No. AHD-00000J-23-0273. (2024). Before the Arizona Corporation Commission. *In the Matter of the Application of the Arizona Corporation Commission's Exploration of Changes to the Up to 10% Annual Reduction in the Export Rate and the 10-Year Export Rate Effective Period Under the Resource Comparison Proxy Methodology Approved in the Value and Cost of*

Distributed Generation Docket (E-00000J-14-0023). On Behalf of the Arizona Corporation Commission Staff. Issues: Value of Solar.

13. Expert Testimony. Case No. U-21585. (2024). Before the Michigan Public Service Commission. *In the Matter of the Application of Consumers Energy Company for Authority to Increase its Rates for the Generation and Distribution of Electricity and Other Relief*. On Behalf of the Attorney General. Issues: Capital Expenses.
14. Expert Report. *Review of LPSC Rules Regarding Distributed Generation: Report on Phase II of Rule-Making*. Docket No. R-33929. (2019). *In Re: Review of Policies Related to Customer-owned Solar Generation and Possible Modification of the Commission's Current Net Metering Rules*. On behalf of Louisiana Public Service Commission. Issues: Solar Net Metering.
15. Expert Report. (2011). *2011 Kansas Generation Planning Survey*. On behalf of the Kansas Corporation Commission Staff.
16. Expert Testimony. Docket No. 11-KCPE-581-PRE. (2011). Before the Kansas Corporation Commission. *In the Matter of the Petition of Kansas City Power & Light Company ("KCP&L") for Determination of the Ratemaking Principles and Treatment That Will Apply to the Recovery in Rates of the Costs to be Incurred by KCP&L for Certain Electric Generation Facilities Under K.S.A. 66-1239*. On Behalf of the Kansas Corporation Commission Staff. Issues: System Planning, Predetermination.
17. Expert Testimony. Docket No. 10-KCPE-795-TAR. (2010). Before the Kansas Corporation Commission. *In the Matter of the Application of Kansas City Power & Light Company for Approval to Implement a Portfolio of Demand Side Management Programs Including Affordability, Energy Efficiency, Demand Response and Educational Programs, and to Implement a Rider for Recovery of Program Costs and Incentives Associated with this Portfolio*. On Behalf of the Kansas Corporation Commission Staff. Issues: Demand Side Management, Cost-Benefit Analyses.
18. Expert Testimony. Docket No. 10-WSEE-775-TAR. (2010). Before the Kansas Corporation Commission. *In the Matter of the Application of Westar Energy, Inc. and Kansas Gas and Electric Company for an Order Authorizing them to participate in Efficiency Kansas, Approve the SimpleSavings Program Rider, and related cost recovery*. On Behalf of the Kansas Corporation Commission Staff. Issues: Demand Side Management, Cost-Benefit Analyses.
19. Expert Testimony. Docket No. 10-BHCG-639-TAR. (2010). Before the Kansas Corporation Commission. *In the Matter of the Application of Black Hills/Kansas Gas Utility Company, LLC, d/b/a Black Hills Energy for Approval to Implement Black Hills Energy's Five-Year Energy Efficiency Plan Consisting of Natural Gas Energy Efficiency Programs to Improve Building and Equipment Efficiency and to Educate About Efficient Energy Usage, to Provide for Program Cost Recovery*

Through a Rider Mechanism, Permit the Implementation of a Revenue Normalization Mechanism to Replace the Weather Normalization Adjustment, a Performance Incentive Mechanism, and Appropriate Accounting Authority to Defer Expenses and Revenues Associated with the Filing. On Behalf of the Kansas Corporation Commission Staff. Issues: Demand Side Management, Cost-Benefit Analyses.

20. Expert Testimony. Docket No. 10-EPDE-497-TAR. (2010). Before the Kansas Corporation Commission. *In the Matter of the Application of the Empire District Electric Company for Approval to Implement its Portfolio of Energy Efficiency and Demand Response Programs for its Kansas Customers, to Provide for Program Cost Recovery and Lost Revenue Through a Rider Mechanism, to Obtain any Necessary Waivers for the Commission, and for Appropriate Accounting Authority to Defer Expenses and Revenues Associated with the Filing.* On Behalf of the Kansas Corporation Commission Staff. Issues: Demand Side Management, Cost-Benefit Analyses.
21. Expert Testimony. Docket No. 10-KGSG-421-TAR. (2010). Before the Kansas Corporation Commission. *In the Matter of the Application of Kansas Gas Service, a Division of ONEOK, Inc., for Approval to Implement the Efficiency Kansas Energy Efficiency Program, to Implement Natural Gas Energy Efficiency Programs to Improve Building and Equipment Efficiency and to Educate about Efficient Energy Usage, To Provide for Program Cost Recovery Through a Rider Mechanism, to Establish Administrative Charges and a Program Initiation Fee, Permit the Implementation of a Revenue Decoupling Mechanism, and Appropriate Accounting Authority to Defer Expenses and Revenues Associated with the Filing.* On Behalf of the Kansas Corporation Commission Staff. Issues: Demand Side Management, Cost-Benefit Analyses.

Commission Consideration Criteria		Discussion
§ 69.3302(a)(1)	How the ratemaking mechanism and rate design align revenues with cost causation principles as to both fixed and variable costs.	The Authority's proposed MYRP does not address the Commission's consideration criteria aligning revenues with cost causation. While increases in rates after the conclusion of a FPFTY may be more consistent with utility costs, the MYRP will likely be less consistent than future rate filings.
§ 69.3302(a)(2)	How the ratemaking mechanism and rate design impact the fixed utility's capacity utilization.	The proposed MYRP will not impact capacity utilization.
§ 69.3302(a)(3)	Whether the ratemaking mechanism and rate design reflect the level of demand associated with the customer's anticipated consumption level.	While increases in rates after the conclusion of a FPFTY may be more consistent with customer consumption, the MYRP will likely be less consistent than future rate filings.
§ 69.3302(a)(4)	How the ratemaking mechanism and rate design limit or eliminate interclass and intraclass cost shifting.	The proposed MYRP does not have an effect on interclass or intraclass cost shifting.
§ 69.3302(a)(5)	How the ratemaking mechanism and rate design limit or eliminate disincentives for the promotion of efficiency programs.	The proposed MYRP will likely not impact the promotion of efficiency programs.
§ 69.3302(a)(6)	How the ratemaking mechanism and rate design impact customer incentives to employ efficiency measures and distributed energy resources.	The proposed MYRP will likely not impact customer incentives to employ efficiency measures.
§ 69.3302(a)(7)	How the ratemaking mechanism and rate design impact low-income customers and support customer assistance programs.	The proposed MYRP would guarantee a second rate increase in addition to the proposed increase required for the FPFTY. This will negatively impact all ratepayers, including impact low-income customers.
§ 69.3302(a)(8)	How the ratemaking and rate design impact customer rate stability principles.	In the absence of a reconciliation mechanism the proposed MYRP may allow for the Authority to over collect revenues required to service the Authority's debt. This would negatively impact customer rate stability.
§ 69.3302(a)(9)	How weather impacts utility revenue under the ratemaking mechanism and rate design.	The proposed MYRP is unrelated to weather concerns.
§ 69.3302(a)(10)	How the ratemaking mechanism and rate design impact the frequency of rate case filings and affect regulatory lag.	While the proposed MYRP may slightly reduce future rate case filings, it is unlikely to significantly reduce such filings as: (1) the proposed MYRP is limited to only the increase required to service the Authority's debt, and (2) the proposed MYRP is limited to a single year - FY 2027.
§ 69.3302(a)(11)	If or how the ratemaking mechanism and rate design interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa. C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa. C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa. C.S. § 1353 (relating to distribution system improvement charge).	The proposed MYRP would not impact surcharges.
§ 69.3302(a)(12)	Whether the alternative ratemaking mechanism and rate design include appropriate consumer protections.	The proposed MYRP does not include sufficient consumer protections. These include reconciliation mechanism, service targets, and/or stay-out provisions.
§ 69.3302(a)(13)	Whether the alternative ratemaking mechanism and rate design are understandable to consumers.	The proposed MYRP effectively pre-approves an additional rate increase after the conclusion of the FPFTY, and thus would be as understandable to customers as any other Authority rate increase.
§ 69.3302(a)(14)	How the ratemaking mechanism and rate design will support improvements in utility reliability.	The Authority's proposed MYRP is put forward to support capital investments required under the Authority's CIP. However, the Authority fails to include any quality of service standards with its proposed MYRP so ratepayers are not assured that the proposed MYRP will lead to improved utility reliability, and may, in fact, lead to reduced quality of service as discussed by OCA Witness Alexander.

ANNEX A
TITLE 52. PUBLIC UTILITIES
PART I. PUBLIC UTILITY COMMISSION
Subpart C. FIXED SERVICE UTILITIES
CHAPTER 69. GENERAL ORDERS, POLICY STATEMENTS
AND GUIDELINES ON FIXED UTILITIES
* * * * *
DISTRIBUTION RATES – STATEMENT OF POLICY

§ 69.3301. Purpose and scope.

~~Due to Federal and State policy initiatives to promote the efficient use of electricity, natural gas and water THROUGH TECHNOLOGIES AND INFORMATION, as well as policy initiatives to promote INCLUDING distributed energy RESOURCES, the fixed utilities within this Commonwealth have seen minimal, flat or even declining load growth.~~ The purpose of this policy statement is to invite the proposal, within a utility's base rate proceeding, of fixed utility distribution RATEMAKING MECHANISMS AND rate designs that further promote these Federal and State policy objectives. THE OBJECTIVES OF 66 Pa.C.S. § 1330 (RELATING TO ALTERNATIVE RATEMAKING FOR UTILITIES), AND MAY INCLUDE REDUCING ~~reduce fixed-utility disincentives for promoting these objectives, provide PROVIDING~~ incentives to improve system economic efficiency, ~~avoid AND AVOIDING UNNECESSARY~~ future capital investments, ~~and ensure~~ WHILE ENSURING that fixed utilities receive adequate revenue to maintain the safe, SECURE and reliable operation of their distribution systems. At the same time, an alternative rate design methodology should reflect the sound application of cost of service principles, establish a rate structure that is just and reasonable, and consider customer impacts.

§ 69.3302. Distribution rate considerations.

(a) In determining just and reasonable ALTERNATIVE ~~distribution rates~~ RATEMAKING MECHANISMS AND RATE DESIGNS ~~that promote the PURPOSE AND SCOPE OF THIS STATEMENT OF POLICY AND THE OBJECTIVES OF 66 Pa.C.S. § 1330 (RELATING TO ALTERNATIVE RATEMAKING FOR UTILITIES)~~ ~~efficient use of electricity, natural gas or water, as well as the use of distributed energy resources,~~ the Commission will MAY consider, among other relevant factors, the following:

(1) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN align revenues with cost causation principles as to both fixed and variable costs.

(2) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN impact the fixed utility's capacity utilization.

(3) Whether the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN reflect the level of demand associated with the customer's anticipated consumption levels.

(4) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN limit or eliminate interclass and intraclass cost shifting.

(5) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN limit or eliminate disincentives for the promotion of efficiency programs.

(6) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN impact customer incentives to employ efficiency measures and distributed energy resources.

(7) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN impact low-income customers and support consumer assistance programs.

(8) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN impact customer rate stability principles.

(9) How weather impacts utility revenue under ~~these rates~~ THE RATEMAKING MECHANISM AND RATE DESIGN.

(10) How the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN impact the frequency of rate case filings and affect regulatory lag.

(11) If or how the ~~rates~~ RATEMAKING MECHANISM AND RATE DESIGN interact with other revenue sources, such as Section 1307 automatic adjustment surcharges, 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), riders such as 66 Pa.C.S. § 2804(9) (relating to standards for restructuring of electric industry) or system improvement charges, 66 Pa.C.S. § 1353 (relating to distribution system improvement charge).

(12) Whether the alternative ~~rate~~ RATEMAKING mechanism AND RATE DESIGN includes INCLUDE appropriate consumer protections.

(13) Whether the alternative ~~rate~~ RATEMAKING mechanism AND RATE DESIGN is ARE understandable and acceptable to consumers and comports with Commonwealth law.

(14) HOW THE RATEMAKING MECHANISM AND RATE DESIGN WILL SUPPORT IMPROVEMENTS IN UTILITY RELIABILITY.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Michael Deupree, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 1, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ Michael Deupree
Michael Deupree

Address: Acadian Consulting Group
5800 One Perkins Place Drive
Suite 5-F
Baton Rouge, LA 70808

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	)	Docket Nos.
v.	)	R-2025-3055010 (Water)
Pittsburgh Water and Sewer Authority	)	R-2025-3055011 (Wastewater)
d/b/a Pittsburgh Water	)	R-2025-3055012 (Stormwater)

DIRECT TESTIMONY OF

DANTE MUGRACE

**ON BEHALF OF THE
COMMONWEALTH OF PENNSYLVANIA
OFFICE OF CONSUMER ADVOCATE**

September 5, 2025

TABLE OF CONTENTS

	<u>PAGE</u>
I. STATEMENT OF QUALIFICATIONS	1
II. PURPOSE OF TESTIMONY	3
III. REVENUE REQUIREMENT ISSUES	11
A. SUMMARY	11
B. SYSTEM REVENUE REQUIREMENTS	13
1. System Revenues	13
2. Operating Expenses – Direct	15
a. Executive Director	22
b. Customer Service	25
c. Technology Services	26
d. Finance	29
e. Human Resources	31
f. Legal	32
g. Safety & Security	34
h. Public Affairs	35
Operating Expenses- Operations	
i. Warehouse	37
j. Laboratory	38
k. Water Treatment	40
l. Water Plant Operations	42
m. Sewer Operations	44
n. Environmental Compliance	46
o. Engineering & Construction	48
p. Other Adjustments	50
3. Operating Expenses – Other	51
4. Debt Service Coverage	52
5. Capital Expenditures & Transfers	53
6. Projected Cash Flow	54
IV. Appendix A – Resume of Dante Mugrace	

V. EXHIBITS:

1. Exhibit DM-1.....	Revenue Requirement Summary
2. Exhibit DM-2.....	Income Statement – FPFTY 2026
3. Exhibit DM-3.....	Chief Executive Officer - 100
4. Exhibit DM-4.....	Customer Service – 101
5. Exhibit DM-5.....	Technology Services – 102
6. Exhibit DM-6.....	Finance – 103
7. Exhibit DM-7.....	Human Resources - 104
8. Exhibit DM-8.....	Legal – 105
9. Exhibit DM-9.....	Safety & Security – 106
10. Exhibit DM-10.....	Public Affairs - 108
11. Exhibit DM-11.....	Environmental Compliance – 110
12. Exhibit DM-12.....	Warehousing – 107
13. Exhibit DM-13.....	Laboratory – 200
14. Exhibit DM-14.....	Water Treatment Plant - 201
15. Exhibit DM-15.....	Sewer Operations – 300
16. Exhibit DM-16.....	Water Operations – 202
17. Exhibit DM-17.....	Engineering & Construction - 109
18. Exhibit DM-18.....	Other Operating Expenses
19. Exhibit DM-19.....	Debt Service Coverage
20. Exhibit DM-20.....	CAPEX & Transfers
21. Exhibit DM-21.....	Projected Cash Flow (DCOH)

STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dante Mugrace. My business address is 22 Brooks Avenue, Gaithersburg, MD 20877.

Q. WHAT IS YOUR PRESENT OCCUPATION?

A. I am a Senior Consultant with the Economic and Management Consulting Firm of PCMG and Associates, LLC. (PCMG). In my capacity as a Senior Consultant, I am responsible for evaluating and examining rate and rate related proceedings before various governmental entities, preparing expert testimony recommending revenue requirement, as well as offering opinions on economic policy and policy issues and methodologies used to set a value on a utility's rate base and cost of service components of revenue requirement.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE.

A. PCMG is an association of experts in utility regulation and policy, economics, accounting, and finance. PCMG's members have over 75 years of collective experience providing assistance to counsel and expert testimony regarding the regulation of electric, gas, water and wastewater utilities that operate under local, state, and federal jurisdictions. PCMG focuses on areas regarding revenue requirement, cost of service, rate design, cost of capital and rate of return. Prior to my association with PCMG, I was employed as a Senior Consultant with the consulting firm of Snavelly King Majoros and Associates (SKM) from 2013 to 2015, in the same capacity as PCMG. Prior to SKM I was employed by the New Jersey Board of Public Utilities (NJBPU) from 1983 to my retirement in 2011. During my tenure at the NJBPU, I held various Accounting, Rate Analyst, Supervisory and Management Positions. My last position was Bureau Chief of Rates in the Agency's Water Division (Bureau Chief of Rates). I held this position for nearly 10 years. My resume is attached as Appendix A.

Q. WHAT EXPERIENCE DO YOU HAVE IN THE AREA OF UTILITY RATE SETTING PROCEEDINGS AND OTHER UTILITY MATTERS?

A. In my capacity as Bureau Chief of Rates at NJBPU, I was responsible for overseeing the rate process regarding administrative, financial, and managerial functions of the Rates

1 Bureau. My primary duties were to ensure that the jurisdictional utilities had sufficient
2 revenues to cover their operating expenses, the ability to earn a reasonable rate of return
3 on plant investments, and to ensure that the provision of safe, adequate, and proper service
4 at reasonable rates was met. During my time at the NJBPU, I was involved in hundreds of
5 rate and rate related proceedings. In my capacity as a Senior Consultant previously with
6 SKM and now with PCMG, I have been and am currently involved in rate and rate related
7 proceedings before the Commissions in the State of Hawaii, the Commonwealth of
8 Massachusetts and Pennsylvania, and the States of Maine, Maryland, New Jersey, New
9 York, North Dakota, and Ohio. I was involved in the Generic Proceedings to Establish
10 Parameters for the Next Generation Performance Based Rate Plans before the Alberta
11 Utilities Commission. I was involved in transmission formula rate plans before the Federal
12 Energy Regulatory Commission (FERC) regarding the PECO Energy Company on behalf
13 of the Pennsylvania OCA and the Rockland Electric Company on behalf of the NJ Division
14 of Rate Counsel.

15 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?**

16 **A.** I hold a Master of Business Administration (MBA) degree with a concentration in Strategic
17 Management from Pace University-Lubin School of Business in New York, New York. I
18 hold a Master of Public Administration (MP) degree from Kean University in Union, New
19 Jersey. I hold a Bachelor of Science (BS) degree in Accounting from Saint Peter's
20 University in Jersey City, New Jersey.

1 **II. PURPOSE OF TESTIMONY**

2 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

3 **A.** I am testifying on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 **A.** The purpose of my testimony is to evaluate and recommend a level of revenue requirement
6 increase for water, wastewater and stormwater service regarding Pittsburgh Water and
7 Sewer Authority d/b/a Pittsburgh Water (Pittsburgh Water or PW) based upon the use of
8 the Cash Flow Method of setting rates for service. In my review and evaluation of PW's
9 proposed System Revenue Requirement, I am relying on the testimony of all OCA
10 witnesses, who address various aspects of PW's rate request.

11 **Q. WHAT IS PITTSBURGH WATER REQUESTING IN THIS RATE CASE?**

12 **A.** On June 4, 2025, PW filed a request with the Pennsylvania Public Utility Commission
13 (Commission) seeking approval of an overall increase in rates of \$84.4 million or 34% above
14 current rates.¹ PW is proposing to implement this increase over two periods of \$63.7 million
15 (25.9%) in the Fully Projected Future Test Year (FPFTY) 2026; and \$20.7 million (6.7%) in
16 the FPFTY 2027 for FY 2027.² According to the Statement of Reasons, PW is seeking a
17 multi-year rate increase of \$84.4 million; \$63.7 million in the FPFTY 2026 and \$20.7 million
18 in the FPFTY 2027.

19 **Q. WHAT IS YOUR OPINION OF PW'S MULTI-YEAR RATE PLAN?**

20 **A.** In my opinion, I believe PW's multi-year rate plan is comprised of two separate rate
21 proposals and not a phase-in of the rates. As explained by Mr. Barca Pittsburgh Water has
22 claimed that its revenue requirement is based upon a fully forecasted 12 month period ending
23 December 31, 2026. Mr. Barca stated that the forecasted period is the 12 months ending
24 December 31, 2027. (Statement No. 2 at 8). These two test year periods are based upon a
25 zero-based budgeting method to develop annual budgets. This is contrary to a traditional
26 budgeting approach in which an escalation factor was not used for an anticipated increase in

¹ \$84.4 million divided by current revenues of \$248.222 million. (Exhibit EB-2). (PW St. 1 at 3).

² Pittsburgh Water's Statement of Reasons at 1.

1 a specific type of cost. (Statement No. 2 at 9). I believe these are two separate budget levels
2 and two separate rate proposals. PW provided two separate revenue requirement exhibits as
3 shown on Mr. Barca's Exhibit EB-2 (Statement of Income – Proposed Rates).

4 **Q. DID PITTSBURGH WATER IDENTIFY REASONS FOR ITS REQUESTED RATE**
5 **INCREASES?**

6 A. Yes. Pittsburgh Water's stated reasons for requesting a revenue requirement increase are
7 to replace its antiquated water, wastewater and stormwater systems. Pittsburgh Water
8 stated it needs sufficient capital to finance large capital expenditures, and an operating
9 budget sufficient to pay the costs for much needed upgrades and maintenance to these
10 facilities. PW also claims that additional funds are needed to cover the increased costs of
11 these projects and to continue to meet financial and regulatory obligations.³ As a cash flow
12 entity, PW states that the rate increase is also necessary for Pittsburgh Water to maintain
13 or improve its bond rating, which keeps borrowing costs down.⁴ PW further states that the
14 requested increase is needed to continue its capital improvement plan much of which is
15 mandated by the Pennsylvania Department of Environmental Protection (DEP).⁵ Company
16 witness Mr. Barca stated the need for this increase is driven by capital costs (debt service,
17 debt service coverage and DSIC costs) surface restoration (paving), vehicle purchases,
18 manhole repairs, emergency water line and sewer lateral repairs, expansion of operations,
19 and continued compliance to meet financial obligations.⁶ Mr. Barca stated that the
20 Pittsburgh Water must also improve its financial metrics that impact bond rating.

21 **Q. PLEASE EXPLAIN PW'S MULTI-YEAR RATE FILING PROPOSAL.**

22 A. As explained on PW St. 2 at 4, PW is proposing a two-year rate increase which would
23 increase revenues by \$63.7 million in FY 2026, and \$20.7 million in FY 2027. This
24 includes an increase in the DSIC Cap to 7.5% and an expansion of the PENNVEST Charge
25 on March 3, 2026.⁷

³ PW's Statement of Reasons.

⁴ *Id.*

⁵ PW St. 1 at 5.

⁶ PW St. 2 at 5.

⁷ PW St. 2 at 4.

1 **Q. WHAT IS YOUR RESPONSE?**

2 A. My response is that Pittsburgh Water's two-year rate plan should be rejected. In concluding
3 this, I am relying on the recommendations of Mr. Michael Dupree and Mr. Jerome Mierzwa
4 with respect to this aspect of the filing. In total, the OCA witnesses demonstrate that PW's
5 two-year rate plan should be overwhelmingly rejected.

6 **Q. WILL YOUR TESTIMONY PRESENT REVENUE RECOMMENDATIONS FOR**
7 **PW'S FY 2026 AND FY 2027?**

8 A. No. I am presenting revenue recommendations solely for PW's FPFTY ending on
9 December 31, 2026. As I indicate below, and as supported by all OCA witnesses for this
10 case, the OCA recommends that PW's Multi-Year Rate Plan (MYRP) be rejected for many
11 compelling reasons that demonstrate that it would produce unjust and unreasonable rates
12 for PW's ratepayers. My testimony adopts that position as well; therefore, my
13 recommendations will address FY 2026 only because FY 2027 are not appropriately
14 supported.

15 **Q. PLEASE DESCRIBE HOW PW DEVELOPS ITS RATE REQUEST AND ITS**
16 **OVERALL REVENUE REQUIREMENT IN THE SETTING OF RATES.**

17 A. As described in Mr. Barca's testimony, PW sets its rates for service based upon the Cash
18 Flow Method (CFM) of ratemaking.⁸ Given that Pittsburgh Water does not have any
19 shareholders and does not pay a dividend or a rate of return to its owner, the CFM is used
20 to determine the levels of cash necessary to fund an operating budget that enables PW to
21 maintain the system, pay for needed capital improvements, the level of debt service
22 coverage that both meets PW's bond covenant requirements, meet additional bonds test
23 and produce sufficient cash to fund all obligations and maintain access to the capital
24 markets at reasonable rates.⁹ The water, wastewater conveyance and stormwater
25 infrastructure operating by PW is currently owned by the City of Pittsburgh. Pittsburgh
26 first assumed responsibility for the system operations and maintenance from the City
27 pursuant to an agreement effective January 1, 1995 between the City and Pittsburgh

⁸ PW St. 2 at 6.

⁹ *Id.*

1 Water.¹⁰ Pittsburgh Water is on the path to becoming the official owner of the City's assets
2 and on September 1, 2025, this transfer will be effectuated.¹¹

3 **Q. BECAUSE PW IS A PENNSYLVANIA PUBLIC UTILITY, IS ITS BOARD OF**
4 **DIRECTORS RESPONSIBLE FOR DETERMINING PW'S RATES IN THIS**
5 **CASE?**

6 A. No. The Commission is responsible for determining PW's rates.¹²

7 **Q. WHAT ARE THE REQUIREMENTS OF THE USE OF A FPFTY PERIOD?**

8 A. With the enactment of Act 11 of 2012, PW has based its claimed revenue requirement on
9 the fully forecasted 12 months ending December 31, 2026.¹³ PW has also proposed to
10 include a forecasted period FY 2027 ending December 31, 2027 based on the 2026
11 FPFTY.¹⁴

12 **Q. IS THE PROPOSED \$84.4 MILLION A 2-YEAR PHASE-IN OF RATES?**

13 No, it is not. Pittsburgh Water has proposed two separate revenue requirements for the
14 FPFTY 2026 of \$63.7 million and a separate revenue requirement request for what PW
15 calls the FY 2027 of \$21.7 million.

16 **Q. DOES THE "FY 2027" MEET THE STATUTORY DEFINITION OF A FULLY**
17 **PROJECTED FUTURE TEST YEAR?**

18 A. No. I am not a lawyer, but I am advised by counsel that Section 315 (e) of the Public Utility
19 Code (Act 11 of 2012) states that "the utility may utilize a future test year or a fully
20 projected future test year, which shall be the 12-month period beginning with the first
21 month that the new rates will be placed in effect after application of the full suspension
22 period permitted under section 1308(d) (relating to voluntary changes in rates)."

23 The proposed FY 2027 is beyond the time period for the Fully Projected Future Test Year.
24 Pittsburgh Water has built its proposed FY 2027 revenue requirement based upon an
25 increase of the FPFTY 2026 proposed \$63.7 million revenue requirement and refers to it

¹⁰ PW St. 1 at 10.

¹¹ *Id.*

¹² *Id.* at 12.

¹³ PW St. 2 at 8.

¹⁴ *Id.*

1 as the “forecast period.”¹⁵ PW does not propose to phase-in rates over the test years at issue
2 in this proceeding. Pittsburgh Water witness Barca defines the increased revenue
3 requirement for the FY 2027 as “associated with annual debt service, debt service coverage
4 costs, and the associated DSIC only.”¹⁶ PW’s FY 2027 forecasted revenue requirement is
5 speculative in nature and not known and measurable in the setting of rates for service.

6 **Q. HAS PITTSBURGH WATER RELIED UPON OTHER PROVISIONS OF ACT 11?**

7 **A.** Yes. According to Mr. Barca, Pittsburgh Water is requesting consolidation of the three
8 dockets for water, wastewater and stormwater and authority to use combined water,
9 wastewater, and stormwater revenue requirements. Mr. Barca stated that this consolidation
10 will continue the prior accounting and ratemaking practice of Pittsburgh Water.¹⁷

11 **Q. HOW DID MR. BARCA DEVELOP ITS FUTURE TEST YEAR AND FULLY**
12 **PROJECTED FUTURE TEST YEAR RESULTS?**

13 **A.** Mr. Barca stated that the Future Test Year (FTY) 2025 and the FPFTY 2026 were derived
14 through a comprehensive PW-wide budgeting process in which PW used a zero-based
15 budgeting method to develop annual budgets. The previous year’s budgets are referenced
16 when developing the FPFTY budget, but each cost is individually considered when
17 developing the budget.¹⁸ This is contrary to a traditional budgeting approach in which an
18 escalation factor is applied to an anticipated increase in a specific type of cost.¹⁹

19 **Q. DID MR. BARCA INCLUDE THE IMPACT OF INFLATION IN THE**
20 **DEVELOPMENT OF PW’S RATE REQUEST?**

21 **A.** According to Mr. Barca, inflation continues to be above historical norms with the average
22 inflation rate having more than doubled over the past four years (FT-2021- FY-2024) by
23 averaging 4.93% as compared to 1.92% between FY 2017-FY 2020.²⁰ Mr. Barca stated
24 that increased costs have put extreme pressure on PW’s operating and capital budgets,
25 jeopardizing the ability to maintain and renew the system. Mr. Barca stated that a wide

¹⁵ Pittsburgh Water St. 2 at 8.

¹⁶ Pittsburgh Water St. 2 at 15.

¹⁷ *Id.*

¹⁸ *Id.* at 9.

¹⁹ *Id.*

²⁰ *Id.* at 10.

1 range of tariffs have been implemented on virtually every U.S. trading partner and triggered
2 a worldwide trade war.²¹ In response to OCA Set 9-19 and 35, PW stated that outside of
3 salary and benefits, inflation adjustments were not used to develop its revenue requirement
4 proposal. PW further stated that the inflation adjustments addressed above were not used
5 to develop PW's Operating Expenses but to show that inflation still persists.

6 **Q. DO YOU HAVE ANY GENERAL RESPONSE TO MR. BARCA'S CLAIMS**
7 **REGARDING INFLATION?**

8 A. Yes. I address PW's claims individually in my analysis below, and I recognize inflation
9 adjustments where warranted. However, while I accepted certain adjustments for inflation
10 (whether embedded in actual contractual obligations or historical spending), that should
11 not be conflated with acceptance of any blanket type of inflation adjustments PW is
12 proposing in this case. Instead, the data, support, and basis for any projected inflation rate
13 must be carefully analyzed with respect to each claimed cost. With respect to Mr. Barca's
14 implementation of trade policies, I am of the opinion that such trade policies typically have
15 not been implemented as proposed and that varying degrees of tariff adjustments have
16 fluctuated and are continuing to fluctuate with respect to reciprocal tariffs against the U.S.
17 from other countries. Given that the current economic landscape is uncertain, nevertheless,
18 implementing inflation adjustments across the board based upon uncertainty is not a known
19 and measurable approach that should be used to set rates for vital utility service.

20 **Q. WHAT HAS THE COMPANY CLAIMED WITH RESPECT TO U.S. TARIFFS?**

21 A. In response to OCA Set 9-37, Mr. Barca stated that U.S. Tariffs are complex and
22 everchanging and some tariffs have been implemented whereas others are pending and or
23 being negotiated. Mr. Barca stated that depending on the types of projects and the materials
24 needed to complete, tariffs could increase the costs, but those impacts are not known until
25 the proposals for each project bid are received.

26 **Q. WHAT IS YOUR RESPONSE?**

²¹ *Id.* at 11-12.

1 A. Mr. Barca's assertion that the impacts are unknown until project proposals are received
2 supports my position that tariff adjustments based on uncertain factors and a shifting
3 political climate are inconsistent with sound ratemaking principles, which require costs to
4 be based on known and measurable changes. Therefore, any adjustments by PW tied to
5 such impacts should be excluded from service rates.

6 **Q. WHAT ARE PW'S CLAIMS REGARDING CAPITAL PROJECT ADDITIONS**
7 **AND COSTS?**

8 A. According to Company witness King, PW bases its capital requirements by its five-year
9 Capital Improvements Plan (CIP) regarding the scheduling and costs for required capital
10 projects related to rehabilitation, replacement, or construction of new infrastructure,
11 facilities and well as equipment purchases.²² Mr. King stated that the CIP Review
12 Committee uses the following criteria to evaluate and prioritize capital projects:

- 13 • Regulatory Compliance – ranking a project's relative importance for
14 maintaining current compliance levels or mitigate future compliance impacts;
- 15 • Quality of Service – ranking a project's role in maintaining or improving
16 current quality of services;
- 17 • Safety -ranking a project's relative importance in maintaining or improving
18 employee or public health and safety; the relative impact of failing to complete
19 the project has on health and safety;
- 20 • Risk of Failure – ranking a project's probability of failing if not replaced or
21 improved;
- 22 • Security – ranking a project's relative impact on physical security measures to
23 protect or fortify infrastructure;
- 24 • Social Impact – ranking a project's relative importance to customer quality of
25 life, environmental justice areas, and number of customers impacted.

26 In response to OCA Set 9-50, PW could not provide a breakdown of these costs projected
27 to be included in the test year period for periods in FY 2024, projected 2025 and FY 2026
28 and FY 2027 as the majority of projects encompass multiple categories, project costs are

²² PW St. 3 at 14.

1 organized by broader categories such as water treatment plants, water pumping and storage,
2 water distribution, wastewater system, stormwater and miscellaneous. PW has projected
3 project costs in the FY 2024 of \$203,517,728; Budgeted 2025 project costs of
4 \$323,429,338 and Budgeted 2026 project costs of \$344,200,122. For the FY 2027, the
5 projected costs are estimated to be \$287,352,969.

6 **Q. WHAT ARE PW'S CLAIMED OPERATING NEEDS IN THE FPFTY?**

7 **A.** As more fully explained by Mr. Barca, PW is proposing certain adjustments to its operating
8 revenue requirements related to certain direct expenses and other operating expenses that
9 sum up to a total of \$135,526,742 in the FY 2025 and \$152,096,214 in the FY 2026 or an
10 increase of \$16,569,472 over the FY 2025 period.²³ These adjustments relate to Salaries
11 and Benefits, General and Administrative costs, Operating Expenses, and Inventory. PW
12 also included Net Allegheny County Sanitary Sewer Authority costs (ALCOSAN) and any
13 loss/gain on ALCOSAN billings.²⁴

14 **Q. WHAT HAS MR. BARCA PROPOSED WITH RESPECT TO PW'S FINANCIAL**
15 **METRICS (DEBT SERVICE COVERAGE RATIO (DSC)) FOR 2026?**

16 **A.** As shown on PW Statement. No. 2 at 39, Mr. Barca has proposed the following DSC for
17 the FY 2026 and FY 2027.

	<u>FY 2026</u>	<u>FY 2027</u>
18 Senior Debt Service Coverage Ratio	1.85x	1.87x
19 Total Debt Service Coverage Ratio	1.42x	1.39x

20
21 **Q. DOES YOUR ANALYSIS ADOPT MR. BARCA'S DSC RATIO FOR 2026?**

22 **A.** According to OCA Witness Mr. Walters, he has recommended a DSC of 1.200 for Senior
23 Debt Service and 1.5686 for Total Debt Service for FY 2026. This is shown on my Exhibit
24 DM-19.

²³ PW St. 2 at 16.

²⁴ PW Exhibit EB-2.

1 **Q. WHAT HAS MR. BARCA PROPOSED WITH RESPECT TO PROJECTED CASH**
2 **FLOW AND DAYS CASH ON HAND (DCOH)?**

3 **A.** As shown on PW Exhibit EB-2, PW and on PWSA COSS Model, Sufficiency Tab, PW
4 has proposed the following DCOH:

	<u>FY 2026</u>	<u>FY 2027</u>
Days Cash on Hand (Days O&M)	204.00	204.28
Including ALCOSAN Expenses	118.00	116.00

8 **Q. HAS PW PROVIDED ANY UPDATE TO ITS CALCULATION OF ITS DCOH?**

9 **A.** Yes. In response to OCA Set 22-5, PW provided a reconciliation of the differences in
10 DCOH projections between PW's witness Mr. Barca and PW's witness Mr. Pickering with
11 respect to the FPFTY 2026. Mr. Barca calculated the DCOH using the beginning cash
12 balance and Mr. Pickering used the ending cash balance. Using the ending cash balance
13 calculation is correct and Mr. Barca's calculation will be updated to reflect the correct
14 DCOH.

15 **III. REVENUE REQUIREMENT ISSUES**

16 **A. SUMMARY**

17 **Q. WHAT ARE THE OVERALL RECOMMENDATIONS YOU ARE PROPOSING IN**
18 **THIS RATE FILING?**

19 **A.** Based upon the use of PW's FPFTY ending December 31, 2026, I have the following
20 recommendations:

- 21 • My recommended System Revenues for the FPFTY 2026 are \$266,720,361, which is
22 \$47,023,749 lower than Pittsburgh Water's proposed FPFTY 2026 System Revenues
23 of \$313,744,110. This results in a recommended revenue requirement increase of
24 \$18,498,565.
- 25 • My recommended Direct Operating Expenses for the FPFTY 2026 are \$131,022,326
26 which is \$18,690,839 lower than Pittsburgh Water's proposed FPFTY 2026 Direct
27 Operating Expenses of \$149,713,166.

- 1 • My recommended Other Operating Expenses for the FPFTY 2026 are \$2,383,047,
2 which is the same as Pittsburgh Water's FPFTY 2026 Other Operating Expenses of
3 \$2,383,047.
- 4 • My recommended total Debt Service Revenues (Revenues Available for Debt
5 Service) Coverage for the FPFTY 2026 is \$131,080,642, which is \$26,425,828 lower
6 than Pittsburgh Water's proposed Debt Service Revenue for the FPFTY 2026 of
7 \$157,506,470.
- 8 • My recommended Capital Expenditures/Transfers for the FPFTY 2026 are
9 \$41,265,075, which is \$9,294,833 lower than Pittsburgh Water's proposed FPFTY
10 2026 Capital Expenditures/Transfers of \$50,559,908.
- 11 • My Senior Debt Service Coverage Ratio for the FPFTY 2026 is 1.5686, which is
12 lower than Pittsburgh Water's proposed Senior Debt Service Coverage Ratio for the
13 FPFTY 2026 of 1.85x.
- 14 • My recommended Cash Flow Projections is 233.25 days Cash on Hand (DCOH) for
15 the FPFTY 2026, as compared to Pittsburgh Water's proposed FPFTY 2026 DCOH
16 of 204.00 days. My recommended Cash Flow Projection including the ALCOSAN
17 billing payments are 128.51 days Cash on Hand (DCOH) for the FPFTY 2026, as
18 compared to Pittsburgh Water's proposed FPFTY 2026 DCOH of 118.00.
- 19 • My overall recommended Revenue Requirement increase for the FPFTY 2026 is
20 \$18,498,564 (7.45%) which is \$47,023,748 lower than Pittsburgh Water's proposed
21 FPFTY 2026 increase of \$65,522,312 (26.40%)
- 22 • The Revenue Requirement increase of \$18,498,564 is broken down by utility service
23 and other System Revenues are as follows:
 - 24 ○ Water Division - \$11,051,028
 - 25 ○ Wastewater Service - \$4,054,287
 - 26 ○ Stormwater Service – 2,111,746
 - 27 ○ Sales for Resale - \$337,305
 - 28 ○ DISC Water Revenues (5%) -\$552,103
 - 29 ○ DSIC Wastewater Revenue (5%) - \$202,714
 - 30 ○ Other Revenues - \$189,380

1 **Q. DO YOU HAVE EXHIBITS TO REFLECT THESE RECOMMENDATIONS?**

2 **A.** Yes. Attached are Exhibits DM-1 through DM-21. The Exhibits reflect the OCA's
3 adjustments for each of Pittsburgh Water's proposed revenue requirement increase under
4 the FPFTY 2026.

5 **B. SYSTEM REVENUE REQUIREMENT**

6 **Q. PLEASE DESCRIBE PITTSBURGH WATER'S SYSTEM REVENUE**
7 **REQUIREMENT UNDER THE FPFTY 2026 PERIOD.**

8 **A.** As shown in PW Exhibit EB-2, Pittsburgh Water has prepared a Statement of Income at
9 Proposed Rates to calculate its overall proposed Rate Revenue increase under each of the
10 proposed rate years (FPFTY 2026 and FPFTY 2027). The breakdown of this balance is the
11 need to recover O&M Expenses, Debt Service, and Capital Expenditures and Transfers.
12 The System Revenue Surplus is calculated at \$62,049 under the FPFTY 2026 and \$126,027
13 under the FPFTY 2027. A detailed breakdown by utility operations for each of the rate
14 years is shown on PW Exhibit EB-2.

15 **1. SYSTEM REVENUES**

16 **Q. WHAT HAS PITTSBURGH WATER PROPOSED REGARDING ITS TOTAL**
17 **SYSTEM REVENUES?**

18 **A.** As shown in PW Exhibit EB-2, Pittsburgh Water has proposed total System Revenues for
19 FPFTY 2026 as follows:

20 **FPFTY 2026**

21		
22	Water Sales	\$183,457,438
23	Wastewater Sales	\$ 66,604,861
24	Stormwater Sales	\$ 34,758,549
25	Sales for Resale/Contract	\$ 5,697,030
26	DSIC Water Revenues	\$ 13,903,179
27	DSIC Wastewater Revenues \$	\$ 4,995,365
28	Other Revenues	\$ 4,327,687
29	Penalties and Interest	<u>\$ 0</u>
30	Total System Revenues	\$313,744,110

31 **Q. HOW DID PITTSBURGH WATER ALLOCATE THE REVENUE**
32 **REQUIREMENT TO THE UTILITY SERVICES ABOVE?**

1 A. According to PW witness Mr. Smith, the revenue requirements were determined based
2 upon a set of allocation factors that were assigned each to the water, wastewater, and
3 stormwater for the FPFTY period.²⁵

4 Q. DO YOU HAVE ANY CHANGES TO PITTSBURGH WATER'S PROPOSED
5 ALLOCATION OF THE REVENUE REQUIREMENT AS BETWEEN WATER,
6 WASTEWATER AND STORM WATER FOR THE FPFTY 2026?

7 A. No. I am accepting Pittsburgh Water's proposed allocation for the FPFTY 2026. I show
8 the scaled back revenue requirement allocation as between water, wastewater, and storm
9 water in Exhibit DM-2.

10 Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PITTSBURGH
11 WATER'S PROPOSED SYSTEM REVENUES THE FPFTY 2026?

12 A. My System Revenue adjustments correspond to the adjustments that I made to Pittsburgh
13 Water's Direct and Other Operating Expenses for the FPFTY 2026 period, which I discuss
14 further in my testimony. In sum, my recommended System Revenues for the FPFTY 2026
15 is \$266,720,361. My allocation is as follows and shown on my Exhibit DM-2:

16 FPFTY 2026

17	Water Sales	\$159,338,540
18	Wastewater Sales	\$58,456,482
19	Stormwater Sales	\$ 30,448,069
20	Sales for Resale /Contract	\$ 4,863,408
21	DSIC Revenues -Water (5%)	\$7,960,467
22	DSIC Revenue -Wastewater (5%)	\$2,720,110
23	Other Revenues	\$2,730,570
24	Penalties and Interest	\$ 0
25	Total System Revenues	\$266,720,361

26
27
28 Q. WHAT IS YOUR ADJUSTMENTS WITH RESPECT TO PW'S ARREARAGE
29 FORGIVENESS FUNDNG?

30 A. As fully explained by OCA Witness Mr. Roger Colton, I am disallowing \$280,094 of
31 Arrearage Forgiveness Funding. This is shown on my Exhibit DM-2 and Exhibit DM-20.
32

²⁵ PW St. 8 at 9.

1 **Q. WHAT IS YOUR ADJUSTMENTS WITH RESPECT TO WATER**
2 **CONSERVATION ASSISTANCE?**

3 A. As more fully explained by OCA Witness Mr. Roger Colton, I am including \$150,000
4 related to Water Conservation Assistance. This is shown on my Exhibit DM-4.

5 **2. OPERATING EXPENSES – DIRECT**

6 **Q. WHAT HAS PW PROPOSED REGARDING ITS OPERATING EXPENSES –**
7 **DIRECT?**

8 A. As shown on PW Exhibit EB-2, Pittsburgh Water has proposed total Operating Expenses
9 – Direct for the FPFTY 2024 of \$149,713,166.

10 **Q. DID PW ALLOCATE THE OPERATING EXPENSES – DIRECT TO THE**
11 **WATER, WASTEWATER CONVEYANCE AND STORMWATER UTILITY**
12 **SERVICES?**

13 A. Yes. As stated in PW Mr. Smith’s testimony,²⁶ Pittsburgh Water allocated and assigned
14 these costs to each of the water, wastewater conveyance and stormwater utility services as
15 shown on PW Exhibit HJS-1. Mr. Smith provided a summary of factors that were used to
16 assign costs to each of the services above, and as detailed in PW Exhibit HJS-2.

17 **Q. HOW DID THE PW DEVELOP ITS OPERATING BUDGETS FOR ITS FPFTY**
18 **THAT WAS USED TO SUPPORT THE PROPOSED REVENUE**
19 **REQUIREMENT?**

20 A. As noted previously, Mr. Barca stated that the FTY (2025) and the FPFTY (2026) results
21 were derived through a comprehensive PW-wide budgeting process. Pittsburgh Water used
22 a zero-based budgeting method to develop annual budgets, and each cost is individually
23 considered when developing the budget.²⁷ Mr. Barca stated that each of the fifteen
24 departments within the PW prepared budget requests for the upcoming fiscal year and those
25 requests are reviewed by the Finance Department for accuracy and adherence to the
26 realistic expectations and/or projections.²⁸ The Finance Department prepared a roll-up of

²⁶ PW St. 8 at 10.

²⁷ PW St. 2 at 9.

²⁸ *Id.* at 13.

1 initial funding and expense recommendations for the Chief Executive Officer and Chief
2 Operating Officer/Chief Financial Officer, which then may make recommendations on the
3 initial budget requests.²⁹ Once satisfied, the Chief Executive Officer and Chief Operating
4 Officer prepared an operating budget for review by the Board, which can accept or modify
5 the operating budget.³⁰

6 **Q. HOW DID YOU APPROACH THE DEVELOPMENT OF YOUR DIRECT**
7 **OPERATING EXPENSE ADJUSTMENTS IN THE FPFTY 2026?**

8 **A.** I reviewed Pittsburgh Water's Cost of Service Study Model 2025 (PW COSS Model 2025)
9 and specifically reviewed each of Pittsburgh Water's 15 line-item Direct Operating
10 Expense accounts (and sub-accounts) shown on PW Exhibit EB-2and HJS-1. I reviewed
11 the data responses submitted by Pittsburgh Water in OCA Set 9, Set 20, and Set 22, PW's
12 responses to the Bureau of Investigation and Enforcement (I&E), and other data responses
13 from other parties to the proceeding. I reviewed Pittsburgh Water Index to Rate Filing
14 Package Filing Requirement (Volume I). I analyzed and reviewed Pittsburgh Water's
15 adjustments beginning with the FY period (2023), FY (2024) FTY (2025) and the FPFTY
16 (2026) period, noting, analyzing and evaluating any adjustments that might be escalation
17 costs in nature, unusual or large variations from prior historical periods, one-time expense
18 items, and whether such costs included in the FY (2023) and through the FPFTY (2026)
19 were abnormal adjustments, or anomalies as compared to prior years adjustments.

20 **Q. HOW DID YOU ANALYZE PW'S EXPENSES FOR EACH OF PW'S OPERATING**
21 **EXPENSE DIVISIONS?**

22 **A.** In my review, and in certain instances, I utilized a three-year normalization adjustment
23 based upon the fact that the majority of the expenses have fluctuated and varied from year
24 to year from 2023 through 2025. In my review of PW's expenses, I identified areas where
25 Pittsburgh Water had incurred no costs or expenses in prior years, cost increases and
26 projected or budgeted over what was incurred in prior years and reviewed whether those
27 cost increases were reasonable and prudent in nature. The use of a three-year normalization
28 is a reasonable approach in developing cost adjustments, on a budgeted basis prospectively.

²⁹ *Id.*

³⁰ *Id.*

Costs changes over time, but not proportionately depending on company operations, changes in laws and regulations, environmental changes, changes in compliance laws and company activities. I set a baseline variance of 15% over or under to make adjustments with respect to PSWA's proposed expense balance for the FPFTY 2026 period. The use of variances is based upon basic accounting principles that a material variance of at least 15% is considered a major variance and requires explanations as to the reasoning for the variance. Variances are useful in determining whether the expected or forecasted costs are in line with actual costs that have been incurred. Given that PW has filed rate cases proceeding approximately every two years, the normalization approach will allow PW to recover costs between rate cases until such time PW files another base rate case proceeding and maintain its expense recovery on a consistent and constant basis. Costs incurred from prior years typically show a trend that can be utilized to set costs in the future. My normalization approach increases or decreases Pittsburgh Water's proposed direct operation expense balances. By not normalizing certain expenses, there is a tendency to over-collect costs in future periods, which would result in unjust and unreasonable rates.

Q. HAVE YOU CONSIDERED PW'S HISTORICAL EXPENSES AS PART OF YOUR ANALYSIS?

A. Yes. In other areas of Pittsburgh Water's proposed operating expenses, I used my informed judgment to recommend whether the costs should be disallowed or partially allowed. This approach was based on whether there were any prior expenses incurred under the 2023-2025 period, and the costs expected to be incurred in the FPFTY 2026 period. If no costs were incurred in prior years, it is difficult to gauge or determine whether a forecasted or budgeted cost proposed by Pittsburgh Water was reasonable as there was nothing with which to compare the forecasted or budgeted costs. While it is expected that some level of costs will be incurred in these instances, there is no basis to support the specific level of costs proposed by PW. To determine whether proposed costs are reasonable, and thus, should be allowed in rates, proposed expenditures must be continuing, ongoing and recurring. There is a degree of interpretation involved when reviewing forecasted data, and different levels of interpretation can vary among the parties to the proceeding and ultimately be determined and included by the Commission. My adjustments to PW's

proposed expenses will all PW to recover all reasonable costs and strike the appropriate balance between ratepayers and PW.

Q. HAS PITTSBURGH WATER RELIED UPON CLAIMED ESCALATION COSTS IN ITS FILING?

A. Yes. With respect to escalation costs, Pittsburgh Water stated in general that outside of salary and benefits, blanket type inflation factors and CPI indices are generally not used.³¹ Mr. Barca stated that PW reviewed each General Ledger accounts (GL) and proposed future year increases based upon existing contractual agreements or historical spending. PW has provided the following CPI Indexes that PW has utilized to develop and set rates in the FPFTY 2026:³²

<u>Item/Category/Expense</u>	<u>Assumptions</u>
Average Inflation (FY 2021 – FY 2024)	4.93%
Employee Benefits	4.00%
Cost of Living Increase	6.00%
Various Annual Operating Costs	5%-18%
Electric/Gas	20%
Insurance/Auto/Workers Comp/Cyber	5%

Mr. Barca stated that inflation adjustments were not used to develop PW's Operating Expenses but rather information was provided to show that inflation still exists.³³

Q. WHAT HAS PITTSBURGH WATER STATED WITH RESPECT TO TARIFFS THAT HAVE RECENTLY BEEN IMPLEMENTED?

A. Mr. Barca stated that this Federal Administration has ushered in a new era of trade policies that involve the use of tariffs. A wide range of tariffs have been implemented on every U.S. trading partner and triggered a worldwide trade war.³⁴ Mr. Barca stated that the economic landscape is very uncertain, which is having a negative impact on Pittsburgh Water's budgets.³⁵ Mr. Barca stated that many of the materials targeted by the tariffs such

³¹ Pittsburgh Water Response to OCA-IX-19, 35.

³² PW St. 2 at 10-12.

³³ Pittsburgh Water Response to OCA-IX-35.

³⁴ PW St. 2 at 11-12.

³⁵ *Id.* at 12.

1 as automobiles, steel and aluminum are necessary to execute Pittsburgh Water's Capital
2 Improvement Plan (CIP) and maintain operations. Any price increase resulting from the
3 tariffs will have a negative budgetary impact.³⁶
4

5 **Q. SHOULD BLANKET INFLATIONS ADJUSTMENTS AND TARIFF**
6 **ADJUSTMENTS BE RELIED UPON TO SUPPORT PW'S BUDGET CLAIMS?**
7

8 **A.** No. Inflationary costs or escalation costs, as well as tariff adjustments should not be used
9 for ratemaking purposes or to set rates for service. Inflationary type increases do not
10 provide a good index of cost increases but are instead overall blanket-type adjustments that
11 are typically applied to all goods and services that may not directly relate to costs incurred
12 by Pittsburgh Water. It is simply a forecast or prediction of cost adjustments, and it is based
13 upon speculation. In part, inflationary type adjustments are not known and measurable and
14 do not reflect costs PW will incur during the period when rates are set for utility service.
15 Inflationary adjustments particularly relate to housing, clothing, food, etc. which are not
16 typically costs that are incurred by a public utility in the provision of safe and reliable
17 service. While such inflationary adjustments are used to develop economic data, they
18 typically should not be used for ratemaking purposes. As costs of goods and services
19 fluctuate over time, applying escalation factors to adjust costs is not a proper approach that
20 should be utilized in setting rates for utility service. I am advised by counsel that the
21 Commission has rejected blanket inflation adjustments in the past. Additionally, as I noted
22 earlier, the data, support, and basis for any projected inflation rate must be carefully
23 analyzed with respect to each of PW's claimed costs. As more fully explained in my
24 testimony, I have utilized certain adjustments to PW's expenses in the FPFTY 2026 period
25 to reflect a reasonable and prudent level of costs to be collected prospectively. More
26 specifically, I have adjusted PW's certain Operating Expenses, General and Administrative
27 Expenses, Inventory, and Chemical Expenses based upon certain information I relied upon
28 with respect to cost adjustments expected to be incurred under the FPFTY 2026. I note that
29 Pittsburgh Water remains responsible for substantiating all of its claims, and where
30 Pittsburgh Water did not do so, I am recommending adjustments. With respect to the

³⁶ *Id.*

proposed tariff adjustments, these adjustments are not known and measurable and do not provide any convincing evidence to be used to set rates for service. As Mr. Barca stated, these impacts will not be known and measurable until proposals for project bids are received. This may be well beyond the time when the Commission sets rates for service.

Q. HOW DID YOU APPROACH PITTSBURGH WATER'S BUDGETED COSTS FOR SALARIES AND WAGES AND EMPLOYEE BENEFITS?

A. With respect to Salaries and Employee Benefits, I adjusted these adjustment through the use of a vacancy rate ratio.³⁷ Pittsburgh Water has indicated that the total employee count as of December 2024, was 411 (budgeted amount of 446)³⁸ and it is expecting to have 460 positions in the FPFTY 2026. I performed an analysis and developed a ratio of total filled employee positions to the number of vacant positions for the FPFTY 2026. I compared the results to Pittsburgh Water's proposed Salaries and Employee Benefits as shown on Pittsburgh Water's COSS Model 2025 O&M tab each utility (water, wastewater and stormwater). I then made adjustments to Pittsburgh Water's FPFTY 2026 period related to Salaries and Employee Benefits. I further discuss these adjustments in each of the following department categories (operating expense accounts).

Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PITTSBURGH WATER'S PROPOSED DIRECT OPERATING EXPENSES OF \$149,713,166 FOR THE FPFTY 2026?

A. I have made adjustments to each of Pittsburgh Water's 15 line-item Direct Operating expense accounts. My total recommended Direct Operating Expenses are as follows, and as shown on my Exhibits DM-3 through DM-17.

FYFTY 2026 \$131,022,326,

These are broken down by Operating Expense category as follows:

Executive Director \$2,999,939

Customer Service \$11,362,893

³⁷ PW Responses to OCA IX-10 and I&E RE-4.

³⁸ PW Response to I&E RE-4.

1	Technology Services	\$7,675,868
2	Finance	\$14,154,214
3	Human Resources	\$2,255,276
4	Legal	\$3,715,983
5	Safety & Security	\$2,470,403
6	Public Affairs	\$1,833,693
7	Environmental Compliance	\$4,117,353
8	Warehouse	\$ 557,601
9	Laboratory	\$2,226,406
10	Water Treatment	\$23,622,591
11	Sewer Operations	\$4,565,297
12	Water Operations	\$17,949,764
13	Eng. & Construction	\$31,669,785
14	Other Adjustments	<u>(\$154,740)</u>
15	Total	\$131,022,326

16

17 This is a reduction of \$18,840,839 lower than PW's proposed expenses of \$149,713,165.

18 **a. Executive Director - 100**³⁹

19 **Q. WHAT DID PITTSBURGH WATER PROPOSE WITH RESPECT TO ITS**
20 **EXECUTIVE DIRECTOR EXPENSES FOR THE FPFTY 2024?**

21 **A.** As shown on PW COSS Model Tab O&M, and Exhibit HJS-1, Pittsburgh Water proposed
22 a FPFTY 2026 balance of \$3,580,832. These balances were broken down by utility service

³⁹ Any differences between PW's COSS Model 2025 related to Salary and Benefits and the balances I use for Salary and Benefits are due to rounding issues.

as shown on PW Exhibit HJS-1. These balances are comprised of Salary and Benefits, O&M Expenses, Inventory and General Administrative Expenses. PW indexed its Salaries by cost of living adjustments for its employees based upon collective bargaining agreements (CBA) ranging from 3.0%-6.0% in FY 2025 and 2.5%-3.0% in FY 2026.⁴⁰ PW indexed its Benefits based upon its insurers for health, (5%) dental (4%) and 401k Retirement plan (7% employee match).⁴¹ PW calculated its General and Administrative (G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels in the FPFTY 2026.⁴² (OCA-Set -9-19)

Q. WHAT ADJUSTMENTS DO YOU HAVE WITH RESPECT TO PITTSBURGH WATER'S EXECUTIVE DIRECTOR ACCOUNT BALANCE RELATED TO SALARY AND BENEFITS?

A. I first reviewed the Salary and Benefits balance. Pittsburgh Water proposed total Salary and Benefits of \$1,347,664 in the FY 2025 and an additional \$76,913 in the FY 2026 for a total of \$1,424,576 in the FPFTY 2026 period.⁴³ In response to OCA-Set-9-10 and I&E RE-4, PW provided a vacancy rate analysis for all of its employees from FY 2022 through the projected period FPFTY 2026. In response to I&E RE-4, PW stated that it anticipated hiring 31 employees in the FPFTY 2025 and an additional 18 employees in the FPFTY 2026. PW stated that as of the end of December 2024, there were 411 employees employed at the PW.⁴⁴ I am recommending the use of a vacancy rate ratio to set the employee levels under the FPFTY 2026. Using a three-year vacancy ratio for the periods of 2023-2025 to set the ratio for the FPFTY 2026 and using the information shown in response to OCA Set 9-10, and I&E RE-4, I arrived at a normalized vacancy level of 6.41% for the FPFTY 2026. This is calculated as follows:

Year	Total Emp.	New Pos. Vacancies	Projected Emp.	3-Yr Vacancy Ratio	3-Yr-Projected Emp	Vacancy Ratio
2023	410	37	445			
2024	411	41	446			
2025	442	4	444			

⁴⁰ PW Responses to I&E RE 6-D, 7-D.

⁴¹ PW Response to I&E RE-7-D.

⁴² PW Response to OCA IX-19.

⁴³ PW COSS Model 2025, O&M tab Column AA Lines 481 and 494.

⁴⁴ PW Response to I&E RE-4.

1 2026 460 0 460
2 3-yr total Avg. vacancies 82 / 3 years = 27 / 421 = 6.41%(Total
3 Vacancies 2023-2025 – 37+41+4=82/3=27)

4 The use of a three-year normalization (2023-2025) for Salary and Benefits expenses
5 is appropriate, given Pittsburgh Water’s prior years’ level of employee count. This analysis
6 shows that there is a gap in filling needed staffing levels. The year by year adjustment and
7 comparison of employee vacancies show a level of disparate and varying vacancy rates
8 over the years (2022-2025). It is unclear whether Pittsburgh Water will fill all vacancies as
9 stated under the FPFTY 2026. I note that if Pittsburgh Water has not filled all claimed
10 vacancies, and its projections have not materialized, this will lead to overpayment by
11 ratepayers. Moreso, vacancies occur throughout the year, and employee levels will
12 fluctuate from month to month depending on the level of retirements, voluntary and
13 involuntary leaves, lay-offs, and firing. Employee vacancies are an inherent issue in a
14 business environment. Given this disparity from year to year, I adjusted Pittsburgh Water’s
15 proposed Executive Salary and Benefits balance for the three-year period by the vacancy
16 rate ratios for each of the three-year period 2023-2025. I multiplied those amounts by the
17 vacancy ratio of 6.41% (FPFTY 2026) to arrive at an adjusted level of \$1,031,992
18 (reduction of \$114,465) for Salaries and \$260,293 (reduction of \$17,827) for Benefits in
19 the FPFTY 2026 period. These adjustments also flow through the remaining cost categories
20 of PW so my recommendations related to Salary and Benefits will be consistent in all of
21 the cost categories and all of PW’s Direct Operating Expenses.

22 **Q. WHAT OTHER COMPENSATION HAS PITTSBURGH WATER INCLUDED IN**
23 **ITS EXECUTIVE DIRECTOR EXPENSES?**

24 **A.** In response to OCA Set-9-14, PW stated that the Chief Executive Officer (CEO) is eligible
25 for a performance bonus of up to 15% of their salary. PW has included \$43,785 in bonus
26 costs for the FPFTY 2026. In response to OCA Set 9-13, Pittsburgh Water stated that it
27 does not have an incentive compensation plan or program, and based upon the performance
28 of PW, Pittsburgh Water has authorized a holiday bonus for staff. The Pittsburgh Water
29 Board of Directors determines the CEO’s annual performance bonus based upon certain
30 goals to be obtained.

1 **Q. WHAT ADJUSTMENTS DID YOU MAKE WITH RESPECT TO THE**
2 **EXECUTIVE DIRECTOR'S OTHER COMPENSATION?**

3 **A.** I am recommending disallowing this bonus for rate making purposes as PW did not provide
4 any outcome related to performance goals or metrics related to the receipt of money
5 attributable to the Chief Executive Officer of \$43,785. Given the lack of information and
6 performance goals, the disallowance is appropriate as there is an absence of whether the
7 bonus is attributable to any customer service metrics or identifiable goal achievement
8 related to safety or reliability measures. With respect to the holiday bonus for staff, PW
9 has not provided any costs that were booked in the FPFTY 2026 but for the bonus for the
10 CEO.⁴⁵ Therefore, it is unclear whether PW anticipates issuing bonuses for staff.

11 **Q. WHAT HAS PW PROPOSED WITH RESPECT TO ITS OPERATING EXPENSES,**
12 **INVENTORY AND GENERAL AND ADMINISTRATIVE EXPENSES FOR ITS**
13 **EXECUTIVE DIRECTOR?**

14 **A.** As shown on PW COSS Model 2025, O&M tab Account 100,⁴⁶ PW included balance to
15 its Operating Expenses of \$30,000, Inventory of \$80 and \$2,126,175 for General and
16 Administrative expenses in the FPFTY 2026.

17 **Q. WHAT ARE YOUR ADJUSTMENTS TO PITTSBURGH WATER'S EXECUTIVE**
18 **DIRECTOR ACCOUNT BALANCE RELATED TO OPERATING EXPENSES,**
19 **INVENTORY AND GENERAL ADMINISTRATIVE?**

20 **A.** I am recommending a disallowance of \$50,000 related to Pittsburgh Water's rebranding
21 costs.⁴⁷ These types of costs do not provide any benefit to ratepayers but rather promotes
22 Pittsburgh Water's new name, identity and logo. These types of costs are not the sort of
23 customer-oriented costs allocated to ratepayers in the areas of safety, reliability and
24 customer service. With respect to General & Administrative costs, I normalized certain
25 costs that had variances greater than 15%. These are for Miscellaneous Professional
26 Services (Account 7383), Travel/Training (Account 7560) and Travel /Training Misc.
27 (Account 7575). These adjustments total a reduction of \$379,880.

⁴⁵ PW Response to OCA IX-14.

⁴⁶ PW COSS Model 2025, O&M tab Account 100 at line 518 Column AA.

⁴⁷ PW Response to I&E RE-14.

1 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PITTSBURGH WATER'S**
2 **EXECUTIVE DIRECTOR EXPENSES FOR EACH OF THE RATE YEARS?**

3 **A.** My total adjustments are a \$580,893 reduction in the FPFTY 2026. This is shown on my
4 Exhibit DM-3.

5 **b. Customer Service - 101**

6 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS**
7 **CUSTOMER SERVICE EXPENSES FOR THE FPFTY 2026?**

8 **A.** As shown on PW Exhibit HJS-1, and the O&M tab of the PW COSS Model 2025,
9 Pittsburgh Water proposed a FPFTY 2026 balance of \$11,809,267. These balances were
10 broken down by utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances
11 are comprised of Salary and Benefits, O&M Expenses and General and Administrative.
12 PW indexed these expenses in the same manner as it did under the Executive Director
13 expense category, with respect to Salaries and Benefits. PW calculated its Operating
14 Expenses and General and Administrative (G&A) expenses by reviewing future year
15 increases based upon existing contractual agreements or historical spending levels,⁴⁸ as I
16 previously explained in my testimony.

17 **Q. WHAT ADJUSTMENTS DO YOU HAVE WITH RESPECT TO PITTSBURGH**
18 **WATER'S CUSTOMER SERVICE ACCOUNT BALANCE?**

19 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
20 reasons and consistent with my treatment of Salary and Benefits for all Direct Operating
21 Expenses, I utilized a three-year vacancy ratio for 2026 of 6.41% with the arguments that
22 I explained previously. I multiplied Pittsburgh Water's proposed Customer Salary and
23 Benefits balances of \$5,841,602 and \$1,976,503, respectively, by the vacancy ratio of
24 6.41% to arrive at an adjusted level of \$5,467,155 for Salaries (reduction of \$374,447) and
25 \$1,849,809 for Benefits (reduction of \$126,694) for the FPFTY 2026. These are shown on
26 my Exhibit DM-4.

27 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES**
28 **AND GENERAL ADMINISTRATIVE?**

⁴⁸ PW Response to OCA IX-19.

1 A. I have adjustments to Pittsburgh Water's General Administrative costs by the use of a
2 three-year normalization adjustments with expenses showing a variance of greater than
3 15%. This reduces the balance by \$95,233. These relate to Misc Professional Services
4 (Account 7383) of \$66,604 and Water Liens (Account 7390) of \$28,620. This reduces
5 PW's Customer Service Expense by \$596,374 in the FPFTY 2026.

6 **Q. WHAT OTHER ADJUSTMENTS HAVE YOU INCLUDED IN PW'S CUSTOMER**
7 **SERVICE EXPENSES?**

8 A. I am including the costs recommended by OCA Witness Mr. Roger Colton with respect to
9 the inclusion of \$150,000 related to the Water Conservation Program.

10 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PW'S CUSTOMER SERVICE**
11 **EXPENSES?**

12 A. My adjustment related to the Water Conservation Program of \$150,000 is shown on my
13 Exhibit DM-4 and carried over to my Exhibit DM-2. My total adjustments are a reduction
14 of \$596,374 in the FPFTY 2026. These are shown on my Exhibit DM-2.

15 **c. Technology Services - 102**

16 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS**
17 **TECHNOLOGY SERVICES FOR THE FPFTY 2026?**

18 A. As shown on PW Exhibit – HJS-1 and O&M tab 102 of the PW COSS Model 2025,
19 Pittsburgh Water proposed a FPFTY 2026 balance of \$9,350,113 for its Technology
20 Services costs. These balances were broken down by utility service as shown on PW HJS-
21 1 and HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses,
22 and General and Administrative Expenses. PW indexed these expenses in the same manner
23 as it did under the previously addressed expense categories, with respect to Salaries and
24 Benefits. PW calculated its Operating Expenses and General and Administrative (G&A)
25 expenses by reviewing future year increases based upon existing contractual agreements
26 or historical spending levels,⁴⁹ as I previously explained in my testimony.

27 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
28 **MANAGEMENT INFORMATION SYSTEMS ACCOUNT BALANCE?**

⁴⁹ PW Response to OCA-IX-19.

1 A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. The adjustment is
2 consistent with my treatment of Salary and Benefits for all PW's Direct Operating
3 Expenses, reflecting PW's vacancy rate analysis for all of its employees. I am
4 recommending the use of a vacancy rate ratio to set the employee levels under the FPFTY
5 2026. I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with the arguments
6 that I explained previously. I then multiplied Pittsburgh Water's proposed Technology
7 Services Salary and Benefits balances for the FPFTY 2026 period of \$2,404,787 and
8 \$667,767, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of
9 \$2,250,640 (reduction of \$154,147) for Salaries and \$624,963 (reduction of \$42,804) for
10 Benefits. These adjustments are shown on my Exhibit DM-5.

11 Q. **WHAT OTHER ADJUSTMENTS DO YOU HAVE WITH RESPECT TO**
12 **PITTSBURGH WATER'S MANAGEMENT INFORMATION SYSTEM**
13 **EXPENSES?**

14 A. I reviewed Pittsburgh Water's O&M Expenses, and General Administrative category and
15 have adjustments related to PW's increase in these expense categories that have a variance
16 of over 15% over prior years. I am recommending several adjustments in the FPFTY 2026
17 year. For the O&M Expenses I normalized certain expenses that had a greater variance than
18 15%, over prior years expenses resulting in a reduction of \$696,801. These costs related to
19 the following: Computer and Peripherals (Account 5120); Computer Hardware (Account
20 5408); Computer Software (Account 5411); Building/Property Repair (Account 5405);
21 Machinery and Equipment Repairs (Account 5452) and Annual Software Support
22 (Account 5408). These Operating Expenses vary from -15.22% to 75.74%.

23 For the General and Administrative Expenses, this reduces the balance by \$780,493 as
24 shown below in the FPFTY 2026. These costs related to the following: Consultants (Account
25 7323); Misc. Professional Services (Account 7383); Travel/Training (Account 7560);
26 Misc. Travel/Training (Account 7575); Local Phones (Account 7681) and Internet
27 (Account 7683). These General and Administrative costs vary from -75.08% to 35.38%.

28 Q. **WHAT IS YOUR ADJUSTMENT WITH RESPECT TO CONSULTANTS' COSTS?**

1 A. With respect to Consultants (Account 7323) PW proposed recovery of \$1,333,000 in the
2 FPFTY 2026. PW provided a breakdown of consultants.⁵⁰ Some of these consultants' costs
3 have active contracts while others would be bid out and finalized assuming the funds are
4 approved in this rate case. In response to I&E RE-45, PW stated that these additional costs
5 for consultants are tied to upcoming Wet Weather Consent Decree and ongoing rate case
6 activities. The additional costs are associated with planned master plans for green
7 infrastructure, SCADA systems and wet weather initiatives. PW spent \$62,368 in 2023,
8 \$57,257 in 2024, and projected \$172,717 in 2025. I am recommending normalizing these
9 over a two-year period which reflects a total annual recovery for this account of \$665,500,
10 compared to PW's proposed recovery of \$1,333,000. Given the expenses incurred in prior
11 years, and the fact that certain contracts are still in progress, it is uncertain whether PW
12 will have all its contracts in place and finalized in FPFTY 2026. PW should provide an
13 update to these vendors' contracts when available.

14 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PW'S TECHNOLOGY**
15 **EXPENSES?**

16 A. My total adjustments are a reduction of \$1,674,245 in the FPFTY 2026. These are shown
17 on my Exhibit DM-5.

18 **d. Finance – 103**

19 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS**
20 **FINANCE COSTS IN FPFTY 2026?**

21 A. As shown on PW Exhibit HJS-1, and O&M tab account 103 of the PW COSS Model 2025,
22 Pittsburgh Water has proposed a FPFTY 2026 balance of \$16,149,891. These balances
23 were broken down by utility service as shown on PW HJS-1 and HJS-2. These balances
24 are comprised of Salaries and Benefits, Operating Expenses, Inventory and General and
25 Administrative Expenses. PW indexed these expenses in the same manner as it did under
26 the previously addressed expense categories, with respect to Salaries and Benefits. PW
27 calculated its Operating Expenses, Inventory and General and Administrative (G&A)

⁵⁰ PW Response to I&E RE-26.

1 expenses by reviewing future year increases based upon existing contractual agreements
2 or historical spending levels,⁵¹ as I previously explained in my testimony.

3 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
4 **FINANCE BALANCE FOR THE FPFTY PERIOD?**

5 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
6 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
7 Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with
8 the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed
9 Finance Salary and Benefits balances for the FPFTY 2026 period of \$1,888,273 and
10 \$526,786, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of
11 \$1,767,235 for Salaries (reduction of \$121,038) and \$493,019 for Benefits (reduction of
12 \$33,767). This adjustment is shown on my Exhibit DM-6.

13 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
14 **INVENTORY AND GENERAL ADMINISTRATIVE?**

15 **A.** I reviewed Pittsburgh Water's O&M Expenses, Inventory and General Administrative
16 category and have adjustments related to PW's increase in these expense categories that
17 have a variance of over 15%. With respect to Operating Expenses, PW has included
18 Vehicle Expenses (Account 5190) in the amount of \$3,000,000 in the FPFTY 2026. Prior
19 costs (2023-2025) average out to about \$1,210,574. I am recommending normalizing this
20 cost over a three-year period or \$1,210,574 annually. PW stated that this expense is for 20
21 vehicles to be purchased annually with a total budget of \$3,000,000 to keep up with life
22 cycle replacements.⁵² I believe the \$3,000,000 is excessive and not reflective of what PW
23 has expensed in the past. Therefore, I believe my recommended normalized annual expense
24 of \$1,210,574 is appropriate. This reduces the balance for Operating Expenses by
25 \$1,789,426 in the FPFTY 2026. With respect to the Annual Software Support PW proposed
26 a balance of \$191,766 in the FPFTY 2026. Normalizing this costs over a three-year period
27 results in a balance of \$154,752, or a reduction of \$37,014. These expenses vary from

⁵¹ PW Response to OCA-IX-19.

⁵² PW Response to I&E RE-21.

1 -19.30% to -59.65%.

2 For the Inventory expenses, PW booked \$50,000 related to Bank Fees. Prior costs averaged
3 out to \$22,254 annually. This reduces the balance by \$27,746 in the FPFTY 2026. This
4 results in a variance of -55.49%.

5 For the General and Administrative Expenses, PW has included various expense categories
6 as follows: Advertising (Account 7305); Consultants (Account 7323); Insurance Auto
7 (Account 7345); Insurance Commercial Property (Account 7348); Insurance General
8 Liability (Account 7353); Insurance Workers Comp City (Account 7366); Legal Services
9 (Account 7370) and Misc. Professional Services (Account 7383). These expenses vary
10 from 25.46% to -30.57%. Normalizing these expenses over a three-year period with a
11 various of greater than 15% results in a \$13,314 increase over PW's proposed balances for
12 these expenses.

13 **Q. WHAT IS YOUR TOTAL ADJUSTMENT TO PITTSBURGH WATER'S**
14 **FINANCE COSTS?**

15 **A.** My total adjustment is a reduction of \$1,995,677 the FPFTY 2026 period as shown on my
16 Exhibit DM-6.

17 **e. Human Resources - 104**

18 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS**
19 **HUMAN RESOURCES COSTS FOR FPFTY 2026?**

20 **A.** As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a Human Resources
21 balance of \$2,807,810 for the FPFTY 2026 period. Pittsburgh Water also reflected this
22 balance in its PW COSS Model 2026 O&M tab 104. These balances were broken down by
23 utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of
24 Salaries and Benefits, Operating Expenses, and General and Administrative Expenses. PW
25 indexed these expenses in the same manner as it did under the previously addressed
26 expense categories, with respect to Salaries and Benefits. PW calculated its Operating
27 Expenses and General and Administrative (G&A) expenses by reviewing future year

increases based upon existing contractual agreements or historical spending levels,⁵³ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S HUMAN RESOURCE COSTS FOR THE FPFTY PERIOD?

A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same reasons and consistent with my treatment of Salary and Benefits for all PW's Direct Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed Human Resource Salary and Benefits balances for the FPFTY 2026 period of \$1,483,311 and \$526,269, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of \$1,388,231 for Salaries (reduction of \$95,080) and \$492,535 (reduction of \$33,734) for Benefits. This is shown in my Exhibit DM-7.

Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES, AND GENERAL ADMINISTRATIVE?

A. I reviewed Pittsburgh Water's General Administrative category and have adjustments related to PW certain expense categories. For the General and Administrative Expenses, I adjusted certain of these expenses that had variances over 15% using a three-year normalization adjustment. This reduces the balance by \$423,720 in the FPFTY 2026. These General and Administrative expenses are related to the following: Consultants (Account 7323); Payroll Services (Account 7382); Misc. Professional Services (Account 7383); Travel/Training (Account 7560) and Travel/Training Misc. (Account 7575). These expenses vary from -35.37% to -79.13%.

Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO HUMAN RESOURCES?

A. My total adjustment to Human Resources is a decrease of \$518,576 in the FPFTY 2026 period as shown on my Exhibit DM-7.

f. Legal - 105

Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS LEGAL EXPENSE IN THE FPFTY 2026?

⁵³ PW Response to OCA-IX-19.

1 A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed Legal Expense of
2 \$4,631,677 for the FPFTY 2026 period. This is also shown on PW COSS Model 2025,
3 O&M tab 105. These balances were broken down by utility service as shown on PW
4 Exhibit HJS-1 and HJS-2. These balances are comprised of Salaries and Benefits, and
5 General and Administrative Expenses. PW indexed these expenses in the same manner as
6 it did under the previously addressed expense categories, with respect to Salaries and
7 Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative
8 (G&A) expenses by reviewing future year increases based upon existing contractual
9 agreements or historical spending levels⁵⁴ as I previously explained in my testimony.

10 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
11 **LEGAL EXPENSE?**

12 A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
13 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
14 Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41%. I then
15 multiplied Pittsburgh Water's proposed Legal Salary and Benefits balances for the FPFTY
16 2026 period of \$1,054,581 and \$287,821, respectively, by the vacancy rate ratio of 6.41%
17 to arrive at an adjusted level of \$986,982 for Salaries (reduction of \$67,599) and \$269,372
18 for Benefits (reduction of \$18,449). These adjustments are shown on my Exhibit DM-8.

19 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO GENERAL**
20 **ADMINISTRATIVE?**

21 A. I reviewed Pittsburgh Water's General and Administrative category, and I have
22 adjustments related to PW's certain expense categories. I utilized a 15% variance
23 adjustment for certain of the General and Administrative Expenses. For the Claims
24 Deductible, PW proposed a balance of \$1,000,000. Prior costs resulted in a normalized
25 balance of \$579,262 or a reduction of \$420,738. In response to I&E RE-49, PW stated that
26 it is managing several significant outstanding claims that, based on Legal Departments
27 assessments, are expected to be resolved during the FPFTY. No other reasons were
28 provided.

⁵⁴ *Id.*

1 **Q. WHAT HAS PW INCLUDED FOR RATE CASE EXPENSES?**

2 **A.** In response to I&E RE -2, and OCA Set 9-12, PW has included a balance of \$826,354 in
3 the FY 2025 and a balance of \$604,825 in the FPFTY 2026 for a total balance of
4 \$1,431,179. These costs are booked in Account No. 7370.

5 **Q. WHAT ADJUSTMENT DID YOU MAKE WITH RESPECT TO PW'S RATE CASE**
6 **EXPENSES?**

7 **A.** I reviewed PW's rate case filings⁵⁵ showing that PW filed 5 rate cases during 2018 through
8 2025. Normalizing these expenses calculates to a 1.40 year period. (7 years divided by 5
9 rate cases, or 1.40). I am recommending a two-year period because the use of a normalized
10 1.40 year period will occur between rate cases, in which PW will still be collecting and
11 ultimately over-collect until PW files its next base rate case. My calculation is consistent
12 with the recommendation that the Commission should not approve PW's multi-year rate
13 plan. This reduces the balance by \$408,908 and sets a rate case balance of \$1,022,271. My
14 recommendation is made with the caveat that PW should be required to provide an update
15 in its rebuttal testimony to substantiate its actual rate case expenditures and projected
16 expenditures through the end of the case. If PW does not do this, I reserve the right to
17 change my recommendation as necessary to ensure that PW's known and identifiable costs
18 available can be factored into my position for this evolving expense.

19 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO LEGAL EXPENSE?**

20 **A.** My total adjustments to Legal Expense are a reduction \$915,694 in the FPFTY 2026. These
21 adjustments are shown on my Schedule DM-8.

22 **g. Safety & Security – 106**

23 **Q. WHAT HAS THE PW PROPOSED WITH RESPECT TO ITS SAFETY &**
24 **SECURITY IN THE FPFTY 2026?**

25 **A.** As shown on PW HJS-1, Pittsburgh Water has proposed a Safety and Security balance of
26 \$2,694,805 for the FPFTY 2026 period. Pittsburgh Water also reflected this balance in its
27 PW COSS Model 2025, O&M tab account 106. These balances were broken down by

⁵⁵ PW Response to OCA-IX-12.

1 utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of
2 Salaries and Benefits, Operating Expenses and General and Administrative Expenses. PW
3 indexed these expenses in the same manner as it did under the previously addressed
4 expense categories, with respect to Salaries and Benefits. PW calculated its Operating
5 Expenses, Inventory and General and Administrative (G&A) expenses by reviewing future
6 year increases based upon existing contractual agreements or historical spending levels,⁵⁶
7 as I previously explained in my testimony.

8 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
9 **SAFETY AND SECURITY COSTS FOR THE FPFTY PERIOD?**

10 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
11 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
12 Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with
13 the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed
14 Safety and Security Salary and Benefits balances for the FPFTY 2026 period of \$1,267,211
15 and \$506,271, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level
16 of \$1,185,983 for Salaries (reduction of \$81,228) and \$473,819 for Benefits (reduction of
17 \$32,452). These balances are shown in my Exhibit DM-9.

18 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES**
19 **AND GENERAL ADMINISTRATIVE?**

20 **A.** I reviewed Pittsburgh Water's O&M Expenses and General Administrative category and
21 have adjustments related to PW's certain increase in these expense categories. I normalized
22 certain costs by a 15% variance adjustment. The use of variances is based upon basic
23 accounting principles that a material variance of at least 15% is considered a major variance
24 and requires explanations as to the reasoning for the variance. Variances are useful in
25 determining whether the expected or forecasted costs are in line with actual costs that have
26 been incurred. For Operating Expenses, these costs reflect a reduction of \$109,204 in the
27 FPFTY 2026. These adjustments relate to the following expenses: Furniture/Fixtures
28 (Account 5140); Ground Maintenance (Account 5145); Misc. Inspection (Account 5345);
29 Key/Lock Services (Account 5350); Misc. Operating Contract (Account 5370); Security

⁵⁶ PW Response to OCA-IX-19.

Guards (Account 5375); Annual Software Support (Account 5402); Building/Property Repairs (Account 5405); Computer Software Support (Account 5411) and Testing (Account 5570). These costs vary from –80.37 % to 149.73%.

For the General and Administrative Expenses, this reduces the balance by \$1,518 in the FPFTY 2026. These are related to General Maintenance (Account 7440), and Travel and Training (Account 7560). These costs have varied from -31.07% to 22.20%.

Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO SAFETY AND SECURITY?

A. My total adjustment to Safety and Security is a reduction of \$224,402 in the FPFTY 2026. These adjustments are shown on my Exhibit DM-9.

h. Public Affairs - 108

Q. WHAT HAS PW PROPOSED WITH RESPECT TO ITS PUBLIC AFFAIRS IN THE FPFTY 2026?

A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a Public Affairs balance of \$1,889,305 in the FPFTY 2026. This balance is also shown on PW COSS Model 2025, O&M tab 108. These balances were broken down by utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses, and General and Administrative Expenses. PW indexed these expenses in the same manner as it did under the previously addressed expense categories, with respect to Salaries and Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative (G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels,⁵⁷ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S PUBLIC AFFAIRS COSTS FOR THE FPFTY PERIOD?

A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same reasons and consistent with my treatment of Salary and Benefits for all PW's Direct Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with

⁵⁷ PW Response to OCA-IX-19.

the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed Public Affairs Salary and Benefits balances for the FPFTY 2026 period of \$970,149 and \$287,877 respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of \$907,962 for Salaries (reduction of \$62,187) and \$269,424 for Benefits (reduction of \$18,453). These balances are shown in my Exhibit DM-10.

Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES, AND GENERAL ADMINISTRATIVE?

A. I reviewed Pittsburgh Water's O&M Expenses, and General Administrative category and have adjustments related to PW's certain expense adjustment in these categories. I normalized certain adjustments that had a variance of over 15%. This increases the overall balance for Operating Expenses by \$31,524 in the FPFTY 2026. These adjustments relate to the following: Consultants (Account 7323); Annual Software Support (Account 5402). These costs varied from -15.32% to 22.70%. For Operating Expenses the variation is an increase of \$49,029.

For the General and Administrative Expenses, I applied the same 15% normalization variance which reduced the balance by \$17,505 in the FPFTY 2026. These adjustments relate to the following: Office Supplies (Account 7450); Travel/Training (Account 7555); and Travel/ Training Misc (Account 7575). These expenses had a variance from -43.76% to 3538%. These adjustments are shown on my Exhibit DM-10.

Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PITTSBURGH WATER'S PUBLIC AFFAIRS COSTS?

A. My total adjustment to Pittsburgh Water's Public Affairs costs is a reduction of \$104,641 in the FPFTY 2026 as shown on my Exhibit DM-10.

i. Warehouse - 107

Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS WAREHOUSE COSTS FOR THE FPFTY 2026?

A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$593,835 in the FPFTY 2025. This balance is also shown on PW COSS Model 2025, O&M tab 107. These balances were broken down by utility service as shown on PW Exhibit HJS-1 and

1 HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses, and
2 General and Administrative Expenses. PW indexed these expenses in the same manner as
3 it did under the previously addressed expense categories, with respect to Salaries and
4 Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative
5 (G&A) expenses by reviewing future year increases based upon existing contractual
6 agreements or historical spending levels,⁵⁸ as I previously explained in my testimony.

7 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
8 **WAREHOUSING COSTS FOR THE FPFTY PERIOD?**

9 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
10 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
11 Operating Expenses that recognizes PW actual vacancy data, I utilized a three-year vacancy
12 ratio for FPFTY 2026 of 6.41% with the arguments that I explained previously. I then
13 multiplied Pittsburgh Water's proposed Warehousing Salary and Benefits balances for the
14 FPFTY 2026 period of \$434,638 and \$128,247, respectively, by the vacancy rate ratio of
15 6.41% to arrive at an adjusted level of \$406,778 for Salaries (reduction of \$27,860) and
16 \$120,026 for Benefits (reduction of \$8,221). These balances are shown in my Exhibit DM-
17 12.

18 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
19 **AND GENERAL ADMINISTRATIVE?**

20 **A.** I reviewed Pittsburgh Water's O&M Expenses, and General Administrative category and
21 have adjustments related to PW's certain expense categories. I applied a normalization
22 adjustment to expenses that had a 15% or greater variance. This increases the balance for
23 Operating Expenses by \$961 in the FPFTY 2026. These adjustments relate to the
24 following: Building Property Maintenance (Account 5405); Cranes Repairs (Account
25 5415) and Surface Restoration (Account 5422). These variances ranged from 18.40% to -
26 62.60%.

27 For the General and Administrative Expenses, this reduces the balance by \$1,114 in the
28 FPFTY 2026. These adjustments relate to the following: Freight (Account 7110);
29 Equipment Rental (Account 7215); Office Supplies (Account 7450) and Travel / Training

⁵⁸ PW Response to OCA-IX-19.

(Account 7575). These variances ranged from 25.27% to -70.25%. These adjustments are shown on my Exhibit DM-12.

Q. WHAT IS YOUR TOTAL ADJUSTMENT TO PITTSBURGH WATER'S WAREHOUSE EXPENSES?

A. My total adjustment is a reduction of \$36,234 in the FPFTY 2026. These adjustments are shown on my Exhibit DM-12.

j. Laboratory - 200

Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS LABORATORY EXPENSES?

A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$2,451,574 for FPFTY 2026. This balance is also shown on PW COSS Model 2026, O&M tab 200. These balances were broken down by utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses, Inventory and General and Administrative Expenses. PW indexed these expenses in the same manner as it did under the previously addressed expense categories, with respect to Salaries and Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative (G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels,⁵⁹ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S LABORATORY COSTS FOR THE FPFTY PERIOD?

A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same reasons and consistent with my treatment of Salary and Benefits for all PW's Direct Operating Expenses, which reflects PW's actual vacancy data, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41%, with the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed Laboratory Salary and Benefits balances for the FPFTY 2026 period of \$1,040,089 and \$334,198, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of \$973,419 for Salaries (reduction of \$66,670) and

⁵⁹ PW Response to OCA-IX-19.

1 \$312,776 for Benefits (reduction of \$21,422). These balances are shown in my Exhibit
2 DM-13.

3 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
4 **AND GENERAL ADMINISTRATIVE?**

5 **A.** I reviewed Pittsburgh Water's O&M Expenses, Inventory and General Administrative
6 category and have adjustments related to PW's certain expense categories. As previously
7 identified, PW has included adjustment for certain operating expense categories from
8 FPFTY 2026. I applied a normalization adjustment to expenses that had a 15% or greater
9 variance. This reduces the balance for Operating Expenses by \$108,912 in the FPFTY
10 2026. These variances relate to the following: Chemical Removal (Account 5422) and
11 Testing (Account 5570). These variances ranged from -32.59% to -80.73%.

12 For Inventory this reduces the balance by \$1,133 in the FPFTY 2026, related to
13 Certification fees (7005). Pittsburgh Water proposed a balance of \$3,400 in the FPFTY
14 2026. Normalizing this expense provides for a balance of \$2,267, a variance of -33.32%.

15 For the General and Administrative Expenses, this reduces the balance by \$27,031 in the
16 FPFTY 2026. These variances relate to the following: Freight (Account 7110); Fuel -
17 Gasses (Account 7422); Ground Maintenance (Account 7440); Office Supplies (Account
18 7450) and Travel/Training (Account 7575). These variances ranged from -24.25% to
19 61.37%.

20 **Q. WHAT IS YOUR RECOMMENDED ADJUSTMENT REGARDING**
21 **PITTSBURGH WATER'S LABORATORY COSTS?**

22 **A.** My recommended adjustments result in a reduction of \$225,168 in the FPFTY 2026 and
23 are shown on my Exhibit DM-14.

24 **k. Water Treatment Plant - 201**

25 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO WATER**
26 **TREATMENT PLANT FOR THE FPFTY 2026?**

27 **A.** As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$24,150,984
28 for the FPFTY 2026. This balance is also shown on PW COSS Model 2026, O&M tab 201.
29 These balances were broken down by utility service as shown on PW Exhibit HJS-1 and

1 HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses,
2 Inventory and General and Administrative Expenses. PW indexed these expenses in the
3 same manner as it did under the previously addressed expense categories, with respect to
4 Salaries and Benefits. PW calculated its Operating Expenses, Inventory and General and
5 Administrative (G&A) expenses by reviewing future year increases based upon existing
6 contractual agreements or historical spending levels,⁶⁰ as I previously explained in my
7 testimony.

8 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
9 **WATER QUALITY COSTS FOR THE FPFTY PERIOD?**

10 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
11 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
12 Operating Expenses, which reflects PW's actual vacancy data, I utilized a three-year
13 vacancy ratio for FPFTY 2026 of 6.41%, with the arguments that I explained previously. I
14 then multiplied Pittsburgh Water's proposed Water Treatment Plant Salary and Benefits
15 balances for the FPFTY 2026 period of \$4,793,221 and \$1,434,984, respectively, by the
16 vacancy rate ratio of 6.41% to arrive at an adjusted level of \$4,485,976 for Salaries
17 (reduction of \$307,245) and \$1,343,002 for Benefits (reduction of \$91,982). These
18 balances are shown in my Exhibit DM-14.

19 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
20 **AND GENERAL ADMINISTRATIVE?**

21 **A.** I reviewed Pittsburgh Water's O&M Expenses, and General Administrative category and
22 have adjustments related to PW's certain in these expense categories. As previously
23 identified, PW has included adjustment for each of these operating expense categories from
24 the FPFTY 2026. I applied a normalization adjustment to expenses that had a 15% or
25 greater variance. This reduces the balance for Operating Expenses by \$65,890 in the
26 FPFTY 2026. These costs variances relate to the following: Caustic Soda (Account 5025);
27 Sodium Hypochlorite (Account 5080); Sodium Carbonate (Account 5085); Machinery &
28 Equipment (Account 5150); Pumps & Motors (Account 5170); Pump & Motor Contract
29 (Account 5344); Misc. Inspection (Account 5345); Misc. Operating Contracts (Account

⁶⁰ PW Response to OCA-IX-19.

5370); HVA & Plumbing Repairs (Account 4339); Machinery & Equipment (Account 5452) and Plant Repairs (Account 5462). These variances range from -77.00% to 273.77%.

For Inventory – Hardware (Account 6300) this increases the balance in the FPFTY 2026 by \$6,898, or a variance of 19.16%.

For the General and Administrative Expenses, this reduces the balance by \$70,173 in the FPFTY 2026. These variances relate to the following: Equipment Rental (Account 7215); Office Supplies (Account 7450); Travel/Training (Account 7555); Travel/Training Misc. (Account 7575) and Gas Utility (Account 7650). These variances range from -18.70% to 27.70%. These adjustments are shown on my Exhibit DM-14.

Q. WHAT IS YOUR RECOMMENDED ADJUSTMENT REGARDING PITTSBURGH WATER’S WATER TREATMENT COSTS?

A. My recommended adjustments result in a reduction of \$528,393 in the FPFTY 2026 and are shown on my Exhibit DM-14.

I. Water Plant Operations - 202

Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS WATER PLANT OPERATIONS FOR THE FPFTY 2026?

A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$19,396,229 for the FPFTY 2026. This balance is also shown on PW COSS Model 2025, O&M tab 202. These balances were broken down by utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of Salaries and Benefits, Inventory, Operating Expenses, and General and Administrative Expenses. PW indexed these expenses in the same manner as it did under the previously addressed expense categories, with respect to Salaries and Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative (G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels,⁶¹ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER’S WATER TREATMENT COSTS FOR THE FPFTY PERIOD?

⁶¹ PW Response to OCA-IX-19.

1 A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
2 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
3 Operating Expenses to reflect PW's actual vacancy data, I utilized a three-year vacancy
4 ratio for FPFTY 2026 of 6.41% with the arguments that I explained previously. I then
5 multiplied Pittsburgh Water's proposed Water Plant Operations Salary and Benefits
6 balances for the FPFTY 2026 period of \$11,294,833 and \$3,130,558, respectively, by the
7 vacancy rate ratio of 6.41% to arrive at an adjusted level of \$10,570,834 for Salaries
8 (reduction of \$723,999) and \$2,929,889 for Benefits (reduction of \$200,669). These
9 balances are shown in my Exhibit DM-16.

10 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
11 **INVENTORY AND GENERAL ADMINISTRATIVE?**

12 A. I reviewed Pittsburgh Water's O&M Expenses, Inventory and General Administrative
13 category and have adjustments related to PW's adjustments in these expense categories.
14 As previously identified, PW has included an adjustment for each of these operating
15 expense categories from the FPFTY 2026. I have made adjustments to Pittsburgh Water's
16 O&M, Inventory and General Administrative costs by the use of a three-year normalization
17 adjustments with expenses showing a variance of greater than 15%. I also normalized costs
18 related to PW's Line Locating costs over a 2-year period. This reduces the balance for
19 Operating Expenses by \$537,269 in the FPFTY 2026. These variances relate to the
20 following: Sodium Bisulfate (Account 5030); Asphalt Hot mix (Account 5220); Brick
21 (Account 5227); Cement Bagged (Account 5230); Lumber (Account 5245); Building &
22 Property Repairs (Account 5405); Electrical Repairs (Account 5417); Machinery &
23 Equipment (Account 5452); Power Tools Repairs (Account 5467) and Misc.
24 Repairs/Hardware (Account 5496). These cost variances range from -87.04% to 222.63%.
25 With respect to Line Locating costs of \$1,071,200 related to Water Operations, PW stated
26 that the total Line Locating costs of \$849,070 have been spent through July 2025.⁶² The
27 costs are expected to be \$1,298,358 in November 2025. For Water Operations, PW
28 allocated a portion of the total cost to this cost category and the remaining cost to Sewer
29 Operations. I am recommending a 2-year normalized level of costs given that this contract

⁶² PW Response to I&E RE-22.

will expire in November 2025 and it is uncertain whether future costs will be. Also, PW stated that a new initiative is planned to be launched with respect to televising sewer lines based upon the Wet Weather Consent Decree. While the Wet Weather Consent Decree is not finalized yet, it is uncertain what the costs will be during the negotiation process. Therefore, a two-year normalization adjustment appears to be reasonable in light of the circumstances involved. If any additional information becomes available, I will adjust my recommendation accordingly.

For Inventory (Account 6500) this increases the balance by \$14,166 in the FPFTY 2026.

For the General and Administrative Expenses, this increase the balance by \$1,306 in the FPFTY 2026. These variances relate to the following: Equipment Rental (Account 7215); Travel/Training (Account 7555); Travel/Training (Account 7560) and Fines and Penalties (Account 7730). These costs variances range from -90.18% to 71.94%.

Q. WHAT ARE YOUR TOTAL RECOMMENDED ADJUSTMENTS TO PITTSBURGH WATER'S WATER PLANT OPERATIONS?

A. My recommended adjustments to Pittsburgh Water's Water Operations are a reduction of \$1,446,465 in the FPFTY 2026. These adjustments are shown on my Exhibit DM-16.

m. Sewer Operations – 300

Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS SEWER OPERATIONS EXPENSE FOR THE FPFTY 2026?

A. As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$5,547,343 for the FPFTY 2026 This balance is also shown on PW COSS Model 2025, O&M tab 300. These balances were broken down by utility service as shown on PW Exhibit HJS-1 and HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses, and General and Administrative Expenses. PW indexed these expenses in the same manner as it did under the previously addressed expense categories with respect to Salaries and Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative

(G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels,⁶³ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S SEWER OPERATIONS COSTS FOR THE FPFTY PERIOD?

A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same reasons and consistent with my treatment of Salary and Benefits for all PW's Direct Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed Sewer Operations Salary and Benefits balances for the FPFTY 2026 period of \$2,393,691 and \$709,437, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of \$2,240,255 for Salaries (reduction of \$153,436) and \$663,962 for Benefits (reduction of \$45,475). These balances are shown in my Exhibit DM-15.

Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES, INVENTORY AND GENERAL ADMINISTRATIVE?

A. I reviewed Pittsburgh Water's O&M Expenses, Inventory and General Administrative category and have adjustments related to PW's expense categories. I have made adjustments to Pittsburgh Water's O&M, Inventory and General Administrative costs by applying the use of a three-year normalization adjustments with expenses showing a variance of greater than 15%. I also normalized costs related to PW's Line Locating costs over a 2-year period for O&M Expenses, this reduces the balance by \$720,260 in the FPFTY 2026. These variances relate to the following: Machinery & Equipment (Account 5150); Catch Basin Cleaning (Account 5315); Building / Property Repairs (Account 5405); HWVA/Plumbing Repairs (Account 5439) and Misc. Repairs & Maintenance (Account 5496). These variances range from -55.60% to 308.84%. With respect to Line Locating costs of \$767,800 related to Sewer Operations, PW stated that the total Line Locating costs of \$849,070 has been spent through July 2025.⁶⁴ The costs are expected to be \$1,298,358 in November 2025. For the Sewer Operations, PW allocated a portion of the total cost from the Water Operations category. I am recommending a 2-year normalized level of costs or

⁶³ PW Response to OCA-IX-19.

⁶⁴ PW Response to I&E RE-22.

1 \$383,900 given that this contract will expire in November 2025 and it is uncertain whether
2 future costs will be. Also, PW stated that a new initiative is planned to be launched with
3 respect to televising sewer lines based upon the Wet Weather Consent Decree. While the
4 Wet Weather Consent Decree is not finalized yet, it is uncertain what the costs will be
5 during the negotiation process. Therefore, a two-year normalization adjustment appears to
6 be reasonable in light of the circumstances involved. If any additional information becomes
7 available, I will adjust my recommendation accordingly.

8 For Inventory this reduces the balance by \$34,950 in the FPFTY 2026. These relate to
9 Inventory-Hardware (Account 6300); Inventory Miscellaneous (Account 6500) and Pipe
10 (Account 6705). These variances range from -21.05% to 25.00%.

11 For the General and Administrative Expenses, this reduces the balance by \$27,925 in the
12 FPFTY 2026. These relate to Ground Maintenance (Account 7440); Office Supplies
13 (Account 7450) and Travel/Training (Account 7560). These variances range from -29.22%
14 to -62.63%. These adjustments are shown on my Exhibit DM-15.

15 **Q. WHAT ARE YOUR TOTAL RECOMMENDED ADJUSTMENTS REGARDING**
16 **PITTSBURGH WATER'S SEWER OPERATIONS COSTS?**

17 **A.** My recommended adjustments are a reduction of 982,046 in the FPFTY 2026 and is shown
18 on my Exhibit DM-15.

19 **n. Environmental Compliance – 110**

20 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO ITS**
21 **ENVIRONMENTAL COMPLIANCE EXPENSE FOR THE FPFTY 2026?**

22 **A.** As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$4,533,711
23 for the FPFTY 2026. This balance is also shown on PW COSS Model 2026, O&M tab 110.
24 These balances were broken down by utility service as shown on PW Exhibit HJS-1 and
25 HJS-2. These balances are comprised of Salaries and Benefits, Operating Expenses, and
26 General and Administrative Expenses. PW indexed these expenses in the same manner as
27 it did under the previously addressed expense categories, with respect to Salaries and
28 Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative

(G&A) expenses by reviewing future year increases based upon existing contractual agreements or historical spending levels,⁶⁵ as I previously explained in my testimony.

Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S ENVIRONMENTAL COMPLIANCE COSTS FOR THE FPFTY PERIOD?

A. My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same reasons and consistent with my treatment of Salary and Benefits for all PW's Direct Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed Environmental Compliance Salary and Benefits balances for the FPFTY 2026 period of \$1,228,889 and \$397,873, respectively, by the vacancy rate ratio of 6.41% to arrive at an adjusted level of \$1,150,117 for Salaries (reduction of \$78,772) and \$372,369 for Benefits (reduction of \$25,504). These balances are shown in my Exhibit DM-11.

Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES AND GENERAL ADMINISTRATIVE?

A. I reviewed Pittsburgh Water's O&M Expenses and General Administrative category and have adjustments related to PW's certain increase in these expense categories. I utilized a normalization variance of greater than 15% to adjust PW's O&M Expenses in the FPFTY 2026. This reduces the balance for Operating Expenses by \$302,165 in the FPFTY 2026. These variances relate to the following: Ground Maintenance (Account 5145); Debris Removal (Account 5330); Dumpster (Account 5340); Vactor Debris Removal Contract (Account 5341); Miscellaneous Inspection (Account 5345); Chemical Removal (Account 5422) and Testing (Account 5570). These variances range from -53.87% to 61.82%.

For the General and Administrative Expenses, this reduces the balance by \$9,918 in the FPFTY 2026. These variances relate to the following: Registration (Account 7020); Ground Maintenance (Account 7440); Office Supplies (Account 7450); Travel/Training Seminars (Account 7555) and Travel/Training (Account 7560). These variances range from -96.82% to 30.62%.

⁶⁵ PW Response to OCA-IX-19.

1 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PITTSBURGH WATER'S**
2 **ENVIRONMENTAL COMPLIANCE?**

3 **A.** My total adjustment is a reduction of \$416,358 in the FPFTY 2026 as shown on my Exhibit
4 DM-11.

5 **o. Engineering & Construction – 109**

6 **Q. WHAT HAS PITTSBURGH WATER PROPOSED WITH RESPECT TO**
7 **ENGINEERING AND CONSTRUCTION FOR THE FPFTY 2026?**

8 **A.** As shown on PW Exhibit HJS-1, Pittsburgh Water has proposed a balance of \$40,125,789
9 for the FPFTY 2026. This balance is also shown on PW COSS Model 20245 O&M tab
10 109. These balances were broken down by utility service as shown on PW Exhibit HJS-1
11 and HJS-2. This balance is comprised of Salaries and Benefits, Operating Expenses, and
12 General and Administrative Expenses. PW indexed these expenses in the same manner as
13 it did under the previously addressed expense categories, with respect to Salaries and
14 Benefits. PW calculated its Operating Expenses, Inventory and General and Administrative
15 (G&A) expenses by reviewing future year increases based upon existing contractual
16 agreements or historical spending levels,⁶⁶ as I previously explained in my testimony.

17 **Q. WHAT ADJUSTMENTS DO YOU HAVE REGARDING PITTSBURGH WATER'S**
18 **ENGINEERING & CONSTRUCTION EXPENSE FOR THE FPFTY PERIOD?**

19 **A.** My first adjustment is related to Pittsburgh Water's Salary and Benefits. For the same
20 reasons and consistent with my treatment of Salary and Benefits for all PW's Direct
21 Operating Expenses, I utilized a three-year vacancy ratio for FPFTY 2026 of 6.41% with
22 the arguments that I explained previously. I then multiplied Pittsburgh Water's proposed
23 Engineering & Construction Salary and Benefits balances for the FPFTY 2026 period of
24 \$5,525,894 and \$1,907,710, respectively, by the vacancy rate ratio of 6.41% to arrive at an
25 adjusted level of \$5,171,684 for Salaries (reduction of \$354,210) and \$1,785,426 for
26 Benefits (reduction of \$122,284). This is shown on my Exhibit DM-17.

27 **Q. WHAT ARE YOUR OTHER ADJUSTMENTS RELATED TO O&M EXPENSES,**
28 **INVENTORY AND GENERAL ADMINISTRATIVE?**

⁶⁶ PW Response to OCA-IX-19.

1 A. I reviewed Pittsburgh Water's O&M Expenses, Inventory and General Administrative
2 category and have adjustments related to PW's proposed increases in these expense
3 categories. As previously discussed, I utilized a normalization variance of greater than 15%
4 to adjust PW's O&M Expenses, Inventory and General Administrative costs in the FPFTY
5 2026. This reduces the balance for Operating Expenses by \$5,896,8021 in the FPFTY 2026.
6 These variances relate to the following: Ground Maintenance (5145); Surface Restoration
7 (5413); GIS Hardware (5427) and Machinery/Repairs (5452). With respect to Manhole
8 Repairs (5343) PW spent \$523,369 through July 2025. PW proposed recovery of
9 \$3,000,000.⁶⁷ PW stated that it is soliciting documents for the FY 2026 contract of
10 \$1,767,328. I am recommending normalizing the proposed \$3,000,000 over two years or
11 an annual recovery of \$1,500,000. Given the uncertainty of the solicitation outcome, and
12 the fact that PW incurred \$523,369 of costs through July, 2025, it is speculative that the
13 balance proposed will come to fruition. With respect to Engineering /Inspections (Account
14 5347) PW proposed a balance of \$3,094,282. PW incurred \$901,628 through July 2025
15 (OCA-Set-9-39). I am recommending normalizing the proposed \$3,094,282 over two years
16 or an annual recovery of \$1,547,141. It is speculative that the balance proposed will come
17 to fruition given the large variance between the actual costs expensed through July 2025
18 and expected costs to be incurred through the end of 2025 and 2026. The variances for the
19 non-normalized costs range from -18,79% to -97.55%.

20 For Inventory this reduces the balance by \$2,360 in the FPFTY 2026. This relates to
21 Certification Fees of \$5,000. Normalizing these costs results in an annual recovery of
22 \$2,640 or a reduction of 47.20%.

23 For the General and Administrative Expenses, this reduces the balance by 2,080,348. These
24 variances relate to the following: Misc. Non Service Cap (Account 7335); Office Supplies
25 (Account 7450); Travel/Training Seminars (Account 7555); and Travel/Training Misc.
26 (Account 7575). These variances range from -20.06% to -46.67%. With respect to Permits
27 (Account 7015), PW projected \$4,000,000 of cost recovery. In response to I&E RE-43,
28 PW stated that its Capital Improvement Plan (CAP) requires additional right-of-way
29 permits from the City of Pittsburgh and these Permits are levied by the City of Pittsburgh

⁶⁷ PW Response to I&E RE-23.

1 using an annual fee schedule adopted by the Pittsburgh City Council. PW is forecasting the
2 pricing for permits to increase. No other information was provided by PW. I am
3 recommending normalizing these Permits over a two year period or \$2,000,000 annually.
4 Prior Permit costs were about \$53,000 over a three-year normalized period. PW's proposed
5 increase to \$4,000,000 seems excessive given that limited information provided by PW.

6 **Q. WHAT ARE YOUR TOTAL ADJUSTMENTS TO PITTSBURGH WATER'S**
7 **ENGINEERING & CONSTRUCTION EXPENSES?**

8 **A.** My total adjustment is a reduction of \$8,456,004 in the FPFTY 2026 as shown on my
9 Exhibit DM-17.

10 **p. Other Adjustments**

11 **Q. WHAT OTHER ADJUSTMENTS DO YOU HAVE THAT YOU HAVE NOT**
12 **ADDRESSED PREVIOUSLY?**

13 **A.** I am recommending disallowance of certain charitable contributions, memberships and
14 dues expenses and sponsorships as broken down in response to OCA Set 9-16. These costs
15 appear to be related to various state and county community boards, civic organizations and
16 other business related agencies that do not directly benefit ratepayers in the provision of
17 safe and reliable utility service. These types of costs do not relate to the core business of
18 utility service, nor do they appear to be related to assisting customers in retaining access to
19 utility service. These types of costs appear to be geared toward PW as being good a
20 corporate citizen and to enhance its image in the community. I am also recommending
21 disallowance of certain lobbying expenses as identified in response to I&E RE-12.
22 Lobbying expenses are geared toward providing legislative and regulatory updates which
23 I believe do not benefit ratepayers with respect to customer service or service quality. These
24 total \$66,540 for contributions, dues, and memberships /sponsorships and \$88,200 for
25 lobbying for a total disallowance of \$154,740 for the FPFTY 2026. This is shown on my
26 Exhibit DM-2.

1 **3. OPERATING EXPENSES – Other**

2 **Q. WHAT TYPES OF EXPENSES HAS PITTSBURGH WATER INCLUDED IN ITS**
3 **OPERATING EXPENSES – OTHER IN THE FPFTY 2024?**

4 **A.** Pittsburgh Water has included the following Other Operating Expenses:

	<u>FPFTY 2026</u>
• Loss (Gain) on ALCOSAN Billings	\$2,383,047
• City Services	\$ 0
• Other Expenses	<u>\$ 0</u>
Total	<u>\$2,383,047</u>

10 This is located on PW Exhibit EB-2. This is also located on PW COSS Model 2025, tab
11 EB-2.

12 **Q. WHAT DO THESE COSTS REPRESENT?**

13 **A.** The Loss (Gain) on ALCOSAN Billings is related to the annual costs that Pittsburgh Water
14 incurs to carry bad debt expense for collections related to pass-through charges of the
15 Allegheny County Sanitary Authority (ALCOSAN).⁶⁸

16 **Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PITTSBURGH**
17 **WATER’S PROPOSED OTHER OPERATING EXPENSES FOR THE FPFTY**
18 **2026?**

19 **A.** I am accepting the loss/gain on ALCOSAN billing for the years shown.

20 **Q. WHAT IS YOUR RECOMMENDED BALANCE REGARDING PITTSBURGH**
21 **WATER’S OTHER OPERATING EXPENSES FOR THE YEARS SHOWN?**

22 **A.** My recommended balance is \$2,383,047 for the FPFTY 2026 which is shown on my
23 Exhibit DM-18.

24
25
26

⁶⁸ PW St. 2 at 25.

1 **4. DEBT SERVICE COVERAGE**

2 **Q. WHAT HAS PITTSBURGH WATER PROPOSED REGARDING ITS DEBT**
3 **SERVICE COVERAGE (DSC) FOR THE FPPTY 2026 AND WHAT ARE THE**
4 **SPECIFIC BREAKDOWNS?**

5 **A.** As shown on PW COSS Model 2025, Sufficiency Tab, Pittsburgh Water has proposed a
6 total Debt Service Coverage of \$157,506,470 for the FPPTY 2026 (Revenues available for
7 Debt Service). The components of these costs are broken down in PW Sufficiency Tab PW
8 has proposed a DSC Ratio of 1.85 in the FPPTY 2026.

9 **Q. HAS THE COMPANY INCLUDED COSTS RELATED TO THE ANNUAL**
10 **OBLIGATIONS PAYMENTS TO THE CITY OF PITTSBURGH?**

11 **A.** Yes. In response to OCA Set 20-1 -Attachment, PW included \$6,000,000 related to annual
12 obligation costs to the City of Pittsburgh related to Pension Obligations, Payroll Expense
13 Tax, PURTA and Street Sweeping. PW also included costs related to Vehicle Fuel and
14 Repairs and Permits paid to the City.

15 **Q. WHAT CHANGES DO YOU HAVE?**

16 **A.** I am accepting PW's balance of \$6,000,000 related to the Annual Obligations to the City
17 of Pittsburgh. I did make adjustments to Permit costs of \$1,300,000 as identified on my
18 Exhibit DM-17 (Engineering and Construction). It is not clear whether the costs of Permits
19 of \$1,300,000 is also included in the Engineering and Construction cost expense category
20 of \$4,000,000 (Account 7015). PW should provide an explanation of these two Permit
21 categories.

22 **Q. WHAT CHANGES ARE YOU RECOMMENDING WITH RESPECT TO THE DSC**
23 **RATIO?**

24 **A.** As more fully discussed by OCA Witness Christopher Walters, he recommended a Senior
25 Debt Service Coverage Ratio of 1.5686 and a Total Debt Service Coverage Ratio of 1.20.
26 This is reflected on my Exhibit DM-19.

5. CAPITAL EXPENDITURES & TRANSFERS

Q. WHAT HAS PITTSBURGH WATER PROPOSED REGARDING ITS CAPITAL EXPENDITURES & TRANSFERS FOR THE FPFTY 20246

A. As shown on PW Exhibit EB-2, Pittsburgh Water has proposed total Capital Expenditures & Transfers of \$50,559,908 in the FPFTY 2026. The breakdown of these components is shown on PW Exhibit EB-2. Included in this amount are costs of \$3,000,000 related to the Rate Stabilization Fund (Other Transfers to Reserve).⁶⁹ The balance of this fund is \$24,861,202 as of 7/31/2025.

Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PITTSBURGH WATER'S CAPITAL EXPENDITURES & TRANSFERS BALANCE FOR THE YEARS SHOWN?

A. I have three flow-through adjustments. My first adjustment is related to Pittsburgh Water's Bad Debt Expense. Using my recommended revenue requirement proposal (Exhibit DM-2) and Pittsburgh Water's bad debt ratio in total of 2.00% (OCA-Set 9-20) I compute a total Bad Debt Expense of \$5,193,061 which is a reduction of \$1,005,949 from Pittsburgh Water's balance of \$6,199,010 (FPFTY 2026).

Q. WHAT IS YOUR NEXT ADJUSTMENT?

A. My next adjustment is to Pittsburgh Water's DSIC costs. PW has proposed a DSIC cap increase from 5% to 7.5% for both water and wastewater.⁷⁰ As per the recommendation of OCA witness Mr. Deupree in Statement 1, I am capping the DSIC recovery at 5%. This reduces the balance from the \$18,898,544⁷¹ to \$10,889,754 in the FPFTY 2026. This is reflected on my Exhibit DM-20.

Q. WHAT IS YOUR THIRD ADJUSTMENT?

A. My third adjustment is related to Mr. Colton's recommended disallowance of PW's Arrearage Forgiveness Program of \$280,094.

⁶⁹ PW Response to OCA XX-2.

⁷⁰ PW St. 2 at 65.

⁷¹ PW Exhibit EB-2.

1 **Q. PLEASE SUM UP YOUR ADJUSTMENTS TO THE CAPITAL EXPENDITURES**
2 **& TRANSFERS.**

3 **A.** My total adjustment is a reduction of \$9,294,833 for the FPFTY 2026.
4

5 **6. PROJECTED CASH FLOW**

6 **Q. WHAT HAS PITTSBURGH WATER PROPOSED REGARDING ITS REQUIRED**
7 **DAYS CASH ON HAND (DCOH) AND ITS REQUIRED ENDING BALANCE FOR**
8 **THE FPFTY 2024?**

9 **A.** As shown on PW COSS Model 2025 Sufficiency Tab, Pittsburgh Water has computed a
10 Beginning Balance of \$83,729,892 in the FY 2024. PW made adjustments to reflect
11 Operating Expenses of \$149,713,165 and ALCOSAN Charges of \$109,172,087 for a total
12 of \$258,885,252. Pittsburgh Water computed its DCOH by taking its proposed total
13 beginning balance of \$83,729,892 and dividing that balance by the total Operating
14 Expenses of \$258,885,252 to arrive at a daily days cash on hand of 0.32342. PW then
15 multiplied the daily days cash on hand of 0.32342 by 365 to arrive at an ending days cash
16 balance ratio of 118.050. (Unrestricted Cash Excluding ALCOSAN billing). The days cash
17 on hand balance excluding ALCOSAN billing results in a day's cash balance ratio of
18 204.133.

19 **Q. HAS PW PROVIDED ANY UPDATE TO ITS CALCULATION OF ITS DCOH?**

20 **A.** Yes. In response to OCA Set 22-5, PW provided a reconciliation of the differences in
21 DCOH projections between PW's witness Mr. Barca and PW's witness Mr. Pickering with
22 respect to the FPFTY 2026. Mr. Barca calculated the DCOH using the beginning cash
23 balance and Mr. Pickering used the ending cash balance. Using the ending cash balance
24 calculation is correct and Mr. Barca's calculation will be updated to reflect the correct
25 DCOH.
26
27

1 **Q. WHAT CHANGES DO YOU HAVE WITH RESPECT TO PITTSBURGH**
2 **WATER'S PROPOSED PROJECTED CASH FLOW BALANCES FOR THE**
3 **YEARS SHOWN?**

4 **A.** My adjustments relate to the flow-through of my recommended adjustments to Pittsburgh
5 Water's Operating Expenses. As shown on my Exhibit DM-21, I utilized the same
6 methodology as Pittsburgh Water. My recommended Cash Flow is 233.25 days (without
7 ALCOSAN Costs) and 128.511 (with ALCOSAN costs).

8 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

9 **A.** Yes, it does. I reserve my right to update my testimony in the event PW's provides
10 additional information that may affect my revenue requirement recommendations.

PCMG and Associates LLC

DANTE MUGRACE

Education

Master Business Administration, MBA Strategic Management, Pace University, Lubin School of Business, New York, NY, 2010

Master Public Administration, MPA, Kean University, Union, NJ, 2001

Bachelor of Science, BS. Accounting, St. Peter's University, Jersey City, NJ, 1983

Position

Senior Consultant – PCMG and Associates	2014 – present
Senior Consultant – Snavelly King Majoros and Associates	2013 – 2014
Independent Consultant	2012 – 2013
Bureau Chief/Administrative Analyst/Accountant – New Jersey Board of Public Utilities	1983 – 2011

Professional Experience

Mr. Mugrace has 35 years' experience in all aspects of regulatory accounting and policy including processing, analyzing and evaluating utility rate case petitions before Public Service Commissions. Mr. Mugrace examines and evaluates rate filings, contracts, agreements and rate matters regarding utility operations and provides recommendations as to best course of action. Additionally, Mr. Mugrace analyzes and reviews utility regulatory matters and sets forth recommendations for resolution of issues, calculates total revenue requirement needed to cover operating expenses and rate of return; researches and evaluates regulatory utility matters to assess impact on various classes of customers, regarding rates, service, compliance and cost of service provisions, as well as annual true-up and tracking mechanisms.

Prior to undertaking consulting assignments, Mr. Mugrace was the Bureau Chief Utility Rate Manager for the New Jersey Board of Public Utilities, in which role he managed and assigned tasks to a staff of 12 professionals and supervisory personal in the daily administrative, financial and managerial functions of the Division. Mr. Mugrace's primary duties were to determine whether the utility had sufficient revenues to cover its operating expenses and earn a return on its plant investment and to ensure that the utility provided safe, reliable and continuing utility service to its customers. Mr. Mugrace set rates and charges for utility companies, which had revenues of up to \$500 million, and ensured that the revenue requirement provided for recovery of all operating expenses, return on investment and depreciation. Mr. Mugrace was also responsible for reviewing and verifying that the companies' property, plant and equipment (up to \$2.5 billion) were used and useful in providing service to its customers. Mr. Mugrace coordinated and met with the New Jersey State Department of Environmental Protection to

PCMG and Associates LLC

determine whether water and wastewater utilities were complying with state regulations and were adhering to any regulatory agency directives or orders. Mr. Mugrace developed ways to minimize the rising costs of water utility services by investigating alternative rate structures, analyzing engineering mechanisms and techniques, looking into the feasibility of mergers and acquisitions within the water industry and reviewing financing, and rate alternatives to minimize the impact on ratepayers. Mr. Mugrace was responsible for ensuring that the rate-case process adhered the statutory timeframe for preparing, reviewing and recommending findings to the Board Commissioners on financial operations, costs, revenues and operating expenses, prior to the litigation proceedings. Mr. Mugrace also examined alternative rate recovery mechanisms and clauses, phase-ins of revenue requirements, deferral mechanisms and pass-through of rate charges. Mr. Mugrace assumed the role of Director during transition periods and Administrative changes. Finally, Mr. Mugrace conducted the recruitment and hiring of employees for placement within the Division and the Board.

Professional and Business Affiliations

- Institute of Public Utilities (IPU) Michigan State University (MSU), National Association of Regulatory Utility Commissioners (NARUC), National Association of State Utility Consumer Advocates (NASUCA)

References

Christine Maloni Hoover, Esq.
Assistant Consumer Advocate
Office of Consumer Advocate
555 Walnut Street 5th Floor, Forum Place
Harrisburg, PA 17101-1923
(717) 783-5048
choover@paoca.org

Victor Schock, Director- Advocacy Staff
North Dakota Public Service Commission
State Capital Building
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480
(701) 328-2400
Vschock@nd.gov

Susan McClure, Esq.
Managing Attorney, Water
NJ Division of Rate Counsel
140 East Front Street, 4th Floor
Trenton, NJ 08625
(609) 984-1460
smcclure@rpa.nj.gov

Jeff Genzer, Esq., Partner
Duncan, Weinberg, Genzer & Pembroke, P.C.
1615 M. Street, N.W., Suite 800
Washington, D.C. 20036
(202) 467-6370
JCG@dwgp.com

PCMG and Associates LLC

Jeanne M. Fox, Esq.
Former NJ BPU President
(973) 271-0500
Jeannefox1@aol.com

Michael Kammer, Director, Water Division
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Trenton, NJ 08625
(609) 292-2422
Mike.Kammer@bpu.nj.gov

Connie Hughes
Former NJ BPU President/Commissioner
(609) 366-3421
Co.hughes47@gmail.com

Fred Butler, Butler Advisor Services
Former NJ BPU Commissioner
176 Grayson Drive
Belle Mead, NJ 08502
(908) 874-6312
Frederickbutler@comcast.net

Michael Schuler, Esq.
Office of the Ohio Consumer Counsel
10 West Broad Street, Suite 1800
Columbus, OH 43215-3485
(614) 466-9547
Michael.Schuler@occ.ohio.gov

Brian Weeks, Esq.
NJ Division of Rate Counsel
140 East Front Street, 4th Floor
Trenton, NJ 08625
(609) 984-1460
bweeks@rpa.nj.gov

PCMG and Associates LLC

Regulatory Projects and Appearances

1. In Re: Princeville Utilities Company, LLC., for an increase in rates for water and sewer services.
(Appearance: Accounting and Policy on behalf of the Hawaii Division of Consumer Advocate)
Hawaii Public Utilities Commission – Case No. 2025-0172
2. In Re: The York Water Company and the York Wastewater Company for an increase in rates for Water and Wastewater services.
(Appearance: Accounting and Policy Issues on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2025-3053442 (Water) and R-2025-3053573 (Wastewater)
3. In Re: Middlesex Water Company for the proposed merger among Middlesex Water Company, Pinelands Water Company and Pinelands Wastewater Company.
(Appearance: Accounting Issues on behalf of the NJ Division of Rate Counsel).
NJ Board of Public Utilities -BPU Docket No. WM25050284
4. In Re: New Jersey American Water Company for approval to purchase the Hopewell Township Water System under the Water Infrastructure Protection Act (WIPA)
(Appearance: Accounting and Policy Issues on behalf the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. WM25040191
5. In Re: Columbia Gas of Pennsylvania – Base Rate Proceeding for Gas Utility Service.
(Appearance: Accounting and Policy Issues on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2025-3053499
6. In Re: Northern States Power Company- Minnesota – North Dakota – Request to Change Electric Rates for Service.
(Appearance: Accounting and Policy Issues on behalf of the North Dakota Public Service Commission Advocacy Staff)
North Dakota Public Service Commission (Docket No. PU-24-376
7. In Re: New Jersey-American Water for Approval to Sell a Portion of Real Property located at 185 John F. Kennedy Parkway in the Township of Millburn, County of Essex.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. WM24090724
8. In Re: New Jersey-American Water for Approval of its Agreement with Shrewsbury Township, NJ for the Purchase and Sale of Water System; Determination that the Purchase Price is Reasonable; Determination that the Transaction costs are Reasonable and; or Such

PCMG and Associates LLC

other Approvals as may be Necessary to Complete the Transaction (In accordance with the Water Infrastructure Protection Act (WIPA).

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

NJ Board of Public Utilities – BPU Docket No. WR24100783

9. In Re: Veolia Water New Jersey for Approval of the Proposed Cost Recovery Mechanism Related to the Replacement of Customer/Property Owner Side Lead Service Lines and other Related Approvals.
(Appearance: Account Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR24100835
10. In Re: Young Brothers, LLC. For Approval of a General Rate Increase and Certain Tariff Changes.
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocate)
Hawaii Public Utilities Commission – Docket No. 2024-0255
11. In Re: Hawaii-American Water Company for Approval of Rate Increases and Revised Rate Schedules and Rules (2024 Filing).
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2024-0038.
12. In Re: South Jersey Gas Company to Revise the level of its Basic Gas Supply Service (BGSS) and Conservation Incentive Program for the year ending September 30, 2025.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. GR24060370.
13. In Re: Public Service Electric and Gas Company 2024/2025 Annual BGSS Commodity Charge filing for its Residential Gas Customers under its Periodic Pricing Mechanism for changes in its Balancing Charge.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. GR24050364.
14. In Re: New Jersey Natural Gas Company for the Annual Review and Revision of its Basic Gas Supply Service and Conservation Incentive Program for Fiscal Year 2025.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR24060372.
15. In Re: Public Service Electric and Gas Company for Approval of Changes in its Conservation Incentive Program Rate Filing for 2024.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel).

PCMG and Associates LLC

New Jersey Board of Public Utilities – BPU Docket No. GR24060369.

16. In Re: Atlantic City Electric Company for Implementation of an Adjustment to its Conservation Incentive Program Rate Mechanism and Associated Customer Class for 2024.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. ER24070548.
17. In Re: Rockland Electric Company – Annual Conservation Incentive Program reconciliation for the period July 1, 2023 to June 30, 2024.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. ER24070547.
18. In Re: Public Service Electric and Gas Company for approval of Changes in its Electric and Gas Green Programs Recovery Charges 2024 cost recovery filing.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. ER24070484 and GR24070490.
19. In Re: New Jersey American Water Company for approval to Sell a Portion of Real Property located at 185 John F. Kennedy Parkway in the Township of Millburn County of Essex.
(Appearance: Accounting / Consulting Issues on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. WM24090724.
20. In Re: Northern States Power Company for Approval of a 2024 Natural Gas Rate Increase.
(Appearance: Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff).
North Dakota Public Service Commission – Docket No. PU-23-367.
21. In Re: FirstEnergy Pennsylvania Electric Company for Approval of a General Base Rate Case increase for Electric Distribution rates for service.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2024-3047068
22. In Re: Duquesne Light Company for Approval of a General Base Rate Case to increase Electric Distribution rates for service.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No.- R-2024-3046523

PCMG and Associates LLC

23. In Re: Peoples Natural Gas Company, LLC for Approval of a General Base Rate Case increases in Natural Gas Service.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2023-3044549
24. In Re: Black Hills Energy Arkansas, Inc. (BHEA) and Summit Utilities Arkansas, Inc. (SUA) for a General Change, or Modification in its Rates, Charges and Tariffs
(Appearance: Incentive Compensation Proposals on behalf of the Attorney General Office)
Arkansas Public Service Commission – Docket No. (BHEA) - 23-074-U and Docket No. (SUA) - 23-079-U.
25. In Re: Montana Dakota Utilities Co. for Approval to increase Gas Rates for Natural Gas Service in North Dakota
(Appearance- Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff)
North Dakota Public Service Commission – Docket No. PU-23-341
26. In Re: Otter Tail Power Company for Approval to increase Electric Rates in North Dakota.
(Appearance: Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff)
North Dakota Public Service Commission – Docket No. PU-23-342
27. In Re: New Jersey-American Water Company for Approval to change the level of its Purchased Water and Purchased Wastewater Treatment Adjustment Clause for 2023.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR23110791
28. In Re: Verified Petition of Jersey Central Power & Light Company to establish a Rate for Rider Lost Revenue Adjustment Mechanism for Sales Losses incurred during Program Year 2 Pursuant to the Energy Efficiency and Peak Demand Reductions Programs (PY Rider LRAM Filing).
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23110865
29. In Re: Fitchburg Gas & Electric Company; The Berkshire Gas Company; Boston Gas Company d/b/a National Grid; Liberty Utilities; Eversource Gas of Massachusetts d/b/a Eversource Energy and; NSTAR Gas Company d/b/a Eversource Energy – 2023 Gas System Enhancement Program Plan Filings. (DPU GSEP-01; DPU GSEP-02; DPU GSEP-03; DPU GSEP-04; DPU GSEP-05; and DPU GSEP-06, respectively)
(Appearance: Accounting Issues on behalf of the Commonwealth of Massachusetts Office of the Attorney General)
MA Department of Public Utilities
30. In Re: Northern States Power Company – Advance Determination of Prudence – 345 kV Transmission Line – MN.

PCMG and Associates LLC

(Appearance: Accounting Issues and Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff.

North Dakota Public Service Commission – Docket No. PU-23-142.

31. In Re: Northern States Power Company – Advance Determination of Prudence- Brookings Second Circuit Project.

(Appearance: Accounting Issues and Revenue Requirement on behalf of the North Dakota Public Service Commission Advocacy Staff.

North Dakota Public Service Commission – Docket No. PU-23-295.

32. In Re: Northern States Power Company – Advance Determination of Prudence – 345 kV Big Stone to Sherburne.

(Appearance: Accounting Issues and Revenue Requirements on behalf of the North Dakota Public Service Commission Advocacy Staff.

North Dakota Public Service Commission – Docket No. PU-23-329.

33. In Re: Rockland Electric Company – Annual Conservation Incentive Program Filing – Reconciliation for the period July 1, 2022 – June 30, 2023.

(Appearance: Accounting Issues on behalf the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. ER23070471

34. In Re: Public Service Electric & Gas Company for Approval of Incremental COVID-19 Costs for Recovery through a New Special Purpose Clause and for Authorization to Recovery Uncollectible Costs for Gas Through the Societal Benefits Charge

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. ER23070448

35. In Re: Jersey Central Power & Light Company’s Verified Petition Seeking Review and Approval of the Net Deferred Costs Included in its COVID-19 Regulatory Asset and Establishment of a COVID-19 Recovery Charge (JCP&L CRC-Filing)

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. ER23070453.

36. In Re: Aqua New Jersey, Inc. Petition for 2024 PSTAC Rate and True-up for 2021 and 2022 PSTAC.

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. WR23080576

37. In Re: Public Service Electric & Gas Company for Approval of Changes in its Electric Tax Adjustment Credit and Gas Tax Adjustment Credit 2023 (2023 TAC Filing)

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. ER23090634 and GR23090635

38. In Re: New Jersey – American Water Company for Deferral Accounting Authority for the Costs of Implementing the Clean Energy Act of 2018 Benchmarking Requirements.

(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)

PCMG and Associates LLC

New Jersey Board of Public Utilities – Docket No. WF23060346

39. In Re: Public Service Electric & Gas Company – Annual BGSS (2023-2024) Commodity Charge Filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for Changes in its Balancing Charge Rate.
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR23060331
40. In Re: Public Service Electric & Gas Company – Electric and Gas Green Programs Recovery Charges 2023. (GPRC).
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23070423 and GR23070424
41. In Re: Public Service Electric & Gas Company – Electric Solar Pilot Recovery Charge (SPRC) for its Solar Loan I Program (2023).
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. ER23060412
42. In Re: Middlesex Water Company for approval of Proposed Cost Recovery of Lead Service Line Replacement Program
(Appearance: Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR23050291
43. In Re: Black Hills Wyoming Gas, LLC d/b/a Black Hills Energy for Approval of a General Rate Increase of \$19,262,412 to the Retail Gas Rates.
(Appearance: Revenue Requirement on behalf of the Wyoming Office of Consumer Advocate)
Wyoming Public Service Commission – Docket No. 30026-78-GR-23
44. In Re: Pittsburgh Water and Sewer Authority for an Increase in Rates for Water Service, Wastewater Service and Stormwater Service
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2023-3039920 (water), R-2023-3039921 (wastewater), and R-2023-3039919 (stormwater)
45. In Re: Massachusetts Electric and Nantucket Electric Companies d/b/a National Grid – Request for recovery of Incremental Storm related expenses associated with fourteen weather events between February 2020 and December 2020.
(Appearance: Storm Cost recovery (Operating and Maintenance Expenses) on behalf of the Massachusetts Office of Attorney General.
Massachusetts Department of Public Utilities – DPU No. 22-43.
46. In Re: Philadelphia Gas Works – for approval of an Increase in rates for Distribution Gas Service for 2023

PCMG and Associates LLC

(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)

Pennsylvania Public Utility Commission – Docket No. R-2023-3037933

47. In Re: Lanai Water Company, Inc. for Review and Approval of Rate Increases, Revised Rate Schedules and Charges to its Tariff.
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2022-0233
48. In Re: Hawaii Water Service Company, Inc., For Approval of a General Rate Increase for Its Pukalani Wastewater Division and Certain Tariff Changes
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2022-0186
49. In Re: UGI Utilities – Electric Division for Review of an Electric Base Rate Case proceeding for 2023.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3037368
50. In Re: Southern Maryland Electric Cooperative, Inc. (SMECO) for Authority to Revise its Rates and Charges for Electric Service and Certain Rate Design Changes.
(Appearance: Revenue Requirement on behalf of the Maryland Office of People’s Counsel)
Maryland Public Service Commission – Case No. 9688
51. In Re: Public Service Electric and Gas Company – 2022 Electric and Gas Tax Adjustment Credit (TAC)
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket Nos. ER22100667 and GR22100668
52. In Re: Public Service Electric and Gas Company – 2022 Green Program Recovery Charge.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket Nos. ER22070413 and GR22070414
53. In Re: Rockland Electric Company – Annual Conservation Incentive Program Filing – Reconciliation for the Period July 1, 2021 – June 30, 2022.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. ER22070469.
54. In Re: Atlantic City Electric Company for Implementation to its Conservation Incentive Program Rate Mechanism and Associated Customer Class Rate (2022)
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. ER22070463

PCMG and Associates LLC

55. In Re: Public Service Electric and Gas Company – 2022/2023 Annual BGSS Commodity Charge filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for changes to its Balancing Charge.
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
NJ Board of Public Utilities – BPU Docket No. GR22060363
56. In Re: Citizens' Electric Company of Lewisburg, PA – 2022 Base Rate Case Proceeding for an Increase in Electric Distribution Rates.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3032369
57. In Re: Valley Energy, Inc. – 2022 Base Rate Case for an Increase in Gas Distribution Rates.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3032300
58. In Re: Berkshire Gas Company – 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-02
59. In Re: Liberty Utilities (New England Natural Gas Company) 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-04
60. In Re: Eversource Gas Company (Eversource Energy) 2021 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office)
Massachusetts Department of Public Utilities – D.P.U. 22-GREC-05
61. In Re: South Jersey Gas Company – 2022 Base Rate Case Proceeding for an Increase in rates for Distribution Gas Service.
(Appearance: Revenue Requirement, CWC and Consolidated Income Taxes on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR22040253
62. In Re: Public Service Electric and Gas Company – 2022 Electric Conservation Incentive Program (CIP) for changes in its Electric CIP rate for 2022.

PCMG and Associates LLC

(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)

New Jersey Board of Public Utilities – Docket No. ER22020035

63. In Re: PECO Energy Company-Gas Division – 2022 Base Rate Case Proceeding for an Increase in rates for Distribution Gas Service.
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3031113.
64. In Re: Nova Scotia Power Company- 2022-2024 General Rate Application for an Increase in Rates for Electric Service
(Appearance- Review of COSS – Subcontract with Synapse Energy Economics, Inc. on behalf of the Nova Scotia Utility Review Board)
Nova Scotia Utility and Review Board – Docket No. M10431
65. In Re: Georgia Power Company – 2022 Base Rate Case petition for an Increase in rates for Electric Distribution Service
(Appearance: Review of O&M Expenses for calendar years 2023-2025 on behalf of the Georgia Public Service Commission – Docket No. TBD)
66. In Re: UGI Utilities Inc, Gas Division – 2022 Base Rate Case petition for an Increase in Distribution Gas Service Rates
(Appearance: Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2022-3030218
67. In Re: Hawaii-American Water Company – Approval of Rate Increases and Revised Rate Schedules for Wastewater Services – 2021
(Appearances: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Service Commission – Case No. 2021-0063
68. In Re: Kalaeloa Water Company – Approval of a General Rate Increase / Adjustments for Water and Wastewater Services – 2021
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Service Commission – Case No. 2021-0005
69. In Re: Northern States Power Company – 2021 Natural Gas Rate Increase Application
(Appearance: Revenue Requirements on behalf of the Advocacy Staff of the North Dakota Public Service Commission – Case No. PU-21-381)
70. In Re: Shore Water Company – Petition for an Increase in Rates for Water Service and Other Relief

PCMG and Associates LLC

(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)

New Jersey Board of Public Utilities – BPU Docket No. WR21091141

71. In Re: Atlantic City Sewerage Company – Petition for an Increase in Rates for Sewerage Service and other Tariff Changes
(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21071006
72. In Re: Gordon’s Corner Water Company – Petition for an Increase in Rates and Charges for Water Service
(Appearance: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21070979
73. In Re: The Petition of HPBS Inc., for review and approval of Central Scheduling System (CSS) charge increase and revised CSS Schedule (2021)
(Appearance – Accounting and Revenue Requirement on behalf of the Hawaii Division of Commerce and Consumer Affairs)
Hawaii DCCA – Docket No. PTP-2021-001
74. In Re: The Berkshire Gas Company, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance – Massachusetts Attorney General’s Office – Accounting and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-02
75. In Re: Eversource Gas Company of Massachusetts d/b/a Eversource Energy, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance – Massachusetts Attorney General’s Office – Account and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-05
76. In Re: NSTAR Gas Company d/b/a Eversource Energy, 2020 Gas System Enhancement Program Reconciliation Filing
(Appearance: Massachusetts Attorney General’s Office – Accounting and Revenue Requirement)
Massachusetts Department of Public Utilities – DPU Docket No. 21-GREC-06
77. In Re: Joint Petition of New Jersey Natural Gas Company and Public Service Electric and Gas Company for Authorization and Approval of a Waiver of Certain Accounting Treatment Pursuant to the Clean Energy Order
(Appearance – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. EO20030254

PCMG and Associates LLC

78. In Re: Public Service Electric and Gas Company – 2021/2022 Annual BGSS Commodity Charge Filing for its Residential Gas Customers under its Periodic Pricing Mechanism and for Changes in its Balance Charge.
(Appearance – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. GR21060878
79. In Re: Middlesex Water Company – Petition for Approval of an Increase in Rates for Water Service and Other Tariff Changes.
(Appearances – New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket No. WR21050813
80. In Re: New Jersey Natural Gas Company – Petition for an Increase in Gas Base Rates and Changes in its Tariff for Gas Service and for a Change to Depreciation Rates for Gas Property and for Approval of a Base Rate Adjustment Pursuant to the NJ RISE and SAFE II Programs.
(Appearances: New Jersey Division of Rate Counsel – Accounting and Revenue Requirement)
New Jersey Board of Public Utilities – BPU Docket Nos. GR21030679 and GR21030680.
81. In Re: PECO Energy Company – a division of Exelon Corp., for a General Base Rate Case Filing for Electric Operations
(Appearances: Accounting and Policy on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2021-3024601
82. In Re: The Pittsburgh Water and Sewer Authority for approval of increased rates and charges for Water, Wastewater and Stormwater services
(Appearance: Accounting and Policy, and Regulatory Policy on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2021-3024773 (Water) R-2021-3024774 (Wastewater) and R-2021-3024779 (Stormwater).
83. In Re: Northern States Power Company – 2021 Electric Base Rate Case Increase
(Appearance: Revenue Requirement on behalf of the Advocacy Staff of the North Dakota Public Service Commission)
North Dakota Public Service Commission – Case No. PUC-20-441
84. In Re: Public Service Electric and Gas Company – Approval of a Tax Adjustment Clause (TAC).
(Appearance; Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. ER20100685 and GR20100686.

PCMG and Associates LLC

85. In Re: Pike County Light and Power Company – Approval to increase base rates for Electric and Gas Service.
(Appearance: Revenue Requirement in behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2020-3022134 (Gas) and R-2020-3022135 (Electric)
86. In Re: Jersey Central Power and Light Company for Approval of JCP&L’s Energy Efficiency and Conservation Plan Including Energy Efficiency and Peak Demand Reduction Programs.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090620
87. In Re: Atlantic City Electric Company for Approval of an Energy Efficiency Program, Cost Recovery Mechanism, and Other Related Relief for Plan Years One Through Three.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090621
88. In Re: Rockland Electric Company for Approval of Its Energy Efficiency and Peak Demand Reduction Programs.
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. QO19010040 and EO20090623
89. In Re: Public Service Electric and Gas Company for Approval of Changes in its Electric Green Programs Recovery Charge and its Gas Green Programs Recovery Charge 2020 PSE&G Green Programs Cost Recovery filing
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. ER20060467 and GR20060468
90. In Re: Public Service Electric and Gas Company’s 2020/2021 Annual BGSS Commodity Charge filing for its Residential Gas Customers under its Pricing Mechanism and for Changes in its Balance Charge
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060379
91. In Re: Public Service Electric and Gas Company’s 2020 Annual Margin Adjustment Clause (MAC)
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060384
92. In Re: South Jersey Gas Company for Approval to Revise the Rider H Rate Associated with the Tax Cuts and Jobs Act of 2017
(Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR20060382

PCMG and Associates LLC

93. In Re: Berkshire Gas Company -2019 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts -Department of Public Utilities – DPU 20-GREC-02
94. In Re: Bay States Gas Company d/b/a Columbia Gas – 2019 Gas System Enhancement Program Reconciliation Filing.
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts – Department of Public Utilities – DPU 20-GREC-05
95. In Re: NSTAR Gas Company – 2019 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts – Department of Public Utilities – DPU 20-GREC-06
96. In Re: South Jersey Gas Company for Approval of Increased Base Tariff Rates and Charges for Gas Service, Changes to Depreciation Rates and Other Tariff Revisions.
(Appearances: Revenue Requirement and Cash Working Capital) on behalf of the New Jersey Division of Rate Counsel.
New Jersey Board of Public Utilities – Docket No. GR20030243
97. In Re: Jersey Central Power & Light Company for Review and Approval of Increased in, and Other Adjustments to Rates and Charges for Electric Services and approval of Other Proposed Tariff Revisions (Appearance: Revenue Requirement, Cash Working Capital, Consolidated Income Taxes, LED Conversion and Reliability Roll-In) on behalf of the New Jersey Division of Rate Counsel.
New Jersey Board of Public Utilities – Docket No. ER20020146
98. In Re: The Pittsburgh Water and Sewer Authority for approval of increased rates and charges for water and wastewater service and for approval of a multi-year rate plan.
(Appearance: Accounting and Policy, Customer Service and Regulatory Policy) on behalf of the Pennsylvania Office of the Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2020-3017951 and R-2020-3017970.
99. In Re: New Jersey-American Water Company, Inc. for approval of Increased Base Tariff Rates and Charges for Water and Wastewater Services and Other Tariff Revisions.
(Appearance: Accounting and Revenue Requirement and Cash Working Capital / Consolidated Income Taxes) on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19121516

PCMG and Associates LLC

100. In Re: Hawaiian Electric Company, Inc., for approval of a General Rate Increase and Revised Rate Schedules and Rules.
(Appearance: Accounting and Revenue Requirement on behalf of the Hawaiian Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2019-0085
101. In Re: Mount Olive Villages Water Company for approval of an Increase in Rates for Water Service and Other Tariff Changes.
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19060770
102. In Re: Mount Olive Villages Sewer Company for approval of an Increase in Rates for Sewer Service and Other Tariff Changes.
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. WR19060769
103. In Re: Public Service Electric and Gas Company for approval of changes in its Electric Green Programs Recovery and its Gas Green Programs Recovery Charge (2019 PSE&G Green Programs Cost Recovery Filing).
(Appearance: Accounting and Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket Nos. ER19070764 and GR19070765
104. In Re: Proposed Amendment to N.J.A.C. 14:9- Adoption by reference to the Uniform System of Accounts for Water Utilities and Wastewater Utilities.
(Appearance: Consulting Services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities- Docket Nos. WX19050612 (Water) and WX19050613 (Wastewater)
105. In Re: Public Service Electric and Gas Company's 2019/2020 Annual BGSS Commodity Charge filing for its Residential Gas Customers Under its Periodic Pricing Mechanism and for Changes in its Balancing Charge.
(Appearance: Revenue Requirement and accounting/consulting services on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR190600699
106. In Re: Bay States Gas Company d/b/a Columbia Gas of Massachusetts for Approval of a 2018 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts Department of Public Utilities – Docket No. 19-GREC-05

PCMG and Associates LLC

107. In Re: NSTAR Gas Company d/b/a Eversource Energy for Approval of a 2018 Gas System Enhancement Program Reconciliation Filing
(Appearance: Revenue Requirement on behalf of the Massachusetts Office of the Attorney General)
Commonwealth of Massachusetts Department of Public Utilities – Docket No. 19-GREC-06
108. In Re: Public Service Electric and Gas Company for Approval of Gas Rate Base Adjustments Pursuant to its Gas System Modernization Program (April 2019 GSMP)
(Appearance: Revenue Requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR19040522
109. In Re: Kalaeloa Water Company, LLC for Approval of General Rate Case and Revised Rules, Regulations and Rates.
(Appearance: Revenue Requirement on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission – Docket No. 2019-0057
110. In Re: Elizabethtown Gas Company for Approval of an Increase in Rates and Charges for Gas Service, Changes to Depreciation Rates and Other Tariff Revisions.
(Appearance: Revenue Requirement and Other Accounting Issues on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – Docket No. GR19040586
111. In Re: Petition of Peoples Natural Gas Company for Approval of an Increase in Rates for Natural Gas Distribution Service.
(Appearance: Revenue Requirement and Other Accounting Issues on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2018-3006818
112. In Re: Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Water Service and other Tariff Changes.
(Appearance: Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR18121351
113. In Re: Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future – Energy Efficiency (CEF-EE) Program on a Regulated Basis.
(Appearance: Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket Nos. GO18101112 and EO18101113.

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114. In Re: Petition of Public Service Electric and Gas Company for Approval of its Clean Energy Future – Energy Vehicle and Energy Storage (CEF-EVES) Program on a Regulated Basis. (Appearance – Revenue Requirement and other Accounting Issues on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. EO18101111.
115. In Re: Petition of New Jersey Natural Gas Company- Request for Deferred Accounting Authority for Costs Related to New Information Technology Systems. (Appearance: Impact on Revenues, prudence of costs on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR18101096
116. In Re: Petition for Approval of An Indirect Change in Control of the New Jersey Public Utilities Subsidiaries of SUEZ Water Resources, Inc. and Other Related Approvals. (Appearance: Impact on Rates, Service, Employees, Positive Benefits on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WM18090982
117. In Re: The Matter of the Merger of Roxbury Water Company into New Jersey American Water Company (Appearance: Impact on Rates, Service and Employees, Positive Benefits on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WM18080904
118. In Re: The Matter of the Application of Maryland-American Water Company for Authorization to Adjust its Existing Schedule of Tariffs and Rates. (Appearance: Revenue Requirement on behalf of the Maryland Office of People’s Counsel) Maryland Public Service Commission – Case No. 9487
119. In Re: The Matter of the Joint Petition for Approval of an Increase in Rates for Water and Wastewater Service and Other Tariff Changes for SUEZ Water NJ, Inc., Toms River, Inc., Arlington Hill, Inc., West Milford, Inc., Matchaponix, Inc., and Princeton Meadows, Inc. (Appearance: Revenue Requirement and the development of Consolidated Income Taxes on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR18050593
120. In Re: The Matter of the Application of Atlantic City Electric Company to Adjust the Level of its Rider RGGI Rate Associated with its Solar Renewable Energy Certificate Financing Program 2018 (Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. ER18050543
121. In Re: The Matter of the Petition of New Jersey Natural Gas Company’s Approval of the Cost Recovery Associated with Energy Efficiency Programs (Appearance; Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GR18050585

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122. In Re: The Matter of Bay States Gas Company d/b/a Columbia Gas of Massachusetts, 2017 Gas System Enhancement Reconciliation Filing (Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy)
Commonwealth of Massachusetts – Department of Public Utilities – Docket No. D.P.U. 18-GREC-05.
123. In Re; The Matter of NSTAR Gas Company d/b/a Eversource Energy, Gas System Enhancement Program Reconciliation Filing (Appearance: Revenue Requirement on behalf of the Massachusetts Attorney General's Office of Ratepayer Advocacy)
Commonwealth of Massachusetts – Department of Public Utilities – Docket No. D.P.U. 18-GREC-06.
124. In Re: The Matter of the Merger of SUEZ Water NJ, SUEZ Water Toms River, SUEZ Water Arlington Hills, SUEZ Water West Milford, SUEZ Water Princeton Meadows and SUEZ Water Matchaponix (Appearance: Positive Benefits related to the Merger on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. WR18030266
125. In Re: The Matter of the Columbia Gas of Pennsylvania for a General Rate Increase in Distribution Gas Service (Appearance; Accounting Issues and Revenue Requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket No. R-2018-2647577
126. In Re: The Matter of the New Jersey Board of Public Utilities Consideration of the Tax Cuts and Jobs Act of 2017 – Generic Proceeding (Appearance: Revenue Requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. AX18010001
127. In Re: Acquisition of Elizabethtown Gas, a Division of Pivotal Utilities Holdings, Inc. by ETG Acquisition Corp., a Division of South Jersey Industries, Inc., and Related Transactions. (Appearance: Customer Service Issues/Employee and Labor Relations on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – BPU Docket No. GM17121309.
128. In Re: Middlesex Water Company – Base Rate Case Proceeding for Water Service. (Appearance: revenue requirement on behalf of the NJ Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. WR17101049.
129. In Re: Township of East Brunswick – Sewer Rate Study – (Evaluation of the existing sewer rate structure and examining and quantify costs for future expansion).
130. In Re: Montana-Dakota Utilities – Base Rate Case Proceeding for Gas Service. (Appearance: revenue requirement on behalf of the North Dakota Public Service Commission). NDPSC Docket No. PU-17-295.

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131. In Re: Andover Utility Company – Base Rate Case Proceeding for Wastewater Services.
(Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket No. WR17070726.
132. In Re: Public Service Electric and Gas Company- Approval of Changes in its Electric and Gas Green Programs Recovery Charges “2017 Public Service Electric & Gas Green Programs Cost Recovery Filing. (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel).
New Jersey Board of Public Utilities – BPU Docket Nos. ER17070724 and GR17070725.
133. In Re: Bay States Gas Company d/b/a Columbia Gas of Massachusetts, 2016 Gas System Enhancement Program Reconciliation Filing, (Appearance: revenue requirement on behalf of the Massachusetts Attorney General’s Office of Ratepayer Advocacy).
Commonwealth of Massachusetts Department of Public Utilities – Docket No. D.P.U. 17-GREC-05.
134. In Re: NSTAR Gas Company d/b/a Eversource Energy, 2016 Gas System Enhancement Program Reconciliation Filing (Appearance: revenue requirement on behalf of the Massachusetts Attorney General’s Office of Ratepayer Advocacy).
Commonwealth of Massachusetts Department of Public Utilities – Docket No. D.P.U. 17-GREC-06.
135. In Re: Petition of Columbia Gas of Maryland – Increase in rates for Distribution Service – (Appearance: revenue requirement on behalf of the Office of People’s Counsel) Public Service Commission of Maryland – Case No. 9447
136. In Re: Petition of South Jersey Gas Company – Increase in base rates for gas services – (Appearance: revenue requirement on behalf of the NJ Division of Rate Counsel)
New Jersey Board of Public Utilities – Docket No. GR17010071
137. In Re: Petition of UGI Penn Natural Gas – Increase in base rates for gas services – (Appearance: revenue requirement on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utilities Commission Docket No. R-2016-2580030
138. In Re: Petition of PJM Interconnection, LLC. – Mid-Atlantic Interstate Transmission, LLC. Formula Rate Filing. (Appearance on behalf of the Pennsylvania Office of Consumer Advocate).
FERC Docket No. ER17-211-000
139. In Re: Petition of Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Company for approval of Increased Base Tariff Rates and Charges for Gas Service and Other Tariff Revisions (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR16090826

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140. In Re: Petition of SUEZ Water New Jersey, et al – Approval of a Management and Services Agreement pursuant to N.J.S.A 48: 3-7.1 (Appearance on the reasonableness of contract agreements on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WO16080806
141. In Re: Petition of SUEZ Water Arlington Hills Inc. – Approval of an Increase in Rates for Wastewater Services and other Tariff Changes (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050510
142. In Re: Petition of Public Service Electric and Gas Company – 2016 Marginal Adjustment Clause (MAC) (Appearance; reconciliation and rate setting on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR16060484
143. In Re: Petition of Public Service Electric and Gas Company for Approval of Changes in its Electric Green Programs Recovery Charges and its Gas Green Program Recovery Charges 2016 PSEG Program Cost Recovery Filing
(Appearance: reconciliation and rate setting on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket Nos. ER16070613 and GR16070614
144. In Re: Petition of the Mount Olive Village Sewer Company, Inc., for Approval of an Increase in Rates for Service (Appearance: revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050391
145. In Re: Petition of the Mount Olive Village Water Company, Inc. for Approval of an Increase in Rates for Service (Appearance; revenue requirement on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16050390
146. In Re: Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for Approval of its 2015 Gas System Enhancement Plan Reconciliation Filing (2016) - (Analysis and Advice to Counsel: computation of the revenue requirement and rate impact on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA Department of Public Utilities Docket No. D.P.U. 16-GREC-01
147. In Re: Petition of Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of its 2015 Gas System Enhancement Plan Reconciliation Filing (2016) - (Appearance: computation of the revenue requirement and rate impact on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA Department of Public Utilities Docket No. D.P.U. 16-GREC-05

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148. In Re: Petition for Approval of Gas Infrastructure Contract Between Public Service Company of New Hampshire d/b/a Eversource Energy and Algonquin Gas Transmission, LLC (2016) - (Analysis and Advice to Counsel: compliance with statutes and regulations, review of contract, and ratemaking on behalf of the New Hampshire Office of Consumer Advocate)
NH Public Utilities Commission Docket No. DE 16-241
149. In Re: Central Maine Power Company, Annual Compliance Filing and Price Change (2016) - (Analysis and Advice to Counsel; tax normalization regulatory asset on behalf of the Maine Office of the Public Advocate)
ME Public Service Commission Docket No. 2016-00035
150. In Re: Bulletin 2015-10 Generic Proceeding to Establish Parameters for the Next Generation PBR Plans (Appearance: productivity adjustments/performance-based ratemaking on behalf of the Alberta Utilities Consumer Advocate)
Alberta Utilities Commission Proceeding 20414
151. In Re: The Matter of Request by Emera Maine for Approval of a Rate Change (2016) - (Appearance: revenue requirement on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 15-00360)
152. In Re: the Matter of the Joint Application of the Southern Company, AGL Resources Inc., and Pivotal Holdings, Inc. d/b/a Elkton Gas (2015-2016) - (Analysis and advice to counsel: customer service impacts, employee impacts, supplier diversity on behalf of the Maryland Office of People's Counsel)
MD PSC Case No. 9404
153. In Re: The Matter of the Merger of Southern Company and AGL Inc. (2015-2016) - (Appearance: customer service impacts and employee impacts on behalf of the NJ Division of Rate Counsel)
New Jersey BPU Docket No. GM15101196
154. In Re: The Matter of the United Water New Jersey, Inc., for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2015-2016) - (Appearance: revenue requirements, rate base issues and operating income on behalf of the NJ Division of Rate Counsel)
New Jersey BPU Docket No. WR15101177
155. In Re: Petition of Boston Gas Company and Colonial Gas Company d/b/a National Grid for Approval of Precedent Agreements with Millennium Pipeline Company, LLC (2015) - (Analysis: review of contract and compliance of the Gas Supply Plan on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA D.P.U. 15-130

PCMG and Associates LLC

156. In Re: Petition of Boston Gas Company and Colonial Gas Company d/b/a National Grid for Approval of Agreements for LNG or Liquefaction Services with GDF Suez Gas NA, LLC; Northeast Energy Center, LLC; Metro LNG, L.P.; and National Grid LNG (2015) - (Analysis: review of contract and compliance of the Gas Supply Plan on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA D.P.U. 15-129
157. In Re: Columbia Gas of Massachusetts CY2014 Targeted Infrastructure Reinvestment Factor (TIRF) Compliance Filing (2015) - (Appearance: computation of the revenue requirement impact on the TIRF on behalf of the Massachusetts Attorney General Office of Ratepayer Advocacy)
MA D.P.U. 15-55
158. In Re: The Matter of the Bay State Gas Company d/b/a Columbia Gas of Massachusetts for Approval of its Targeted Infrastructure Reinvestment Factor (TIRF) for CY 2013 (2014) - (Appearance: computation of the revenue requirement impact on the TIRF)
MA D.P.U. 14-83
159. In Re: The Matter of the Merger of Exelon Corporation and Pepco Holdings, Inc. (Atlantic City Electric Company) (2014-2015) - (Appearance: customer service impacts)
New Jersey BPU Docket No. EM14060581
142. In Re: Public Utilities Commission of Ohio – In the Matter of the Application of Ohio Power Company (American Electric Power Ohio) (AEP Ohio) to Adopt a Final Implementation Plan for the Retail Stability Rider – (Appearance - Accounting Issues) (2014) on behalf of the Ohio Office of Consumer Counsel (OCC)
PUCO Case No. 14-1186-EL-RDR
143. In Re: Public Utilities Commission of Ohio - In the Matter of the Application of Aqua Ohio, Inc. to Increase its Rates and Charges for its Waterworks Service. – Revenue and Rates (2014) - (Appearance: operating income, certain rate base issues and income taxes on behalf of the Ohio Office of Consumer Counsel)
PUCO Case No. 13-2124-WW-AIR
144. In Re: New York Public Service Commission, as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. Revenue Requirement (2013-2014) – (Appearance: revenue requirement, rate base issues and operating income on behalf of the Intervenor, the County of Westchester)
NYPSC Case Nos. 13-E-0030, 13-G-0031 and 13-S-0032, et al
145. In Re: North Dakota Public Service Commission, - Application of Northern States Power Company for Authority to Increase Rates for Electric Service in North Dakota, On-Going Revenue Requirement (2013) - (Appearance: revenue requirement and rate base, operating income, operating and maintenance expenses on behalf of the North Dakota Public Service Commission Staff)
North Dakota Case No. PU-12-813

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146. In the Matter of the Petition of New Jersey American Water Company for Authorization to Implement a Distribution System Improvement Charge (DSIC) Order Denying Petition and Instituting Stakeholder Process (2008) - (Case manager on policy decision and revenue requirement impact on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WO08050358
147. In the Matter of the Joint Petition of the City of Trenton, New Jersey and New Jersey-American Water Company, Inc. for Authorization of the Purchase and Sale of the Assets of the Outside Water Utility System ("OWUS") of the City of Trenton, New Jersey and for Other Relief Order Adopting Initial Decision, (2008) - (Case manager on the revenue requirement impact on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WM08010063
148. In the Matter of the Petition of United Water New Jersey, United Water Toms River, United Water Lambertville, United Water Mid-Atlantic and Gaz de France for Approval as Need for a Change in Ownership and Control (2007) - (Case manager on customer impact, employee impact and impact on rates on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WM06110767
149. In the Matter of the Petition of United Water Arlington Hills Sewerage, Inc. for an Increase in Rates for Wastewater Service and Other Tariff Changes (2009) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR08100929
150. In the Matter of the Petition of United Water New Jersey Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes, (2009) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR08090710
151. In the Matter of the Petition of United Water Toms River, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2008) - (Case manager on the revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR08030139
152. In the Matter of the Joint Petitioners of New Jersey-American Water Company, Inc., S.J. Services, Inc., South Jersey Water Company, Inc. and Pennsgrove Water Supply Company, Inc. for Among Other Things Approval of a Change in Control of South Jersey Water Supply Company, Inc. and Pennsgrove Water Supply Company, Inc. (2007) - (Case manager on the overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WM07020076

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153. In the Matter of the Petition of Aqua, New Jersey, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2008) - (Case manager on revenue requirement and the overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR0712095
154. I/M/O the Joint Petition of Thames Water, Aqua Holdings GMBH, on Behalf of Itself and Its Parent Holdings Company, RWE Aktiengesellschaft, Thames Water Aqua US Holdings, Inc., American Water works Company Inc., Thames Water Holdings Incorporated, E 'town Corporation, New Jersey-American Water Company, Inc., Elizabethtown Water Company, the Mount Holly Water Company and Applied Wastewater Management, Inc. for Confirmation that the Board of Public Utilities Does Not Have Jurisdiction Over, or, Alternatively, for Approval of a Proposed Transaction Involving, Among Other Things, the Sale by Thames Water Aqua Holdings GMBH of Up to 100% of the Shares of the Common Stock of American Waterworks Company, Inc. in One or More Public Offerings (2007) - (Case manager on revenue requirement impacts, effect on rates and effect on service on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WM06050388
155. In the Matter of the Petition of Elizabethtown Water Company for Approval of an Increase in Rates for Water Service (2007) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR03070510
156. In the Matter of the Petition of New Jersey American Water Company, Inc. for Approval of Increased Tariff Rates and Charges for Water and Sewer Service; Increased Depreciation Rates and Other Tariff Revisions (2008) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR08010020
157. In the Matter of Middlesex Water Company for Approval of an Increase in its Rates for Water Service and Other Tariff Changes (2007) - (Case manager on overall revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR07040275
158. In the Matter of the Joint Petition of United Water New Jersey, Inc., United Water Arlington Hills, Inc., United Water Hampton, Inc., United Water Vernon Water Hills, Inc., and United Water Lambertville, Inc. for an Increase in Rates and Charges for Water Service and Other Tariff Changes and for Approval to Merge the Operations of the Joint Petitioners into and with United Water New Jersey, Inc. (2007) - (Case manager on revenue requirement and overall rate proceeding on behalf of the Staff of the NJ Board of Public Utilities)
BPU Docket No. WR07020135

SUMMARY REVENUE REQUIREMENT

		(1) Rev Req Increase		OCA		References
		PSWA 2025 Present Rates	Adjustments	PSWA FPFTY 2026	Adjustments	
					Recommended FPFTY - 2026	
1	Total System Revenues	\$ 248,221,796	\$ 65,522,314	\$ 313,744,110	\$ 18,498,565	\$ 266,720,361
2	Total Direct Operating Expenses	\$ 133,489,949	\$ 16,223,217	\$ 149,713,166	\$ (18,690,840)	\$ 131,022,326
3	Other Operating Expenses	\$ 2,036,793	\$ 346,254	\$ 2,383,047	\$ -	\$ 2,383,047
4	Total	\$ 135,526,742	\$ 16,569,471	\$ 152,096,213	\$ (18,690,840)	\$ 133,405,373
5	Total Debt Service	\$ 93,675,175	\$ 17,350,764	\$ 111,025,939	\$ (1,792,071)	\$ 109,233,868
6	Total CapEx & Transfers	\$ 15,408,988	\$ 35,150,919	\$ 50,559,907	\$ (9,594,832)	\$ 40,965,075
7	Total System Wide Rev. Requirement	\$ 244,610,905	\$ 52,501,683	\$ 313,682,059	\$ (30,077,742)	\$ 283,604,317
8	Surplus (Deficit)	\$ 3,610,891		\$ 62,051		\$ (16,883,956)
	Required Debt Service	\$ 113,831,870		\$ 157,506,471		\$ 131,080,642
9	DSC - Senior Debt	1.572		1.8546		1.5686
10	DSC - Total Debt	1.215		1.4186		1.2000
11	Total Proposed Revenue Requirement		\$ 65,522,314		\$ 18,498,565	
12	Overall % Increase		26.397%		7.452%	

(1) PWSA Exhibit EB-2

**PWSA
2025**

Acct. No.	tab		Present Rates	Adjustments	FPFTY 2026	Adjustments	Recommended	References	
1		System Revenues						Ratio to Total	
2		Water Sales	\$ 148,287,512	\$ 35,169,926	\$ 183,457,438	\$ 11,051,028	\$ 159,338,540	59.740%	
3		Wastewater Sales	\$ 54,402,195	\$ 12,202,666	\$ 66,604,861	\$ 4,054,287	\$ 58,456,482	21.917%	
4		Stormwater Sales	\$ 28,336,323	\$ 6,422,226	\$ 34,758,549	\$ 2,111,746	\$ 30,448,069	11.416%	
5		Sale for Resale / Contract Sales	\$ 4,526,103	\$ 1,170,927	\$ 5,697,030	\$ 337,305	\$ 4,863,408	1.823%	
6		DSIC Water Revenues	\$ 7,408,364	\$ 6,494,815	\$ 13,903,179	\$ 552,103	\$ 7,960,467	2.985%	
7		DSIC Wastewater Revenues	\$ 2,720,110	\$ 2,275,255	\$ 4,995,365	\$ 202,714	\$ 2,922,824	1.096%	
8		Other Revenues	\$ 2,541,190	\$ 1,786,497	\$ 4,327,687	\$ 189,380	\$ 2,730,570	1.024%	
9		Penalties & Interest	\$ -	\$ -	\$ -	\$ -	\$ -	0.000%	
10		Total System Revenues	\$ 248,221,797	\$ 65,522,312	\$ 313,744,109	\$ 18,498,564	\$ 266,720,361	100.000%	1.20
11		DSIC Water ratio	2.98%	26.40%	4.43%	7.45%		FR II.1	
12		DSIC Wastewater ratio	1.10%		1.59%				
13		System Revenue Requirements					1.5686		
14		<u>Operating Expenses:</u>					DSC		
15		Direct Operating Expenses							
16		Administrative Division							
17	100	Executive Director	\$ 3,064,525	\$ 516,306	\$ 3,580,831	\$ (580,892)	\$ 2,999,939		
18	101	Customer Service	\$ 10,577,193	\$ 1,232,073	\$ 11,809,266	\$ (446,373)	\$ 11,362,893		
19	102	Technology Services	\$ 6,954,251	\$ 2,395,862	\$ 9,350,113	\$ (1,674,245)	\$ 7,675,868		
20	103	Finance	\$ 11,687,452	\$ 4,462,440	\$ 16,149,892	\$ (1,995,678)	\$ 14,154,214		
21		Procurement	\$ -	\$ -	\$ -				
22	104	Human Resources	\$ 2,171,267	\$ 636,543	\$ 2,807,810	\$ (552,534)	\$ 2,255,276		
23	105	Legal	\$ 4,294,802	\$ 336,874	\$ 4,631,676	\$ (915,693)	\$ 3,715,983		
24	106	Safety & Security	\$ 2,292,742	\$ 402,063	\$ 2,694,805	\$ (224,402)	\$ 2,470,403		
25	108	Public Affairs	\$ 1,907,291	\$ (17,986)	\$ 1,889,305	\$ (55,612)	\$ 1,833,693		
26		<u>Operations Division:</u>							
27	110	Env. Compliance	\$ 5,064,527	\$ (530,816)	\$ 4,533,711	\$ (416,358)	\$ 4,117,353		
28	107	Warehouse	\$ 563,331	\$ 30,504	\$ 593,835	\$ (36,234)	\$ 557,601		
29		Ops. Capital Assets	\$ -	\$ -	\$ -				
30	200	Laboratory	\$ 2,065,384	\$ 386,190	\$ 2,451,574	\$ (225,168)	\$ 2,226,406		
31	201	Water Treatment Plant	\$ 23,517,836	\$ 633,148	\$ 24,150,984	\$ (528,393)	\$ 23,622,591		
32	300	Sewer Operations	\$ 4,209,934	\$ 1,337,410	\$ 5,547,344	\$ (982,047)	\$ 4,565,297		
33	202	Water Operations	\$ 17,847,846	\$ 1,548,383	\$ 19,396,229	\$ (1,446,465)	\$ 17,949,764		
34	109	Eng. & Construction	\$ 37,271,567	\$ 2,854,223	\$ 40,125,790	\$ (8,456,005)	\$ 31,669,785		
35		Other				\$ -	\$ -	OCA Set 9-14	
36						\$ -	\$ -		
37		Other Adjustments (econ. Develop. bus. Develop, dues, advertising contributions, lobbying, publications)				\$ (154,740)	\$ (154,740)	OCA Set 9-16/24	
38		Total Direct Operating Expenses	\$ 133,489,948	\$ 16,223,217	\$ 149,713,165	\$ (18,690,839)	\$ 131,022,326		
39				12.15%					
40		Other Operating Expenses							
41		Loss/(Gain) on ALCOSAN Billings	\$ 2,036,793	\$ 346,254	\$ 2,383,047	\$ -	\$ 2,383,047		
42		City Services	\$ -	\$ -	\$ -	\$ -	\$ -		
43		Non-City Water Payments	\$ -	\$ -	\$ -	\$ -	\$ -		
44		Total Other Operating Expenses	\$ 2,036,793	\$ 346,254	\$ 2,383,047	\$ -	\$ 2,383,047		

		WIFIA Loans	\$	-	\$	-	\$	-	\$	-
		SRF Loans	\$	11,924	\$	420,460	\$	432,384	\$	432,384
		Proposed Debt	\$	2,011,924	\$	12,662,263	\$	14,674,187	\$	12,882,116
35		Total Debt Service	\$	95,675,175	\$	15,350,764	\$	111,025,939	\$	(1,792,071)
										16.04%
		CAPEX & Transfers								
		Debt Coverage Capital - Existing Senior	\$	-	\$	18,421,471	\$	-	\$	18,421,471
		Debt Coverage Capital - Existing Total	\$	-	\$	-				
		Debt Coverage Capital - Future Senior	\$	-	\$	2,810,451	\$	-	\$	2,510,451
		Debt Coverage Capital - Future Total	\$	-						
35		Internally Generated Funds-PAYGO	\$	-	\$	-	\$	-	\$	-
36	7.50%	Internally Generated Funds-PAYGO/DSIC	\$	10,071,004	\$	8,827,540	\$	18,898,544	\$	(8,008,790)
37		Other Transfers to Reserve	\$	-	\$	3,000,000	\$	3,000,000	\$	-
38		Bad Debt Expense	\$	4,823,090	\$	1,375,920	\$	6,199,010	\$	(1,005,949)
39		Water/Wastewater Leak Credits	\$	-	\$	-	\$	662,322	\$	-
40		Hardship Grant Funding	\$	-	\$	-	\$	-	\$	-
41		Arrearage Forgiveness Funding	\$	280,094	\$	-	\$	280,094	\$	(280,094)
42		Stormwater Credit Program Cost	\$	234,800	\$	53,216	\$	288,016	\$	-
43		Total CAPEX & Transfers	\$	15,408,988	\$	35,150,920	\$	50,559,908	\$	(9,594,833)
										228.12%
44		Total Systemwide Revenue Requirement	\$	244,610,904	\$	69,071,155	\$	313,682,059	\$	(30,077,742)
45		System Revenue/Surplus/(Deficit)	\$	3,610,893	\$	(3,548,843)	\$	62,050	\$	-
					\$	65,522,312				

(1) PWSA Exhibit EB-1 and 2

CHIEF EXECUTIVE OFFICER		(1)			References
100		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	
	Disallowance of Bonus \$43,784				OCA Set 9-14
	Salary - Vacancy Rate ratio of 6.41%	\$ 1,146,457	\$ (114,465)	\$ 1,031,992	OCA Set 9-10
	Benefits	\$ 278,120	\$ (17,827)	\$ 260,293	OCA Set 9-13
	Operating Expenses	\$ 30,000	\$ (18,720)	\$ 11,280	
	Inventory	\$ 80	\$ -	\$ 80	
	General & Administrative	\$ 2,126,175	\$ (429,880)	\$ 1,696,295	
		\$ 3,580,832	\$ (580,893)	\$ 2,999,939	
7323	Consultants - Rebranding	\$ 209,000	\$ (50,000)	\$ 159,000	I&E RE-14
7370	Legal	\$ 88,200			
7305	Advertising	\$ -			
			\$ (50,000)		
7383	Misc. Professional Services	\$ 1,751,000	\$ (365,235)	\$ 1,385,765	-20.86%
7560	Travel & Training	\$ 10,500	\$ 8,014	\$ 18,514	76.32%
7575	Travel & Training Misc	\$ 43,000	\$ (22,659)	\$ 20,341	-52.70%
			\$ (379,880)		
			\$ (429,880)		

(1) PWSA COS Model 2025 Tab 100

CUSTOMER SERVICE		(1)			References
101		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	
Salary - Vacancy Rate Ratio of 6.41%	\$	5,841,602	\$ (374,447)	\$ 5,467,155	OCA-Set 9-10
Benefits	\$	1,976,503	\$ (126,694)	\$ 1,849,809	
Operating Expenses	\$	52,458	\$ -	\$ 52,458	
Inventory	\$	-	\$ -	\$ -	
General & Administrative	\$	3,938,704	\$ (95,233)	\$ 3,843,471	
		\$ 11,809,267	\$ (596,374)	\$ 11,212,893	
Credit Card Fees Expense				\$ -	Set 17
Expansion of Bill Discount				\$ -	
Water Conservation Program			\$ 150,000	\$ 150,000	Colton
Total				\$ 150,000	
7383 Misc. Professional Services	\$	212,668	\$ (66,604)	\$ 146,064	-31.32%
7390 Water Liens	\$	105,000	\$ (28,629)	\$ 76,371	-27.27%
7375 Meter Services					
7215 Equipment Rental	\$	1,700			OCA Set 9-22
			\$ (95,233)		

(1) PWSA COS Model 2025 Tab 101

TECHNOLOGY SERVICES					
102		(1)			
		PWSA	OCA		
		FPFTY 2026	Adjustments	Recommended	References
Salary - Vacancy Rate Ratio of 6.41%		\$ 2,404,787	\$ (154,147)	\$ 2,250,640	OCASet 9-10
Benefits		\$ 667,767	\$ (42,804)	\$ 624,963	
Operating Expenses		\$ 3,891,486	\$ (696,801)	\$ 3,194,685	
Inventory		\$ -	\$ -	\$ -	
General & Administrative		\$ 2,386,073	\$ (780,493)	\$ 1,605,580	
		\$ 9,350,113	\$ (1,674,245)	\$ 7,675,868	
5120	Computer & Peripherals	\$ 721,500	\$ (283,660)	\$ 437,840	-39.32%
5408	Computer Hardware	\$ 30,528	\$ (11,881)	\$ 18,647	-38.92%
5411	Computer Software Support	\$ 100,000	\$ 21,834	\$ 121,834	21.83%
5405	Building /Property Repair	\$ 3,224	\$ 2,442	\$ 5,666	75.74%
5452	Machinery/Equip. Repairs	\$ 48,000	\$ (11,767)	\$ 36,233	-24.51%
5408	Wilson Group Lease - Computer Hardware	\$ 30,528			
5402	Annual Software Support	\$ 2,718,734	\$ (413,769)	\$ 2,304,965	-15.22%
		\$	(696,801)		
7323	Consultants - OCA Set 9-40 IE-RE-26/45	\$ 1,333,000	\$ (666,500)	\$ 666,500	2 year normalize
7383	Misc. Professional Service	\$ 497,888	\$ (84,368)	\$ 413,520	-16.95%
7560	Travel/Training	\$ 29,000	\$ (21,772)	\$ 7,228	-75.08%
7575	Misc. Travel/Training	\$ -	\$ 9,279	\$ 9,279	100%
7681	Local Phones	\$ 51,000	\$ 18,045	\$ 69,045	35.38%
7683	Internet	\$ 85,000	\$ (35,177)	\$ 49,823	-41.38%
		\$	(780,493)		

I&E RE-36 Computer /Peripherals

(1) PWSA COS Model 2025 Tab 102

FINANCE		(1)			References
103		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	
Acct 5190	Salary - Vacancy Rate Ratio of 6.41%	\$ 1,888,273	\$ (121,038)	\$ 1,767,235	OCA Set 9-10
	Benefits	\$ 526,786	\$ (33,767)	\$ 493,019	
	Operating Expenses	\$ 4,420,820	\$ (1,826,440)	\$ 2,594,380	
	Inventory	\$ 50,000	\$ (27,746)	\$ 22,254	
7255	General & Administrative	\$ 9,264,012	\$ 13,314	\$ 9,277,326	OCA-Set 9-60
		\$ 16,149,891	\$ (1,995,677)	\$ 14,154,214	
		PWSA		OCA	
		Proposed		Recommended	
5190	Vehicles 3 yr average I&E RE-21	\$ 3,000,000	\$ (1,789,426)	\$ 1,210,574	-59.65%
5402	Annual Software Support	\$ 191,766	\$ (37,014)	\$ 154,752	-19.30%
		\$	(1,826,440)		
7003	Bank Fees	\$ 50,000	\$ (27,746)	\$ 22,254	-55.49%
7305	Advertising	\$ 11,000	\$ (2,960)	\$ 8,040	-26.91%
7260	Parking Lease	\$ 54,000	\$ -	\$ -	
7255	Office Rent -Buncher - River Holding	\$ 2,851,821	\$	\$ -	OCA Set 9-22/40
7323	Consultants	\$ 427,000	\$ 88,650	\$ 515,650	20.76%
7332	Consulting - Engineer - OCA Set 9-40 I&E RE-45	\$ 196,684			
7383	Professional Services - Other				
7345	Insurance Auto	\$ 145,000	\$ (44,324)	\$ 100,676	-30.57%
7348	Insurance - Commercial Property	\$ 470,000	\$ (89,371)	\$ 380,629	-19.02%
7353	Insurance - Gen Liability	\$ 32,000	\$ (5,984)	\$ 26,016	-18.70%
7366	Insurance - Workers Comp City	\$ 20,000	\$ (3,249)	\$ 16,751	-16.25%
7370	Legal Services	\$ 65,000	\$ (10,879)	\$ 54,121	-16.74%
7383	Misc. Prof. Services	\$ 319,871	\$ 81,431	\$ 401,302	25.46%
		\$	13,314		

(1) PWSA COS Model 2025 Tab 103

HUMAN RESOURCES		(1)			
104		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	References
Salary - Vacancy Rate Ratio of 6.41%		\$ 1,483,311	\$ (95,080)	\$ 1,388,231	OCA-Set 9-10
Benefits		\$ 526,269	\$ (33,734)	\$ 492,535	
Operating Expenses		\$ 20,244	\$ -	\$ 20,244	
Inventory		\$ -	\$ -	\$ -	
General & Administrative		\$ 777,986	\$ (423,720)	\$ 354,266	
		\$ 2,807,810	\$ (552,534)	\$ 2,255,276	
7323	Consultants - OCA Set 9-40	\$ 35,000	\$ (33,958)	\$ 1,042	-97.02%
7382	Payroll Services	\$ 243,000	\$ (85,958)	\$ 157,042	-35.37%
7383	Misc. Prof. Services	\$ 244,924	\$ (155,215)	\$ 89,709	-63.37%
7560	Travel & Training	\$ 180,925	\$ (143,160)	\$ 37,765	-79.13%
7575	Travel / Training Misc	\$ 13,500	\$ (5,429)	\$ 8,071	-40.21%
			\$ (423,720)		

(1) PWSA COS Model 2025 Tab 104

LEGAL		(1)			References
105		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	
7370	Salary - Vacancy Rate Ratio of 6.41%	\$ 1,054,581	\$ (67,599)	\$ 986,982	OCA Set 9-10
	Benefits	\$ 287,821	\$ (18,449)	\$ 269,372	
	Operating Expenses	\$ -	\$ -	\$ -	
	Inventory	\$ -	\$ -	\$ -	
	General & Administrative	\$ 3,289,275	\$ (829,646)	\$ 2,459,629	
		\$ 4,631,677	\$ (915,694)	\$ 3,715,983	
7715	Claims Deductible - 2024 IE-RE-49	PWSA		OCA	-42.07%
		Proposed		Recommended	
		\$ 1,000,000	\$ (420,738)	\$ 579,262	
		\$ -	\$ -	\$ -	
7370	Legal - Rate Case Expense				
	2025	\$ 826,354	\$ (236,101)	\$ 590,253	OCA Set 9-12
	2026	\$ 604,825	\$ (172,807)	\$ 432,018	OCA Set 9-44
		\$ 1,431,179	\$ (408,908)	\$ 1,022,271	

(1) PWSA COS Model 2025 Tab 105

SAFETY & SECURITY		(1)			References
106		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	
5375/5145	Salary - Vacancy Rate Ratio of 6.41%	\$ 1,267,211	\$ (81,228)	\$ 1,185,983	OCA Set 9-10
	Benefits	\$ 506,271	\$ (32,452)	\$ 473,819	
	Operating Expenses	\$ 860,173	\$ (109,204)	\$ 750,969	
	Inventory	\$ 1,500	\$ -	\$ 1,500	
7440	General & Administrative	\$ 59,650	\$ (1,518)	\$ 58,132	
		\$ 2,694,805	\$ (224,402)	\$ 2,470,403	
		PWSA		OCA	
		Proposed		Recommended	
5140	Furniture/Fixtures	\$ 5,000	\$ 3,006	\$ 8,006	60.12%
5145	Ground Maintenance	\$ 223,900	\$ (157,724)	\$ 66,176	-70.44%
5345	Misc. Inspection	\$ 20,950	\$ (16,837)	\$ 4,113	-80.37%
5350	Key / Lock Services	\$ 3,000	\$ 4,492	\$ 7,492	149.73%
5370	Misc. Operating Contract	\$ 8,000	\$ (3,705)	\$ 4,295	-46.31%
5375	Security Guards	\$ 300,000	\$ 168,743	\$ 468,743	56.25%
5402	Annual Software Support	\$ 115,319	\$ (56,045)	\$ 59,274	-48.60%
5405	Building /Property Repairs	\$ 67,500	\$ (43,847)	\$ 23,653	-64.96%
5411	Computer Software Support	\$ 56,752	\$ (11,404)	\$ 45,348	-20.09%
5570	Testing	\$ 3,000	\$ 4,117	\$ 7,117	137.23%
		\$	(109,204)		
7440	Ground Maintenance	\$ 21,150	\$ 4,695	\$ 25,845	22.20%
7560	Travel /Training	\$ 20,000	\$ (6,213)	\$ 13,787	-31.07%
		\$	(1,518)		

I&E RE 36 - Ground Maintenance

(1) PWSA COS Model 2025 Tab 106

PUBLIC AFFAIRS		(1)			References
108		PWSA		OCA	
		FPPTY 2026	Adjustments	Recommended	
Salary - Vacancy Rate Ratio of 6.41%		\$ 970,149	\$ (62,187)	\$ 907,962	OCA Set 9-10
Benefits		\$ 287,877	\$ (18,453)	\$ 269,424	
Operating Expenses		\$ 114,289	\$ 31,524	\$ 145,813	
Inventory		\$ -	\$ -	\$ -	
General & Administrative		\$ 516,990	\$ (6,497)	\$ 510,493	
		\$ 1,889,305	\$ (55,612)	\$ 1,833,693	

		PWSA		OCA	
		Proposed		Recommended	
7323	Consultants-OCA-Set 9-40	\$ 216,000	\$ 49,029	\$ 265,029	22.70%
5402	Annual Software Support	\$ 114,289	\$ (17,505)	\$ 96,784	-15.32%
			\$ 31,524		
7450	Office Supplies	\$ 3,300	\$ (1,444)	\$ 1,856	-43.76%
7555	Travel / Training	\$ 24,000	\$ (22,743)	\$ 1,257	-94.76%
7575	Travel/Training-Misc	\$ 500	\$ 17,690	\$ 18,190	3538.00%
7742	Education/Outreach IE-RE-49	\$ 141,900			
			\$ (6,497)		

(1) PWSA COS Model 2025 Tab 108

ENVIRONMENTAL COMPLIANCE

110

(1)

PWSA

OCA

FPFTY 2026

Adjustments

Recommended

References

Salary - Vacancy Rate Ratio of 6.41%	\$	1,228,889	\$	(78,772)	\$	1,150,117	OCA Set 9-10
Benefits	\$	397,873	\$	(25,504)	\$	372,369	
Operating Expenses	\$	2,453,949	\$	(302,165)	\$	2,151,784	
Inventory	\$	-	\$	-	\$	-	
General & Administrative	\$	453,000	\$	(9,918)	\$	443,082	
	\$	4,533,711	\$	(416,358)	\$	4,117,353	

PWSA

OCA

Proposed

Recommended

5145	Ground Maintenance	\$	8,500	\$	(4,250)	\$	4,250	
5330	Debris Removal	\$	500,000	\$	(241,616)	\$	258,384	-48.32%
5340	Dumpster	\$	46,009	\$	(20,242)	\$	25,767	-44.00%
5341	Vactor Debris Removal Contract	\$	250,000	\$	(92,692)	\$	157,308	-37.08%
5345	Misc. Inspection	\$	5,000	\$	(1,393)	\$	3,607	-27.86%
5370	Misc. Operating Contracts OCA-9-40	\$	500,000	\$	-	\$	-	
5422	Chemical Removal	\$	120,000	\$	74,188	\$	194,188	61.82%
5570	Testing	\$	30,000	\$	(16,160)	\$	13,840	-53.87%
			\$	(302,165)				

7020	Registration Fees	\$	2,500	\$	(608)	\$	1,892	-24.32%
7323	Consultants OCA Set 9-40	\$	80,000					
7330	Construction Management IE-RE-45	\$	30,000	\$	-	\$	-	
7383	Misc. Professional Services	\$	211,500			\$	-	
7440	Grounds / Maintenance	\$	18,000	\$	5,511	\$	23,511	30.62%
7450	Office Supplies	\$	2,000	\$	(1,129)	\$	871	-56.45%
7555	Travel/Training Seminars	\$	12,500	\$	(12,103)	\$	397	-96.82%
7560	Travel/Training	\$	6,500	\$	(1,589)	\$	4,911	-24.45%
			\$	(9,918)				

I&E RE- 38 Debris Removal

(1) PWSA COS Model 2025 Tab 110

WAREHOUSING		(1)			References
107		PWSA	Adjustments	OCA	
		FPFTY 2026		Recommended	
	Salary - Vacancy Rate Ratio of 6.41%	\$ 434,638	\$ (27,860)	\$ 406,778	OCA Set 9-10
	Benefits	\$ 128,247	\$ (8,221)	\$ 120,026	
	Operating Expenses	\$ 18,900	\$ 961	\$ 19,861	
	Inventory	\$ -	\$ -	\$ -	
	General & Administrative	\$ 12,050	\$ (1,114)	\$ 10,936	
		\$ 593,835	\$ (36,234)	\$ 557,601	
5405	Building Property Maintenance	\$ 3,600	\$ 2,232	\$ 5,832	62.00%
5415	Cranes Repairs	\$ 3,500	\$ (2,191)	\$ 1,309	-62.60%
5422	Surface Restoration - OCA Set 9-39	\$ 5,000	\$ 920	\$ 5,920	18.40%
		\$	961		
7110	Freight	\$ 250	\$ (151)	\$ 99	-60.40%
7215	Equipment Rental	\$ 1,200	\$ (843)	\$ 357	-70.25%
7450	Office Supplies	\$ 800	\$ (499)	\$ 301	-62.38%
7575	Travel & Training	\$ 1,500	\$ 379	\$ 1,879	25.27%
		\$	(1,114)		

(1) PWSA COS Model 2025 Tab 107

LABORATORY		(1)		OCA		References
200		PWSA	Adjustments	Recommended		
		FPFTY 2026				
Salary - Vacancy Rate Ratio of 6.41%		\$ 1,040,089	\$ (66,670)	\$ 973,419		OCA Set 9-10
Benefits		\$ 334,198	\$ (21,422)	\$ 312,776		
Operating Expenses		\$ 598,162	\$ (108,912)	\$ 489,250		
Inventory		\$ 3,400	\$ (1,133)	\$ 2,267		
General & Administrative		\$ 475,725	\$ (27,031)	\$ 448,694		
		\$ 2,451,574	\$ (225,168)	\$ 2,226,406		
		PWSA		OCA		
		Proposed		Recommended		
5147	Lab Equipment - I&E RE-36	\$ 168,000	\$ -	\$ -		
5402	Annual Software Support	\$ 61,162				
5422	Chemical Removal	\$ 12,000	\$ (9,688)	\$ 2,312		-80.73%
5570	Testing	\$ 304,500	\$ (99,224)	\$ 205,276		-32.59%
			\$ (108,912)			
7005	Certification Fees	\$ 3,400	\$ (1,133)	\$ 2,267		-33.32%
			\$ (1,133)			
7110	Freight	\$ 1,200	\$ (558)	\$ 642		-46.50%
7383	Professional Services -IE RE-45	\$ 220,000				
7422	Fuel - Gasses	\$ 12,500	\$ (5,286)	\$ 7,214		-42.29%
7440	Ground Maintenance	\$ 10,000	\$ (5,553)	\$ 4,447		-55.53%
7450	Office Supplies	\$ 1,200	\$ (291)	\$ 909		-24.25%
7575	Travel/Training	\$ 25,000	\$ (15,343)	\$ 9,657		-61.37%
			\$ (27,031)			

(1) PWSA COS Model 2025 Tab 200

WATER TREATMENT PLANT

201

	(1) PWSA		OCA		
	FPFTY 2026	Adjustments	Recommended	References	
Salary - Vacancy Rate Ratio of 6.41%	\$ 4,793,221	\$ (307,245)	\$ 4,485,976	OCA Set 9-10	
Benefits	\$ 1,434,984	\$ (91,982)	\$ 1,343,002		
Operating Expenses	\$ 10,284,212	\$ (65,890)	\$ 10,218,322		
Other		\$ -	\$ -		
Inventory	\$ 100,040	\$ 6,898	\$ 106,938		
General & Administrative	\$ 7,538,527	\$ (70,173)	\$ 7,468,354		
	\$ 24,150,984	\$ (528,393)	\$ 23,622,591		

		PWSA Proposed		OCA		
5025	Caustic Soda	\$ 1,000	\$ (770)	\$ 230	-77.00%	
5080	Sodium Hypochlorite	\$ 1,100,000	\$ 309,281	\$ 1,409,281	28.12%	
5085	Sodium Carbonate	\$ 26,000	\$ (9,747)	\$ 16,253	-37.49%	
5150	Machinery & Equipment	\$ 125,000	\$ 49,818	\$ 174,818	39.85%	
5170	Pumps & Motors	\$ 80,000	\$ 48,056	\$ 128,056	60.07%	
5344	Pump & Motor Contract	\$ 650,000	\$ (246,202)	\$ 403,798	-37.88%	
5345	Misc. Inspection	\$ 6,000	\$ 16,426	\$ 22,426	273.77%	
5370	Misc. Operating Contracts	\$ 450,000	\$ (198,793)	\$ 251,207	-44.18%	
5417	Electrical Repairs	\$ 50,000	\$ 111,949	\$ 161,949	223.90%	
5439	HVAC & Plumbing Repairs	\$ 200,000	\$ 40,133	\$ 240,133	20.07%	
5452	Machinery & Equipment	\$ 141,000	\$ 39,255	\$ 180,255	27.84%	
5462	Plant Repairs	\$ 540,000	\$ (225,296)	\$ 314,704	-41.72%	
		\$	(65,890)			
6300	Inventory - Hardware	\$ 36,000	\$ 6,898	\$ 42,898	19.16%	
		\$	6,898			
7215	Equipment Rental	\$ 16,667	\$ 34,516	\$ 51,183	207.09%	
7450	Office Supplies	\$ 4,000	\$ (748)	\$ 3,252	-18.70%	
7555	Travel & Training	\$ 25,000	\$ 5,299	\$ 30,299	21.20%	
7575	Travel & Training Misc.	\$ 4,000	\$ 1,108	\$ 5,108	27.70%	
7605	Electric Utility - OCA Set 9-40	\$ 6,727,000				
7650	Gas Utility	\$ 427,060	\$ (70,173)	\$ 356,887	-16.43%	
		\$	(70,173)			

(1) PWSA COS Model 2025 Tab 201
[Water Treatment Chemicals Market is expected to reach a \(globe newswire.com\)](https://www.globenewswire.com)
 Update to include 2025 and beyond

SEWER OPERATIONS		(1)			
300		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	References
5370	Salary - Vacancy Rate Ratio of 6.41%	\$ 2,393,691	\$ (153,436)	\$ 2,240,255	OCA Set 9-10
	Benefits	\$ 709,437	\$ (45,475)	\$ 663,962	
	Operating Expenses	\$ 2,152,565	\$ (720,260)	\$ 1,432,305	
	Inventory	\$ 189,000	\$ (34,950)	\$ 154,050	
	General & Administrative	\$ 102,650	\$ (27,925)	\$ 74,725	
		\$ 5,547,343	\$ (982,046)	\$ 4,565,297	
		PWSA		OCA	
		Proposed		Recommend	
5150	Machinery & Equipment	\$ 75,000	\$ (39,359)	\$ 35,641	-52.48%
5315	Catch Basin Cleaning	\$ 1,123,365	\$ (301,467)	\$ 821,898	-26.84%
5380	Line Locating - OCA Set 9-39/IE RE-22	\$ 767,800	\$ (383,900)	\$ 383,900	2 yr. normalize
5405	Building / Prop Repairs	\$ 5,000	\$ 3,200	\$ 8,200	64.00%
5439	HVAC / Plumbing Repairs	\$ 3,000	\$ (1,668)	\$ 1,332	-55.60%
5496	Misc. Repair /Maint.	\$ 950	\$ 2,934	\$ 3,884	308.84%
		\$	(720,260)		
6300	Inventory - Hardware	\$ 175,000	\$ (36,835)	\$ 138,165	-21.05%
6500	Inventory Misc.	\$ 8,000	\$ 2,044	\$ 10,044	25.55%
6705	Pipe	\$ 1,000	\$ (159)	\$ 841	-15.90%
		\$	(34,950)		
7440	Grounds/Maintenance	\$ 40,000	\$ (11,689)	\$ 28,311	-29.22%
7450	Office Supplies	\$ 2,400	\$ (1,503)	\$ 897	-62.63%
7560	Travel/Training	\$ 26,000	\$ (14,733)	\$ 11,267	-56.67%
		\$	(27,925)		

(1) PWSA COS Model 2025 Tab 300

WATER OPERATIONS		(1)			
202		PWSA		OCA	
		FPFTY 2026	Adjustments	Recommended	References
5030	Salary - Vacancy Rate Ratio of 6.41%	\$ 11,294,833	\$ (723,999)	\$ 10,570,834	OCA Set 9-10
	Benefits	\$ 3,130,558	\$ (200,669)	\$ 2,929,889	
	Operating Expenses	\$ 2,408,838	\$ (537,269)	\$ 1,871,569	
	Inventory	\$ 1,902,000	\$ 14,166	\$ 1,916,166	
	General & Administrative	\$ 660,000	\$ 1,306	\$ 661,306	
		\$ 19,396,229	\$ (1,446,465)	\$ 17,949,764	
		PWSA		OCA	
		Proposed		Recommend	
5030	Sodium Bisulfate I&E RE-35	\$ 10,000	\$ (8,704)	\$ 1,296	-87.04%
5145	Ground & Maintenance IE-RE-36	\$ 40,000	\$ -	\$ -	
5150	Machinery IE RE-36	\$ 258,000	\$ -	\$ -	
5220	Asphalt Hotmix	\$ 14,000	\$ (4,238)	\$ 9,762	-30.27%
5227	Brick	\$ 1,500	\$ (549)	\$ 951	-36.60%
5230	Cement Bagged	\$ 5,000	\$ (945)	\$ 4,055	-18.90%
5245	Lumber	\$ 40,000	\$ (9,792)	\$ 30,208	-24.48%
5380	Line Locating OCA Set 9-39/IE RE 22	\$ 1,071,200	\$ (535,600)	\$ 535,600	2 yr. normalize
5402	Annual Software Support	\$ 46,506			
5405	Building & Prop Repairs	\$ 12,000	\$ 26,716	\$ 38,716	222.63%
5417	Electrical Repairs	\$ 1,200	\$ 2,467	\$ 3,667	205.58%
5452	Machinery & Equip. Repairs	\$ 24,132	\$ (4,588)	\$ 19,544	-19.01%
5467	Power Tools Repairs	\$ 3,000	\$ (1,580)	\$ 1,420	-52.67%
5496	Misc. Repairs /Hardware	\$ 1,500	\$ (456)	\$ 1,044	-30.40%
		\$	(537,269)		
6500	Inventory - Misc	\$ 36,000	\$ 14,166	\$ 50,166	39.35%
		\$	14,166		
7015	Permits - I&E RE-43	\$ 250,000			
7215	Equipment Rental	\$ 48,000	\$ (11,040)	\$ 36,960	-23.00%
7555	Travel & Training	\$ 4,000	\$ (3,607)	\$ 393	-90.18%
7560	Travel & Training	\$ 4,000	\$ 1,566	\$ 5,566	39.15%
7730	Fines & Penalties OCA 9-52	\$ 20,000	\$ 14,387	\$ 34,387	71.94%
		\$	1,306		

(1) PWSA COS Model 2025 Tab 202

ENGINEERING & CONSTRUCTION

109

(1)

PWSA

OCA

FPFTY 2026

Adjustments

Recommended

References

	Salary - Vacancy Rate Ratio of 6.41%	\$	5,525,894	\$	(354,210)	\$	5,171,684	OCA Set 9-10
	Benefits	\$	1,907,710	\$	(122,284)	\$	1,785,426	
	Operating Expenses	\$	36,478,095	\$	(5,896,802)	\$	30,581,293	
	Inventory	\$	5,000	\$	(2,360)	\$	2,640	
7710	General & Administrative	\$	(3,790,910)	\$	(2,080,348)	\$	(5,871,258)	
		\$	40,125,789	\$	(8,456,004)	\$	31,669,785	

			PWSA Proposed			OCA Recommend	
5145	Grounds & Maintenance	\$	26,100	\$	(25,461)	\$	639
5343	Manhole Repair - OCA Set 9-39/RE-23	\$	3,000,000	\$	(1,500,000)	\$	1,500,000
	Engineer / Inspections - OCA Set 9-39 IE						
5347	RE 25	\$	3,094,282	\$	(1,547,141)	\$	1,547,141
5413	Surface Restoration - OCA 9-39 IE RE 20	\$	15,000,000	\$	(2,818,752)	\$	12,181,248
5427	GIS Hardware/Software	\$	5,573	\$	(1,448)	\$	4,125
5452	Machinery/Repairs	\$	6,000	\$	(4,000)	\$	2,000
			\$		(5,896,802)		
7005	Certification Fees	\$	5,000	\$	(2,360)	\$	2,640
			\$		(2,360)		
7015	Permits - I&E RE-43	\$	4,000,000	\$	(2,000,000)	\$	2,000,000
7323	Consultants OCA 9-40 IE-RE-45	\$	5,346,744				
7330	Construction Mgmt. IE-RE-45	\$	1,893,254				
7335	Misc Non Serv Cap. IE RE-45	\$	325,000	\$	(65,182)	\$	259,818
7450	Office Supplies	\$	2,000	\$	(825)	\$	1,175
7555	Travel/Training Seminars	\$	1,540	\$	(340)	\$	1,200
7575	Travel/Training Misc	\$	30,000	\$	(14,001)	\$	15,999

\$ (2,080,348)

(1) PWSA COS Model 2025 Tab 109

OTHER OPERATING EXPENSES

	(1) PWSA		OCA		
	FPFTY 2026	Adjustments	Recommended	References	
Loss / (Gain) on ALCOSAN Billing	\$ 2,383,047	\$ -	\$ 2,383,047		
City Services	\$ -	\$ -	\$ -		
Other-Expenses	\$ -	\$ -	\$ -		
Total	\$ 2,383,047	\$ -	\$ 2,383,047		

(1) PWSA Exhibit EB-2
PWSA Exhibit HJS-1

DEBT SERVICE COVERAGE

	(1) PWSA FPFTY 2024	Adjustments	OCA Recommended	References
Operating Revenues	\$ 313,744,109	\$ -	\$ 266,720,361	
ALCOSAN Collections	\$ 106,789,040	\$ -	\$ 106,789,040	
Revenues	\$ 420,533,149	\$ (47,023,748)	\$ 373,509,401	
Operating Expenses	\$ (149,713,165)	\$ 18,690,839	\$ (131,022,326)	
Other	\$ -	\$ -	\$ 901,133	
ALCOSAN Charges	\$ (109,172,088)	\$ -	\$ (109,172,088)	
Other Transfers to Reserves	\$ (3,000,000)	\$ -	\$ (3,000,000)	
Bad Debt Expenses	\$ (6,199,010)	\$ 1,005,949	\$ (5,193,061)	
Water/Wastewater Leak Credit	\$ (662,322)	\$ -	\$ (662,322)	
Rider Arrearage Funding	\$ (280,094)	\$ -	\$ (280,094)	
Total Expenses	\$ (269,026,679)	\$ 20,597,920	\$ (248,428,759)	
Add: City Services	\$ 6,000,000	\$ -	\$ 6,000,000	OCA Set 20-1
Revenues Available for Debt Service	\$ 157,506,470	\$ (26,425,828)	\$ 131,080,642	\$ 112,582,078
Debt Service:				
Existing Debt - Senior Debt	\$ 73,685,883	\$ -	\$ 73,685,883	re-cast 2026 bond from 7.0% total interest cost to 5.5%, and increase net premium from 7.0% to 8.44%. \$ 9,449,732 \$ 1,792,071 Difference
Future Debt - Senior Debt	\$ 11,241,803	\$ (1,792,071)	\$ 9,449,732	
WIFIA Loan #1	\$ 432,384	\$ -	\$ 432,384	
Total Senior Debt Service	\$ 85,360,070	\$ -	\$ 83,567,999	
Subordinate Debt	\$ 5,519,150	\$ -	\$ 5,519,150	
Existing Debt - Pennvest	\$ 17,146,719	\$ -	\$ 17,146,719	
Existing Debt - Revolving Debt	\$ 3,000,000	\$ -	\$ 3,000,000	
WIFIA Loan #1	\$ -	\$ -	\$ -	
Future Debt - Pennvest	\$ -	\$ -	\$ -	
Total Debt Service	\$ 111,025,939	\$ -	\$ 109,233,868	\$ 109,233,868 1.2x TDS = \$ 131,080,642 \$ 18,498,564
	\$ -	\$ -	\$ -	
Senior Debt Service Coverage	1.8452		1.5686	
Total Debt Service Coverage	1.4186		1.2000	
Existing Debt	99,351,752		99,351,752	
Future Debt	11,674,187		9,882,116	

- (1) PWSA Exhibit EB-2
PWSA Exhibit HJS-1
PWSA COSS Model 2025

CAPEX & TRANSFERS

		(1)				
		PWSA		OCA		
		FPFTY 2026	Adjustments	Recommended	References	
7.50%	Debt Coverage Capital	\$ 21,231,922		\$ 21,231,922		
	Internally Generated Funds - PAYGO (DSIC)	\$ 18,898,544	\$ (8,008,790)	\$ 10,889,754	5.00%	
	Other Transfers to Reserves	\$ 3,000,000	\$ -	\$ 3,000,000	OCA Set 20-2	
	Bad Debt Expense	\$ 6,199,010	\$ (1,005,949)	\$ 5,193,061		
	Water / Wastewater Leak Credit	\$ 662,322	\$ -	\$ 662,322		
	Arrearage Forgiveness Program	\$ 280,094	\$ (280,094)	\$ -	Colton	
	Other	\$ -	\$ -	\$ -		
	Stormwater Credit Program Cost	\$ 288,016	\$ -	\$ 288,016		
Total		\$ 50,559,908	\$ (9,294,833)	\$ 41,265,075		

(1) PWSA COSS Model 2025 Future Debt Tab
PWSA Sufficiency Tab
PWSA Revenue Requirement Tab
PWSA Exhibit EB-2

PROJECTED CASH FLOW				
Days Cash on Hand	(1)			
	PWSA FY 2026	Adjustments	OCA Recommended	References
Operating Fund				
Beginning Balance	\$ 83,729,892		\$ 83,729,892	OCA Set 9-34
Operating Expenses	\$ (149,713,165)		\$ (131,022,326)	
ALCOSAN Charges	\$ (109,172,087)		\$ (106,789,040)	
Total	\$ (258,885,252)		\$ (237,811,366)	
	\$ -		\$ -	
Daily Days Cash	0.32342		0.35209	
Ending Cash Balance	118.050		128.511	
Unrestricted Cash (Excluding ALCOSAN)	204.1331		233.2535	
Unrestricted Cash (Including ALCOSAN)	118.0500		128.5111	

(1) PWSA Exhibit EB-2

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Dante Mugrace, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 2, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ Dante Mugrace
Dante Mugrace

Address: PCMG and Associates, LLC
22 Brooks Avenue
Gaithersburg, MD 20877

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**DOCKET NOS.
R-2025-3055010 (water)
C-2025-3056056
C-2025-3055943**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**R-2025-3055011 (wastewater)
C-2025-3056054
C-2025-3055944**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**R-2025-3055012 (stormwater)
C-2025-3056058
C-2025-3055942**

Corrected Direct Testimony of

Christopher C. Walters

OCA Statement 3

On behalf of

Pennsylvania Office of Consumer Advocate

Date Served: September 8, 2025



BRUBAKER & ASSOCIATES, INC.

Project 11887

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	DOCKET NOS.
	)	R-2025-3055010 (water)
v.	)	C-2025-3056056
	)	C-2025-3055943
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055011 (wastewater)
	)	C-2025-3056054
v.	)	C-2025-3055944
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055012 (stormwater)
	)	C-2025-3056058
v.	)	C-2025-3055942
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	

**Table of Contents to the
Direct Testimony of Christopher C. Walters**

SUMMARY OF RECOMMENDATIONS

REVIEW OF PITTSBURGH WATER’S PROPOSED REVENUE REQUIREMENT AND FINANCIAL METRICS.....	3
REVIEW OF RATING AGENCY ASSESSMENTS OF PITTSBURGH WATER’S CREDIT QUALITY AND OUTLOOK.....	6

OCA’S CONCERNS WITH AND RECOMMENDATIONS FOR PITTSBURGH WATER’S FUTURE DEBT ISSUANCE ASSUMPTIONS.....	13
OCA’S RECOMMENDATION FOR DSCR AND OTHER FINANCIAL METRICS	21
QUALIFICATIONS OF CHRISTOPHER C. WALTERS	Appendix A

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	DOCKET NOS.
v.	)	R-2025-3055010 (water)
	)	C-2025-3056056
	)	C-2025-3055943
The Pittsburgh Water and Sewer Authority	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055011 (wastewater)
v.	)	C-2025-3056054
	)	C-2025-3055944
The Pittsburgh Water and Sewer Authority	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055012 (stormwater)
v.	)	C-2025-3056058
	)	C-2025-3055942
The Pittsburgh Water and Sewer Authority	)	

Direct Testimony of Christopher C. Walters

- 1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**
- 2 **A Christopher C. Walters. My business address is 16690 Swingley Ridge Road, Suite 140,**
- 3 **Chesterfield, MO 63017.**

1 **Q WHAT IS YOUR OCCUPATION?**

2 A I am a consultant in the field of public utility regulation and a Principal with the firm of
3 Brubaker & Associates, Inc. (“BAI”), energy, economic and regulatory consultants.

4 **Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
5 **EXPERIENCE.**

6 A This information is included in Appendix A to my testimony.

7 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

8 A I am appearing on behalf of the Pennsylvania Office of Consumer Advocate (“OCA”).

9 **Q PLEASE GIVE A BRIEF OVERVIEW OF YOUR TESTIMONY.**

10 A The purpose of this section is to review and evaluate the financial metrics Pittsburgh
11 Water and Sewer Authority d/b/a Pittsburgh Water (“Pittsburgh Water” or “PW”)
12 proposes to target in its application of the Cash Flow Method to determine its revenue
13 requirement in this proceeding. Specifically, my testimony supports OCA’s
14 recommendation for a reasonable Debt Service Coverage (“DSC”) ratio based on
15 Pittsburgh Water’s circumstances, supported by historical financial performance, peer
16 benchmarks, credit rating agency considerations, and the evidence presented in
17 Pittsburgh Water’s Direct Testimony. My recommendation also accounts for other
18 financial metrics including Days Cash on Hand (“DCOH”) as well as Pittsburgh Water’s
19 credit ratings.

My silence in regard to any issue should not be construed as an endorsement of or acquiescence to Pittsburgh Water's position.

SUMMARY OF RECOMMENDATIONS

Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.

A My conclusions and recommendations are as follows:

1. Pittsburgh Water's assumed terms for its future revenue bond issuances are unreasonable estimates that unnecessarily increase the cost of service and debt service coverage requirements. Reasonable adjustments to Pittsburgh Water's future debt issuances to be more representative of expected debt capital market costs for a strong rated municipal system, such as Pittsburgh Water, should be adopted. Specifically, in the four subsequent Fiscal Years ("FY") from 2026-2029, Pittsburgh Water has assumed effective interest rates of 7.0% and net premiums to par of 7%. Re-casting future debt issuances at an effective yield of 5.5% and increasing the net premium to par to 8.44% reduces Pittsburgh Water's debt service cost and coverage capital requirements.
2. I recommend that a Total DSC ratio of 1.20x is more than sufficient to support Pittsburgh Water's credit, maintain access to capital, and mitigate the impact to ratepayers. The resulting Senior DSC ratio is approximately 1.57x. Incorporating these DSC ratios, in conjunction with the rest of OCA's recommended adjustments, produces a DCOH metric of 128.6 days including Allegheny County Sanitary Sewer Authority (ALCOSAN) charges in FY 2026.
3. My recommended DSC ratio provides Pittsburgh Water with sufficient margins above its bond covenant minimums to maintain credit quality and ensure financial flexibility while avoiding excessive burdens on ratepayers.

REVIEW OF PITTSBURGH WATER'S PROPOSED REVENUE REQUIREMENT AND FINANCIAL METRICS

Q PLEASE SUMMARIZE PITTSBURGH WATER'S PROPOSAL IN THIS CASE?

A On June 4, 2025, Pittsburgh Water filed a request with the Pennsylvania Public Utility Commission ("PUC" or "Commission") seeking approval of an overall rate increase of approximately \$84.4 million, or 34% above current rates. Pittsburgh Water proposes to

1 implement an increase of \$63.7 million (25.9%) in the Fully Projected Future Test Year
2 (“FPFTY”) 2026, followed by an additional \$20.7 million (6.7%) in FY 2027.

3 **Q HOW HAS PITTSBURGH WATER DETERMINED ITS REQUESTED**
4 **REVENUE REQUIREMENT IN THIS CASE?**

5 **A** Pittsburgh Water’s revenue requirements are determined using the cash flow method of
6 ratemaking. Unlike investor-owned utilities, which typically earn a return on their rate
7 base and recover costs through a traditional cost-of-service model, municipal utilities
8 do not have shareholders and do not pay dividends. Instead, they must generate enough
9 cash from rates to cover their operating costs, pay debt service on bonds, and fund
10 capital projects. Cash flow ratemaking means that the Commission sets rates at a level
11 that ensures the utility has sufficient cash inflows to meet these obligations while
12 maintaining prudent financial metrics. In other words, the focus is on the adequacy of
13 cash flow rather than on earning a regulated return on equity.

14 **Q HOW DO REGULATORS AND BONDHOLDERS MEASURE WHETHER A**
15 **MUNICIPAL UTILITY LIKE PITTSBURGH WATER HAS SUFFICIENT**
16 **CASH FLOW?**

17 **A** The most common measures are DSC ratios. These ratios compare the cash available
18 for debt service, which can be generally described as operating revenues minus
19 operating expenses, to the annual debt service requirement. They help demonstrate the
20 cushion a utility has to pay bondholders on time, even if revenues or expenses fluctuate.
21 In Pittsburgh Water’s case, it has requirements for its Senior DSC and Total DSC ratios.

22 Another widely used metric is Days Cash on Hand (DCOH). This measures how
23 many days the utility could continue to pay its operating expenses if no new cash came

1 in. It is calculated by dividing unrestricted cash balances by the utility's average daily
2 operating expenses. For example, if Pittsburgh Water has 120 DCOH, it means it could
3 operate for roughly four months using only existing reserves.

4 **Q WILL YOU PLEASE GENERALLY DESCRIBE THE DIFFERENCES**
5 **BETWEEN THE SENIOR AND TOTAL DSC RATIOS?**

6 A Pittsburgh Water, like many municipal issuers, has multiple tiers of debt. "Senior"
7 bonds are those with the highest repayment priority. The Senior DSC ratio measures the
8 amount of cash flow available to cover only those senior debt obligations. Because
9 senior bondholders are paid first, this ratio is an important indicator of the security of
10 Pittsburgh Water's most senior debt. The Total DSC ratio considers all of Pittsburgh
11 Water's debt obligations, both senior and subordinated debt. It measures the utility's
12 overall ability to meet debt service across its entire portfolio of bonds.

13 **Q WHAT ARE PITTSBURGH WATER'S MINIMUM DSC RATIO**
14 **REQUIREMENTS?**

15 A Pittsburgh Water's Senior DSC ratio minimum requirement is 1.25x and its Total DSC
16 ratio minimum requirement is 1.10x. A Senior DSC ratio of 1.25x means that for every
17 \$1.00 of senior debt service payments due in a year, Pittsburgh Water must generate at
18 least \$1.25 of net revenues. In other words, it must collect 25% more cash than the bare
19 minimum needed to cover senior bondholders. This ensures a margin of safety for the
20 most senior lenders. Similarly, a Total DSC ratio of 1.10x means that when looking at
21 all debt, both senior and subordinate, PWSA must generate at least \$1.10 of net revenues
22 for every \$1.00 it owes. That represents a 10% cushion across the entire debt portfolio.

1 **Q HAS PITTSBURGH WATER PROPOSED A DSC TARGET IN THIS**
2 **PROCEEDING?**

3 A Yes, it has. Pittsburgh Water’s proposed primary financial metrics are summarized in
4 Table CCW-1.

Table CCW-1		
<u>Pittsburgh Water Proposed Financial Metrics</u>		
<u>Description</u>	<u>FY 2026</u>	<u>FY 2027</u>
Senior Debt Service Coverage Ratio	1.85x	1.87x
Total Debt Service Coverage	1.42x	1.39x
Days Cash on Hand	118	116
Source: Pittsburgh Water Statement No. 2 at 52.		

5 **REVIEW OF RATING AGENCY ASSESSMENTS OF**
6 **PITTSBURGH WATER’S CREDIT QUALITY AND OUTLOOK**

7 **Q HAVE YOU REVIEWED THE MOST RECENT REPORTS COVERING**
8 **PITTSBURGH WATER FROM THE CREDIT RATING AGENCIES?**

9 A Yes, I have. Pittsburgh Water attached the most recent ratings agency reports from
10 Moody’s and S&P to the direct testimony of its witness, Ms. Christine Fay (Statement
11 No. 7), as well as Exhibits CF-8, CF-9, and CF-10.

Q. WHAT ARE THE CURRENT ISSUER CREDIT RATINGS AND OUTLOOKS ASSIGNED TO PITTSBURGH WATER BY THE MAJOR RATING AGENCIES?

A The table below summarizes the current long-term issuer credit ratings and rating outlooks assigned to Pittsburgh Water by two of the primary credit rating agencies: Moody's and S&P. These ratings reflect each agency's evaluation of Pittsburgh Water's financial strength, risk profile, and ability to meet its long-term debt obligations:

Table CCW-2		
Rating Agency	Credit Rating	Outlook
Moody's	A2	Stable
S&P	A+	Stable

Q WHAT HAVE THE RATINGS AGENCIES IDENTIFIED AS PITTSBURGH WATER'S CREDIT STRENGTHS AND WEAKNESSES?

A In its recent report covering Pittsburgh Water, Moody's emphasized both positive and negative factors. On the strength side, Moody's highlighted improving debt service coverage ratios supported by rate increases and Commission oversight, a much improved governance with strong financial planning, predictable revenues under PUC regulation, a large essential service area, and demonstrated success in executing its capital program. At the same time, Moody's cautioned that Pittsburgh Water carries a very high debt burden of over \$1.18 billion, has relatively narrow financial margins, remains heavily reliant on additional borrowing to fund its large capital program, and

1 faces affordability, political, and operational pressures tied to aging infrastructure and
2 regulatory mandates. Moody's notes that DCOH consistently below 100 days could lead
3 to a downgrade.

4 Similarly, in its December 2024 report covering Pittsburgh Water, S&P also
5 identified a mix of favorable and constraining factors. Among the strengths, S&P
6 pointed to stronger debt service coverage and liquidity in recent years, reserve levels
7 consistent with the "A" category, transparent cost recovery under PUC oversight, a
8 stable and essential service base, and a proven track record in executing large capital
9 projects. However, S&P stressed that Pittsburgh Water's very high debt-to-revenue ratio
10 is a significant weakness, compounded by an aggressive capital program that requires
11 continued borrowing. It also noted that coverage levels remain relatively thin compared
12 to higher-rated peers, affordability concerns could limit future rate flexibility, and
13 Pittsburgh Water continues to face substantial reinvestment needs for its aging
14 infrastructure.

15 **Q DID THE CREDIT RATING AGENCIES EXPRESS CONCERN ABOUT**
16 **AGGRESSIVE RATE INCREASES AND AFFORDABILITY?**

17 **A** Yes. Both Moody's and S&P highlighted rate affordability as a credit consideration.
18 Moody's noted that Pittsburgh Water operates in a service area with economically
19 diverse and, in some cases, challenged neighborhoods, which increases sensitivity to
20 rate increases and could limit financial flexibility. Similarly, S&P pointed to
21 affordability concerns and political scrutiny of rate increases as potential constraints on
22 timely cost recovery, even though the regulatory framework itself is credit-supportive.

1 In short, while both agencies recognize that strong rate support has improved Pittsburgh
2 Water's coverage and liquidity, they caution that continued aggressive increases may
3 be difficult to sustain given customer affordability pressures and political oversight.

4 **Q HAS RATE AFFORDABILITY BEEN A MAJOR CONCERN BY THE CREDIT**
5 **RATINGS AGENCIES IN RECENT YEARS?**

6 A Yes. Credit rating agencies have been emphasizing rate affordability, maintaining
7 adequate financial coverages of debt obligations, and supporting utilities' overall
8 investment grade bond ratings. In a recent industry report, Moody's explained that the
9 regulated electric and gas utilities' outlook remains "Negative" largely due to increased
10 pricing pressures on customers. Moody's stated that it changed its outlook from "Stable"
11 to "Negative" due to the following:

12 We have revised our outlook on the US regulated utilities sector to
13 negative from stable. We changed the outlook because of increasingly
14 challenging business and financial conditions stemming from higher
15 natural gas prices, inflation and rising interest rates. These developments
16 raise residential customer affordability issues, increasing the level of
17 uncertainty with regard to the timely recovery of costs for fuel and
18 purchased power, as well as for rate cases more broadly.¹

19 Also, in a report published in January of 2024, S&P specifically mentioned
20 commodity price volatility, in combination with significant increases in capital
21 investments, driving utility rate increases that may strain affordability concerns.²

¹*Regulated Electric and Gas Utilities – US 2023 outlook negative due to higher natural gas prices, inflation and rising interest rates*, MOODY'S INVESTORS SERVICE OUTLOOK, November 10, 2022 at page 1. (Emphasis Added).

²Industry Credit Outlook 2024: North America Regulated Utilities, S&P GLOBAL RATINGS, January 9, 2024 at page 8.

1 Separately, Fitch opined that the regulated electric and gas utilities' outlook is
2 deteriorating due to elevated capex pressuring credit metrics. Fitch also noted, bill
3 affordability concerns for ratepayers and regulators' ability to balance utility rate
4 requests with increasing customer bills.

5 Specifically, Fitch states:

6 Fitch Ratings' deteriorating outlook for the North American Utilities,
7 Power & Gas sector reflects continuing macroeconomic headwinds and
8 elevated capex that are putting pressure on credit metrics in the high-cost
9 funding environment. Bill affordability concerns for ratepayers continue
10 to persist despite the pull back in natural gas prices and inflationary
11 pressures. Fitch expects utility capex to grow by double digits in 2024,
12 underpinned by investments needed to make the electric infrastructure
13 more resilient against extreme weather events and to accommodate
14 renewable generation, including distributed sources. Rate case outcomes
15 are key to watch as regulators balance more rate requests with increases
16 in customer bills. Authorized ROEs could prove to be sticky despite an
17 increase in cost of capital. Higher weather-normalized retail electricity
18 sales, driven by datacenter growth and onshoring of manufacturing
19 activities, and tax transferability provisions of the Inflation Reduction
20 Act could somewhat offset headwinds to utilities. Ongoing management
21 actions to sell assets and issue equity, in some cases, is supportive of
22 parent companies' ratings. Within Fitch's coverage, 90% of ratings hold
23 Stable Rating Outlooks. We expect limited rating movement in 2024.
24 The number of upgrades in 2023 so far exceeds the number of
25 downgrades, and is driven by positive rating actions on several parent
26 holding companies and their regulated subsidiaries.³

27 As outlined by Moody's, S&P, and Fitch above, credit analysts are focusing on
28 rate affordability as an important factor to support a strong credit standing. In order for
29 utilities to maintain their financial integrity and strong investment grade credit
30 standings, customers must be able to afford to pay their utility bills.

³North American Utilities, Power & Gas Outlook 2024, FITCH RATINGS, December 6, 2023 at page 1.
(Emphasis Added).

Q HAS THE OCA ASSESSED THE AFFORDABILITY OF PITTSBURGH WATER'S RATES AND ITS EFFORTS TO ADDRESS THE NEEDS OF LOW-INCOME CUSTOMERS?

A Yes. OCA witness Mr. Colton's direct testimony (OCA Statement No. 6) has assessed the affordability of Pittsburgh Water's rates and its efforts to address the needs of low-income customers. Mr. Colton concludes that Pittsburgh Water's proposed rates are unaffordable for many low-income customers and that Pittsburgh Water has not taken adequate steps to address affordability or comply with past commitments. He identifies several concerns:

- Even with the existing Bill Discount Program ("BDP"), Pittsburgh Water's bills remain unaffordable for households at or below 50% of the Federal Poverty Level ("FPL"), and many households between 50% and 100% of FPL also face unaffordable burdens under the proposed rates.
- Pittsburgh Water's affordability analysis relies on assumptions that understates the hardship faced by smaller households, which make up the majority of its customer base. By using the highest income in each FPL band and focusing on larger households, Pittsburgh Water minimizes the appearance of unaffordability.
- Low-income customers outside the BDP exhibit troubling payment patterns, including a Payment-to-Bill ratio of just 0.35 compared to 0.98 for all residential customers, a Payment Coverage ratio of only 0.36 compared to 0.85 for all customers, and default rates on payment arrangements far exceeding system-wide averages.
- Pittsburgh Water's Arrearage Forgiveness Program is structured in a way that makes forgiveness effectively unavailable to the lowest-income customers who need it most, because it requires customers to first enter into long-term deferred payment arrangements.
- Outreach and enrollment efforts remain inadequate. Many low-income households who could benefit from affordability programs are not being identified or enrolled, and Pittsburgh Water does not maintain a system to proactively recognize likely low-income customers.

Mr. Colton recommends expanding and restructuring the Bill Discount Program to include three tiers, raising the discount to 75% for households at or below 50% of FPL, and extending meaningful discounts to those between 50% and 100% of FPL. He

1 further recommends removing the deferred payment requirement from the Arrearage
2 Forgiveness Program, strengthening outreach and plain-language notices, and
3 expanding funding for water conservation assistance targeted at low-income customers.
4 Collectively, his testimony demonstrates that without these reforms, Pittsburgh Water's
5 rates will remain unaffordable for thousands of households, undermining both public
6 health and the Authority's own financial stability.

7 **Q IN YOUR OPINION, IS PITTSBURGH WATER'S REQUESTED INCREASE**
8 **CAUSE FOR CONCERN AS IT RELATES TO AFFORDABILITY?**

9 A Yes. As mentioned above, Pittsburgh Water is requesting a 25.9% increase in FY 2026
10 and an incremental increase of 6.7% in FY 2027, collectively 34.3%. Put another way,
11 this equates to a compound annual increase of 15.9% over two years, which is a
12 substantial burden on customers. Beyond the sheer size of the increase, the concern is
13 compounded by Pittsburgh Water's stated objective of strengthening its financial
14 metrics in order to achieve a higher credit rating during the same period it is executing
15 an aggressive capital improvement program. This creates a "double whammy" for
16 ratepayers: they are asked to shoulder both the near-term costs of the capital program
17 itself and the additional rate burden required to pursue rating upgrades.

18 In my view, the incremental costs necessary to boost credit metrics and pursue
19 a higher rating now are likely to exceed any potential debt service savings that
20 Pittsburgh Water might realize from improved borrowing costs in the future. A more
21 balanced approach would be for Pittsburgh Water to focus on sustaining its current

investment-grade credit standing and allow its financial metrics to gradually strengthen as the pace of capital spending moderates over time.

**OCA'S CONCERNS WITH AND RECOMMENDATIONS FOR
PITTSBURGH WATER'S FUTURE DEBT ISSUANCE ASSUMPTIONS**

**Q AS PART OF ITS FILING, HAS PITTSBURGH WATER INDICATED IT
PLANS ON ISSUING DEBT THROUGHOUT THE MULTI-YEAR PLAN?**

A Yes, it has. As part of its filing, Pittsburgh Water has projected a \$150 million senior revenue bond issuance in the Spring of 2026 and an additional \$110 million senior revenue bond issuance in the Spring of 2027. Pittsburgh Water anticipates the 2026 bond issuance will increase its annual debt service costs by \$11.24 million and the 2027 bond issuance will increase its annual debt service costs by an incremental \$8.24 million.

**Q HAVE YOU REVIEWED PITTSBURGH WATER'S ASSUMPTIONS
UNDERLYING ITS PROPOSED BOND ISSUANCES?**

A It was not abundantly clear in Pittsburgh Water's Cost of Service model what it was assuming for effective interest rates, term to maturity, or net proceeds despite having the principal amount, as well as projected annual payments for interest and principal amounts. This lack of clarity is concerning because these assumptions directly determine how much customers will ultimately have to pay.

If Pittsburgh Water overestimates the interest rate or assumes unduly unfavorable terms, the projected debt service costs could appear higher than what will actually occur. This can make the financial outlook seem more burdensome than

necessary and may lead to setting rates at a level that over-collects from customers. Similarly, if the assumed net proceeds are overstated or unrealistic, Pittsburgh Water's financing plan may not align with the actual funds available, which could create inefficiencies in how projects are financed. Without a transparent set of assumptions, it is difficult for regulators, intervenors, or even Pittsburgh Water's own board to evaluate whether the planned bond issuances are appropriately sized and cost-effective. Put simply, these assumptions are the foundation for determining future rates, so they must be presented clearly and supported with reasonable analysis.

In response to several data requests in OCA Set XXII, Pittsburgh Water indicated that it had uncovered a formulaic error in the amounts for interest and principal for its future debt issuances. In response to OCA-XXII-3, Pittsburgh Water stated that, "This error does not change the revenue requirement because the total annual payment stayed the same. The only change was the principal and interest amounts." In addition, in response to OCA-XXII-2, Pittsburgh Water indicated that it has assumed the following parameters for each of the future debt issuances:

Pittsburgh Water							FY 2026	FY 2027	FY 2028	FY 2029
Future System Debt Service										
							FY 2026	FY 2027	FY 2028	FY 2029
Forecasted Debt Service	Initial Amt.	Rate	Term	Premium	Premium	Issue Amt				
<i>Revenue Bonds</i>										
FY 2026	150,000,000	7.00%	30	7.00%	(10,500,000)	139,500,000.00	11,241,803	11,241,803	11,241,803	11,241,803
Principal					-		\$1,476,803	1,580,180	1,690,792	1,809,148
Interest					-		\$9,765,000	9,661,624	9,551,011	9,432,656
FY 2027	110,000,000	7.00%	30	7.00%	(7,700,000)	102,300,000.00		8,243,989	8,243,989	8,243,989
Principal					-			1,082,989	1,158,798	1,239,914
Interest					-			7,161,000	7,085,191	7,004,075
FY 2028	105,000,000	7.00%	30	7.00%	(7,350,000)	97,650,000.00			7,869,262	7,869,262
Principal					-				1,033,762	1,106,126
Interest					-				6,835,500	6,763,137
FY 2029	105,000,000	7.00%	30	7.00%	(7,350,000)	97,650,000.00				7,869,262
Principal					-					1,033,762
Interest					-					6,835,500
Subtotal: Revenue Bonds							\$ 11,241,803	\$ 19,485,792	\$ 27,355,055	\$ 35,224,317

Q WERE THERE ANY OTHER DISCREPANCIES YOU IDENTIFIED BASED ON YOUR REVIEW OF PITTSBURGH WATER'S TESTIMONY ANY EXHIBITS?

A Yes, there were. In Pittsburgh Water Statement No. 2 (Barca), pages 48 and 51, Mr. Barca testifies that DCOH at present rates is 118 days in FY 2026 and 42 days in FY 2027, and that at proposed rates DCOH is 118 and 116 days in FY 2026 and FY 2027, respectively. In contrast, Pittsburgh Water St. No. 1 (Pickering), Exhibit WJP-1, Table I(A), shows FPFTY 2026 DCOH at present rates of 45 days (26 including ALCOSAN charges) and proposed-rate DCOH of 118 days in FY 2026 and 116 days in FY 2027. In OCA-XXII-5, I asked Pittsburgh Water to reconcile these differences in DCOH projections between Mr. Barca's testimony and Mr. Pickering's testimony for the FPFTY 2026. In response, Pittsburgh Water stated as follows:

The discrepancy is Pittsburgh Water Statement No. 2 (Barca) calculates the DCOH using the beginning cash balance and Pittsburgh Water Statement No. 1 (Pickering) uses the ending cash balance for the DCOH calculation. Using the ending cash balance calculation is correct and consistent with how the rating agencies calculate DCOH. Exhibit WJP-1 is correct and Pittsburgh Water Statement No. 2 (Barca) will be updated to reflect the correct DCOH calculation. Exhibits EB-1 and EB-2 will also be updated per the response to OCA-XXII-6 below (see OCA-22-5 Attach A and Attach B for corrected exhibits). For clarity, OCA-22-5 Attach C (excel) is a simplified DCOH calculation for FY 2026 and FY 2027 that matches WJP-1.

I have provided Pittsburgh Water's response as Exhibit CCW-1.

Q DO YOU HAVE CONCERNS WITH PITTSBURGH WATER'S ASSUMED PARAMETERS FOR ITS FUTURE BOND ISSUANCES?

1 A Yes, I have a few concerns. First, I believe Pittsburgh Water has overstated the interest
2 rates that are likely to prevail for a strong-rated municipal system such as Pittsburgh
3 Water. An assumed effective rate of 7.0% is not reasonable; as I will discuss in greater
4 detail below, an effective rate closer to 5.5% is more likely. Second, I believe the
5 assumed net premium to par of 7% is insufficient compared to its most recent issuance.

6 **Q DID PITTSBURGH WATER EXPRESS ANY CONCERNS OR OPINIONS**
7 **ABOUT FACTORS THAT ARE CURRENTLY AFFECTING THE**
8 **MUNICIPAL BOND MARKET?**

9 A Yes. In the testimony of Ms. Christine Fay,⁴ she notes that the Trump administration's
10 tariff policies introduced significant volatility into the municipal bond market and
11 contributed to higher base interest rates. Elevated interest rates increase the cost of debt
12 service, which in turn may require Pittsburgh Water either to absorb higher financing
13 costs or to scale back its capital program in order to satisfy its annual rate covenant and
14 additional bonds test.

15 **Q AS PART OF ITS TESTIMONY, DID PITTSBURGH WATER PROVIDE A**
16 **DETAILED DISCUSSION OF HOW IT DERIVED A PROJECTED INTEREST**
17 **RATE OF 7.0% FOR ITS FUTURE BOND ISSUANCES?**

18 A Not that I am aware of. However, in its informal discovery response narrative provided
19 on August 28, 2025, Pittsburgh Water explained that:

20 The attached data also shows that all-in total interest cost (not the coupon
21 rate) have ranged from 3.97% to 5.08%. Pittsburgh Water is assuming

⁴ PW St. 7 at 38.

1 7% in this rate case. There was a spike in the MMD rate at the time this
2 rate case was filed and that is the reason why a higher all-in TIC is
3 assumed. Pittsburgh Water's bond have generally priced higher than the
4 MMD rate. The MMD rate as of yesterday was 5.06% - meaning it would
5 be reasonable to expect that had Pittsburgh Water priced a bond issuance
6 yesterday, the all-in TIC would have been well in excess of 5.06%. This
7 would have been the most expensive borrowing in recent history and
8 supports the claim that municipal bond rates continue to increase.⁵

9 It is unclear what "well in excess of 5.06%" means. As I will explain later in this
10 testimony, Pittsburgh Water's most recent issuance from earlier this year had a Total
11 Interest Cost ("TIC") spread of 0.04% above the contemporary Municipal Market Data
12 ("MMD") yield and has had a maximum spread of 0.44% above contemporary
13 MMD yields.

14 **Q DO YOU AGREE THAT TRADE POLICIES IMPACTED THE BOND**
15 **MARKET EARLIER THIS YEAR?**

16 **A** Yes, I do. In the months of April and May this year, trade policy concerns rattled the
17 debt and equity markets alike. However, as I will explain below, higher base interest
18 rates are not expected going forward. Further, subsequently since those months, trade
19 policy concerns have waned. In fact, in its Domestic Commentary topic titled *Tariff*
20 *Angst Begins to Recede*, the August 2025 issue of *Blue Chip Financial Forecasts* said
21 the following:

22 Tariff angst, one of the dominant forces impacting financial markets over
23 the past few months, has begun to ebb. It is now extremely likely that the
24 August 1 expiration date for the Liberation Day pause will be relatively
25 uneventful as the US has negotiated numerous trade agreements with key
26 trading partners, including Japan, the European Union, the UK, South
27 Korea and Vietnam. The swing in concern has been reflected in soaring
28 equity prices with the S&P500 index up about 3% in July, reaching
29 multiple new record highs during the month. Moreover, the market

⁵Pittsburgh Water's Response to OCA Informal Request 1.

1 measure of volatility (the VIX index) has declined consistently, falling
2 to levels last seen in mid-February. Indexes of both US economic policy
3 uncertainty and trade policy uncertainty have been trending down though
4 both remain slightly elevated by historical standards.

5 **Brighter outlook.**

6 Ebbing concerns over markedly higher tariffs have reduced pessimism
7 over the economic outlook a bit. In the wake of Liberation Day, the Blue
8 Chip Financial Forecasts (BCFF) consensus in late April looked for real
9 GDP to increase at a near recessionary 0.6% q/q saar in the last three
10 quarters of this year (and 0.6% in the last two quarters). In this month's
11 survey, the consensus outlook has increased to 0.8% for the last two
12 quarters of 2025. Furthermore, signs of modest economic resilience have
13 emerged. During July, the Citibank Economic Surprise Index rose from
14 decidedly negative territory in late June to decidedly positive territory by
15 the end of July.

16 Accordingly, the BCFF panel has lowered its US recession probability
17 to 34% from 37% last month, 41% in June and 47% in May. The likely
18 increase in tariffs is still expected to provide a risk to the economy at the
19 margin. If tariff rates were returned to the levels that existed prior to
20 Liberation Day, the BCFF consensus estimates that the probability of the
21 US economy falling into a recession in the next 12 months would fall
22 to 27%.⁶

23 **Q WHY DO YOU BELIEVE PITTSBURGH WATER HAS OVERSTATED**
24 **INTEREST RATES FOR ITS PROJECTED BOND ISSUANCES?**

25 **A** Several sources of current and projected municipal bond yields indicate that yields are
26 and will be much closer to 5% for A-rated municipal bonds than 7% as assumed by
27 Pittsburgh Water. For example, in the August 25, 2025 issue of Raymond James'
28 *Municipal Bond Investor Weekly*, 30-year A-rated municipal bond yields were 5.12%
29 compared to 30-year Treasury yields of 4.88%, a spread of 24 basis points, or 0.24%.
30 In the August 2025 release of *Blue Chip Financial Forecasts*, the consensus forecast for

⁶*Blue Chip Financial Forecasts*, August 1, 2025.

1 interest rates on A-rated state and local bonds over the next six quarters range from 4.5%
2 to 4.4%, while the consensus projected yield on 30-year Treasury yields over the same
3 time period is 4.9% to 4.6%, representing a yield spread over Treasury bonds of -40 to
4 -20 basis points.

5 Finally, in an informal discovery response, Pittsburgh Water provided the all-in
6 effective interest rates compared to the A-rated MMD borrowing rate as of the pricing
7 date for its last five bond issuances including four senior bond issuances and one
8 subordinated bond issuance. The spread above the MMD borrowing rate that Pittsburgh
9 Water has had to pay ranges from -0.37% to +0.44%. I will note that the anomaly in the
10 data seems to be the subordinated debt spread of -0.37% over the contemporary MMD
11 borrowing rate. Notably, the 2025 senior bond issue has a TIC rate of 4.38% which
12 compares to the contemporary MMD borrowing rate of 4.34% at the pricing date on
13 January 7, 2025. The indicated spread over the contemporary MMD borrowing rate is
14 0.04%. In that same informal discovery response, Pittsburgh Water indicated that the
15 MMD borrowing rate as of August 27, 2025 is 5.06%. Adding the highest spread of
16 0.44% over the MMD that Pittsburgh has had to effectively pay to the current MMD
17 rate of 5.06% would produce a high-end estimate of 5.50%.

18 Given the expectations of lower interest rates in the near-term as well as the
19 realized spreads over the MMD rate Pittsburgh Water has paid in the recent past, 5.50%
20 is more than reasonable, if not high. Assuming a rate of 7.0% is beyond excessive and
21 should be rejected.

1 **Q WHY DO YOU BELIEVE PITTSBURGH WATER HAS UNDERSTATED THE**
2 **NET PREMIUM FOR ITS PROJECTED BOND ISSUANCES?**

3 A In an informal discovery response provided on August 28, 2025, Pittsburgh Water
4 indicated that the range of premiums-to-par for bond issuances since 2022 have ranged
5 from 2.21% to 12.34% before the cost of issuance is considered. As mentioned above,
6 Pittsburgh Water is assuming a net premium (premium above par less issuance costs) to
7 par of 7.0%. This assumed net premium to par is quite low compared to recent bond
8 issuances made by Pittsburgh Water. For example, in its \$129.2 million Series 2025A
9 revenue bonds issued earlier this year, Pittsburgh Water's cost to issue was
10 approximately \$1.19 million, or just 0.92% of par. Moreover, investors paid a premium
11 on top of par of approximately \$12.09 million (or 9.36%), meaning Pittsburgh Water
12 issued \$129.2 million in par value bonds and received a total of \$141.3 million before
13 issuance costs and \$140.12 million net proceeds after issuance costs. The net effective
14 premium after issuance costs of \$140.12 million is approximately 8.44%. This recent
15 example demonstrates that Pittsburgh Water's assumed premium of 7.0% above par is
16 understated.

17 **Q DID PITTSBURGH WATER EXPLAIN THE REASONING FOR THEIR**
18 **ASSUMED NET PREMIUM AMOUNT OF 7.0% IN THEIR TESTIMONY OR**
19 **APPLICATION?**

20 A Not that I am aware of. However, in its informal discovery response narrative provided
21 on August 28, 2025, Pittsburgh Water explained that "The attached data shows that the
22 premium as a percentage of par has ranged from 2% to 12%. Pittsburgh Water is

1 assuming a premium of 7% in this rate case, which we feel is reasonable based on
2 historical data.”

3 **Q HAVE YOU MEASURED THE IMPACT YOUR RECOMMENDED**
4 **ADJUSTMENTS WILL HAVE ON DEBT SERVICE COSTS?**

5 A Yes, I have. Reducing the yield on Pittsburgh Water’s future debt to 5.5%, as well as
6 increasing its net premium-to-par from 7.0% to 8.44% would reduce the level
7 annualized debt costs on future debt from \$11.24 million in FY 2026 to \$9.45 million,
8 a reduction of \$1.79 million in annual debt service costs.

9 **OCA’S RECOMMENDATION FOR**
10 **DSC RATIO AND OTHER FINANCIAL METRICS**

11 **Q BASED ON YOUR REVIEW OF PITTSBURGH WATER’S REQUEST, DO**
12 **YOU BELIEVE ITS REQUESTED TOTAL DSC RATIO OF 1.42x IS**
13 **REASONABLE?**

14 A No, I do not. Pittsburgh Water’s requested DSC ratio is excessive and provides too much
15 of a financial cushion at the expense of ratepayers now. In effect, Pittsburgh Water is
16 asking ratepayers, many of whom already struggle with affordability, to fund an inflated
17 margin beyond what is necessary to maintain credit quality or flexibility.

18 This is particularly concerning given Pittsburgh Water’s proposed increase in
19 the Distribution Service Investment Charge cap as well as its proposal for Multi-Year
20 Rate Plan over the next two years, including an increase to the debt service coverage
21 capital requirements in the second year. If approved, these mechanisms would shield
22 Pittsburgh Water and minimize regulatory lag, resulting in highly stable and predictable

1 cash flows. In other words, Pittsburgh Water is seeking the benefits of guaranteed cost
2 recovery while continuing to ask ratepayers to fund oversized cushions. That outcome
3 is not just unnecessary—it is fundamentally unfair to consumers and inconsistent with
4 the Commission’s obligation to ensure just and reasonable rates.

5 **Q WHAT IS THE REVENUE REQUIREMENT IMPACT OF YOUR**
6 **RECOMMENDED DSC RATIO?**

7 A My recommended Total DSC ratio of 1.20x reduces Pittsburgh Water’s revenue
8 requirement by approximately \$26.4 million. However, OCA witness Dante Mugrace
9 will present the resulting revenue requirement incorporating all of OCA’s recommended
10 adjustments.

11 **Q DOES YOUR DSC RATIO ADHERE TO THE BOND COVENANT**
12 **REQUIREMENTS?**

13 A Yes, it does. The threshold requirement of the bond covenants is 1.25x for senior debt
14 service and 1.10x for total debt service. My recommendation provides ample cushion
15 above that requirement while maintaining sufficient levels for other important financial
16 metrics.

17 **Q HAVE YOU ASSESSED THE IMPACT YOUR RECOMMENDED TOTAL DSC**
18 **RATIO OF 1.20x WILL HAVE ON OTHER FINANCIAL METRICS?**

19 A Yes, I have. My recommended DSC ratio of 1.20x under the Total DSC measure will
20 produce a Senior DSC ratio of approximately 1.57x. After incorporating all of OCA’s

adjustments, the DCOH including ALCOSAN charges is approximately 129 days (See D. Mugrace Ex. DM-21), an increase from the 118 projected by Pittsburgh Water. Similarly, the resulting DCOH excluding ALCOSAN charges increases from 204 days to 233 days. I present the comparison of resulting financial metrics in Table CCW-3.

Table CCW-3		
<u>Financial Metric Comparison</u>		
<u>Description</u>	<u>FPFTY 2026</u>	
	<u>PW</u>	<u>OCA</u>
Senior DSCR	1.85x	1.57x
Total DSCR	1.42x	1.20x
DCOH (excl. ALCOSAN)	204	233
DCOH (incl. ALCOSAN)	118	129

Q DO YOU BELIEVE YOUR RECOMMENDATION WILL HARM PITTSBURGH WATER'S FINANCIAL INTEGRITY?

A No, I do not. My recommended Total and Senior DSC ratios are:

1. Consistent with Pittsburgh Water's recently realized ratios that have provided strong stable credit ratings and access to capital.
2. Consistent with Pittsburgh Water's previously requested ratios in prior rate cases.

1 3. Produce DCOH metrics that are higher than Pittsburgh Water's proposed after all of
2 OCA's adjustments are incorporated.

3 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

4 **A Yes, it does.**

QUALIFICATIONS OF CHRISTOPHER C. WALTERS

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Christopher C. Walters. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a Principal with the firm of Brubaker & Associates, Inc. (“BAI”), energy, economic and regulatory consultants.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EMPLOYMENT EXPERIENCE.

A I received a Bachelor of Science Degree in Business Economics and Finance from Southern Illinois University Edwardsville. I have also received a Master of Business Administration Degree from Lindenwood University.

As a Principal at BAI, I perform detailed technical analyses and research to support regulatory projects including expert testimony covering various regulatory issues. Since my career at BAI began in 2011, I have held the positions of Analyst, Associate Consultant, Consultant, Senior Consultant, and Associate. Throughout my tenure, I have been involved with several regulated projects for electric, natural gas and water and wastewater utilities, as well as competitive procurement of electric power and gas supply. My regulatory project work includes estimating the cost of equity capital, capital structure evaluations, assessing financial integrity, merger and acquisition

1 related issues, risk management related issues, depreciation rate studies, and other
2 revenue requirement issues.

3 BAI was formed in April 1995. BAI and its predecessor firm have participated
4 in more than 700 regulatory proceedings in 40 states and Canada.

5 BAI provides consulting services in the economic, technical, accounting, and
6 financial aspects of public utility rates and in the acquisition of utility and energy
7 services through RFPs and negotiations, in both regulated and unregulated markets. Our
8 clients include large industrial and institutional customers, some utilities and, on
9 occasion, state regulatory agencies. We also prepare special studies and reports,
10 forecasts, surveys and siting studies, and present seminars on utility-related issues.

11 In general, we are engaged in energy and regulatory consulting, economic
12 analysis and contract negotiation. In addition to our main office in St. Louis, the firm
13 also has branch offices in Corpus Christi, Texas; Louisville, Kentucky; and
14 Phoenix, Arizona.

15 **Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

16 A Yes. I have sponsored testimony before state regulatory commissions including:
17 Arizona, Arkansas, Colorado, Delaware, Florida, Georgia, Illinois, Iowa, Kansas,
18 Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri,
19 Montana, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, South
20 Carolina, Texas, Utah, and Wyoming. In addition, I have also sponsored testimony
21 before the City Council of New Orleans and an affidavit before the FERC.

1 **Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR**
2 **ORGANIZATIONS TO WHICH YOU BELONG.**

3 A I earned the Chartered Financial Analyst (“CFA”) designation from the CFA Institute.
4 The CFA charter was awarded after successfully completing three examinations which
5 covered the subject areas of financial accounting and reporting analysis, corporate
6 finance, economics, fixed income and equity valuation, derivatives, alternative
7 investments, risk management, and professional and ethical conduct. I am a member of
8 the CFA Institute and the CFA Society of St. Louis.

544160

Exhibit CCW-1
Response to OCA Set XXII-5

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set XXII
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Request: OCA-XXII-5 In Pittsburgh Water Statement No. 2 (Barca), pages 48 and 51, Mr. Barca testifies that DCOH at present rates is 118 days in FY 2026 and 42 days in FY 2027, and that at proposed rates DCOH is 118 and 116 days in FY 2026 and FY 2027, respectively. In contrast, Pittsburgh Water St. No. 1 (Pickering), Exhibit WJP-1, Table I(A), shows FPFTY 2026 DCOH at present rates of 45 days (26 including ALCOSAN charges) and proposed-rate DCOH of 118 days in FY 2026 and 116 days in FY 2027.

- a. Please reconcile these differences in DCOH projections between Mr. Barca’s testimony and Mr. Pickering’s testimony for the FPFTY 2026.
- b. If corrections are necessary, provide an updated model with formulas and cell references intact.

Response:

The discrepancy is Pittsburgh Water Statement No. 2 (Barca) calculates the DCOH using the beginning cash balance and Pittsburgh Water Statement No. 1 (Pickering) uses the ending cash balance for the DCOH calculation. Using the ending cash balance calculation is correct and consistent with how the rating agencies calculate DCOH. Exhibit WJP-1 is correct and Pittsburgh Water Statement No. 2 (Barca) will be updated to reflect the correct DCOH calculation. Exhibits EB-1 and EB-2 will also be updated per the response to OCA-XXII-6 below (see OCA-22-5 Attach A and Attach B for corrected exhibits).

For clarity, OCA-22-5 Attach C (excel) is a simplified DCOH calculation for FY 2026 and FY 2027 that matches WJP-1.

Response provided by: Edward Barca, Director of Finance for Pittsburgh Water

Date response provided by: August 27, 2025

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Christopher C. Walters, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 3, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ Christopher C. Walters
Christopher C. Walters

Address: Brubaker & Associates, Inc.
16690 Swingley Ridge Road
Suite 140
Chesterfield, MO 63017

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY	)	
COMMISSION	)	
	)	
v.	)	DOCKET NOS. R-2025-3055010 (WATER)
	)	R-2025-3055011 (WASTEWATER)
THE PITTSBURGH WATER AND	)	R-2025-3055012 (STORMWATER)
SEWER AUTHORITY d/b/a/	)	
PITTSBURGH WATER	)	

DIRECT TESTIMONY OF
JEROME D. MIERZWA

ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

SEPTEMBER 5, 2025

TABLE OF CONTENTS

I. INTRODUCTION	1
II. WATER SERVICE	6
A. Cost of Service Study.....	6
B. Water Revenue Allocation	9
C. Rate Design	13
III. WASTEWATER CONVEYANCE SERVICE	14
A. Cost of Service Study.....	14
B. Wastewater Revenue Allocation	15
C. Rate Design	19
IV. STORMWATER SERVICE.....	21

1 **I. INTRODUCTION**

2 Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

3 A. My name is Jerome D. Mierzwa. I am a Principal and the President of Exeter Associates,
4 Inc (“Exeter”). My business address is 10480 Little Patuxent Parkway, Suite 300,
5 Columbia, Maryland 21044. Exeter specializes in providing public utility-related
6 consulting services.

7 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
8 EXPERIENCE.

9 A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of
10 Science Degree in Marketing.¹ In 1985, I received a Master’s Degree in Business
11 Administration with a concentration in finance, also from Canisius College. In July 1986,
12 I joined National Fuel Gas Distribution Corporation (“NFG Distribution”) as a
13 Management Trainee in the Research and Statistical Services Department (“RSS”). I was
14 promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I
15 conducted various financial and statistical analyses related to the Company’s market
16 research activity and state regulatory affairs. In April 1987, as part of a corporate
17 reorganization, I was transferred to National Fuel Gas Supply Corporation’s (“NFG
18 Supply”) rate department where my responsibilities included utility cost of service and rate
19 design analysis, expense and revenue requirement forecasting and activities related to
20 federal regulation. I was also responsible for preparing NFG Supply’s Federal Energy
21 Regulatory Commission (“FERC”) Purchase Gas Adjustment (“PGA”) filings and
22 developing interstate pipeline and spot market supply gas price projections. These forecasts
23 were utilized for internal planning purposes as well as in NFG Distribution’s Section
24 1307(f) purchased gas cost proceedings.

¹ Effective August 1, 2023, Canisius College became Canisius University.

1 In April 1990, I accepted a position as a Utility Analyst with Exeter. In December
2 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996, I became a
3 Principal of Exeter. Since joining Exeter, I have specialized in utility class cost of service
4 and rate design analysis, evaluating the gas purchasing practices and policies of natural gas
5 utilities, sales and rate forecasting, performance-based incentive regulation, revenue
6 requirement analysis, the unbundling of utility services, and the evaluation of customer
7 choice natural gas transportation programs.

8 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS
9 ON UTILITY RATES?

10 A. Yes. I have provided testimony on approximately 500 occasions in proceedings before
11 FERC, utility regulatory commissions in Arkansas, Connecticut, Delaware, Georgia,
12 Illinois, Indiana, Louisiana, Maine, Maryland, Massachusetts, Montana, Nevada, New
13 Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, Utah,
14 and Virginia, as well as before the Pennsylvania Public Utility Commission
15 (“Commission”).

16 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

17 A. On June 4, 2025, the Pittsburgh Water and Sewer Authority (“PWSA”) d/b/a Pittsburgh
18 Water filed an application to increase rates for water, wastewater conveyance, and
19 stormwater service by \$84.4 million over a two year period under a multi-year rate plan
20 (“MYRP”). The \$84.4 million proposed increase is comprised of \$63.7 million (25.9%) for
21 the Fiscal Year Ending December 31, 2026, 2026 (“FY 2026”), and \$20.7 million (6.7%)
22 for FY 2027. The rate increases are proposed to be effective January 1, 2026, and January
23 1, 2027, respectively. Exeter was retained by the Pennsylvania Office of Consumer
24 Advocate (“OCA”) to review and analyze the water, wastewater conveyance, and
25 stormwater cost of service studies and the rate design proposals included in Pittsburgh

1 Water's application. My testimony addresses Pittsburgh Water's cost of service studies and
2 rate design proposals.

3 The rate increases proposed by Pittsburgh Water are inclusive of an increase to the
4 Distribution System Improvement Charge ("DSIC") cap from 5.0% to 7.5%, and expansion
5 of the Company's existing Pennsylvania Infrastructure Investment Authority
6 ("PENNVEST") surcharge starting March 3, 2026. Pittsburgh Water's DSIC and its
7 proposal to increase the cap to 7.5%, is explained and addressed by OCA witness Michael
8 Deupree. As explained by Mr. Deupree, the OCA does not support Pittsburgh Water's
9 proposal to increase the DSIC cap to 7.5%. Mr. Deupree will also be addressing a
10 modification to the language of the PENNVEST surcharge that there should be a
11 verification of the assets for the PENNVEST loans being used and useful.

12 Q. DOES THE OCA SUPPORT THE ADOPTION OF A MYRP FOR
13 PITTSBURGH WATER IN THIS PROCEEDING?

14 A. No. As explained in greater detail by OCA witness Dante Mugrace, a MYRP for Pittsburgh
15 Water should not be adopted in this proceeding and a rate increase for FY 2027 should not
16 be approved in this proceeding. As explained by Mr. Mugrace in OCA Statement 2, and as
17 supported by several other OCA witnesses, Pittsburgh Water's proposed MYRP is
18 deficient regarding the statutory and regulatory provisions governing a MYRP.

19 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

20 A. My findings and recommendations are as follows:

- 21 • The water cost of service study presented by Pittsburgh Water utilizes the base-
22 extra capacity method set forth in the American Water Works Association's
23 ("AWWA") *Manual M1, Principals of Water Rates Fees, and Charges* ("AWWA
24 Manual") and is reasonable;
- 25 • Pittsburgh Water serves three Wholesale customers: Fox Chapel, Aspinwall, and
26 Reserve Township. The water service rates proposed by Pittsburgh Water for the
27 Wholesale class are significantly less than the indicated cost of service, and
28 Pittsburgh Water is proposing to reallocate this deficiency to the other customer
29 classes. The amount of the Wholesale revenue reallocation is \$3,897,457 for FY

1 2026. In Pittsburgh Water’s last water base rate proceeding in Docket No. R-2023-
2 3039920 (2023 Proceeding), the amount of the deficiency was \$8,566,911. In the
3 2023 Proceeding, Pittsburgh Water claimed that the rates for each Wholesale
4 customer were set by a contractual agreement and Pittsburgh Water was unable to
5 increase the rates of its Wholesale customers beyond what was allowed by the
6 individual agreements. In the 2023 Proceeding, I recommended that Pittsburgh
7 Water provide notice of termination for each Wholesale agreement and negotiate
8 alternative agreements that provide for movement towards cost of service rates over
9 the course of the contract. In this proceeding in data request OCA-VIII-6, I asked
10 Pittsburgh Water if they had issued termination notices for its Wholesale contracts
11 as I recommended in the 2023 Proceeding. In response to this request, Pittsburgh
12 Water responded that it “is actually negotiating new rates for Fox Chapel,” and that
13 “other Wholesale rates will be renegotiated as they become due.” The new rates for
14 Fox Chapel have assisted in reducing the revenue deficiency claimed in this
15 proceeding from the revenue deficiency claimed in the 2023 Proceeding. Pittsburgh
16 Water did not indicate why it did not issue termination notices under its contracts
17 with Aspinwall and Reserve Township, and Pittsburgh Water should do so in its
18 rebuttal testimony;

- 19 • For FY 2026, the customer class base rate revenue increases for water service
20 proposed by Pittsburgh Water should be proportionately scaled back to reflect the
21 actual water service revenue increase authorized by the Commission in this
22 proceeding. In addition, I recommend that the PENNVEST surcharge revenues
23 proposed to be collected from each customer class be scaled back to reflect the
24 actual increase authorized by the Commission this proceeding. I also recommend
25 that pursuant to Mr. Deupree’s direct testimony, the DSIC charges to be assessed
26 by Pittsburgh Water be based on a DSIC cap of 5.0%. As previously explained, it
27 is the OCA’s position in this proceeding that a rate increase for Pittsburgh Water
28 for FY 2027 should not be approved. If the Commission does not accept this
29 recommendation, I recommend that for FY 2027, the proposed base rate customer
30 class revenue increases and PENNVEST surcharge revenue increases each be
31 scaled back to reflect the actual increases authorized by the Commission for FY
32 2027 in this proceeding;
- 33 • Consistent with the 2023 Proceeding Settlement, Pittsburgh Water’s proposal to
34 eliminate the minimum usage allowance from the monthly water and wastewater
35 customer charges effective FY 2027 should be approved, and the customer charges
36 proposed by Pittsburgh Water in this proceeding should be proportionately scaled
37 back to reflect the reduced revenue requirement increases authorized by the
38 Commission;
- 39 • The wastewater conveyance cost of service study presented by Pittsburgh Water
40 utilizes the functional cost allocation described in *Financing and Charges for*
41 *Wastewater Systems; Manual of Practice No. 27* published by the Water
42 Environmental Federation (“Manual of Practice No. 27”) and is reasonable;
- 43 • Pittsburgh Water’s stormwater gradualism adjustment of \$6.0 million, or 15% of
44 the total stormwater revenue requirement, which provides for the recovery of a

1 portion of the stormwater revenue requirement from wastewater conveyance
2 customers appears reasonable. However, to the extent that the Commission
3 authorizes a total stormwater revenue requirement that is less than the revenue
4 requirement requested by Pittsburgh Water, that reduction should first be applied
5 to reduce the stormwater gradualism adjustment assigned to wastewater
6 conveyance service;

- 7 • For FY 2026, the customer class base rate revenue increases for wastewater
8 conveyance service proposed by Pittsburgh Water should be proportionately scaled
9 back to reflect the actual wastewater conveyance revenue increase authorized by
10 the Commission in this proceeding. In addition, I recommend that the PENNVEST
11 surcharge revenues proposed to be collected from each customer class be scaled
12 back to reflect the actual increase authorized by the Commission this proceeding. I
13 also recommend that pursuant to Mr. Deupree's direct testimony, the DSIC charges
14 to be assessed by Pittsburgh Water be based on a DSIC cap of 5.0%. As previously
15 explained, it is the OCA's position in this proceeding that a rate increase for
16 Pittsburgh Water FY 2027 should not be approved. If the Commission does not
17 accept this recommendation, I recommend that for FY 2027, the proposed base rate
18 customer class revenue increases and PENNVEST surcharge revenue increases be
19 scaled back to reflect the actual increases authorized by the Commission for FY
20 2027 in this proceeding; and
- 21 • To the extent that the Commission authorizes an increase in stormwater revenues
22 which is less than that requested by Pittsburgh Water, the stormwater rates proposed
23 by Pittsburgh should be proportionately scaled back.

24 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

25 A. The remainder of my testimony is divided into three additional sections. The second section
26 of my testimony describes and evaluates Pittsburgh Water's water cost of service study,
27 proposed revenue allocation, and rate design proposals. The next section of my testimony
28 addresses Pittsburgh Water's wastewater conveyance cost of service study, proposed
29 revenue allocation, and rate design proposals. The final section of my testimony addresses
30 Pittsburgh Water's stormwater rate design proposals.
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II. WATER SERVICE

A. Cost of Service Study

Q. WHAT IS THE OBJECTIVE OF A COST OF SERVICE STUDY?

A. A cost of service study is conducted to assist a utility or commission in determining the level of costs properly recoverable from each of the various classes of customers to which the utility provides service. Allocation of recoverable costs to each class of service is generally based on cost causation principles.

Q. WHAT ARE THE PRIMARY COST OF SERVICE STUDY
METHODOLOGIES UTILIZED FOR WATER UTILITIES?

A. The two most commonly used and widely recognized methods of allocating costs to customer classes for water utilities are the base-extra capacity method and the commodity-demand method. Both of these methods are set forth in the American Water Works Association's ("AWWA") Manual M1, *Principles of Water Rates, Fees, and Charges* ("AWWA Manual").

Q. WHAT METHODOLOGY HAS PITTSBURGH WATER UTILIZED FOR ITS
WATER COST OF SERVICE STUDY?

A. Pittsburgh Water has utilized the base-extra capacity method in preparing its water cost of service study. Under the base-extra capacity method, investment and costs are first classified into four primary functional cost categories: base or average capacity, extra capacity, customer, and fire protection. Once investment and costs are classified to these functional categories, they are allocated to the various customer classes. Pittsburgh Water's water cost of service study is presented by Harold J. Smith of Raftelis Financial Consultants, Inc. Pittsburgh Water's subsequently discussed wastewater conveyance cost of service study and stormwater cost analysis are also presented by Mr. Smith. The water and wastewater conveyance cost of service studies were prepared based on Pittsburgh

1 Water's fully projected future test year ("FPFTY") base rate revenue requirement claim for
2 FY 2026 in this proceeding, inclusive of the proposed expansion of the PENNVEST
3 surcharge. Under the proposed PENNVEST surcharge, the interest and principal associated
4 with Pittsburgh Water's PENNVEST loans will be recovered through a separate volumetric
5 rate assessed to all non-Public Fire customer classes.

6 Q. PLEASE DESCRIBE IN GREATER DETAIL THE FOUR PRIMARY
7 FUNCTIONAL COST CATEGORIES AND HOW THEY ARE ALLOCATED
8 TO THE VARIOUS CUSTOMER CLASSES UNDER THE BASE-EXTRA
9 CAPACITY METHOD.

10 A. **Base or Average Costs** are costs that tend to vary with the quantity of water used, plus
11 costs associated with supplying, treating, pumping, and distributing water to customers
12 under average load conditions. Base costs were allocated to customer class on the basis of
13 average daily usage in Pittsburgh Water's cost of service study.

14 **Extra Capacity Costs** are costs associated with meeting usage requirements in
15 excess of base or average usage. This includes operating and capital costs for additional
16 plant and system capacity beyond that required for average usage. Extra capacity costs in
17 Pittsburgh Water's study have been subdivided into costs necessary to meet maximum day
18 extra demand and maximum hour extra demand. These extra capacity costs were allocated
19 to customer class on the basis of each class's maximum day and maximum hour usage in
20 excess of average usage. Extra capacity costs related to fire protection service are allocated
21 directly to the fire protection classifications.

22 **Customer Costs** are costs associated with serving customers regardless of their
23 usage or demand characteristics. Customer costs include the operating costs related to
24 meters and services, meter reading costs, and billing and collection costs. Customer costs

1 were allocated on the basis of capital cost of meters and services and the number of
2 customer bills.

3 **Fire Protection Costs** are costs associated with providing the facilities to meet the
4 potential peak demand of fire protection service. In Pittsburgh Water's study, fire
5 protection costs have been subdivided into the costs associated with meeting Public Fire
6 Protection and Private Fire Protection demands. The extra capacity costs assigned to fire
7 protection were allocated to Public and Private Fire Protection on the basis of the total
8 relative demands of hydrants and fire service lines. In accordance with 66 Pa. C.S. §
9 1328(b) of the Public Utility Code, public fire costs exceeding 25% of the public fire cost
10 of service were assigned to the other customer classes based on equivalent meters.

11 Q. WHAT CUSTOMER CLASSES HAS PITTSBURGH WATER IDENTIFIED IN
12 ITS WATER COST OF SERVICE STUDY?

13 A. The Company has separately identified the cost of serving ten customer classes in its water
14 study:

- 15 • Residential
- 16 • Residential Customer Assistance Program ("CAP")
- 17 • Commercial
- 18 • Industrial
- 19 • Health or Education
- 20 • Municipal – Residential
- 21 • Municipal – Commercial
- 22 • Private Fire
- 23 • Public Fire
- 24 • Wholesale

25 Q. DO YOU GENERALLY FIND PITTSBURGH WATER'S WATER COST OF
26 SERVICE STUDY TO BE REASONABLE?

27 A. Yes. I find Pittsburgh Water's use of the base-extra capacity methodology to be reasonable.

1 **B. Water Revenue Allocation**

2 Q. EXHIBIT HJS-10W OF PITTSBURGH WATER'S WATER COST OF
3 SERVICE STUDY PRESENTS BOTH AN UNADJUSTED AND ADJUSTED
4 COST OF SERVICE FOR EACH CUSTOMER CLASS. PLEASE EXPLAIN
5 THE DIFFERENCE.

6 A. The unadjusted cost of service reflects the direct results of Pittsburgh Water's water cost
7 of service study. As indicated on Exhibit HJS-10W, Pittsburgh Water subsequently
8 adjusted the direct results of its water cost of service study to reflect:

- 9 • A reallocation of public fire costs in excess of 25% of the indicated cost of service
10 pursuant to 66 § Pa 1328(b) of the Public Utility Code as previously discussed;
- 11 • A reallocation of the revenue deficiency of the Wholesale customer class, which is
12 discussed later in my testimony;
- 13 • The forgone revenue resulting from discounts given to participants in Pittsburgh
14 Water's Customer Assistance Program;
- 15 • A reallocation of a portion of the cost of service assigned to the Residential class to
16 the Health or Education customer class to provide for gradualism; and
- 17 • A reallocation of a portion of the cost of service assigned to the Industrial class to
18 provide for gradualism.

19 Also reflected on Exhibit HJS-10W is an adjustment to the cost of service of each customer
20 class to remove from the cost of service the revenues that will be separately recovered
21 through the expanded PENNVEST surcharge.

22 Q. DID PITTSBURGH WATER INCLUDE ANY OTHER ADJUSTMENTS TO
23 THE WATER COST OF SERVICE, OR REVENUE REQUIREMENT, FOR
24 EACH CUSTOMER CLASS?

25 A. Yes. As shown on Exhibit HJS-12W, page 2, Pittsburgh Water further adjusted the adjusted
26 cost of service for each customer class to include bad debt expense.

1 Q. DOES PITTSBURGH WATER PRESENT A SUMMARY OF THE WATER
2 REVENUES TO BE RECOVERED FROM EACH CUSTOMER CLASS FOR
3 FY 2026 AT PROPOSED RATES?

4 A. Yes. Exhibit HJS-15W presents a summary of the revenues to be received from each
5 customer class for FY 2026 at proposed rates. As shown on Exhibit HJS-15W, Pittsburgh
6 Water is proposing to separately assess each customer class base rate charges, a
7 PENNVEST surcharge, and DSIC charges. The base rate revenues reflected on Exhibit
8 HJS-15W recover the adjusted cost of service from each customer class, which as
9 previously explained, exclude PENNVEST interest and principal. The PENNVEST
10 surcharge revenues reflected on Exhibit HJS-15W recover PENNVEST interest and
11 principal from each customer class. The DSIC revenues reflected on Exhibit HJS-15W
12 recover the DSIC charges assessed to each customer class based on a DSIC of 7.5%.

13 Q. PLEASE PROVIDE A COMPARISON OF THE ADJUSTED WATER COST
14 OF SERVICE FOR EACH CUSTOMER CLASS, INCLUSIVE OF BAD DEBT
15 EXPENSE, AND PRESENT AND PROPOSED FY 2026 RATES FOR EACH
16 CUSTOMER CLASS, INCLUSIVE OF DSIC REVENUES AND PENNVEST
17 SURCHARGE REVENUES.

18 A. The adjusted cost of service for each customer class indicated by Pittsburgh Water's water
19 cost of service study, inclusive of bad debt expense, DSIC revenues, and PENNVEST
20 revenues, at present and proposed FY 2026 rates are summarized in Table 1. As shown in
21 Table 1, for FY 2026, Pittsburgh Water is essentially proposing a revenue allocation and
22 rates in this proceeding that recover the cost of service from each customer class.

Table 1. Comparison of Present and Proposed FY 2026 Water Rates and Adjusted Cost of Service

Class	Present Rates	Proposed Rates	INCREASE		Adjusted Cost of Service	Variance
			Amount	Percent		
Residential + CAP + Municipal	\$60,740,524	\$74,485,502	\$13,744,978	22.6%	\$74,469,953	\$15,549
Commercial + Municipal	\$63,677,179	80,705,625	17,028,446	26.7%	80,698,311	7,314
Industrial	3,698,590	5,239,551	1,540,961	41.7%	5,238,695	856
Health or Education	24,678,347	31,250,683	6,572,336	26.6%	31,242,813	7,870
Private Fire	938,225	1,270,237	332,012	35.4%	1,270,187	50
Public Fire	1,875,259	2,659,260	784,001	41.8%	2,659,157	103
Wholesale	4,701,606	7,446,789	2,745,182	58.4%	7,446,789	0
Total:	\$160,309,730	\$203,057,647	\$42,747,917	26.7%	\$203,025,905	\$31,742

Q. EARLIER IN THIS SECTION OF YOUR TESTIMONY YOU INDICATED THAT YOU WOULD ADDRESS PITTSBURGH WATER’S REALLOCATION OF THE REVENUE DEFICIENCY OF THE WHOLESALE CLASS LATER IN YOUR TESTIMONY. PLEASE ADDRESS PITTSBURGH WATER’S PROPOSED REALLOCATION.

A. The proposed rate revenues for the Wholesale class are significantly less than the unadjusted indicated cost of service, and Pittsburgh Water is proposing to reallocate this deficiency to the other customer classes. As shown on Exhibit HJS-10W, the amount of the proposed Wholesale revenue reallocation is \$3,897,457 for FY 2026. In Pittsburgh Water’s last water base rate proceeding in Docket No. R-2023-3039920 (2023 Proceeding), the amount of the deficiency, as shown on Exhibit HJS-10W, was \$8,566,911. In the 2023 Proceeding, Pittsburgh Water claimed that the rates for each Wholesale customer were set by a contractual agreement, and Pittsburgh Water was unable to increase the rates of Wholesale customers beyond what was allowed by the individual agreements.

In my direct testimony in the 2023 Proceeding, I noted that Pittsburgh Water served three Wholesale customers: Fox Chapel, Aspinwall and Reserve Township, and I agreed

1 with Pittsburgh Water that the rates for each Wholesale customer were currently set by
2 contractual agreement. Pittsburgh Water's contractual agreements with Fox Chapel,
3 Aspinwall, and Reserve Township were filed with the Commission in Docket No. U-2020-
4 3020772 in conformance with the March 26, 2020 Compliance Plan Stage 1 Order at
5 Docket Nos. M-2018-2640802 and M-2018-2640803.² Under the agreement with
6 Aspenwall, Pittsburgh Water was authorized to terminate the agreement with one year's
7 notice, and the agreements with Fox Chapel and Reserve Township could be terminated
8 upon five year's notice. In the 2023 Proceeding, I recommended that Pittsburgh Water
9 provide notice of termination for each agreement and negotiate alternative agreements that
10 provided for movement toward cost of service rates over the course of the contract.

11 In this proceeding in data request OCA-VIII-6, I asked Pittsburgh Water if they had
12 issued termination notices for its Wholesale contracts as I recommended in the 2023
13 Proceeding. In response to this request, Pittsburgh Water responded that it "is actually
14 negotiating new rates for Fox Chapel," and that "other Wholesale rates will be renegotiated
15 as they become due." The new rates for Fox Chapel have assisted in reducing the Wholesale
16 revenue deficiency claimed in this proceeding from the revenue deficiency claimed in the
17 2023 Proceeding which was resolved by settlement. Pittsburgh Water did not indicate why
18 it did not issue termination notices under its contracts with Aspinwall and Reserve
19 Township, and Pittsburgh Water should do so in its rebuttal testimony.

20 Q. SHOULD THE CUSTOMER CLASS REVENUE INCREASES FOR WATER
21 SERVICE PROPOSED BY PITTSBURGH WATER BE ADOPTED IN THIS
22 PROCEEDING?

23 A. For FY 2026, I recommend that the base rate customer class revenue increases for water
24 service proposed by Pittsburgh Water be proportionately scaled back to reflect the actual

² See <https://www.puc.pa.gov/pdocs/1669573.pdf>.

1 increase authorized by the Commission in this proceeding. In addition, I recommend that
2 the PENNVEST surcharge revenues proposed to be collected from each customer class be
3 scaled back to reflect the actual increase authorized by the Commission in this proceeding.
4 I also recommend that pursuant to Mr. Deupree's direct testimony, the DSIC charges
5 assessed by Pittsburgh Water be based on a DSIC CAP of 5.0%.

6 As previously explained, it is the OCA's position in this proceeding that a rate
7 increase for Pittsburgh Water for FY 2027 should not be approved. If the Commission does
8 not accept this recommendation, I recommend that for FY 2027, the base rate customer
9 class revenue increases and PENNVEST surcharge revenue increases be scaled back to
10 reflect the actual increases authorized by the Commission for FY 2027 in this proceeding.

11 **C. Rate Design**

12 Q. IS PITTSBURGH WATER PROPOSING ANY CHANGES TO ITS EXISTING
13 RATE STRUCTURE FOR WATER SERVICE?

14 A. Yes. While Pittsburgh Water is not proposing any changes to the existing rate structure
15 for FY 2026, for FY 2027, Pittsburgh Water is proposing to eliminate the minimum usage
16 allowance currently included in the fixed monthly customer charge. The minimum
17 allowance varies by meter size. For example, for the typical Residential customer served
18 by a 5/8-inch meter, the current minimum allowance is 1,000 gallons per month.

19 Q. DO YOU AGREE WITH PITTSBURGH WATER'S PROPOSAL
20 CONCERNING THE ELIMINATION OF THE USAGE ALLOWANCE FROM
21 THE FIXED MONTHLY WATER CUSTOMER CHARGE?

22 A. Yes.

23 Q. HOW DOES ELIMINATION OF THE MINIMUM ALLOWANCE IMPACT
24 THE CUSTOMER CHARGE ASSESSED TO THE TYPICAL RESIDENTIAL
25 WATER CUSTOMER?

1 A. As shown on Exhibit HJS-17W, the current monthly charge for a typical Residential water
2 customer with a 5/8" meter and a 1,000 gallon minimum allowance is \$31.54. For FY 2026
3 the proposed customer charge which would include the minimum allowance is \$34.34. For
4 FY 2027, Pittsburgh Water is proposing an average rate increase of 6.7%. Even with this
5 increase, the elimination of the minimum allowance would reduce the monthly customer
6 charge for a typical Residential customer to \$18.81 as shown on Exhibit HJS-21W. Without
7 the proposed FY 2027 increase, I estimate that the monthly customer charge for a typical
8 Residential customer would be \$18.41.

9 Q. SHOULD THE METHOD USED BY PITTSBURGH WATER TO
10 DETERMINE WATER MONTHLY CUSTOMER CHARGES IN THIS
11 PROCEEDING BE ADOPTED?

12 A. Yes. To the extent the Commission authorizes revenue requirement increases in this
13 proceeding which are less than Pittsburgh Water's requested increases for FY 2026 and FY
14 2027, I recommend that the customer charges proposed by Pittsburgh Water for FY 2026
15 and FY 2027 be proportionately scaled back to reflect the reduced revenue increases.

16 **III. WASTEWATER CONVEYANCE SERVICE**

17 **A. Cost of Service Study**

18 Q. WHAT METHODOLOGY DID PITTSBURGH WATER UTILIZE IN
19 PREPARING ITS WASTEWATER CONVEYANCE COST OF SERVICE
20 STUDY?

21 A. Pittsburgh Water used the functional cost allocation methodology described in *Financing*
22 *and Charges for Wastewater Systems; Manual of Practice No. 27* published by the Water
23 Environment Federation ("Manual of Practice No. 27"). This method allocates the cost of
24 providing wastewater service to customer classifications in proportion to each
25 classification's use of the service provider's facilities and services. Costs are assigned to

1 cost components using predominant operational purposes as cost-causative factors. The
2 functional cost allocation method is generally accepted as a sound method for allocating
3 the cost of wastewater service.

4 Q. PLEASE IDENTIFY THE CUSTOMER CLASSES INCLUDED IN
5 PITTSBURGH WATER'S WASTEWATER CONVEYANCE STUDY.

6 A. With the exception of the Wholesale and fire protection service classes, the same customer
7 classes included in Pittsburgh Water's water cost of service study are included in Pittsburgh
8 Water's wastewater conveyance cost of service study.

9 Q. DO YOU GENERALLY FIND PITTSBURGH WATER'S WASTEWATER
10 CONVEYANCE COST OF SERVICE STUDY TO BE REASONABLE?

11 A. Yes. I find Pittsburgh Water's wastewater conveyance cost of service study to be
12 reasonable.

13 **B. Wastewater Revenue Allocation**

14 Q. LIKE THE WATER COST OF SERVICE STUDY, PITTSBURGH WATER
15 ALSO PRESENTS UNADJUSTED AND ADJUSTED WASTEWATER COSTS
16 OF SERVICE FOR EACH CUSTOMER CLASS. PLEASE IDENTIFY THE
17 ADJUSTMENTS MADE BY PITTSBURGH WATER TO THE UNADJUSTED
18 WASTEWATER CONVEYANCE COST OF SERVICE STUDY.

19 A. As shown on Exhibit HJS-9WW, Pittsburgh Water is proposing several adjustments to
20 the unadjusted cost of service for wastewater conveyance service. Similar to the water cost
21 of service adjustments presented on Exhibit HJS-10W that were previously discussed in
22 my testimony, Pittsburgh Water is proposing a gradualism adjustment for the Industrial
23 class, a Customer Assistance Program adjustment, and an assignment of a portion of the
24 allocated Residential class cost of service to the Health or Education customer class. In
25 addition, Pittsburgh Water is proposing a gradualism adjustment for stormwater service.

1 Also reflected on Exhibit HJS-9WW is an adjustment to the cost of service of each
2 customer class to remove from the cost of service the revenues that will be separately
3 recovered through the expanded PENNVEST surcharge.

4 Q. DID PITTSBURGH WATER INCLUDE ANY OTHER ADJUSTMENTS TO
5 THE WASTEWATER CONVEYANCE COST OF SERVICE, OR REVENUE
6 REQUIREMENT, FOR EACH CUSTOMER CLASS?

7 A. Yes. As shown on Exhibit HJS-11WW, page 2, Pittsburgh Water further adjusted the cost
8 of service for each customer class to include bad debt expense.

9 Q. DOES PITTSBURGH WATER PRESENT A SUMMARY OF THE
10 WASTEWATER SERVICE REVENUES TO BE RECOVERED FROM EACH
11 CUSTOMER CLASS FOR FY 2026 AT PROPOSED RATES?

12 A. Yes. Exhibit HJS-14WW presents a summary of the revenues to be recovered from each
13 customer class for FY 2026 at proposed rates. The base rate revenues reflected on Exhibit
14 HJS-14WW recover the adjusted cost of service from each customer class, which as
15 previously explained exclude PENNVEST interest and principal. The PENNVEST
16 surcharge revenues reflected on Exhibit HJS-14WW recover PENNVEST interest and
17 principal from each customer class. The DSIC revenues reflected on Exhibit HJS-14WW
18 recover the DSIC charges assessed to each customer class based on a DSIC of 7.5%.

19 Q. PLEASE DESCRIBE THE STORMWATER GRADUALISM ADJUSTMENT.

20 A. For FY 2026, Pittsburgh Water is proposing to recover \$6.0 million of its stormwater
21 revenue requirement from wastewater conveyance customers.

22 Q. HAS PITTSBURGH WATER PROPOSED A STORMWATER GRADUALISM
23 ADJUSTMENT IN PRIOR RATE PROCEEDINGS?

24 A. Yes. In Docket Nos. R-2021-3024774 (Wastewater) and R-2021-3024779 (Stormwater)
25 Pittsburgh Water proposed a stormwater gradualism adjustment of \$12.4 million which

1 reflected 34% of total wastewater conveyance costs. In its most recent rate proceeding at
2 R-2023-3039921 (Wastewater) and R-2023-3039919 (Stormwater), Pittsburgh Water
3 proposed a stormwater gradualism adjustment of \$9.5 million which reflected 19% of total
4 wastewater conveyance costs.

5 Q. WHAT PERCENTAGE OF TOTAL WASTEWATER CONVEYANCE COSTS
6 DOES THE \$6.0 STORMWATER GRADUALISM ADJUSTMENT
7 REPRESENT IN THIS PROCEEDING?

8 A. For FY 2026, the \$6.0 million stormwater gradualism adjustment proposed by Pittsburgh
9 Water in this proceeding represents 10% of total wastewater conveyance costs.

10 Q. HOW DO THE PROPOSED INCREASES IN WASTEWATER
11 CONVEYANCE AND STORM WATER RATES INITIALLY COMPARE FOR
12 FY 2026 IN THIS PROCEEDING?

13 A. Inclusive of the stormwater gradualism adjustment, the overall wastewater conveyance rate
14 increase proposed by Pittsburgh Water in this proceeding for FY 2026 is 25.3%. The
15 overall stormwater rate increase proposed by Pittsburgh Water for FY 2026 is 22.7%.
16 Without the stormwater gradualism adjustment, the overall wastewater conveyance rate
17 increase would be 14.8%, and the overall stormwater rate increase would be 43.8%.

18 Q. IS IT YOUR RECOMMENDATION THAT THE STORMWATER
19 GRADUALISM ADJUSTMENT PROPOSED BY PITTSBURGH WATER BE
20 APPROVED BY THE COMMISSION?

21 A. Yes. The stormwater gradualism adjustment proposed by Pittsburgh Water reflects a
22 reduction to both the total amount of the adjustment and on a percentage basis from that
23 proposed in prior proceedings. However, to the extent the Commission authorizes a total
24 stormwater revenue requirement that is less than the revenue requirement requested by
25 Pittsburgh Water, I recommend that the reduction first be applied to reduce the stormwater

gradualism adjustment assigned to wastewater conveyance customers, and only if there is an amount remaining should it then be proportionately applied to reduce the stormwater revenue requirement not assigned to wastewater customers.

Q. PLEASE PROVIDE A COMPARISON OF THE ADJUSTED WASTEWATER COST OF SERVICE FOR EACH CUSTOMER CLASS, INCLUSIVE OF BAD DEBT EXPENSE, AT PRESENT AND PROPOSED FY 2026 RATES FOR EACH CUSTOMER CLASS, INCLUSIVE OF DSIC REVENUES AND PENNVEST SURCHARGE REVENUES.

A. The adjusted cost of service for each customer class indicated by Pittsburgh Water's water cost of service study, inclusive of bad debt expense, DSIC revenues, and PENNVEST surcharge revenues, at present and proposed FY 2026 rates are summarized in Table 2. As shown in Table 2, for FY 2026, Pittsburgh Water is essentially proposing a revenue allocation and rates in this proceeding that recover the cost of service from each customer class.

Table 2. Comparison of Present and Proposed FY 2026 Wastewater Rates and Adjusted Cost of Service

Class	Present Rates	Proposed Rates	INCREASE		Adjusted Cost of Service	Variance
			Amount	Percent		
Residential + CAP + Municipal	\$26,438,705	\$31,939,126	\$5,500,421	20.8%	\$31,927,587	\$11,539
Commercial + Municipal	21,922,593	28,331,386	6,408,793	29.2%	28,318,819	12,567
Industrial	1,303,317	1,697,872	394,555	30.3%	1,696,574	1,298
Health or Education	7,457,690	9,631,842	2,174,152	29.2%	9,623,327	8,515
Total:	\$57,122,305	\$71,600,226	\$14,477,921	25.3%	\$71,566,307	\$33,919

1 Q. SHOULD THE CUSTOMER CLASS REVENUE INCREASES FOR
2 WASTEWATER CONVEYANCE PROPOSED BY PITTSBURGH WATER BE
3 ADOPTED IN THIS PROCEEDING?

4 A. For FY 2026, I recommend that the base rate customer class revenue increases for
5 wastewater conveyance proposed by Pittsburgh Water be proportionately scaled back to
6 reflect the actual increase authorized by the Commission in this proceeding. In addition, I
7 recommend that the PENNVEST surcharge revenues proposed to be collected from each
8 customer class be scaled back to reflect the actual increase authorized by the Commission
9 in this proceeding. I also recommend that pursuant to Mr. Deupree's direct testimony, the
10 DSIC charges to be assessed by Pittsburgh Water be based on a DSIC cap of 5.0%.

11 As previously explained, it is the OCA's position in this proceeding that a rate
12 increase for Pittsburgh Water for FY 2027 should not be approved. If the Commission does
13 not accept this recommendation, I recommend that for FY 2027, the base rate customer
14 class revenue increases and PENNVEST surcharge revenues proposed by Pittsburgh Water
15 be scaled back to reflect the actual increases authorized by the Commission for FY 2027
16 in this proceeding.

17 **C. Rate Design**

18 Q. IS PITTSBURGH WATER PROPOSING TO MAKE ANY CHANGES TO THE
19 EXISTING WASTEWATER CONVEYANCE RATE STRUCTURE?

20 A. Pittsburgh Water is not proposing to make any changes to the wastewater conveyance rate
21 structure for the rates proposed for FY 2026. However, similar to what is proposed for
22 water service, Pittsburgh Water is proposing to eliminate the minimum allowance included
23 in its monthly customer charges in FY 2027. Similar to water service, for the typical
24 Residential customer served by a 5/8-inch meter, the current minimum allowance is 1,000
25 gallons per month.

1 Q. DO YOU AGREE WITH PITTSBURGH WATER'S PROPOSAL
2 CONCERNING THE ELIMINATION OF THE USAGE ALLOWANCE FROM
3 THE FIXED MONTHLY WASTEWATER CHARGE?

4 A. Yes.

5 Q. HOW DOES ELIMINATION OF THE MINIMUM ALLOWANCE IMPACT
6 THE CUSTOMER CHARGE ASSESSED TO THE TYPICAL RESIDENTIAL
7 CUSTOMER?

8 A. As shown on Exhibit HJS-16WW, the current monthly charge for a typical Residential
9 wastewater customer with a 5/8" meter and a 1,000 gallon minimum allowance is \$8.25.
10 For FY 2026 the proposed customer charge which would include the minimum allowance
11 is \$8.37. For FY 2027, Pittsburgh Water is proposing an average rate increase of 6.7%.
12 Even with this increase the elimination of the minimum allowance would reduce the
13 monthly customer charge for a typical Residential wastewater customer to \$3.99 as shown
14 on Exhibit HJS-20WW. Without the proposed FY 2027 increase, I estimate that the
15 monthly customer charge for a typical Residential customer would be \$3.68.

16 Q. SHOULD THE METHOD USED BY PITTSBURGH WATER TO
17 DETERMINE WASTEWATER MONTHLY CUSTOMER CHARGES IN THIS
18 PROCEEDING BE ADOPTED?

19 A. Yes. To the extent the Commission authorizes wastewater revenue requirement increases
20 in this proceeding which are less than Pittsburgh Water's requested increases for FY 2026
21 and FY 2027, I recommend that the customer charges proposed by Pittsburgh Water be
22 proportionately scaled back to reflect the reduced revenue increases.
23

1 **IV. STORMWATER SERVICE**

2 Q. DID PITTSBURGH WATER PERFORM A STORMWATER CLASS COST OF
3 SERVICE STUDY?

4 A. No. Stormwater rates for all customers are assessed based on equivalent Residential units
5 (“ERU”), and Pittsburgh Water calculated stormwater rates based on ERU. Pittsburgh
6 Water developed an analysis showing the cost of serving each ERU. Pittsburgh Water’s
7 rates for stormwater service for Residential customers are based on a three-tier rate
8 structure, with rates that vary based on the impervious area of a customer’s property. All
9 other customers are assessed rates for stormwater service based on the ERU of the
10 customer’s property.

11 Q. DID PITTSBURGH WATER ALSO PREPARE AN UNADJUSTED AND
12 ADJUSTED STORMWATER COST OF SERVICE AS IT DID FOR WATER
13 AND WASTEWATER CONVEYANCE SERVICE?

14 A. Yes, it did. As shown on Exhibit HJS-5SW, Pittsburgh Water made adjustments for bad
15 debt expense and the Customer Assistance Program. Pittsburgh Water also adjusted the
16 unadjusted cost of service by \$6.0 million to reflect the stormwater costs to be recovered
17 from wastewater customers, and the costs associated with a stormwater credit program.
18 Under this credit program, customers can reduce their stormwater charges by taking
19 specific actions to reduce their demand for stormwater service.

20 Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO PITTSBURGH WATER’S
21 STORMWATER RATE DESIGN?

22 A. No. To the extent that the Commission authorizes increases in stormwater revenues for
23 FY 2026 and FY 2027 which are less than the increases requested by Pittsburgh Water, the
24 rates proposed by Pittsburgh Water should be proportionately scaled back.

25 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

1 A. Yes, it does; however, I reserve the right to update this testimony as may be necessary.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 4, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ Jerome D. Mierzwa
Jerome D. Mierzwa

Address: Exeter Associates, Inc.
10480 Little Patuxent Parkway
Suite 300
Columbia, MD 21044

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission

v.

Pittsburgh Water

Docket No.: R-2025-3055010 (Water)
R-2025-3055011 (Wastewater)
R-2025-3055012 (Stormwater)

DIRECT TESTIMONY

OF

LeeAnn Wise

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: September 5, 2025

TABLE OF CONTENTS

Introduction.....1

Summary.....2

Customer Testimony.....2

Conclusion and Recommendations.....6

Introduction

Q. Please state your name and business address.

A. My name is LeeAnn Wise. My business address is 555 Walnut Street, Forum Place 5th Floor, Harrisburg, Pennsylvania 17101.

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

A. I am employed as a Senior Regulatory Analyst by the Pennsylvania Office of Consumer Advocate (OCA).

Q. What is the purpose of your testimony in this case?

A. To address customers' concerns from the Public Input Hearings regarding affordability quality of service issues, and customer service concerns.

Q. Have you previously provided testimony before the Pennsylvania Public Utility Commission?

A. Yes, I have provided testimony in the following rate cases: Wellsboro Electric, Docket No. R-2025-3054392, Citizens' Electric, Docket No. R-2025-3054394, and Valley Energy, Docket No. R-2025-3054393.

Q. What are your qualifications to provide this testimony in this case?

A. I have a Master's Degree in Business Administration from Shippensburg University and a Bachelor of Science degree in Professional Accountancy from the University of Pennsylvania. I have over fifteen years of experience in call center operations, with a strong background managing teams, improving workflow, and delivering outstanding customer service. I have attached my Curriculum Vitae (CV) as Exhibit LMW-1. Additionally, I have received internal training while working for the Office of Consumer Advocate (OCA).

Q. Have you prepared Exhibits to accompany your testimony?

A. Yes, in addition to my CV, I have attached the following Exhibit: Exhibit LMW-2:

PWSA PIH Summary.

Summary

Q. Please summarize your conclusions and recommendations.

A. Testimony presented during the public input hearings highlighted persistent and widespread consumer concerns regarding the affordability of rates, the adequacy of customer service, and the overall quality and reliability of service provided by the Pittsburgh Water and Sewer Authority (PW). These concerns reflect ongoing public dissatisfaction and signal the need for continued regulatory oversight. Considering these issues, and pursuant to the obligations established under the 2023 Base Rate Case Settlement, it is both reasonable and necessary that Pittsburgh Water be required to maintain, monitor, and further enhance its complaint tracking and resolution system. This requirement is essential to ensure transparency, accountability, and responsiveness to customer needs, and to support the continued improvement of service delivery consistent with Commission expectations and public interest considerations.

Customer Testimony

Q. Please describe consumer testimony requesting the Commission to reject Pittsburgh Water's proposed rate increase.

A. During the public input hearings, there were numerous customers from different regions of Pittsburgh who testified to their opposition to granting the proposed rate increase request of Pittsburgh Water. All but one participant opposed the rate increase. The main themes of customer testimony include but are not limited to affordability, quality of

1 service, customer service, executive salaries, and transparency of operations. Overall,
2 customers are most concerned about affordability and quality of service.

3 **Q. Please describe the Public Input Testimony regarding the affordability of PW's**
4 **services.**

5 A recurring and significant concern expressed by many of the attendees at the public
6 hearing was the affordability of PW utility rates. Several customers voiced concerns over
7 the financial stress caused by increased utility bills and having to choose between paying
8 their utility bills or putting food on the table. Their testimony highlights the broader
9 economic difficulties, especially for low-income customers. These issues are further
10 expanded in the direct testimony of OCA witness Mr. Roger Colton, who provided a
11 comprehensive analysis of how high utility costs can adversely affect residential
12 customers, including impacts on health, housing stability, and overall quality of life.
13 Becky Boyle testified on behalf of the Honorable Lindsay M. Williams, who represents
14 the 38th Senatorial District in Allegheny County. Senator Williams is opposed to the
15 multi-year rate increase stating this would be the fifth rate increase for PW since 2018.
16 Senator Williams is concerned that customer bills have more than doubled in less than ten
17 years. She stated her office has heard from over 100 constituents regarding the rising cost
18 of housing and utilities. Constituents have also reported the need for customer assistance
19 programs to be expanded. Senator Williams explained that her constituent's family
20 budgets are already stretched to the maximum with raising gas, grocery, rent, and utility
21 bills. The Senator is concerned that "raising yet another monthly bill will put many over
22 the edge, forcing them to [make] difficult decisions between food and medication, or

1 between keeping the water or heat on in their home.” She is asking that the Commission
2 deny Pittsburgh Water’s request for a rate increase. Tr. 158-162.

3 Natalie Greene, a social worker, expressed her concern that the proposed rate
4 increase would “exacerbate the homelessness crisis that we are going through in our
5 country and in our specific city right now.” Tr. 132-134. Catherine Brosky testified that
6 the proposed increase exceeds any cost-of-living increase offered in wages. She is
7 particularly concerned that the increase is larger when including other fees and charges
8 associated with her bill, like the Distribution System Improvement Charge (DSIC). Ms.
9 Brosky requested the Commission to request Pittsburgh Water to provide a simple
10 spreadsheet showing exactly what the increase in rates will be used for. Tr. 227-232.

11 Adolph Smith, a senior citizen on a fixed income, asked Pittsburgh Water not to
12 try to recapture infrastructure costs all at once. His current monthly bill is \$144. His bill
13 would increase to \$176 in 2027 under the proposed increase. He and his wife receive
14 social security and have additional pensions, eliminating them from eligibility for any
15 low-income assistance programs. He also agreed with Ms. Brosky that there should be
16 full transparency among the public about Pittsburgh Water’s spending record. Tr. 243.

17 Joseph Glassbrenner, President of the Brighton Heights Citizens Federation,
18 opposes the proposed Pittsburgh Water rate increase, citing financial hardship on
19 residents after four consecutive years of hikes. He noted that Pittsburgh Water’s cash
20 reserves are growing and criticized the limited impact of their customer assistance
21 program, which has only distributed \$1,025,000—just a small fraction of available funds.
22 Glassbrenner argued that approving another rate hike would be unethical and would
23 enable Pittsburgh Water to continue raising rates without making efforts to cut internal

costs. Tr. 247-248. Curtis Davon, Director for Clean Water Action Pittsburgh testified “Affordability Matters”. Another rate hike without strong protection will push more residents into crisis.

Mr. Davon asked Pittsburgh Water and the Commission to automatically enroll eligible households into the bill discount program, expand income-base assistance and protect vulnerable households, especially those in certain watersheds within the City of Pittsburgh, with a permanent shout-out moratorium. 252-254.

Q. Please describe Public Input Testimony regarding PW employee compensation.

A. During public input hearings, customers raised concerns about the high salaries the executives at PW are receiving. Mr. Jay Sanchez testified that the CEO of PW took a \$44,550 bonus in 2023 and the CEO’s salary for the same year was \$1.24 million dollars. His salary increased to \$1.35 million in 2024 which is over half of the office budget. Mr. Sanchez asked that the Authority to “commit to capping payroll until repairs are fully funded and on schedule.” Tr. 173-174. Christa Campbell also testified she is appalled at the salaries of the executives. Tr. 182-185.

Q. Please describe the Public Input Testimony regarding the quality of PW’s services.

During the course of several public hearings, several customers raised concerns on the level of quality and customer service received by Pittsburgh Water. A significant amount of testimony focused on the long-standing issues of repeated flooding in the neighborhood commonly referred to as “The Run”. Residents reported these flooding events have not only caused property damage but have also led to ongoing frustration due to what they perceive as inadequate responses and lack of effective solutions by PW.

1. Ray Gerard testified to concerns over the floodplain called Four Mile Run, or the Run.

1 He stated that there have been at least nine or ten major flooding events over the past
2 fifteen years, exposing the neighborhood to tens of thousands of gallons of sewage. Tr.
3 88-89.

4 2. Ziggy Edwards agreed with Mr. Gerard's concerns over the floodplain. She testified to
5 the community's objection to the Mon-Oakland Connector project, a private roadway
6 spanning from Oakland university campuses to Hazelwood Green Development, funded
7 in part by a \$41M commitment from the City of Pittsburgh or Pittsburgh Water. Her
8 neighborhood was able to block the Mon-Oakland Connector Project. Pittsburgh Water
9 explained that the flood control plan was a separate project. Although Pittsburgh Water
10 claimed the Connector and flood control plan were not related, Ms. Edwards noted that
11 funding seemed to be combined. Despite assurances that the flood plan would
12 proceed regardless, she expressed concern that the project has yet to be started while
13 taxpayers are burdened with increased utility bills. Tr. 108-111.

14 3. Anna Dekleva also testified about routine flooding in "The Run". She and her
15 neighbors have advocated for years to have the issue addressed. Despite the recent rate
16 increases, the issue has remained unresolved. She is concerned over the lack of
17 transparency as to how the stormwater fees are being spent. Tr. 81-82.

18 4. Laura Vincent is a landlord who has lived in "The Run" since 2005. She has had to install
19 axle valves on her properties along with other interventions to mitigate potential flood
20 damage. Ms. Vincent has experienced significant damage to appliances and fixtures,
21 including but not limited to washing machines, dryers, furnaces, and hot water heaters. She
22 stated her neighborhood has been promised solutions for "nineteen years" and "we've
23 gotten nothing." She also testified that bills have increased and that bills, themselves, are
24 difficult to read and/or understand. Tr. 113-116.

1 5. Anne Quinn also lives in the “The Run” neighborhood and testified having been told by
2 Pittsburgh Water they cannot fix flooding in the run due to their focus on lead line
3 replacement, despite paying stormwater fees. She also testified to concerns in paying the
4 PENNVEST loan repayment in the proposed rate increase. Ms. Quinn stated bills are
5 unclear and there should be better explanations of items such as the Allegheny County
6 Sanitary Authority. She also requests full transparency of how Pittsburgh Water is
7 collecting and spending funds. Ms. Quinn also testified that it is her understanding that the
8 stormwater fee was implemented to make sure big campus customers were accounted for
9 with their imperviable surfaces and is requesting that Pittsburgh Water go after PENNDOT
10 for impervious surface payments. Tr. 187-193.

11 6. Gabriel Gray asked Pittsburgh Water to provide clarity on arrearage forgiveness
12 programs (AFP) and a better layout of customer bills. In addition, he also asked for
13 Pittsburgh Water to provide maintenance and education on meters and equipment in the
14 home. Tr. 118-121.

15 7. Christa Campbell also testified what she preserves as inefficiencies that cost consumers
16 money. She had previously had a property demolished. Despite following proper
17 procedures, Pittsburgh Water had over twenty visits looking for the demolished property.
18 She testified that this firsthand observation of inefficiency caused her to wonder what other
19 inefficiencies may exist at Pittsburgh Water, and how it affects consumer costs. She said it
20 also happened again to her in 2023 – same issue, has had five site visits whereby Pittsburgh
21 Water was looking for the house that was demolished. Tr. 182-185.

1 **Q. Given the testimony provided by, what are the key points the Commission should**
2 **consider in its evaluation of the proposed rate increase?**

3 A. The Commission should recognize that raising rates without clear and measurable
4 improvements to service quality and responsiveness, only adds to the additional financial
5 hardship customers are facing. PW should be held accountable for providing the reliable
6 service customers expect before asking them to pay a higher monthly rate.

7 **Q. Does PW maintain a complaint log within its customer service division?**

8 A. Yes, PW maintains a complaint log containing formal and informal complaints.

9 **Q. How did this complaint log come to exist?**

10 A. The complaint log was a direct requirement of the 2023 Base Rate Case Settlement. In
11 the 2023 Base Rate Case, OCA witness Terry Fought stressed that the use of PW Spry
12 Mobile application is not complete nor is it in a format permitting a sort by location
13 function. Mr. Fought recommended PW take the necessary steps to provide a complete
14 customer complaint log to conform with 52 Pa. Code § 65.3. Complaints. He
15 recommended the file be easily sorted by complaint type, house number, street address,
16 and zip code. All non-billing customer interactions must be made available for sorting by
17 “key words” in a readily available format.

18 **Q. Please state your concerns about Pittsburgh Water’s complaint tracking system.**

19 A. As part of the 2023 rate case filing, Pittsburgh Water was required to update/conduct a
20 root cause analysis to include an evaluation of informal customer complaints submitted to
21 the Bureau of Consumer Services as well as formal customer complaints filed with the
22 Pennsylvania Public Utilities Commission. This Settlement provision was important to
23 the OCA to ensure PW was following 52 Pa. Code § 65.3, as well as providing a
24 mechanism for ongoing improvements in customer service. Throughout the course of the

1 last base rate case's litigation, the OCA and Pittsburgh Water worked together to develop
2 a comprehensive system to categorize and identify the root cause of customer complaints.
3 Pittsburgh Water has continued to make significant progress in expanding their tracking
4 system to include an additional ten categories to better identify the root causes of
5 customer complaints.¹ I support OCA witness Ms. Barbara Alexander in her request to
6 require PW to continue to maintain the complaint log. The complaint tracking system is
7 vital in identifying customer concerns and providing sound customer service.

8 **Conclusion and Recommendations**

9 **Q. Please summarize your conclusion and recommendations.**

10 A. Consumer testimony at the public hearings strongly supports and reinforces the concerns
11 stated by OCA witnesses Colton and Alexander regarding affordability, quality of
12 service, and customer service. As discussed previously, Pittsburgh Water customers
13 expressed extreme concern about the affordability of their water, wastewater, and
14 stormwater bills. Additionally, many customers voiced concerns over the quality of
15 service provided by Pittsburgh Water, specifically in "The Run" and Brighton Heights
16 neighborhoods. Testimony highlighted persistent flooding issues and infrastructural
17 concerns that have continued for many years without effective resolution.
18 Customers also raised concerns over the transparency of Pittsburgh Water expense
19 spending and executive compensation. Customers in the "The Run" neighborhood,
20 raised repeated concerns over consistent flooding. They described financial, emotional,
21 and physical toll taken, without the Company providing any meaningful solutions.
22 Having safe, affordable, and reliable service is not optional, it is Pittsburgh Water's

¹ Pittsburgh Water Exhibit JAM-11, pg. 65

1 fundamental obligation to their customers. Today, many customers feel this obligation is
2 not being met. These concerns are not isolated; they reflect a broad pattern of hardship
3 and frustration that Pittsburgh Water and the Commission should not overlook.

4 OCA's witnesses have provided several recommendations addressing Pittsburgh
5 Water's cost of service studies, rate design, customer service, low-income assistance
6 programs, and affordability of service. Customers throughout the Pittsburgh Water service
7 areas have done their part to testify, providing meaningful concerns.

8 I recommend that affordability, customer service, and quality of service issues
9 raised by customers during the public input meetings be addressed by Pittsburgh Water in
10 their rebuttal testimony. I also urge the Commission to thoroughly review the public input
11 hearing responses regarding the proposed rate increase and how PW has addressed the
12 concerns raised by customers. Customers' concerns and voices must be heard and taken
13 into consideration when determining the final rate increase. I also recommend as part of
14 Pittsburgh Water's prior rate case R-2023-3039920, R2023-3039921, R2023-303919, PW
15 continues to maintain and enhance compliance tracking, to ensure ongoing accuracy,
16 categorization efforts, and analytic functions. The Company should also be required to
17 continue to use the data to develop training geared toward improving overall customer
18 service performance. The use of complaint tracking information supports continuous
19 improvement in service delivery.

20 **Q. Are there any expert witnesses who address related themes that you want to cross-**
21 **reference here?**

22 **A.** Yes. OCA witness Mr. Rodger Colton submitted testimony concerning the affordability
23 of PW's proposed rate increases. He further addressed the necessity of implementing

1 sufficient discount programs and arrearage forgiveness measures to ensure low-income
2 customers maintain access to essential utility services.

3 **Q. Does this complete your Direct Testimony?**

4 **A. Yes.**

Qualifications of

LeeAnn Wise

Education:

2008 Master's of Business Administration, Shippensburg University

1989 B.S. Professional Accountancy, Pennsylvania State University

Relevant Positions:

March 2025 Regulatory Analyst, Pennsylvania Office of Consumer Advocate

Role Description:

I am currently employed by the Pennsylvania Office of Attorney General, Office of Consumer Advocate (OCA) as a Regulatory Analyst. In this position, my responsibilities include reviewing utility company filings with the Pennsylvania Public Utility Commission (Commission) and analyzing the financial, economic, rate of return, and policy issues that are relevant to the filings. Additionally, I am tasked with preparing recommendations for the OCA's involvement in utility filings with the PA PUC, writing testimony and presenting oral testimony on behalf of the OCA. As part of my role, I also assist in the policy matters regarding low-income issues and customer service subjects.

Relevant Training: I have over fifteen years of experience overseeing and evaluating customer service operations of utility-affiliated and third-party call centers. This includes time at Comcast as Senior Finance Manager, where I provided oversight of performance metrics, evaluating disputes and time to resolve, call-handle times, average speed of answer, and ensuring customer interactions align to policy standards. My training includes a sound understanding of the best practices in customer service delivery, call tracking protocols, and the importance of consistent documentation to support customer communication and reliability.

Provided Case Testimony: Wellsboro Electric, Docket No. R-2025-3054392

Citizens' Electric, Docket No. R-2025-3054394

Valley Energy, Docket No. R-2025-3054393

Summary of Public Input Hearings

Unaffordability of Rate Increase, Economic Uncertainty, and Economic Burden

- Becky Boyle testified on behalf of the Honorable Lindsey M. Williams, who represents the 38th Senatorial District in Allegheny County. Senator Williams opposes PWSA's proposed multiyear overall rate increase of 84.4 million dollars. She explained that this is the fifth rate increase that the Authority has requested since her election in 2018. Senator Williams is concerned that customer bills have more than doubled in less than ten years. She expressed concern that working families and small business cannot afford this increase, despite a constitutional right to access water in Pennsylvania. Senator Williams' office has heard from more than 100 constituents "with concerns about the rising cost of housing and utilities. That includes water and wastewater services. Constituents have reported that they need customer assistance programs to be expanded, and for enrollment procedures to be easier." In light of federal funding cuts to vulnerable populations, Senator Williams is worried that "seniors and children [will go] hungry or without medical care," and expressed a concern for high administrative burdens on state government. Senator Williams also explained that Pittsburgh "family budgets are [already] stretched to razor thin margins as it is with rising costs at the gas pump, the grocery store, and everywhere else." She is concerned that "raising yet another monthly bill will put many over the edge, forcing them to [make] difficult decisions between food and medication, or between keeping the water or heat on in their home." She is asking that the Commission deny PWSA's request for a rate increase. Tr. 158-162.¹
- Emily Sawyer testified on behalf of herself. Ms. Sawyer explained that while "we all want healthy, safe, and functional infrastructure for our water and sewer systems... it feels like we're being asked to pay for deferred maintenance that's gone on for a lot longer than that we should." Ms. Sawyer testified that while inflation is increasing, wages remain stagnant. "We need to be able to afford water. And I just don't think people can afford this." Tr. 57-58.
- Ray Gerard testified on behalf of himself. He testified that while "a rate increase of over 10% might not seem like a lot," the proposed increase in addition to other utility increases, price of groceries, and other costs is jeopardizing his ability to afford his financial obligations. Mr. Gerard explained that he no longer maintains a garden to reduce usage and to lower his bill. He also voiced concern over the floodplain called "Four Mile Run," or "the Run" experiencing at least nine or ten major flooding events over the last fifteen years, and that his neighborhood falls victim to "tens of thousands of gallons of sewage" overflow from properties above "the Run." Tr. 88-89.

¹ "Tr." denotes transcript, reflecting Public Input Hearing testimony recorded for R-2025-3055010 et al. to date.

- Natalie Greene testified on behalf of herself. She is a social worker who primarily works with unhoused residents of Pittsburgh. She expressed concern that this rate hike will “exacerbate the homelessness crisis that we are going through in our country and in our specific city right now.” She explained that she does not know how long assistance programs will be able to help due to a “state of turbulence” as to funding. While she is concerned for housing the unhoused, she is also worried that the average resident will be unable to afford the increase and that housing instability will only continue to rise. Tr. 132-134.
- Christa Campbell testified on behalf of herself. She is a retired, individual residential customer, and agreed with Senator Williams’ testimony. Ms. Campbell was frustrated to hear that the Authority is requesting a 33% increase when there are so many different inefficiencies” that cost consumers money. She had demolished a property and went through the termination process with PWSA and other utilities. She then explained that PWSA had over 20 site visits looking for the demolished property despite following the procedures. She testified that this firsthand observation of inefficiency caused her to wonder what other inefficiencies may exist at PWSA, and how it affects consumer costs. She said it also happened again to her in 2023 – same issue, has had five site visits whereby PWSA was looking for the house that was demolished. She was also appalled at the salaries of the executives for the company and brought up monopolistic themes. She also encouraged the Authority to consider alternatives to lab testing that might save customers money. Tr. 182-185.
- Catherine Brosky testified on her own behalf. Ms. Brosky is opposed to this rate increase request and is especially opposed to frequency of base rate increase requests for the Authority. She testified that this increase exceeds any cost of living increases offered in wages. With all of the other fees to her bill, she believes that the Authority’s request for increase is larger when looking at all of the surcharges, like the Distribution System Improvement Charge (DSIC). While there are programs for low-income families, Ms. Brosky explained that there is “inelasticity of wages in single income households.” She said that it makes sense why PWSA wants to make up for past mismanagement, but it is a burden to consumer bills. She also raised transparency concerns, testifying that the Authority “has invested more than 898 million” on infrastructure on its website, but she did not see a breakdown on how that 898 million was spent in more detail. Per Ms. Brosky, “In 2024, PWSA received an additional 36 million out of ratepayers’ pockets,” and would like to know how it was used. Ms. Brosky testified that the request for increase is presented in “one big PDF that would make the layperson’s head ache.” She would like the Commission to require the Authority to simplify its request so “a person could understand what’s happening.” Tr. 227-232.
- Adolph Sims testified on behalf of him and his wife. Mr. Sims respectfully opposed the rate increase request and said the rate increase is too high. He and his wife are seniors on fixed incomes. He asked that the Authority not recuperate infrastructure costs all at once,

and “spread it out over the course of time.” He currently pays \$144 per month, and an increase of \$22-34 by 2027 would raise his bill to \$176. He and his wife have pensions and only receive minimal increases from Social Security. “You talk about opportunities for low income. We don’t meet those guidelines. So[,] as a consumer, as someone who has worked for 37 years on their job, my wife worked 35 years on her job, it seems to be no concern that we’re in that [unfortunately gray] or middle area where there’s nothing there for us but to pay the expensive bill. So I think we need to find another way, at least try.” He also agreed with concerns regarding lack of transparency. Tr. 238-240.

- Raymond Zanetti testified on his own behalf. He explained that it will be “very difficult for many small business owners who need to pass on these increases to [] tenants.” He also asked that PWSA stretch out the cost of the increase over a greater spread of years, and/or to adjust to the rates of increasing inflation. Tr. 243.
- Joseph Glassbrenner is the President of the Brighton Heights Citizens Federation, a nonprofit community group. He objects to the proposed rate increase “as it imposes extreme hardship on our residents and the ratepayers for a fourth consecutive year.” Mr. Glassbrenner testified that PWSA represents having cash on hand that is anticipated to grow at a recent public meeting. He also expressed concern that the customer assistance program has “only distributed \$1,025,000, which is merely half of one percent of the current cash on hand, and it quickly gets depleted by all those that apply for this high rate.” Mr. Glassbrenner alleges that a “ruling in favor by the Commission for a fourth year in a row would be considered unethical and create a dangerous outlet for Pittsburgh Water to continue reoccurring rate increases without any internal operation efforts to reduce their cost or expenditures.” Tr. 247-248.
- Curtis Davon is an organizing director for Clean Water Action Pittsburgh. While Mr. Davon “want[s] a strong, reliable water system,” “the proposed rate increase must [still] be fair, transparent, and tied directly to measurable improvements that benefit the people who will pay for it.” He testified that “Affordability matters. Many families in Pittsburgh are already struggling, as mentioned earlier, to keep up with rising [housing], food and utility costs. Another rate hike without strong protections will push more residents into crisis.” In light of this, Mr. Davon asked PWSA and the Commission to automatically enroll eligible households into “the bill discount program, expand income-based assistance and protect vulnerable households with a permanent shut off moratorium.” Mr. Davon also asked that environmental justice communities, “like Hazelwood or Homewood or the Hill District” be prioritized in terms of green stormwater infrastructure and flood mitigation.” Tr. 252-254.

Flood and Quality of Service Concerns

- Anna Dekleva testified on behalf of herself as a resident of Greenfield. Referring to herself as a resident of/in “the Run,” Ms. Dekleva explained that she and her neighbors experience “routing flooding that has not been adequately addressed with available solutions, despite persistent advocacy and despite a recent increase in rates specifically for stormwater.” Ms. Dekleva testified that there is “little transparency” as to how stormwater fees are being spent [by the Authority]. As a social worker, Ms. Dekleva also explained that residential customers cannot afford “rent, food and utilities, never mind other basic expenses while working full-time jobs,” calling the proposed increase “sinister violence.” Ms. Dekleva also testified that wages are stagnant as costs increase, and that reducing usage does not lower her bill. Tr. 81-82.
- Ziggy Edwards testified on behalf of herself and recalled the flash flood described in Mr. Gerard’s testimony and exhibits, above. She recalled a man and son being stranded on top of their car in such high water that emergency responders had difficulty rescuing them. Ms. Edwards recalled that either the Authority or the City of Pittsburgh committed \$41 million dollars to the Mon-Oakland Connector project, which is the private roadway that was supposed to go from the Oakland University campuses to the Hazelwood Green Development in Hazelwood following this flash flood. Her neighborhood successfully blocked the Mon-Oakland Connector Project, to which the Authority then explained was a separate project from their proposed flood control plan. To that end, Ms. Edwards remembers the Authority promising that PWSA promised to enact their flood plan for the area “no matter what.” Ms. Edwards explained that despite the Authority telling her community that the flood plan and the Mon-Oakland Connector Project were two different projects, the funding for both was seemingly intertwined, and now “we’re paying for a design of a project that as of right now has no way of being constructed.” Ms. Edwards explained that her water bills have doubled since she moved to the area. Tr. 108-111.
- Laura Vincent is a landlord who resides in “the Run” and testified on her own behalf. She has resided in “the Run” since 2005 and had to install axle valves on her properties along with other interventions to prevent further damage from flooding. She recalled water rushing down her cellar and removing a steel door off of its jam, and experiences with seven feet or more of water in her basement. Ms. Vincent explained that the Authority has been aware of the flooding issue in “the Run” and has not offered adequate educational or financial assistance, including but not limited to resources and education regarding “backflow valves,” which may have proved helpful over the years at her properties. Ms. Vincent testified that she has suffered damaged appliances and fixtures, including but not limited to washing machines, dryers, furnaces, and hot water heaters. Her neighborhood has been promised solutions for “nineteen years” and “we’ve gotten nothing.” She also testified that bills have increased and that bills, themselves, are difficult to read and/or understand. Tr. 113-116.

- Anne Quinn testified on her own behalf and explained that she lives in “the Run,” also known as the “Four Mile Run” sewer shed or the “M29 Outfall.” PWSA has told her that they cannot fix flooding in the run due to their focus on lead line replacement, which doesn’t make sense to her because she is still paying stormwater fees. She believes that the Combined Sewer System makes it difficult to track how those systems work. She testified that it is her understanding that the rate increase is resulting from the Authority seeking to “address [] historical negligence of care.” She expressed concern in paying the “PennVEST loan repayment aspect of this rate hike.” Ms. Quinn testified that the breakdown of her bill is unclear, and that there should be a better explanation of items like the Allegheny County Sanitary Authority (ALCOSAN) service fee that [has increased] by seven percent for wastewater customers. Ms. Quinn asked that rates not be raised until there is transparency as to how money comes in and out. Ms. Quinn also testified that it is her understanding that the stormwater fee was implemented to make sure big campus customers were accounted for with their imperviable surfaces, and is requesting that PWSA go after PENNDOT for impervious surface payments. Ms. Quinn is active in the community and is worried that this rate increase will increase homelessness. Tr. 187-193.
- Adrienne Ciuccio testified on behalf of herself. While she experienced her own customer service issues relating to multiple, incorrect shutoff notices, she also expressed concern for her neighborhood, Brighton Heights. She explained that a recent news article quoted PWSA’s Chief Operating Officer stating that her neighborhood’s main water line was not worthy of investment. Tr. 168.

Rate Increase (General)

- Gabriel Gray testified on his own behalf and asked for clarity from the Authority as to what he owes in arrearages and for the Authority to better lay out customer bills, as well as provide maintenance and education on meters and equipment in the home. Tr. 118-121.
- Monique Olivis testified on her own behalf as a landlord in the service territory. She asked that the Authority review their policy regarding tenant usage and arrearages, and she testified that the rate increase is already “too expensive for some of these people on fixed incomes.” Tr. 126-128.
- Jay Sanchez testified on behalf of himself as a ratepayer. He opposes the increase and stated that PWSA has a history of “kicking the can down the road” and “capital underspending.” Mr. Sanchez testified that the Chief Executive Officer “took a \$44,550 bonus in 2023” and that the CEO’s salary alone “cost over 1.24 million dollars in 2023 and rising to 1.35 million dollars in 2024,” which he observed to be more than half of the office’s budget. Mr. Sanchez asked that the Authority to “commit to capping payroll until repairs are fully funded and on schedule.” Tr. 173-174.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, LeeAnn Wise, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 5, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ LeeAnn Wise
LeeAnn Wise

Address: Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket No. R- 2025-3055010
	:	
v.	:	Docket No. R-2025-3055011
	:	
Pittsburgh Water and Sewer Authority	:	Docket No. R-2025-305-5012
	:	

Direct Testimony of Roger Colton
on behalf of
Pennsylvania Office of Consumer Advocate
OCA Statement 6

September 5, 2025

Table of Contents

Part 1.	The Importance of Providing Appropriate Affordability Assistance	7
A.	The Financial Cost to the Community from Providing Inadequate Assistance	9
B.	The Financial Cost to Pittsburgh Water from Providing Inadequate Assistance	12
Part 2.	Assessing the Need for Additional Bill Discount Assistance	16
A.	Distinguishing the “Affordability Analysis” Presented by Pittsburgh Water.	17
B.	Modifying the Pittsburgh Water Discount for Households with Annual Income Below 50% Federal Poverty Level.	29
C.	Adding a Third Tier to the Pittsburgh Water Bill Discount Program	30
D.	Supplementing Bill Discount Program Outreach	36
Part 3.	The Need for Modifications to Pittsburgh Water’s Arrearage Forgiveness Program	48
Part 4.	Claimed Cost Recovery for Pittsburgh Water’s Arrearage Forgiveness Program	62
Part 5.	The Need for Expanded Low-Income Water Conservation Assistance	66
Part 6.	Addressing Concerns Raised through Public Input Hearing Testimony	79
	Exhibits	83

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is Roger Colton. My business address is 34 Warwick Road, Belmont,
3 Massachusetts, 02478.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

5 A. I am the owner of the firm Fisher Sheehan & Colton, Public Finance and General
6 Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to
7 a variety of federal and state agencies, consumer organizations and public utilities on rate
8 and customer service issues involving water/sewer, natural gas and electric utilities.

9 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

10 A. I am testifying on behalf of the Office of Consumer Advocate (OCA).

11 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

12 A. I work primarily on low-income utility issues. This involves regulatory work on rate and
13 customer service issues, as well as research into low-income usage, payment patterns,
14 and affordability programs. At present, I am working on various projects in the states of
15 New Hampshire, Massachusetts, New Jersey, Pennsylvania, Florida, Kentucky, Ohio,
16 Illinois, Wisconsin, Minnesota, Missouri, and Montana. My clients include state agencies
17 (e.g., Pennsylvania Office of Consumer Advocate, Maryland Office of People's Counsel,
18 Connecticut Office of Consumers Counsel), federal agencies (e.g., the U.S. Department
19 of Health and Human Services), community-based organizations (e.g., Consumers
20 Council of Missouri, Nova Scotia Energy Poverty Task Force, Sierra Club), and public
21 and private utilities (e.g., BC Hydro, Toledo Water).

1 Examples of my work include my current projects to assist the Massachusetts Attorney
2 General's Office (AGO) in the generic investigation by the Department of Public Utilities
3 (DPU) into the design of low-income affordability programs. I am consulting for the New
4 Hampshire Department of Energy, which administers that state's Electricity Assistance
5 Program (EAP), in the proceeding before the New Hampshire Public Utilities
6 Commission to review the EAP. A brief description of my professional background is
7 provided in Exhibit OCA-Colton-1.

8 Not all of my work involves rate case testimony. In addition, I engage in work throughout
9 the United States and Canada. For example, in 2022, I drafted, under contract to the City
10 of Toledo (OH), a Water Affordability Plan for that city. In May of 2022, I completed a
11 detailed report examining the affordability of water service in Knoxville (KY) for a
12 community-based organization, Knoxville Water and Energy for All (KWEA). In 2020, I
13 represented a coalition of major national consumer organizations to comment on the
14 Environmental Protection Agency's proposed framework by which to judge community
15 financial capability. I have recently completed a project with the Natural Resources
16 Defense Council to develop a tool by which to assess the financial impact of differing
17 types of low-income bill assistance for water utilities. I also continue to be "Of Counsel"
18 to the National Coalition for Legislation on Affordable Water (NCLA-Water). A brief
19 description of my professional background is provided in Exhibit OCA-Colton-1.

1 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

2 A. After receiving my undergraduate degree in 1975 from Iowa State University, I obtained
3 further training in both law and economics. I received my law degree in 1981 from the
4 University of Florida. I received my Master's Degree in Regulatory Economics from the
5 MacGregor School at Antioch University in 1993.

6 **Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY ISSUES?**

7 A. Yes. I have published three books and more than 80 articles in scholarly and trade
8 journals, primarily on low-income utility and housing issues. I have published three times
9 that number of technical reports for various clients on energy, water, telecommunications
10 and other associated low-income utility issues. My most recent publication was a chapter
11 in a 2018 book published by the London-based Edward Elgar Publishing, which was
12 titled "Energy Justice: US and International Perspectives." My chapter, "The equities of
13 efficiency: distributing energy usage reduction dollars," set forth a methodology
14 grounded in law and economics by which to objectively measure whether utility
15 investments in energy efficiency are being equitably distributed.

16 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY**
17 **COMMISSIONS?**

18 A. Yes. I have testified before the Pennsylvania Public Utility Commission on numerous
19 occasions over the past 35 years with respect to low-income issues. With respect to water
20 utilities in particular, I have testified on behalf of the Pennsylvania Office of Consumer
21 Advocate (OCA) regarding Pennsylvania-American Water Company (PAWC), Aqua PA,
22 and Pittsburgh Water rate cases in numerous years. I have testified before the
23 Philadelphia Water and Wastewater Rate Board in each Philadelphia Water Department

(PWD) rate case since 2000. I testified before the Illinois Commerce Commission on behalf of Legal Action of Chicago regarding the request of Illinois-American Water Company (IAWC) for increased rates in 2024, and before the Missouri Public Service Commission on the behalf of the Consumers Council of Missouri regarding proposed rates for Missouri American Water Company.

Overall, in my career I have testified before state utility regulatory commissions on over 350 occasions regarding utility issues affecting low-income customers and customer service. I have testified in regulatory proceedings in 43 states and various Canadian provinces on a wide range of utility issues. A list of the jurisdictions in which I have testified as an expert witness is listed in Exhibit OCA-Colton-1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my Direct Testimony in this proceeding is to examine:

- the affordability of the residential bills at the rates proposed by the Pittsburgh Water and Sewer Authority (Pittsburgh Water or PW) in this proceeding;
- the need for adequate bill discount assistance in the Pittsburgh Water service territory;
- the need for adequate arrearage forgiveness assistance in the Pittsburgh Water service territory;
- the need for adequate water conservation assistance in the Pittsburgh Water service territory; and
- the need to incorporate public comments received through the Public Input Hearing process into decision-making in this proceeding.

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS YOU MAKE THROUGHOUT YOUR TESTIMONY.

A. Based on the data and analysis I present throughout my testimony, I recommend as follows:

- That Pittsburgh Water increase its discount for customers with income less than 50% FPL from 60% to 75%.
- That Pittsburgh Water move from a two-tiered discount to a three-tiered discount. The new discount tier would apply to customers with income greater than 50% FPL but at or below 100% FPL.
- That Pittsburgh Water should include stand-alone Plain Language notices of the availability of the Bill Discount Program and Arrearage Forgiveness Program in three situations: (1) at the time a customer enrolls in a deferred payment arrangement; (2) prior to the disconnection of service for nonpayment; (3) in any situation where a customer has had service disconnected for nonpayment and continues to remain disconnected at the beginning of the cold weather season (December 1st).
- That Pittsburgh Water develop and utilize a mechanism by which it identifies customers on its system for whom Pittsburgh Water has reasonable information to indicate the customer is a low-income customer.
- That Pittsburgh Water eliminate the requirement that low-income customers enter into a deferred payment arrangement as a prerequisite to enrolling in Pittsburgh Water's Arrearage Forgiveness Program (AFP). Pre-existing balances incurred by low-income customers during a time they were being charged unaffordable bills should be forgiven for each complete payment the program participant makes.
- That given the elimination of the required deferred payment arrangement as a prerequisite to participating in the Pittsburgh Water Arrearage Forgiveness Program, customers who enroll in the Bill Discount Program (with a pre-existing arrears), or who would otherwise receive a Hardship Grant, should be auto-enrolled in the AFP.
- That the right of an AFP participant to "catch-up on their missed payments to achieve forgiveness" should be incorporated into the Tariff establishing the Program.
- That Pittsburgh Water undertake a comprehensive review of all of its public-facing communications to ensure that references exclusively to the provision of forgiveness for on-time payments are modified to ensure that customers are

1 informed of their right to also achieve forgiveness by catching up on late or missed
2 payments.

- 3 ➤ That Pittsburgh Water’s request for an arrearage forgiveness cost recovery of
4 \$280,094 a year, for two years be denied.
- 5 ➤ That Pittsburgh Water include in its new Conservation Program tariff the process
6 for a tenant to pursue when landlord approval has not been obtained, and when
7 said tenant is not authorized to provide the “written consent” now required by the
8 tariff. In addition, Pittsburgh Water should extend its successful consultation with
9 its Low-Income Assistance Advisory Committee (LIAAC) to determine how to
10 maximize the ability, and ease, of landlords to provide consent when the landlord
11 is not the customer. Such procedures might, for example, include the ability of a
12 landlord to approve participation in the Program through an electronic signature,
13 through a web portal (and a QR code), or through text messaging.
- 14 ➤ That one of two alternative recommendations regarding eligibility for Pittsburgh
15 Water’s low-income Line Repair and Conservation Program be adopted. The two
16 alternative recommendations differ based on whether the representation in the
17 Raftelis 2024 Affordability Report or the representation in the “Script and
18 Checklist” accurately represent the eligibility requirements for the Line Repair and
19 Conservation Program.
 - 20 ○ First, in the event that the Raftelis representation is correct—that the
21 Program is available to any customers with income below 200% of Federal
22 Poverty Level—Pittsburgh Water should immediately review and revise all
23 customer-facing scripts and checklists to identify and eliminate all
24 erroneous communications that a customer “must be an active Bill
25 Discount Program customer” in order to participate in the Program.
 - 26 ○ Second, in the alternative, if the “Script and Checklist” used by Pittsburgh
27 Water customer service representatives (CSRs) accurately represents
28 current Pittsburgh Water policy, that policy should be modified. The low-
29 income Line Repair and Conservation Program should be made available
30 to any customer with an income at or below 200% of the Federal Poverty
31 Level.
 - 32 ○ Under either alternative, the customer should be allowed to establish that
33 income-eligibility through providing household income information,
34 through current participation in Pittsburgh Water’s Bill Discount Program,
35 or through documentation of current participation in any public assistance
36 program with a maximum income eligibility of at or below 200% of

Poverty Level (e.g., SNAP, Free and Reduced School Lunches, Medicaid, LIHEAP, etc.).

- I recommend that funding for the low-income Line Repair and Water Conservation Program be expanded by \$150,000 a year to an annual total of \$300,000.

Part 1. The Importance of Providing Appropriate Bill Assistance.

Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I explain the importance of providing appropriate levels of bill assistance to Pittsburgh Water’s low-income customers. I find that there are distinct public health benefits from providing an adequate level of assistance. In addition, there are financial benefits to both the City of Pittsburgh and to Pittsburgh Water, itself, from providing an adequate level of assistance.

Q. PLEASE EXPLAIN WHY PAYING PARTICULAR ATTENTION TO PROVIDING AN APPROPRIATE AMOUNT OF AFFORDABILITY ASSISTANCE IS IMPORTANT IN THIS RATE PROCEEDING.

A. Water service in today’s world is an essential human need. Water is needed not only for drinking, but also for cooking and sewer needs. A 2022 White Paper by the U.S. Water Alliance states that “for every community in our country, the availability of safe drinking water and wastewater services is a precondition for public health and prosperity.”¹ Water is vital to maintaining hygiene and health. The lack of water has particularly negative

¹ Hara, Willette and Simonson (2022). Making Water a Public Good: The Bigger Picture of Water Affordability, at 1, US Water Alliance.

1 impacts on children, the elderly, women, and persons suffering from an illness or chronic
 2 health concern. As one recent study noted:

3 Dehydration can create threatening chemical imbalances for elderly people.
 4 Women who are menstruating need water to properly cleanse themselves, and
 5 mothers who are nursing need water to maintain their milk supply and their
 6 health. Some people with chronic illness need clean water in order to run and
 7 wash personal medical equipment.²

8 A recent study published in the American Journal of Preventative Medicine concluded
 9 that “Water shutoffs pose a real threat to human health because the lack of adequate
 10 sanitation can cause diseases to spread and allow people to become sick.”³ A 2010 report
 11 for the Water Research Foundation (the research arm of the American Water Works
 12 Association, AWWA) concluded that “A final consideration of importance to water
 13 utilities is the relationship of payment problems to health issues. . . Potential impacts
 14 relate to many of the same public health endpoints targeted by Safe Drinking Water Act
 15 standards such as effects on children and the unborn.”⁴

16 The fundamental need for affordable water is recognized not only by laws relating to the
 17 protection of children, but also by laws relating to the habitability of homes. In 21 states,
 18 a parent’s inability to provide running water in the home can be considered “child

² Jones and Moulton (2016). *The Invisible Crisis: Water Unaffordability in the United States*, at 11, Unitarian Universalist Service Committee, Cambridge: MA; see also, Bipartisan Policy Center (September 2017). *Safeguarding Water Affordability*, at 7.

³ Zhang et al (2021). *Water Shutoff Moratoria Lowered COVID-19 Infection and Death Across U.S. States*, 2021 *American Journal of Preventative Medicine*.

⁴ Cromwell, et al. (2010). *Best Practices in Customer Payment Assistance Programs*, at xxii, Water Research Foundation: Washington D.C. (hereafter “Best Practices”).

neglect.”⁵ The lack of running water and sanitation is generally considered by public health inspectors to make a home uninhabitable.⁶

A. The Financial Cost to the Community of Providing Inadequate Assistance.

Q. IS THERE A COST INCURRED BY THE COMMUNITY DUE TO PITTSBURGH WATER’S FAILURE TO ADEQUATELY ADDRESS THE NEED FOR BILL DISCOUNTS TO LOW-INCOME CUSTOMERS?

A. Yes. In May 2022, four professors at the University of Pennsylvania’s Perelman School of Medicine published their research on *The Costs of Water Insecurity in Philadelphia* (hereinafter “Costs of Water Insecurity”).⁷ These four Philadelphia medical professors reported that the costs of water insecurity did not end with the cost to the affected customer. Rather, the professors reported the costs included:

Financial and employment costs:

- Healthcare costs from mental and physical health impacts, part of which are paid by individuals. The total estimated costs for mental health conditions to all payers is \$302 per household per year.
- Money spent purchasing bottled water, paying a neighbor for a hose connection, paying to shower at a gym or other facility, paying reconnection fees, paying attorney fees to dispute shutoff and/or ramifications of it. The estimated cost of purchased water varies from \$0.50 to \$1.25 per gallon, so from \$1950 to \$4950 per household per year.

⁵ *Id.*, at 34.

⁶ *Id.*, at 32 – 33.

⁷ Laura A. Gibson, PhD , Eliza Kinsey, PhD, Christina A. Roberto, PhD, & Louise Russell, PhD (May 2022). *The Costs of Water Insecurity in Philadelphia*, Perelman School of Medicine, University of Pennsylvania. I have appended this study to my testimony as Exhibit OCA-Colton-2.

- Time costs (e.g., lost labor, leisure, and home productive hours) of collecting water.

- Missed work and loss of productivity and employment from physical and mental health impacts.

- Accumulating debt (disconnected customer accounts continue to incur fees and penalties)

- Diminished credit and dismantled borrowing potential.

Family and Educational Costs

- Children removed from homes by Child Protective Services or forced to relocate away from family because of lack of water.

- Missed school days.

- Poor hygiene, which increases the risk of children being bullied; some parents keep kids home from school to prevent bullying.

- Reduction in spending on school supplies because parents need to make tradeoffs to pay utility bills.

Physical and Mental Health Costs

- Increased psychological distress and mental health effects.

- Increased risk for infectious diseases and death among children and adults.

- Dehydration, which can disrupt cognitive function including concentration, alertness, and short-term memory and negatively impact mood and organ function.

- Increased risk for obesity, type 2 diabetes, and oral health problems, partly because people substitute sugary drinks for water.

- Water shut offs create elevated health risks for certain vulnerable groups such as babies and children, older adults, people with disabilities, people with chronic diseases, pregnant people, nursing mothers, and women who are menstruating.

1 **Q. DID THE *COSTS OF WATER INSECURITY REPORT* FIND OTHER PUBLIC**
 2 **AND PRIVATE COSTS ARISING FROM THE UNAFFORDABILITY OF**
 3 **WATER?**

4 A. Yes. In addition to the above findings, the Perelman School of Medicine researchers
 5 reported costs such as:

6 **Housing costs:** Housing loss because the house is uninhabitable without
 7 water, or a lien may be placed on an occupant for unpaid debt. This can lead
 8 to high penalties and interest, with some households facing tax foreclosure or
 9 renters evicted for not paying utility bills (if billed separately by the
 10 landlord).

11 **Community Costs:**

- 12 • Vacant homes that are abandoned following a water shut off.
- 13 • Increases in homelessness.
- 14 • Costs to health systems and payers for increases in hospitalization,
 15 ambulatory, and ER visits and prescription drugs driven by rises in
 16 infectious and chronic diseases (though some of these costs are borne
 17 by insurers, by state and federal governments, and, as noted above, by
 18 individuals).
- 19 • Tens of thousands of pro-bono hours for legal and community
 20 services.

21 **City Costs:**

- 22 • Costs of shut offs and reconnections, including staff time, travel, and
 23 materials.
- 24 • Children placed in foster care following a neglect finding for not
 25 having a utility service.
- 26 • Homelessness (as a result of eviction, foreclosure, not being able to
 27 stay in a water-less home).
- 28 • Public safety (including illegal, sometimes unsafe water
 29 reconnections).

- Macroeconomic impacts of lost productivity.

Q. WHAT DO YOU CONCLUDE?

A. Water cannot be viewed as just another commodity sold by a public agency, with access denied when customers find the cost to be unaffordable. Pittsburgh Water should acknowledge this “connection between affordability and public health as another compelling reason to go beyond normal commercial collections practices and help meet higher community goals in this area of service.”⁸ Pittsburgh Water “must remain mindful that public health is their core business and there is as much health impact at stake in the manner in which they obtain revenue from low-income households as there is in treating the water to high standards.”⁹

B. The Financial Cost to Pittsburgh Water from Providing Inadequate Assistance.

Q. IS THERE A COST TO PITTSBURGH WATER AND ITS CUSTOMERS FROM PITTSBURGH WATER’S FAILURE TO ADEQUATELY ADDRESS THE AFFORDABILITY PROBLEMS OF ITS LOW-INCOME CUSTOMERS?

A. Yes. When Pittsburgh Water issues a bill to a customer who simply cannot afford to pay it, there is a cost not simply to the customer receiving the bill, but there is also a cost to Pittsburgh Water as the service provider (and thus to Pittsburgh Water’s remaining customers). I base this conclusion on my review of Pittsburgh Water credit and collection data for the period January 2024 through June 2025 (the last month for which data is available). I examine three metrics based on this Pittsburgh Water data: (1) the Payment-

⁸ Best Practices, *supra*, at xxii.

⁹ Best Practices, *supra*, at 29.

1 to-Bill ratio; (2) the Payment Coverage Ratio; and (3) the Payment Arrangement Default
2 Rate (PAD Rate). I will explain each metric in more detail below.

3 **Q. WHAT IS THE PAYMENT-TO-BILL RATIO WHICH YOU EXAMINE?**

4 A. The Payment-to-Bill Ratio (PTB Ratio) measures the extent to which customers are
5 making regular payments toward their Pittsburgh Water bill. It involves a simple
6 calculation, where I place the number of bills for current service issued each month to
7 residential customers in the denominator, and I place the number of payments received
8 from such customers in the numerator. The PTB Ratio only counts the number of
9 payments. It does not consider the degree to which the payment covers the amount of the
10 underlying bill. A payment of 50% of the bill is counted as the same as a payment of
11 100% of the bill. The degree to which a bill is completely paid is discussed in more detail
12 below.

13 To illustrate: assume that Pittsburgh Water has two customers who received twelve
14 identical bills over the course of a year (I'll call them Customer A and Customer B). Both
15 customers have an unpaid balance of \$0 at the end of the year. However, Customer A
16 made their payment in 12 monthly installments, one in response to each bill. Customer B
17 made their payment in two installments, one in June and one in December. While
18 Customer A has a PTB Ratio of 1.0 (12 payments for every 12 bills), Customer B will
19 have a PTB Ratio of 0.17 (two payments for every 12 bills). Customer A not only is a less
20 risky customer, but is also a less expensive customer to serve. There are fewer carrying
21 costs associated with their bill. There are fewer credit and collection expenses.

1 In the Pittsburgh Water service territory, low-income customers not on Pittsburgh Water's
 2 Bill Discount Program had a noticeably different PTB Ratio for the period January 2024
 3 through June 2025. During that time period, low-income customers not on Pittsburgh
 4 Water's Bill Discount Program had a PTB Ratio of 0.35 (35 payments for every 100
 5 bills). In contrast, residential customers, as a whole, had a PTB Ratio of 0.98 (98
 6 payments for every 100 bills).¹⁰

7 **Q. PLEASE EXPLAIN THE "PAYMENT COVERAGE RATIO" METRIC YOU USE.**

8 A. While the PTB Ratio I discuss above examines the regularity of bill payment, the
 9 Payment Coverage Ratio (PC Ratio) measures the completeness of payment. As above,
 10 the PC Ratio is easily calculated. It involves placing the dollars of bills for current service
 11 rendered in the denominator and the dollars of payments made in the numerator. If
 12 Customer A receives an annual bill of \$500 and makes \$500 in payments, the PC Ratio is
 13 100%. If Customer B receives the same \$500 bill, but makes a payment of only \$300, the
 14 PC Ratio is 0.60. Unlike above, the PC Ratio does not consider the number of payments
 15 made, only the degree to which a customer's payments cover the entire bill for current
 16 service.

17 Pittsburgh Water's low-income customers made noticeably less complete bill payments
 18 over the time period January 2024 through June 2025. While the PC Ratio for low-
 19 income customers not on Pittsburgh Water's BDP was 0.36 (\$36 of payments for each

¹⁰ Pittsburgh Water's discovery response providing data on Bill Discount Program (BDP) participants appeared to have a data reporting error. According to the Pittsburgh Water's response (PW Response to OCA-IV-7), BDP participants made roughly eight payments for every 100 bills they received (a BDP Ratio of 0.79). That number of payments, however, was inconsistent with both the Pittsburgh Water's reports of the percentage of total bills paid by BDP participants and the numbers of accounts, and dollars, in arrears by age of arrears.

\$100 of bills for current service), Pittsburgh Water’s residential customers as a whole had a PC Ratio of 0.85 (\$85 of payments for every \$100 of bills for current service).¹¹ The Pittsburgh Water Bill Discount Program helps low-income customers achieve more complete bill payment. In contrast to the PC Ratio of 0.36 for low-income customers not on the BDP (\$36 of payments for each \$100 of bills), BDP participants experienced a PC Ratio of 0.85 (\$85 of payments for each \$100 of bills). While BDP participants were receiving lower (i.e., discounted) bills, in other words, they were successfully paying a far higher percentage of those bills.

Q. PLEASE EXPLAIN THE PAYMENT ARRANGEMENT METRIC YOU EXAMINE.

A. I measure the extent to which payment arrangements entered into by Pittsburgh Water result in a payment arrangement default (Payment Arrangement Default Rate, PAD Rate).¹² Looking at the PAD Rate is important in that the metric measures the degree of failure of Pittsburgh Water to offer a mechanism through which customers in arrears can successfully retire those arrears (i.e., reduce those arrears to a \$0 balance). During the period January 2024 through June 2025, more than half (54%) of all residential payment arrangements ended in default (54 defaulted payment arrangements for each 100 payment arrangements). Low-income customers not on the Pittsburgh Water Bill Discount

¹¹ If a customer has a PC Ratio of greater than 1.00, that usually means the customer has paid their entire bill for current service and has made a payment toward an existing arrearage.

¹² Pittsburgh Water refers to “deactivated” payment arrangements rather than “defaulted” payment arrangements. Nonetheless, Pittsburgh Water was asked to provide the number of “defaulted” payment arrangements and its response did not distinguish the data provided from the data requested. (*See*, PW Responses to OCA-IV-5, OCA-IV-6, OCA-IV-7).

1 Program had a dramatically higher PAD Rate of 1.37. That number demonstrates that for
2 every 100 payment arrangements entered into by Pittsburgh Water, Pittsburgh Water had
3 137 which were defaulting. Participation in the BDP helped reduce that default rate, even
4 if not to the same level of residential customers as a whole. The BDP PAD Rate for the
5 time period examined (January 2024 through June 2025) was 0.71 (71 defaults for each
6 100 payment arrangements). Importantly, in other words, while the BDP helped low-
7 income customers improve their payment patterns (reducing their PAD Rate by nearly
8 50%, from 1.37 to 0.71), when faced with the proposition of paying their entire
9 discounted bill for current service plus an installment toward retiring arrears, a substantial
10 proportion of low-income customers on the BDP were unable to make those payments.

11 **Part 2. Assessing the Need for Additional Bill Discount Assistance.**

12 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**
13 **TESTIMONY.**

14 A. In this section of my testimony, I assess the need for additional low-income affordability
15 assistance in the Pittsburgh Water service territory. I find that there are two areas in which
16 Pittsburgh Water needs to provide additional assistance. First, there is a need for a higher
17 discount for the tier of customers with income at or below 50% of Federal Poverty Level.
18 Second, there is a need to divide Pittsburgh Water's second tier of customers (with
19 income above 50% of Poverty but at or below 200% of Poverty) into two tiers. The new
20 tier should include customers with income above 50% of Federal Poverty Level but at or
21 below 100% of Federal Poverty Level.

A. Distinguishing the “Affordability Analysis” Presented by Pittsburgh Water.

Q. HAS PITTSBURGH WATER PRESENTED AN AFFORDABILITY ANALYSIS IN THIS PROCEEDING?

A. Yes. In the Settlement of its 2023 rate proceeding, Pittsburgh Water agreed to prepare a new affordability analysis. Pittsburgh Water witness Mechling attached that new study, prepared in 2024 for Pittsburgh Water by Raftelis (hereafter referred to as the “Raftelis 2024 Affordability Study”) to her Direct Testimony.¹³ As Raftelis explained in its 2024 Affordability Study, they:

explor[ed] new metrics that may be correlated with affordability. The metrics that were analyzed are median home value, Supplemental Nutrition Assistance Program (SNAP) participation, and the percent of population older than 65 years. The original analysis has been updated with the latest information and rates and charges. The new additions to the report enhance PWSA’s ability to more effectively and efficiently reach out to customers in the most vulnerable areas within the service area.¹⁴

Pittsburgh Water shared the draft Raftelis Affordability Report with its Low-Income Assistance Advisory Committee (LIAAC) in early 2025 and has used the report to help guide its program outreach, just as was intended (report was to “enhance PWSA’s ability to more effectively and efficiently reach out to customers in the most vulnerable areas.”)¹⁵

¹³ Pittsburgh Water Exhibit JAM-12 (hereafter, Raftelis 2024 Affordability Study).

¹⁴ *Id.*, at 10.

¹⁵ *Id.*

1 **Q. IS THERE A DIFFERENCE BETWEEN THE DISCUSSION YOU PRESENT**
 2 **BELOW AND THE “AFFORDABILITY ANALYSIS” PRESENTED IN THE**
 3 **RAFTELIS 2024 AFFORDABILITY ANALYSIS?**

4 A. Yes. While the Raftelis 2024 Affordability Study is an important tool to help Pittsburgh
 5 Water enhance its outreach throughout the “most vulnerable areas” of its service territory,
 6 there are tasks which that Report was not designed to undertake, and decisions which that
 7 Report was not designed to support. The Raftelis 2024 Affordability Report explicitly
 8 states that “It is important to note that this report is meant to provide a baseline statistical
 9 understanding of household affordability of water, wastewater conveyance, and
 10 stormwater service in the Pittsburgh area: not to recommend what Pittsburgh Water
 11 should do to improve its affordability efforts.” (emphasis added)¹⁶ Moreover, the Report
 12 explicitly acknowledges, by its own terms, that “It is important to note the limitations of
 13 this report. First, this is an analysis of current affordability and uses 2024 rates to
 14 calculate customer bills. Rates may change in the future and these changes will certainly
 15 impact customer bills.”¹⁷ Note that the term “limitations” was the language used by the
 16 Report, itself. The word is not used as a pejorative, nor used in derogation of the
 17 usefulness of the Report for the purposes for which it was intended. It simply notes that
 18 there are purposes for which the Report is not intended to be used.

¹⁶ Raftelis 2024 Affordability Study, at 10.

¹⁷ *Id.*, at 1.

1 **Q. HOW DOES YOUR DISCUSSION BELOW DIFFER FROM THE PURPOSES**
2 **FOR WHICH THE RAFTELIS 2024 AFFORDABILITY STUDY WAS**
3 **INTENDED?**

4 A. My inquiry differs from the “affordability” analysis presented in the Pittsburgh Water
5 “Affordability Study” in that my assessment is specifically designed to assess the need
6 for additional assistance in the Pittsburgh Water service territory within the context of the
7 new (and increased) rates which Pittsburgh Water proposes in this proceeding. Since the
8 Raftelis 2024 Affordability Study and my testimony have distinctly different purposes,
9 there is no need to evaluate the Raftelis 2024 Affordability Report. The lack of comment
10 on the Raftelis 2024 Affordability Report should not be construed as any agreement or
11 disagreement with either the methodology or the results of that Study. It simply indicates
12 that, by the explicit terms of that Report, the study does not directly relate to my
13 Testimony.

14 **Q. DO YOU USE MEDIAN HOUSEHOLD INCOME IN ASSESSING THE IMPACTS**
15 **OF THE RATES PROPOSED BY PITTSBURGH WATER ON THE NEED FOR**
16 **ADDITIONAL RATE ASSISTANCE IN THIS PROCEEDING?**

17 A. Yes. I do not use Median Household Income (MHI) in any assessment of the need for
18 additional affordability assistance. The use of MHI has been almost universally criticized
19 as the basis for an analysis of the need for affordability assistance. Consider the
20 following:

- 1 • **Environmental Finance Center (University of North Carolina):**¹⁸ “By
2 definition, half of the households in a community will have an income less
3 than MHI. Because these households have smaller incomes than the
4 median household, they potentially face much greater affordability
5 challenges. Thus, using percent MHI on its own can obscure the
6 affordability issues that low-income households face within a service area.
7 If the goal of the affordability analysis is to understand whether a utility or
8 community should focus on mitigating affordability, then using the percent
9 MHI provides little insight compared to other more precise metrics. . .
10 Focusing on the percentage that the median household pays can leave the
11 impression that the customer base pays relatively little for water. Shifting
12 the analysis to the impoverished threshold highlights a more realistic
13 percentage for the families likely to have the most affordability challenges.
14 ... using percent MHI alone can obscure the problem—leading utility
15 managers or regulators to believe that they do not have any affordability
16 concerns. Relying on percent MHI can mask the hardships faced by
17 families that are most at risk of facing affordability issues.¹⁹
- 18 • **American Waterworks Association (“AWWA”):**²⁰ “MHI can be a highly
19 misleading indicator of a community’s ability to pay for several reasons.
20 MHI is a poor indicator of economic distress and bears little relationship
21 to poverty or other measures of economic need within a community. ...
22 Given the relatively large percentage of households in the lower portions
23 of the income distribution in many cities, it is important to examine the

¹⁸ “Founded in 1998, the University of North Carolina at Chapel Hill Environmental Finance Center (UNC EFC) reaches local communities and state and federal programs by delivering applied training programs and technical assistance, resource and interactive tool development, and in-depth applied research on best and emerging practices.” <https://efc.sog.unc.edu/>

¹⁹ Irvin (2017). Is Percent MHI the Best Way to Measure Affordability? Environmental Finance Center, University of North Carolina.

²⁰ “The American Water Works Association is an international, nonprofit, scientific and educational society dedicated to providing total water solutions assuring the effective management of water. Founded in 1881, the Association is the largest organization of water supply professionals in the world. Our membership includes over 4,300 utilities that supply roughly 80 percent of the nation’s drinking water and treat almost half of the nation’s wastewater.” <https://www.awwa.org/About-Us>

effect of rising water bills across the entire income distribution—and especially at the lower end—rather than simply at the median.”²¹

• **AWWA/U.S. Conference of Mayors/Water Environment Federation:**²²

“A central issue in assessing affordability of federal water mandates is the reasonableness of community-wide MHI as a primary yardstick. MHI can be a highly misleading indicator of a community’s ability to pay for several reasons. ... MHI is a poor indicator of economic distress and bears little relationship to poverty or other measures of economic need within a community.”²³

• **National Academy of Public Administration:**²⁴ “Not focused on the poor or most economically vulnerable users – Using MHI did not accurately reflect the impact on the most vulnerable households, the low-income users least able to absorb higher water bills. ... Clearly, MHI is too broad an income measure to reflect the impact of water rate increases on low-income users”²⁵

One water industry academic, Manny Teodoro concludes that “[d]espite its widespread use, the [percent of median household income] approach is seriously flawed.” He explains that:

²¹ Stratus Consulting (2013). Assessing the Affordability of Federal Water Mandates, AWWA, U.S. Conference of Mayors and Water Environment Federation

²² “The Water Environment Federation (WEF) is a not-for-profit technical and educational organization of more than 30,000 individual members and 75 affiliated Member Associations (MAs) representing water quality professionals around the world.” <https://www.wef.org/about/Governance/about/>

²³ AWWA/USCM/WEF (2013). Affordability Assessment Tool for Federal Water Mandates.

²⁴ “Established in 1967, the Academy responds to requests for assistance from Congress, federal agencies; and state, local and international government entities on issues of importance.” The Academy is a Congressionally-chartered non-partisan 501(c)(3) nonprofit. (“The Senate Appropriations Committee, in a committee report on FY 2016 legislative language, directed the Environmental Protection Agency (EPA) to contract with the National Academy of Public Administration (the Academy) to conduct an independent study to create a definition of, and framework for, community affordability of clean water.”)

²⁵ National Academy of Public Administration (2017). Developing a New Framework for Community Affordability of Clean Water Services, prepared for the U.S. Environmental Protection Agency.

Perhaps the most frequent criticism of the [percent of] MHI standard is that its focus on median income misses the real subject of affordability concerns: poor households. The median-income household is unlikely to face serious water and sewer affordability problems in any but the smallest or most desperately poor communities. For low-income households, however, water and sewer services may force important economic tradeoffs. Measuring affordability as a function of an entire community's MHI obscures the effects of rate-setting on low-income customers, for whom utility leaders presumably have the greatest affordability concerns. Certainly, the tenor of public policy debates surrounding utility affordability suggests that low-income residential customers are the focus of alarm. As income stratification in a community increases, the degree to which [percent of] MHI masks potential affordability problems increases.²⁶

Conclusions like those above—that the use of an MHI in an affordability analysis “can obscure the affordability issues,” “provides little insight,” “obscures the problem,” “can be [...] highly misleading,” “bears little relationship to poverty or other measures of economic need,” does “not accurately reflect the impact on the most vulnerable households,” “obscures the effects of rate-setting on low-income customers,” and “masks potential affordability problems”—all lead to the conclusion that an assessment of the need for affordability assistance, including my own assessment, should not use MHI as the basis for decision-making. Accordingly, I do not use MHI in assessing the need for additional assistance in this proceeding.

**Q. DOES PITTSBURGH WATER’S ASSESSMENT OF AFFORDABILITY
PRESENTED IN TESTIMONY HAVE PROBLEMS AS WELL?**

²⁶ Teodoro (2018). Measuring Household Affordability for Water and Sewer Utilities, Journal of the American Water Works Association, 110:1(13).

A. Yes. Quite apart from the Raftelis 2024 Affordability Study, Pittsburgh Water witness Mechling presents her assessment of affordability at 50% of Federal Poverty Level (FPL), 100% of FPL, and 150% of FPL.²⁷ Her analysis, however, presents her analysis by FPL for a 2-person, a 4-person, and a 6-person household. The income of households at 100% of FPL (2025) for these three household sizes are set forth in the Table below.

Table 1. Income at 100% FPL (2025) by Household Size		
2-person	4-person	6-person
\$21,150	\$32,150	\$43,150

The use of these three household sizes is questionable at best. Of the 31 zip codes comprising the Pittsburgh Water service territory, the largest average household size is 2.35 persons. Nearly one-half of the Pittsburgh Water zip codes (14 of 31) have an average household size of less than 2.0. Seven more have an average household size of more than 2.0 but less than 2.2 persons. Despite the fact that 21 of Pittsburgh Water’s 31 zip codes have an average household size of 2.2 or less, in other words, Pittsburgh Water’s witness uses incomes for households of 4-persons and 6-persons to measure affordability.

To consider Pittsburgh Water’s affordability analysis from another perspective, the affordability analysis of Pittsburgh Water witness Mechling uses the incomes of 4-person and 6-person households despite the fact that only 12.1% of households in Pittsburgh Water’s zip codes have four or more members. She excludes 1-person households even though 1-person households represent the single greatest percentage of households in the

²⁷ PW St. 6, at Table 2, pages 28 – 29.

1 Pittsburgh Water service territory (42.5%), with 2-person households being the next
2 biggest (33.6%).

3 **Q. IS THERE ANY OTHER WAY IN WHICH THE ANALYSIS BY FPL**
4 **PRESENTED IN THE PITTSBURGH WATER TESTIMONY OVERSTATES**
5 **AFFORDABILITY?**

6 A. Yes. In presenting the affordability analysis for different FPL ranges, Pittsburgh Water
7 witness Mechling uses the top of each range to represent the income for the range. For
8 the range of households at 0% to 50% FPL, she uses 50% FPL; for the range of 50% to
9 100% FPL, she uses 100% FPL; for the range of 100% to 150% FPL, she uses 150% of
10 FPL. The impact is to minimize the unaffordability for each range of FPL. Skewing the
11 affordability in each FPL range does not represent the spread of incomes through each
12 range of FPL. The Table below, for example, presents the distribution of adults (persons
13 age 18 or older) by FPL at narrower ranges than were presented by Witness Mechling. As
14 the data shows, the group at 50% to 75% FPL is as big as the group at 75% to 100% FPL.
15 Similarly, the group at 100% to 125% of FPL is nearly the same size as the group at
16 125% to 150%. Even if consistently using the top of the FPL range to present an
17 affordability analysis of Pittsburgh Water bills is accurate if it is narrowly limited to the
18 data presented (affordability at 100% FPL; affordability at 150% FPL), the analysis is
19 misleading to the extent that it purports to represent affordability within the three ranges
20 of FPL. If one wants to examine the affordability for the three ranges of FPL, it would be
21 far more appropriate to use the mid-point of each range as the applicable income.

Table 2. Distribution of Population in Pittsburgh Water Zip Codes by FPL Range at or below 150% FPL (sum of 0 – 150% FPL = 100%)				
0 – 50% FPL	50 – 75% FPL	75 – 100% FPL	100 – 125% FPL	125 -150% FPL
30,971	13,880	13,368	13,927	14,355
35.8%	16.0%	15.5%	16.1%	16.6%

Q. WHAT IS THE AFFORDABILITY OF PITTSBURGH WATER BILLS FOR HOUSEHOLDS OF ONE THROUGH THREE PERSONS USING THE MID-POINT OF EACH FPL RANGE?

A. The affordability of Pittsburgh Water bills at 50% FPL, 100% FPL, and 150% FPL, for households with one, two, and three persons per household is set forth in the Table below. The data provides two important insights for purposes of assessing the need for affordability assistance in this proceeding. First, Table 3 shows that even with the bill discounts which Pittsburgh Water currently provides to customers with income at or below 50% of FPL, Pittsburgh Water bills are unaffordable for 1-person, 2-person, and 3-person households. In making this observation, I again note that 89% of the households in the Pittsburgh Water service territory have three or fewer members in their household. Second, the Table documents that give Pittsburgh Water's proposed rates, discount, and rate design, bills to households with income between 50% and 100% of FPL will also have unaffordable Pittsburgh Water bill burdens.

Table 3. Affordability for 1-person – 3-person households at 0 - 50% FPL, 50 - 100% FPL, 100 - 150% FPL (with proposed discounts and rate design) (2026 and 2027) (proposed rates, discounts, and rate design)			
2026	0 - 50% FPL	50 - 100% FPL	100 - 150% FPL
1-person household	7.3%	5.7%	3.4%
2-person household	5.4%	4.2%	2.5%
3-person household	4.3%	3.3%	2.0%
2027	0 - 50% FPL	50 - 100% FPL	100 - 150% FPL
1-person household	8.7%	6.2%	3.7%
2-person household	6.5%	4.6%	2.8%
3-person household	5.1%	3.7%	2.2%

In reaching these two conclusions, I use the demarcation of affordability adopted by the City of Philadelphia in the design of the affordability program for the Philadelphia Water Department. As the Table above shows, for 1-person households, both the 2026 Pittsburgh Water bill burden are 9% or more. Two-person households have Pittsburgh Water burdens of 6.5% to nearly 7%. Three-person households with income at or below 50% of FPL have burdens exceeding 5% of income in both 2026 and 2027. Even at income between 50% and 100% of FPL, Pittsburgh Water bill burdens substantially exceed the burdens defined to be affordable by the City of Philadelphia for purposes of Philadelphia Water Department's affordability program.²⁸

²⁸²⁸ In December 2016, the Philadelphia city council unanimously adopted a percentage of income affordability program for the Philadelphia Water Department. That City legislation defined affordable burdens to be 2% of income for households with income at 0% to 50% FPL; 2.5% of income for households with income at 50% to 100% FPL; and 3.0% of income for households with income at 100% to 150% of FPL. <https://water.phila.gov/wp-content/uploads/files/rates-charges-2024-09-01.pdf>

Q. HAVE YOU CONSIDERED PITTSBURGH WATER BILL AFFORDABILITY USING ANY OTHER METRIC?

A. Yes. In addition to examining affordability based on different ranges of FPL, I have examined affordability based on different ranges of income in absolute dollars of income. This review allows me to take a narrower view of bill affordability based on income ranges reported by the Census Bureau for Pittsburgh Water's service territory. While examining absolute dollars of income does not distinguish customers by household size, for purposes here, that distinction is not needed. A household with a Pittsburgh Water bill of \$730 (i.e., the discounted Pittsburgh Water bill for households with income above 50% of FPL), and an income of \$12,000 has a bill burden of 6.1% whether that household has 1-person, 2-persons, or 3-persons.

In my examination of this aspect of Pittsburgh Water bill burdens, I use Pittsburgh Water's 2027 discounted bills for households with income exceeding 50% of FPL. Moreover, I examine households with annual income up to \$35,000. As Table 1 above shows, 100% of FPL in 2025 was \$21,150 for a 2-person household, \$32,150 for a 4-person household, and \$43,150 for a 6-person household. Those are the same three household sizes used by Pittsburgh Water in its analysis. Accordingly, exactly 50% of FPL for a 2-person, 4-person, and 6-person household would range from roughly \$10,000 to nearly \$22,000. Since I want to capture incomes somewhat above 50% of FPL, I thus include absolute dollar ranges up to \$35,000.²⁹

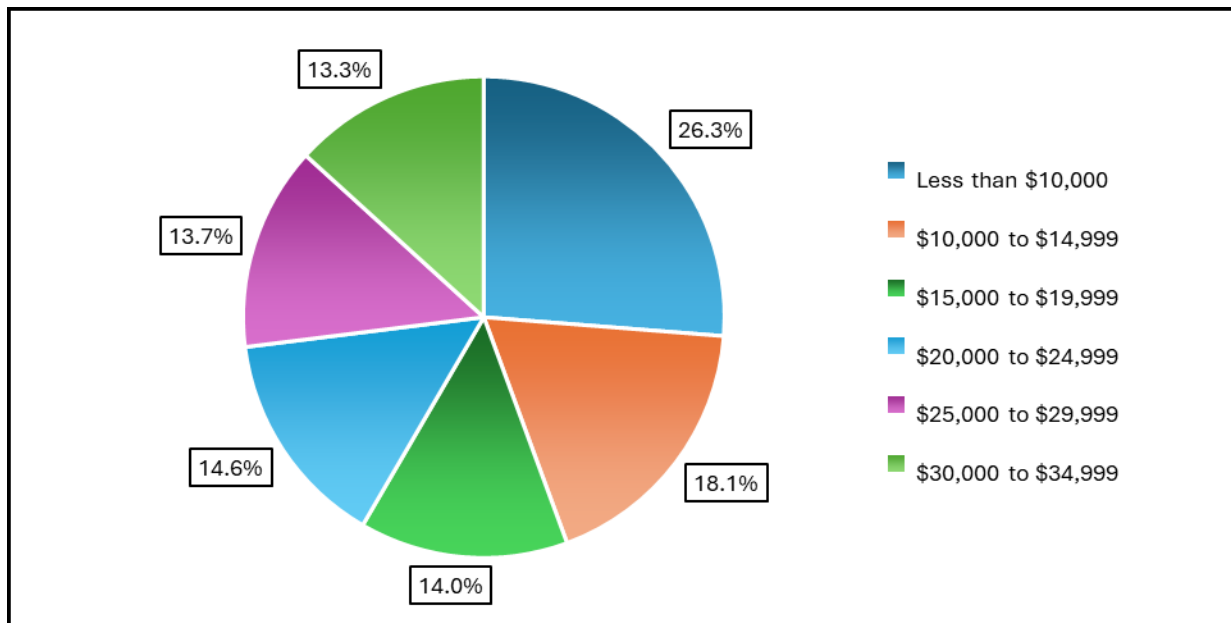
²⁹ Indeed, the incomes reported by the Census Bureau are reported in ranges of \$5,000. The maximum income I use is thus for the income range of \$30,000 to \$35,000. As with my discussion of FPL above, I use the mid-point of each range to represent the range.

Pittsburgh Water's bill burdens given its 2027 proposed rates, discounts and rate design are set forth in Table 4 below. As this Table documents, Pittsburgh Water bill burdens (irrespective of household size) are unaffordable for households with income up to \$30,000.

Table 4. Pittsburgh Water Bill Burdens by Ranges of Annual Income (2027 proposed rates, discounts, and rate design)			
Income Range	Mid-point	2027 Discounted Bill	Burden
Less than \$10,000	\$5,000	\$729.66	14.6%
\$10,000 - \$14,999	\$12,500	\$729.66	5.8%
\$15,000 - \$19,999	\$17,500	\$729.66	4.2%
\$20,000 - \$24,999	\$22,500	\$729.66	3.2%
\$25,000 - \$29,999	\$27,500	\$729.66	2.7%
\$30,000 - \$34,999	\$32,500	\$729.66	2.2%

The importance of the data in Table 4 above for purposes of this rate proceeding lies in the distribution of income within the Pittsburgh Water service territory. That distribution is set forth in Figure 1 below. The Figure shows that of the households with annual income below \$35,000, in fact, more than one-quarter have income less than \$10,000. More than 40% (44.4%) have income less than \$15,000, while nearly three-in-five (58.4%) have income less than \$20,000.

*Figure 1. Distribution of Households by Income
(annual income Less than \$35,000) (Pittsburgh Water) (2023)*



As is evident, using income at the top of a range such as Pittsburgh Water has done to justify its existing bill discount levels fails to reflect the reality of income distribution with Pittsburgh Water's service territory. The use of maximum incomes in each range to reflect the income of households within the range is misleading at best.

B. Modifying the Pittsburgh Water Discount for Households with Annual Income Below 50% Federal Poverty Level.

Q. HOW, IF AT ALL, SHOULD PITTSBURGH WATER MODIFY ITS DISCOUNT FOR CUSTOMERS WITH INCOME AT OR BELOW 50 PERCENT OF FEDERAL POVERTY LEVEL?

A. I recommend that Pittsburgh Water increase its discount for customers with income less than 50% FPL from 60% to 75%. This increased discount will reduce Pittsburgh Water bill burdens to a more affordable level for customers in this lowest income range. A

1 household with only 1-person would still have the highest burden (5.6%) in 2027, but
2 households with 2-persons (4.2%) or 3-persons (3.3%) come much closer to achieving
3 affordability.

4 **Q. IS THERE A SIGNIFICANT COST ASSOCIATED WITH MAKING THIS**
5 **ADJUSTMENT TO THE DISCOUNT FOR CUSTOMERS WITH INCOME OR**
6 **BELOW 50 PERCENT OF FEDERAL POVERTY LEVEL?**

7 A. No. According to Pittsburgh Water, a 60% discount for customers at or below 50% FPL
8 would generate a revenue reduction of \$369,018. Increasing that discount to 75% would
9 instead generate a revenue reduction of \$461,272, a difference of only \$92,264.

10 **C. Adding a Third Tier to the Pittsburgh Water Bill Discount Program.**

11 **Q. DO YOU RECOMMEND A SECOND MODIFICATION TO THE PITTSBURGH**
12 **WATER BILL DISCOUNT PROGRAM?**

13 A. Yes. I recommend that Pittsburgh Water move from a two-tiered discount to a three-tiered
14 discount. The new discount tier would apply to customers with income greater than 50%
15 FPL but at or below 100% FPL. I recommend discounts for this tier equivalent to the
16 discounts set for the lowest income tier, with the exception that volumetric discounts be
17 set at 30%. This increased discount will reduce Pittsburgh Water bill burdens to a more
18 affordable level for customers in this second income range. A household with only 1-
19 person would have the highest burden (4.6%) in 2027, but households with 2-persons
20 (3.4%) or 3-persons (2.7%) come much closer to achieving affordability.

21 **Q. WHY DO YOU RECOMMEND CREATING A SECOND TIER FOR**
22 **CUSTOMERS WITH INCOME GREATER THAN 50 PERCENT OF FEDERAL**

**POVERTY LEVEL BUT AT OR BELOW 100 PERCENT OF FEDERAL
POVERTY LEVEL?**

A. There is a dramatic difference in the dollar amount of income between the “bottom” and the “top” of the second income range now used by Pittsburgh Water. The difference in that income can be seen by looking at the income for customers at 50% FPL (2025) (to represent the bottom of the second tier)³⁰ and for customers at 200% FPL (to represent the top of Pittsburgh Water current second tier). I compare those two incomes for households with one, two, and three persons in the Table below.³¹ As can be seen, the difference in income between a Pittsburgh Water customer at 50% FPL and a Pittsburgh Water customer at 200% FPL for a one-person household would be nearly \$23,500, even though these two households would be in the same discount tier for Pittsburgh Water’s tiered discount program. Similarly, the difference in income between a Pittsburgh Water customer at 50% FPL and a Pittsburgh Water customer at 200% FPL for a three-person household would be nearly \$40,000. Nonetheless, those two 3-person households would receive the exact same discount under the proposed Pittsburgh Water program.

³⁰ The bottom of the second tier would be an income greater than 50% FPL (e.g., 50.1% FPL). Accordingly, I use 50% FPL to represent this bottom breakpoint.

³¹ As I discuss elsewhere, households with from one- and two-persons represent 77% of all Pittsburgh households. Households with one-, two- and three-persons represent 91% of all Pittsburgh households.

Table 5. Income by Household Size at Selected Ranges of FPL (2025)			
Poverty Level	1-person HH	2-person HH	3-person HH
50% FPL	\$7,825	\$10,575	\$13,325
100% FPL	\$15,650	\$21,150	\$42,300
200% FPL	\$31,300	\$42,300	\$53,300
Difference between 50% and 200%	\$23,475	\$31,725	\$39,975

1 These dollar differences in annual income substantially affect the affordability of bills to
2 Pittsburgh Water’s low-income customers. The data in Table 4 above shows that these
3 dramatic differences in income (in absolute dollars) will make the difference between
4 whether a customer does or does not receive an affordable bill under the rates proposed
5 by Pittsburgh Water for 2027. Despite these dramatic differences in burdens, under
6 Pittsburgh Water’s current two-tiered discount, all of these households would fall in the
7 same discount tier for purposes of its Bill Discount Program.

8 **Q. HAVE YOU BEEN ABLE TO EXAMINE THE BILL AFFORDABILITY**
9 **PROBLEMS FOR HOUSEHOLDS THAT ARE NOT AT THE LOWEST TIERS**
10 **OF INCOME?**

11 A. Yes. I have considered inability-to-pay by reference to the Pennsylvania data report in the
12 Census Bureau’s most recent PULSE Household Survey. These same impacts can be seen
13 in Pennsylvania in even more recent data. Perhaps the most up-to-date data, as of the time
14 I write this testimony, is the data periodically published through the Census Household
15 Pulse Survey (HPS). While the HPS does not provide data specific to utility service
16 territories, it does provide information specific to Pennsylvania. At the time I write this
17 Testimony, the most recent HPS data collection was for the period August 20, 2024
18 through September 16, 2024.

1 The Census Bureau’s Household Pulse Survey (HPS) documents that Pennsylvania
2 households engage in dangerous efforts to reduce their energy bills when they find that
3 they cannot afford to pay these bills. Table 6 below shows that for Pennsylvania
4 households with income less than \$50,000, between roughly 30% and 50% reported
5 reducing or forgoing expenses for basic household necessities (such as medicine or food)
6 in order to pay an energy bill either “almost every month” or “some months.”

7 The households who are forced into engaging in these unsafe and unhealthy activities in
8 their struggle to keep their utility bills affordable are not confined to the lowest income
9 tiers as would be represented in Pittsburgh Water’s Tier 1 (at or below 50% FPL). The
10 cells in Table 6 below show that even households with income between \$35,000 and
11 \$75,000, well above 50% of Federal Poverty Level, have been forced to make trade-offs
12 in order to pay their utility bills. Indeed, only 68% to 74% of households with income
13 between \$50,000 and \$100,000 report “never” needing to make such tradeoffs.

Table 6. Household reduced or forwent expenses for basic household necessities, such as medicine or food, in order to pay an energy bill (HPS, Housing Table 4)

	Almost every month	Some months	1 or two months	Never	Total
Less than \$25,000	13.3%	26.3%	15.1%	44.1%	98.8%
\$25,000 - \$34,999	15.6%	12.4%	8.6%	63.4%	100.0%
\$35,000 - \$49,999	14.6%	15.7%	11.1%	58.5%	100.0%
\$50,000 - \$74,999	7.1%	20.4%	4.3%	68.3%	100.0%
\$75,000 - \$99,999	3.5%	14.4%	7.7%	74.3%	99.9%
\$100,000 - \$149,999	3.6%	7.2%	12.3%	77.0%	100.0%
\$150,000 - \$199,999	5.2%	3.1%	1.4%	90.3%	100.0%
\$200,000 and above	1.9%	0.0%	5.4%	92.7%	100.0%

1 In addition to my examination of the trade-offs Pennsylvania households are forced to
2 make in order to pay their utility bills, I have also considered the inability-to-pay reported
3 in the Census Household Pulse Survey. The Table below documents that, in
4 Pennsylvania, from 20% to more than 30% of households with income less than \$75,000
5 reported being unable to pay an energy bill, or unable to pay the full bill amount, either
6 “almost every month” or in “some months.” The utility bill payment difficulties facing

Pennsylvania customers is simply not confined to the lowest income tier as defined by Pittsburgh Water.

Table 7. Household was unable to pay an energy bill or unable to pay the full bill amount					
	Almost every month	Some months	1 or two months	Never	Did not report
Less than \$25,000	7.8%	11.5%	23.4%	56.6%	99.3%
\$25,000 - \$34,999	15.6%	11.6%	5.0%	67.9%	100.0%
\$35,000 - \$49,999	14.5%	18.3%	7.6%	59.6%	100.0%
\$50,000 - \$74,999	2.7%	17.1%	6.1%	74.1%	100.0%
\$75,000 - \$99,999	2.5%	4.5%	11.6%	81.4%	100.0%
\$100,000 - \$149,999	3.4%	2.6%	6.6%	87.5%	100.0%
\$150,000 - \$199,999	4.8%	1.8%	2.7%	90.6%	100.0%
\$200,000 and above	0.0%	2.1%	2.2%	95.7%	100.0%

Given this Pulse Household Survey data, it is reasonable to extend bill discounts to a new second tier as I define above (income above 50% FPL but at or below 100% FPL).

Q. WHAT DO YOU CONCLUDE?

A. I conclude that expanding the discount for a portion, yet not all, of the Pittsburgh Water BDP program participants in the manner I describe above for customers with income more than 50% of FPL but at or below 100% of FPL will generate benefits not only to the participating customers, but to the utility and its remaining non-participating ratepayers.

Q. IS THERE A SIGNIFICANT COST ASSOCIATED WITH CREATING THIS SECOND INCOME FOR CUSTOMERS WITH INCOME GREATER THAN 50 PERCENT BUT AT OR BELOW 100 PERCENT OF FEDERAL POVERTY LEVEL?

A. No. In 2026, the volumetric rate charged to Bill Discount Program participants would generate \$1,735,600 in revenue from customers at 50% to 200% of FPL. Pittsburgh Water reports that from January 2022 through June 2025, 45.8% of its Bill Discount Program applicants with annual income in the broad range of 50% to 200% of FPL in fact have annual income in the narrower range of 50% to 100% of FPL. A 30% discount for Tier 2 of customers (50% to 100% FPL) would reduce this volumetric revenue. Applying these numbers the introduction of a 30% discount will generate a revenue reduction of \$238,471.³² Applying a DSIC rate of 7.5% to this revenue reduction yields a final water revenue reduction of \$256,357. Using the same methodology yields a wastewater revenue reduction of \$148,350.

It is important to remember, of course, that this is not an increase to the Pittsburgh Water revenue requirement. The recommendation I make does not change the \$84.4 million rate increase sought by Pittsburgh Water. The recommendation I make instead is a reallocation of costs from those customers who cannot pay to those customers who can.

D. Supplementing Bill Discount Program Outreach.

Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I explain why Pittsburgh Water should include stand-alone Plain Language notices of the availability of the Bill Discount Program and Arrearage Forgiveness Program in four situations: (1) at the time a customer enrolls in a deferred payment arrangement; (2) prior to the disconnection of service for nonpayment;

³² \$1,735,600 x 0.30 * 0.485 = \$238,471.

(3) in any situation where a customer has had service disconnected for nonpayment and continues to remain disconnected at the beginning of the cold weather season (December 1st). I finally recommend that Pittsburgh Water develop and utilize a mechanism by which it identifies customers on its system for whom Pittsburgh Water has reasonable information to indicate the customer is a low-income customer.

In making the recommendations I advance below, I do not intend to criticize Pittsburgh Water's existing outreach efforts. In particular, Pittsburgh Water should be commended for its targeted geographic focus in its outreach.³³ Nonetheless, Pittsburgh Water's Bill Discount Program and Arrearage Forgiveness Program can also be viewed as tools through which Pittsburgh Water can help control its own costs, rather than simply as a mechanism to address low-income affordability issues. My discussion below outlines how outreach can be structured when the Pittsburgh Water programs are viewed from that perspective.

Q. WHY DO YOU RECOMMEND THAT PITTSBURGH WATER PROVIDE SUCH STAND-ALONE NOTICES IN ALL INSTANCES RATHER THAN SIMPLY TO LOW-INCOME CUSTOMER?

A. Pittsburgh Water would have no knowledge of the income of one of its customers facing payment difficulties in the absence of that customer's choice to enroll in one of Pittsburgh Water's customer assistance programs. It does not appear that Pittsburgh Water has attempted to estimate the number of low-income customers in its service territory. When asked to provide an estimate of the number of low-income customers by zip code,

³³ See generally, PW Responses to OWT-2-17, OWT-2-18, OWT-2-28.

Pittsburgh Water responded that “[i]t is only possible to provide both the income and population by Pittsburgh neighborhood,” and it only did so based not on low-income status, but on the basis of Median Household Income (MHI).³⁴ It could not provide an estimate of the number of customers disaggregated by ranges of income.³⁵ Nor could it provide an estimate of the total number of low-income customers which it serves.³⁶

Moreover, Pittsburgh Water maintains no mechanism by which it might reasonably identify a customer as “low-income” outside the enrollment of that customer in one of Pittsburgh Water’s customer assistance program. Pittsburgh Water, for example, reported that it had identified 8,057 low-income customers in its service territory.³⁷ It reported that it serves 8,573 Bill Discount Program participants.³⁸

Q. IS IT REASONABLE TO CONCLUDE THAT PITTSBURGH WATER’S FAILURE TO IDENTIFY AND ADDRESS THE NEEDS OF ITS LOW-INCOME CUSTOMERS HARMS BOTH THOSE CUSTOMERS, THE UTILITY, AND ITS REMAINING CUSTOMERS?

A. Yes. I discuss the payment difficulties of low-income customers in detail above. As that discussion demonstrates, it is reasonable to conclude that low-income customers on the Pittsburgh Water system are facing substantial payment difficulties. Those payment

³⁴ PW Response to OCA-IV-17.

³⁵ *Id.*

³⁶ PW Response to OCA-IV-2(c).

³⁷ PW Response to OCA-IV-2(b).

³⁸ PW Response to OCA-IV-2(d). Pittsburgh Water did not explain why its number of Bill Discount Participants exceeded its number of identified low-income customers.

1 difficulties harm the low-income customer, the utility in its capacity as a utility, and all
2 other ratepayers as well.

3 In addition, however, to avoid any implicit bias that may be introduced by the way in
4 which, or the extent to which, Pittsburgh Water may categorize a customer as “low-
5 income,” I have also examined the payment patterns of Pittsburgh Water’s residential
6 customers by geographic area. I began by matching the collection activity reported by
7 Pittsburgh Water by zip codes.³⁹ After doing this, as in my testimony above, using those
8 zip codes which Pittsburgh Water identified as comprising its service territory, I matched
9 those zip codes with Census data on MHI. I use MHI simply for the purpose of rank
10 ordering Pittsburgh Water’s zip codes by income. For all the reasons I discuss above, the
11 use of MHI for any substantive analysis of affordability is inappropriate. I then selected
12 the eight zip codes with the highest MHI as “High” zip codes, and the eight zip codes
13 with the lowest MHI as “Low” zip codes. Those zip codes falling into neither of these
14 two categories were labelled “Remainder” and were not further considered.

15 **Q. WHAT DID YOU FIND WITH RESPECT TO INCOME, PAYMENT PATTERNS,**
16 **AND CREDIT AND COLLECTION PRACTICES?**

17 A. Pittsburgh Water directs a disproportionate amount of more intense collection activity
18 toward customers who live in its low-income zip codes. I found that 14.2% of all
19 residential customers live in the “High Income” zip codes identified in the manner
20 described above, while 37.5% of all residential customers live in the “Low-Income” zip
21 codes. However, I found that:

³⁹ PW Response to OCA-IV-08.

➤ While the High Income zip codes had 14.2% of all residential customers, they had only 9.2% of the accounts on which Late Payment Charges were imposed on residential and only 5.7% of the total dollars of Late Payment Charges.

➤ In contrast, while the Low-Income zip codes had 37.5% of all residential customers, they had 44.4% of all the accounts on whom Late Payment Charges were imposed and 48.1% of the total dollars of Late Payment Charges.

This disproportionate imposition of Late Payment Charges, both in numbers of accounts and in dollars, would demonstrate that the Low-Income zip codes had more accounts in arrears as well as that those accounts in arrears were further in arrears. In addition to bearing these higher costs of nonpayment, the Low-Income zip codes experienced a disproportionate amount of Pittsburgh Water's collection activities.

➤ While the High Income zip codes had 14.2% of all residential customers, they had only 6.4% of all nonpayment disconnections. In contrast, while the Low-Income zip codes had 37.5% of all customers, they had 47.7% of all nonpayment disconnections.

➤ Indeed, while the High Income zip codes experienced only 0.54 nonpayment disconnections for every 100 customers in the zip code, the Low-Income zip codes had three times that rate (a rate of 1.5 nonpayment disconnections for every 100 customers in those zip codes).

Q. WHAT DO YOU CONCLUDE AND RECOMMEND?

A. I conclude that Pittsburgh Water should implement a mechanism in its customer information system which would allow Pittsburgh Water to identify customers for whom Pittsburgh Water has information that would reasonably indicate the customer is low-income. The use of such a mechanism would not only allow Pittsburgh Water to be proactive in its outreach for its customer assistance programs, but it would allow Pittsburgh Water to be proactive in offering customers the full array of customer service protections which may be income-based. While I acknowledge that such a mechanism is

1 *required* neither by statute nor by Commission regulation for a water utility such as
 2 Pittsburgh Water, implementing such a mechanism is sound utility management.
 3 Consider, for example, the benefits to Pennsylvania’s energy utilities arising from the
 4 extensive reporting of data for residential customers as a whole compared to data for
 5 “confirmed low-income” customers.⁴⁰

6 As the Bureau of Consumer Services notes, “A low-income customer is defined as one
 7 whose household income is at or below 150% of the federal poverty income guidelines
 8 (FPIG). A low-income customer is classified as confirmed low-income after their public
 9 utility has obtained information that would reasonably place them within this FPIG
 10 level.”⁴¹ Even though, as a water utility, not *required* to collect such data, Pittsburgh
 11 Water should nonetheless do so as a matter of sound business practice.

12 **Q. WHY DO YOU RECOMMEND THAT PITTSBURGH WATER OFFER THE**
 13 **AVAILABILITY OF THE BILL DISCOUNT PROGRAM, COUPLED WITH**
 14 **ARREARAGE FORGIVENESS, AS PART OF ITS NEGOTIATION OF**
 15 **DEFERRED PAYMENT ARRANGEMENTS?**

16 A. I discuss in detail above the unescapable fact that a substantial proportion of the deferred
 17 payment arrangements which Pittsburgh Water enters into with its customers result in a
 18 default. Simply “trying again” is not really an alternative to Pittsburgh Water customers

⁴⁰ See generally, Bureau of Consumer Services, annual Report on Universal Service Programs and Collections Performance, available at <https://www.puc.pa.gov/filing-resources/reports/universal-service-programs-and-collections-performance-reports/> (allowing comparisons between residential and “confirmed low-income” customers on topics such as shutoffs, payment plans, arrearage balances, write-offs, and the like).

⁴¹ 2023 Report on Universal Service Programs and Collections Performance, at 2.

1 who agree to, but default on, their payment arrangement. If a customer has previously
 2 defaulted on two payment arrangements, that customer is not eligible to enter into
 3 another.⁴² When such a large number of payment arrangements end in a default, it might
 4 be reasonable to expect Pittsburgh Water to inquire into why that lack of success is
 5 occurring. Yet that is not true for Pittsburgh Water. When specifically asked for any study,
 6 or report, or other written document “discussing why residential customers do not
 7 successfully complete deferred payment plans (sometimes known as payment agreements
 8 or other similar terms) in order to avoid the disconnection of service for nonpayment,”
 9 Pittsburgh Water responded simply that “Pittsburgh Water has no such written
 10 documents.”⁴³

11 **Q. WHAT DO YOU CONCLUDE AND RECOMMEND?**

12 A. Offering a customer a deferred payment arrangement, even a long-term deferred payment
 13 arrangement, is not a recipe for success if the reason the customer is in arrears in the first
 14 instance is that bills for current service are unaffordable. In those situations, all a deferred
 15 payment arrangement does is to begin with the unaffordable bill and add an additional
 16 installment payment through which to retire the arrears. In those instances, it should not
 17 be surprising that far fewer low-income payment arrangements succeed in any given year
 18 than do not. The remedy for unpaid bills by low-income customers is not to place those
 19 customers on a deferred payment arrangement, but rather to enroll those customers in the

⁴² PW Response to OWT-3-17, attachment, at 8 (“Customers are eligible for a maximum of TWO payment arrangements unless the customer has experienced a life changing event, such as job loss, change in residents, or income change.”)

⁴³ PW Response to OCA-IV-31.

1 Bill Discount Program (with its arrearage forgiveness provisions). Through that remedy,
 2 Pittsburgh Water would not merely address the unpaid bill, but would also address the
 3 underlying cause of the unpaid bill. Doing so would not only benefit the low-income
 4 customer, but would also benefit the Company and its remaining customers as well.

5 **Q. WHAT DO YOU RECOMMEND?**

6 A. I recommend that before Pittsburgh Water enters into a payment arrangement with a
 7 customer, it should be required to provide the customer a stand-alone Plain English notice
 8 to that customer of the customer's right to enter into the Bill Discount Program and an
 9 explanation of the advantages of that program's arrearage forgiveness benefits. Pittsburgh
 10 Water should develop this Plain English notice in collaboration with its LIAAC. As part
 11 of the payment arrangement agreement with the customer, Pittsburgh Water should
 12 obtain an affirmative acknowledgement that the customer has received and understands
 13 this option.

14 **Q. IS THERE A STATUTORY BASIS FOR IMPOSING THIS REQUIREMENT?**

15 A. Yes. Pennsylvania statutes provide that:

16 No public utility shall, directly or indirectly, by any device whatsoever, or in
 17 anywise, demand or receive from any person, corporation, or municipal
 18 corporation a greater or less rate for any service rendered or to be rendered by
 19 such public utility than that specified in the tariffs of such public utility
 20 applicable thereto. The rates specified in such tariffs shall be the lawful rates
 21 of such public utility until changed, as provided in this part. *Any public*
 22 *utility, having more than one rate applicable to service rendered to a patron,*
 23 *shall, after notice of service conditions, compute bills under the*
 24 *rate most advantageous to the patron.*⁴⁴

⁴⁴ 66 Pa. Stat. and Cons. Stat. Ann. § 1303 (West).

(emphasis added). Pittsburgh Water should not, in other words, require a customer to pay off arrears through a payment arrangement in which arrears would be subject to forgiveness under the Pittsburgh Water AFP.

Q. PLEASE EXPLAIN YOUR FINAL RECOMMENDATION.

A. My final recommendation is that customers, if and when their arrears reach a certain level, should receive a stand-alone written Plain English notice of their right to enter into the Bill Discount Program along with an explanation of that program's arrearage forgiveness benefits. Doing so will improve the payment patterns of these customers. The PUC has previously observed how enrollment of low-income customers into an income-based discount can be expected to help low-income customers improve their payment patterns, stating that "enrolling low-income customers into CAPs as early as possible generally puts them in the best position to maintain good payment habits and avoid accruing utility debt." (emphasis added)⁴⁵

There is no question that Pittsburgh Water has substantial numbers of Confirmed Low-Income customers that have high arrears. According to Pittsburgh Water's own data, it has significant numbers of low-income customers (excluding Bill Discount Program participants) who are carrying old arrears. Table 8 below shows Pittsburgh Water's report of the number of customers with arrears that are 90 days old or older by month for January 2024 through June 2025.⁴⁶ Two important observations are evident in this Table.

⁴⁵ 2019 Amendments to Policy Statement on Customer Assistance Program, 52 Pa. Code § 69.261–69.267, Docket No. M-2019-3012599, Final Policy Statement and Order, at 46 (September 19, 2019).

⁴⁶ The numbers in these columns would not be additive. An account not only "may" fall in more than one column, but is likely to fall in more than one column. An account 180 days in arrears, will also be 90 days in arrears.

1 First, the sheer number of accounts in these older aging buckets is significant.
2 Consistently more than 10,000 low-income accounts (excluding Bill Discount Program
3 participants) have arrears that are 90 days older or older. Second, if a low-income account
4 is not collected by the time it reaches 90 days old, the likelihood of it being subsequently
5 collected is slim. In May 2025, for example, while there were 10,978 low-income
6 accounts from 91 to 180 days in arrears, in June 2025, there were still 9,592 low-income
7 accounts that were 181 to 360 days in arrears. In the corresponding months one year
8 earlier, while there were 12,004 low-income accounts from 91 to 180 days in arrears in
9 May 2024, there were still 10,535 low-income accounts that were 181 to 360 days in
10 arrears in June 2024.

11 Offering these low-income customers reduced bills through the Bill Discount Program,
12 coupled with arrearage forgiveness, will provide them with an affordable payment
13 alternative.

Table 8. The Number of Accounts with Arrears Age 90+ Days By month (January 2023 – June 2025) (PW Response to OCA-IV-14)			
2024	91 180 Days	181 360 Days	>360 Days
January	13,324	11,606	18,026
February	13,237	11,757	18,254
March	13,053	11,675	18,370
April	12,973	11,465	18,533
May	12,004	10,709	18,598
June	12,412	10,535	18,580
July	12,215	10,233	18,703
August	12,172	10,248	18,744
September	11,938	10,351	18,669
October	11,891	10,292	18,418
November	12,081	10,230	16,596
December	11,944	10,090	16,267
2025	91 180 Days	181 360 Days	>360 Days
January	12,332	10,223	15,925
February	11,957	10,222	15,895
March	11,555	10,074	15,921
April	11,079	9,841	15,786
May	10,978	9,681	15,773
June	11,117	9,592	15,776

1 Consistently through their independent evaluations of CAP programs, Pennsylvania's
2 energy utilities have found that enrollment in low-income affordability programs will
3 improve the percentage of bills paid. Taking a low-income population of customers who
4 are 90 days (and more) behind on their bills and enrolling them in a program which

1 results in 60% or more of full payments being made would be beneficial to both the low-
2 income customer and to Pittsburgh Water in its capacity as the water provider.

Table 9. Statewide Percent of Full Payments Made by Energy Utilities (2021 – 2023) ⁴⁷			
	2021	2022	2023
Electric utilities	65.2%	60.9%	60.8%
Natural gas utilities	62.8%	64.1%	62.4%

3 **Q. WHAT DO YOU FIND AND RECOMMEND?**

4 A. The payment patterns identified above are precisely what the PUC was referencing when
5 it observed that programs such as CAP “would generally put [low-income customers] in
6 the best position to maintain good payment habits and avoid accruing utility debt.⁴⁸” My
7 recommendation below is designed to place Pittsburgh Water customers in the best
8 position to maintain good payment habits and avoid accruing additional utility debt.

9 I recommend that when Pittsburgh Water customers accrue an unpaid balance of \$300,
10 Pittsburgh Water should provide a stand-alone written Plain English notice informing
11 those customers of their right to enroll in the Company’s Bill Discount Program (along
12 with an explanation of the advantages of that program’s arrearage forgiveness
13 provisions).

⁴⁷ Bureau of Consumer Services (Sept. 2024). 2023 Annual Report on Universal Service Programs and Collections Performance, at page 67.

⁴⁸ Pennsylvania Public Utility Commission, 2019 Amendments to Policy Statement on Customer Assistance Program, 52 Pa. Code §§ 69.261—69.267, Docket No. M-2019,3012599, Final Policy Statement and Order, at 46 (September 19, 2019)

Part 3. The Need for Modifications to Pittsburgh Water’s Arrearage Forgiveness Program.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I examine the need for Pittsburgh Water to modify its Arrearage Forgiveness Program (AFP). Two modifications are reasonable. First, customers should enter the AFP without needing to first enter into a deferred payment arrangement. Second, customers who are enrolled in the Pittsburgh Water Bill Discount Program should, without more, also be enrolled in the AFP.

Q. WHAT IS YOUR UNDERSTANDING OF THE REQUIREMENT THAT A LOW-INCOME CUSTOMER MUST ENTER INTO A DEFERRED PAYMENT ARRANGEMENT IN ORDER TO ENROLL IN THE AFP?

A. In order to enroll in Pittsburgh Water’s AFP, a low-income customer must enter into a deferred payment arrangement for their pre-existing arrears. Pittsburgh Water explicitly states that “Enrollment in the Bill Discount Program and an active payment plan are the precursors for enrollment into the Arrearage Forgiveness Program.” (emphasis added).⁴⁹ According to Pittsburgh Water, “the length and term of payment plans in the Arrearage Forgiveness Program are driven by the customer’s household income inputted into the Commission’s payment plan calculator.”⁵⁰ The length of an income-based payment arrangement is automatically generated by the pre-programmed calculator.⁵¹ A customer

⁴⁹ PW Response to OWT-3-17.

⁵⁰ *Id.*, see also, PW Responses to OWT-4-12, OWT-4-13.

⁵¹ *Id.*, Attachment, at 13 – 14.

with income at or below 150% of Federal Poverty Level may have 60 months over which to retire an arrears.

Q. IS THE REQUIREMENT THAT AN ARREARAGE FORGIVENESS PROGRAM PARTICIPANT ENTER INTO AN ACTIVE PAYMENT AGREEMENT CONSISTENT WITH THE SETTLEMENT OF THE 2023 PITTSBURGH WATER RATE CASE?

A. No. The Settlement of the 2023 Pittsburgh Water rate proceeding explicitly provided that “in the next base rate case filed by Pittsburgh Water, it shall propose to implement a change to its AFP that would allow then existing and all future participants to receive arrearage forgiveness over no longer than a 36 month period and will not require AFP participants to make a co-payment towards the pre-program frozen arrears.” (emphasis added).⁵²

Q. WHAT ARREARAGE BALANCES HAVE BEEN BROUGHT TO PITTSBURGH WATER THROUGH CUSTOMERS ENROLLING IN THE BILL DISCOUNT PROGRAM?

A. Low-income Bill Discount Program customers can bring substantial arrears into the program, which arrears were incurred prior to program enrollment. According to Pittsburgh Water, more than 40% of BDP enrollees have a pre-existing arrears of \$500 or more, while nearly 25% have an arrears of \$1,000 or more. The data provided by Pittsburgh Water is set forth in Table 10 below.

⁵² PUC Docket No. R-2023-3039920 (water), et al., Joint Petition for Settlement of All Issues with All Parties, at paragraph E.3(f)(ii), pages 13 - 14.

Table 10. Pre-Existing Arrears at Time of Bill Discount Program Enrollment (PW Response to OWT-3-28)					
Ranges	\$1 - \$500	\$501 - \$1000	\$1001 - \$1500	\$1501 - \$2000	> \$2000
Number of Accounts	2,295	685	371	205	379

Requiring low-income customers to enter into a deferred payment arrangement for these arrears has the effect of making arrearage forgiveness virtually unavailable to those who need arrearage forgiveness the most. Even if one spreads the pre-existing arrears over 60 months, a customer with a pre-existing arrears of \$1,000 would have a payment obligation of \$17/month (\$204/year) simply for their arrears; with a pre-existing arrears of \$1,500 would have a payment obligation of \$25/month (\$300/year); with a pre-existing arrears of \$2,000 would have a payment obligation of \$33/month (\$396/year); or with a pre-existing arrears of \$2,00 would have a payment obligation of \$42/month (\$504/year).

These arrearage payments unreasonably increase the bill which low-income customers must pay each month to receive arrearage forgiveness credits. The Table below compares the 2026 and 2027 bills, by Federal Poverty Level, as reported in Pittsburgh Water witness Mechling's testimony, compared to the additional payment obligation imposed by Pittsburgh Water's required payment arrangement installment payments for customers with income at or below 150% of Federal Poverty Level. As the Table shows, even if Pittsburgh Water spreads the pre-existing arrears over 60 months, the required installment payment will have the effect of increasing the annual payment obligation for the highest income customer (150% of Federal Poverty Level) anywhere from nearly 30% (\$204 / \$729.66) to nearly 70% (\$504 / \$729.66). For the lowest income customer (50% of

Federal Poverty Level), the required installment payments will increase the annual payment obligation anywhere from nearly 60% (\$204 / \$360.78) to nearly 140% (\$504 / \$360.78).

Table 11. 2026 and 2027 Annual Discounted Bills for Current Service (by FPL) ⁵³ compared to Annual Installments for Arrears by Pre-existing Arrearage Balance					
50% Federal Poverty Level		100% Federal Poverty Level		150% Federal Poverty Level	
2026	2027	2026	2027	2026	2027
\$340.84	\$360.78	\$663.27	\$729.66	\$663.75	\$729.66
		\$1,000 Arrears	\$1,500 Arrears	\$2,000 Arrears	\$2,500 Arrears
Annual Payment Arrangement Installment (60-months)		\$204	\$300	\$396	\$504

Imposing these high and unaffordable installment payments is one reason why Pittsburgh Water experiences such a high default rate on payment arrangements within its Bill Discount Program participant population. Customers do not make separate payments for their bill for current service and for their arrearages. Rather, people make a payment toward their total bill. From a payment perspective, therefore, it makes no difference whether that total payment is unpayable due to the bill for current service or unpayable due to a pre-existing arrearage. What Pittsburgh Water has done, therefore, is to create an arrearage management program where, despite the forgiveness of some portion of the arrears, the installment payments toward the pre-existing arrearages will still represent a substantial contributor to the inability of low-income customers to pay their Pittsburgh Water bills. As a result, not only will low-income program participants have an inability to pay for current service (and to retain service), but they will have an inability to earn the

⁵³ PW St. 6 at 28 – 29.

1 full forgiveness to which they are entitled. In doing so, Pittsburgh Water defeats the very
2 purpose of the program.

3 **Q. DO YOU KNOW THAT THE FAILURE THAT YOU PROJECT IS ACTUALLY**
4 **HAPPENING?**

5 A. Yes. In 2024, Pittsburgh Water experienced 1,880 payment arrangement defaults for Bill
6 Discount Program participants, while in 2025 (January – July), it experienced 1,106
7 defaults. Those defaults occurred from an average number of Bill Discount Participants
8 on payment arrangements of only 6,791 in 2024, and an average of only 6,789 in 2025
9 (through June).

10 **Q. DO YOU HAVE ANY FINAL OBSERVATION ABOUT THE REQUIRING LOW-**
11 **INCOME CUSTOMERS TO ENTER INTO PAYMENT ARRANGEMENTS AS A**
12 **PREREQUISITE TO ENROLLING IN THE ARREARAGE FORGIVENESS**
13 **PROGRAM?**

14 A. Yes. Requiring low-income customers to enter into and maintain a deferred payment
15 arrangement denies AFP participants their ability to obtain forgiveness over a 24-month
16 period. By definition, with such a requirement, rather than having the full arrears forgiven
17 over a 24-month period, the program participants are required to pay a substantial portion
18 of their pre-existing arrears. The Table below sets out the forgiveness schedule given a
19 60-month payment arrangement for selected pre-existing balances.

Table 12. Payment and Forgiveness Schedule (24-Months) Given 60-Month Payment Arrangement Installment

MO	\$1,000 Pre-Existing Balance			\$1,500 Pre-Existing Balance			\$2,000 Pre-Existing Balance			\$2,500 Pre-Existing Balance		
	PA Installment	AFP Forgiveness	Balance Remaining	PA Installment	AFP Forgiveness	Balance Remaining	PA Installment	AFP Forgiveness	Balance Remaining	PA Installment	AFP Forgiveness	Balance Remaining
1	\$17	\$41.67	\$941.33	\$25	\$62.50	\$1,412.50	\$33	\$83.33	\$1,883.67	\$42	\$104.17	\$2,353.83
2	\$17	\$41.67	\$882.67	\$25	\$62.50	\$1,325.00	\$33	\$83.33	\$1,767.33	\$42	\$104.17	\$2,207.67
3	\$17	\$41.67	\$824.00	\$25	\$62.50	\$1,237.50	\$33	\$83.33	\$1,651.00	\$42	\$104.17	\$2,061.50
4	\$17	\$41.67	\$765.33	\$25	\$62.50	\$1,150.00	\$33	\$83.33	\$1,534.67	\$42	\$104.17	\$1,915.33
5	\$17	\$41.67	\$706.67	\$25	\$62.50	\$1,062.50	\$33	\$83.33	\$1,418.33	\$42	\$104.17	\$1,769.17
6	\$17	\$41.67	\$648.00	\$25	\$62.50	\$975.00	\$33	\$83.33	\$1,302.00	\$42	\$104.17	\$1,623.00
7	\$17	\$41.67	\$589.33	\$25	\$62.50	\$887.50	\$33	\$83.33	\$1,185.67	\$42	\$104.17	\$1,476.83
8	\$17	\$41.67	\$530.67	\$25	\$62.50	\$800.00	\$33	\$83.33	\$1,069.33	\$42	\$104.17	\$1,330.67
9	\$17	\$41.67	\$472.00	\$25	\$62.50	\$712.50	\$33	\$83.33	\$953.00	\$42	\$104.17	\$1,184.50
10	\$17	\$41.67	\$413.33	\$25	\$62.50	\$625.00	\$33	\$83.33	\$836.67	\$42	\$104.17	\$1,038.33
11	\$17	\$41.67	\$354.67	\$25	\$62.50	\$537.50	\$33	\$83.33	\$720.33	\$42	\$104.17	\$892.17
12	\$17	\$41.67	\$296.00	\$25	\$62.50	\$450.00	\$33	\$83.33	\$604.00	\$42	\$104.17	\$746.00
13	\$17	\$41.67	\$237.33	\$25	\$62.50	\$362.50	\$33	\$83.33	\$487.67	\$42	\$104.17	\$599.83
14	\$17	\$41.67	\$178.67	\$25	\$62.50	\$275.00	\$33	\$83.33	\$371.33	\$42	\$104.17	\$453.67
15	\$17	\$41.67	\$120.00	\$25	\$62.50	\$187.50	\$33	\$83.33	\$255.00	\$42	\$104.17	\$307.50
16	\$17	\$41.67	\$61.33	\$25	\$62.50	\$100.00	\$33	\$83.33	\$138.67	\$42	\$104.17	\$161.33
17	\$17	\$41.67	\$2.67	\$25	\$62.50	\$12.50	\$33	\$83.33	\$22.33	\$42	\$104.17	\$15.17
18	\$17	\$41.67	(\$56.00)	\$25	\$62.50	(\$75.00)	\$33	\$83.33	(\$94.00)	\$42	\$104.17	(\$131.00)
19	\$17	\$41.67	(\$114.67)	\$25	\$62.50	(\$162.50)	\$33	\$83.33	(\$210.33)	\$42	\$104.17	(\$277.17)
20	\$17	\$41.67	(\$173.33)	\$25	\$62.50	(\$250.00)	\$33	\$83.33	(\$326.67)	\$42	\$104.17	(\$423.33)
21	\$17	\$41.67	(\$232.00)	\$25	\$62.50	(\$337.50)	\$33	\$83.33	(\$443.00)	\$42	\$104.17	(\$569.50)
22	\$17	\$41.67	(\$290.67)	\$25	\$62.50	(\$425.00)	\$33	\$83.33	(\$559.33)	\$42	\$104.17	(\$715.67)
23	\$17	\$41.67	(\$349.33)	\$25	\$62.50	(\$512.50)	\$33	\$83.33	(\$675.67)	\$42	\$104.17	(\$861.83)
24	\$17	\$41.67	(\$408.00)	\$25	\$62.50	(\$600.00)	\$33	\$83.33	(\$792.00)	\$42	\$104.17	(\$1,008.00)

1 Table 12 presents how pre-existing arrears would be retired pursuant to Pittsburgh
2 Water's existing arrearage forgiveness structure for four selected pre-existing arrearage
3 balances (\$1,000, \$1,500, \$2,000, \$2,500). It begins by assuming a payment arrangement
4 of 60 months for the pre-existing balance. Even under the AFP, this is a dollar amount the
5 customer must pay in addition to paying their bills for current service. It then identifies
6 what forgiveness credit would be provided given a credit of 1/24th of the original balance
7 each month. It finally identifies the remaining balance from the pre-existing arrears after
8 subtracting both the customer payment and the arrearage forgiveness each month.

9 The Table shows that even at these higher unpaid balances which customers might bring
10 into the Arrearage Forgiveness Program, program participants are never granted the 24-
11 months of forgiveness which the AFP purports to provide. In each instance, customer
12 payments, even if spread over 60-months, will reduce the pre-existing balance to \$0 long
13 before the AFP participant reaches Month 24 of program participation. With a pre-
14 existing balance of \$1,000 or more (\$1,500, \$2,000, \$2,500), the AFP effectively brings
15 the balance to \$0 in Month 17 assuming the customer makes their installment payment
16 each month. (However, if the customer does not make their installment payment each
17 month, neither do they earn their arrearage forgiveness credit.)

18 Pittsburgh Water, however, does not track information that would reveal this program's
19 shortcoming(s). When asked to provide the mean length of time it would take to
20 completely retire the mean arrearage balance for participants enrolled in the Arrearage
21 Forgiveness Program as of the end of each calendar quarter from January 2022 to present,

Pittsburgh Water responded that it “does not have a mechanism in place to track the requested data.”⁵⁴

Q. WHAT DO YOU RECOMMEND?

A. I recommend that Pittsburgh Water eliminate the requirement that low-income customers enter into a deferred payment arrangement as a prerequisite to enrolling in Pittsburgh Water’s Arrearage Forgiveness Program. Pre-existing balances incurred by low-income customers during a time they were being charged unaffordable bills should be forgiven for each complete payment the program participant makes.

Q. DO YOU HAVE A SECOND RECOMMENDED MODIFICATION FOR THE PITTSBURGH WATER ARREARAGE FORGIVENESS PROGRAM?

A. Yes. I recommend that, given the elimination of the required deferred payment arrangement as a prerequisite to participating in the Pittsburgh Water Arrearage Forgiveness Program, customers who enroll in the Bill Discount Program (with a pre-existing arrears), or who would otherwise receive a Hardship Grant, should be auto-enrolled in the AFP. At present, while Pittsburgh Water asserts that it “screens,” “vets,” or “reviews” Bill Discount Program applicants, or Hardship Grant recipients, for arrearage forgiveness, there is no auto-enrollment process.⁵⁵

Q. UPON WHAT DO YOU BASE YOUR CONCLUSION THAT THERE IS A NEED FOR AUTO-ENROLLMENT?

⁵⁴ PW Response to OWT-2-27.

⁵⁵ PW Response to OWT-2-16. See also, PW Response to OWT-2-24.

1 A. While Pittsburgh Water asserts that “customers do not need to apply directly to the
 2 Arrearage Forgiveness Program, customers who enroll in the Bill Discount Program and
 3 who also enroll in a payment arrangement automatically receive arrearage forgiveness
 4 with each on-time payment in an active payment plan.”⁵⁶ When asked, however, how
 5 many customers simultaneously enrolled in the BDP and the Arrearage Forgiveness
 6 Program, all Pittsburgh Water said is that “Bill Discount Program enrollment is a
 7 precursor for Arrearage Forgiveness enrollment.”⁵⁷

8 Pittsburgh Water data shows that there are far more Bill Discount Program customers
 9 with arrearages than there are Bill Discount Program customers enrolled in the Arrearage
 10 Forgiveness Program. Table 13 shows, for example, that in July 2025, there were 844
 11 customers enrolled in the Arrearage Forgiveness Program, while in January 2025, there
 12 were 644. While from July 2023 through July 2025, the number of Bill Discount Program
 13 participants increased from 6,654 to 8,538, the number of AFP participants declined from
 14 1,029 in July 2023 to 844 in July 2025.

⁵⁶ PW Response to OWT-2-24.

⁵⁷ PW Response to OWT-2-26.

1

Table 13. Number of Customers Enrolled in Bill Discount Program (BDP) and in Arrearage Forgiveness Program (AFP) (July 2023 – July 2025) (PW Responses to OWT-2-26, OCA-IV-3)								
2023			2024			2025		
	BDP	AFP		BDP	AFP		BDP	AFP
			January	7,092	684	January	8,079	644
			February	7,168	726	February	8,221	658
			March	7,238	708	March	8,326	735
			April	7,340	540	April	8,397	745
			May	7,453	621	May	8,397	778
			June	7,572	755	June	8,411	869
July	6,654	1,029	July	7,550	689	July	8,538	844
August	6,709	820	August	7,624	807			
September	6,746	835	September	7,683	813			
October	6,832	781	October	7,735	783			
November	6,832	831	November	7,901	749			
December	6,961	1,003	December	7,995	735			

2 This data is simply inconsistent with the data provided by Pittsburgh Water with respect
3 to the number and percent of Bill Discount Program participants entering the Program
4 with pre-existing arrears. According to the Company's data, from January 2024 through
5 June 2025, 3,042 low-income customers enrolled in the Bill Discount Program with a
6 pre-existing arrears. From January 2023 through June 2025, 3,785 low-income customers
7 enrolled in the Bill Discount Program with a pre-existing arrears. Nonetheless, Pittsburgh
8 Water acknowledges that as of June 2025, it had only 844 participants in its Arrearage
9 Forgiveness Program.

1

Table 14. Number of Bill Discount Program Participants with Pre-existing Arrears At Time of Program Enrollment (PW Response to OWT-1-10)					
Month/Year	Count	Month/Year	Count	Month/Year	Count
Jan-23	29	Jan-24	172	Jan-25	206
Feb-23	26	Feb-24	130	Feb-25	193
Mar-23	42	Mar-24	168	Mar-25	228
Apr-23	38	Apr-24	226	Apr-25	221
May-23	54	May-24	206	May-25	164
Jun-23	47	Jun-24	117	Jun-25	129
Jul-23	37	Jul-24	183		
Aug-23	90	Aug-24	168		
Sep-23	71	Sep-24	128		
Oct-23	99	Oct-24	136		
Nov-23	88	Nov-24	132		
Dec-23	122	Dec-24	135		
Total	743		1,901		1,141

2 The low number of Arrearage Forgiveness Program participants would not exist because
3 customers had completely earned their forgiveness. Table 15 below demonstrates that,
4 using either the mean or the median, pre-existing arrears at the time customers enrolled in
5 the Bill Discount Program, there has been insufficient time for program participants to
6 have earned complete forgiveness.

1

Table 15. Mean and Median Pre-Existing Arrears at Time of Bill Discount Program Enrollment (PW Response to OWT-3-10)								
Month/Year	Mean	Median	Month/Year	Mean	Median	Month/Year	Mean	Median
Jan-23	\$1,284.29	\$615.59	Jan-24	\$1,419.48	\$519.96	Jan-25	\$1,016.87	\$501.69
Feb-23	\$1,581.64	\$830.44	Feb-24	\$1,209.80	\$575.46	Feb-25	\$1,451.79	\$567.18
Mar-23	\$1,615.25	\$1,039.21	Mar-24	\$1,239.55	\$563.24	Mar-25	\$1,279.10	\$622.72
Apr-23	\$1,338.55	\$869.05	Apr-24	\$1,884.56	\$1,018.45	Apr-25	\$1,508.12	\$649.10
May-23	\$961.87	\$667.83	May-24	\$1,315.44	\$574.85	May-25	\$1,960.56	\$717.86
Jun-23	\$1,550.28	\$712.33	Jun-24	\$1,207.79	\$535.44	Jun-25	\$1,436.68	\$504.31
Jul-23	\$2,522.35	\$2,152.64	Jul-24	\$1,328.70	\$630.35			
Aug-23	\$1,340.00	\$630.04	Aug-24	\$1,316.11	\$395.31			
Sep-23	\$735.70	\$537.73	Sep-24	\$1,244.87	\$367.93			
Oct-23	\$954.04	\$410.00	Oct-24	\$1,072.74	\$532.62			
Nov-23	\$951.77	\$514.90	Nov-24	\$1,218.78	\$534.72			
Dec-23	\$1,071.34	\$472.65	Dec-24	1457.241	\$775.38			

2 **Q. WHAT DO YOU FIND AND CONCLUDE?**

3 A. Based on the data above, I find that there are significant numbers of Bill Discount
 4 Program participants who are carrying arrears at the time they enroll in the Bill Discount
 5 Program who do not, at the time, also enter the Arrearage Forgiveness Program. In
 6 addition, by definition, customers who receive a Pittsburgh Water Hardship Grant would
 7 income-qualify for the Bill Discount Program, while, at the same time, carrying a pre-
 8 existing arrears. Based on these observations, I conclude that it is reasonable for
 9 Pittsburgh Water to modestly modify its Arrearage Forgiveness Program to automatically
 10 enroll both: (1) customers who are enrolling in the Bill Discount Program with a pre-
 11 existing arrears, and (2) customers who are receiving a Hardship Grant.

1 **Q. DO YOU HAVE ANY FINAL MODIFICATION YOU RECOMMEND FOR THE**
 2 **ARREARAGE FORGIVENESS PROGRAM?**

3 A. Yes. While not a change to the Arrearage Forgiveness Program itself, I recommend a
 4 minor modification to the Tariff establishing the Arrearage Forgiveness Program as well
 5 as Pittsburgh Water program outreach. In describing the Program, Pittsburgh Water
 6 witness Mechling describes the Arrearage Forgiveness Program as serving “to freeze a
 7 customer’s debt and reduce the customer’s account balance by 1/24th of the original pre-
 8 program balance amount with on time payments of monthly billed charges, eliminating
 9 the balance within a two-year period.” (emphasis added)⁵⁸ Moreover, Pittsburgh Water
 10 publicity and outreach for the Program states that the Program provides “\$40 forgiven
 11 monthly⁵⁹ for each on-time payment in an active, income-based payment plan.”
 12 (emphasis added)⁶⁰ Moreover, the script which Pittsburgh Water CSRs use in
 13 conversations with customers describes the Arrearage Forgiveness Program as follows:
 14 “If enrolled, you are also eligible to receive a monthly forgiveness credit in the amount of
 15 \$40 for every on-time monthly payment.” (emphasis added).⁶¹

16 The problem with the emphasized language in each of these statements describing the
 17 Arrearage Forgiveness Program is not so much one of technical accuracy, as it is one of
 18 omission and incompleteness. The statements, while perhaps accurate as far as they do

⁵⁸ PW St. 6 at 35.

⁵⁹ This \$40 monthly credit is proposed to be modified in this proceeding, consistent with the Settlement of Pittsburgh Water’s 2023 rate proceeding.

⁶⁰ Exhibit JAM-5.

⁶¹ Exhibit JAM-9.

1 go, are inaccurate and misleading in what they fail to describe about the Arrearage
2 Forgiveness Program. Pittsburgh Water witness Mechling described the program more
3 accurately when she noted: “Customers who fail to remain current on payment of their
4 billed charges would have the opportunity to catch-up on their missed payments of
5 charges billed within the 24 months to achieve forgiveness of their frozen, pre-program
6 arrears.” (emphasis added)⁶² This ability to “catch-up on their missed payments. . .to
7 achieve forgiveness” is a critical element of the Arrearage Forgiveness Program.
8 Consistent public representations that arrears may only be earned given an “on-time”
9 payment not only misrepresent the way the program operates but may serve as a
10 disincentive for customer participation.

11 I recommend that the right of an Arrearage Forgiveness Program participant to “catch-up
12 on their missed payments to achieve forgiveness” should be incorporated into the Tariff
13 establishing the Program. Moreover, I recommend that Pittsburgh Water undertake a
14 comprehensive review of all of its public-facing communications to ensure that
15 references exclusively to the provision of forgiveness for on-time payments be modified
16 to ensure that customers are informed of their right to also achieve forgiveness by
17 catching up on late or missed payments.

⁶² PW St. 6 at 36.

Part 4. Claimed Cost Recovery for Pittsburgh Water’s Arrearage Forgiveness Program.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I respond to Pittsburgh Water’s request for an arrearage forgiveness cost recovery of \$280,094 a year, for two years.⁶³ I recommend that cost recovery be denied. While Pittsburgh Water witness Barca asserted that the requested dollar amount is the lost revenue to Pittsburgh Water “as a result of the amendments” to the Arrearage Forgiveness Program,⁶⁴ when asked for the rate recovery for arrearage forgiveness in this proceeding, the most Pittsburgh Water could do was to reference the line in its Cost-of-Service model where the requested dollar amount was hard-entered. No details underlying the dollar amount, or description of the calculation leading to the dollar amount, were provided.⁶⁵

Q. IS THERE ANY INDICATION THAT PITTSBURGH WATER OVERSTATES THE COST OF ITS ARREARAGE FORGIVENESS PROGRAM?

A. Yes. In its Cost-of-Service model, Pittsburgh Water asserts that its arrearage forgiveness will be experienced equally over two years.⁶⁶ That is clearly in error. The forgiveness should reasonably be expected to be front-loaded in 2026 (the first year of the program in the rate period). As demonstrated in Table 12, given the combined forgiveness credits

⁶³ PW St. 2 at 4. See also, Exhibit EB-1.

⁶⁴ PW St. 2 at 4.

⁶⁵ PW Response to OCA-VI-13.

⁶⁶ The total arrearage forgiveness costs are allocated 50% to 2026 and 50% to 2027.

1 *plus* the customer payments toward their pre-existing arrears,⁶⁷ even pre-existing arrears
 2 as large as \$1,000 or more will be completely retired in the middle of the second year of
 3 program participation. To assert that the 2027 arrearage forgiveness amount will be no
 4 less than the 2026 forgiveness amount will result in an over-collection of the revenue lost,
 5 if any, to the arrearage forgiveness program.

6 **Q. ARE THERE OTHER FUNDAMENTAL PROBLEMS WITH THE COST**
 7 **RECOVERY REQUESTED BY PITTSBURGH WATER FOR ARREARAGE**
 8 **FORGIVENESS?**

9 A. Yes. The amount of arrearage forgiveness will depend on the number of low-income
 10 customers who are participating in the Arrearage Forgiveness Program. In turn, the
 11 number of participants will depend on what month of the year participants enroll. If there
 12 are more customers enrolling in the later months of the rate period, in other words, there
 13 will be fewer dollars lost to arrearage forgiveness, if for no other reason than simply
 14 because there are fewer months in which customers can earn forgiveness. Table 14 below
 15 demonstrates that there are substantial differences in when customers enter the Bill
 16 Discount Program with pre-existing arrears (and are thus subject to arrearage
 17 forgiveness). It simply cannot be assumed that there will be a constant number of
 18 program participants over the course of a 12-month period. Some program participants
 19 will participate in the program for six months, while others will participate for three
 20 months, while others will participate for three, or five, or nine months, all depending on

⁶⁷ While Pittsburgh Water asserts there is “no copayment” toward a customer’s pre-existing arrears, that assertion is largely semantic. Pittsburgh Water requires customers to enter into a deferred payment arrangement which, in turn, requires a monthly customer payment toward their arrears.

1 when they enroll. In the absence of information on how many customers are participating
2 in the rate period for how many months, the number that Pittsburgh Water is requesting
3 for rate recovery is nothing more than an arbitrary figure.

4 In addition, the amount of arrearage forgiveness depends on the number of complete
5 payments made by program participants. Not all participants in the Arrearage Forgiveness
6 Program will earn a monthly credit toward their pre-existing arrearage in every month.
7 Instead, arrearage forgiveness credits are provided only when a customer has made a
8 complete payment. Accordingly, even if a customer participates in the Arrearage
9 Forgiveness Program for a full twelve months, if that customer makes only six complete
10 payments, they will receive only six months of arrearage forgiveness. Pittsburgh Water
11 did not provide any analysis of the extent to which Arrearage Forgiveness Program
12 participants are making complete payments to earn their forgiveness credits. In the
13 absence of that data, any request for cost recovery is arbitrary.

14 In fact, Pittsburgh Water does not track any of the basic information that is fundamental
15 to establishing an appropriate cost recovery. Pittsburgh Water was asked to provide the
16 following:

- 17 ➤ How many customers were removed from the Arrearage Forgiveness Program,
18 disaggregated by reason for removal;
- 19 ➤ The mean and median dollar amount of forgiveness provided to customers
20 through the Arrearage Forgiveness Program;
- 21 ➤ The number of participants in the Arrearage Forgiveness Program who had their
22 entire arrearage balance forgiven while enrolled in the Arrearage Forgiveness
23 Program;
- 24 ➤ The mean arrearage balance for participants enrolled in the Arrearage Forgiveness
25 Program as of the end of each calendar quarter from January 2022 to present;

- The mean length of time it would take to completely retire the mean arrearage balance for participants enrolled in the Arrearage Forgiveness Program as of the end of each calendar quarter from January 2022 to present.

Pittsburgh Water reported that it could not provide any of this information.⁶⁸ To the extent that customers are removed from the Program, they will not receive forgiveness for which cost recovery is requested. If there is no data on which to calculate mean or median forgiveness actually provided, there is no data on which to calculate the total forgiveness for which cost recovery is requested based solely on the number of participants. If there is no data on the length of time it would require a participant to receive complete forgiveness, it is not possible to determine the extent to which customers have participated in the program for an entire year. If a customer completely retires their arrears in eight months, that means that the customer has paid a sizable proportion of their pre-existing arrears through their payment arrangement without need to have those arrears forgiven.

In the complete absence of empirical support for its requested cost recovery, I recommend that the arbitrary dollar amount sought by Pittsburgh Water be denied.

Q. IS THERE A FINAL FATAL FLAW IN PITTSBURGH WATER’S REQUESTED COST RECOVERY FOR ITS ARREARAGE FORGIVENESS CREDITS?

A. Pittsburgh Water’s requested cost recovery for its Arrearage Forgiveness Program erroneously assumes that the Arrearage Forgiveness Program creates new costs that must be separately included in its revenue requirement. That assumption is in error. Table 15 above documents the mean and median arrears of Bill Discount Program participants at

⁶⁸ PW Response to OWT-2-27. (“Pittsburgh Water does not have a mechanism in place to track the requested data.”)

1 the time they enter the program (remember, an Arrearage Forgiveness Program
 2 participant must also be a Bill Discount Program participant). The data in this Table
 3 disproves any assertion that Pittsburgh Water would have collected 100% of the pre-
 4 existing arrears in the absence of the arrearage forgiveness program. The impact of the
 5 Program is not to create new costs, but rather is simply to re-label existing costs. Given
 6 that the Arrearage Forgiveness Program is not creating new costs, there are no dollars that
 7 should be separately included in Pittsburgh Water's revenue requirement.

8 **Part 5. The Need for Expanded Low-Income Water Conservation Assistance.**

9 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**
 10 **TESTIMONY.**

11 A. In this section of my testimony, I examine the need for Pittsburgh Water to expand its
 12 budget to address the need for water conservation assistance in its service territory. My
 13 understanding of Pittsburgh Water's low-income conservation budget is based on the
 14 testimony of Pittsburgh Water witnesses Mechling and Pickering. Witness Pickering
 15 states that in this proceeding, Pittsburgh Water is proposing to convert Pittsburgh Water's
 16 low-income Line Repair and Water Conservation Program into a permanent program.⁶⁹
 17 Witness Mechling expanded on that testimony, noting that "The Line Repair and Water
 18 Conservation Pilot was well underway in 2024, with a total of 155 customers achieving a
 19 reduction of their monthly consumption by an average of 17%."⁷⁰ According to witness
 20 Mechling, the permanent program will:

⁶⁹ PW St. 1 at 4.

⁷⁰ PW St. 6 at 6, 32.

1 fund the repair/replacement of leaking plumbing devices for income qualified
 2 customers. To support this proposal, \$150,000 is included in the revenue
 3 requirements for both the FPFTY and FY 2027 to continue this program after
 4 the Pilot is complete. Additionally, Pittsburgh Water proposes to increase the
 5 per-property program benefit from \$1,356 to \$1,600 based on contractor
 6 feedback following Pilot appointments.⁷¹

7 Finally, witness Mechling states that Pittsburgh Water proposes to incorporate its Line
 8 Repair and Water Conservation Program into a tariff. She explains:

9 The purpose of the tariff proposal is to identify for customers the availability
 10 of the program, the eligibility requirements, and the benefit available.
 11 However, the tariff language is not intended to provide all the specific details
 12 about the functioning of the program, such as the specific form and
 13 information that is required from our customers, as Pittsburgh Water needs to
 14 maintain flexibility over those details to be able to ensure that the program
 15 continues to evolve to best serve customers as we gain more experience with
 16 its functioning.⁷²

17 The Pittsburgh Water proposal to convert the low-income Line Repair and Conservation
 18 Program into a permanent program is a reasonable proposal and should be approved.

19 While limited in nature achieving an average usage reduction of 17% through the
 20 program exhibits a very successful effort to help low-income customers control their bills
 21 by reducing their usage. This extent of usage reduction not only improves the
 22 affordability of bills to the low-income program participants, it reduces the cost of
 23 nonpayment by these customers. Reducing the costs of nonpayment involves not only a
 24 reduction in Pittsburgh Water expenses that I have discussed elsewhere (e.g., write-offs,
 25 carrying costs of arrears, collection costs), but, by reducing arrears, the program also
 26 helps to reduce the cost of the Arrearage Forgiveness Program by helping low-income

⁷¹ *Id.*, at 34.

⁷² *Id.*, at 35.

1 customers enter that program with lower pre-program arrears to be forgiven. Finally,
 2 given that customers must be an “active Bill Discount Program customer” to participate
 3 in the Line Repair and Conservation Program,⁷³ participation in the Program will also
 4 reduce the cost of the discount. Clearly, a 50% discount on a bill of \$100 imposes a lower
 5 system cost than a 50% discount on a bill of \$150.

6 One seemingly notable success in the Pittsburgh Water low-income Line Repair and
 7 Conservation Program is Pittsburgh Water’s ability to reach tenants. Of the 178
 8 “completed” projects reported in Pittsburgh Water’s Exhibit JAM-5, 37 of them (21%)
 9 were reported as involving “tenants.” Despite this seeming success, the participation in
 10 the Line Repair and Conservation Program still does not reflect the incidence of tenants
 11 in the low-income population served by Pittsburgh Water. In Pittsburgh Water’s zip
 12 codes, renters represent 68.2% of the total number of households with income less than
 13 \$35,000. Even aside from their low-income status impeding the correction of leaks and
 14 the need for conservation services, which impeded the program is specifically
 15 designed to address, tenants often lack the authority to make decisions (called the
 16 “dominion interest”) about water consuming systems. Pittsburgh Water appears not
 17 merely to explicitly require landlord approval (as the “property owner”) to participate in
 18 the Line Repair and Water Conservation Program, but requires the landlord to provide
 19 such consent on a prescribed written form.⁷⁴

⁷³ Exhibit JAM-9 (“CSR: You may be eligible for Pittsburgh Water’s Line Repair and Conservation Pilot Program. This program offers free repairs of private side service line leaks on exposed plumbing. To be eligible for the program you must be an active Bill Discount Program customer. Are you interested in applying for the Bill Discount Program and speaking with a PGH2O Cares Analyst regarding the potential leak repair?”) (emphasis added).

⁷⁴ PW Response to OWT-1-8, Attachment D, at page 8.

1 Current forms and messaging do not allow such electronic communication. According to
 2 the illustrative forms provided by Pittsburgh Water when it was asked to provide “a copy
 3 of all current training materials, outreach materials, or other documents describing the
 4 current eligibility, benefits, and other terms and conditions for Pittsburgh Water’s low
 5 income customer assistance programs,” the property owner is told:

- 6 ➤ “Your response is required: You must sign and submit this Agreement in order for
 7 Pittsburgh Water to repair your water service line and/or install water saving
 8 devices.” and
- 9 ➤ Signing the agreement. In this packet, we have included an agreement that
 10 authorizes Pittsburgh Water and its contractors to perform the repairs required to
 11 the portion of the water service line that you own. Please review and return this
 12 Agreement as soon as possible. You must sign and return the Agreement to
 13 receive a repair to your private water service line and/or installation of water
 14 savings devices.”⁷⁵

15 My first recommendation, therefore, is for Pittsburgh Water to include in its new Program
 16 tariff the process for a tenant to pursue when landlord approval has not been obtained,
 17 and when said tenant is not authorized to provide the “written consent” now required by
 18 the tariff. In addition, I recommend that Pittsburgh Water extend its successful
 19 consultation with its LIAAC to determine how to maximize the ability, and ease, of
 20 landlords to provide consent when the landlord is not the customer. Such procedures
 21 might, for example, include the ability of a landlord to approve participation in the
 22 Program through an electronic signature, through a web portal (and a QR code), or
 23 through text messaging.

⁷⁵ OTW-1-8, Attachment D and Attachment E.

**Q. IS THERE A SECOND RECOMMENDATION THAT YOU MAKE FOR
PITTSBURGH WATER’S LOW-INCOME LINE REPAIR AND WATER
CONSERVATION PROGRAM?**

A. There is, at best, confusion as to what customers are eligible for Pittsburgh Water’s free low-income Line Repair and Water Conservation Program. On the one hand, the August 2024 affordability study prepared by Raftelis asserts that Pittsburgh Water’s program is available to customers who have income at or below 200% of Federal Poverty Level.⁷⁶ Moreover, the Program tariff proposed in this proceeding provides that eligibility for the Line Repair and Water Conservation program extends to “customers who are at or below 200% of the Federal Poverty Level.”⁷⁷ Notwithstanding this broad language, however, Pittsburgh Water’s direct interactions with customers present a different story. According to witness Mechling, “Deputy Director of Customer Service, Brittany Schacht, created both a Customer Assistance Program Script and Checklist to guide Customer Service Representatives on identifying and assisting low-income customers during telephone interactions.”⁷⁸ That script, attached to Ms. Mechling’s testimony as Exhibit JAM-9, states quite explicitly that a customer “must be an active Bill Discount Program customer” to participate in the Line Repair and Conservation Program.⁷⁹ It is not evident in Pittsburgh Water’s filing which of these representations is accurate.

⁷⁶ “Free leak repairs on exposed plumbing and installation of water saving devices for customers who are at or below 200% of the Federal Poverty Level.” (JAM-12) (emphasis added).

⁷⁷ JAM-14.

⁷⁸ PW. St. 6 at 44, citing Exhibits JAM-9 and JAM-10.

⁷⁹ Exhibit JAM-9 (“CSR: You may be eligible for Pittsburgh Water’s Line Repair and Conservation Pilot Program. This program offers free repairs of private side service line leaks on exposed plumbing. To be eligible for the

1 Accordingly, I offer alternative recommendations regarding eligibility for Pittsburgh
 2 Water’s low-income Line Repair and Conservation Program. The recommendations are
 3 designed to maximize the ability of needy low-income customers to participate in the
 4 Program. The two alternative recommendations differ based on whether the
 5 representation in the Raftelis 2024 Affordability Report or the representation in the
 6 “Script and Checklist” accurately represent the eligibility requirements for the Line
 7 Repair and Conservation Program.

8 ➤ First, in the event that the Raftelis representation is correct –that the Program
 9 is available to any customers with income below 200% of Federal Poverty
 10 Level—Pittsburgh Water should immediately review and revise all customer-
 11 facing scripts and checklists to identify and eliminate all erroneous
 12 communications that a customer “must be an active Bill Discount Program
 13 customer” in order to participate in the Program.

14 ➤ Second, in the alternative, if the “Script and Checklist” used by Pittsburgh
 15 Water customer service representatives (CSRs) accurately represents current
 16 Pittsburgh Water policy, that policy should be modified. The low-income Line
 17 Repair and Conservation Program should be made available to any customer
 18 with income at or below 200% of the Federal Poverty Level.

19 Under either alternative, the customer should be allowed to establish that income-
 20 eligibility through providing household income information, through current participation
 21 in Pittsburgh Water’s Bill Discount Program, or through documentation of current
 22 participation in any public assistance program with a maximum income eligibility of at or
 23 below 200% of Poverty Level (e.g., SNAP, Free and Reduced School Lunches, Medicaid,
 24 LIHEAP, etc.). In this fashion, Pittsburgh Water accepts an authoritative finding by a
 25 public assistance program that the customer is income-eligible for the program.

program *you must be an active Bill Discount Program customer*. Are you interested in applying for the Bill Discount Program and speaking with a PGH2O Cares Analyst regarding the potential leak repair?”) (emphasis added).

1 Participation in the Bill Discount Program would be one, but only one, means of
2 providing such documentation.

3 **Q. WHAT IS YOUR THIRD RECOMMENDATION FOR THE LOW-INCOME LINE**
4 **REPAIR AND CONSERVATION PROGRAM?**

5 A. I recommend that funding for the low-income Line Repair and Water Conservation
6 Program be expanded by \$150,000 a year to an annual total of \$300,000. I base my
7 recommendation on several grounds. First, as Table 16 below demonstrates, Pittsburgh
8 Water has been very successful in expanding the reach of its low-income Bill Discount
9 Program. Simply in the time from July 2023 through July 2025. Participation in the Bill
10 Discount Program has increased by 28% (nearly 2,000 participants). From July 2024
11 through July 2025, Pittsburgh Water has added nearly 1,000 participants to its Bill
12 Discount Program. Even though I recommend that the low-income Line Repair and
13 Conservation Program not be limited to Bill Discount Program participants, that program
14 provides a large and expanding population from which to enroll income eligible
15 customers. Enrolling Bill Discount Program participants in the Line Repair and
16 Conservation Program offers two advantages.
17 First, it provides an administrative advantage in that Pittsburgh Water could enroll
18 customers in both programs at the same time. Second, every Bill Discount Program
19 participant who also receives water conservation assistance, particularly with Pittsburgh
20 Water's average usage reduction of 17%, will reduce the cost of the bill discounts to
21 Pittsburgh Water and its remaining ratepayers. Given the maximum spending limit of
22 \$1,600 for the Line Repair and Conservation Program, even an annual budget of
23 \$300,000 would serve fewer than 200 participants, less than one-fifth of the Bill Discount

Program participants newly-enrolled simply in the most recent twelve months. No reason exists to believe that new enrollment in the Bill Discount Program will begin to decline in the future.

Table 16. Bill Discount Program Participants by Month (July 2023 – July 2025)					
2023	Participants	2024	Participants	2025	Participants
July	6,654	January	7,092	January	8,079
August	6,709	February	7,168	February	8,221
September	6,746	March	7,238	March	8,326
October	6,832	April	7,340	April	8,397
November	6,832	May	7,453	May	8,397
December	6,961	June	7,572	June	8,411
		July	7,550	July	8,538
		August	7,624		
		September	7,683		
		October	7,735		
		November	7,901		
		December	7,995		

The extent to which conservation investments –particularly investments that result in an average usage reduction of 17%-- can not only help customers, but can also help reduce costs to Pittsburgh Water can be seen by comparing average Pittsburgh Water residential bills to both average residential arrears and average residential arrears at the time of a nonpayment disconnection.

The data for residential customers as a whole is set forth in the Table below. The Table shows that while average residential bills have ranged around \$115 to \$125 per month, from January 2024 through June 2025, average residential arrears (of accounts in arrears) have ranged from a low of \$1,180 (January 2024) to a high of \$1,463 (February 2025). Indeed, the average residential arrears for accounts that have been subject to a

disconnection for nonpayment (DNP) have ranged from a low of \$4,142 (January 2024) to a high of \$5,312 (April 2025).

Billing Date	Average bill	Date	Arrears average	Date	Arrears at DNP
Jan-24	\$115.29	Jan-24	\$1,179.51	Jan-24	\$4,141.51
Feb-24	\$115.90	Feb-24	\$1,222.84	Feb-24	\$4,267.27
Mar-24	\$111.20	Mar-24	\$1,246.57	Mar-24	\$4,368.10
Apr-24	\$116.13	Apr-24	\$1,234.55	Apr-24	\$4,431.86
May-24	\$116.49	May-24	\$1,252.87	May-24	\$4,626.76
Jun-24	\$123.65	Jun-24	\$1,263.17	Jun-24	\$4,619.75
Jul-24	\$127.03	Jul-24	\$1,257.53	Jul-24	\$4,713.05
Aug-24	\$122.57	Aug-24	\$1,256.62	Aug-24	\$4,749.32
Sep-24	\$126.56	Sep-24	\$1,249.87	Sep-24	\$4,755.72
Oct-24	\$127.24	Oct-24	\$1,287.51	Oct-24	\$4,899.81
Nov-24	\$119.62	Nov-24	\$1,327.10	Nov-24	\$4,858.82
Dec-24	\$114.20	Dec-24	\$1,382.72	Dec-24	\$4,997.12
Jan-25	\$122.49	Jan-25	\$1,430.32	Jan-25	\$5,101.53
Feb-25	\$134.26	Feb-25	\$1,462.89	Feb-25	\$5,192.72
Mar-25	\$119.32	Mar-25	\$1,421.11	Mar-25	\$5,211.14
Apr-25	\$113.78	Apr-25	\$1,460.50	Apr-25	\$5,312.07
May-25	\$114.19	May-25	\$1,443.98	May-25	\$5,275.75
Jun-25	\$116.59	Jun-25	\$1,443.63	Jun-25	\$5,243.36

Not only are Pittsburgh Water residential arrears, both on average and at the time of a disconnection for nonpayment, high, but they are increasing as well. The average arrears of accounts in arrears for the time period January through June 2024 was \$1,233, while the average arrears (of accounts in arrears) during the corresponding six month period in 2025 was \$1,444, a 17% increase in one year. The average arrearage balance at the time

of a disconnection for nonpayment was \$4,409 for the six months January through June 2024, while it was \$5,223 in the corresponding six months of 2025 (an 18% increase in just one year). While Pennsylvania water utilities do not routinely report the arrearages of customers at the time of disconnection to the Pennsylvania Commission, they do report their average arrearages of customers not on payment arrangements. As is shown in the Table below, the average arrearage balance for Pittsburgh Water residential customers not on agreement is considerably higher than for the state’s other large water utilities.

Table 18. Not on Arrangement, Average Arrearages and Average Bill Ratios ⁸⁰ Residential Customers (Large Water Utilities) ⁸¹						
	2022		2023		2024	
	Average Arrearage	Avg Bill Ratio	Average Arrearage	Avg Bill Ratio	Average Arrearage	Avg Bill Ratio
Aqua	\$115.37	1.49	\$123.44	1.43	\$124.81	1.11
PAWC	\$70.41	1.13	\$83.54	1.22	\$106.02	1.37
PWSA	\$586.11	5.08	\$892.97	8.18	\$1,026.54	8.64

Q. HAVE YOU EXAMINED THE ARREARAGES OF CUSTOMERS WHO HAVE ENROLLED IN PITTSBURGH WATER’S BILL DISCOUNT PROGRAM?

A. Yes, I specifically reviewed the average arrears of low-income customers at the time those customers enrolled in Pittsburgh Water’s Bill Discount Program.⁸² The data is set forth in Table 19 below. As can be seen, in the twelve months ending December 2024, the

⁸⁰ “Bill Ratios” are defined by the Commission as follows: “The not on arrangement average bill ratio is calculated by dividing the not on arrangement average arrearage by the total average bill.” BCS (June 2025). 2024 Residential Collections Data Report, at 12. This statistic is also sometimes known as a “Bills Behind” ratio. Available at <https://www.puc.pa.gov/filing-resources/reports/quinquennial-report-pursuant-to-section-1415/>

⁸¹ *Id.*, at 12.

⁸² PW Response to OWT-1-10.

lowest arrears was \$368 (September 202), while the highest was \$1,018 (April 2024). In the most recent six months (January through June 2025), the lowest arrears of low-income customers enrolling in the Bill Discount Program was \$502 (January 2025), while the highest was \$718 (May 2025). The Pittsburgh Water data documents that there are from 130 to nearly 230 low-income customers each month enrolling in the Bill Discount Program with these median levels of arrears.

Notwithstanding this high level of arrears entering the Bill Discount Program, and the role which conservation could play in reducing those arrears, the modest recommendation I make to increase the budget of the Line Repair and Conservation Program by \$150,000 would serve only an additional 100 customers (\$150,000 budget / \$1,600 maximum spend = 94 additional jobs funded).

Table 19. Median Arrears at Time of BDP Enrollment by Month								
Month/Year	Count	Median	Month/Year	Count	Median	Month/Year	Count	Median
Jan-23	29	\$615.59	Jan-24	172	\$519.96	Jan-25	206	\$501.69
Feb-23	26	\$830.44	Feb-24	130	\$575.46	Feb-25	193	\$567.18
Mar-23	42	\$1,039.21	Mar-24	168	\$563.24	Mar-25	228	\$622.72
Apr-23	38	\$869.05	Apr-24	226	\$1,018.45	Apr-25	221	\$649.10
May-23	54	\$667.83	May-24	206	\$574.85	May-25	164	\$717.86
Jun-23	47	\$712.33	Jun-24	117	\$535.44	Jun-25	129	\$504.31
Jul-23	37	\$2,152.64	Jul-24	183	\$630.35			
Aug-23	90	\$630.04	Aug-24	168	\$395.31			
Sep-23	71	\$537.73	Sep-24	128	\$367.93			
Oct-23	99	\$410.00	Oct-24	136	\$532.62			
Nov-23	88	\$514.90	Nov-24	132	\$534.72			
Dec-23	122	\$472.65	Dec-24	135	\$775.38			

1 **Q. DO YOU HAVE REASON TO BELIEVE THAT THERE ARE A SUBSTANTIAL**
2 **NUMBER OF BILL DISCOUNT PROGRAM PARTICIPANTS WHO HAVE**
3 **HIGH USAGE?**

4 A. Yes. Pittsburgh Water asserts that typical residential customers have a usage of 3,000
5 gallons per month. This is the consumption used by Pittsburgh Water to reflect its low-
6 income customers.⁸³ Whether or not that residential consumption is representative of
7 low-income customers need not be determined in this proceeding. Pittsburgh Water
8 provided direct, specific, usage data for Bill Discount Program participants. That data is
9 set forth in the Table below. The Table shows that in 2025, more than one-of-six Bill
10 Discount Program participants had usage of more than 5,000 gallons per month, while
11 more than one of every ten participants had usage of more than 6,000 gallons per month.
12 That pattern of high usage was similar to the pattern of high usage in 2024 as well. In
13 absolute numbers (rather than percentages), in 2025, 972 Bill Discount Participants had
14 monthly usage of more than 5,000 gallons while 88 did so in 2024. In 2025, 600 Bill

⁸³ Exhibit JAM-12, at 18.

Discount Program participants had monthly usage of 6,000 gallons or more, while 526 did so in 2024.

Year	# of BDP Participants	Pct >4,000 gallons	Pct >5,000 gallons	Pct >6,000 gallons
2022	4,596	25.5%	15.2%	9.9%
2023	4,964	26.6%	15.8%	9.3%
2024	5,430	26.5%	16.0%	9.7%
2025	5,545	27.9%	17.5%	10.8%

The proposed Line Repair and Conservation Program budget of \$150,000 is unreasonable given these high numbers of high usage customers simply within the Bill Discount Program. The proposed budget does an inadequate job of funding assistance that would help reduce costs to both the Bill Discount Program participants and to all other ratepayers who help fund that Bill Discount Program.

Q. WHAT DO YOU CONCLUDE?

A. Reducing bills to low-income customers through the Line Repair and Conservation Program would reduce those arrears. Just as payments are made at the margin (if a customer owes \$1,200 and makes a payment of \$300, that payment is applied to dollars \$901 through \$1,200) bill reduction due to usage reduction generated by conservation investments is at the margin as well (if a \$200 bill is reduced by 20%, the dollars of reduction are dollars \$161 through \$200, not dollars \$1 through \$40).

⁸⁴ PW Response to OWT-3-42.

Part 5. Addressing Concerns Raised through Public Input Hearing Testimony.

Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.

A. In this section of my testimony, I review aspects of the testimony offered at a Public Input Hearings (PIHs) which pertain to my testimony above. I will not address the PIH testimony relating to climate change not because it is unimportant, but rather simply because it is beyond the scope of my own testimony. Any failure of mine to reference PIH testimony should not be construed as a finding that such testimony was not important or appropriate, merely that it was not within the scope of my testimony. OCA witness LeeAnn Wise will also be addressing the PIH testimony and my testimony is limited to the customer testimony that relates to the issues that I have raised.

Q. WHAT PUBLIC INPUT HEARING TESTIMONY IS PARTICULARLY IMPORTANT FOR PURPOSES OF YOUR DIRECT TESTIMONY?

A. Any number of witnesses at the PIHs provided real life examples of the bill affordability problems I identified throughout my testimony above. Catherine Brosky, for example, expressed concern about the “frequency of annual rate increase(s).” According to Ms. Brosky, the percentage of each increase “far exceeds any cost of living increase I’ve received in my wages.”⁸⁵ Ms. Brosky’s testimony strongly supports my testimony regarding the need for additional assistance directed toward households that are not in the

⁸⁵ Public Input Hearing Transcript, at pages 227 – 228. (Since the transcripts for the PIHs do not begin anew for each hearing, citations will simply be to the page number. Citations will not include references to the day or time of the particular PIH.) The testimony of Ms. Brosky was echoed by the testimony of Joseph Glassbrenner, who noted his objection to “extreme hardship on our residents and the ratepayers for a potential fourth consecutive year.” *Id.* at 247. He noted how the increasing rates depletes available assistance more quickly. *Id.*

1 lowest tier of Federal Poverty Level. She expressed particular concern about wage
 2 earners. “While there are programs available to assist low-income families, there is no
 3 corresponding consideration for the inelasticity of wages in single income households.”⁸⁶

4 Ms. Brosky’s concerns were very similar to the concerns expressed by PIH witness Emily
 5 Sawyer. Ms. Sawyer noted that “I know inflation makes everything more expensive. .
 6 .But the only thing that doesn’t go up when inflation goes up seems to be peoples’
 7 wages.”⁸⁷

8 In contrast to these concerns about the wage earners, witness Adolph Sims expressed
 9 concerns about seniors. As a senior, Mr. Sims said he has been retired for eleven years
 10 and does not meet the income guidelines for low-income assistance.⁸⁸ He explained:

11 Right now, presently, I pay \$144. An increase of \$22 or an increase of \$34 by
 12 2027 would raise my bill to \$176. My wife and I are on a fixed income. We
 13 get minimal increases from Social Security. My pension is my pension. My
 14 wife’s pension is her pension. So that is what we have.⁸⁹

15 Mr. Sims concluded by noting that “we’re in that – unfortunately , that gray or middle
 16 area where there’s nothing there for us but to pay the expensive bill.”⁹⁰

17 Becky Boyle appeared to speak on behalf of State Senator Lindsey Williams. A statement
 18 from Senator Williams spoke of the needs of the working poor. Senator Williams noted
 19 that, given the rate increases proposed by Pittsburgh Water in this proceeding, her

⁸⁶ *Id.*, at 228.

⁸⁷ *Id.*, at 57 – 58.

⁸⁸ *Id.*, at 238 – 239.

⁸⁹ *Id.*, at 238.

⁹⁰ *Id.*, at 239.

1 constituents' water bills will have "more than doubled in less than ten years."⁹¹ She stated
2 unequivocally that "the working families and small businesses in my district simply
3 cannot afford yet another increase."⁹² Senator Williams expressed that "constituents
4 reported that they need customer assistance programs to be expanded, and for enrollment
5 procedures to be made easier."⁹³ Senator Williams stated:

6 Pittsburgh Water should take these changes into consideration and increase
7 eligibility for customer assistance programs and make their recertification
8 and entry into the program easier for individuals. The changes coming will be
9 difficult for many people and navigating them while their water bills pileup
10 will not make anything better or easier. This proposal today does not include
11 an increase in eligibility for customer assistance programs, nor does it include
12 relaxing any administrative burden.⁹⁴

13 Those are precisely what I have proposed, and supported, in detail throughout my
14 testimony above.

15 Finally, Anna Dekleva testified that she is a licensed clinical social worker. She testified
16 that "as a social worker, I meet with dozens of people every week who are unable to
17 afford rent, food, and utilities, never mind other basic expenses while working full-time
18 jobs."⁹⁵ She then presented compelling testimony supporting my observation that the
19 unaffordability of water will impose costs on the customer, on the utility, and on the
20 community.

⁹¹ *Id.*, at 159.

⁹² *Id.*

⁹³ *Id.*, at 160.

⁹⁴ *Id.*, at 161.

⁹⁵ *Id.*, at 81.

1 And as a social worker, I can tell you that when people default on utilities,
2 have utilities shut off, they are evicted and then that eviction continues to
3 spiral into ever greater forms of precarity. So, for a lot of people this could
4 mean a really big difference in the way their quality of life works.⁹⁶

5 Ms. Deleva finally noted that, on a personal level, conservation was not working to help
6 reduce her bill. “We have tried to drastically cut back on our water use. It’s made no
7 impact, maybe within a dollar of our bill over the past seven years we’ve lived here, but
8 particularly in the last two.”⁹⁷

9 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

10 **A.** Yes, it does.

⁹⁶ *Id.*, at 83. See, also, PIH Transcript, at 132 (increasing water bills will result in increasing rates of homelessness).

⁹⁷ *Id.*, at 82 – 83.

Exhibit OCA-COLTON-1

**Roger Colton
Fisher, Sheehan & Colton
Public Finance and General Economics
Belmont, MA**

* * * * *

EDUCATION:

- J.D. (Order of the Coif), University of Florida (1981) (licensed in Iowa)
- M.A. (Regulatory Economics), McGregor School, Antioch University (1993)
- B.A. Iowa State University (1975) (journalism, political science, speech)

PROFESSIONAL EXPERIENCE:

Fisher, Sheehan and Colton, Public Finance and General Economics: 1985 – present.

As a co-founder of this economics consulting partnership, Colton provides services in a variety of areas, including regulatory economics, poverty law and economics, public benefits, fair housing, community development, energy efficiency, utility law and economics (energy, telecommunications, water/sewer), government budgeting, and planning and zoning.

Colton has testified in state and federal courts in the United States and Canada, as well as before regulatory and legislative bodies in more than forty (40) states. He is particularly noted for creative program design and implementation within tight budget constraints.

PROFESSIONAL AFFILIATIONS:

- Past Chair: Belmont Zoning By-law Review Working Committee (climate change)
- Member: Board of Directors, Massachusetts Rivers Alliance
- Columnist: Belmont Citizen-Herald
- Producer: Belmont Media Center: BMC Podcast Network
- Host: Belmont Media Center: Belmont Journal
- Member: Belmont Town Meeting
- Vice-chair: Belmont Light General Manager Screening Committee
- Past Chair: Belmont Goes Solar
- Coordinator: BelmontBudget.org (Belmont’s Community Budget Forum)
- Coordinator: Belmont Affordable Shelter Fund (BASF)

Past Chair: Belmont Solar Initiative Oversight Committee
 Past Member: City of Detroit Blue Ribbon Panel on Water Affordability
 Past Chair: Belmont Energy Committee
 Member: Massachusetts Municipal Energy Group (Mass Municipal Association)
 Past Chair: Housing Work Group, Belmont (MA) Comprehensive Planning Process
 Past Chair: Board of Directors, Belmont Housing Trust, Inc.
 Past Chair: Waverley Square Fire Station Re-use Study Committee (Belmont MA)
 Past Member: Belmont (MA) Energy and Facilities Work Group
 Past Member: Belmont (MA) Uplands Advisory Committee
 Past Member: Advisory Board: Fair Housing Center of Greater Boston.
 Past Chair: Fair Housing Committee, Town of Belmont (MA)
 Past Member: Aggregation Advisory Committee, New York State Energy Research and Development Authority.
 Past Member: Board of Directors, Vermont Energy Investment Corporation.
 Past Member: Board of Directors, National Fuel Funds Network
 Past Member: Board of Directors, Affordable Comfort, Inc.
 Past Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.
 Past Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.
 Past Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*
 Past Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.
 Past Member: National Advisory Board: Energy Financing Alternatives for Subsidized Housing, New York State Energy Research and Development Authority.

PROFESSIONAL ASSOCIATIONS:

National Association of Housing and Redevelopment Officials (NAHRO)
 National Society of Newspaper Columnists (NSNC)
 Association for Enterprise Opportunity (AEO)
 Iowa State Bar Association
 Energy Bar Association
 Association for Institutional Thought (AFIT)
 Association for Evolutionary Economics (AEE)
 Society for the Study of Social Problems (SSSO)
 Association for Social Economics

BOOKS

Colton, *et al.*, *Access to Utility Service*, National Consumer Law Center: Boston (4th edition 2008).

Colton, *et al.*, *Tenants' Rights to Utility Service*, National Consumer Law Center: Boston (1994).

Colton, *The Regulation of Rural Electric Cooperatives*, National Consumer Law Center: Boston (1992).

BOOK CHAPTERS

Colton (2018). The equities of efficiency: distributing energy usage reduction dollars, Chapter in *Energy Justice: US and International Perspectives* (Edited by Raya Salter, Carmen Gonzalez and Elizabeth Ann Kronk Warner), Edward Elgar Publishing (London, England).

JOURNAL PUBLICATIONS

65 publications in industry and academic journals, primarily involving utility regulation and affordable housing. (list available upon request)

TECHNICAL REPORTS

200 technical reports for public-sector and private-sector clients (list available upon request)

JURISDICTIONS IN WHICH EXPERT WITNESS PROVIDED

1. Maine	17. Tennessee	33. Montana
2. New Hampshire	18. Kentucky	34. Colorado
3. Vermont	19. Ohio	35. New Mexico
4. Massachusetts	20. Indiana	36. Arizona
5. Rhode Island	21. Michigan	37. Utah
6. Connecticut	22. Wisconsin	38. Idaho
7. New Jersey	23. Illinois	39. Nevada
8. Maryland	24. Minnesota	40. Washington
9. Pennsylvania	25. Iowa	41. Oregon
10. Washington D.C.	26. Missouri	42. California
11. Virginia	27. Kansas	43. Hawaii
12. North Carolina	28. Louisiana	Canadian Provinces
13. South Carolina	29. Arkansas	1. Nova Scotia
14. Florida (Federal Court)	30. Texas (Federal Court)	2. Ontario
15. Alabama	31. South Dakota	3. Manitoba
16. Mississippi	32. North Dakota	4. British Columbia

EXHIBIT OCA-COLTON-2

The Costs of Water Insecurity in Philadelphia

May 2022



REPORT

Authors:

Laura A. Gibson, PhD
Eliza Kinsey, PhD, Christina A. Roberto, PhD, &
Louise Russell, PhD
Perelman School of Medicine,
University of Pennsylvania

Appendix on Cost Estimates

Authors: George Miller, PhD, Corwin Rhyan, MPP
Altarum Institute

PEACH LAB
Psychology of Eating and Consumer Health Lab

Water Insecurity Report

Executive Summary

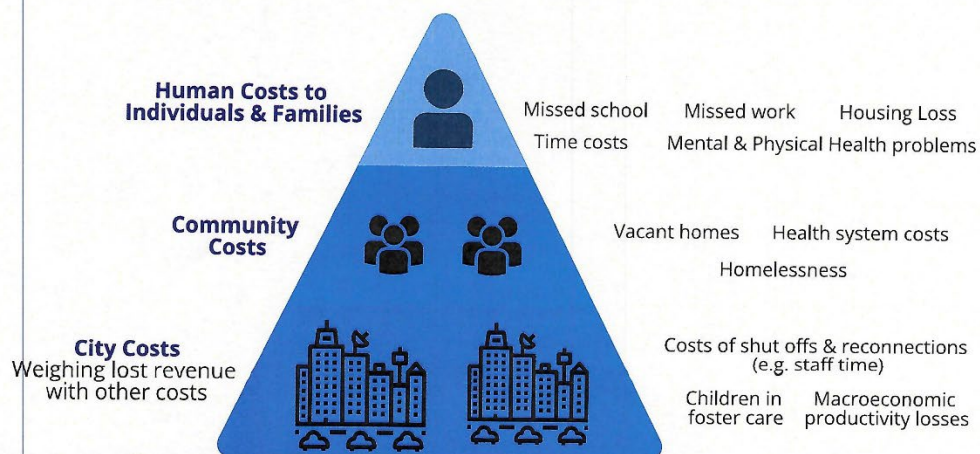
Water security is a human right.

Water security—the ability to reliably access and benefit from safe and acceptable water—has been recognized by the United Nations as a human right.(1–3) Despite its importance, access to safe water is an understudied area, with especially sparse data on its prevalence and impacts in the United States.

Many U.S. cities, including Philadelphia, disconnect water service when a household does not pay its bill on time. Large disparities in water security exist across racial and ethnic groups, regions, and socioeconomic status (3–5). In the U.S., Black and Hispanic individuals are less likely to be connected to piped water and lower-income households are more likely to have water systems with greater contamination violations. (3–5) The Covid-19 pandemic elevated the recognition that water is essential for proper hygiene and disease control. For that reason, Philadelphia along with other U.S. cities placed a moratorium on shutting off water service. Philadelphia also reconnected over 15,000 properties' water service.(6) Since then, at least 5 U.S. cities (Chicago, Buffalo, Oakland, Detroit, Phoenix) have decided they will permanently ban water shut offs.

It is critically important for cities to ensure a well-maintained and safe water infrastructure. In Philadelphia, the revenue generated from the payment of water bills is a key way to support that goal. At the same time, when designing water policy, the City must also consider the economic and social costs that are not only borne by individuals experiencing water insecurity, but that spill over to adversely affect communities and organizations and the City itself when people do not have reliable access to safe water. Thus, as with many other public issues, the city government faces the difficult task of weighing the costs and benefits of water shutoffs or alternatives to shutoffs to many different parties, including the Water Department and the city's water infrastructure, the households that lose access to water, and the larger community.

Costs of Philadelphia Water Shut Offs



Report Goals

The goals of this report are to: **1)** begin identifying the complete set of costs associated with water insecurity and water shut offs in the City of Philadelphia; **2)** conduct a very preliminary cost analysis of water shut offs with the limited existing data; **3)** identify important areas for future research on water insecurity in urban areas; and **4)** identify several City water policies or initiatives that may help to further address water insecurity and ensure sufficient revenue generation. The costs we have identified are based on a search of peer-reviewed research and published reports as well as personal communications with members of interested organizations or the community who are knowledgeable about water insecurity. We also partnered with researchers at Altarum, who have provided initial estimates of some of the costs associated with water shut offs in the City of Philadelphia. The current list of costs and the cost analysis, however, are limited because much of the existing research is from low- and middle- income countries or rural areas in the U.S. Far less is known about water insecurity in urban U.S. areas, making this a critical area for future research.

Next Steps

As the City of Philadelphia considers its future water policies and practices, it will be essential to work across City departments to identify data sources that can help us understand the needs of the Water Department to maintain a safe water supply as well as the effects of water shut offs and water insecurity on the households left without water and on the broader community. The City of Philadelphia also offers a financial assistance program that can help people who have difficulty paying their water bills, but additional research may help generate ideas for how to increase enrollment in the program for eligible individuals. It will also be important to understand the experiences of people coping with water insecurity and how different programs and policies can best be designed to help people pay bills on time and gain reliable access to safe water. We hope to create a public sector and academic partnership that can explore these issues and generate innovative solutions.



Human Costs of Water Insecurity



Financial and Employment Costs

- **Healthcare costs** from mental and physical health impacts, part of which are paid by individuals. Altarum estimates the total costs for mental health conditions to all payers as \$302 per household per year.(7)
- **Money spent** purchasing bottled water, paying a neighbor for a hose connection, paying to shower at a gym or other facility, paying reconnection fees, paying attorney fees to dispute shutoff and/or ramifications of it (8) (9). Altarum estimates the cost of purchased water to vary from \$0.50 to \$1.25 per gallon, so from \$1950 to \$4950 per household per year.
- **Time costs** (e.g., lost labor, leisure, and home productive hours) of collecting water. (8-10)
- **Missed work** and loss of productivity and employment from physical and mental health impacts.(7)
- **Accumulating debt** (disconnected customer accounts continue to incur fees and penalties)(11)
- **Diminished credit** and dismantled borrowing potential.(11)



Family and Educational Costs

- **Children removed from homes** by Child Protective Services or forced to relocate away from family because of lack of water. (1,9)
- **Missed school** days. (12)
- **Poor hygiene**, which increases risk of children being bullied; some parents keep kids home from school to prevent bullying. (9)
- **Reduction in spending on school supplies** because parents need to make tradeoffs to pay utility bills. (12)



Physical and Mental Health Costs

- Increased **psychological distress** and mental health effects. (7,13-17)
- Increased risk for **infectious diseases and death** among children and adults. (9,18-21)
- **Premature loss of life** during covid-19. (22)
- **Dehydration**, which can disrupt cognitive function including concentration, alertness, and short-term memory and negatively impact mood and organ function. (23)
- Increased risk for **obesity, type 2 diabetes, and oral health problems**, partly because people substitute sugary drinks for water. (24,25)
- Water shut offs create **elevated health risks for certain vulnerable groups** such as babies and children, older adults, people with disabilities, people with chronic diseases, pregnant people, nursing mothers, and women who are menstruating.(26,27)

Human Costs of Water Insecurity



Housing Costs

- **Housing loss** because the house is uninhabitable without water, or a lien may be placed on an occupant for unpaid debt. This can lead to high penalties and interest, with some households facing tax foreclosure or renters evicted for not paying utility bills (if billed separately by the landlord). (22)(28)

Community Costs



- **Vacant homes** that are abandoned following a water shut off (9)
- Increases in **homelessness**. (28)
- **Costs to health systems and payers** for increases in hospitalization, ambulatory, and ER visits and prescription drugs driven by rises in infectious and chronic diseases (though some of these costs are borne by insurers, by state and federal governments, and, as noted above, by individuals).
- Tens of thousands of **pro-bono hours for legal and community services**. (29)

City Costs



- **Costs of shut offs** and reconnections, including staff time, travel, and materials.
- **Children placed in foster care** following a neglect finding for not having a utility service.(9)
- **Homelessness** (as a result of eviction, foreclosure, not being able to stay in a water-less home). (28)
- **Public safety** (including illegal, sometimes unsafe water reconnections). (9)
- Macroeconomic impacts of **lost productivity**.

Costs to Water Department

- **Lost revenue** from unpaid bills that can impact water infrastructure.

Future Research Needs

- Understanding the revenue needs of the Water Department to ensure a safe water system for all.
- Understanding the costs and yields from bill collection efforts.
- Identifying data sources to estimate the household and community costs listed in this report for urban areas, as much of the existing research comes from low- and middle- income settings or rural areas of the U.S. that do not necessarily generalize to water insecurity in an urban setting like Philadelphia.

Potential Water Policies & Initiatives Requiring Further Study

- Default enrollment in the tiered water assistance program.
- New outreach strategies to promote enrollment in the tiered water assistance program.
- New communication methods to encourage bill payment.
- Extension of the moratorium on water shut offs.
- New title/ownership policy to allow occupants to pay for water even while title/ownership is not established.

Appendix: Altarum Cost Estimates

Authors: George Miller, PhD, Corwin Rhyan, MPP

Introduction

While there is considerable anecdotal evidence of the hardships, including economic impact, associated with water shutoffs, there is little direct quantitative evidence of the magnitude of these hardships in Philadelphia. To help address this issue, these cost estimates were prepared by Altarum Institute, Ann Arbor, Michigan, drawing on our prior analysis of the costs to households that do not have piped water. [1] In adapting these previous estimates, we have omitted costs that do not apply to the Philadelphia water shutoff scenario and have modified the remaining costs to apply more closely to the Philadelphia population at risk for water shutoffs. In the long run, it would be useful to collect more evidence that is specific to Philadelphia.

Most of the costs we show will accrue to households, local residents, local businesses, and state or federal governments, rather than to the city of Philadelphia. However, showing these economic impacts is important because (1) the city presumably cares about the economic wellbeing of its households and citizens who are impacted by shutoff harms; (2) some of the shutoff harms will affect local worker productivity and hence local businesses; (3) some of these harms will affect the city via decreased economic activity; and (4) if the city chooses to resume shutoffs, all other major stakeholders (households, businesses, and other government entities) will be made worse off, likely creating a net societal loss. This is an example of one of the most important economic problems we face when dealing with social determinant of health issues: the “wrong pockets” problem, wherein any one entity cannot see enough savings to justify making the societally beneficial choice.[2] In this case, the city has the opportunity to avoid the societal loss from resuming shutoffs by foregoing the associated revenue.

Cost of Purchasing Water

Summary. Restarting water shutoffs for 75,000 households in Philadelphia would likely cost each household between \$1,980 and \$4,950 to purchase water. The total cost of purchased water for 75,000 households would be \$149 million (75,000 households * \$1,950) to \$371 million (75,000 * \$4,950) per year (or between \$12.4 million and \$30.9 million per month).

Explanation. In households that rely on purchased water for everyday use the average number of gallons per person is estimated to be 3.96 gallons per day.[3] The average household size for households lacking water access in Philadelphia is 2.74 (2.12 adults),[4] so the average Philadelphia household that experiences a water shutoff would have to purchase 3960 gallons per year (2.74 persons/household * 3.96 gallons/person/day * 365 days/year). For water purchased in bulk (5-gallon containers or larger), we found prices per gallon ranging from \$0.50 to \$1.25 and even higher. At \$0.50 per gallon the total annual cost of purchased water would be \$1,980 per household per year (3960 gallons * \$0.50). At \$1.25 per gallon the total cost would be \$4,950 per household per year.

[1] <https://www.rwjf.org/en/how-we-work/grants-explorer.html#k=water%20access%20altarum&start=2020&closed=false>

[2] <https://jamanetwork.com/channels/health-forum/fullarticle/2760141>

[3] <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2017WR022186>

[4] Family size data are for those lacking complete plumbing facilities in Philadelphia County, possibly resulting in a conservative (i.e., understated) estimate of the average size of a household at risk of a water shutoff. This would cause our shutoff cost estimates also to be conservative. Source: American Community Survey 2018 5-year data, accessed via IPUMS (<https://www.ipums.org/>).

Appendix: Altarum Cost Estimates

Water Acquisition Time Costs

Summary. It would take each household experiencing a water shutoff 20 minutes per day to acquire water. Valued at the average household wage, the cost would be \$3.13 per day and \$1,142 per year. The cost for 75,000 households would be about \$86 million per year (or \$7.1 million per month).

Explanation. For people who have to haul water from a remote location the data indicate that 25% of household members spend 30 minutes a day acquiring water.[5] Thus each household (average size, 2.74 persons) would spend 20.55 minutes per day acquiring water ($0.25 \times 2.74 \text{ persons} \times 30 \text{ minutes}$). Philadelphians would likely be able to buy water from a nearby store; getting to the store, purchasing the water, and getting it home might take less time than this. The average hourly earnings for the population at risk in Philadelphia County is \$9.15 across all household members.[6] So the time cost would, valued at this average wage, come to \$3.13 per household per day, \$1,142 per household per year, and nearly \$86 million per year for 75,000 households.

Mental Health Costs

Summary. Mental health conditions such as anxiety and depression are more prevalent in adults who live in households coping with water shutoffs. Restarting shutoff notices and shutoffs for 75,000 water accounts in Philadelphia could lead to 7,314 additional cases of mental health conditions among adult Philadelphians in the next year, at an annual cost of \$312 per household and a total cost of \$23.4 million per year (\$2.0 million per month) for treatment and lost earnings.

Explanation. Surveys from the National Institute of Mental Health show that, in 2019, 20.6% of U.S. adults suffered from mental health conditions, or 20.6 of every 100 adults.[7] Mental health conditions such as anxiety and depression are more prevalent in adults who live in households coping with water shutoffs, 22.1% higher.[8] Thus, instead of 20.6 adults with mental conditions per 100 adults in the general population, 25.2 adults have mental health conditions per 100 adults in households with water shutoffs – 4.6 more adults per 100 than in the general population.

The average cost of treating mental conditions, from the Medical Expenditure Panel Survey,[9] is \$2,560/patient/year in 2020 dollars, for a total additional cost per 100 adults of \$11,776 (4.6 adults * \$2,560). The average household with water shut off has 2.12 adults.

Thus, restarting water shutoff notices and water shutoffs for 75,000 households in Philadelphia could lead to 7,314 additional cases of anxiety and depression among adult Philadelphians (75,000 households * 2.12 adults/household * 4.6 excess cases/100 adults), at an annual cost of \$2,560 each: total treatment cost, \$18.7 million per year.

[5] Based on expert judgment informed by https://apps.who.int/iris/bitstream/handle/10665/68568/WHO_SDE_WSH_04.04.pdf?sequence=1&isAllowed=y.

[6] All household wage data are for families lacking complete plumbing facilities in Philadelphia county; source: American Community Survey 2018 5-year data, accessed via IPUMS (<https://www.ipums.org/>).

[7] <https://www.nimh.nih.gov/health/statistics/mental-illness>, using 2019 data.

[8] <https://www.sciencedirect.com/science/article/abs/pii/S0277953619305143>

[9] <https://www.meps.ahrq.gov/mepsweb/>.

Appendix: Altarum Cost Estimates

Additionally, mental health conditions such as anxiety and depression are linked to decreased labor force participation and lower average earnings for those affected. Research on depression has found that on average it causes 2.6% lower average earnings compared to those without a mental health condition.^[10] Combining this 2.6% decrease in earnings (assuming it applies to all mental health conditions) with the same population described above (75,000 households * 2.12 adults per household), and average annual earnings per adult for those in Philadelphia county (\$24,609)^[11], lost earnings from mental health conditions caused by water shutoffs can be estimated.

The additional annual costs of lost earnings for those suffering from mental health conditions is thus \$4.7 million (75,000 households * 2.12 adults/household * \$24,609 in earnings across all adults * 0.026 decrease in earnings).

Together, these two estimates total \$23.4 million in annual economic losses from mental health conditions potentially caused by water shutoffs, or \$312 per household.

[Note that these estimates only capture estimated mental health impact among adults in those households; the impact on children's mental health has not been estimated.]

^[10] https://www.nber.org/system/files/working_papers/w19451/w19451.pdf

^[11] All household wage data are for families lacking complete plumbing facilities in Philadelphia county; source: American Community Survey 2018 5-year data, accessed via IPUMS (<https://www.ipums.org/>).

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111

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos.
	:	R-2023-3039920 (Water)
	:	R-2023-3039921 (Wastewater)
	:	R-2023-3039919 (Stormwater)
v.	:	
	:	
	:	
Pittsburgh Water and Sewer Authority	:	

DIRECT TESTIMONY

BARBARA R. ALEXANDER
BARBARA ALEXANDER CONSULTING LLC

ON BEHALF OF
OFFICE OF CONSUMER ADVOCATE

September 5, 2025

Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

A. My name is Barbara R. Alexander. I am the sole member manager of Barbara Alexander Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case as a witness on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

Q. WHAT IS YOUR BACKGROUND AND EXPERIENCE WITH RESPECT TO THE ISSUES ON WHICH YOU ARE PROVIDING TESTIMONY IN THIS PROCEEDING?

A. I opened my consulting practice in March 1996, after nearly ten years as the Director of the Consumer Assistance Division of the Maine Public Utilities Commission. While there, I testified as an expert witness on consumer protection, customer service and low-income issues in rate cases and other investigations before the Commission. My consulting practice is directed to consumer protection, customer service and low-income programs and policies relating to the regulation of the telephone, electric and gas industries. My practice has included policy issues relating to the adoption of retail energy markets and the regulation of public utility distribution service, particularly relating to reliability of service, rate programs, customer service performance, as well as default service programs and policies. I have appeared in over 30 U.S. and Canadian jurisdictions as an expert witness on behalf of state utility consumer advocates and national and state non-profit consumer organizations.

I am a graduate of the University of Michigan (B.A. 1968) and the University of Maine School of Law (J.D. 1976).

I have appeared before the Pennsylvania Public Utility Commission (PUC or Commission) many times on behalf of the OCA. I filed testimony on consumer education, consumer protection, supplier licensing, customer enrollment, default service, and Code of Conduct

1 issues for the OCA in the Commission's electric restructuring proceedings in 1997 and
2 1998, as well in all in the natural gas restructuring cases beginning in 1999. With respect to
3 issues relating to retail market competition policies, I have filed testimony on behalf of the
4 OCA on policies that should govern the planning and acquisition of Default Service for
5 residential customers and on proposals to adopt Purchase of Receivables (POR) programs,
6 Customer Referral Programs, and other "retail market enhancement" programs for electric
7 and natural gas utilities, including FirstEnergy distribution companies. I have provided
8 testimony submitted on behalf of the OCA on service quality and low-income program
9 issues associated with recent electric and natural gas distribution company mergers and base
10 rate cases for electric utilities, water and sewer utilities, and natural gas utilities as
11 documented in my CV with the specific identification of relevant proceedings attached as
12 Exhibit BA-1. In particular, I have testified on behalf of the OCA in the many proceedings
13 relating to the Commission's assumption of jurisdiction over the Pittsburgh Water and
14 Sewer Authority (now d/b/a/ Pittsburgh Water) to address recent compliance plan
15 proceedings and base rate cases, most recently in Docket Nos. R-2023-3039920 (Water), R-
16 2023-3039921 (Wastewater), R-2023-3039919 (Stormwater).

17
18 Q. DO YOU HAVE ADDITIONAL EXHIBITS ATTACHED TO THIS TESTIMONY?

19 A. Yes. In addition to my CV, I attach the following Exhibits:

20 Exhibit BA-2: Pittsburgh Water Response to OCA-II-1 (a), Call Center Performance.

21 Exhibit BA-3: Pittsburgh Water Response to OCA-XXI-11.

22 Exhibit BA-4: Pittsburgh Water's Response to OCA-II-3.

1 Q. PLEASE SUMMARIZE PITTSBURGH WATER'S ¹ PROPOSAL TO INCREASE
2 RATES IN THIS PROCEEDING.

3 A. On June 4, 2025, Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water (Pittsburgh
4 Water or PW) submitted this rate case and proposes multi-year rate increases to produce
5 additional overall revenues by approximately \$84 million over two years – an initial rate
6 increase of \$63.7 million (an increase of 25.9%) in 2026 and another rate increase of \$20.7
7 million (6.7%) in 2027.

8 Pittsburgh Water serves approximately 81,000 water customers, 29,000 wastewater
9 customers, and 4,300 stormwater customers, primarily in the City of Pittsburgh, the
10 Boroughs of Millvale, McKees Rocks, Sharpsburg, Swissvale, Wilkinsburg and Blawnox,
11 and portions of Reserve, O'Hara, Ross, Penn Hills and Shaler Townships in Allegheny
12 County. It provides wastewater service and stormwater service in the City of Pittsburgh.
13 Pittsburgh Water's wastewater system is a collection and conveyance system only. It does
14 not include treatment. Wastewater is conveyed to the regional Allegheny County Sanitary
15 Sewer Authority (ALCOSAN) for treatment.

16 The customer notices included in Pittsburgh Water's filing presented the rate increases for
17 residential customers as follows:

18 *For a typical Residential customer using 3,000 gallons of water per month with a 5/8-inch*
19 *meter and who generates stormwater runoff from 1 Equivalent Residential Unit (ERU)*
20

Residential	Current Rates	2026 Rates	2027 Rates
Water	\$64.30	\$73.18	\$78.75
Wastewater	\$21.61	\$23.75	\$26.16
Stormwater	\$10.06	\$12.34	\$12.62

¹ Pittsburgh Water and Sewer Authority formally changed their d/b/a to Pittsburgh Water. I will use that name or PW throughout my testimony.

DSIC	\$4.30	\$7.72	\$8.57
PVC ²	-	\$6.03	\$9.39
Total	\$100.27	\$123.02	\$135.49

For a typical Residential customer enrolled in the Bill Discount Program using 3,000 gallons of water per month with a 5/8-inch meter and who generates stormwater runoff from 1 ERU.

Residential Bill Discount	Current Rates	2026 Rates	2027 Rates
Water	\$32.76	\$33.84	\$36.94
Wastewater	\$13.36	\$12.88	\$13.17
Stormwater	\$ 1.51	\$ 1.85	\$ 1.89
DSIC	\$ 2.31	\$ 3.73	\$ 4.11
PVC	-	\$ 3.01	\$ 4.70
Total	\$49.94	\$55.31	\$60.81

Pittsburgh Water’s request for approval of multi-year rates increases is a request for approval of “alternative ratemaking” under Section 1330 of the Public Utility Code. Pittsburgh Water requests that the initial rate increase take effect on March 8, 2026 (the end of the statutory suspension period), and the additional rate increase take effect on January 1, 2027.

Q. HOW DOES PITTSBURGH WATER JUSTIFY ITS RATE INCREASE IN THIS PROCEEDING?

A. Pittsburgh Water’s justifications for these rate increases are based on funding for mandated infrastructure improvements, the obligation to meet more stringent environmental and regulatory requirements, and the need to reflect increasing operating costs related to inflation in rates.

Q. WHAT ISSUES WILL YOU ADDRESS IN YOUR TESTIMONY?

² PENNVEST Charge

1 A. I will address the following issues in this proceeding and, where relevant, Pittsburgh
2 Water's compliance with certain settlement conditions of the last base rate case ("2023
3 Base Rate Case Settlement"):

4 • Customer service, including the performance of the call center, billing, meter
5 reading, complaint handling, and other metrics tracked by the Commission.

6 • Consumer protection policies and programs, particularly those relating to Chapter
7 56 of the Commission's regulations.

8 • Pittsburgh Water's Root Cause Analysis and Customer Complaint Log.

9 • Pittsburgh Water's use of speech pattern analytics to review call center
10 conversations.

11 • Pittsburgh Water's proposal to charge residential customers a fee for paying the bill
12 using a credit card for Pittsburgh Water's service.

13 Q. IS YOUR TESTIMONY EXCLUSIVE ON THESE ISSUES?

14 A. No. While I am the primary witness on customer service and consumer protection policies
15 and programs, my testimony supplements and contributes to the overall recommendations
16 of the other OCA witnesses.

17 Q. WILL YOU PROPOSE CHANGES TO THE REVENUE REQUIREMENT OR RATES
18 PROPOSED BY PITTSBURGH WATER?

19 A. Not directly. My testimony concerning customer service and reliability of service
20 performance is intended to provide context on the reasonableness of Pittsburgh Water's
21 proposed revenue requirement, as well as the adjustments made by other OCA witnesses.

1 Q. WHAT IS THE CONNECTION BETWEEN YOUR DISCUSSION OF SERVICE
2 QUALITY AND CUSTOMER SERVICE PERFORMANCE AND THE RATE
3 INCREASE PROPOSED BY PITTSBURGH WATER?

4 A. Any public utility must justify its rates in part based on its ability to perform its essential
5 quality of service and customer service functions at a reasonable performance level. It is
6 appropriate to compare the performance of the utility seeking a significant rate increase to
7 other Pennsylvania utilities, particularly where, as here, Pittsburgh Water has only recently
8 come under the Commission's jurisdiction in 2018, and a lengthy proceeding has been held
9 that sets forth Pittsburgh Water's obligations to conform to that authority. Finally,
10 Pittsburgh Water is not a typical public utility regulated by the Commission. Unlike the
11 vast majority of the electric, gas, and water utilities regulated by the Commission,
12 Pittsburgh Water is a public entity and has no shareholders and there is no "return on
13 equity" as that aspect of rate regulation is applicable to investor-owned utilities who are
14 allowed an opportunity for a reasonable profit on their investments.

15 Q. HOW SHOULD THE COMMISSION CONSIDER PITTSBURGH WATER'S
16 QUALITY OF SERVICE AND CUSTOMER SERVICE PERFORMANCE IN LIGHT
17 OF THIS DISTINCTION?

18 A. The consideration of quality of service and customer service performance performs a
19 somewhat different function for Pittsburgh Water compared to most other public utilities
20 owned by private investors and shareholders. First, my analysis and findings should inform
21 the Commission on the reasonableness of Pittsburgh Water's significant rate increase
22 proposals. In other words, if Pittsburgh Water seeks a rate increase, but there are
23 deficiencies in its customer service performance, the Commission should order

1 improvements in specific areas as a condition of any rate increase or consider reducing the
2 rate increase until reforms have been adopted. This approach is mandated by the statutory
3 guidelines governing public utility rate cases in which the Commission must evaluate the
4 “efficiency, effectiveness, and adequacy of service.”³ Even more important here,
5 Pittsburgh Water has proposed a multi-year rate increase without any proposals to meet
6 essential customer service performance requirements, discussed below.

7 Q. PLEASE SUMMARIZE YOUR RECOMMENDATION IN RESPONSE TO
8 PITTSBURGH WATER’S PROPOSAL FOR A MULTI-YEAR RATE INCREASE.

9 A. My primary recommendation is that Pittsburgh Water’s proposal for a multi-year rate
10 increase not be approved. While other OCA witnesses identify many reasons for their
11 comparable conclusion, the basis for my recommendation is that Pittsburgh Water has not
12 provided any meaningful assurance or mechanism to meet reasonable customer service and
13 service quality performance. Pittsburgh Water has not recommended a two-year phase in
14 of an approved revenue requirement. Rather, PW has proposed a change in rates for two
15 years based on factors external to the evidence presented in this proceeding. A utility that
16 has been approved to raise rates always has the option of allowing service quality to
17 deteriorate to avoid expenditures that might threaten its rate of return. This potential is
18 exacerbated with a multi-year rate plan. Pittsburgh Water’s proposed two-year rate
19 adjustment would set in motion the potential for deterioration in service quality and
20 customer service during a period with rate increases that reflect certain costs and expenses
21 but does not include any evaluation of service quality or customer service performance.

³ 66 Pa. C.S. § 523.

1 According to Pittsburgh Water's primary witness, William Pickering, Chief Executive
2 Officer:

3 Provided that Pittsburgh Water obtains approval for the necessary rate relief,
4 Pittsburgh Water will be in a solid position to continue making progress toward
5 enhancing the quality and effectiveness of customer service, providing responsible
6 and responsive operations service, improving infrastructure reliability, and
7 maintaining regulatory compliance. Progress in these areas has been recognized by
8 customers participating in recent survey efforts. Pittsburgh Water is continuing its
9 significant efforts to provide more reliable service to customers, meet stricter water
10 quality standards, and improve stormwater management. The requested rate relief
11 will provide the revenue necessary to continue these efforts so that we are a utility
12 of the future that delivers the highest possible quality of services to our customers.
13 Continued support from the Commission in the form of rate relief as well as
14 collaborative efforts to improve the safety, quality, and reliability of Pittsburgh
15 Water's water, wastewater, and stormwater services are absolutely essential.⁴
16

17 While Pittsburgh Water states that this rate increase and multi-year rate increases will
18 support improved performance, there is no actual mechanism in place to assure customers
19 that increased rates will result in improved, let alone continued levels of service quality
20 and customer service.⁵

21 Q. PLEASE SUMMARIZE YOUR OTHER RECOMMENDATIONS:

22 A. As stated above, my primary recommendation is to reject Pittsburgh Water's proposal for
23 a multi-year rate increase due, in part, to the lack of any specific performance standards or
24 consequences for the failure to meet reasonable performance standards. Merely reporting
25 performance without any consequence for deterioration in performance or the failure to
26 meet Pittsburgh Water's own internal objectives is not a reasonable bargain for consumers.

27 In addition, any decision to increase base rates in this proceeding should be accompanied

⁴ Pittsburgh Water St. 1 at 14-15.

⁵ Pittsburgh Water Response to OCA-XXI-12 excused this omission by linking the multi-year rate plan to planned infrastructure investments and to satisfy debt service payments on loans for infrastructure, thus assuming that service quality would continue to meet Commission regulations.

1 by requirements that Pittsburgh Water meet its own specific performance standards and
2 comply with the 2023 Base Rate Case Settlement. Based on my evaluation of certain other
3 Pittsburgh Water proposals and service quality performance, I recommend the following
4 requirements that should be imposed if any rates are increased:

5 • Pittsburgh Water's Call Center should continue to meet its internal standards of an
6 average answer time of 1 minute and an abandonment rate of 3% or less for all its customer
7 queues each quarter.

8 • Pittsburgh Water's "root cause" analysis of customer complaints includes the
9 analysis required by the 2023 Base Rate Case Settlement but the recommendations for
10 reform as a result of that analysis are not yet documented or evaluated. Therefore, I
11 recommend that Pittsburgh Water continue to conduct routine root cause analysis of its
12 customer disputes and the Commissions Bureau of Consumer Services (BCS) and
13 Commission handled complaints and report on the implementation of its current and future
14 recommendations in its ongoing Quarterly Reports. This ongoing evaluation should also
15 include a review of the success and failure of payment plans.

16 • Pittsburgh Water should continue to maintain its service quality complaint log and
17 evaluate the trends and indicators of the volume and type of complaint over time.

18 • Pittsburgh Water's proposal to impose a transaction fee for payment by credit
19 and/or debit cards by residential customers should be rejected.

20 • Pittsburgh Water has documented that its field representations attempt to contact
21 the customer at the premises immediately prior to termination of service. I recommend that
22 PW develop a more detailed reporting mechanism to identify the basis for why termination
23 was halted. This recommendation will allow a more detailed analysis that may provide an

1 important feedback loop to improve customer communications, especially with regard to
2 payment arrangement options.

3 • Pittsburgh Water's speech analytics proposal, if implemented, is a potentially
4 useful tool to use in auditing and evaluating compliance with internal and regulatory
5 policies to ensure customer satisfaction and the transmittal of required information by
6 customer representatives. I recommend that this project be viewed as a pilot and evaluated
7 in terms of costs and values or benefits to customers in a report to stakeholders within 12
8 months after the date of the final order in this proceeding, or, at the latest, in the next base
9 rate case. This pilot should not be viewed as approval or using speech analytics to replace
10 the use of customer service representatives to present and implement approved regulatory
11 programs and customer rights at this time.

12 Q. PLEASE SUMMARIZE THE CUSTOMER SERVICE PERFORMANCE METRICS
13 MONITORED BY THE COMMISSION.

14 A. The Commission publishes annual reports on customer service performance for the call
15 center, meter reading, billing timeliness, customer satisfaction survey responses, and
16 response to customer disputes.⁶ These reports compare the performance of Pennsylvania's
17 largest electric and natural gas distribution companies but do not include performance for
18 water and sewer utilities. I obtained similar or comparable data on these performance areas
19 from Pittsburgh Water in discovery. In addition, the Commission publishes a quarterly
20 UCARE report (Utility Customer Activities Report and Evaluation) that presents data on
21 complaints and payment arrangements handled by the Commission's Bureau of Consumer

⁶ <https://www.puc.pa.gov/filing-resources/reports/customer-service-performance-reports/>

1 Services for electric, natural gas, and water and sewer utilities, including Pittsburgh Water.

2 The most recent reports reflect calendar year 2023.⁷

3 Q. PLEASE DISCUSS PITTSBURGH WATER'S CALL CENTER PERFORMANCE.

4 A. Pittsburgh Water relies on a customer call center as the main method by which customers
5 can communicate individually with Pittsburgh Water. While Pittsburgh Water has one
6 office in downtown Pittsburgh, that office, due in part to its singular location, cannot
7 provide a widely accessible means of allowing its approximately 110,000 customers to
8 report an outage, talk about their bill, file a complaint, ask for a payment plan, or respond
9 to a termination notice.⁸ Pittsburgh Water tracks the standard performance metrics for a
10 large call center, including the average speed of answering a call that is transferred to a live
11 customer service representative and the abandonment rate, the percentage of calls in which
12 customers hang up or abandon their call due to a long wait time.

13 Q. WHAT WAS PITTSBURGH WATER'S COMMITMENT CONCERNING ITS CALL
14 CENTER PERFORMANCE IN THE 2023 BASE RATE CASE SETTLEMENT?

15 A. As a result of the documentation that Pittsburgh Water did not routinely meet its own
16 internal performance standards for its call center, Pittsburgh Water agreed to improve its
17 customer service performance metrics. Settlement ¶III.9.D.1.a. Specifically, Pittsburgh
18 Water agreed to use best efforts to meet its internal standards of an average answer time of
19 1 minute and an abandonment rate of 3% or less for an average of all its customer queues
20 each quarter in the last base rate case. The quarterly calculations of the average answer
21 time and abandonment rate will be separated by queue.

⁷ <https://www.puc.pa.gov/filing-resources/reports/consumer-activities-report-evaluation/>

⁸ Pittsburgh Water estimates that the walk in office handles transactions for 10-12 customers per week. Pittsburgh Water Response to OCA-XIV-4.

1 Q. HAS PITTSBURGH WATER MET ITS SETTLEMENT COMMITMENT?

2 A. Yes. In 2024 the call center performance significantly improved compared to 2022-2023.
3 The 2025 performance to date also reflects a continuation of meeting the agreed upon
4 performance standards. I attach Exhibit BA-2 showing the recent call center performance
5 results by queue.⁹

6 Q. WHAT DO YOU RECOMMEND IN THIS PROCEEDING REGARDING
7 PITTSBURGH WATER'S CALL CENTER PERFORMANCE?

8 A. Pittsburgh Water does not link meeting these internal standards to its request for a
9 significant rate increase in this proceeding. I recommend that as a condition of any rate
10 increase adopted by the Commission, that Pittsburgh Water be required to conform to its
11 own internal quarterly call center performance standards of a call answering rate of 1
12 minute (60 seconds) or less and an abandonment rate of 3% or less for each of its call center
13 queues, particularly those queues that relate to billing, metering, collection, dispatch and
14 stormwater issues. Furthermore, the lack of any recommendation for linking customer
15 service and call center performance to the implementation of its multi-year rate plan is a
16 serious defect. Multi-year rate plans provide utilities with increased financial certainty and
17 operational flexibility over an extended period, often with reduced regulatory review.
18 Without incorporating specific performance metrics related to customer service—such as
19 call center responsiveness, complaint resolution, and service quality—there is a substantial
20 risk that PW may deprioritize these functions in pursuit of cost savings. This undermines
21 the core principles of performance-based regulation, which are intended to align utility

⁹ Pittsburgh Water Response to OCA-II-1 (a), Call Center Performance.

1 incentives with measurable outcomes that benefit customers. Moreover, because PW
2 customers do not have competitive alternatives, it is imperative that any long-term rate
3 structure include safeguards to ensure continued service quality. Failing to do so not only
4 compromises accountability and transparency but also erodes public trust in the regulatory
5 process. As such, the lack of a customer service performance linkage within a multi-year
6 rate plan that allows rate increases based on evidence not available in this rate case
7 proceeding, is a serious omission that should be addressed to protect ratepayer interests
8 and uphold regulatory integrity. The fact that Pittsburgh Water has internal performance
9 standard goals is insufficient to justify any rate increase because there is no consequence
10 for Pittsburgh Water's failure to achieve these objectives.

11 Whether or not a multi-year rate plan is allowed, I recommend that Pittsburgh Water be
12 required to continue to meet these performance requirements as a condition of any rate
13 increase ordered in this proceeding. Whether a one year or multi-year rate case, Pittsburgh
14 Water should not be able to deteriorate in performance in this essential performance area
15 to ensure reasonable service quality to its customers if a rate increase is allowed.

16 Q. TURNING TO THE BCS REPORTS CONCERNING COMPLAINTS AND PAYMENT
17 ARRANGEMENT DISPUTES THAT REQUIRE FURTHER INVESTIGATION, WHAT
18 IS PITTSBURGH WATER'S RECENT PERFORMANCE?

19 A. Every Pennsylvania public utility is required to educate customers about how to register
20 informal and formal complaints, the former resolved by the Commission's Bureau of
21 Consumer Services because of a customer's dissatisfaction with the utility's response and
22 the latter handled as a formal matter by the Commission because of a formal filing by the
23 customer or group of customers. Utilities also receive "disputes" directly from customers

1 and are obligated to investigate and respond to those issues or indications of dissatisfaction.
2 Customer complaints typically form a hierarchy or pyramid from a large volume of
3 disputes to a smaller group of informal complaints to the BCS and a relatively small
4 number of formal complaints filed with the Commission. Tracking and evaluating disputes
5 and informal or formal complaints are key to ensuring ongoing improvements in customer
6 service because that evaluation is likely to spot the “red flag” that indicates a systemic issue
7 or concern that requires management’s attention and, in some cases, a change in policy or
8 procedure. In addition, of course, this type of evaluation may also identify violations of the
9 Commission’s regulations.

10 BCS reports on the frequency and trends associated with informal complaints filed
11 by residential customers who are dissatisfied with their initial resolution by the public
12 utility. In the 2023 UCARE Report, BCS reported the following results for Pittsburgh
13 Water (referred to as PWSA in the Report¹⁰):

- 14 • Residential total complaints increased from 323 in 2021 to 445 in 2023 and a total
15 complaint rate increase from 1.65 in 2021 to 2.20 in 2023.
- 16 • The Consumer Complaint Response Time increased significantly by 13.4 days
17 from 2021 to 2023.
- 18 • Payment Arrangement Referrals (PAR) increased substantially by 248.6% from 35
19 in 2021 to 122 in 2023. The PAR rate increased from 0.18 in 2021 to 0.60 in 2023. The
20 PAR Response Time also increased.

¹⁰ <https://www.puc.pa.gov/media/3305/2023-ucare-final.pdf>

1 • In a notable change, the Stormwater Complaints decreased from 18 in 2021 to 13
2 in 2023.

3 • The number of residential service terminations increased by 21.5%, from 177 in
4 2021 to 215 in 2023. Alternatively, reconnections decreased significantly, by -68.9%, from
5 257 in 2021 to 80 in 2023.

6 BCS does not include “justified”¹¹ complaints or “verified infractions”¹² for Pittsburgh
7 Water in its public reports, an omission that should be corrected in the future due to the
8 Commission’s jurisdiction over Pittsburgh Water for Chapter 56 and 52 related complaints.
9 However, BCS does report infractions to PW and I have obtained that information through
10 discovery in this proceeding.

11 Q. DID PITTSBURGH WATER IDENTIFY OR DISCUSS THESE BCS-IDENTIFIED
12 TRENDS IN ITS FILING SEEKING A RATE INCREASE FOR TWO YEARS?

13 A. No. When asked to provide a response to these trends, Pittsburgh Water stated that most
14 of these trends were due to their halt of any termination from July 2022 through February
15 2023 as part of the transition to a new billing system, vacancies at the call center and the
16 compliance section of their customer service department.¹³ I note that these are the types
17 of events that could occur during Pittsburgh Water’s two-year rate proposal causing
18 deterioration in customer service without any consequences attached to their rate increases.

¹¹ Defined by BCS as: 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.

¹² Defined by BCS as: A misapplication or infringement of a Commission regulation, particularly the standards and billing practices for residential utility service.

¹³ Pittsburgh Water Response to OCA-XXI-7.

1 Q. PLEASE SUMMARIZE THE COMMITMENTS RELATED TO TRACKING AND
2 EVALUATING CUSTOMER COMPLAINTS CONTAINED IN THE 2023 BASE RATE
3 CASE SETTLEMENT.

4 A. Root Cause Analysis: Pittsburgh Water agreed to update its “root cause” analysis to include
5 evaluation of informal customer complaints submitted to the BCS as well as formal
6 customer complaints filed with the Commission. Settlement ¶III.9.D.3. More specifically,
7 Pittsburgh Water’s evaluation will include the following:

- 8 • Any trends or patterns regarding the informal and formal complaints;
- 9 • Any trends or patterns with respect to BCS’ informally verified infractions.
- 10 • The analysis shall be completed using internal staff resources.
- 11 • The results shall be reported either within one year of a Final Order in this
12 proceeding or as part of its next base rate filing, whichever is earlier. The results
13 will include a description of any reforms Pittsburgh Water plans to adopt.

14 Service Quality Complaint Logs: Pittsburgh Water agreed to provide a complete complaint
15 log. Specifically, Pittsburgh Water has agreed to maintain complete data regarding
16 customer complaints, work order and service logs which can be made available via Excel
17 in response to any discovery requests by the parties in, e.g., PW’s next base rate case.
18 Settlement ¶III.9.F.1.a. If the data is requested as part of discovery, the parties agree to
19 collaborate on an informal basis to ensure that it is provided in a mutually acceptable and
20 reasonably sortable format. Regarding High Pressures, Pittsburgh Water will continue to
21 capture pressure inquiries or complaints in its work order logs.

22 Q. PLEASE PROVIDE YOUR EVALUATION OF PITTSBURGH WATER’S
23 COMPLIANCE WITH THE ROOT CAUSE ANALYSIS REQUIREMENT.

A. Pittsburgh Water Witness Mechling included the updated Root Cause Report as Exhibit JAM-11.¹⁴ This Report included, as required by the 2023 Base Rate Case Settlement, an analysis of informal complaints resolved by BCS and formal complaints filed with the Commission. This Report included the analysis required by the Settlement. Also, as required by the Settlement, the Report included specific recommendations as summarized by Pittsburgh Witness Mechling¹⁵ for her team to address in 2025 as follows:

Number	Recommendation
Disputes	
1	Retrain Customer Service Representatives on high consumption and meter testing, and establish an annual training schedule.
2	Add meter testing bench tours and training to all new hire schedules.
Informal Complaints	
3	Enhance data tracking for dispute to complaint conversion rates.
4	Update payment arrangement training SOPs for Customer Service Representatives.
5	Develop training specific to identifying and properly handling disputes and complaints.
Formal Complaints	
6	Enhance data tracking for complaint types.
Informally Verified Infractions	
7	Update non-registering water meter account listing.
8	Initiate Utility Report quality assurance reviews.

Q. HAS PITTSBURGH WATER RECEIVED NOTICE OF INFRACTIONS FROM BCS SINCE JANUARY 2023?

A. Yes. Since January 2023, Pittsburgh Water received a total of 129 infractions over 83 filed complaints. Pittsburgh Water identified the following actions taken in response:

- 50 were addressed through a restructuring of our internal non-access process to address aged meters, non-registering meters and estimated meter readings;
- 32 resulted in individual staff coaching and training due to user errors;
- 22 were addressed through coaching and training with Compliance staff related to issuing timely and complete Utility Reports and complaint responses;
- 11 were escalated to Collections' management to update account classifications, ensure completion of collection-related activities, and ensure timely postings of collection-related fees;
- 10 were escalated to Field Operations' management related to unplanned interruptions of service; and

¹⁴ Pittsburgh Water St. 6.

¹⁵ Ibid., page 45.

1 • 4 were addressed through errors identified with Pittsburgh Water’s billing system.¹⁶

2
3
4 A. HOW HAS PITTSBURGH WATER RESPONDED TO THE RECOMMENDATIONS
5 IN THE ROOT CAUSE REPORT?

6 A. Pittsburgh Water did not include the status or results of the Root Cause Report
7 recommendations listed by Pittsburgh Water Witness Mechling in its filing, but in
8 discovery, Pittsburgh Water stated that it has issued retraining and implemented a regular
9 training schedule for certain areas of high complaint incidence: high consumption,
10 metering testing procedures, and payment arrangement requests. Additional data tracking
11 mechanisms were “enhanced.” To decrease the number of infractions, Pittsburgh Water
12 has updated the list of non-registering water meters to investigate accounts in a timely
13 manner. Also, “Pittsburgh Water is continuing to develop a quality assurance standardized
14 process to review Utility Reports issued to customers and investigation responses issued to
15 the Commission in response to informal complaint filings.”¹⁷

16 Q. WHEN ASKED TO UPDATE THE STATUS OF THE IMPLEMENTATION OF THESE
17 RECOMMENDATIONS, WHAT WAS PITTSBURGH WATER’S RESPONSE?

18 A. The response stated, “No substantive progress has been made due to staffing issues
19 amongst the Contact Center management team.”¹⁸ A most recent discovery response
20 provided more detailed information on implementation of the recommendations identified
21 in the root cause report attached as Exhibit JAM-11. I attach this response as Exhibit BA-
22 3.¹⁹ I note that a number of these recommendations are still pending due to the identified

¹⁶ Pittsburgh Water Response to OCA-II-21.

¹⁷ Pittsburgh Water Response to OCA-II-22.

¹⁸ Pittsburgh Water Response to OCA-II-63.

¹⁹ Pittsburgh Water Response to OCA-XXI-11.

1 changes needed to the PW Standard Operating Procedure software, namely internal
2 training upgrades for identifying disputes, implementing payment arrangements, and
3 “quality assurance reports.” These delays are crucial to monitoring compliance with the
4 Report’s recommendations. PW has not provided any information on tracking the results
5 of any of these recommendations, that is, determining whether the recommendation once
6 implemented has had the desired result or whether additional actions may be required to
7 respond to the root cause analysis.

8 Q. CLOSELY RELATED, BUT NOT REQUIRED BY THE 2023 BASE RATE CASE
9 SETTLEMENT, DOES PITTSBURGH WATER TRACK AND EVALUATE THE
10 SUCCESS OR FAILURE OF ITS PAYMENT PLANS OFFERED TO RESIDENTIAL
11 CUSTOMERS?

12 A. No. When asked why such an analysis did not occur, Pittsburgh Water stated:

13 It would be difficult to track success and failure of payment plans in our Customer
14 Information System given that multiple payment plans may be issued over time per each
15 contract account due to change in customer income, leaks after the water meter, a
16 subsequent plan following a defaulted arrangement, and a third plan as approved by the
17 Bureau of Consumer Services via the Commission’s complaint process, as well as all
18 factors associated with a customer’s personal finances and bill payment practices.²⁰

19 While I understand the issues identified in this response, I note the increase in Payment
20 Arrangement Requests documented in the most recent BCS report quoted above as a “red
21 flag” indicator that requires further analysis.²¹ The increase in PARs was also identified
22 in the root cause report attached as Exhibit JAM-11 and identified as one of the pending
23

²⁰ Pittsburgh Water Response to OCA-II-15.

²¹ Red flag factors in the Pennsylvania PUC’s Bureau of Consumer Services (BCS) reports are indicators of potential utility performance issues. These include high complaint or termination rates, slow dispute resolution, billing errors, and noncompliance with customer assistance or regulatory requirements. Identifying these factors helps monitor utility practices and protect consumers.

1 recommendations that has not yet been fully implemented in Exhibit BA-3.

2 Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO THE
3 IMPLEMENTATION OF THE ROOT CAUSE ANALYSIS AS A CONDITION OF ANY
4 RATE INCREASE IN THIS PROCEEDING?

5 A. First, I recommend that Pittsburgh Water continue to track and evaluate customer
6 complaints, both internally resolved, and externally handled by BCS or the Commission,
7 in the same root cause analysis reflected in the report included as Exhibit JAM-11. This
8 type of analysis should include the most recent BCS findings of “infractions,” identified in
9 response to OCA-II-21 in 2024 and 2025 to date. Second, I recommend that Pittsburgh
10 Water formally track the recommendations, document system-wide steps taken in response
11 to those recommendations, and evaluate on an ongoing basis whether or how the steps and
12 implementation taken in response to the root cause evaluation have achieved their intended
13 purpose. Any ongoing root cause analysis should include this organic feedback mechanism
14 to determine if the root cause has been properly identified and the steps or implementation
15 taken to respond to those findings have accomplished the intended results. Third, I
16 recommend that Pittsburgh Water develop a methodology to track and evaluate the success
17 and failure of a statistically valid number of payment plans negotiated by Pittsburgh Water,
18 with perhaps starting with an evaluation of the Payment Agreement Requests (PARs)
19 resolved by BCS.

20 Q. DURING YOUR REVIEW OF PITTSBURGH WATER’S PAYMENT
21 ARRANGEMENT POLICIES, IS THERE ANOTHER ISSUE THAT REQUIRES
22 REFORM?

23 A. Yes. Pittsburgh Water does issue a written communication to its customers when entering

1 a “special payment arrangement.”²² This communication does provide the terms of the
2 payment plan agreed to by the customer in their conversation with the call center.
3 However, this communication does not inform the customer of their right to dispute the
4 terms of the payment plan and should be reformed to do so.²³

5 Q. DID PITTSBURGH WATER COMPILE THE SERVICE QUALITY CUSTOMER
6 COMPLAINT LOGS REQUIRED BY THE SETTLEMENT?

7 A. Yes. Pittsburgh Water Witness McFaddin included the current version of this complaint
8 log as Exhibit WM-1.²⁴ This complaint log reflects the obligation pursuant to the 2023
9 Base Rate Case Settlement.

10 Q. WHAT IS YOUR RECOMMENDATION CONCERNING PITTSBURGH WATER’S
11 CUSTOMER COMPLAINT LOG AS A CONDITION OF THIS RATE CASE?

12 A. I recommend that Pittsburgh Water continue to maintain this complaint log and evaluate
13 the trends in customer complaints as part of an ongoing root cause analysis. I recommend
14 that Pittsburgh Water maintain this complaint log in a manner to track the volume of
15 complaints over time. This log can also reflect over time the results of Pittsburgh Water’s
16 commitments to address targeted service quality issues, particularly with estimated bills,
17 high bills, and localized infrastructure concerns. I note that the highest number of
18 complaints relate to “leak investigation,” “request replacement,” and “valve operation.”

²² Pittsburgh Water Response to OCA-II-10, attachment.

²³ Pittsburgh Water Response to OCA-XXI-8 states that the communication about the payment plan is voluntary and that there is no requirement to inform the customer of their dispute rights in such a communication. While I defer to counsel for a legal determination, as a policy matter this is not reasonable since customers have the right to appeal any payment plan to BCS for review.

²⁴ Pittsburgh Water St. 5.

1 Q. TURNING TO PITTSBURGH WATER’S PROPOSAL TO CHANGE ITS PRIOR
2 AGREEMENT TO ELIMINATE CREDIT CARD FEES AND RESUME CHARGING
3 SUCH FEES TO RESIDENTIAL CUSTOMERS, DO YOU AGREE WITH THIS
4 RECOMMENDATION?

5 A. No. As a part of the Settlement of its 2021 base rate proceeding, Pittsburgh Water agreed
6 to eliminate merchant fees for residential customers to make Interactive Voice Response
7 and on-line payments as part of its 2020 rate case settlement.²⁵ Beginning in January 2022,
8 Pittsburgh Water eliminated these payment fees for residential customers. Pittsburgh Water
9 proposed to reverse that agreement and charge customers those fees in addition to the actual
10 tariffed charges for customer bills in its last rate case but agreed in the 2023 Base Rate
11 Case Settlement to withdraw that proposal. Settlement ¶III.9.D.4. Now, however,
12 Pittsburgh Water is once again proposing to reverse that agreement and charge residential
13 customers \$2.01 per transaction for paying their Pittsburgh Water bill via credit or debit
14 card on the Pittsburgh Water web portal and when selecting this payment option on the
15 Interactive Voice Response menu.²⁶ According to Pittsburgh Water Witness Barca, the cost
16 of incurring the “convenience fees” is approximately \$500,000 per year and this expense
17 has been eliminated from the projected revenue requirement and rates for the multi-year
18 rate proposal.²⁷

²⁵ *Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority*, Docket Nos. R-2020-3017951 (water) and R-2020-3017970 (wastewater) Final Order entered December 3, 2020 (approving Settlement Section III.G.2.).

²⁶ Pittsburgh Water Response to OCA-XVII-6. The amount of this transaction fee was not identified in Pittsburgh Water’s Direct Testimony.

²⁷ Pittsburgh Water St. 2 at 26, line 24. Pittsburgh Water Response to OCA-XVII-1. The annual amount of fees has varied:

FY 2020: \$518,324

FY 2021: \$432,702

FY 2022: \$435,202

1 Q. DOES PITTSBURGH WATER USE A THIRD PARTY TO PROCESS PAYMENTS?

2 A. Yes. Pittsburgh Water has used the same third party since entering into a contract in 2020
3 and recently amended that contract to include the option for customers to use Apple Pay
4 and Google Pay as a payment option as of March 2025.²⁸

5 Q. WHAT PERCENTAGE OF CUSTOMERS USE THE CREDIT/DEBIT CARD
6 PAYMENT OPTION?

7 A. According to a review of payment options used by residential customers in the 1st Quarter
8 of 2025, 27% used the credit/debit card option.²⁹ There is no indication that the costs
9 associated with eliminating credit/debit card fees has increased compared to the level in
10 effect at the time Pittsburgh Water agreed to make this change. Pittsburgh Water
11 understood at the time of this agreement to change its fee policy that the costs of handling
12 credit card payments would be included in the revenue requirement for all customers,
13 similar to the costs associated with other payment options available to its residential
14 customers.

15 Q. IS THERE EVIDENCE THAT THE IMPOSITION OF THIS FEE WILL ADVERSELY
16 IMPACT CUSTOMERS WHO ARE FACING TERMINATION OF SERVICE?

17 A. Yes. I provided evidence to support the use of one-time credit/debit card payments in the
18 collection or billing cycle in the 2023 Base Rate Case. Pittsburgh Water did examine the
19 payments by credit/debit card for customers facing termination of service in April 2023.
20 Of those 788 accounts, 230 set up an installment payment plan, 103 accounts (13%) made

FY 2023: \$465,962

FY 2024: \$516,773

FY 2025 (through 7/31/25): \$322,218

²⁸ Pittsburgh Water Response to OCA-XVII-3.

²⁹ Pittsburgh Water Response to OCA-XVII-4.

1 one or more credit/debit card payments, and 67 accounts made an ACH (checking account)
2 web-based one-time payment.³⁰ This information, while only a reflection of one month,
3 indicates that customers who face termination of service make use of the credit/debit card
4 payment option to avoid further or more serious collection penalties. Imposing a fee on
5 these vulnerable customers after agreeing to eliminate these fees only one year ago is
6 unreasonable. Furthermore, the reversal of this agreed upon policy is likely to adversely
7 impact lower income and fixed income customers who will see the higher bills and
8 payment difficulties if this significant rate increase is approved.

9 Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO PITTSBURGH
10 WATER'S PROPOSAL TO REINSTATE FEES FOR PAYMENT BY CREDIT/DEBIT
11 CARD FOR RESIDENTIAL CUSTOMERS?

12 A. I recommend that the Commission reject this request to reinstate fees on the grounds that
13 the proposal is unjustified and harmful, particularly for customers seeking to make a last
14 minute payment to avoid termination of service and other nonpayment scenarios.
15 Customers using a credit or debit card for payment of essential water, sewer, and
16 stormwater charges should be provided with the same expectation as using their card to
17 pay for food, medical services, and other consumer goods where extra fees to use a
18 credit/debit card are not imposed. While this practice of charging customers who use
19 electronic payments might have been justified years ago when most customers paid by
20 check or in person, the proliferation of electronic payment options and the widespread use
21 of digital payment options via the smart phone suggest a different approach. Consumers

³⁰ See Direct Testimony of Barbara Alexander (OCA St.5) at pages 17-20, *Pa. PUC v. Pittsburgh Water and Sewer Authority*, Docket No. R-2023-3039920 *er al.*

1 are used to using electronic payment methods on their smart phones and with their bank-
2 issued credit and debit cards to purchase consumer goods and services and the use of these
3 internet-based payment options is growing rapidly.³¹ Credit/debit card fees should be
4 treated in the same manner as allowing withdrawal from their banking account, and the
5 processing of checks or cash payments at authorized vendors, the costs of which are
6 currently reflected in the revenue requirement paid by all customers. Furthermore,
7 changing this policy now after several years in which customers have grown to rely on the
8 no-fee payment options offered by Pittsburgh Water is likely to confuse customers who
9 have relied on this policy and raise additional complaints and inquiries with a resulting loss
10 of customer satisfaction.

11 Q. DOES PITTSBURGH WATER OFFER A WIDE RANGE OF TRANSACTIONS TO
12 RESIDENTIAL CUSTOMERS FOR WHICH NO FEE IS CHARGED?

13 A. Yes. I attach Exhibit BA-4, Pittsburgh Water's Response to OCA-II-3 that identifies a wide
14 range of transactions and interactions with Pittsburgh Water for which no fee is charged
15 for residential customers. This policy supports my recommendation to reject any
16 transaction fees for certain types of payment options.

17 Q. DO YOU AGREE WITH THE AMOUNT THAT PITTSBURGH WATER SEEKS TO
18 COLLECT IN RATES FOR PAYMENT TRANSACTION FEES?

19 A. Not necessarily. PW has negotiated a fee in a contract that has been in effect since 2000.
20 I recommend that PW provide documentation that the fees that it seeks to include in rates

³¹ Forbes Advisor. August 2023. "[53% of Americans Use Digital Wallets More Than Traditional Payment Methods: Poll.](#)" (Accessed June 26, 2025); Federal Reserve. April 2024. "[Federal Reserve Payments Insight Brief: Banking My Way – Gen Z and Millennials Are Driving Change in Payments.](#)" (Accessed June 26, 2025). [Key takeaway: More than half of Generation Z (ages 18-25) and millennials (26-41) now use digital wallets, and 80% say it is important to be able to make payments by mobile device.]

1 are the lowest cost and that reflects a more recent analysis of handling these transactions
2 in house (i.e., directly with the credit card companies) or by means of a more recent request
3 for proposals. This information should be included in PW's Rebuttal testimony in order to
4 determine the reasonable amount of additional costs to be included in rates in the event that
5 the Commission approves PW's request to charge fees to customers who pay by
6 credit/debt.

7 Q. HAVE YOU REVIEWED PITTSBURGH WATER'S IMPLEMENTATION OF THE
8 OBLIGATION TO ATTEMPT PERSONAL CONTACT IMMEDIATELY PRIOR TO
9 TERMINATION OF SERVICE?

10 A. Yes. I reviewed Pittsburgh Water's training materials and a report that reflects the results
11 of the attempt to contact the customer at the time of termination of service. According to
12 these training materials, the field representative must document "each door knock,
13 customer interaction, and notice posting, including the date, time, contact information of
14 the adult with whom personal contact was made, conversation details, and they must
15 choose why the termination was stopped using approved menu options." These materials
16 quote the customer rights provided by 52 Pa Code Section 56.94 and particularly
17 emphasize the obligations if the adult notifies the field technician of a medical issue and
18 require the technician to hand out a customer assistance brochure.³²

19 Q. HAVE YOU REVIEWED THE COMPILATION OF DATA DERIVED FROM THE
20 WORK ORDER AND ASSET MANAGEMENT APPLICATION, SPRYMOBILE
21 CONCERNING THE IMPLEMENTATION OF THIS TRAINING?

³² Pittsburgh Water Response to OCA-II-7 and attachment.

A. Yes. Pittsburgh Water provided a monthly “personal contact report” that contains information about the attempt of personal contact, whether such contact occurred, and whether termination occurred or was halted at that time.³³ The following chart³⁴ reflects a summary of this data:

Total Non-Payment Shut Off - No Answer	591	
Total Non-Payment Shut off - Answer	237	
Was a Hold Placed on Termination - Yes		324
Was a Hold Placed on Termination - No		504
Total OWC - Shut Off - No Answer	409	
Total OWC Shut Off - Answer	117	
Was a Hold Placed on Termination - Yes		161
Was a Hold Placed on Termination - No		365
Total DM Non-Access Shut Off-No Answer	358	
Total DM Non - Access Shut Off - Answer	192	
Was a Hold Placed on Termination - Yes		274
Was a Hold Placed on Termination - No		276
MD Non-Access - Shut Off - Non Answer	40	
MD-Non Access - Shut Off - Answer	9	
Was a hold Placed on Termination - Yes		15
Was a hold Placed on Termination - No		34

This information is valuable and shows that when attempts to contact the customer or responsible adult at the time of termination, contacts do occur and such contacts result in a hold on the termination to respond to the customer’s information. However, this data does not reflect the reasons for why the termination was not implemented or the “approved menu options.”

Q. DO YOU HAVE ANY RECOMMENDATIONS WITH REGARD TO PITTSBURGH WATER POLICIES AND REPORTING ON ATTEMPTING CONTACT AT THE TIME OF TERMINATION OF SERVICE?

A. First, I recommend that such data continue to be obtained and available for discovery in future proceedings. Second, I recommend that Pittsburgh Water develop a method of

³³ Pittsburgh Water Response to OCA-XIV-6 and attachment.

³⁴ This compilation of the data provided in response to OCA-XIV-6 was calculated by OCA Witness Dante Mugrace at my request.

1 categorizing the reasons for when a hold is ordered so that PW can evaluate the potential
2 for additional communications or other actions that might prevent the more expensive
3 attempt to terminate service. I note that the materials include the option to add
4 “conversation details.” Any evaluation of this text based information can be easily
5 summarized and categorized by AI products available to any individual on the market today
6 who makes use of licensed Adobe or Microsoft software. In effect, my recommendation
7 is to consider this information in future root cause analysis of key performance data.

8 Q. PLEASE DESCRIBE PITTSBURGH WATER’S EXPLORATION OF USING SPEECH
9 ANALYTICS FROM CUSTOMER CALL TRANSACTIONS TO TARGET CERTAIN
10 ACTIONS.

11 A. Pittsburgh Water is considering a proposal by a current vendor to use a speech analytics
12 software to review recorded customer calls and “train the tool to recognize our Call
13 Sequencing Model, including the regulatory requirements, within to discovery if the
14 customer is satisfied at the end of every call, along with the programming of key words
15 and a sentiment analysis of both our agents and our customers.”³⁵ Pittsburgh Water has
16 also provided a proposal by their vendor that had a potential implementation in the 4th
17 Quarter 2025 “if unspent 2025 funds are approved to be reallocated.”³⁶

18 Q. HAS PITTSBURGH WATER MADE A DECISION TO IMPLEMENT THIS
19 PROGRAM SINCE THIS PROCEEDING WAS INITIATED?

20 A. Yes. PW is planning to pilot this proposal for 1-2 months before agreeing to a long term
21 of 36-months and is undergoing communications with its unionized call representatives to

³⁵ Pittsburgh Water Response to OCA-II-35.

³⁶ Pittsburgh Water Response to OCA-XVIII-1, attachment (6 pages).

1 educate them on the forthcoming review of 100% of customer calls to obtain feedback on
2 their performance.³⁷

3 Q. WHAT IS YOUR RESPONSE TO THIS INITIATIVE?

4 A. I do not oppose the exploration of the use of speech analytics software if such a project is
5 targeted to link the analysis to a specific regulatory or utility function that is intended to
6 either assist in compliance and oversight and potentially improve efficiencies. I
7 recommend that the results of the pilot be reported and discussed with the Low Income
8 Advisory Group prior to any longer term implementation. This analysis should document
9 and compare the software's tools to determine customer satisfaction, compliance with
10 regulatory requirements, and impact on internal training and call times, with the more
11 traditional method.

12 Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

13 A. Yes. However, I reserve the right to supplement this testimony if additional relevant
14 information is received.

³⁷ Pittsburgh Water Response to OCA-XXI-1 and XXI-4.

Exhibit BA-1
Curriculum Vitae

BARBARA R. ALEXANDER

BARBARA ALEXANDER CONSULTING LLC

44 Beech St.
Hallowell, ME 04347

Telephone: (207) 458-1049
E-mail: barbalexand@gmail.com

PRIOR Clients:

AARP
Pennsylvania Office of Consumer Advocate
Public Counsel Unit, Attorney General, Washington
Arkansas Attorney General
The Public Utility Project of New York
Ohio Office of Consumer Counsel
District of Columbia Office of People's Counsel
Delaware Division of Public Advocate
Maryland Office of People's Counsel
TURN (The Utility Reform Network), California

Areas of Expertise:

- Default Service, Consumer Protection, Service Quality, and Universal Service policies and programs associated with the alternative rate plans and mergers;
- Consumer Protection and Service Quality policies and programs associated with the regulation of competitive energy and telecommunications providers;
- The regulatory policies associated with the regulation of Credit, Collection, Consumer Protection, Low Income, and Service Quality programs and policies for public utilities;
- Customer Education and Rate design and pricing policies applicable to residential customers; and
- Advanced Metering Infrastructure and Grid Modernization costs and benefits, time-based pricing proposals, and performance standards.

Prior Employment

DIRECTOR

Consumer Assistance Division

1986-96

Maine Public Utilities Commission

Augusta, Maine

One of five division directors appointed by a three-member regulatory commission and part of commission management team. Direct supervision of 10 employees, oversight of public utility consumer complaint function, appearance as an expert witness on customer services, consumer protection, service quality and low income policy issues before the PUC. Chair, NARUC Staff Subcommittee on Consumer Affairs.

SUPERINTENDENT

1979-83

Bureau of Consumer Credit Protection

Department of Professional and Financial Regulation

Augusta, Maine

Director of an independent regulatory agency charged with the implementation of Maine Consumer Credit Code and Truth in Lending Act. Investigations and audits of financial institutions and retail creditors, enforcement activities, testimony before Maine Legislature and U.S. Congress.

Education

JURIS DOCTOR

1973-76

University of Maine School of Law

Portland, Maine

Admitted to the Bar of the State of Maine, September 1976. Currently registered as “inactive.”

B.A. (WITH DISTINCTION) IN POLITICAL SCIENCE

1964-68

University of Michigan

Ann Arbor, Michigan

Boards and Commissions

Councilor, Winthrop (ME) City Council

2020-2022

Member, Board of Trustees, University of Maine System
(Nominated by Governor and Confirmed by Maine Legislature)

May 2022 to present

Publications and Testimony

“How to Construct a Service Quality Index in Performance-Based Ratemaking”, The Electricity Journal, April, 1996

“The Consumer Protection Agenda in the Electric Restructuring Debate”, William A. Spratley & Associates, May, 1996

Direct Testimony on behalf of the Telecommunications Workers Union, Telecom Public Notice 96-8, Price Cap Regulation and Related Issues, Canadian Radio-Television and Telecommunications Commission, September, 1996. [Analysis of and recommendations concerning the need to regulate service quality in move to price cap regulation]

Direct Testimony on behalf of Public Counsel Section, Office of Attorney General, Docket No. UE-960195, Application by Puget Sound Power and Light Co. And Washington Natural Gas Co. For Approval of Merger), Washington Utilities and Transportation Commission, September 1996 [Need for and design of a Service Quality Index for both electric and gas business

units as part of a multi-year rate plan]

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“The Transition to Local Telecommunications Competition: A New Challenge for Consumer Protection”, Public Counsel Section, Washington Attorney General, October 1997. [Reprinted in part in NRRI Quarterly Bulletin, Vol. 19, N0.1, Spring, 1998]

Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate, Restructuring Proceedings before the New Jersey Board of Public Utilities: Public Service Electric and Gas, Jersey Central (GPU), Rockland Electric Co., Atlantic Electric Co., March-April 1998. [Phase-in and customer enrollment, Code of Conduct, consumer protections associated with the provision of Provider of Last Resort service]

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Direct and Reply Testimony on behalf of the Maryland Office of People’s Counsel, Investigation into Certain Unauthorized Practices (Slamming and Cramming), Case. No. 8776, before the Maryland Public Service Commission, 1998 and 1999.

Direct Testimony on behalf of the Maryland Office of People’s Counsel, Universal Service Issues, Case No. 8745, before the Maryland Public Service Commission, November 20, 1998.

“Cramming is the Last Straw: A Proposal to Prevent and Discourage the Use of the Local Telephone Bill to Commit Fraud,” NRRI Quarterly Bulletin, Fall. 1998.

Alexander, Barbara, Retail Electric Competition: A Blueprint for Consumer Protection, U.S. Department of Energy, Office of Energy and Renewable Energy, Washington, D.C., October 1998.

Alexander, Barbara, “Consumer Protection Issues in Electric Restructuring for Colorado: A Report to the Colorado Electricity Advisory Panel,” on behalf of the Colorado Office of Consumer Counsel, February 1999.

Testimony on Proposed Interim Rules (Consumer Protection, Customer Enrollment, Code of Conduct, Supplier Licensing) on behalf of the New Jersey Division of Ratepayer Advocate before the New Jersey BPU, May 1999.

Direct Testimony on behalf of AARP, West Virginia PUC Investigation into Retail Electric Competition (consumer protection, universal service, Code of Conduct), June 15, 1999.

Direct and Surrebuttal Testimony on behalf of the Pennsylvania OCA, Natural Gas Restructuring proceedings (8 natural gas utilities): consumer protection; consumer education; code of conduct, before the Pennsylvania PUC, October 1999-April 2000.

Comments on Draft Rules addressing Slamming and Cramming (Docket No. RMU-99-7) on behalf of the Iowa Office of Consumer Advocate, before the Iowa Utilities Board, October 1999.

Alexander, Barbara, “Door to Door Sales of Competitive Energy Services,” LEAP Letter, January-February 2000 [Wm. A.

Spratley & Associates, Columbus, OH]

Direct Testimony on behalf of the Maine Office of Public Advocate, Central Maine Power Company Alternative Regulation Plan [Docket 99-666] on service quality issues, before the Maine PUC, May 2000.

Direct Testimony on behalf of AARP, Universal Service Programs and Funding of low-income programs for electric and natural gas service, before the New Jersey Board of Public Utilities, Docket No. EX000200091, July 2000.

Comments (on behalf of NASUCA and AARP) on Uniform Business Practices Reports, May and September 2000.

Direct Testimony on behalf of the Pennsylvania OCA, Verizon-Pennsylvania Structural Separation Plan on service quality, customer service and consumer protection issues [Docket No. M-00001353] before the Pennsylvania PUC, October 2000.

Direct and Rebuttal Testimony on behalf of the Maine Office of Public Advocate, Verizon-Maine Alternative Form of Regulation on service quality issues [Docket No. 99-851] before the Maine PUC, January and February 2001.

Direct and Rebuttal Testimony on behalf of the Citizens Utility Board, Nicor Gas Customer Select Pilot Program, on consumer protection and regulation of competitive natural gas suppliers [Docket Nos. 00-0620 and 00-0621] before the Illinois Commerce Commission, December 2000 and February 2001.

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate on consumer protection and service quality issues associated with the pending merger between GPU Energy and FirstEnergy, before the Pennsylvania PUC, Docket Nos. A-110300F0095 and A-110400F.0040 (February and March 2001)

Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate on consumer protection, service quality, and universal service issues associated with the pending merger between GPU Energy and FirstEnergy, before the New Jersey Board of Public Utilities, Docket No. EM00110870 (April 2001).

Alexander, Barbara, "Default Service: What Should be Done When the Experiment Goes Awry?" (April 2001)

Responsive Testimony on behalf of the New Jersey Division of Ratepayer Advocate on service quality issues associated with a Plan for Alternative Regulation by Verizon-New Jersey, before the New Jersey Board of Public Utilities, Docket No. To01020095 (May 2001).

Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate on service quality, consumer protection, and universal service issues associated with the pending merger between Conectiv and Pepco, before the New Jersey Board of Public Utilities, BPU Docket No. EM101050308 (September and November 2001).

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Alexander, Barbara, "Default Service for Retail Electric Competition: Can Residential and Low-Income Customers be Protected When the Experiment Goes Awry?" (April 2002) Available at www.ncat.org/liheap/pubs/barbadeefault3.doc

Comments on behalf of AARP before the California PUC on CARE (low income program) concerning Rapid Deployment, Rulemaking 01-08-027 (2001 and 2002).

Comments on behalf of Citizens Utility Board before the Illinois Commerce Commission on Proposed Rule to Allow the Use of Credit Scoring to Determine When a Deposit May be Required, ICC Docket No. 01-0644, June 24, 2002.

Comments on behalf of Consumer Groups before the Texas PUC on Rulemaking Proceeding to Amend Requirements for Provider of Last Resort Service, Docket No. 25360, June 28, 2002.

Direct Testimony on behalf of the New Jersey Division of Ratepayer Advocate before the Board of Public Utilities on Joint Petition of New Jersey-American Water Co. and Thames Water Aqua Holding for Approval of a Change in Control of New Jersey-American Water Co., Docket No. WM01120833, July 18, 2002.

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Direct Testimony on behalf of New Jersey Division of Ratepayer Advocate before the Board of Public Utilities on Petition of NUI Utilities d/b/a Elizabethtown Gas Co. for Approval of Increased Base Tariff Rates and Charges for Gas Service, Docket No. GR02040245, September 6, 2002.

Alexander, Barbara, An Analysis of Residential Energy Markets in Georgia, Massachusetts, Ohio, New York, and Texas, prepared for the National Energy Affordability and Accessibility Project, National Center for Appropriate Technology, September 2002. Available at www.ncat.org/neaap

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC on Philadelphia Gas Works' Gas Restructuring Filing, Docket No. M-00021612, September 2002 and November 2002.

Direct Testimony on behalf of Consumer Groups before the Texas PUC on Notice and Request of Mutual Energy CPL and Mutual Energy WTU for Approval of Changes in Ownership and Affiliation, Docket No. 25957, October 15, 2002.

Comments on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Advanced Notice of Proposed Rulemaking for Revision of Chapter 54 Pertaining to Electric Generation Supplier Licensing, Docket No. L-00020158, March 5, 2003.

Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate before the New Jersey BPU on Jersey Central Power & Light's base rate case proceeding (service quality and reliability of service), Docket No. ER02080506, ERT02080507, and ER02070417, December 2002 and February 2003.

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Direct, Rebuttal, and Supplemental Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Petition of Duquesne Light Co. for Approval of Plan for Post-Transition Period POLR Services, Docket No. P-00032071 (February-April 2004).

Comments on behalf of AARP before the California PUC, Order Instituting Rulemaking on the Commission's Own Motion to Establish Consumer Rights and Consumer Protection Rules Applicable to All Telecommunications Utilities, R. 00-02-004 (March 2004).

Comments and Reply Comments on behalf of AARP before the Maine PUC, Inquiry into Standard Offer Supply Procurement for Residential and Small Commercial Customers, Docket No. 2004-147 (April 2004).

Comments on behalf of Wisconsin Citizens' Utility Board before the Wisconsin Public Service Commission's Gas Service Standards, Docket No. 1-AC-210 (July 2004).

Comments on behalf of the Colorado Office of Consumer Counsel before the Public Utilities Commission of Colorado, In the Matter of the Proposed Repeal and Reenactment of all Rules Regulating Telephone Utilities and Providers (Docket No. 03R-524T) (September 2004).

Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Investigation of Metropolitan Edison Co., Pennsylvania Electric Co. and Pennsylvania Power Co. Reliability Performance, Docket no. I-00040102, [customer service and reliability performance] (June 2004).

Direct and Surrebuttal Testimony on behalf of the Vermont Department of Public Service before the Vermont Board of Public Utilities, Investigation into Successor Alternative Regulatory Plan for Verizon Vermont, Docket 6959 [Service Quality] (November 2004 and March 2005).

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Direct and Surrebuttal Testimony on behalf of Wisconsin Citizens' Utility Board before the Wisconsin Public Service Commission, Application of Wisconsin Power and Light Co. for Authority to Increase Retail Electric, Natural Gas and Ripon Water Rates, Docket No. 6680-UR-114 [customer service, credit and collection programs and expenses, low income programs, fixed bill program] (April 2005).

Comments on behalf of the Maine Office of Public Advocate before the Maine Public Utilities Commission, Inquiry into Revisions to Chapter 81, Residential Utility Service Standards for Credit and Collection Programs, and Chapter 86, Disconnection and Deposit Regulations for Nonresidential Utility Service, Docket No. 2005-005 (April and May 2005).

Direct and Rebuttal Testimony on behalf of AARP Montana before the Montana Public Service Commission, Northwestern Energy Electric Cost Tracker, Docket No. D2004.6.90 [Default Service cost recovery policies and integration with low income programs] (December 2004 and July 2005).

Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Joint Application of PECO Energy Co. and Public Service Electric and Gas Co. for Approval of the Merger of Public Service Enterprise Group, Inc. with and into Exelon Corporation, Docket No. A-110550F0160 [customer service, reliability of service, low income programs] (June 2005).

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Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, In the Matter of the Petition of the Pennsylvania Power Co. for Approval of an Interim Provider of Last Resort Supply Plan, Docket No. P-00052188 [Default Service policies] (December 2005 and January 2006).

Direct and Rebuttal Testimony on behalf of the Maine Office of Public Advocate before the Maine PUC, Investigation into Verizon Maine's Alternative Form of Regulation, Docket No. 2005-155 [Retail Service Quality] (January and May 2006).

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Direct and Rebuttal Testimony on behalf of the Government and Consumer Parties (CUB, Attorney General of Illinois) before the Illinois Commerce Commission, Petition to Initiate Rulemaking with Notice and Comment for Approval of Certain Amendments to Illinois Administrative Code Part 280, Docket No. 06-0379 (May and September 2006). [Consumer Protection rules]

Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, In Re Application of UGI Utilities, Inc., UGI Utilities Newco, Inc., and Southern Union Co., Docket Nos. A-120011F2000, A-125146, A-125146F5000 (June 2006). [Customer Service, Service Quality, and Universal Services]

Direct and Rebuttal Testimony on behalf of the Maryland Office of People's Counsel before the Maryland PSC, In The Competitive Selection of Electricity Supplier/Standard Offer or Default Service for Investor-Owned Utility Small Commercial Customers and, Delmarva Power and Light and Potomac Electric Power Residential Customers, Case No. 9064 (August and September 2006). [Default Service policies]

Direct and Rebuttal Testimony on behalf of the Maryland Office of People's Counsel before the Maryland PSC, In The Matter of the Optimal Structure of the Electric Industry of Maryland, Case No. 9063 (October and November 2006). [Default service policies]

Comments on behalf of AARP Maine before the Maine PUC on various dockets and notices concerning the implementation of Standard Offer Service for residential customers, Docket Nos. 2006-314, 2006-557, and 2006-411 (July-November 2006). [Default service policies]

Comments on behalf of AARP District of Columbia before the District of Columbia PSC, In the Matter of the Development and Designation of Standard Offer Service in the District of Columbia, Case No. 1017 (2006). [Default service policies]

Comments on behalf of AARP New Jersey before the New Jersey Board of Public Utilities, In the Matter of the Establishment of a Universal Service Fund Pursuant to Section 12 of the Electric Discount and Energy Competition Act of 1999, Docket No. EX00020091 (August 2006) [Recommendations for USF program changes]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Joint Application of Equitable Resources, Inc. and the People's Natural Gas Co., d/b/a Dominion Peoples, for Approval of the Transfer of All Stock Rights of the Latter to the Former and for the Approval of the Transfer of All Stock of Hope Gas, Inc., d/b/a/ Dominion Hope to Equitable Resources, Inc., Docket No. A-122250F5000 (September and October 2006). [Customer Service, Service Quality, and Universal Service issues]

Direct Testimony on behalf of Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Pennsylvania PUC v. Natural Fuel Gas Distribution Corp., Docket No. R-00061493 (September 2006) [Supplier Purchase of Receivables Program]

Direct Testimony on behalf of AARP Montana before the Montana Public Service Commission, Joint Application of NorthWestern Energy and BBI to purchase NorthWestern Energy, Docket No. 2006.6.82 [December 2006] [Conditions for approval of merger; low income and customer service programs]

Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania PUC, Petition by PPL Electric Utilities Corp. for Approval of a Competitive Bridge Plan, Docket No. P-00062227 (December 2006) [Default Service policies]

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Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy Co. for Approval of its Default Service Plan for the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2409362 (June 2014) [retail market enhancement programs, referral program]

Alexander, Barbara, "An Analysis of State Renewable Energy and Distributed Generation Mandates on Low Income Consumers: Recommendations for Reform" (Oak Ridge National Laboratory, DOE, September 2014)

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania PUC v. West Penn Power, Metropolitan Edison, Penn Power, and Penelec, Dockets Nos. R-2014-2428742-24287245 (November 2014 and January 2015) [FirstEnergy rate cases: customer service; reliability of service; estimated billing protocols; proposed Storm Damage Expense Rider; tariff revisions]

Comments on behalf of Delaware Division of the Public Advocate before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (January 2015) [consumer protection regulations for retail electric competition]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of Major Energy Electric Services, LLC and Major Energy Services, LLC, Case No. 9346(b) (March 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of XOOM Energy Maryland LLC, Case No. 9346(a) (March 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Direct, Surrebuttal and Supplemental Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Respond Power, Docket No. C-2014-2427659 (May-October 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. IDT Energy, Inc., Docket No. C-2014-2427657 (April 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Affidavit of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (June 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (September 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Reply Testimony of Barbara Alexander before the Public Service Commission of Maryland, In the Matter of the Investigation into the Marketing, Advertising and Trade Practices of Blue Pilot Energy, Case No. 9346(c) (July 31, 2015) [unfair and deceptive practices; compliance with MD statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of Public Counsel and the Energy Project, WUTC v. Avista Utilities, Dockets UE-150204 and UG-150205, (July 2015) [Analysis of request for smart meter (AMI) deployment and business case.]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. [FirstEnergy] for Approval of their Default Service Program and Procurement Plan for the Period June 1, 2017 through May 31, 2019, Docket Nos. P-2015-2511333, et. al. (January-February 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Alexander, Barbara and Briesemeister, Janee, Solar Power on the Roof and in the Neighborhood: Recommendations for Consumer Protection Policies (March 2016).

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PPL Electric Utilities Corp. for Approval of a Default Service

Program and Procurement Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2015-2526627 (April-May 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PECO Energy Co. for Approval of its Default Service Program for the Period from June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980 (June-July 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of Duquesne Light Co. for Approval of Default Service Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140 (July-August 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Briesemeister, Janee and Alexander, Barbara, Residential Consumers and the Electric Utility of the Future, American Public Power Association (June 2016)

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission on behalf of the Public Counsel and The Energy Project, Washington UTC v. Avista Corp. d/b/a Avista Utilities, Dockets UE-160228 and UG-160229 (August 2016) [Base Rate Case and AMI Project analysis of costs and benefits]

Alexander, Barbara, *Analysis of Public Service Co. of Colorado's "Our Energy Future" Initiative: Consumer Concerns and Recommendations*, AARP White Paper (December 2016), attached to the Direct Testimony of Corey Skluzak on behalf of the Colorado Office of Consumer Counsel, Docket No. 16A-0588E (Exhibit CWS-35).

Direct Testimony of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (May 2017) [Response to proposal for new surcharge for certain distribution grid investments]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Root-Cause Analysis Report: District of Columbia Customer Satisfaction, prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (May 2017)

Direct Testimony of Barbara Alexander before the Arkansas Public Service Commission on behalf of the Attorney General of Arkansas, Application of Entergy Arkansas, Inc. for an Order to find Advanced Metering Infrastructure to be in the Public Interest, Docket No. 16-06-U (June 2017) [Analysis of AMI business case; consumer protection policies]

Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utilities Commission on behalf of the Office of Consumer Advocate, Pennsylvania PUC, et al., v. Philadelphia Gas Works, Docket No. R-2017-2586783 (June 2017) [Purchase of Receivables Program, customer shopping issues]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of People's Counsel, In the Matter of the Application of Potomac Electric Power Co. for Adjustments to its Retail Rates for the Distribution of Electric Energy, Case No. 9443 (June and August 2017) [Service Quality and Reliability of Service]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of the Washington State Office of Attorney General, Public Counsel Unit, W.U.T.C. v. Puget Sound Energy, Dockets UE-170033 and UG_170034 (June 2017) [Base Rate Case: Service Quality Index; customer services]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of Peoples Counsel, In the Matter of the Merger of AltaGas Ltd. And WGL Holdings, Inc., Case No. 9449 (August and September 2017) [Merger: conditions for service quality and reliability of service]

Supplemental Testimony in Opposition to Joint Stipulation and Recommendations of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (October 11, 2017) [Response to Stipulation approving new surcharge for certain distribution grid investments]

Direct and Rebuttal Testimony of Barbara Alexander on behalf of The Public Utility Project of New York, before the New York Public Service Commission, Case 15-M-0127 In the Matter of Eligibility Criteria for Energy Service Companies, Case 12-M-0476 Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State, and Case 98-M-1343 In the Matter of Retail Access Business Rules (November and December 2017) [Analysis of New York retail energy market for residential customers; recommendations for reform]

Comments of Barbara Alexander before the Delaware Public Service Commission, on behalf of the Delaware Division of the Public Advocate, In the Matter of the Review of Customer Choice in the State of Delaware, Docket No. 15-1693 (December 22, 2017) [Proposals for retail market enhancement programs]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Supplemental Root-Cause Analysis Report: District of Columbia Customer Satisfaction prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (January 2018)

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Utility Commission, Joint Petition of Metropolitan Edison Company Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company For Approval of their Default Service Program and Procurement Plan for the Period June 1, 2019 Through May 31, 2023, Docket Nos. P-2017-2637855, et seq. (February, March, and April 2018) [Retail Market Enhancement Programs in a default service proceeding]

Direct Testimony of Barbara Alexander on behalf of the Arizona Corporation Commission Staff, before the Arizona Corporation Commission, In the Matter of the Application of Brooke Water, LCC for increase in water rates, Docket No. W-03039A-17-0295 (May 15, 2018) [Analysis of customer service, call center performance, and compliance with prior Commission orders]

Alexander, Barbara, "Residential Demand Charges: A Consumer Perspective," EUCI Conference, Nashville, TN (May 2018)

Direct Testimony of Barbara Alexander in Opposition to the Joint Stipulation and Recommendation on behalf of the Office of the Ohio Consumers' Counsel, before the Public Utility Commission of Ohio, Case No. 17-0032-EL-AIR et seq. (June 15, 2018) [Analysis of the prudence of Duke Energy Ohio's Advanced Metering Infrastructure Deployment and request for inclusion of costs in rate base]

Alexander, Barbara, "Time to End the Retail Energy Market Experiment for Residential Customers," Harvard Electricity Policy Group (June 2018)

Rebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Public Utility Commission, PUC v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577 (July 3, 2018) [Analysis of gas utility billing policies for non-commodity services and retail natural gas suppliers]

Direct Testimony of Barbara Alexander on behalf of TURN and Center for Accessible Technology before the California Public Utility Commission, 2018 Rate Design Window, Docket No. A.17-12-011, et al. (October 26, 2018) [Consumer Protections to Accompany the Transition to Default Time of Use Rates for residential customers; analysis of customer education and messaging]

Direct and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Utility Commission, PUC vs. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645, R-2018-3002647 (September and October 2018) [Analysis of compliance with Pennsylvania consumer protection and service quality performance of a large water and sewer utility; base rate case]

Direct Testimony of Barbara Alexander on behalf of TURN before the California Public Utility Commission, Southern California Edison Charge Ready 2 Infrastructure and Market Education Programs, Docket No. A.18-06-015 (November 30, 2018) [Analysis of proposed mass market customer education proposal]

Direct, Surrebuttal and Supplemental Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Implementation of Chapter 32 of The Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Docket Nos. M-2018-2640802 and M-2018-2640803 (April, May and August 2019) [Analysis of consumer protection, customer service, and customer education programs of large water and wastewater utility]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company, LLC and Peoples Gas Company, LLC for all of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company, LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC's Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063 (April and May 2019) [Customer Service, Consumer Protection, and Universal Service conditions for merger]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of PALMco Power OH, LLC dba Indra Energy and PALMco Energy OH, LLC dba Indra Energy, Case No. 19-957-GE-COI (September 4, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers' Council, before the Ohio Public Utilities Commission, In the Matter of the Commission's Investigation of Verde Energy USA Ohio LLC, Case No. 19-0958-GE-COI (October 2, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Direct Testimony and Supplemental Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of Their Involuntary Remote Disconnect Procedures, Docket No. P-2019-3013979 et al. (March 20, 2020 and July 15, 2022) [Criteria for remote disconnection of service with AMI]

Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Interstate Gas Supply, Inc., Direct Energy Services LLC and Shipley Choice LLC v. Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., West Penn Power Co., Docket Nos. C-2019-30138-5 et al. (May 2020) [Complaint by retail suppliers seeking to bill non-basic services on utility bill]

Alexander, Barbara, "An Evaluation of Arizona Public Service Company's Customer Education Plan and its Implementation," prepared on behalf of the Staff of the Arizona Corporation Commission, Docket Nos. E-01345A-19-0236 and E-01345A-19-0003 (May 15, 2020)

Direct and Supplemental Testimony, Rebuttal Testimony, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356 (June-August 2020) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290 (June-July 2020),) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Co. for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019522 (July-September 2020), [Standard Offer Program and low income shopping program for retail market programs]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 (water), C-2020-3019348, R-2020-3017970 (wastewater), C-2020-3019349 (July-September 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Affidavit of Barbara R. Alexander, Analysis of Washington Gas Light Co. Root Cause Analysis Report, on behalf of the Office of the People's Counsel of the District of Columbia, submitted to the Public Service Commission in Formal Case No. 1142 (October 2020).

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pennsylvania American Water Co, Docket R-2020-3019369, et al., (September-October 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773, et al. (July-September 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc, Docket Nos. R-2021-3027385 et al. (November-December 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of their Default Service Programs, Docket Nos. P-2021-3030012 et al. (February, March, and April 2022) [Standard Offer program; retail market policies; Time of Use rate option; low income consumer protections]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania American Water Co., Docket Nos. R-2022-3031672, et al (July and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, York Water Company base rate increase, Docket Nos. R-2022-3031340, R-2022-3032806 (August and September 2022) [Base rate case: analysis of customer service and consumer protection performance]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Columbia Gas of Pennsylvania Proposal for Green Path Tariff, Docket Nos. R-2022-3032167 and C-2022-3032404 (December 2022 and January and February 2023) [Proposal to offer an optional "green" product to residential customers with Renewable Natural Gas and Carbon Offsets]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Central Maine Power Company Request for Distribution Rate Increase and Rate Design Changes, Docket No. 2022-00152 (December 2022, March and April 2023) [Rate impacts; multi-year rate plan; rate design]

Direct and Surrebuttal Testimony on behalf of AARP Maine before the Maine Public Utilities Commission, Versant Power Request for Approval of Rate Change, Docket No. 2022-00255 (January and April 2023) [Rate impacts, AMI costs and benefits]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Manwalamink Water and Sewer and NextEra Water Pennsylvania, Docket Nos. A-2022-3035298, et al. (January and March 2023) [consumer protection; service quality; acquisition of small water and sewer utility]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, National Fuel Gas Distribution Corp. Base Rate Case, Docket No. R-2022-3035730 (January and March 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Philadelphia Gas Works Base Rate Case, Docket No. R-2023-3037933 (May and July 2023) [analysis of consumer protection and service quality performance in base rate case]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, FirstEnergy Pennsylvania Electric Distribution Companies Application for Merger, Docket No. A-2023-3038771 et.al (June and August 2023) [analysis of implication of proposed merger for customer service performance and low income programs]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pittsburgh Water and Sewer Authority Base Rate Case, Docket No. R-2023-3039920, et al., (August and September 2023) [customer service performance; compliance with statutory and regulatory rules; multi-year rate plan conditions]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Application of Pennsylvania-American Water Co. to Acquire Wastewater Assets of Borough of Brentwood, Docket No. A-2021-3024058 (October and November 2023) [analysis of public benefits of acquisition]

Direct, Supplemental Direct, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pennsylvania PUC v. Pennsylvania American Water Co., Docket Nos. R-2023-3043189 and R-2023-3043190 (February and March 2024) [customer service performance, compliance with statutory and regulatory rules; billing for non-basic services; tariffs]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pennsylvania PUC v. Peoples Natural Gas Company LLC, Docket No. R-2023-3044549 (March and May 2024) [customer service performance, compliance with statutory and regulatory rules; billing for non-basic services; tariffs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Petition of PECO Energy for Default Service Program for June 1, 2025 through May 31, 2029, Docket No. P-2024-3046008 (April and May 2024) [Retail Market Enhancement Programs; Standard Offer Program; TOU Rate; Billing Disclosures]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Petition of PPL Electric for Default Service Program for June 1, 2025 through

May 31, 2029, Docket No. P-2024-3047290 (June and July 2024) [Retail Market Enhancement Programs; Standard Offer Program; TOU Rate; Billing Disclosures]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Petition of Duquesne Light Co. for Default Service Program for June 1, 2025 through May 31, 2029, Docket No. P-2024-3048592 (July and August 2024) [Retail Market Enhancement Programs; Standard Offer Program; TOU Rate; Billing Disclosures]

Direct, Rebuttal and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pennsylvania PUC v. FirstEnergy Pennsylvania, Docket No. R-2024-3047068 (June, July, and August 2024) [customer service performance, compliance with statutory and regulatory rules; billing for non-basic services; tariffs; EV rate pilots; management performance; payment processing fees; root cause analysis]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pennsylvania PUC v. Aqua Pennsylvania, Docket Nos. R-2024-3047822 (Water) and R-2024-3047824 (Wastewater) (August and September 2024) [customer service performance, compliance with statutory and regulatory rules; payment processing fees; tariffs; management performance; root cause analysis]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania PUC v. UGI Utilities, Inc.—Gas Division, Docket No. 2024-R-3052716 (April-May 2025) [customer service performance, compliance with statutory and regulatory rules, management performance, root cause analysis, billing for supplier charges]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utilities Commission, Pennsylvania PUC v. Philadelphia Gas Works, Docket No. 2025-R-3053112 (May-July 2025) [customer service performance, compliance with statutory and regulatory rules, management performance, root cause analysis, billing for supplier charges]

Presentations and Training Programs:

- Presentation on Consumer Protection Policies for Solar Providers, New Mexico Public Regulatory Commission, Santa Fe, NM, January 2017
- Presentation on Residential Rate Design Policies, National Energy Affordability and Energy Conference, Denver, CO., June 2016
- Presentation on “Regulatory-Market Arbitrage: From Rate Base to Market and Back Again,” before the Harvard Electricity Policy Group, Washington, D.C., March 2016.
- Presentation on Residential Rate Design and Demand Charges, NASUCA, November 2015.
- Alexander, Barbara, “Residential Demand Charges: A Consumer Perspective,” presentation for Harvard Electricity Policy Group, Washington, D.C., June 2015.
- Presentation on “Future Utility Models: A Consumer Perspective,” for Kleinman Center for Energy Policy, U. of Pennsylvania, August 2015.
- Presentation, EUCI Workshop on Demand Rates for Residential Customers, Denver, CO [May 2015]
- Presentation, Smart Grid Future, Brookings Institute, Washington, DC [July 2010]
- Participant, Fair Pricing Conference, Rutgers Business School, New Jersey [April 2010]
- Presentation on Smart Metering, National Regulatory Conference, Williamsburg, VA [May 2010]
- Presentation on Smart Metering, Energy Bar Association Annual Meeting, Washington, DC [November 2009]
- Presentation at Workshop on Smart Grid policies, California PUC [July 2009]
- National Energy Affordability and Energy Conference (NEAUC) Annual Conference
- NARUC annual and regional meetings
- NASUCA annual and regional meetings
- National Community Action Foundation’s Annual Energy and Community Economic Development Partnerships Conference
- Testimony and Presentations to State Legislatures: Virginia, New Jersey, Texas, Kentucky, Illinois, and Maine
- Training Programs for State Regulatory Commissions: Pennsylvania, Georgia, Kentucky, Illinois, New Jersey
- DOE-NARUC National Electricity Forum
- AIC Conference on Reliability of Electric Service
- Institute of Public Utilities, MSU (Camp NARUC) [Instructor 1996-2006]
- Training Programs on customer service and service quality regulation for international regulators (India and Brazil) on behalf of Regulatory Assistance Project
- Georgia Natural Gas Deregulation Task Force [December 2001]
- Mid Atlantic Assoc. of Regulatory Utility Commissioners [July 2003]
- Illinois Commerce Commission’s Post 2006 Initiative [April 2004]
- Delaware Public Service Commission’s Workshop on Standard Offer Service [August 2004]

Exhibit BA-2

Pittsburgh Water's Response to OCA-II-1 (a)

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set II
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Request: OCA-II-1 Provide the following monthly and annual average information in an Excel spreadsheet with any formulas intact for the calendar years 2023 through the most recent month for which data is available in 2025:

NOTE: Where available, distinguish customer class for results requested.

- a. Call Center Performance: calls received; calls answered by a customer service representative; percentage of calls answered within 30 seconds by a customer service representative; average speed of answer for call answered by a customer service representative, busy out rate; abandonment rate.
- b. Customer disputes: number received, and number answered; number of disputes answered in more than 30 days.
- c. Billing: estimated bills; percentage of meters not read within 6 months and within 12 months; number and percentage of bills not rendered on time.
- d. Outages: number of outages and customers affected not caused by scheduled maintenance.
- e. Appointments for repair and installation of service: provide the monthly performance data showing the appointments scheduled, kept, and not made (missed).
- f. Installation of service: number of new service installations (with or without additional PWSA facilities) and average days to install.
- g. Customer Satisfaction: survey instruments, methodology, and monthly and annual survey results.
- h. Emergency response performance results for each area measured by PWSA.

Response: Please see **Attachment OCA-2-1** Call Center, Customer Disputes, Billing, and Outages Information 2023-June 2025 (excel). Additionally:

- With regard to letter “a”, the percentage of calls answered within 30 seconds by a specific customer service representative is not something that Pittsburgh Water has tracked. The provided data is representative of multiple queues within Customer Service, each with their own fluctuations in staffing.
- With regard to the request in letter “f”, a customer who would like to tap-in to Pittsburgh Water’s water/sewer system is assisted by the Permits section of Customer Service. Once issued, permits for water and sewer line taps are valid for up to five years. Instructions are provided to the customer to contact Pittsburgh Water Field Operations when they are ready for the tap and/or meter installation and the work can be scheduled within 48 hours of the customer’s request. .
- With regard to the request in letter “g”, please refer to the narrative portion within the PA PUC Quarterly Reports as filed by Pittsburgh Water with the Commission.

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set II
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

- With regard to the request in letter “h”, Pittsburgh Water requests a detailed description of “emergency response performance results” to facilitate our understanding and ability to respond.

Response provided by: Julie A. Mechling, Director of Customer Service

Date Response provided: July 16, 2025

Exhibit BA-3

Pittsburgh Water's Response to OCA-XXI-11

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set XXI
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Request: OCA-XXI-11 Please provide the Pittsburgh Water updated review of the results of the implementation of the recommendations in the root cause analysis attached as JAM-11 and as identified in response to OCA-2-22. In your response, identify each recommendation, actions taken in response, tatus of implementation, and results (monitoring of impact of recommendation).

Response:

Updated Root Cause Analysis Recommendation	Actions Taken in Response	Implementation Status	Expected Impact of Recommendation
Retrain Customer Service Representatives on high consumption and meter testing and establish an annual training schedule.	All Customer Service Representatives completed high consumption retraining via the learning management system.	All representatives were retrained as of July 2025.	Allows representatives to review common questions and inquiries related to high consumption and the meter testing process.
Add meter testing bench tours and training to all new hire schedules.	New hire training schedules were altered to include an in-person tour and training of the meter testing bench and procedures.	Completed as of the 3 rd quarter of 2024.	Allows newly hired representatives to see the meter testing process in a hands-on approach.
Enhance data tracking for dispute to complaint conversion rates.	Excel spreadsheets were updated to include the addition of unique clarification case identifiers to analyze dispute-to-complaint conversation rates.	Completed as of the 1 st quarter of 2025.	This will allow for better data tracking and analysis.
Update payment arrangement training SOPs for Customer Service Representatives.	Representatives received retraining related to payment arrangement requests. These trainings were done during team meetings in preparation of the 2025 Winter Moratorium ending.	Team trainings were completed, but SOP development is still in progress to expand on the situations that may impact payment arrangement requests.	Decrease the number of payment arrangement requests filed with the PUC in error.

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set XXI
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Develop specific training to identify and properly handle disputes and complaints.	Pittsburgh Water developed the SOP specific to dispute investigations as the first stage of the quality assurance implementation.	In progress and will require multiple SOPs to be developed to properly document identifying and handling all types of customer disputes.	Increase efficiency of investigation process and decrease the amount of time it takes to respond to customer complaints.
Enhance data tracking for complaint types.	Excel spreadsheets were updated to include the addition of complaint type classifications.	Completed as of the 1 st quarter of 2025.	This will allow for better data tracking and analysis.
Update non-registering water meter account listing.	Pittsburgh Water’s Billing department provided updated data listings of properties receiving at least 6 consecutive months of zero consumption meter readings. These updated accounts were added to the Compliance listing to identify potential non-registering water meters.	Completed as of the 2nd quarter of 2025.	This decreases the length of time that accounts with non-registering water meters are in service and allows for Pittsburgh Water to better minimize potential back-billing.
Initiate Utility Report quality assurance reviews.	Pittsburgh Water developed the SOP specific to dispute investigations as the first stage of the quality assurance implementation.	In progress.	Increase efficiency of the investigation process and decrease the amount of time it takes to respond to customer complaints.

Response provided by: Julie A. Mechling, Director of Customer Service

Date Response Provided: August 28, 2025

Exhibit BA-4

Pittsburgh Water's Response to OCA-II-3

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set II
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Request: OCA-II-3 Identify all the customer self-service (done without interaction with the Authority employee or representative) options available to residential customers and the charges or fees associated with each self-service, including payment options. In your response, please identify the technological vehicles associated with each such option (e.g., IVR, web portal, text).

Response:

Self-Service Option	Technology	Fee
View and Print Monthly Bills	Customer Advantage Portal	\$0.00
Set Bill and Payment Alerts	Customer Advantage Portal (email and text message)	\$0.00
Pay Monthly Bills	IVR, Customer Advantage Portal, Pittsburgh Water Website, Pay By Link (email and text message)	\$0.00 for Residential Customers; Transactional fees for Credit/Debit Card Payments by Non-Residential Customers
View Daily Water Usage	Customer Advantage Portal	\$0.00
Set Usage Alerts (4 types)	Customer Advantage Portal (email and text message)	\$0.00
Application for Refund	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Common Application for Assistance Programs	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Claim for Damages	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Data Protection Release	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Final Bill Application	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Request a Lead Test Kit	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Request a Non-Emergency Issue	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Self-Report Meter Reading	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Transfer Service	Customer Advantage Portal, Pittsburgh Water Website	\$0.00

**Response of the Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
to the Interrogatories of the Office of Consumer Advocate (“OCA”), Set II
Docket Nos. R-2025-3055010 (Water), R-2025-3055011 (Wastewater)
R-2025-3055012 (Storm Water)**

Update Contact Information	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Water Meter Sizing	Customer Advantage Portal, Pittsburgh Water Website	\$0.00
Application for Service – Tenants	Pittsburgh Water Website	\$0.00
Residential Water Shut-Off Request	Pittsburgh Water Website	\$0.00
Residential Owner Water Shut-off Request	Pittsburgh Water Website	\$0.00
Restoration of Water Service Waiver	Pittsburgh Water Website	\$0.00
Affidavit of Vacancy	Pittsburgh Water Website	\$0.00
Zipcheck Authorization	Pittsburgh Water Website	\$0.00
Line Repair and Conservation Pilot Application	Pittsburgh Water Website (Webform and pdf)	\$0.00
Hardship Grant Application	Dollar Energy Fund	\$0.00
Rain Barrell Credit Program	Pittsburgh Water Website	\$0.00
Dye Testing Results	Pittsburgh Water Website	\$0.00
Evidence of Compliance Application	City Grows https://go.citygrows.com/pittsburghwater/dye-test-certification	\$0.00
Water for Community Gardens	Pittsburgh Water Website	\$0.00
Backflow Test Submission	Pittsburgh Water Website	\$0.00
Stormwater Fee Application	Pittsburgh Water Website	\$0.00
Right-to-Know Requests	Pittsburgh Water Website	\$0.00
Website Feedback Form	Pittsburgh Water Website	\$0.00
Request to Speak at Board Meeting	Pittsburgh Water Website	\$0.00

Response provided by: Julie A. Mechling, Director of Customer Service

Date Response provided: July 16, 2025

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Direct Testimony, OCA Statement No. 7, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 5, 2025

Signature: /s/ Barbara R. Alexander
Barbara R. Alexander

Address: Barbara Alexander Consulting LLC
44 Beech Street
Hallowell, ME 04347

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2025-3055010 (WATER)
v.	:	R-2025-3055011 (WASTEWATER)
	:	R-2025-3055012 (STORMWATER)
The Pittsburgh Water and Sewer	:	
Authority d/b/a Pittsburgh Water	:	

REBUTTAL TESTIMONY

OF

Michael Deupree

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: September 30, 2025

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Michael W. Deupree. My business address is 5800 One Perkins Place
4 Drive, Suite 5-F, Baton Rouge, Louisiana, 70808.

5 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

6 A. Yes. I filed direct testimony in this proceeding on September 5, 2025, on behalf of
7 the Pennsylvania Office of Consumer Advocate (“OCA”).

8 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

9 A. The purpose of my testimony is to clarify my understanding of the requirements
10 under Section 3202(b) regarding the need for a water utility to request a waiver to increase
11 the DSIC from 5 percent to 7.5 percent and to respond to elements of the direct testimony
12 of Joseph Kubas on behalf of the Office of Small Business Advocate (“OSBA”).
13 Specifically, I will respond to OSBA’s recommendation regarding The Pittsburgh Water
14 and Sewer Authority d/b/a Pittsburgh Water’s (“Pittsburgh Water,” or “Authority”)
15 proposed increase in the Distribution System Improvement Charge (“DSIC”) cap and its
16 interaction with the Pennsylvania Infrastructure Investment Authority (“PennVEST”)
17 surcharge.

18 **II. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE**

19 **Q. PLEASE DESCRIBE THE DSIC.**

20 A. As explained in my direct testimony, the DSIC was established by the General
21 Assembly in a 2012 omnibus amendment to allow for timely recovery of costs between
22 rate cases to fund the repair, improvement, or replacement of eligible property included

1 in long-term infrastructure improvement plans.¹ Generally, the DSIC is limited by statute
2 to five percent of a customer's bill, and can only be increased to 7.5 percent, by the
3 Commission if the increase is needed "in order to ensure and maintain adequate, efficient,
4 safe, reliable and reasonable service."²

5 **Q. HAS YOUR UNDERSTANDING OF THE DSIC CHANGED SINCE THE FILING**
6 **OF YOUR DIRECT TESTIMONY?**

7 A. Yes, slightly. Subsequent to the filing of my direct testimony I have been informed
8 by Counsel that changes in statutes after the passage of Act No. 2012-11 eliminated the
9 need for Pittsburgh Water to seek a waiver as outlined in 66 Pa. C.S. § 3202(b) for its
10 water operations. This error does not, however, change my overall conclusion that the
11 requested increase in the DSIC cap from the current five percent to 7.5 percent for either
12 the Authority's water or wastewater operations is needed as the Authority has failed to
13 provide evidence that the current five percent DSIC cap has impacted the Authority
14 financially, or that it would be unable to finance projected future capital investments under
15 the existing five percent DSIC cap.

16 **Q. WHAT IS OSBA'S POSITION ON THE PROPOSED INCREASE IN DSIC CAP**
17 **FROM 5.0 PERCENT TO THE PROPOSED 7.5 PERCENT?**

18 A. OSBA does not object to the requested increase in the DSIC surcharge cap from
19 5.0 percent to 7.5 percent but opposes the application of the DSIC surcharge to the
20 PennVEST surcharge.³ OSBA argues that it is improper to apply a surcharge to a

¹ Direct Testimony of Michael W. Deupree at 28:4-9.

² 66 Pa. C. S. § 1358(a)(1).

³ Direct Testimony of Joseph Kubas at 15:23 to 16:4.

1 surcharge, meaning that the PennVEST surcharge should only recover the debt service
2 of PennVEST loans with the DSIC only applying to base rates.⁴

3 **Q. WHAT IS PENNVEST AND HOW IS IT SEPARATE FROM DSIC?**

4 A. PennVEST is a Pennsylvania agency that provides low interest loans to
5 communities to make capital investments in improvements associated with water,
6 wastewater, stormwater, and other related services.⁵ Funding associated with PennVEST
7 loans are thus separate from the Authority's other issued loans, with the PennVEST
8 surcharge designed to recover the cost of servicing PennVEST loans.⁶ This is distinct
9 from the DSIC, which is a statutory mechanism that allows for timely recovery of costs
10 between rate cases to fund the repair, improvement, or replacement of eligible property
11 included in the Authority's long-term infrastructure improvement plans.

12 **Q. WHAT IS YOUR RECOMMENDATION REGARDING OSBA'S PROPOSAL**
13 **REGARDING THE PROPOSED INCREASE IN DSIC CAP?**

14 A. I continue to recommend the Commission reject the proposed increase in the DSIC
15 surcharge cap for all of the reasons discussed in my direct testimony. However, I do
16 believe that OSBA's recommendation that the PennVEST surcharge be excluded from
17 the calculation of the DSIC is appropriate. The PennVEST surcharge is designed to
18 recover costs associated with the servicing of low interest PennVEST loans, while the
19 DSIC is designed to allow for the timely recovery of costs associated with the financing
20 of capital investments that are otherwise recovered through the Authority's base rates in
21 the context of a rate case. Clearly separating the PennVEST surcharge, and all potential

⁴ *Id.* at 16:8-15.

⁵ *Id.* at 11:16-19.

⁶ *Id.* at 11:19-20.

1 future surcharges, from calculation of the DSIC will improve transparency by preventing
2 the stacking of surcharges on customer's bills.

3 **III. CONCLUSIONS AND RECOMMENDATIONS**

4 **Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

5 A. Having reviewed the direct testimony filed by the other non-company parties in this
6 proceeding, I continue to recommend the Commission reject the Authority's proposal to
7 increase the DSIC cap from five percent to 7.5 percent. The Authority has not shown that
8 the current DSIC cap has impacted the Authority financially, or that it will be unable to
9 finance projected future capital investments under the existing five percent DSIC cap. I
10 furthermore recommend that the Commission direct the Authority to remove the current
11 provision within its DSIC tariff that allows for surcharges to be included in DSIC
12 calculations.

13 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

14 A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Michael Deupree, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement No. 1R, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 30, 2025

Signature: /s/ Michael Deupree
Michael Deupree

Address: Acadian Consulting Group
5800 One Perkins Place Drive
Suite 5-F
Baton Rouge, LA 70808

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
	:	Docket No. R-2025-3055010
v.	:	Docket No. R-2025-3055011
	:	Docket No. R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
	:	

Rebuttal Testimony of
Roger D. Colton

On Behalf of:
Office of Consumer Advocate
Statement 6R

September 30, 2025

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is Roger Colton. My address is 34 Warwick Road, Belmont, MA.

3 **Q. ARE YOU THE SAME ROGER COLTON WHO PREVIOUSLY PREPARED**
4 **DIRECT TESTIMONY FOR SUBMITTAL BY THE OFFICE OF CONSUMER**
5 **ADVOCATE IN THIS PROCEEDING?**

6 A. Yes, I am.

7 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR REBUTTAL TESTIMONY.**

8 A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony of Joseph
9 Kubas regarding the allocation of the costs of Pittsburgh Water and Sewer Authority's
10 (Pittsburgh Water) Customer Assistance Program ("CAP"). The Pittsburgh Water CAP
11 expenditures to which Mr. Kubas objects includes the Bill Discount Program (BDP),
12 Hardship Grant expenditures, Leak Credit expenses, the Arrearage Forgiveness Program,
13 and a program directed toward service line repairs.¹ I will refer to these programs
14 collective as Pittsburgh Water's CAP. I conclude that the recommendation of Mr. Kubas
15 that CAP costs should be allocated exclusively to the residential class should be rejected.

16 **Part 1. The Commission-Articulated Factors.**

17 **Q. DOES MR. KUBAS ACCURATELY REPRESENT THE COMMISSION'S**
18 **CURRENT POLICY REGARDING THE ALLOCATION OF LOW-INCOME**
19 **PROGRAM COSTS?**

¹ OSBA Statement 1, at 17 – 18.

1 A. No. Mr. Kubas asserts, as his complete justification for changing the Commission’s long-
 2 standing policy that allocates Pittsburgh Water’s CAP-related costs to all customers, that
 3 “these customer assistance program exists (sic) solely for the benefit of the residential
 4 class and therefore should be recovered solely by residential customers, excluding
 5 stormwater customers.”² He does not acknowledge that Pittsburgh Water has traditionally
 6 allocated the costs of its CAP programs to all customer classes. In this proceeding, it is
 7 Mr. Kubas who is proposing the change from past practices relating to the allocation of
 8 CAP costs. I recommend that, instead, the Commission should continue the allocation of
 9 CAP costs amongst all customer classes.

10 **Q. ARE THERE PARTICULAR CONSIDERATIONS IN ADDRESSING THE**
 11 **UNIQUE STATUS OF A MUNICIPAL UTILITY?**

12 A. Yes. Mr. Kubas’s testimony does not acknowledge that the Commission’s past policy on
 13 the allocation of universal costs only to the residential class allowed for an exception
 14 from that policy for Philadelphia Gas Works (PGW). As with PGW, as a municipal
 15 utility, it would be particularly inequitable to change this allocation so that universal
 16 service charges are allocated only to the residential class. To allocate all universal service
 17 costs to the residential class would operate to remake the bargain that the City has made
 18 with its water and wastewater customers. The offer of programs in support of universal
 19 service for all customers is a *quid pro quo* that was exacted in exchange for substantial –
 20 and continuing—public perquisites provided to the utility. So long as all customer classes

² OSBA St. 1 at 19.

1 enjoy the fruits of that exchange, they should also contribute to paying for the obligations
2 that were bargained for as part of that exchange.

3 The public perquisites that have been provided to Pittsburgh Water have a substantial
4 value. If Pittsburgh Water could not use the streets and public ways as a transportation
5 corridor for its lines, the increased costs associated with acquiring its system would be
6 borne by all ratepayers. Providing Pittsburgh Water customers these public perquisites,
7 therefore, conveys substantial financial benefits to all customers. Having received the
8 financial benefits, all Pittsburgh Water customers should thus pay the financial
9 compensation to the public for having provided those benefits in the first place. To allow
10 otherwise would be to grant the benefit while forgiving the costs.

11 **Q. DOES MR. KUBAS ADDRESS THE COMMISSION’S DECISION REGARDING**
12 **THE ALLOCATION OF UNIVERSAL SERVICE COSTS FOR GAS AND**
13 **ELECTRIC UTILITIES?**

14 A. No. In its September 19, 2019 Final Policy Statement and Order in the PUC’s generic
15 investigation into energy affordability in Pennsylvania,³ the Commission explicitly
16 acknowledged that, historically, it allocated universal service costs for gas and electric
17 utilities exclusively to residential customers, but explained why that decision is not
18 universally applied.

³ (Docket M-2019-3012599), http://www.puc.pa.gov/about_puc/consolidated_case_view.aspx?Docket=M-2019-3012599 (November 5, 2019).

1 The Commission noted in its September 19, 2019 Order that “In its 1992 *Final Report on*
 2 *The Investigation of Uncollectible Balances*⁴ at Docket No. I-00900002, BCS also opined
 3 that the origins and impacts of the unaffordability of utility bills are not limited to
 4 residential ratepayers:

5 [T]he problem of the inability of some low income [*sic*] customers to pay
 6 their entire home energy bills is caused primarily by societal economic
 7 conditions that are unrelated to any one rate class. Until such time as
 8 sufficient public revenues are available to address the poverty/energy
 9 problem, the costs for [CAPs] should be viewed as a cost of operating as a
 10 public utility for which all ratepayers must share the cost. [BCS] does not
 11 find any logic to the argument that because the larger societal economic
 12 conditions are negatively affecting the ability of some [low-income]
 13 residential customers to pay their bills, that the problem is somehow caused
 14 by the residential class and should therefore be paid for by that class.

15
 16 *Final Report on The Investigation of Uncollectible Balances* at 157–158.”

17 The Commission also noted in its September 19, 2019 Order that it:

18 agrees that poverty, poor housing stock, and other factors that contribute to
 19 households struggling to afford utility service are not just “residential class”
 20 problems. Further, helping low-income families maintain utility service and
 21 remain in their homes is also a benefit to the economic climate of a
 22 community. In approving PGW’s practice of recovering such costs across all
 23 ratepayer classes, we noted that “all firm customers, including commercial
 24 and industrial customers, benefit indirectly from PGW’s extensive low-
 25 income assistance programs.”⁵ *Pa. PUC, et al. v. PGW*, Docket No. R-2017-
 26 2586783 (order entered on November 8, 2017), at 75. Clearly, there is a
 27 persuasive argument to be made that home heating and energy assistance for

⁴ <http://www.puc.pa.gov/pcdocs/1524987.pdf>. This docket number is sometimes cited as Docket No. I-900002.

⁵ In that 2017 rate case proceeding, PGW argued that all non-residential customers indirectly benefit from universal service programs by keeping low income customers in their homes and allowing them to contribute to Philadelphia’s economic activity. PGW contended “the portion of universal service costs paid by non-residential customers is offset by the substantial positive economic impact in Philadelphia on those non-residential customers created by PGW’s universal service programs.” *Pa. PUC, et al. v. PGW* at 63.

low-income households serves a public good whose responsibility is not merely other residential ratepayers.

Q. WHAT DID THE COMMISSION ULTIMATELY DECIDE?

A. The Commission’s ultimate decision in its September 19, 2019 Order,⁶ was that “...the Commission finds it appropriate to consider recovery of the costs of CAP costs from all ratepayer classes. Utilities and stakeholders are advised to be prepared to address CAP cost recovery in utility-specific rate cases consistent with the understanding that *the Commission will no longer routinely exempt non-residential classes from universal service obligations.*”⁷

Q. WHAT DO YOU CONCLUDE?

A. I conclude that the Commission’s September 19, 2019 decision, and the foundation upon which it based that decision, was much broader than the limited rationale Mr. Kubas advances in his testimony. In my discussion below, I will consider the broader basis set forth in the Commission’s decision.

A. The Commission-Identified Factors.

Q. PLEASE EXPLAIN THE FIRST BROADER BASIS WHICH MR. KUBAS DID NOT ACKNOWLEDGE.

A. As I will establish below, the Commission reached an appropriate conclusion when it stated in its Final Order that “[t]he Commission agrees that poverty, poor housing stock,

⁶ I acknowledge that the Commission said “We are not making a final precedential decision regarding cost recovery in this docket. . . .” (September 19 Order, at footnote 156, page 99).

⁷ Id., at 99 (emphasis added).

1 and other factors that contribute to households struggling to afford utility service are not
 2 just “residential class” problems.”⁸

3
 4 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

5 A. In its September 2019 Final Order quoted above, the Pennsylvania PUC identified several
 6 factors that “contribute to households struggling to afford utility service” and indicated
 7 that such factors “are not just residential class problems.” Amongst the factors which the
 8 PUC specifically identified were (1) poverty and (2) poor housing stock.⁹ In this section
 9 of my testimony, I address those specifically-identified factors. In my discussion below, I
 10 not only examine two aspects of “poverty” (as specifically identified by the PUC), but I
 11 will also examine “poor housing stock.”

12 **Q. PLEASE EXPLAIN WHY THE PUC APPROPRIATELY IDENTIFIED**
 13 **“POVERTY” AS A FACTOR THAT JUSTIFIES ALLOCATING UNIVERSAL**
 14 **SERVICE COSTS TO ALL CUSTOMER CLASSES.**

15 A. I discussed the prevalence of poverty in the Pittsburgh Water service territory in detail in
 16 my direct testimony. Without repeating that entire discussion, I documented that, of
 17 Pittsburgh Water’s customers living with income at or below 150% of the Federal
 18 Poverty Level (FPL), in fact, 35.8% of those customers live with income below 50% of
 19 FPL, 31.5% live with income between 50% and 100% FPL, and 32.7% live with income

⁸ Id., at 96.

⁹ The PUC also identified “other factors” without elaborating on what those “other factors” might be.

between 100% and 150% of FPL.¹⁰ The analysis presented by Pittsburgh Water goes even further, examining the geo-spatial distribution of low-income customers in addition to the total number of low-income customers. According to the affordability analysis presented by Pittsburgh Water, “low incomes are concentrated in the central areas of Pittsburgh (Oakland) as well as pockets both west (Sheraden), north (Northview Heights, Perry South, and Central Northside) and east (Larimer, Lincoln-Lemington-Belmar, Homewood North) of the city.”¹¹

Q. WHAT IS THE SIGNIFICANCE OF THIS PREVALENCE OF POVERTY IN THE PITTSBURGH WATER SERVICE TERRITORY?

A. The identified prevalence of poverty is of particular significance to a municipal water utility such as Pittsburgh Water. As the research for the Water Research Foundation, the research arm of the American Water Works Association (AWWA) found, “A final consideration of importance to water utilities is the relationship of payment problems to health issues. . . Potential impacts relate to many of the same public health endpoints targeted by Safe Drinking Water Act standards. . .”¹² The AWWA research reported that water utilities “must remain mindful that *public health is their core business* and there is as much health impact at stake in the manner in which they obtain revenue from low-income households as there is in treating the water to high standards.” (emphasis added)¹³

¹⁰ OCA Statement 6, at Table 2.

¹¹ Pittsburgh Water, Exhibit JAM-1, at pages 29 – 30.

¹² Cromwell, et al. (2010). Best Practices in Customer Payment Assistance Programs, at xxii, Water Research Foundation: Washington D.C. (as cited in OCA Statement 6, at page 8) (hereafter “Best Practices”).

¹³ Best Practices, *supra*, at 29.

1 Particularly for a municipal water utility, maintaining the public health standards is a
 2 systemwide issue applicable to all customers, not merely a “residential” customer issue.

3 Moreover, the concentration of poverty, and of water unaffordability, as identified by
 4 Pittsburgh Water has the impact of destabilizing neighborhoods, to the detriment of all
 5 customers including non-residential customers. Consider, for example, Detroit, which has
 6 garnered worldwide attention regarding the challenge of delivering affordable water
 7 service to residential customers.¹⁴ The high rate of water service disconnections gained
 8 the attention of the United Nations as early as 2004.¹⁵ More than a decade later, those
 9 issues remain prevalent.¹⁶ In March 2018, nearly 17,500 Detroit water customers were
 10 subject to the potential disconnection of service.¹⁷ Water shutoffs frequently result in

¹⁴ Catarina de Albuquerque, United Nations Special Rapporteur of the Human Rights Council on the Human Right to Safe Drinking Water and Sanitation, Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Mission to the United States of America, Int’l Law Comm’n, ¶ 35, U.N. Doc. A/HRC/18/33, (July 4, 2011).

¹⁵ UN News. “In Detroit, -backed water shut-offs ‘contrary to human rights,’ say UN experts,” 20 Oct 2004.

<https://news.un.org/en/story/2014/10/481542-detroit--backed-water-shut-offs-contrary-human-rights-say-un-experts>
 See also, Fried, Kate. “Groups Pressure United Nations to Restore Water Service in Detroit.” Food & Water Watch. June 18, 2014. <https://law.scu.edu/media/school-of-law/ihrcc/documents/IHRC-human-rights-water-us-post-thematic-report.pdf>

¹⁶ “Nationally, water and wastewater utilities face the dual challenges of: (1) generating revenues sufficient to support infrastructure development and renewal, and (2) advancing universal access to services considered essential for human health and welfare. This dichotomy is amplified by economic conditions in Detroit, making it in some senses ‘ground zero’ for the national water affordability challenge.” City of Detroit Blue Ribbon Panel on Affordability (2016). Blue Ribbon Panel on Affordability: Final Report, at 3 (footnotes omitted), City of Detroit: Detroit (MI). That Final Report framed the issue as follows: “One of the most acute consequences of the City of Detroit’s historic decline has been the growth in the number of low-income customers encountering difficulties in paying their water and sewer bills. Over the years, these problems in one of the nation’s poorest large cities have led to abysmal bill-collection rates and large numbers of service disconnections.” Id., at 1.

¹⁷ Kat Stafford (March 26, 2018). Controversial water shutoffs could hit 17,461 Detroit households, Detroit Free Press, <https://www.freep.com/story/news/local/michigan/detroit/2018/03/26/more-than-17-000-detroit-households-risk-water-shutoffs/452801002/>

families and individuals losing their homes and abandoning the housing structure. In 2016, a study found clusters of between 51 and 88 shutoffs in nine Detroit Census Block groups.¹⁸ That same year, more than 100 additional Census Block groups had clusters of between 27 and 51 shutoffs.¹⁹ Notably, although “some ... occupants ... surviv[ed] on donated water and water sharing with neighbors, a[n] ... [u]ntold number of th[e] houses ... [were] vacated or abandoned.”²⁰ In sum, to assert that non-residential customers do not benefit from Pittsburgh Water’s CAP is factually incorrect.

Q. PLEASE EXPLAIN THE SECOND FACTOR WHICH THE PUC IDENTIFIED IN ITS SEPTEMBER 19, 2019 ORDER AS RELEVANT TO WHETHER COSTS SHOULD BE ALLOCATED OVER ALL CUSTOMER CLASSES.

A. The second factor which the PUC identified in its September 19, 2019 Order was “poor housing stock.” This factor is of particular importance in Pittsburgh. The U.S. Census Bureau undertakes a periodic survey of housing conditions for major metropolitan areas throughout the United States. Called the American Housing Survey (AHS), the last AHS for Pittsburgh was performed in 2019. The results of the survey regarding “housing quality” are presented in the Table below.

As can be seen in this Table, the PUC’s expressed concern about “poor housing stock” is well-founded for Pittsburgh. There is a relationship between housing stock that is

¹⁸ We the People of Detroit Research Collective (2016). Mapping the Water Crisis: The Dismantling of African-American Neighborhoods in Detroit, at 20 – 21, We the People of Detroit Research Collective: Detroit (MI);

¹⁹ Id.

²⁰ Id. see also, Detroit Real Estate Game, *supra*

“adequate” and annual income as a percentage of the Federal Poverty Level. While 96% of housing units occupied by households with income greater than 200% FPL are found to be adequate, only 94.8% of those with occupants having income below 50% are. Fewer than 90% of the housing units occupied by households with income less than 150% of FPL were reported to represent “adequate” housing.

Table 1. 2019 Pittsburgh - Housing Quality - All Occupied Units Pittsburgh, PA MSA (2013 OMB definition) Variable 1: Poverty Level, Variable 2: NONE (thousands of units)						
Characteristics	Poverty Level					
	Total	<50%	50 – 99%	100–149%	150–199%	200%+
Total	1,055.0	72.5	65.8	81.0	93.5	742.2
Housing Adequacy						
Moderately inadequate	51.1	NA	NA	NA	NA	24.1
Adequate	995.7	68.7	58.1	71.7	84.6	712.6
Percent adequate	94.4%	94.8%	88.3%	88.5%	90.5%	96.0%

Q. WHAT DO YOU CONCLUDE?

A. Contrary to Mr. Kubas’ summary assertion that it is inappropriate to allocate CAP costs to all customer classes, I conclude that the PUC’s stated concerns about “poor housing stock,” particularly as it affects low-income households, is well-founded as a justification for continuing to allocate universal service costs over all customer classes, just as the Commission has done in the past for Pittsburgh Water.

B. Poverty is Not Just a Residential Class Problem.

Q. PLEASE ADDRESS THE STATEMENT BY THE PUC THAT POVERTY IS “NOT JUST [A] RESIDENTIAL CLASS PROBLEM.”

A. In its September 19, 2019 Order, the PUC acknowledged that the “OCA and the Low Income Advocates contend that the true “cost-causers” of universal service programs are the socio-economic conditions that create poverty, not residential ratepayers.”²¹ I agree with the PUC’s observation that poverty is “not just [a] residential class problem.” In reaching this conclusion, I examine broad economic factors throughout the Pittsburgh Water service territory, not exclusively associated with the residential class, which contribute to the inability-to-pay of Pittsburgh Water low-income customers.

Q. HAVE YOU HAD OCCASION TO EXAMINE THE VARIOUS UNDERLYING ECONOMY WITHIN THE PITTSBURGH WATER SERVICE TERRITORY?

A. Yes. I examine wages in the Pittsburgh metropolitan region as reported by the U.S. Bureau of Labor Statistics.²² I find that low wages are prevalent throughout the Pittsburgh Water service territory. Based on this local wage data, I find that the inability-to-pay issues addressed by the universal service programs of Pittsburgh Water are not “caused” by the residential customer class. They are instead broader societal issues that can be attributed to every customer class.

²¹ Final Order, *supra*, at page 95.

²² The reporting areas are defined by the U.S. Bureau of Labor Statistics (available at <https://www.bls.gov/oes/current/oesrcma.htm#P>).

1 **Q. UPON WHAT DO YOU BASE YOUR CONCLUSION THAT THESE LOW**
2 **WAGES ARE PREVALENT THROUGHOUT CITY OF PITTSBURGH?**

3 A. The Table below shows data for the City of Pittsburgh. As is evident, low-wage jobs are
4 prevalent throughout the City. More than 50% of the total employment in the Pittsburgh
5 Metropolitan Statistical Area (MSA) have mean hourly wages of \$25 or less. Moreover,
6 nearly one-third (32%) of the total employment has a mean hourly wage of \$20 or less,
7 while more than one-in-five (21%) have a mean hourly wage of \$17 or less. Nearly one-
8 in-twenty (4.7%) have a mean hourly wage of \$14 or less.

Table 2. Employment by Mean Hourly Wage (Pittsburgh MSA, PA) (May 2024) ²³				
Mean Hourly Wage	Sum of Employment	Pct of Total Employment	Cumulative Sum of Employment	Cumulative Pct of Total Employment
\$12 - \$13	5,880	0.6%	5,880	0.6%
\$13 - \$14	43,430	4.2%	49,310	4.7%
\$14 - \$15	70,560	6.8%	119,870	11.5%
\$15 - \$16	33,810	3.2%	153,680	14.8%
\$16 - \$17	64,900	6.2%	218,580	21.0%
\$17 - \$18	50,300	4.8%	268,880	25.8%
\$18 - \$19	25,560	2.5%	294,440	28.3%
\$19 - \$20	38,740	3.7%	333,180	32.0%
\$20 - \$21	71,490	6.9%	404,670	38.8%
\$21 - \$22	63,710	6.1%	468,380	45.0%
\$22 - \$23	26,400	2.5%	494,780	47.5%
\$23 - \$24	28,470	2.7%	523,250	50.2%
\$24 - \$25	32,100	3.1%	555,350	53.3%
\$25 - \$26	27,500	2.6%	582,850	55.9%

1 It is unreasonable for employers to pay wages this much less than what is needed to meet
2 basic household necessities in the Pittsburgh MSA and then to have those employers
3 disclaim any responsibility for supporting the programs which are made necessary
4 because of these low wages.

5 **Q. WHY DID YOU SELECT \$25.00 AS THE TOP OF THE RANGE OF WORKER**
6 **WAGES THAT YOU EXAMINED?**

7 A. I selected \$25.00 as the top of the range of worker wages to consider based on an
8 examination of the ALICE data for Allegheny County (PA). “ALICE” is the acronym used

²³ Available at <https://www.bls.gov/oes/tables.htm>

to describe Asset-Limited, Income-Constrained, Employed (“ALICE”) households with income above the Federal Poverty Level but below the cost of basics included in the ALICE Household Survival Budget. In looking at ALICE data for this purpose, there are two basic terms that are used in presenting ALICE data:

- **The ALICE Survival Budget.** The ALICE Budget tracks the cost of household necessities that matter most to ALICE households: housing, child care, food, transportation, health care, and basic technology. According to United for ALICE, the United Way research arm which addresses the economic issues facing ALICE households. The ALICE Budget differs from the budget used by the U.S. Bureau of Labor Statistics (BLS) to calculate the Consumer Price Index (the traditional measure of inflation). The budget which BLS uses tracks over 200 goods and services. These include items that financially insecure households cannot afford on a regular basis (e.g., full-service meals at restaurants, wine, major appliances, flights, and jewelry). In contrast, the ALICE Budget is limited to household essentials.²⁴
- **The ALICE Wage:** The ALICE Wage is expressed on a monthly, annual, and hourly basis. It represents the dollar amount needed to be earned that would exactly equal the household’s ALICE Survival Budget. A wage lower than the ALICE Wage means the wage-earner can *not* meet the ALICE Survival Budget. A wage higher than the ALICE Wage means the wage-earner is meeting the ALICE Survival Budget with some additional earning capacity left over. The ALICE Wage differs by household size and composition, as well as the number of wage earners in the household.

The ALICE Wages for Allegheny County (PA), disaggregated by household size and composition, are presented in Table 3 below. As can be seen, non-aging households – ALICE calculates a separate “ALICE Wage” for aging households (\$18.89/hour for a household with one senior; \$28.61 for a household with two seniors)—have an ALICE Survival Budget that ranges from a low of \$16.55/hour (a single adult) to a high of \$47.08 (for a household with two adults and two children). Two of the household types between those top and bottom amounts have an hourly ALICE Wage need of between \$23 and \$24, while a third has an hourly ALICE Wage of \$27.80. I conclude based on

²⁴ ALICE Essentials Index, at page 3, available at <https://www.unitedforalice.org/essentials-index>

this data that setting the top wage at \$25/hour for purposes of my analysis was reasonable.

Table 3. Allegheny County Basic Needs Budget (United for ALICE: Pennsylvania) ²⁵						
	Single Adult	One Adult One Child	One Adult One Childcare	Two Adults	Two Adults Two Children	Two Adults Two Childcare
Monthly Total	\$2,759	\$3,958	\$4,633	\$3,902	\$6,381	\$7,847
Annual Total	\$33,108	\$47,496	\$55,596	\$46,824	\$76,572	\$94,164
Hourly Wage	\$16.55	\$23.75	\$27.80	\$23.41	\$38.29	\$47.08

Q. DID YOU ENGAGE IN ANY FURTHER ANALYSIS TO SUPPORT USING A \$25.00 WAGE LIMIT AS THE TOP OF YOUR WAGE ANALYSIS?

A. Yes. The most recent data reported by the Bureau of Labor Statistics for employee wages is for May 2024. Accordingly, I took the 2024 Federal Poverty Guidelines and, for each household size (up to 3 persons), converted those guidelines into an hourly wage.²⁶ I performed this conversion at 150% of Poverty, which is the Commission’s definition of low-income. The Table below sets out the results for households with one to three persons in the household. The Table shows that the Poverty Wage (at 150% of Poverty) is roughly \$15.00 per hour for a 2-person household. The Poverty wage is somewhat below \$19.00 per hour for a 3-person household. It is clear that my use of \$25.00 as the top code for my inquiry is a conservative measure of workers who are working at Poverty wages (defining a “Poverty wage” as the wage at 150% of Poverty).

²⁵ Available at <https://www.unitedforalice.org/county-reports/pennsylvania#10/40.4355/-80.0230>

²⁶ In doing this, I use an annual work year of 2,080 hours.

Table 4. 150% of Poverty Level as an Hourly Wage

	100% FPL	150% FPL	No. Annual Hours	Hourly Wage
1	\$15,060	\$22,590	2,080	\$10.86
2	\$20,440	\$30,660	2,080	\$14.74
3	\$25,820	\$38,730	2,080	\$18.62

Q. WHAT DO YOU CONCLUDE BASED ON THIS DATA?

A. I conclude that the Pennsylvania PUC was correct when it observed that poverty is a broad-based social problem not associated with any particular customer class, including specifically not being associated with the residential class exclusively. I find that one reason that these customers income-qualify for Pittsburgh Water’s universal service programs is because a substantial number of people throughout the City of Pittsburgh are being paid Poverty wages.

C. How Universal Service Benefits Business.

Q. HAVE YOU HAD OCCASION TO CONSIDER HOW PROVIDING UNIVERSAL SERVICE BENEFITS BUSINESS?

A. Yes. The PUC specifically noted that:

The Commission agrees that poverty, poor housing stock, and other factors that contribute to households struggling to afford utility service are not just “residential class” problems. Further, helping low-income families maintain utility service and remain in their homes is also a benefit to the economic climate of a community. In approving PGW’s practice of recovering such costs across all ratepayer classes, we noted that “all firm customers, including commercial and industrial customers, benefit indirectly from PGW’s

1 extensive low-income assistance programs.” *Pa. PUC, et al. v. PGW*, Docket
 2 No. R-2017-2586783 (order entered on November 8, 2017), at 75.²⁷

3 In reaching this conclusion, the PUC noted that “[i]n that 2017 rate case proceeding,
 4 PGW argued that all non-residential customers indirectly benefit from universal service
 5 programs by keeping low income customers in their homes and allowing them to
 6 contribute to Philadelphia’s economic activity. PGW contended “the portion of universal
 7 service costs paid by non-residential customers is offset by the substantial positive
 8 economic impact in Philadelphia on those non-residential customers created by PGW’s
 9 universal service programs.” *Pa. PUC, et al. v. PGW* at 63.”²⁸

10 **Q. HAVE YOU HAD OCCASION TO CONSIDER WHETHER THERE IS A**
 11 **FACTUAL BASIS TO SUPPORT THE SAME CONCLUSION IN THIS**
 12 **PROCEEDING?**

13 A. Yes. Any increase in water and wastewater costs from payment of universal service costs
 14 would be offset by improvements in employee productivity (which would offset those
 15 universal service costs in whole or part). Poverty produces ill-prepared workers whose
 16 lives are easily disrupted by small catastrophes. If the car breaks down, if a child gets
 17 sick, it suddenly becomes impossible to be a reliable worker. Poverty also generates poor
 18 health among workers, making them less reliable still and raising the cost of employing
 19 them. Paying a small increase in costs to help generate these offsetting benefits is a
 20 reasonable investment for a business to make.

²⁷ Final Order, *supra*, at page 96.

²⁸ *Id.*

1 In addition to generating economic development impacts on their own accord, programs
 2 such as the Pittsburgh Water Bill Discount Program help contribute to the overall
 3 competitiveness of the Pennsylvania economy. This conclusion is not disputed by
 4 researchers that consider the impacts of programs such as those providing utility bill
 5 affordability subsidies on private employers. One comprehensive study published in 2004
 6 concluded:

7 Why the under-use of public benefits is a problem. When most people hear
 8 about the idea of marketing public benefits through employers, their initial
 9 reaction is “why would a company want to get involved with a social service
 10 program?”

11
 12 In fact, employers have good reason to be concerned that large numbers of
 13 working people with low family incomes do not take advantage of the public
 14 benefits intended to help them and their families achieve economic
 15 sufficiency--benefits that also help employers by contributing to the
 16 economic stability of their workforces. These public benefits bolster the
 17 ability of low-income workers to meet their basic needs, in effect providing a
 18 wage supplement to employers.²⁹

19 Note that these conclusions are made by business stakeholders: the U.S. Chamber of
 20 Commerce and the National Association of Manufacturers.

21 **Q. IS THERE PENNSYLVANIA-SPECIFIC RESEARCH THAT DRAWS THE**
 22 **CONNECTION BETWEEN ADDRESSING POVERTY AND IMPROVING**
 23 **BUSINESS COMPETITIVENESS?**

²⁹ Geri Scott (2004). “Private Employers and Public Benefits,” Workforce Innovation Networks (WINS): Boston (MA) and Washington D.C. WINS is a collaboration of Jobs for the Future, the Center for Workforce Preparation of the U.S. Chamber of Commerce, and the Center for Workforce Success, The Manufacturing Institute of the National Association of Manufacturers.

1 A. Yes. Addressing the problems of poverty is a critical element to restoring the
 2 competitiveness of Pennsylvania businesses. In its report *Back to Prosperity: A*
 3 *Competitive Agenda for Renewing Pennsylvania*,³⁰ the Brookings Institution Center on
 4 Urban and Metropolitan Policy consistently noted the need to address the factors
 5 contributing to the decline of communities, large and small, in the state. According to the
 6 report, funded by the Heinz Endowment and the William Penn Foundation, neighborhood
 7 decline “has become a contagious self-sustaining process in parts of older urban
 8 Pennsylvania.” Such decline, the report found, triggers a slide in property values, brings
 9 negative perceptions, and erodes public health and safety, all of which impede the
 10 competitiveness of the state’s business and industry. According to this analysis of the
 11 competitiveness of Pennsylvania business, and how to “restore prosperity,” “the widening
 12 social and economic gap between Pennsylvania’s older communities and their suburbs
 13 has negative implications for the overall health of its regions.”

14 **Q. WILL PROGRAMS SUCH AS PITTSBURGH WATER’S CAP HELP ADDRESS**
 15 **THESE PROBLEMS?**

16 A. Programs such as the Pittsburgh Water CAP, while obviously not a solution standing by
 17 themselves, are one *part* of the solution. In addition to addressing utility payment
 18 problems, Pittsburgh Water’s CAP can help address trends toward housing abandonment,

³⁰ Available at: <https://www.brookings.edu/research/back-to-prosperity-a-competitive-agenda-for-renewing-pennsylvania/>.

1 reductions in educational attainment,³¹ and adverse health outcomes for payment-
 2 troubled utility customers.³²

3 Universal service programs help to control the need to provide local government services,
 4 the cost of which is largely borne by non-residential taxpayers. There is a direct
 5 connection between unaffordable utility bills and the costs of providing public health
 6 services.³³ The benefits of mitigating the need to provide these government services
 7 redound to the benefit of all taxpayers, including small business entities.

8 **Q. HAVE YOU HAD OCCASION TO REVIEW RESEARCH ON THE**
 9 **RELATIONSHIP BETWEEN INABILITY-TO-PAY AND THE MITIGATION OF**
 10 **HARMS TO BUSINESS THAT YOU IDENTIFY?**

³¹ Roger Colton (1996). "The Road Off Taken: Unaffordable Home Energy Bills, Forced Mobility And Childhood Education in Missouri," 2 Journal on Children and Poverty 23. Available at: <https://www.tandfonline.com/doi/abs/10.1080/10796129608414757>.

³² See generally, Apprise, Inc. (2018). National Energy Assistance Survey: Final Report, National Energy Assistance Directors' Association: Washington D.C. Available at: <http://www.appriseinc.org/resource-library/selected-reports/energy-survey-research-and-policy-analysis/>.

³³ See generally, Jamal Lewis, et al. (2019). Energy efficiency as energy justice: addressing racial inequities through investments in people and places, available at https://www.greenandhealthyhomes.org/wp-content/uploads/Energy-Efficiency-as-Energy-Justice_Final.pdf; see also, Maheswaran et al. (2004). Socio-economic deprivation and excess winter mortality and emergency hospital admissions in South Yorkshire Coalfields Health Action Zone, UK. Public Health 118. 167 – 176, available at <https://pubmed.ncbi.nlm.nih.gov/15003406/>; see also, Frank, D., Neault, N., Skalicky, A., Cook, J., Wilson, J., Levenson, S., Meyers, A., Heeren, T., Cutts, D., Casey, P., Black, M., and Berkowitz, C. (2006). Heat or Eat: Low Income Home Energy Assistance Program and Nutritional Risk Among Children Under 3 Years Old. Pediatrics, available at: <https://pubmed.ncbi.nlm.nih.gov/17079530/>; Frank DA, Roos N, Meyers AF, et al., Seasonal variation in weight-for-age in a pediatric emergency room. Public Health Reports, 1996; 111:366-371; Bhattacharya J, DeLeire T, and Currie J. Heat or eat? Cold-weather shocks and nutrition in poor American families. Am. J. Public Health. 2003; 93:1149-1154.

A. Yes. A 2014 study by the Consumer Financial Protection Bureau³⁴ (CFPB) reports that “even when the economy was booming, financial stress was sapping the productivity and hurting the health of millions of American workers.”³⁵ According to the CFPB:

Multiple surveys offer ample evidence of the impact of financial stress at work. For example, in 2012, roughly one in five employees admitted they had skipped work in the past year to deal with a financial problem. Among workers now in their 30’s and 40’s – a critical cohort of the American workforce - stress levels are even higher. Many Generation X workers (29%) say their personal finances distract them at work, and a majority (53%) find it stressful to deal with their personal finances. This is a particularly salient finding given that Gen Xers – those born between 1964 and 1980 – are beginning to enter their peak-earning years. If they are financially stressed now, Gen Xers may have more difficulty than other generations finding security in the future. Across workers of all generations, 24% admit their personal finances have been a distraction at work. And, of those workers who are concerned about their finances, 39% spend at least three hours each week either thinking about or dealing with financial problems at work.³⁶

According to the CFPB:

It’s not just employees who want help managing financial stress at work. Managers confront this stress every day. In a recent survey, 61% of human resources professionals say financial stress is having some impact on

³⁴ CFPB (August 2014). Financial wellness at work: A review of promising practices and policies. <https://www.consumerfinance.gov/data-research/research-reports/financial-wellness-at-work/>.

³⁵ Financial wellness at work, at 6, citing E. Thomas Garman et al., Financial Stress Among American Workers: Final report: 30 Million Workers in America –One in Four—Are Seriously Financially Distressed and Dissatisfied Causing Negative Impacts on Individuals, Families, and Employers, 17 2005).

³⁶ Id., citing MetLife, Inc., 10th Annual Study of Employee Benefits Trends: Seeing Opportunity in Shifting Tides 51 (2012), available at <https://go.gale.com/ps/i.do?id=GALE%7CA288537968&sid=sitemap&v=2.1&it=r&p=HRCA&sw=w&userGroup=anon%7E8c5e8389&aty=open-web-entry> (“22% of employees admit that they have taken unexpected time off in the past 12 months to deal with a financial issue and/or spent more time than they think they should at work on personal financial issues . . .”). 15% of Gen Y respondents, 10% of Gen X respondents, 5% of Younger Boomer respondents, and 1% of Older Boomer respondents admitted to the same; PricewaterhouseCoopers, LLC, Employee Financial Wellness Survey 10,11 (2014), available at http://www.pwc.com/en_US/us/private-company-services/publications/assets/pwc-employee-financial-wellness-survey-2014-results.pdf.

employee work performance. Twenty-two percent say worries over personal finances have a “large impact” on employee engagement.³⁷

Q. HOW SUBSTANTIAL ARE THE RESULTING COSTS TO EMPLOYERS?

A. The costs to employers can be substantial, and engaging in activities to reduce these costs can be helpful to employers. One white paper presented “an overview of the research literature related to financial stress, how it can affect employee productivity, and real world data regarding the estimated costs to businesses when financially stressed employees are left to struggle on their own.”³⁸

Indeed, an increase in health care costs is one of the most cited costs imposed on employers due to financial stress. As CFPB reported:

A recent report in Health Affairs analyzed the health risks and medical expenses of more than 92,000 employees over a three-year period. Those reporting high stress were \$413 more costly per year on average than workers who were not at risk from stress. By comparison, smoking – a common health risk targeted by corporate wellness programs – was found to raise health care costs by \$587 dollars on average. Since financial problems are an important stress factor, it appears employers may be paying a high cost for employee financial stress, but they do not recognize it because a large portion of that expense shows up indirectly as a health care expense.³⁹

³⁷ Id..

³⁸ Martha Brown Menard, Ph.D. (June 2017). Improving Employees’ Financial Wellness: Why it Matters and What Employers Can Do About It.” https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3011461.

³⁹ CFPB Financial Wellness at Work, supra, citing, Lucia F. Dunn & Ida A. Mirzaie, Working Paper, Determinants of Consumer Debt Stress: Differences by Debt Type and Gender (2012), available at <https://ckan.chrr.ohio-state.edu/dataset/ba0e86eb-7361-401c-af8b-129703aeafad/resource/e9f1efcd-dc5f-4c81-9134-9431c6a82385/download/dsi-working-paper-07-19-12.pdf>; Ron Z. Goetzel et al., Ten Modifiable Health Risk Factors Are Linked To More Than One-Fifth Of Employer-Employee Health Care Spending, 31 Health Affairs 2474 (2012).; Ron Z. Goetzel, et al., The relationship between modifiable health risks and health care expenditures, 40 J. Occup. Environ. Med. 843 (1998) (showing an analysis of the multi-employer HERO health risk and cost database). https://journals.lww.com/joem/Abstract/1998/10000/The_Relationship_Between_Modifiable_Health_Risks.3.aspx. <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2011.0819>; Health Poll, AP-AOL/ABT SRBI (2008),

As can be seen, the financial benefits to employers is not theoretical. There are real, and substantial, financial benefits to employers such as small business that arise from a program such as Pittsburgh Water's CAP.

Moreover, financial stress adversely affects employers both through absenteeism and presenteeism.⁴⁰ "Presenteeism" is a term-of-art that refers to a worker being "present" at his or her place of employment, but nonetheless being sufficiently distracted by non-work-related factors to be not productive.⁴¹ According to Menard:

Academic researchers have studied the costs of absenteeism, presenteeism, and employee turnover specifically associated with employee financial stress, and have estimated these costs based on real world data. Absenteeism from work resulting from worrying about personal finances and employee turnover in particular represents a problem that has been well documented in the literature, and higher levels of financial stress are associated with higher levels of absenteeism, particularly among blue-collar workers. A recent survey of over 5,000 US workers by the company Willis Towers Watson found that employees who are worried about their finances are absent on average for 3.5 days annually.⁴²

According to Menard, "financially troubled employees bring [their] concerns to work."

Dr. Menard reports:

The previously mentioned Mercer survey found that 16% of employees reported spending more than 20 working hours each month worrying about money. The average across those surveyed was 13 hours per month. For an

http://surveys.associatedpress.com/data/SRBI/AP-AOL%20Health%20Poll%20Topline%20040808_FINAL_debt%20stress.pdf.

⁴⁰ "Presenteeism" has long been recognized in both the industry and academic literature. See, e.g., Paul Hemp (October 2004). Presenteeism: At Work but Out of It, Harvard Business Review <https://hbr.org/2004/10/presenteeism-at-work-but-out-of-it>.

⁴¹ See, Hemp, *supra*.

⁴² Menard, *supra*, at 6 (internal notes omitted).

individual employee, that is equal to 7.8% of their annual work time spent being distracted as a result of their financial situation. Other estimates are even higher. Garman and colleagues peg financial presenteeism and absenteeism costs at 15-20% of total compensation paid to all employees in the businesses studied. . The Mercer survey also found that 22 percent of employees report missing at least one day of work to handle financial problems, and a full 20 percent have had to resign from jobs due to financial stress.⁴³

Menard's work was confirmed by research of the International Foundation of Employee Benefit Plans (IFEBC). That research concluded:

Financially distressed workers are more likely to miss work—not surprising given persons with financial stress tend to have more physical and mental health problems than those who are financially healthy. In fact, 70% of all job absenteeism has been tied to stress-related illnesses.

Even when employees do show up for work, they are likely to demonstrate some degree of presenteeism due to fatigue and/or an inability to concentrate. Presenteeism occurs when employees come to work but are not functioning up their capabilities. It manifests itself in a host of ways including more time spent on tasks poor-quality work, impaired social functioning, burnout, anger and low morale.

One in five employees (20%) reports issues with personal finances have been a distraction at work. More than one-third (37%) say they spend three hours or more each week thinking about or dealing with issues related to personal finances.⁴⁴

A different survey, this one of employers rather than employees, asked employers about their workers' financial stress. "The survey found that financially stressed employees are not able to check their worries at the door; they typically spend over three hours per week dealing with personal finance at work and lose nearly one month of productive work time

⁴³ Menard, *supra*, at 7 (internal notes omitted).

⁴⁴ Patricia Bonner (Nov./Dec. 2016). *The Impact of Financial Stress on Your Employees, Plans and Trusts*, Vol. 34:6: 18-24.

(23-31 days per year) over financial concerns.” This survey states that “there may be a strong correlation between poverty and financial stress,” though it acknowledges that “low wages” are not “completely to blame.”⁴⁵

D. Allocation of Universal Service Costs as a “Public Good.”

Q. HAVE YOU HAD OCCASION TO CONSIDER THE PUC’S REFERENCE TO UNIVERSAL SERVICE COSTS AS A “PUBLIC GOOD”?

A. Yes. The PUC specifically noted that universal service should be viewed as a “public good.” In its September 19, 2019 Order, the PUC stated: “Clearly, there is a persuasive argument to be made that home heating and energy assistance for low-income households serves a public good whose responsibility is not merely other residential ratepayers.” (Id., at 96 – 97). While the PUC’s statement was with respect to “home heating and energy assistance,” the same rationale can be applied to Pittsburgh Water’s CAP costs as well.

Q. UPON WHAT DO YOU BASE THAT CONCLUSION?

A. One well-accepted tenet of utility ratemaking is that certain expenses incurred by a public utility are for “public goods.” Due to the nature of public goods, all customers receive benefits from public goods and, accordingly, the costs of such goods are spread over all customer classes. Each end user makes a financial contribution to the utility’s delivery of public goods. The “public goods” doctrine is applied in a variety of settings as a justification to spread designated utility costs over all customer classes.

⁴⁵ Dan Macklin (August 2019). Businesses Losing \$500 Billion Due to Employees Financial Distress, H.R. Technologist Weekly Newsletter. Available at: <https://www.hrtechnologist.com/articles/compensation-benefits/businesses-losing-500-billion-due-to-employees-financial-stress-2/>.

1 In economic theory, public goods are those products and services that are valuable to
 2 society, but which are undersupplied when society relies on private markets to provide
 3 them. Because they are needed and will not be made sufficiently available through
 4 private markets, the government must supply public goods.

5 The public goods principle has been applied in the utility context. For these purposes, the
 6 Pennsylvania PUC should adopt the definition of “public good” articulated by the National
 7 Regulatory Research Institute (NRRI). NRRI stated:

8 A public good can be defined as “any publicly induced or provided collective
 9 good” that “arise[s] whenever some segment of the public collectively wants
 10 and is prepared to pay for a different bundle of goods and services than the
 11 unhampered market will produce.” (note omitted). In sharp contrast to the
 12 private-good model. . . , the emphasis of the public-good model is on the *total*
 13 societal benefits—both direct and indirect—associated with network
 14 modernization. As applied to the telecommunications network, the public-good
 15 model is based upon the premise that the costs of achieving and supporting a
 16 modern, state-of-the-art network infrastructure are ultimately borne by the
 17 general body of ratepayers as opposed to limited subsets of customers who
 18 exhibit a high demand for specific new services. The public-good model is
 19 conducive to establishing social policies which provide for a “supply driven
 20 definition” of infrastructure.

21 * * *

22
 23
 24 Under the public-good model, infrastructure investment[s] that are in the
 25 “public interest” are mandated by regulatory commissions, which act as
 26 surrogates for marketplace forces for the very reason that those forces break
 27 down either because of the enormous risks involved because of uncertainty with
 28 respect to costs and demand or both, or because of the intangible or
 29 unmeasurable society benefits which are not valued by the marketplace.
 30 (emphasis in original).⁴⁶

⁴⁶ National Regulatory Research Institute (October 1991). The Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network, NRRI: Columbus (OH). Available at: https://nrri.org/phpss113/search_focus-91-15-select-publications/

1
2 This NRRI discussion should help guide the PUC’s consideration of universal service cost
3 allocations in this proceeding.

4 **Q. PLEASE EXPLAIN HOW A “PUBLIC GOOD” CAN BE PROVIDED TO AN**
5 **INDIVIDUAL.**

6 A. A product can represent a “public good” even though the direct service is provided to an
7 individual. For example, businesses do not go to school, individuals do. Businesses do
8 not go to doctors, individuals do. Businesses do not place their children in day care,
9 individuals do. Despite this, in each of these instances, the direct benefits to business
10 from the affordable provision of these “public goods” have been documented. Affordable
11 health care and childcare are all akin to affordable water bills in their nature as public
12 goods which provide direct and substantial benefits to businesses as well as individuals.
13 Accordingly, businesses, as well as individuals, should be responsible for helping to pay
14 for these public goods.

15 **Q. IS THERE ANY ANALOGY TO VIEWING UNIVERSAL SERVICE FOR**
16 **PITTSBURGH WATER AS A PUBLIC GOOD?**

17 A. Yes. Affordable water and wastewater service can be analogized to other public goods.
18 For example, child care is analogous because of the direct benefits it has been found to
19 provide to business. The Committee on Economic Development has quantified the
20 beneficial impacts to business from reducing the causes of employee absenteeism and
21 employee turnover associated with unaffordable childcare. According to CED:⁴⁷

⁴⁷ CED is a national business-academic partnership. One objective of CED is “to unite business judgment and experience with scholarship in analyzing the issues and develop recommendations to resolve the economic problems

Many businesses also find that helping parents meet their child care needs can potentially reduce absenteeism and employee turnover. The 1990 *National Child Care Survey* (NCCS) found that 15 percent of the mothers in its sample who worked outside the home reported losing some time from work (including arriving late, leaving early, or having to take a full day off) during the previous month because of a failure in their regular child care arrangement. Studies have found that employee turnover produces disruption and inefficiency in the work environment and that the cost of replacing employees is high. For example, Merck & Co., Inc. found that it costs . . . about 75 percent of salary to replace a clerical or technical employee. It also found that it may take considerable time to fill a vacant position and an average of 12.5 months for a new employee to become adjusted to the job.⁴⁸

Part 2. Summary and Recommendation.

Q. WHAT DO YOU CONCLUDE?

A. Based on the data and discussion above, I conclude that OSBA witness Kubas has not provided a compelling argument on why the PUC should change the manner in which Pittsburgh Water has historically allocated its universal service costs. Historically, Pittsburgh Water has allocated its universal service costs amongst all customer classes. In its discussion of the allocation of universal service costs for Pennsylvania's natural gas and electric utilities, the PUC identified several factors –none of which were discussed by Mr. Kubas – that should be considered. I have reviewed each of those factors which the PUC identified and, after such review, conclude that Pittsburgh Water should continue to allocate its universal service costs in the way in which it has historically done so.

that constantly arise in a dynamic and democratic society.” Objectives of the Committee for Economic Development. The Research and Policy Committee of the CED is directed under the organization’s bylaws to “initiate studies into the principles of business policy and of public policy which will foster the full contribution by industry and commerce to the attainment and maintenance” of the objectives of the organization.

⁴⁸ Research and Policy Committee (1993). *Why Child Care Matters: Preparing Young Children for a More Productive America*, A Statement by the Research and Policy Committee of the Committee for Economic Development, at 1, Committee for Economic Development: New York: NY. Available at: https://www.ced.org/pdf/Why_Child_Care_Matters_1993.pdf.

1 **Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

2 A. Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Roger Colton, hereby state that the facts above set forth in my Rebuttal Testimony, OCA Statement No. 6R, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 30, 2025

Signature: /s/ Roger Colton
Roger Colton

Address: Fisher Sheehan & Colton
34 Warwick Road
Belmont, MA 02478

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	Docket Nos.: R-2025-3055010 (WATER)
v.	:	R-2025-3055011 (WASTEWATER)
	:	R-2025-3055012 (STORMWATER)
The Pittsburgh Water and Sewer	:	
Authority d/b/a Pittsburgh Water	:	

SURREBUTTAL TESTIMONY

OF

Michael Deupree

On behalf of the

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

Date Served: October 14, 2025

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Michael W. Deupree. My business address is 5800 One Perkins Place
4 Drive, Suite 5-F, Baton Rouge, Louisiana, 70808.

5 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

6 A. Yes. I filed direct and rebuttal testimony on September 5 and 30, respectively, in
7 this proceeding on behalf of the Pennsylvania Office of Consumer Advocate ("OCA").

8 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

9 A. The purpose of my testimony is to respond to the rebuttal testimony of William J.
10 Pickering and Edward Barca on behalf of The Pittsburgh Water and Sewer Authority d/b/a
11 Pittsburgh Water's ("Pittsburgh Water," or "Authority"). Specifically, I will respond to Mr.
12 Pickering's general observations and Mr. Barca's continued support for an increase in the
13 Distribution System Improvement Charge ("DSIC") cap and the implementation of a Multit-
14 Year Rate Plan ("MYRP").

15 **Q. DOES YOUR SURREBUTTAL TESTIMONY RESPOND TO EVERY**
16 **STATEMENT MADE BY MR. PICKERING OR MR. BARCA?**

17 A. No. My Surrebuttal addresses the key statements and opinions of these witnesses
18 who respond to my evidence and recommendations as set forth in my Direct and Rebuttal
19 Testimonies. The failure to respond to any statements by PW witnesses should not be
20 interpreted as agreement with their statements or recommendations.

21 **II. RESPONSE TO GENERAL OBSERVATIONS**

22 **Q. PLEASE SUMMARIZE THE GENERAL OBSERVATIONS OF THE**
23 **PROCEEDING OFFERED BY PITTSBURGH WATER.**

1 A. Pittsburgh Water argues that it is important for the Commission to remain focused
2 on the future and ensure that the Company has sufficient funds required to support the
3 safe, reliable and adequate operations of its water, wastewater conveyance and
4 stormwater systems.¹ The Authority specifically notes that its Capital Improvement Plan
5 (“CIP”) are not projects that are simply “nice to have,” but rather are critical to regulatory
6 compliance, quality of service, operating efficiency, safety and reliability of Pittsburgh
7 Water’s operations.²

8 **Q. DO YOU BELIEVE THAT THESE FORWARD-LOOKING CONCERNS REQUIRE**
9 **A CHANGE IN THE CURRENT REGULATORY PARADIGM FOR PITTSBURGH**
10 **WATER?**

11 A. No. The Commission should recognize that the Authority has been able to increase
12 its annual capital expenditures in nearly every year since it began to be regulated by the
13 Commission in FY 2018,³ with over \$100 million in annual investments achieved each
14 year since FY 2019.⁴ Indeed, FY 2024 marked both the largest annual increase in capital
15 improvements and the first time in recent history the Authority met its annual CIP budget.⁵
16 Therefore, the proposed increase in the DSIC and the proposed MYRP are not required
17 to meet the Authority’s existing CIP, but instead are designed to accelerate the existing
18 CIP in the case of the expansion of the DSIC, or reduce the regulatory burden of future
19 rate case filings in the case of the proposed MYRP.

20 **III. DISTRIBUTION SYSTEM IMPROVEMENT CHARGE**

¹ PW St. 1R at 3:7-10.

² *Id.* at 3:11-14.

³ PW St. 2 at 30.

⁴ *Id.* at 31:2-3.

⁵ *Id.* at 31:3-5.

1 **Q. PLEASE SUMMARIZE THE AUTHORITY'S RESPONSE TO YOUR DIRECT**
2 **TESTIMONY ARGUING AGAINST THE PROPOSED INCREASE IN THE DSIC CAP.**

3 A. The Authority focuses on my discussion of PAY-GO financing, arguing that it has
4 been previously approved by the Commission and that, therefore, the appropriateness of
5 DSIC revenue for PAY-GO funding is settled.⁶ More to the point of my finding that the
6 Authority has not shown that an increase in DSIC caps are required to maintain healthy
7 financial margins, the Authority argues that it is not proposing the increase in DSIC caps
8 for financial purposes, but in order to accelerate the replacement and modernization of
9 its distribution system beyond what is current planned.⁷

10 **Q. WHY DOES THE AUTHORITY ARGUE THAT THE COMMISSION HAS**
11 **SETTLED THE APPROPRIATENESS OF USING DSIC REVENUE FOR PAY-GO**
12 **FINANCING?**

13 A. The Authority points to the Settlement Agreement resolving all issues in its 2020
14 rate proceeding ("2020 Settlement"), which was subsequently approved by the
15 Commission without modification.⁸ In the 2020 Settlement, parties agreed that Pittsburgh
16 Water would be allowed to utilize DSIC revenue for PAY-GO funding for DSIC-eligible
17 projects. The Authority ignores, however, that the referenced settlement term also
18 explicitly reserves the rights of parties to reevaluate the use of DSIC revenue for PAYGO
19 funding in future base rate proceedings.

20 Initially, PWSA will utilize DSIC revenue only for PAYGO funding of DSIC-
21 eligible projects. PWSA may also utilize DSIC revenue to recover amounts
22 associated with bond funding of DSIC-eligible projects provided that, prior
23 to using DSIC for this purposes, PWSA will meet with the parties to the
24 Settlement to discuss the parameters and procedures and will provide

⁶ PW St.2R at 52:12-16.

⁷ *Id.* at 53:22-25.

⁸ *Id.* at 52:12-14.

1 notice to the Commission of its intent to use DSIC revenue to recover bond
2 related funding. All parties reserve the right to reevaluate the use of DSIC
3 revenue for PAYGO or bond related funding as part of a future base rate
4 proceeding.⁹

5 **Q. DO YOU CONTINUE TO BELIEVE THAT PAY-GO FINANCING IS**
6 **INCONSISTENT WITH THE INTENTION OF THE DSIC?**

7 A. Yes. As discussed in my direct testimony, the most obvious concern presented
8 from the use of PAY-GO compared to traditional capital financing is the negative effects
9 such financing has on intergenerational equity, as current ratepayers are asked to
10 overpay for utility capital investments that will provide benefits to ratepayers for likely
11 decades to come.¹⁰ PAY-GO also effectively shifts financing responsibilities from the
12 Authority onto ratepayers who have fewer resources to effectively finance these
13 investments, which they may never use or benefit from.¹¹ Lastly, Pennsylvania statutes
14 establishing the DSIC do not appear to encompass the use of DSIC revenues for PAY-
15 GO purposes.¹² Pittsburgh Water simply hasn't proven that the parties to this case are
16 prohibited from evaluating their DSIC proposal in this context, and the Commission should
17 review the proposal with a keen eye to ensure that existing customers are not over-paying
18 for the proposed capital improvements to the Authority's system in an inefficient manner.

19 **Q. IS YOUR DISCUSSION OF PAY-GO RELEVANT TO THE AUTHORITY'S**
20 **REQUEST TO INCREASE THE DSIC CAP?**

21 A. Yes. The Authority claims that my criticism of Pittsburgh Water's use of DSIC
22 revenue for PAY-GO purposes is not relevant to the Authority's request to increase the

⁹ *Id.* at 52:17-26, *citing*, Docket No. R-2020-3017951, P-2020-3019019, Joint Petition for Settlement, III.A.2.(e), *emphasis added*.

¹⁰ OCA St. 1 at 31:17 to 32:9.

¹¹ *Id.* at 32:12-18.

¹² *Id.* at 33:1-15.

1 DSIC cap.¹³ I disagree, as the Authority requests approval of the proposed increase in
2 the DSIC cap in order to accelerate the replacement of its distribution system, yet
3 simultaneously argues that the expansion of the cap will allow for a greater degree of
4 PAY-GO funding. The Authority could enhance DSIC-funded replacement efforts on its
5 system by forgoing the use of PAY-GO, which would alleviate the need for the requested
6 increase in the DSIC cap. Worded another way, by either eliminating or discontinuing the
7 current amount of PAY-GO, the Authority can shift that money into DSIC-eligible projects
8 — maximizing the use of the existing cap.

9 **Q. MR. BARCA TESTIFIES THAT “I AM INFORMED BY COUNSEL THAT THE**
10 **COMMISSION MAY NOT LEGALLY APPROVE A SETTLEMENT TERM THAT**
11 **VIOLATES THE PUBLIC UTILITY CODE OR THAT IS OTHERWISE ILLEGAL.¹⁴” DID**
12 **YOU TESTIFY OR INTEND TO TESTIFY THAT THE LAST SETTLEMENT WAS**
13 **ILLEGAL?**

14 A. No. While I am not an attorney, I offered my criticisms of the behavior of the
15 Authority following the last Settlement, and do not criticize the Settlement itself. My
16 testimony questions the continued use of DSIC funding by the Authority only.

17 **Q. CAN THE AUTHORITY FUND CAPITAL IMPROVEMENTS OUTSIDE OF THE**
18 **DSIC?**

19 A. Yes. Indeed the Authority budgeted Capital Improvement Plan (“CIP”) anticipates
20 just this,¹⁵ which the Authority references in its rebuttal testimony by admitting that the
21 DSIC represents only a relatively small part of Pittsburgh Water’s overall capital

¹³ PW St. 2R at 51:11-13.

¹⁴ PW St. 2R at 53.

¹⁵ PW St. 2 at page 33.

1 expenditures.¹⁶ Specifically the Authority estimates a required need for \$47.4 million in
2 incremental capital funding for Fiscal Year (“FY”) 2026, with an additional \$20.8 million in
3 the subsequent FY 2027.¹⁷ Of this, the Authority estimates that only a total of \$10.2 million
4 -- \$8.8 million in FY 2026 and \$1.4 million in FY 2027 – will be financed through DSIC
5 revenue. This means that only 18.6 percent of estimated incremental capital costs in FY
6 2026 will be funded through DSIC revenues, falling to only 6.7 percent of incremental
7 costs in FY 2027.

8 **Q. WHY IS IT RELEVANT THAT THE AUTHORITY CAN FINANCE CAPITAL**
9 **IMPROVEMENTS OUTSIDE OF THE DSIC?**

10 A. The Authority claims that the purpose of its proposed DSIC cap is not financially
11 driven but rather is designed to accelerate the replacement of its distribution system
12 assets.¹⁸ Importantly, the Authority argues that it must be able to obtain additional capital
13 to accelerate these replacements.¹⁹ Indeed, if the purpose was only to accelerate the
14 replacement of its distribution system assets without consideration of the financial
15 requirements, the Authority could do that without needing to increase the DSIC cap.
16 Furthermore, as acknowledged by the Authority in its direct testimony, the Authority seeks
17 to increase the DSIC cap to increase its level of internally generated funds in an effort to
18 reduce its financial leverage.²⁰

19 **Q. WHY DO YOU CONCLUDE THAT THE AUTHORITY HAS FAILED TO SHOW**
20 **THAT INCREASING THE DSIC CAP IS NEEDED IN THE CURRENT PROCEEDING?**

¹⁶ PW St. 2R at 71:21-23.

¹⁷ PW St. 2 at page 33.

¹⁸ PW St. 2R at 53:22-24.

¹⁹ *Id.* at 53:25.

²⁰ PW St. 2 at 65:6-12.

1 A. I continue to recommend that the Commission reject the Authority's proposal to
2 increase the existing DSIC cap from five percent to 7.5 percent. The Authority has not
3 shown that the existing regulatory process it has operated under, including a five percent
4 DSIC, has been unable to adequately support the Authority's proposed capital
5 improvements. Indeed, the Authority in rebuttal is clear that its proposed increase in the
6 DSIC is not needed to support its current CIP, but to accelerate this CIP beyond what the
7 Authority is currently planning.²¹

8 **Q. DO YOU CONTINUE TO OPPOSE THE USE OF PAY-GO OVER TRADITIONAL**
9 **FINANCING?**

10 A. Yes. The use of PAY-GO presents obvious intergenerational equity concerns
11 compared to traditional capital financing. This asks current ratepayers to overpay for utility
12 capital investments that will provide benefits to ratepayers for decades. Indeed, the
13 Authority itself finds that traditional bond financing would be cheaper for ratepayers until
14 at least 2038, more than ten years into the future.²² This further assumes that ratepayers
15 do not have to finance the increased burden on rates through expensive options like
16 monthly credit card interest fees.

17
18 **IV. MULTI-YEAR RATE PLAN**

19 **Q. DOES THE AUTHORITY CONTINUE TO ARGUE FOR COMMISSION**
20 **APPROVAL OF ITS PROPOSED MYRP?**

²¹ PW St. 2R at 53:23-24.

²² PW St. 2R at 51:24 to 52:3.

1 A. Yes. The Authority speculates that many parties dislike the proposed MYRP due
2 to a preference for frequent rate case filings that provide an opportunity to delve into every
3 aspects of Pittsburgh Water's operations and policies.²³ The Authority also argues that
4 several parties object on the grounds that the process for reviewing and approving the
5 2027 rate case was not laid out in sufficient detail. In response, the Authority lays out a
6 framework for future filings to which it is amenable to.²⁴ The Authority also disagrees with
7 parties that incremental long-term debt costs are speculative in nature.²⁵

8 **Q. HOW DO YOU RESPOND TO THE AUTHORITY'S STATEMENT REGARDING**
9 **PARTIES PREFERENCE FOR FREQUENT RATE CASE FILINGS?**

10 A. Rate cases in principle allow the Commission and parties the opportunity to audit
11 a public utility. I do not believe the positive benefit of this oversight should be so easily
12 discounted as it provides the Commission an opportunity to ensure that the utility is
13 prioritizing capital investments in a manner that is consistent its policy prerogatives while
14 preserving customer affordability. Regardless, that is not the primary reason I do not
15 support the proposed MYRP. The Commission is required to set rates based on known
16 and measurable criteria and expenses estimated to occur in FY 2027 are less certain
17 than those that are expected to occur before the end of the FPFTY and do not rise to an
18 appropriate level of being adequately known and measurable in the current proceeding.

19 **Q. DOES THE AUTHORITY'S PROPOSED PROCEDURE ALLEVIATE THESE**
20 **CONCERNS?**

²³ PW St. 2R at 58:21-25.

²⁴ *Id.* at 59:25 to 61:15.

²⁵ *Id.* at 61:20 to 62:8.

1 A. No. The proposed FY 2027 rate increase would still be subject to unknown cost
2 inputs such as the premium and interest rate associated with the Authority's future bond
3 issuance.²⁶ Capping this potential rate increase, as proposed by the Authority,²⁷ would
4 provide some protection to ratepayers, but also raises a new concern. If the Authority
5 recognizes that it believes it can defer all financial costs that may occur in excess of the
6 \$20.7 million rate increase until its next rate case without negatively impacting its credit
7 ratings, why is it unable to manage this limited financial requirement until its next rate
8 case? As I noted in my direct testimony, the Authority's proposal effectively highlights the
9 lack of need for the proposed MYRP to effectively manage future financial costs.

10 **Q. DOES THE AUTHORITY RESPOND TO SPECIFIC CRITICISMS YOU RAISE IN**
11 **YOU DIRECT TESTIMONY?**

12 A. Yes. The Authority argues that the Averch-Johnson ("A-J") effect referenced in my
13 direct testimony does not apply to a municipal utility since it is a non-profit entity subject
14 to a cash flow method of ratemaking.²⁸ Instead, the Authority argues that it is only
15 permitted to recover the costs of its operations and its debt and PAY-GO costs required
16 to finance capital improvements. Since the Authority posits that costs associated with
17 capital improvements will only increase over time, the Authority is forced to struggle with
18 reducing its expenditures and capital additions between rate cases to fit the revenues
19 granted by the Commission.²⁹

20 **Q. DO YOU AGREE THAT THE AUTHORITY IS IMMUNE FROM THE POSITIVE**
21 **EFFECTS OF REGULATORY LAG SINCE IT IS A NON-PROFIT ENTITY?**

²⁶ *Id.* at 60:14.

²⁷ *Id.* at 60:18 to 61:2.

²⁸ *Id.* at 69:24 to 70:6; note that the witness incorrectly refers to the A-J effect as the "A-V" effect.

²⁹ *Id.* at 70:7-21.

1 A. No. While the Authority does not earn a rate of return, it is still subject to financial
2 risks associated with its capital investments and can earn excess revenues from its
3 customers. Indeed, as Pittsburgh Water admits, the presence of regulatory lag forces the
4 utility to manage its expenditures and capital additions in order to “fit the revenues granted
5 by the Commission.”³⁰ Pittsburgh Water argues that these curbs harm its ability to achieve
6 its ambitious capital investment goals and thus harms the public. However, I would argue
7 that weakening an important mechanism that promotes the efficient management of
8 Authority expenses and capital investment costs is also harmful to the public interest. The
9 Authority already has available to it the ability to utilize FPFTY in rate cases and the
10 existing 5 percent DSIC to provide additional financial certainty to assist in meeting its
11 proposed capital investment goals.

12 **Q. DOES THE AUTHORITY ARGUE IT IS PROHIBITED FROM FILING A NEW**
13 **BASE RATE CASE UNTIL THE END OF THE SUSPENSION DATE OF THE PRIOR**
14 **CASE?**

15 A. Yes. The Authority argues that 52 Pa. Code § 3208(c)(1) prevents a utility from
16 requesting a base rate increase until the end of the suspension date of the prior case.³¹
17 Therefore, the Authority would be unable to file a request with the Commission for an
18 increase in base rates until after March 8, 2026, and more realistically months after this
19 date.³² However, outside of this limited restriction, the Authority has considerable options
20 regarding the timing of its next base rate case.

³⁰ *Id.* at 70:15-16.

³¹ *Id.* at 71:5-13.

³² *Id.* at 71:7-11.

1 **Q. DOES THE AUTHORITY PRESENT ADDITIONAL REBUTTAL TO**
2 **ARGUMENTS INCLUDED IN YOUR DIRECT TESTIMONY THAT YOU WOULD LIKE**
3 **TO RESPOND TO?**

4 A. Yes. The Authority largely claims its financial health is irrelevant to its request for
5 a MYRP to cover additional costs in 2027.³³ Specifically, the Authority recognizes its
6 improving recent performance, but argues that referring to past performance ignores its
7 need for a 2027 rate increase, which is neither logical or reasonable.³⁴ The Authority also
8 argues that I ignored its negative credit opinion commentary and only focused on positive
9 opinions generally limited to improvement management and governance.³⁵ Likewise, the
10 Authority dismisses my discussion of its ability to fund the Rate Stabilization Fund (“RSF”)
11 as unrelated to its proposed MYRP.³⁶

12 **Q. DO YOU AGREE WITH THE AUTHORITY’S ARGUMENTS?**

13 A. No. The Authority ignores the main thrust of my argument – that the Authority was
14 able to achieve these improvements to its financial health in the context of its existing
15 regulatory paradigm which has not included an MYRP. Specifically, the Authority
16 recognizes that it has seen its annual revenues in excess of expenses grow each year
17 since FY 2018 (excluding FY 2020)³⁷ and that the overall balance of all financial accounts
18 held by Pittsburgh Water has grown approximately 40 percent over the period 2018-2023
19 and is expected to grow by a further 77.6 percent over the period 2024-2027.³⁸
20 Furthermore, the Authority has been able to fund over \$100 million in annual capital

³³ *Id.* at 72:22-25.

³⁴ *Id.* at 72:15-25.

³⁵ *Id.* at 73:5-20.

³⁶ *Id.* at 73:26 to 73:4.

³⁷ OCA. St. 1 at 14:6 to 15:2.

³⁸ *Id.* at 15:8-13.

1 improvements every year since FY 2019 without jeopardizing its financial health, with FY
2 2024 representing both the largest annual increase in budgeted capital improvements
3 and also the first time in recent history that Pittsburgh Water was able to fully finance its
4 planned capital investment budget.³⁹

5 **Q. DO YOU AGREE THAT CREDIT RATING AUTHORITIES HAVE ISSUED**
6 **NEGATIVE CREDIT OPINION COMMENTARY FOR PITTSBURGH WATER?**

7 A. No. All credit rating opinions will include discussions of both strengths and
8 weaknesses influencing an entities' current and projected credit worthiness. In this
9 Moody's Investors Service ("Moody's") did note in its May 29, 2023, update that the
10 Authority's current debt burden is significant and is expected to increase as the Authority
11 enacts its capital improvement plan.⁴⁰ However, Moody's tempered this finding by noting
12 improvements in Pittsburgh Water management structure has improved since becoming
13 regulated by the Commission, which Moody's holds has committed to allowing for timely
14 rate increases to satisfy bond covenants and allow for needed capital improvements.⁴¹
15 Indeed, focusing on limited discussion ignores the breadth of both Moody's and S&P
16 Global Ratings' ("S&P") overall opinions, which has seen growing favorable trends in the
17 Authority's financial ability to cover its debts. This is highlighted by the fact that the
18 Authority has seen its Moody's credit rating improve from A3 to A2, and its S&P credit
19 rating improve from A to A+, over the period 2020-2025.⁴² S&P, in particular, noted in its
20 December 19, 2024, rating reaffirming its A+ rating that the Authority's regulatory

³⁹ *Id.* at 20:3-9.

⁴⁰ Pittsburgh Water Exhibit CF-8.

⁴¹ *Id.*

⁴² Errata Direct Testimony of Michael W. Deupree at 16:7 to 17:12.

1 approach has enabled it to obtain regular rate increases from the Commission that has
2 allowed it to fund its capital investment plan in the face of rising costs from suppliers.⁴³

3 **Q. DO YOU CONTINUE TO BELIEVE THAT THE AUTHORITY'S ABILITY TO**
4 **FUND ITS RATE STABILIZATION FUND IS RELEVANT TO CONSIDERATION OF**
5 **THE PROPOSED MYRP?**

6 A. Yes. Since 2020, Pittsburgh Water has seen sufficient operating revenues in
7 excess of expenses that it has been able to establish and increase the Rate Stabilization
8 Fund ("RSF"). The RSF provides an additional source of funding to the Authority to meet
9 debt service coverage requirements during times of unexpected revenue shortfalls,⁴⁴
10 effectively acting as a rainy-day fund for Pittsburgh Water. Specifically, the Authority
11 created the RSF with an initial investment of \$2 million in 2020, and was able to provide
12 additional contributions of \$3 million in 2022 and \$15 million in 2024.⁴⁵ Indeed, by 2024
13 the RSF totaled \$24.7 million and represented approximately 7.2 percent of the
14 Authority's 2024 operating revenues, beating the Authority's prior target of five percent of
15 annual operating revenues.⁴⁶ Importantly, the Authority has been able to create and
16 expand the RSF under its current regulatory paradigm without an MYRP or other form of
17 alternative regulation beyond the FPFTY and DSIC.

18 **Q. DID THE AUTHORITY OFFER CORRECTIONS TO YOUR PRESENTATIONS**
19 **OF HISTORIC BOND INDENTURE REQUIREMENTS?**

⁴³ Pittsburgh Water Exhibit CF-10.

⁴⁴ PW St. 2, Exhibit EB-9.

⁴⁵ OCA St. 1 at 18:11-12.

⁴⁶ OCA St. 1 at 18:11-17.

1 A. Yes. The Authority argues that I misstated Pittsburgh Water's historic bond
2 indenture requirements.⁴⁷ Notably, the Authority finds that I generally **overstated** the
3 Authority's historic requirements. Therefore, the Authority argues that its actual historical
4 debt service coverage margins were greater than what I already found to be healthy, and
5 does not change my conclusion on the matter.

6 **Q. HOW DO YOU RESPOND TO THE AUTHORITY'S CRITICISM OF YOUR**
7 **CHARACTERIZATION OF ITS HISTORIC DEBT SERVICE COVERAGE MARGINS AS**
8 **"HEALTHY?"**

9 A. Obviously the characterization of the Authority's historic debt service coverage
10 margins represents my opinion based on an examination of the Authority's historic
11 performance.⁴⁸ However, I would note that OCA Witness Walters in the current
12 proceeding argues that a 1.20 debt service coverage would provide sufficient financial
13 support to the Authority. This represents a lower margin than what the Authority has
14 achieved in any recent year.

15 **Q. HAS PITTSBURGH WATER OFFERED ANY TESTIMONY OR DATA THAT**
16 **CHANGES YOUR RECOMMENDATIONS ON MYRP?**

17 A. No. I continue to recommend the Commission reject the Authority's proposed
18 MYRP. The Authority has not shown that the existing regulatory process in place has
19 been unable to provide adequate financial support to the Authority. Instead, the Authority
20 has seen growing excess revenues and has been able to create and expand the RSF.
21 Likewise, the Authority has not shown that the existing regulatory process has been

⁴⁷ PW St. 2R 74:9-12.

⁴⁸ PW St. 2R 74:14.

1 unable to adequately support the Authority's annual capital investments, which have
2 increased nearly every year since the Commission began regulating the Authority.

3
4 **V. CONCLUSIONS AND RECOMMENDATIONS**

5 **Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.**

6 A. Having reviewed the rebuttal testimony of Pittsburgh Water in this proceeding, I
7 continue to recommend the Commission reject the Authority's proposed MYRP and
8 proposal to increase the existing DSIC cap from five percent to 7.5 percent. The Authority
9 has not shown that the existing regulatory process has been unable to provide adequate
10 financial support to the Authority, including providing adequate support for the Authority's
11 annual capital investments.

12 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

13 A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Michael Deupree, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 1SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature: /s/ Michael Deupree
Michael Deupree

Address: Acadian Consulting Group
5800 One Perkins Place Drive
Suite 5-F
Baton Rouge, LA 70808

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission) Docket Nos. R-2025-3055010 (Water)
v.) R-2025-3055011 (Wastewater)
Pittsburgh Water and Sewer Authority) R-2025-3055012 (Stormwater)

SURREBUTTAL TESTIMONY OF

DANTE MUGRACE

**ON BEHALF OF THE
COMMONWEALTH OF PENNSYLVANIA
OFFICE OF CONSUMER ADVOCATE**

October 14, 2025

TABLE OF CONTENTS

I.	PURPOSE OF SURREBUTTAL TESTIMONY	1
II.	REVENUE REQUIREMENT ISSUES	5
A.	Financial Metrics – Debt Service Coverage / Day Cash on Hand	5
B.	Overall Expenses – Operating Budget Expenses in the FPPTY	6
C.	Normalization / Various Adjustments	7
D.	Payroll and Employee Benefits.....	10
E.	Non-Salary and Benefits Expenses.....	11
F.	Performance / Executive Bonus.....	12
G.	Rebranding Costs	13
H.	Water Conservation Program	14
I.	Lobbying Expenses.....	14
J.	Vehicles	15
K.	Line Location.....	16
L.	Manhole Repairs	16
M.	Field Inspection.....	17
N.	Surface Restoration	17
O.	Permits	18
P.	Capital Asset Reclass	19
Q.	Multi-Year Rate Plan (MYRP).....	19
III.	Exhibit DM-SR-1 through Exhibit DM-SR-21	

I. PURPOSE OF SURREBUTTAL TESTIMONY

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dante Mugrace. My business address is 22 Brooks Avenue, Gaithersburg, MD 20877.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS DOCKET?

A. Yes. I submitted Direct Testimony on September 5, 2025, which was marked as OCA Statement 2. My qualifications and experience are attached to my Direct Testimony.

Q. DO YOU HAVE ANY ADJUSTMENTS TO YOUR DIRECT TESTIMONY?

A. Based upon the rebuttal testimonies of the witnesses and the additional information received, I am recommending an overall increase of \$18,882,465 as shown on my Exhibit DM-1. For those issues that I have not specifically addressed in my Surrebuttal Testimony, I am relying on my Direct Testimony with respect to those issues along with my arguments for the specific adjustments.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my Surrebuttal Testimony is to address the Rebuttal Testimony of Authority witnesses Pickering (Pittsburgh Water or PW St. No. 1-R), and Barca (PW St. No. 2-R). To the extent that I do not respond to or address a particular issue or argument, I defer to my Direct Testimony on those issues.

Q. DOES YOUR SURREBUTTAL TESTIMONY CONTAIN ANY EXHIBITS?

A. Yes. Exhibits DM-SR 1 through DM-SR-21 are attached and they contain documents that I reference in this surrebuttal testimony.

Q. DID MR. BARCA UPDATE THE AUTHORITY'S COST OF SERVICE MODEL REGARDING THE FPFTY REVENUE REQUIREMENT INCREASE?

A. Yes. In PW's Rebuttal Cost of Service Model PW updated its revenue requirement increase to \$65,164,703 Tab EB-2). (System Operating Revenues of \$313,718,242 minus 2025 TY Operating Revenues of \$248,553,539). This is a \$357,609 difference from PW's as filed

revenue requirement of \$65,522,312 as shown on the Pittsburgh Water 2025 Cost of Service Study model filed on June 4, 2025.

Q. WHAT DID MR. PICKERING STATE REGARDING THE REBUTTAL COST OF SERVICE MODEL REVISIONS?

A. Mr. Pickering stated that the revisions to the Mr. Pickering Exhibit WJP-1 (Rev) were updated to maintain consistency with the Rebuttal Cost Service Model and there were no structural or formatting changes to WJP-1.¹ The overall changes are small and included minor changes to revenues.²

Q. WHAT DID MR. BARCA CLAIM REGARDING YOUR OVERALL RECOMMENDED REVENUE REQUIREMENT?

A. Mr. Barca claimed that my revenue requirement of \$18,498,565 (Exhibit DM-1) did not align with my Days Cash on Hand (DCOH) position for the FPFTY 2026 starting and ending cash (Exhibit DM-21) with the FPFTY deficit adjustment of \$16,883,956 (Exhibit DM-1) and did not account for an error in OCA's calculation of FPFTY DCOH of over \$16 million for FY 2026.³ Therefore the actual increase from the OCA would be \$35,382,521 (\$18,498,565 plus \$16,883,956) to account for the and eliminate the error made in OCA's recommendations and to align the rate increase with the OCA's recommended DCOH level.⁴

Q. WHAT IS YOUR RESPONSE?

A. Mr. Barca's claim that I erred in my calculation of PW's revenue requirement is inaccurate. By including the deficit adjustment of \$16,883,956 and providing for a revenue requirement increase of \$35,382,521 (\$18,498,565 plus \$16,883,956) the recommended debt service coverage (DSC) proposed by OCA Witness Mr. Walters would result in a greater coverage of 1.5685x, or a DSC of 1.7665x (Exhibit DM-SR-19). Further the updated \$17,207,308 deficit resulted in not including the recovery of Internally General Funds (PAYGO and DSIC) \$10,905,428, the collection of the Revolving Line of Credit of

¹ PW St. 1R at 9.

² *Id.*

³ PW St. 2R at 5.

⁴ *Id.*

1 \$3,000,000 and the Other Transfers to Reserve of \$3,000,000 for a total of \$16,905,428.
2 (Exhibit DM-SR-2). Although these balances are deducted as part of the Total Systemwide
3 Revenue Requirement of \$284,907,308 (Exhibit DM-SR-2) these balances offset the
4 \$16,905,428 as they are funds that can be used in the PW operations, to cover the proposed
5 debt service and other Capex and Transfers. The difference between the \$17,207,308 and
6 the \$16,905,428 is \$301,880 (deficit). *See* Exhibit DM-SR-2.

7 **Q. WHAT ELSE DID MR. BARCA STATE REGARDING YOUR RECOMMENDED**
8 **REVENUE REQUIREMENT PROPOSAL?**

9 **A.** Mr. Barca's attempt to recalculate my revenue recommendation, and the resulting
10 conclusions are faulty because they rely upon the assumption that none of the adjustments
11 I made are appropriate. Mr. Barca stated that my adjustments create results that are not
12 aligned with PW's actual costs along with my backward looking normalization approach
13 that creates results that do not meet Pittsburgh Water's real expenses. He stated that my
14 approach is unreasonable and illogical to set Pittsburgh's Water revenue requirement.⁵ Mr.
15 Barca stated that the backwards averaging recommendation would be so severe that PW
16 would need to contemplate whether to defer planned maintenance, cancel capital projects
17 and/or freeze the expansion of operations to stay financially solvent. The Commission
18 should not force such a dire situation upon PW through an arbitrary, backwards-looking
19 normalization theory of setting rates.⁶

20 **Q. WHAT IS YOUR RESPONSE?**

21 **A.** PW is responsible for substantiating all of its claims in this case, and where it did not do
22 so, I recommended adjustments.⁷ While Mr. Barca may not agree with my adjustments, his
23 attempt to mischaracterize my position produces skewed financial metrics that fail to
24 account for the totality of my recommendations. Setting rates for service under a cash flow
25 method is not unique. Applying the same basic ratemaking principles to that of a traditional
26 Rate Base/Rate of Return methodology still requires the finding of known and measurable
27 (justified based upon the documentation and evidence provided through discovery),

⁵ PW St. 2R at 7.

⁶ *Id.* at 8.

⁷ OCA St. 1 at 17.

1 prudent in nature (judged by the reasonableness and based upon information received) and
2 used and useful (whether costs that are incurred to provide utility services are useful to
3 ratepayers) expenses and components. In order to allow recovery of expenditures and costs
4 components, PW should show that these expenditures and cost components are realistic
5 and a necessary part of its normal day to day operations. There is a degree of interpretation
6 involved when reviewing forecasted data, and various levels of interpretations can vary
7 among the parties to the proceeding, which will ultimately be determined by the
8 Commission when setting rates for service. Mr. Barca's claims that my recommended
9 revenue requirement will not provide PW with the necessary resources to provide safe and
10 reliable water services and stay financially solvent, but my analysis demonstrates that the
11 opposite is true. PW's rates should be set sufficiently to cover all of its known and
12 measurable costs and provide sufficient cash on hand to meet its day to day obligations.
13 Ratemaking concepts, including those that are set under a cash flow method, do not provide
14 for 100% guaranteed recovery of all costs and expenditures. It provides for the opportunity
15 and the ability to recover all of a utility's known and measurable costs using good sound
16 management techniques and proper operational approaches in order to provide utility
17 service to ratepayers. I note that Mr. Barca stated that PW cannot provide evidence of what
18 will happen in the future.⁸ This language clearly supports the need to normalize expenses
19 and compare the outcome to PW's forecasted expenses in the FPFTY period. The OCA's
20 recommendation is reasonable and will allow PW to remain financially secure while
21 ensuring that customers are not paying unjust and unreasonable rates.

22 Mr. Barca presents a false-choice scenario in which PW must either receive its full increase,
23 regardless of whether ratepayers overpay for service, or PW's operations will decline and
24 impact service. Aside from the fact that Mr. Barca ignores other options in between,
25 including that PW can always seek additional rate relief as needed, his argument is flawed
26 in several other respects. In reviewing projected and prospective costs, one must review
27 historic costs to determine whether PW's projections are reasonable in nature and prudent.
28 Mr. Barca's interpretation is based upon his opinion and based upon PW not recovering all
29 of its projected expenditures, which is an unreasonable and arbitrary approach. PW always

⁸ PW St. 2R at 85.

1 has the ability to re-evaluate its financial position and cash flow needs in future years and
2 can seek further rate adjustments as its business situation may require at that time. PW
3 should not be permitted to over-collect its expenditures simply because it is a cash flow
4 utility.

5 **II. REVENUE REQUIREMENT ISSUES**

6 A. Financial Metrics – Debt Service Coverage / Day Cash on Hand

7 **Q. WHAT DID MR. BARCA CLAIM REGARDING YOUR RECOMMENDED DEBT** 8 **SERVICE COVERAGE RATIOS?**

9 A. Mr. Barca did not agree with my recommended Debt Service Coverage (DSC). He claims
10 that OCA's claimed senior and total debt were arrived at by pretending that PW will incur
11 operating expenses on a normalized level rather than on the level projected in PW's
12 approved operating budget.⁹ Mr. Barca stated that OCA's recommendation actually results
13 in a senior DSC of 1.34x and "an equally catastrophic" 1.02x total DSC, cause PW multiple
14 bond covenant defaults.¹⁰ Mr. Barca stated that PW needs to strive for much higher
15 coverage levels as supported by guidance released by S&P Global Ratings and Moody's
16 as well as actual performance of peer utilities.¹¹

17 **Q. WHAT IS YOUR RESPONSE?**

18 A. Mr. Barca's argument is inaccurate, as I explained above. Mr. Barca's argument that its
19 total level of projected operating expenses should be recovered in order to produce the
20 recommended DSC ratios proposed is unsupported by facts and unrealistic. DSC ratios are
21 akin to the traditional rate base/rate of return methodology and that through reasonable
22 adjustments to PW's operating expenses, the resulting DSC are achievable and attainable.
23 Mr. Barca's argument that OCA's recommendation as compared to the use of PW's
24 projected expenses results in less than PW's recommended DSC of 1.8452x is also not
25 accurate or realistic. Mr. Barca tries to influence the OCA's calculation of the DSC ratios
26 to show that it needs higher coverage levels, supported by S&P Global and Moody's. This

⁹ PW St. 2R at 15.

¹⁰ *Id.*

¹¹ *Id.*

1 would result in a situation that PW is entitled to every single dollar of the rate increase it
2 has requested, and that position is simply not supported in this case.

3 **Q. WHAT DID MR. BARCA STATE REGARDING YOUR RECOMMENDED DAYS**
4 **CASH ON HAND (DCOH)?**

5 **A.** Mr. Barca did not agree with my recommendation of the DCOH balance.¹² Mr. Barca stated
6 that my recommended DCOH does not reflect the cash deficit created by my
7 recommendations. Correcting this error my recommended DCOH would be 186.2 days
8 without including ALCOSAN billing and 102.6 days including ALCOSAN billing.¹³ Mr.
9 Barca claimed that my recommended balance pretends that PW will incur operating
10 expenses on a normalized level rather than on the level projected in PW's approved
11 budget.¹⁴

12 **Q. WHAT IS YOUR RESPONSE?**

13 **A.** As I previously stated above, PW's recovery of 100% of its projected and forecasted
14 expenditures in order to achieve its recommended DCOH is neither realistic nor a credible
15 approach. PW has the opportunity, *not* the guarantee of recovery, and it must substantiate
16 all claimed expenses. PW has the burden of proof to support all of its claimed expenses.
17 Only known and measurable costs, which are prudent in nature and used and useful in
18 utility operations should be recovered from ratepayers. The fact that PW has claimed that
19 the proposed levels inhibit the ability to continue to grow its reserves to the levels
20 comparable to its peers and its rate agencies does not provide sufficient argument to support
21 the recovery of all of its proposed expenses.

22 B. Overall Expenses – Operating Budget Expenses in the FPFTY
23 **Q. WHAT DID MR. BARCA CLAIM REGARDING THE OVERALL EXPENSES**
24 **AND OPERATING BUDGET RECOMMENDATION OF OTHER PARTIES?**

25 **A.** Mr. Barca claims that the concerns expressed by OCA regarding variances between
26 budgeted and actual expenses are not valid.¹⁵ Mr. Barca stated that the Operating Budget
27 incurred by PW through August 31, 2025 is \$79,895,479 or a 6.5% increase through the

¹² PW St. 2R at 17.

¹³ *Id.*, Exh. EB-16.

¹⁴ PW St. 2R at 17.

¹⁵ PW St. 2R at 22.

1 same period in the prior year.¹⁶ The projected year-end Operating Budget total is
2 \$136,793,915, which is 0.9% higher than the approved budget for FY 2025. Mr. Barca
3 stated that my FPFTY operating budget recommendations are \$3,388,542 lower than PW's
4 operating budget through August 31, 2025.¹⁷ Mr. Barca stated that adopting this operating
5 budget recommendations would be setting PW up for failure and would be forced to cancel
6 active contracts, layoff staff and pause future initiatives just to keep the business financially
7 solvent.¹⁸

8 **Q. WHAT IS YOUR RESPONSE?**

9 **A.** I will address my adjustments and variances related to Mr. Barca's statement regarding
10 variances and the various operating expense categories below for each of my recommended
11 adjustments as needed and addressed.

12 C. Normalization / Various Adjustments

13 **Q. WHAT DID MR. BARCA CLAIM REGARDING YOUR NORMALIZATION**
14 **ADJUSTMENTS AND VARIOUS OTHER ADJUSTMENTS?**

15 **A.** Mr. Barca did not agree with my various normalization adjustments to PW's projected
16 expense categories. Mr. Barca claimed that this approach may be reasonable when it is
17 applied to an investor-owned utility that is regulated on a rate or return/rate base basis, but
18 for several reasons, is not reasonable for PW.¹⁹ Mr. Barca stated that PW continues to grow
19 its operations to a sufficient size to renew, maintain and operate its large water, wastewater
20 and stormwater systems. Using historical data to condemn future projections is self-
21 defeating and amounts to a repudiation of PW's efforts to repair and neglect inadequacies
22 of the past. Mr. Barca claims that if PW is held to historic spending levels for ratemaking
23 purposes, it will be forced to reduce the levels of expenditures to those levels and will not
24 be able to accomplish the myriad of projects and initiatives it has determined are necessary
25 or has been ordered to do so by regulators.²⁰ Mr. Barca stated that PW has asked for no
26 material increment above revenues it needs to fund its Operating Budget to be able to attain

¹⁶ *Id.*

¹⁷ *Id.* at 22-23.

¹⁸ *Id.* at 23.

¹⁹ *Id.* at 24.

²⁰ PW St. 2R at 24.

1 financial indicators that would be consistent with its peer utilities.²¹ Finally, Mr. Barca
2 argues that unlike an investor-owned utility, if PW does encounter unforeseen
3 circumstances and is unable to expend all of its FY 2026 budget funding provided in rates,
4 that 100% of the revenues PW collects from customers will be retained by PW and will be
5 used to support the continued operations in a safe and reasonable manner and will not go
6 to shareholders or an owner.²² PW would commit to using FY 2026 excess revenues net of
7 expenses in subsequent years to reduce its cost of service by paying down debt or other
8 borrowing, adding the amount to its cash on hand or crediting its reserve fund.²³ Mr. Barca
9 stated that the explicit or implicit alleged justification for using historical averages rather
10 than the PW's projections for FY 2026 expenses is that PW did not sufficiently justify or
11 prove that its claimed expense levels for FY 2026 were reasonable.²⁴ Mr. Barca stated that
12 the demanding of proof that is virtually impossible when projecting expenditures many
13 months out and PW did provide extensive support for its FY 2026 projections which was
14 simply brushed aside by the witnesses as insufficient.²⁵ PW provided significant discovery
15 responses to the parties most of which were not referenced that discussed projected
16 expenditures.²⁶ Finally Mr. Barca stated that normalization is simply not reasonable or
17 produces reasonable results for PW's expenses and should be rejected in its entirety.²⁷

18 **Q. WHAT IS YOUR RESPONSE?**

19 **A.** I am addressing the use of normalization overall as a basis for setting rates for service. My
20 arguments for normalizing certain adjustment components are the same as discussed in my
21 direct testimony. The use of normalizing and averaging certain expense adjustments is an
22 appropriate method to set rates prospectively (FPFTY 2026), when all of PW's expenses
23 were adjusted with no specific ratemaking adjustments used to develop the revenue
24 requirement. Therefore, in order to evaluate PW's proposed operating expenses, one must
25 review all the categories and line items that are part of the proposed revenue requirement

²¹ *Id.* at 25.

²² *Id.*

²³ *Id.*

²⁴ *Id.* at 26.

²⁵ *Id.*

²⁶ *Id.*

²⁷ PW St. 2R at 26.

1 to analyze and examine the costs. Past spending trends and cost levels are a good indicator
2 of future needs and requirements. Abnormalities, fluctuations and variations are among the
3 reasons to normalize costs because they smooth out costs and provide for a consistent and
4 steady recovery during the time rates are set by the Commission. In periods where PW has
5 not booked costs nor documented any prior expense, it is difficult to measure or assess
6 what level should be considered reasonable and appropriate going forward. Costs must be
7 incurred continuously and be recurring going forward, and PW has not provided any
8 specific reason why certain accounts did not have costs in prior periods but will have costs
9 in future periods. The test is the FPFTY period 2026, and the recovery of costs should be
10 used for that specific period only, and any over-recovery of costs in the FPFTY 2026 is not
11 an appropriate approach to set rates for service. This is the main reason for normalization,
12 to prevent over-recovery or over-collection of expenses in future periods. Over-recovery
13 of expenses comes at the expense of ratepayers as rates have already been set by the
14 Commission, and ratepayers will be harmed by being charged unreasonable rates.

15 PW has the opportunity to recover all of its prudent and known costs to provide safe and
16 reliable utility service. It is not guaranteed to recover all of its costs based on a capital plan
17 or budget for ratemaking purposes, and it must support all claimed expenses, not merely
18 be entitled to recover any claimed cost simply by alleging that terrible things will occur if
19 it is not awarded every dollar requested. Mr. Barca stated that PW's myriad of projects and
20 initiatives it has determined are necessary or ordered by regulators will not be achieved
21 because of the level of revenue requirement proposed by the OCA. It remains reasonable
22 and appropriate to use normalization and to review historical data in the development of
23 rates going forward.

24
25 **Q. DOES PW'S STATUS AS A CASH-FLOW UTILITY ENTITLE IT TO HAVE A**
26 **FINANCIAL CUSHION OR TO USE EXCESS REVENUE FOR OTHER MEANS**
27 **AT THE EXPENSE OF RATEPAYERS?**

28 A. No. PW should not have any incremental revenues above the revenues it needs simply
29 because under a cash flow basis of ratemaking, revenues equal expenses. As I stated
30 previously, PW has the opportunity to recover all of its known and measurable expenses;
31 it is not a 100% recovery of all costs. Incremental recovery of revenues in order to have a

1 financial cushion is not a reasonable approach to set rates for service because it would be
2 difficult to claw back any incremental revenue in the event PW's forecasted outcome has
3 not been realized. PW has a daily cash on hand balance of \$83,729,892 (which is akin to
4 a rate base / rate of return cash working capital balance) that it can use to cover unforeseen
5 and unexpected expenditures during its annual operating period. This is PW's cushion.
6 Additionally, PW's claims ignore that when rates for service are set, they are neither the
7 highest rates nor the lower rates, but rather a reasonable rate that is set by the Commission
8 based on evidence that rates are based on reasonable and prudent costs of the utility. In this
9 regard, there is no difference between whether Rate Base / Rate of Return or Cash Flow
10 Methodology is being applied. Using either methodology, it is not appropriate for PW to
11 use any excess revenues in subsequent years to reduce debt or other borrowing or to be
12 used for other means. This approach creates an unnecessary burden on ratepayers and an
13 undue hardship. PW should not have unfettered access to ratepayer money without costs
14 being justified, prudent and used and useful in nature. The Commission should also take
15 into consideration the ratemaking principle of gradualism in permitting PW to recover
16 increased costs over several years or through a number of rate case proceedings.

17 D. Payroll and Employee Benefits

18 **Q. WHAT DID MR. BARCA CLAIM REGARDING YOUR ADJUSTMENTS TO**
19 **PAYROLL AND EMPLOYEE BENEFITS?**

20 **A.** Mr. Barca did not agree with my adjustments or my methodology to determine employee
21 levels and expenses related to employees or my use of a vacancy rate ratio of 6.41%.²⁸ Mr.
22 Barca stated that my recommended employee count would only fund 434 positions instead
23 of PW's claim to fund 464 positions.²⁹ As of September 22, 2025, PW's headcount was
24 415 which is lower than the headcount that OCA is claiming Pittsburgh Water will have
25 more than a year from now.³⁰ PW's current headcount figures invalidate the FPFTY
26 recommendation from OCA and is not prudent because it does not provide PW with the
27 necessary funds to expand the headcount to 464 planned for the FPFTY to continue to
28 advance PW's mission.³¹ Mr. Barca stated that OCA did not provide any analysis of PW's

²⁸ PW St. 2R at 27.

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.* at 27-28.

1 projections to refute PW's need for the number of employees in FY 2026. Mr. Barca stated
2 that my recommendation should be rejected because they do not provide PW with enough
3 revenue to recover increased expenses for additional employees in the FPFTY and fund
4 cost of living adjustments for employees which are nondiscretionary for union employees
5 per the collective bargaining agreements.³²

6 **Q. WHAT IS YOUR RESPONSE?**

7 **A.** Given that Mr. Barca's claim for actual employee headcount as of September 22, 2025 was
8 415, which is less than the headcount projected in 2025 of 442 (I&E RE-4-D) it is
9 reasonable to normalize employee count for this very reason. The prior employee count
10 has shown vacancies in all of the years 2022 through 2025. It also appears that PW is
11 struggling to hire and retain employees, and the use of a vacancy rate ratio is reasonable
12 given the apparent inability to fill vacancies in prior years and prospectively. Employee
13 vacancies are inherent in all companies including utilities in that in any given period,
14 employees retire, voluntarily and involuntarily leave the company and certain positions are
15 eliminated. With respect to PW's offer of cost of living increases, I accepted PW's cost of
16 living increase as shown in response to I&E RE-6-D, that is included in the normalization
17 adjustments. My vacancy rate adjustment reflects the level of employees and employee
18 count with current salaries and benefits. The adjustment to employee headcount reflects
19 the associated adjustment to employee benefits at current levels.

20 E. Non-Salary and Benefits Expenses

21 **Q. WHAT DID MR. BARCA STATE REGARDING YOUR NON-SALARY AND**
22 **BENEFITS EXPENSES?**

23 **A.** Mr. Barca did not agree with my adjustments to non-salary and benefits expenses. Mr.
24 Barca stated that PW is positioned to meet or exceed its FY 2025 Operating Budget, which
25 further justifies the requested FPFTY claim and my adjustments to non-salary and benefits
26 are not realistic.³³ Mr. Barca stated that reductions this dramatic further invalidates the
27 recommendation of my adjustments in that they are counterproductive and do not provide

³² *Id.* at 28.

³³ PW St. 2R at 30.

PW with the revenues to adequately maintain the system and provide ratepayers with safe and reliable service.³⁴

Q. WHAT IS YOUR RESPONSE?

A. As I previously stated, PW's recovery of 100% of its projected and forecasted expenditures is not a realistic nor a credible approach. PW has the opportunity, *not* the guarantee of recovery, and it must substantiate all claimed expenses. PW has the burden of proof to support all of its claimed expenses. Only known and measurable costs, which are prudent in nature and used and useful in utility operations should be recovered from ratepayers. The fact that PW has claimed that the proposed levels inhibit the ability to continue to grow does not provide a sufficient argument to support the recovery of all of its proposed expenses. The fact that PW stated that it is positioned to meet or exceed its FY 2025 Operating Budget is without merit as past performance and operating activities is a good indicator of future operating activities that are used to developing the operating expenses in the FPFTY 2026 period.

F. Performance / Executive Bonus

Q. WHAT HAS MR. BARCA STATE REGARDING YOUR DISALLOWANCE OF THE PERFORMANCE BONUS?

A. Mr. Barca stated that he did not agree with my recommendation to disallow the Performance bonus.³⁵ Mr. Barca stated that the criteria that was set forth in OCA Set 9 – 13 response were the performance goals to determine the CEO's annual performance of up to 15% of salary.³⁶ Mr. Barca stated that the CEO employment contract include the performance goals and must be funded like other contract obligations.³⁷

Q. WHAT IS YOUR RESPONSE?

A. PW stated that the dollars to be included in rates and recovered from ratepayers, for costs related to the performance / executive bonuses but has not provided any evidence that these goals have been achieved. In order to evaluate whether the executive bonus should be

³⁴ *Id.*

³⁵ PW St. 2R at 31.

³⁶ *Id.*

³⁷ *Id.*

1 included in the revenue requirement equation, one must determine whether those dollars
2 benefit ratepayers in the area of customer service, safety and reliability. This review should
3 occur now and not in the future. This is not an appropriate way to evaluate whether the
4 costs related to incentive compensation are reasonable and prudent in nature. PW has not
5 provided any evidence with respect to the costs associated with the bonus paid to the Chief
6 Executive Officer, nor has PW demonstrated that the bonus is tied to specific customer
7 oriented benefits that produce quantifiable ratepayer benefits. PW is free to provide
8 bonuses or other forms of compensation to its employees and have PW fund these bonuses
9 by reducing certain operating expenses, implementing cost savings measures or shifting
10 costs from other expense categories to fund these bonuses, but PW should not expect that
11 these costs will be recovered from ratepayers. Therefore, I am continuing to recommend
12 disallowance of the costs related to the Chief Executive Officer in the amount of \$43,784.

13 G. Rebranding Costs

14 **Q. WHAT DOES MR. BARCA STATE REGARDING YOUR DISALLOWANCE OF**
15 **ITS REBRANDING COSTS?**

16 **A.** Mr. Barca did not agree with my disallowance of Rebranding Costs of \$50,000.³⁸ He stated
17 that PW rebranding sets the tone throughout the organization by highlighting commitment
18 to public health, safety, ethics and integrity, stewardship, and accountability by reaffirming
19 PW's Mission, Vision and Core Values. This has a positive impact on business practices
20 which ultimately benefits PW's ratepayers.³⁹

21 **Q. WHAT IS YOUR RESPONSE?**

22 **A.** I continue to disallow these costs because PW has not provided any outcome related to
23 ratepayer benefits. I continue to recommend disallowing these costs because they merely
24 promote PW's new name, identity and logo. They are not the sort of customer-oriented
25 benefits I see that are related to safe, adequate and reliable utility service.

26

³⁸ PW St. 2R at 32.

³⁹ *Id.*

1 H. Water Conservation Program

2 **Q. WHAT HAS MR. BARCA STATED WITH RESPECT TO YOUR ADJUSTMENTS**
3 **TO THE WATER CONSERVATION PROGRAM?**

4 **A.** Mr. Barca referred to Ms. Mechling with respect to the additional dollars of \$150,000
5 related to PW's Water Conservation Program.⁴⁰ Ms. Mechling did not agree with the
6 additional \$150,000 as proposed by OCA witness Mr. Colton as the program is currently a
7 pilot and is now proposing to make it a permanent program for the first time.⁴¹ She stated
8 that based upon the revenue requirements for 2026 and 2027, there will be sufficient dollars
9 to identify eligible candidates, work with them and secure services.⁴²

10 **Q. WHAT IS YOUR RESPONSE?**

11 **A.** I defer to OCA Witness Mr. Colton with respect to the additional dollars related to PW's
12 Water Conservation Program.

13 I. Lobbying Expenses

14 **Q. WHAT HAS MR. BARCA STATED REGARDING YOUR DISALLOWANCE OF**
15 **LOBBYING EXPENSES?**

16 **A.** Mr. Barca did not agree with my disallowance of Lobbying Expenses of \$88,200.⁴³ He
17 stated that these costs are reasonable for PW since it is a municipal authority and has an
18 obligation to maintain lines of communication with other parts of government. These
19 expenses related to lobbying expenses are government relations expenses which benefit
20 customers. Since PW has no shareholders, all of PW's government relations efforts accrue
21 to the benefit of customers.

22 **Q. WHAT IS YOUR RESPONSE?**

23 **A.** I continue to recommend disallowance of these lobbying expenses for ratemaking
24 purposes. PW has not provided any outcomes or results that justify these lobbying costs;
25 therefore, disallowance is appropriate. Regardless of whether or not PW has shareholders
26 is irrelevant, these types of costs are not an appropriate expense to be included in the
27 provision of utility services. Further, PW has not provided a special circumstance

⁴⁰ *Id.*

⁴¹ PW St. 6R at 42.

⁴² *Id.*

⁴³ PW St. 2R at 32.

1 surrounding PW's ratemaking development and PW did not provide any reason to warrant
2 for such treatment. Since these costs are not justified or reasonable, they should not be
3 recovered from ratepayers, as PW would have to determine how these amounts should be
4 expensed.

5 J. Vehicles

6 **Q. WHAT DID MR. BARCA CLAIM WITH RESPECT TO YOUR ADJUSTMENT**
7 **RELATED TO VEHICLES?**

8 **A.** Mr. Barca did not agree with my normalizing the cost of Vehicles over a three year
9 period.⁴⁴ He stated that the current PW's fleet is over 5 years of age with 32% over 7 years
10 of age. Mr. Barca stated that approximately \$2-3 million should be the minimum amount
11 invested annually to keep up with replacement cycles and account for expansions of
12 operations.⁴⁵

13 **Q. WHAT IS YOUR RESPONSE?**

14 **A.** PW has not provided any firm contracts or agreements, nor identified the vendor, nor
15 provided the effective date of such contracts and when these vehicles will be in place in
16 and become effective in 2026. More than estimations and approximations are needed to
17 substantiate PW's claim. Prior recent costs show balances of vehicles purchases of
18 \$1,567,271 in 2022, \$1,939,380 in 2023, \$762,342 in 2024, and \$930,000 in 2025. These
19 vehicle expenditures did not rise to the level of costs proposed in the FPFTY 2026 period
20 (Account 5190). A normalization balance that I recommended in the amount of \$1,210,574
21 fairly reflects past vehicle purchases. Mr. Barca's claim that the \$2-3 million vehicles
22 purchases did not come to fruition in prior years with the greatest purchase occurring in
23 2023 at a balance of \$1,939,380. PW's argument that it is trying to keep up with
24 replacement cycles is without merit. PW has not provided any evidence to show it actually
25 entered into a contract with a vendor. In the absence of support for PW's full claim amount
26 of \$3,000,000, a normalization adjustment is a reasonable approach to recover these costs
27 in the FPFTY period.

⁴⁴ PW St. 2R at 33.

⁴⁵ *Id.* at 33-34.

1 K. Line Location

2 **Q. WHAT DID MR. BARCA CLAIM WITH RESPECT TO YOUR ADJUSTMENT**
3 **RELATED TO PW'S LINE LOCATION COSTS?**

4 **A.** Mr. Barca stated that he did not agree with my two-year average. He stated that it is not
5 typical for contract renewal pricing to decrease.⁴⁶ Mr. Barca provided Exhibit EB-18 that
6 represents the recently executed FY 2026 agreement for line locating services.

7 **Q. WHAT IS YOUR RESPONSE?**

8 **A.** I have reviewed Exhibit EB-18 and have accepting Mr. Barca's claim that PW has entered
9 into a contract related to Line Locating Services. Therefore, I am accepting PW's balance
10 of \$767,800 related to these expenditures.

11 L. Manhole Repairs

12 **Q. WHAT HAS MR. BARCA STATED REGARDING YOUR ADJUSTMENTS TO**
13 **PW'S MANHOLE REPAIR?**

14 **A.** Mr. Barca did not agree with my two-year average of Manhole Repairs and stated that I
15 attempted to justify my argument by stating that \$523,369 has been incurred through July
16 2025 and the solicitation outcome is uncertain.⁴⁷ Mr. Barca stated that that PW already
17 spent \$1,154,044 on one contract through the first nine months of FY 2025. In addition,
18 PW provided sufficient explanation for the FY 2026 projected level in direct and rebuttal.⁴⁸

19 **Q. WHAT IS YOUR RESPONSE?**

20 **A.** Given that PW has spent \$1,154,044 through September 2025, and annualizing this balance
21 results in an annual expenditure of \$1,538,725, it is reasonable to recommend an annual
22 recovery of \$1,500,000 that I previously recommended. Prior costs were \$0 in 2021, \$0 in
23 2022 and \$1,534,899 in 2023. PW actually spent \$1,615,548 in 2024 and proposed to spend
24 \$2,500,000 in 2025. In actuality PW spent on an annualized basis \$1,534,899 in 2025. A
25 \$1,500,000 annual recovery for these expenditures appears to be reasonable in light of prior
26 spending limits.

⁴⁶ *Id.* at 34.

⁴⁷ PW St. 2 at 35.

⁴⁸ *Id.*

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M. Field Inspection

Q. WHAT HAS MR. BARCA STATED REGARDING YOUR ADJUSTMENT TO FIELD INSPECTION?

A. Mr. Barca did not agree with my two-year average of Field Inspection expenditures of \$1,547,141 stating that I attempted to justify my argument that \$901,628 has been incurred through July 2025 and is speculative that the proposed balance will come to fruition.⁴⁹ Mr. Barca stated that construction inspection contracts are typically 10-15% of the associated construction contract that it is supporting.⁵⁰ Mr. Barca stated that I did not consider this when making my recommendation which supports Mr. Barca’s claim that my adjustment should be rejected. Mr. Barca stated that my adjustment is not representative of the true cost that will be incurred.⁵¹

Q. WHAT IS YOUR RESPONSE?

A. Mr. Barca has not provided any firm inspection contract costs reflecting 10-15% of total construction contract costs. In response to OCA Set 9-39, PW stated that about \$901,628 was spent through July 2025. Annualizing this balance results in an annual expense of \$1,545,648. My recommended two-year average results in a recovery of \$1,547,141 which is almost the amount of recovery PW has indicated it is expected to spend on an annual basis. Therefore, my recommended two-year average basis appears to be reasonable.

N. Surface Restoration

Q. WHAT HAS MR. BARCA STATED REGARDING YOUR ADJUSTMENT TO SURFACT RESTORATION COSTS?

A. Mr. Barca did not agree with my three-year normalization of PW’s Surface Restoration costs. He stated that I normalized these costs without any additional information.

Q. WHAT IS YOUR RESPONSE?

A. In response to OCA Set 9-39, PW spent \$2,566,191 through July 2025. The response stated that Surface Restoration costs activities increase during the summer months with many

⁴⁹ PW St. 2 at 36.
⁵⁰ *Id.*
⁵¹ *Id.*

1 large invoices submitted in September – November for work completed in April-
2 September. That is all the information that was provided in order to evaluate the
3 reasonableness of PW's proposed costs of \$15,000,000. Prior costs were \$7,394,000 in
4 2021, \$8,405,752 in 2022, \$12,677,855 in 2023, \$12,236,664 in 2024 and expected costs
5 of \$11,629,825 in 2025. It appeared that PW has been ramping up its Surface Restoration
6 costs in prior years in response to Mr. Barca stating that PW is addressing the backlog of
7 paving sites. My normalization adjustment reflects a balance of \$12,181,248 which is fairly
8 close to what PS has incurred and spent in prior years for Surface Restoration costs.
9 Without additional further information or an update to what has been spent to date in 2025,
10 it is unclear what PW is expected to incur through the end of 2025. I am continually
11 recommending a balance of \$12,181,248 for Surface Restoration costs.

12 O. Permits

13 **Q. WHAT HAS MR. BARCA STATED WITH RESPECT TO YOUR ADJUSTMENTS**
14 **TO PERMITS?**

15 **A.** Mr. Barca did not agree with my two-year average of Permits for an annual recovery of
16 \$2,000,000. He stated and referenced the response to I&E RE-43 which stated that PW's
17 adopted Capital Improvement Plan requires additional right-of-way permits from the City
18 of Pittsburgh's Department of Mobility and Infrastructure. These expenses are levied by
19 the City of Pittsburgh using annual fee schedule adopted by Pittsburgh City Council as part
20 of the annual budgeting process.⁵² Mr. Barca stated that PW is forecasting the pricing for
21 permits to increase and much of the increase is offset by a corresponding negative amount
22 with Capital Asset Reclass general ledger account 7710. Mr. Barca stated that I did not
23 explain why this explanation was not sufficient.⁵³ Mr. Barca stated that I had the chance to
24 ask for additional information but failed to do so.⁵⁴

25 **Q. WHAT IS YOUR RESPONSE?**

26 **A.** Prior costs for Permits were \$0 in 2021, \$0 in 2022, \$100 in 2023, \$20,647 in 2024 and
27 \$139,997 in 2025. PW has not provided any information regarding the City of Pittsburgh
28 pricing fee schedule or any other information to show the costs increases. In response to

⁵² PW St. 2 at 39.

⁵³ *Id.*

⁵⁴ *Id.* at 39-40.

1 I&E RE-43, PW was asked to provide the detailed basis and calculations / supporting
2 documentation related to Permits. PW did not provide any other forms of correspondences,
3 notifications or related attachments reflecting the need to increase these Permit costs. It is
4 difficult to evaluate the proposed costs when PW was asked to provide the information
5 through discovery and did not provide a sufficient response. Given the lack of a response,
6 I believe additional discovery would have resulted in the same response. Mr. Barca stated
7 that the increased costs of Permits are forecasted costs but has not provided any concrete
8 evidence to support the Permit costs from \$139,997 to \$4,000,000 in the FY 2026. Without
9 further information, I continue to recommend a two-year average or \$2,000,000 annually
10 related to Permit costs. This is over and above what PW has incurred in the past 5 years.
11

12 P. Capital Asset Reclass

13 **Q. WHAT HAS MR. BARCA STATED REGARDING COST ADJUSTMENTS MADE**
14 **BY THE OCA IN RELATION TO THE CAPITAL ASSET RECLASS?**

15 **A.** Mr. Barca stated that the adjustments that I made to reduce the allowance for a number of
16 expenses that are tied to the Capital Asset Reclass should also have reduced the Capital
17 Asset Reclass Account GL 7710 negative adjustment to correspond with the adjustments
18 made for the Annual Sewer Contract, Emergency Water Line, Manhole Repair,
19 Engineering Inspection, Construction Management and Permit Expense.⁵⁵

20 **Q. WHAT IS YOUR RESPONSE?**

21 **A.** I am unable to trace the adjustments with respect to Mr. Barca's claim that my revenue
22 requirement should be increased to \$3,523,570 in order to reflect the allowances made that
23 are tied to the Capital Asset Reclass account. Until PW can provide the specific
24 adjustments, I am not recommending any adjustments with respect to PW's Capital Asset
25 Reclass account.

26 Q. Multi-Year Rate Plan (MYRP)

27 **Q. WHAT HAS MR. BARCA STATED REGARDING YOUR OPPOSITION TO PW'S**
28 **PROPOSED MULTI-YEAR RATE PLAN?**

⁵⁵ PW St. 2R at 42.

1 A. Mr. Barca stated that PW's MYRP proposal is simple and non-controversial. Mr. Barca
2 stated that the underlying reason seems to be the Parties' preference to subject PW to
3 frequent rate cases because a rate case gives the Parties the opportunity to delve into every
4 aspect of PW's operations and policies, which Mr. Barca believes they would lose or will
5 be curtailed if a MYRP were approved.⁵⁶ Mr. Barca stated that the PA General Assembly
6 has already decided whether utilities will be required to be subjected to constant rate cases
7 in order to maintain their financial health and to have the revenues they need to continue
8 to provide adequate and reasonable service. Mr. Barca stated that PW's proposal seems to
9 be exactly what the General Assembly had in mind when it enacted the law.⁵⁷

10 **Q. WHAT IS YOUR RESPONSE?**

11 A. I refer to my Direct Testimony in that PW's two-year rate plan (MYRP) should be rejected
12 and I am continuing to rely on the recommendations of OCA Witness Mr. Dupree and
13 OCA Witness Mr. Mierzwa.

14 **Q. WHAT HAS MR. BARCA AND MS. MECHLING STATE REGARDING**
15 **REINSTITUTING CREDIT CARD PAYMENT CONVIENIENCE FEES BACK TO**
16 **THE CUSTOMERS INCURRING THOSE FEES?**

17 A. Mr. Barca stated that it took issue with OCA witness Ms. Alexander with respect to PW's
18 customers to continue to absorb these fees which cost ratepayers approximately \$500,000
19 per year. Mr. Barca stated that Ms. Alexander asked the Commission to reject PW's
20 proposal to reinstitute passing through third party transaction fees and demand that PW not
21 be permitted to collect the cost of the fees in rates without deeming them to be the lowest
22 cost and that reflects a more recent analysis of handling these transactions in house.⁵⁸

23 **Q. WHAT IS YOUR RESPONSE?**

24 A. As per the surrebuttal testimony of OCA witness Ms. Alexander, (OCA St. 7R) she
25 recommends PW's proposal to impose a transaction fee for payment by credit and or debit

⁵⁶ PW St. 2R at 58.

⁵⁷ *Id.*

⁵⁸ PW St. 2R at 97.

1 cards by residential customers be rejected. Ms. Alexander recommended that PW continue
2 to offer no fee payment method for credit and debit cards.

3

4 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

5 **A.** Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Dante Mugrace, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 2SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature:

Dante Mugrace
Dante Mugrace

Address:

PCMG and Associates, LLC
22 Brooks Avenue
Gaithersburg, MD 20877

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**DOCKET NOS.
R-2025-3055010 (water)
C-2025-3056056
C-2025-3055943**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**R-2025-3055011 (wastewater)
C-2025-3056054
C-2025-3055944**

**Pennsylvania Public Utility Commission
Office of Small Business Advocate
Office of Consumer Advocate**

v.

The Pittsburgh Water and Sewer Authority

**R-2025-3055012 (stormwater)
C-2025-3056058
C-2025-3055942**

Surrebuttal Testimony of

Christopher C. Walters

OCA Statement 3SR

On behalf of

Pennsylvania Office of Consumer Advocate

Date Served: October 14, 2025



Project 11887

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	DOCKET NOS.
	)	R-2025-3055010 (water)
v.	)	C-2025-3056056
	)	C-2025-3055943
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055011 (wastewater)
	)	C-2025-3056054
v.	)	C-2025-3055944
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055012 (stormwater)
	)	C-2025-3056058
v.	)	C-2025-3055942
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	

**Table of Contents to the
Surrebuttal Testimony of Christopher C. Walters**

SUMMARY	2
RESPONSE TO MS. CHRISTINE FAY	3
RESPONSE TO MR. EDWARD BARCA.....	9
CONCLUSION.....	13

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	DOCKET NOS.
Office of Consumer Advocate	)	R-2025-3055010 (water)
	)	C-2025-3056056
v.	)	C-2025-3055943
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055011 (wastewater)
	)	C-2025-3056054
v.	)	C-2025-3055944
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	
	)	
Pennsylvania Public Utility Commission	)	
Office of Small Business Advocate	)	
Office of Consumer Advocate	)	R-2025-3055012 (stormwater)
	)	C-2025-3056058
v.	)	C-2025-3055942
	)	
The Pittsburgh Water and Sewer Authority	)	
	)	

Surrebuttal Testimony of Christopher C. Walters

- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A Christopher C. Walters. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

1 **Q ARE YOU THE SAME CHRISTOPHER C. WALTERS WHO PREVIOUSLY**
2 **FILED DIRECT TESTIMONY ON SEPTEMBER 5, 2025, IN THIS**
3 **PROCEEDING?**

4 A Yes, I am.

5 **Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

6 A I am appearing on behalf of the Pennsylvania Office of Consumer Advocate (“OCA”).

7 **Q PLEASE GIVE A BRIEF OVERVIEW OF YOUR SURREBUTTAL**
8 **TESTIMONY.**

9 A The purpose of my Surrebuttal Testimony in this proceeding is to respond to the
10 Rebuttal Testimonies of Pittsburgh Water and Sewer Authority d/b/a Pittsburgh Water
11 (“Pittsburgh Water”) witnesses Ms. Christine Fay and Mr. Edward Barca.

12 My silence on any particular issue should not be construed as tacit agreement or
13 an endorsement of another party’s position.

14 **SUMMARY**

15 **Q PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.**

16 A In my Surrebuttal Testimony, I respond to certain criticisms and recommendations
17 offered in the Rebuttal Testimonies of Pittsburgh Water witnesses Ms. Christine Fay
18 and Mr. Edward Barca. In particular, I respond to Ms. Fay’s assertions that: my
19 recommended long-term interest rate for future debt issuances is understated, my
20 recommended bond premium is overstated, my recommended ratios would lead to

1 multi-notch downgrades and raise red flags with ratings agencies, and that ratings
2 agencies are less concerned with affordability and more concerned with regulatory risk.
3 I will also respond to Mr. Barca's Rebuttal Testimony as it relates to his criticisms of
4 my recommended Debt Service Coverage Ratio ("DSCR") of 1.20x and resulting Days
5 Cash on Hand ("DCOH") metrics.

6 **RESPONSE TO MS. CHRISTINE FAY**

7 **Q PLEASE SUMMARIZE THE CONCERNS EXPRESSED BY MS. FAY**
8 **REGARDING YOUR RECOMMENDATIONS?**

9 A Ms. Fay's Rebuttal Testimony (PWSA St. No. 7-R) raises several concerns with my
10 recommendations. She contends that my proposed 5.5% borrowing cost is too low for
11 long-term planning, arguing that the Pittsburgh Water's 7.0% assumption is prudent
12 given potential market volatility, though she concedes that 6.5% may be reasonable for
13 the near-term Fully Projected Future Test Year ("FPFTY"). She also disputes my
14 adjustment to increase the bond premium to 8.44%, asserting that coupon and premium
15 are inversely related and that my change is "not relevant in actual market practice."
16 Ms. Fay further claims that my recommended DSCR of 1.57x (Senior) and 1.20x (Total)
17 would be "catastrophic" for Pittsburgh Water's credit quality, leading to multiple-notch
18 rating downgrades by Moody's and S&P, and that my lower DCOH and revenue
19 recommendations would signal financial weakness. Finally, she argues that I
20 misinterpreted rating-agency discussions of affordability, asserting that those reports
21 focus on regulatory risk from affordability-driven rate suppression rather than

1 affordability itself, and that my interpretation exemplifies the type of regulatory
2 behavior that rating agencies caution against.

3 **Q DO YOU AGREE WITH MS. FAY THAT A 7.0% BORROWING COST**
4 **REMAINS REASONABLE FOR LONG-TERM PLANNING PURPOSES?**

5 A No. Ms. Fay acknowledges that “given the general decrease in interest rates and
6 economic outlook ... it is reasonable to assume a 6.5% instead of 7% borrowing cost”
7 for the FPFTY.¹ That statement effectively concedes that the 7.0% rate Pittsburgh
8 Water used to determine its revenue requirement is overstated for the test period.

9 A-rated municipal debt currently prices well below 6%. Pittsburgh Water’s own
10 2025A issuance confirms that reality. As provided in Pittsburgh Water’s response to
11 OCA-Informal-1 Attach A, Pittsburgh Water indicated the all-in Total Interest
12 Cost (“TIC”) was 4.38%. In fact, as reported in the most recent Blue Chip Financial
13 Forecasts’ report, the consensus of projections has A-rated State and Local bond yields
14 remaining relatively flat from 4.3%-4.4% through the first quarter of 2027, which
15 represents a modest decline from 4.4% to 4.5% at the time of my Direct Testimony.
16 Similarly, at the time of my Direct Testimony, 30-year A-rated municipal bond yields
17 were 5.12% as reported in the August 25th issue of Raymond James’ *Municipal Bond*
18 *Investor Weekly*. In its October 6, 2025 issue, Raymond James notes that A-rated
19 municipal bonds were yielding 4.91%, a further decline of 21-basis-points from
20 late August. A 7.0%, and even a 6.5%, rate assumption, therefore, exaggerates
21 borrowing costs and overstates required revenue recovery.

¹Pittsburgh Water St. No. 7-R at page 3.

Q MS. FAY ARGUES THAT A 7.0% BORROWING COST REMAINS REASONABLE BECAUSE OF HEIGHTENED INTEREST-RATE VOLATILITY. HAS THAT VOLATILITY PERSISTED IN 2025?

A No. Market volatility has subsided dramatically since the period when Pittsburgh Water developed its filing assumptions. The Intercontinental Exchange Bank of America Merrill Lynch Option Volatility Estimate (“ICE BofA MOVE” or “MOVE”) Index, which measures expected volatility in the U.S. Treasury market and serves as the bond market’s analogue to the Chicago Board Options Exchange Volatility Index (“VIX”), has declined steadily throughout 2025 after it peaked near 140 in April. The current level of the MOVE Index is near 75, or nearly half of its 2025 high. This is demonstrated below in Figure CCW-1SR.

FIGURE CCW-1SR
ICE BofA MOVE Index: Year-To-Date



Given this normalization, Pittsburgh Water’s reliance on a 6.5% to 7.0% cost assumption to reflect volatility is no longer supported by market data. Current municipal borrowing conditions point to materially lower expected financing costs. My recommended future debt cost of 5.5% is reasonable, if not high.

1 **Q MS. FAY CLAIMS THAT YOUR ADJUSTMENT TO INCREASE THE**
2 **ASSUMED BOND PREMIUM TO 8.44% IS IRRELEVANT IN ACTUAL**
3 **MARKET PRACTICE BECAUSE COUPON AND PREMIUM MOVE**
4 **INVERSELY. DO YOU AGREE?**

5 **A**No. Ms. Fay maintains that the 7% premium is reasonable and that my adjustment is
6 not relevant in actual market practice. That misstates the purpose of my adjustment. I
7 did not treat coupon and premium as independent variables; I demonstrated that, given
8 current yields and Pittsburgh Water's own bond issuance experience, the resulting net
9 proceeds in Pittsburgh Water's model are understated.

10 Pittsburgh Water's Series 2025A bonds achieved a premium exceeding 8%,
11 verifying that my assumption is consistent with market experience. The premium
12 reduces annual debt-service requirements and affects cost-of-service. Ignoring that
13 impact inflates ratepayer's costs and understates capital available to Pittsburgh Water.

14 **Q MS. FAY TESTIFIES THAT ADOPTING YOUR RECOMMENDED DSCR**
15 **AND DCOH TARGETS WOULD CAUSE MULTI-NOTCH CREDIT-RATING**
16 **DOWNGRADES. HOW DO YOU RESPOND?**

17 **A**Ms. Fay asserts that OCA's revenue recommendation and resulting DSCR and DCOH
18 would be catastrophic and most certainly will result in ratings downgrades, estimating
19 three-notch and two-notch downgrades under Moody's and S&P scorecards,
20 respectively. Those claims are speculative and unsupported by any actual rating-agency
21 statement. In fact, there are examples of municipal water systems achieving DSCRs
22 consistent with, or lower than my recommendations, without catastrophic

1 consequences. For example, as detailed in the City of Philadelphia Water & Wastewater
2 Revenue Bonds, Series 2024C Official Statement, the City of Philadelphia Water
3 Department achieved Senior DSCR of 1.27x, 1.29x, 1.22x for FY2021-FY2023,
4 respectively. Similarly, over the same three-year period, the City of Philadelphia
5 achieved Total DSCRs of 1.10x, 1.11x, 1.06x. The Philadelphia Water Department
6 maintains an A+ rating from S&P.

7 Moody's and S&P explicitly caution that their scorecards are only indicative and
8 that final ratings depend on qualitative judgment, including management quality and
9 rate flexibility. My recommended 1.20x Total and 1.57x Senior DSCRs remain
10 comfortably above Pittsburgh Water's bond-covenant minimums (1.10x and 1.25x) and
11 preserve strong credit quality while avoiding excessive revenue collection.

12 Ms. Fay's catastrophic downgrade scenario assumes a mechanical relationship
13 between ratios and ratings that rating agencies themselves reject. My recommendation
14 balances financial stability with affordability.

15 **Q MS. FAY ASSERTS THAT YOU MISAPPLIED RATING-AGENCY REPORTS**
16 **ON AFFORDABILITY AND THAT AGENCIES' PRIMARY CONCERN IS**
17 **REGULATORY RISK, NOT CUSTOMER AFFORDABILITY. DO YOU**
18 **AGREE?**

19 **A** No. Ms. Fay claims that the three reports I cited are for gas and electric utilities and,
20 therefore, are not relevant to Pittsburgh Water, and that rating agencies' primary concern
21 pertains to whether utilities will be able to raise rates sufficiently. That characterization
22 is incomplete.

1 The rating-agency’s materials I cited explicitly link affordability to regulatory
2 and political risk. They conclude that utilities facing affordability pressures encounter
3 heightened risk of delayed or denied rate relief, which directly affects credit stability.
4 Those principles apply universally to monopolistic essential-service utilities, regardless
5 of sector.

6 Far from mischaracterizing agency perspectives, my testimony is reflective of
7 their guidance: maintaining affordability is integral to preserving regulatory support
8 and credit quality. Ignoring affordability, as Ms. Fay suggests, would increase
9 regulatory risk, not mitigate it.

10 **Q HAS FITCH RATINGS RECENTLY ISSUED COMMENTARY EXPRESSING**
11 **CONCERN ABOUT RATE AFFORDABILITY IN THE WATER AND SEWER**
12 **UTILITY SECTOR?**

13 **A**Yes. In its June 5, 2025 commentary titled “Fitch Revises U.S. Water and Sewer Sector
14 Outlook to Deteriorating Amid Rising Costs,” Fitch revised the sector outlook from
15 “Neutral” to “Deteriorating.” Fitch explained that persistent inflationary pressures on
16 labor, chemicals, and capital costs are driving utilities to implement higher effective
17 tariffs, but that additional rate increases may prove difficult because of affordability
18 constraints. Fitch noted that these rising costs are outpacing the ability of many utilities
19 to recover them through rates without placing undue burden on customers, signaling
20 that affordability has become an increasingly important credit consideration for the
21 sector.²

²<https://www.fitchratings.com/research/us-public-finance/fitch-revises-us-water-sewer-sector-outlook-to-deteriorating-amid-rising-costs-05-06-2025>.

1 While Fitch does not rate Pittsburgh Water, it is a major ratings agency that has
2 expressed growing concern about general trends in rate affordability for the sector.

3 **Q DO MS. FAY’S REBUTTAL STATEMENTS PROVIDE A BASIS FOR**
4 **ALTERING YOUR RECOMMENDATIONS?**

5 A No. Her Rebuttal Testimony: (1) acknowledges that a lower borrowing cost is
6 appropriate, (2) misconstrues the role of bond premiums in determining annual
7 debt-service costs, (3) overstates the credit impact of moderate coverage ratios, and
8 (4) misinterprets rating-agency’s perspectives on affordability. My recommendations
9 continue to produce sound financial metrics consistent with A-category credit quality
10 while better aligning Pittsburgh Water’s rates with ratepayer affordability and the
11 statutory standard of just and reasonable rates.

12 **RESPONSE TO MR. EDWARD BARCA**

13 **Q MR. BARCA CLAIMS THE OCA’S ANALYSIS UNDERSTATED THE**
14 **AUTHORITY’S FPFTY CASH BALANCE BY \$16.9 MILLION, RENDERING**
15 **YOUR DCOH ESTIMATE INACCURATE. DO YOU AGREE?**

16 A No. As OCA witness Mugrace explains in his Surrebuttal Testimony (OCA St. 2-SR),
17 Mr. Barca’s claim misrepresents the treatment of internally generated funds and reserve
18 transfers. When these legitimate cash sources are correctly included—specifically, the
19 PAYGO and DSIC balances, the \$3 million revolving line of credit, and \$3 million in
20 transfers to reserve—the \$16.9 million difference is eliminated. The OCA’s resulting

DCOH values remain approximately 233 days excluding ALCOSAN and 128 days including ALCOSAN, which are consistent with maintaining solid A-Aa level liquidity.

Q MR. BARCA ALSO CONTENDS THAT OCA’S RECOMMENDED DCOH WOULD PREVENT PITTSBURGH WATER FROM RECOVERING SUFFICIENT REVENUES TO SUSTAIN OPERATIONS. HOW DO YOU RESPOND?

A That argument conflates a guarantee of cost recovery with the opportunity to recover prudent, known, and measurable costs. As Mr. Mugrace explains, rate recovery under a cash-flow methodology does not entitle Pittsburgh Water to surplus revenues or excess liquidity. The DCOH levels produced under OCA’s recommendations provide more than adequate cushion for daily operations while ensuring that ratepayers are not charged to finance unnecessary reserves.

Q MR. BARCA FURTHER CLAIMS THAT YOUR RECOMMENDED DCOH ASSUMES “NORMALIZED” EXPENSES INSTEAD OF PITTSBURGH WATER’S PROJECTED BUDGET AND, THEREFORE, WOULD INHIBIT PITTSBURGH WATER’S ABILITY TO BUILD RESERVES. HOW DO YOU RESPOND?

A As explained above, Pittsburgh Water is entitled to the opportunity—not a guarantee—to recover prudent, known, and measurable costs. The DCOH metric should reflect sufficient cash to meet day-to-day obligations and maintain credit quality, not a target

1 that ensures full realization of every forecasted expenditure and/or unrestricted growth
2 of reserves.

3 **Q DOES THE OCA'S RECOMMENDED DCOH PROVIDE ADEQUATE**
4 **PROTECTION FOR PITTSBURGH WATER'S FINANCIAL INTEGRITY?**

5 A Yes, it does. The 128/233-day DCOH levels provide substantial liquidity. This cushion
6 ensures timely payment of operating expenses and debt service while avoiding
7 unnecessary ratepayer funding of surplus balances. As Mr. Mugrace concludes,
8 Pittsburgh Water's argument that it must recover 100% of its forecasted expenses to
9 remain solvent is neither realistic nor supported by ratemaking standards. The OCA's
10 DCOH recommendation achieves the appropriate balance, protecting credit stability
11 without overcharging customers.

12 **Q MR. BARCA CONTENDS THAT YOUR RECOMMENDED 1.20x TOTAL**
13 **DSCR PROVIDES ONLY A 10-BASIS-POINT CUSHION ABOVE**
14 **PITTSBURGH WATER'S 1.10x BOND COVENANT AND IS, THEREFORE,**
15 **TOO NARROW TO ENSURE FINANCIAL STABILITY. HOW DO YOU**
16 **RESPOND?**

17 A As an initial matter, my recommendation provides for a 1,000-basis-point cushion above
18 the minimum level of 1.10x. A basis point is measured as 0.0001, or 0.01%. The
19 difference between 1.20x and 1.10x is 10 percentage points, or 1,000-basis-points.
20 Second, my recommendation is largely consistent with Mr. Barca's recommended
21 DSCR in Pittsburgh Water's previous rate case where he recommended DSCRs of 1.21x

and 1.26x for 2024 and 2025.³ Notably, the DCOH levels recommended by Mr. Barca were 145 and 142.6, both of which are less than OCA's levels in this proceeding. I would note that the DCOH levels of 233 days, as recommended by OCA in this case, are consistent with the high-end of the range for Aa-rated municipalities (150-250 days) as shown in Moody's U.S. Municipal Utility Revenue Debt Scorecard provided below in Figure CCW-2SR, while the DSCR of 1.20x is consistent with the high-end of Baa-rated municipalities (1.00x-1.25x).

Figure CCW-2SR
US Municipal Utility Scorecard

Moody's Ratings

U.S. Public Finance

Appendix: US Municipal Utility Revenue Debt Scorecard

Exhibit 6

		Aaa	Aa	A	Baa	Ba	B and Below
Numerical score		0.5 to 1.5	1.5 to 2.5	2.5 to 3.5	3.5 to 4.5	4.5 to 5.5	5.5 to 6.5
System Characteristics (30%)							
Asset Condition (10%)	Net Fixed Assets/Annual Depreciation:	> 75 years	75 years ≥ n > 25 years	25 years ≥ n > 12 years	12 years ≥ n > 9 years	9 Years ≥ n > 6 Years	≤ 6 Years
System Size (7.5%)	Water and/or Sewer/ Solid Waste:	O&M > \$65M	\$65M ≥ O&M > \$30M	\$30M ≥ O&M > \$10M	\$10M ≥ O&M > \$3M	\$3M ≥ O&M > \$1M	O&M ≤ \$1M
	Stormwater:	O&M > \$30M	\$30M ≥ O&M > \$15M	\$15M ≥ O&M > \$8M	\$8M ≥ O&M > \$2M	\$2M ≥ O&M > \$750K	O&M ≤ \$750K
	Gas or Electric:	O&M > \$100M	\$100M ≥ O&M > \$50M	\$50M ≥ O&M > \$20M	\$20M ≥ O&M > \$8M	\$8M ≥ O&M > \$3M	O&M ≤ \$3M
Service Area Wealth (12.5%)		> 150% of US median	150% ≥ US median > 90%	90% ≥ US median > 75%	75% ≥ US median > 50%	50% ≥ US median > 40%	≤ 40% of US median
Financial Strength (40%)							
Annual Debt Service Coverage (15%)		> 2.00x	2.00x ≥ n > 1.70x	1.70x ≥ n > 1.25x	1.25x ≥ n > 1.00x	1.00x ≥ n > 0.70x	≤ 0.70x
Days Cash on Hand (15%)		> 250 Days	250 Days ≥ n > 150 Days	150 Days ≥ n > 35 Days	35 Days ≥ n > 15 Days	15 Days ≥ n > 7 Days	≤ 7 Days
Debt to Operating Revenues (10%)		< 2.00x	2.00x < n ≤ 4.00x	4.00x < n ≤ 7.00x	7.00x < n ≤ 8.00x	8.00x < n ≤ 9.00x	≥ 9.00x

Notably, each metric receives a 15% weighting. Collectively, OCA's recommended levels are supportive of Pittsburgh Water's credit and financial integrity.

³Pennsylvania Public Utility Commission Docket No. R-2023-3039920 *et al*, PWSA Corrected Statement No. 2, Direct Testimony of Edward Barca at pages 43-44.

1 **CONCLUSION**

2 **Q HAVE THE REBUTTAL TESTIMONIES OFFERED BY PITTSBURGH**
3 **WATER CAUSED YOU TO ALTER YOUR RECOMMENDATIONS AT THIS**
4 **TIME?**

5 **A No. I maintain and reiterate my recommendations offered in my Direct Testimony**
6 **(OCA Statement 3).**

7 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

8 **A Yes, it does.**

549161

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Christopher C. Walters, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 3SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature: /s/ Christopher C. Walters
Christopher C. Walters

Address: Brubaker & Associates, Inc.
16690 Swingley Ridge Road
Suite 140
Chesterfield, MO 63017

OCA STATEMENT 4SR

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**PENNSYLVANIA PUBLIC UTILITY)
COMMISSION)**

v.)

**THE PITTSBURGH WATER AND)
SEWER AUTHORITY d/b/a/)
PITTSBURGH WATER)**

**DOCKET NOS. R-2025-3055010 (WATER)
R-2025-3055011 (WASTEWATER)
R-2025-3055012 (STORMWATER)**

**SURREBUTTAL TESTIMONY OF
JEROME D. MIERZWA**

**ON BEHALF OF THE
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

OCTOBER 14, 2025

EXETER

ASSOCIATES, INC.

10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Jerome D. Mierzwa. I am a Principal at and the President of Exeter Associates,
3 Inc (“Exeter”). My business address is 10480 Little Patuxent Parkway, Suite 300,
4 Columbia, Maryland 21044. Exeter specializes in providing public utility-related
5 consulting services.

6 Q. ARE YOU THE SAME JEROME D. MIERZWA THAT FILED DIRECT
7 TESTIMONY IN THIS PROCEEDING ON SEPTEMBER 5, 2025?

8 A. Yes, I am.

9 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

10 A. The purpose of my surrebuttal testimony is to respond to certain aspects of the rebuttal
11 testimony of Harold J. Smith filed on behalf of the Pittsburgh Water and Sewer Authority.
12 (“PWSA”) d/b/a Pittsburgh Water.

13 Q. IN HIS REBUTTAL TESTIMONY, DID MR. SMITH REVISE THE COST OF
14 SERVICE STUDIES HE INITIALLY PRESENTED IN HIS DIRECT
15 TESTIMONY?

16 A. Yes. Mr. Smith incorporated a number of modifications to the water, wastewater
17 conveyance, and stormwater cost of service studies he initially presented in his direct
18 testimony and presented those revised studies in his rebuttal testimony. Those
19 modifications are described on pages 2 and 3 of his rebuttal testimony. However, overall,
20 the impact of those modifications on the results of the cost of service studies, and the
21 proposed allocation of the rate increases to the individual rate classes, is minimal. Several
22 of Mr. Smith’s revisions to the cost of service studies addressed labeling rather than
23 numerical adjustments.

24 In Table 1 of my direct testimony, I presented a summary of the adjusted cost of
25 service for each customer class indicated by Mr. Smith’s initial water cost of service study,

inclusive of bad debt expense, distribution system improvement charges (“DSIC”), and PENNVEST revenues, at present and proposed fiscal year (“FY”) 2026 rates. In Table 1-SR, I have revised Table 1 to reflect the revised cost of service study presented by Mr. Smith in his rebuttal testimony. A comparison of Table 1 and Table 1-SR reveals that the impact of the changes to the initial water cost of service study which are reflected in the revised cost of service study are minimal.

Table 1-SR. Comparison of Present and Proposed FY 2026 Water Rates and Adjusted Cost of Service

Class	Present Rates	Proposed Rates	INCREASE		Adjusted Cost of Service	Variance
			Amount	Percent		
Residential + CAP + Municipal	\$60,740,524	\$74,436,555	\$13,696,031	22.5%	\$74,421,016	\$15,539
Commercial + Municipal	\$63,677,179	80,670,732	16,993,553	26.7%	80,648,878	21,854
Industrial	3,698,590	5,235,579	1,536,989	41.6%	5,235,292	287
Health or Education	24,678,347	31,229,314	6,550,967	26.5%	31,224,986	4,328
Private Fire	938,225	1,269,621	331,396	35.3%	1,269,613	8
Public Fire	1,875,259	2,657,448	782,189	41.7%	2,657,858	(410)
Wholesale	4,945,597	7,485,310	2,539,713	51.4%	7,485,310	0
Total:	\$160,553,722	\$202,984,647	\$42,430,838	26.4%	\$202,942,953	\$41,606

Q. WHAT DID YOU RECOMMEND IN YOUR DIRECT TESTIMONY WITH RESPECT TO THE WATER CUSTOMER CLASS REVENUE INCREASES PROPOSED BY PITTSBURGH WATER, AND HAS YOUR RECOMMENDATION CHANGED BASED ON MR. SMITH’S REVISED WATER COST OF SERVICE STUDY?

A. In my direct testimony, for FY 2026, I recommended that the base rate customer class revenue increases for water service proposed by Pittsburgh Water be proportionately scaled back to reflect the actual increase authorized by the Commission in this proceeding. In addition, I recommended that the PENNVEST surcharge revenues proposed to be collected

1 from each customer class be scaled back to reflect the actual increase authorized by the
2 Commission in this proceeding. I also recommended that, pursuant to OCA witness
3 Michael Deupree's direct testimony, the DSIC charges assessed by Pittsburgh Water be
4 based on a DSIC cap of 5.0%.

5 With respect to rates for FY 2027, I noted in my direct testimony that it is the OCA's
6 position in this proceeding that a rate increase for Pittsburgh Water for FY 2027 should not
7 be approved. If the Commission does not accept this recommendation, I recommended that
8 for FY 2027, the base rate customer class revenue increases and PENNVEST surcharge
9 revenue increases proposed by Pittsburgh Water be scaled back to reflect the actual
10 increases authorized by the Commission for FY 2027 in this proceeding. Since the impact
11 of Mr. Smith's proposed changes to the water cost of service study are minimal, the
12 recommendations I presented in my direct testimony with respect to the class revenue
13 increases proposed by Pittsburgh Water have not changed.

14 Q. PLEASE DESCRIBE TABLE 2, WHICH YOU PRESENTED IN YOUR
15 DIRECT TESTIMONY.

16 A. Table 2, which I presented in my direct testimony, provided a comparison of the adjusted
17 cost of service for each customer class indicated by Mr. Smith's initial wastewater
18 conveyance cost of service study, inclusive of bad debt expense, DSIC revenues, and
19 PENNVEST surcharge revenues at present and proposed rates for FY 2026 as proposed by
20 Pittsburgh Water. In Table 2-SR, I have revised Table 2 to reflect the revised wastewater
21 conveyance cost of service study present presented by Mr. Smith in his rebuttal testimony.
22 A comparison of Table 2 and Table 2-SR reveals that the impact of the changes to the
23 initial cost of service study reflected in the revised cost of service study are minimal.
24

**Table 2-SR. Comparison of Present and Proposed FY 2026 Wastewater Rates
and Adjusted Cost of Service**

Class	Present Rates	Proposed Rates	INCREASE		Adjusted Cost of Service	Variance
			Amount	Percent		
Residential + CAP + Municipal	\$26,438,705	\$31,951,282	\$5,512,577	20.9%	\$31,951,105	\$177
Commercial + Municipal	21,922,593	28,365,140	6,442,547	29.4%	28,344,182	20,958
Industrial	1,303,317	1,698,043	394,726	30.3%	1,697,893	150
Health or Education	7,457,690	9,632,979	2,175,289	29.2%	9,630,645	2,334
Total:	\$57,122,305	\$71,647,446	\$14,525,139	25.4%	\$71,623,825	\$23,619

Q. WHAT DID YOU RECOMMEND IN YOUR DIRECT TESTIMONY WITH RESPECT TO THE WASTEWATER CUSTOMER CLASS REVENUE INCREASES PROPOSED BY PITTSBURGH WATER, AND HAS YOUR RECOMMENDATION CHANGED BASED ON MR. SMITH'S REVISED WASTEWATER COST OF SERVICE STUDY?

A. In my direct testimony, for FY 2026, I recommended that the base rate customer class revenue increases for wastewater service proposed by Pittsburgh Water be proportionately scaled back to reflect the actual increase authorized by the Commission in this proceeding. In addition, I recommended that the PENNVEST surcharge revenues proposed to be collected from each customer class be scaled back to reflect the actual increase authorized by the Commission in this proceeding. I also recommended that pursuant to Mr. Deupree's direct testimony, the DSIC charges assessed by Pittsburgh Water be based on a DSIC cap of 5.0%.

With respect to rates for FY 2027, I noted in my direct testimony that it is the OCA's position in this proceeding that a rate increase for Pittsburgh Water for FY 2027 should not be approved. If the Commission did not accept this recommendation, I recommended that for FY 2027, the base rate customer class revenue increases and PENNVEST surcharge revenue increases proposed by Pittsburgh Water be scaled back to reflect the actual

1 increases authorized by the Commission for FY 2027 in this proceeding. Since the impact
2 of Mr. Smith's proposed changes to the wastewater cost of service study are minimal, the
3 recommendations I presented in my direct testimony with respect to the wastewater class
4 revenue increases proposed by Pittsburgh Water have not changed.

5 Q. IN YOUR DIRECT TESTIMONY, DID YOU PROPOSE ANY
6 ADJUSTMENTS TO PITTSBURGH WATER'S STORMWATER RATE
7 DESIGN?

8 A. No. In my direct testimony, I recommended that, to the extent the Commission authorizes
9 increases in stormwater revenues for FY 2026 and FY 2027 which are less than the
10 increases requested by Pittsburgh Water, the rates proposed by Pittsburgh Water should be
11 proportionately scaled back.

12 Q. HAS YOUR RECOMMENDATION CHANGED AS A RESULT OF THE
13 REVISED STORMWATER COST OF SERVICE ANALYSIS PRESENTED BY
14 MR. SMITH?

15 A. No.

16 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

17 A. Yes, it does; however, I reserve the right to update this testimony as may be necessary.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 4SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature: /s/ Jerome D. Mierzwa
Jerome D. Mierzwa

Address: Exeter Associates, Inc.
10480 Little Patuxent Parkway
Suite 300
Columbia, MD 21044

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission

v.

**Docket No. R-2025-3055010 Water
R-2025-3055011 Wastewater
R-2025-3055012 Stormwater**

**The Pittsburgh Water & Sewer
Authority d/b/a Pittsburgh Water**

SURREBUTTAL TESTIMONY OF

**LeeAnn Wise
ON BEHALF OF THE
OFFICE OF CONSUMER ADVOCATE**

October 14, 2025

1 **Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A: LeeAnn Wise. 555 Walnut Street, Forum Place 5th Floor, Harrisburg Pennsylvania
3 17101.

4 **Q: ARE YOU THE SAME LEEANN WISE WHO PREVIOUSLY FILED**
5 **DIRECT TESTIMONY IN THIS PROCEEDING?**

6 A: Yes, I am.

7 **Q: WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

8 A: I will respond to Company witness Ms. Mechling's rebuttal testimony to my direct
9 testimony. Ms. Mechling disagrees with my statement that the concerns raised at
10 the public input hearings "are not isolated" and "reflect a broad pattern of hardship
11 and frustration". I disagree with her critique and will use this opportunity in
12 surrebuttal testimony to explain why.

13 **Q: DO YOU AGREE WITH MS. MECHLING'S COMMENT RELATED TO**
14 **THE CONCERNS RAISED AT THE PUBLIC INPUT HEARING THAT**
15 **THESE CONCERNS ARE ISOLATED AND DO NOT REFLECT A BROAD**
16 **PATTERN OF HARDSHIP AND FRUSTRATION?**

17 A: No, I do not agree. My direct testimony included summaries and references to
18 multiple statements made by customers during the public input hearings. The
19 concerns included affordability, service quality, executive compensation, and
20 company transparency. The comments were not singular or subjective but were
21 voiced by a wide cross-section of the customer base from across different hearing
22 locations and times. The repetition, consistency, and geographic spread emphasized

1 that these are not isolated complaints but rather reoccurring themes, reflective of the
2 entire customer base.

3 In my testimony, I also included links to several news articles further collaborating
4 with the comments and concerns expressed during the public input hearings. These
5 sources further validate the issues raised during the hearings and demonstrate
6 ongoing public concern beyond just the public input hearings. Although Ms.
7 Mechling implied only customers attending the public input hearings have concerns,
8 she did not provide any additional data or evidence to substantiate her claim.

9 **Q: WHAT IS YOUR CONCLUSION AND RECOMMENDATION?**

10 **A:** The public input transcripts and supplemental news articles demonstrate the
11 concerns stated in my direct testimony are not isolated and further expand on
12 customer frustration. They show a consistent pattern of dissatisfaction among
13 Pittsburgh Water's customer base and are relevant to the Commission's evaluation
14 of the proposed rate increase requested.

15 The Commission does not gauge the success of public input hearings by the number
16 of attendees, rather success is defined as our commitment to being accessible to the
17 public. This is particularly important when affordability and quality of service
18 remain concerns for many Pennsylvanians. Customer testimony from public input
19 hearings, whether they are well attended or not, should continue to be instrumental
20 in shaping the outcome of rate proceedings.¹ Therefore, I continue to recommend

¹ Letter from Chairman Stephen M. DeFrank to Secretary Matthew Homsher of the Pennsylvania Public Utility Commission's Secretary's Bureau in re *Pa. PUC v. Wellsboro Electric Company, Valley Energy, Inc., and Citizens'*

1 the Commission consider customer concerns when determining the Company's
2 requested rate increase.

3 **Q: DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

4 A: Yes, it does.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, LeeAnn Wise, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 5SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature: /s/ LeeAnn Wise
LeeAnn Wise

Address: Office of Consumer Advocate
555 Walnut Street
Forum Place, 5th Floor
Harrisburg, PA 17101

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
	:	Docket No. R-2025-3055010
v.	:	Docket No. R-2025-3055011
	:	Docket No. R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
	:	

Surrebuttal Testimony of
Roger D. Colton

On Behalf of:
Office of Consumer Advocate
Statement 6SR

October 14, 2025

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. My name is Roger Colton. My address is 34 Warwick Road, Belmont, MA.

3 **Q. ARE YOU THE SAME ROGER COLTON WHO PREVIOUSLY PREPARED**
4 **DIRECT AND REBUTTAL TESTIMONY FOR SUBMITTAL BY THE OFFICE**
5 **OF CONSUMER ADVOCATE IN THIS PROCEEDING?**

6 A. Yes, I am.

7 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY.**

8 A. The purpose of my Surrebuttal Testimony is to respond to the Rebuttal Testimony of
9 Pittsburgh Water witness Julie Mechling regarding the Pittsburgh Water and Sewer
10 Authority's (Pittsburgh Water) Customer Assistance Program ("CAP"), and Pittsburgh
11 Water witness Rocky Craley.

12 **Part 1. Response to Pittsburgh Water Witness Julie Mechling.**

13 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**
14 **TESTIMONY?**

15 A. In this section of my Surrebuttal Testimony, I respond to the opposition expressed by
16 Pittsburgh Water witness Mechling to each recommendation I made which would
17 improve Pittsburgh Water's delivery of affordable service to its low-income customers.

18 **Q. PLEASE RESPOND TO WITNESS MECHLING'S TESTIMONY REGARDING**
19 **THE COST OF INCREASING THE TIER 1 DISCOUNT FROM 60% TO 75%.**

20 A. Pittsburgh Water witness Mechling opposes increasing the Tier 1 discount (for
21 households below 50% of the Federal Poverty Level) (FPL) from 60% to 75%. She
22 asserts first that increasing the discount is estimated to result in an additional \$143,644 in

1 lost base revenue.¹ This estimate is \$50,000 higher than the additional lost revenue of
 2 \$92,264 which I estimated in my Direct Testimony. The estimated cost provided by
 3 witness Mechling appears to be excessive.

4 According to Exhibit JAM-20 attached to witness Mechling's testimony, the water
 5 revenue generated at a 60% discount would reach \$245,758. The wastewater revenue
 6 generated at a 60% discount would reach \$137,292. In Exhibit JAM-21, witness
 7 Mechling's data states that there were 13,656 Bill Discount Program (BDP) bills for
 8 customers with income below 150% FPL, while there were 20,064 wastewater bills for
 9 BDP customers at that income level. The resulting average monthly bills given the 60%
 10 discount at the water and wastewater revenue used by Ms. Mechling are set forth in Table
 11 1 below. As can be seen, the data presented in Ms. Mechling's rebuttal testimony
 12 assumes an average discounted bill for BDP participants below 50% FPL of \$24.84. That
 13 bill is higher than the \$20.88 bill for customers with income below 50% FPL in 2025 as
 14 presented in Ms. Mechling's Direct Testimony.² The increase in bills used by Ms.
 15 Mechling in her Rebuttal Testimony is actually even more than \$3.96 ($\$24.84 - \$20.88 =$
 16 $\$3.96$). The \$20.88 average bill used in her Direct Testimony included not only water and
 17 wastewater revenue, but DSIC revenue and stormwater charges as well.³ If one deletes
 18 those additional revenues, the \$20.88 becomes \$18.45, a bill 35% lower than what Ms.

¹ PW. St. 6R at 27, citing PW Ex JAM-20.

² PW St. 6, at Table Two, page 28.

³ PW Rebuttal Cost of Service Model, Tab Bill Discount Impacts and Table Impacts_26 (2025).

Mechling uses in her Rebuttal calculation.⁴ Given the inconsistency of Ms. Mechling’s rebuttal data with the data presented in her Direct Testimony, as well the inconsistency between her rebuttal data and the data presented in Pittsburgh Water’s own Rebuttal Cost of Service Model, her estimate of \$143,644 in additional lost revenue should be rejected.

Table 1. Total Bill at 60% Discount Given Witness Mechling Rebuttal Data			
Service	Revenue	BDP Participants Below 50% FPL	Average Bill Given 60% Discount
Water	\$245,758.34	13,656	\$18.00
Wastewater	\$137,292.12	20,064	\$6.84
Total			\$24.84

Q. IS THERE ANY OTHER ARGUMENT ADVANCED BY WITNESS MECHLING IN OPPOSITION TO INCREASING THE DISCOUNT FROM 60% TO 75% THAT YOU WISH TO RESPOND TO?

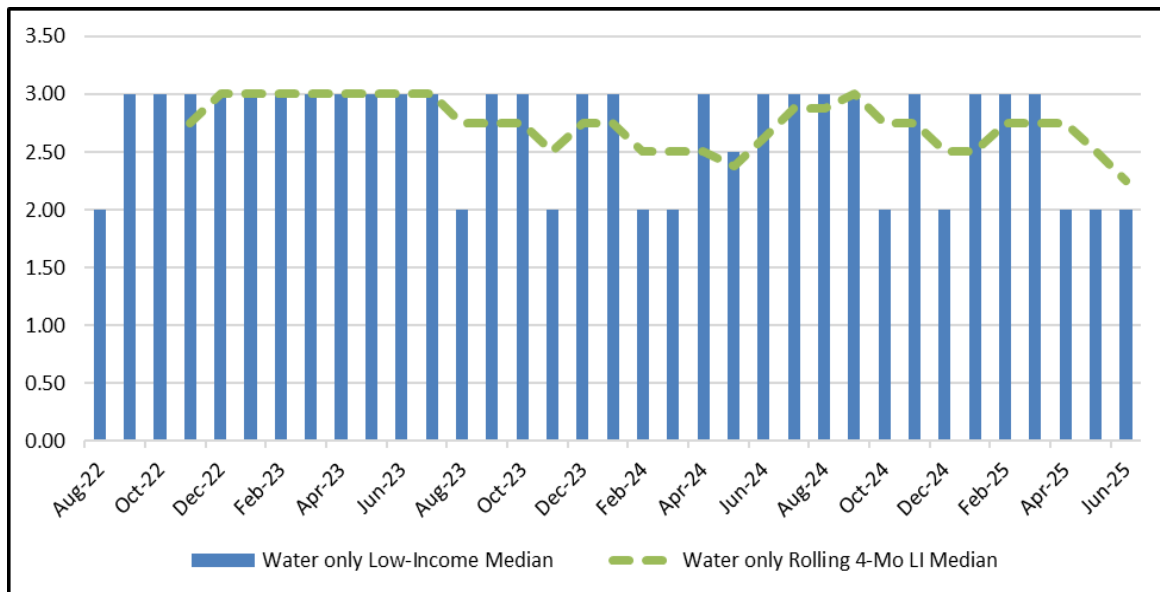
A. Yes. Ms. Mechling opposes increasing the Tier 1 discount from 60% to 75% because, she asserts, “the risk exists that fluctuations in covered customer usage may lead to larger volumes of lost revenue.”⁵ She does not attempt to identify what that “risk” is, nor does she attempt to show what level of “larger volumes of lost revenue” might arise. Not only is the risk minimal, but the potential increase in “volumes of lost revenue” is minimal as well. Figure 1 below shows the monthly median consumption of Pittsburgh Water’s confirmed low-income customers. The Figure first shows median consumption month-by-month for nearly three years (August 2022 through June 2025). In addition, since witness Mechling’s concerns would not arise if the “fluctuations” to which she refers

⁴ Id.

⁵ PW St. 6R, at 27.

occur for only one month, the Figure also shows a rolling four-month average median consumption for low-income customers. The Figure shows that not only do witness Mechling's concerns about increased lost revenue associated with usage fluctuations that drive bills higher, the fluctuations that have occurred, in fact, are downward fluctuations which would result in lower levels of lost revenue. The Figure finally shows, however, that month-to-month fluctuations in usage tend to cancel each other out. The four-month rolling average median usage has continuously fluctuated in a very narrow band, between 2.5 and 3.0 kilogallons per month. As can be seen, the unsubstantiated concerns expressed by witness Mechling about the additional lost revenues associated with "fluctuations in covered customer usage" have no basis in fact. That concern presents no reasonable grounds to reject my proposed increase in the Tier 1 discount for customers with income below 50% FPL.

Figure 1. Low-Income Median Consumption and Rolling 4-Month Average Low-Income Median Consumption⁶



⁶ PW Response to OWT-1-24.

1 Even then, Pittsburgh Water would be better off. If total undiscounted revenues increased
2 by 10%, the total discounted revenues would increase by nearly \$24,000 given a 75%
3 discount. If total undiscounted revenues increased by 15%, the total discounted revenues
4 would increase by nearly \$36,000. Even if given an increase in the discount for customers
5 with income below 50% FPL, Pittsburgh Water would benefit by having higher overall
6 water and wastewater revenues.

7 **Q. DO YOU HAVE ANY FINAL OBSERVATION ABOUT WITNESS MECHLING'S**
8 **REBUTTAL TESTIMONY REGARDING EXPANDING THE TIER 1 DISCOUNT**
9 **FROM 60% TO 75%?**

10 A. I wish to note the aspect of my Direct Testimony that witness Mechling did not try to
11 rebut. Given Pittsburgh Water's substantial request for an increase in rates, the impact of
12 the bill discount which the Commission previously found to be reasonable deteriorates
13 over time. In the absence of adjusting the bill discount level in light of the requested rate
14 increase of Pittsburgh Water, the percentage increase in bills faced by customers with
15 income below 50% FPL far outstrips the percentage increase in bills faced by residential
16 customers in general. The average bills by year for customers below 50% FPL, as
17 reported in Pittsburgh Water's Rebuttal Cost of Service Model are set forth in Table 2
18 below. As the Table demonstrates, without adjusting the discount provided to the

population with income below 50% FPL, the FY2026 bill for these customers would increase by 36% relative to 2025, while the FY2027 bill would increase 44%.

Table 2. Monthly Bill, 50% FPL (3 kgal) ⁷		
FY 2025	FY 2026	FY 2027
FTY	FPFTY	
\$20.88	\$28.39	\$30.05

In contrast, the monthly residential bill (at 3 kgal) would increase from \$100.27 to \$122.97 (22.6%).⁸ It is clear that without adjusting the Pittsburgh Water Tier 1 discounts for the population with income below 50% FPL, that population will have a rate increase imposed on them that is substantially greater than the rate increase imposed on other customers.⁹

Q. PLEASE RESPOND TO WITNESS MECHLING’S TESTIMONY REGARDING THE COST OF ESTABLISHING A TIER 2 DISCOUNT OF 30%.

A. Pittsburgh Water witness Mechling opposes the creation of a new Tier 2 discount for customers with income between 51% and 100% FPL. She argues that creation of this new discount tier would result in an additional \$365,747 in lost revenue.¹⁰ Witness Mechling asserts that her calculation of “lost revenue” (\$365,747) is considerably higher than my

⁷ PW Rebuttal Cost of Service Model, Tab: Bill Discount Impacts.

⁸ *Id.*

⁹ In this regard, the Rebuttal Testimony of Pittsburgh Water witness Craley errs when he asserts, without documentation or support, that “in this rate proceeding, Pittsburgh Water is including enhancements to its BDP that will keep the impacts to CAP customers’ bills similar to or less than the impacts to non-eligible residential customers.” PW St. 9R, at 6.

¹⁰ PW St. 6R, at 28, citing PW Ex. JAM-21.

1 calculation of lost revenue (\$238,471).¹¹ The only reason witness Mechling's calculation
 2 of lost revenue is greater than the calculation I present in my Direct Testimony, however,
 3 is that she includes wastewater revenue in her calculation, but she excludes my
 4 calculation of the revenue associated with a wastewater discount. My Direct Testimony
 5 explicitly stated: "Applying a DSIC rate of 7.5% to this revenue reduction yields a final
 6 water revenue reduction of \$256,357. Using the same methodology yields a wastewater
 7 revenue reduction of \$148,350."¹² When one sums my water and wastewater discounts,
 8 the total discount equals \$404,707. Even that figure is not directly applicable to Ms.
 9 Mechling's lost revenue calculation of \$365,747. My figure included lost DSIC revenue
 10 as well. If one subtracted that DSIC revenue from my calculation, my calculation of lost
 11 revenue would be \$374,354. The difference between my estimated cost and Ms.
 12 Mechling's lost revenue figure, in other words, is only \$8,607. Her argument that the Tier
 13 2 discount should be rejected because I underestimated the loss of revenue should be
 14 rejected. Her calculation and mine yield virtually identical results.

15 Moreover, witness Mechling opposes the creation of an additional discount tier on the
 16 grounds that Pittsburgh Water is proposing the removal of the minimum allowance and it
 17 needs to "focus resources on education as well as billing system changes to correctly
 18 implement that change."¹³ The fact that Pittsburgh Water proposes to make changes to its
 19 billing system to remove the minimum allowance, however, is an argument to add the

¹¹ PW St. 6R, at Ex. JAM-21.

¹² OCA St. 6, at 36 (emphasis added).

¹³ PW St. 6R, at 27.

new discount tier sooner rather than later. The incremental information technology cost to Pittsburgh Water of adding a new discount tier should not be a barrier to adopting an additional tier. Other regulated Pennsylvania water utilities have done so. Pennsylvania American Water Company, for example, has adopted a four-tier discount. Aqua PA has adopted a three-tier discount. Information technology costs were not barriers to either of those utilities. Moreover, the incremental “customer education” associated with an additional tier should not be substantial. The customer education would be focused on the fact of providing a discount, not the specific percentage discount provided.

Q. DID WITNESS MECHLING ADVANCE ANY ADDITIONAL ARGUMENT IN OPPOSITION TO THE INCREASE IN THE DISCOUNT FOR CUSTOMERS WITH INCOME BELOW 50% FPL TO 75% AND THE ADDITION OF A NEW 30% DISCOUNT FOR CUSTOMERS WITH INCOME BETWEEN 50% AND 100% FPL?

A. Yes. Pittsburgh Water witness Mechling offered the unsupported conclusory argument that Pittsburgh Water has not “failed in its effort” to consider “affordability” such that my recommendations must be adopted.¹⁴ In making this claim, witness Mechling ignores her own history of testimony regarding Pittsburgh Water’s BDP. Not even Pittsburgh Water has historically supported its Bill Discount Program on the grounds that it will “make utility bills ‘affordable’ for qualifying low income customers.” In Pittsburgh Water’s 2023 rate proceeding, in which it proposed its Bill Discount Program, Pittsburgh Water (then known as PWSA) witness Mechling testified: “Mr. Colton mischaracterizes the

¹⁴ PW St. 6R, at 7.

1 goal of PWSA with its proposal, which was not to avoid any price increases but to avoid
 2 large spikes in bills in relation to residential rates.” At that time, too, Mechling opposed
 3 increasing Pittsburgh Water’s discounts. Her opposition was based on her stated principle
 4 that “participants in PWSA’s low income customer assistance programs should share in
 5 the costs of Commission approved rate increases. . . .”¹⁵

6 Neither of those grounds for the Pittsburgh Water BDP involve “making utility bills
 7 ‘affordable’ for qualifying low income customers.” And Pittsburgh Water’s bills as a
 8 percentage of income have increased since that time. Moreover, in Pittsburgh Water’s
 9 2021 rate proceeding, Pittsburgh Water witness Mechling¹⁶ testified:

10 Although significant time has been spent analyzing low-income customer
 11 assistance programs for electric and natural gas distribution companies to
 12 include what are reasonable levels of affordability for those services for low-
 13 income customers, no such Commission lead (sic) effort exists for water or
 14 wastewater conveyance utilities. In the settlement of PWSA’s last rate case,
 15 PWSA supported the initiation by the Commission of a proceeding to
 16 consider whether to extend the “CAP Policy Statement” to Commission
 17 regulated water and wastewater utilities. Ultimately, I believe wholesale
 18 revisions to our existing programs or policy decisions about what is or is not
 19 affordable and what is the optimal program design for water and wastewater
 20 utilities are better evaluated by the Commission on a statewide basis. Such
 21 evaluation would better inform program design and ensure that PWSA is
 22 designing programs consistent with Commission determined policy
 23 directions.¹⁷

¹⁵ Docket No. R-2023-3039920, PWSA St. 6R, at 40 – 41.

¹⁶ “Julie Mechling” was known as “Julie Quigley” at the time this testimony was filed in 2021.

¹⁷ Docket No. R-2021-3024773, PWSA Statement 6R, at 67.

Pittsburgh Water has never asserted, in other words, that its Bill Discount Program is “intended to make utility bills ‘affordable’ for qualifying low income customers.” The examples provided above are just that: examples. I cite this example as sufficient to demonstrate the fallacy of the proposition in Ms. Mechling’s rebuttal testimony that Pittsburgh Water’s low income customer assistance programs are intended to make utility bills affordable for qualifying low income customers.

Q. DOESN’T PREPARATION OF THE RAFTELIS REPORT ON AFFORDABILITY SUPPORT PITTSBURGH WATER’S BILL DISCOUNT PROGRAM DESIGN?

A. No. To assert that might be the case is to use the Raftelis report for purposes for which it was not intended. The 2024 Affordability Report shared with Pittsburgh Water’s Low-Income Assistance Advisory Committee (LIAAC) in early 2025 appeared to be a useful tool to help guide Pittsburgh Water’s program outreach, just as was intended (report was to “enhance PWSA’s ability to more effectively and efficiently reach out to customers in the most vulnerable areas”).¹⁸ As noted by the Report itself, however, there were limitations to the uses to which the Report was intended to be devoted (“It is important to note *the limitations of this report*. . .) (emphasis added).¹⁹ Accordingly, care should be taken *not* to use the Report for purposes which the Report, itself, disclaimed, i.e., to assess the need, if any, to make changes in the Pittsburgh Water Bill Discount Program (“It is important to note that this report is meant to provide a baseline statistical

¹⁸ Raftelis 2024 Affordability Study, at 1.

¹⁹ *Id.*, at 1.

understanding of household affordability of water, wastewater conveyance, and stormwater service in the Pittsburgh area: not to recommend what Pittsburgh Water should do to improve its affordability efforts.)” (emphasis added)²⁰

Q. ARE THERE ANY PARTICULAR STATEMENTS MADE BY PITTSBURGH WATER WITNESS MECHLING TO WHICH YOU WISH TO RESPOND?

A. Yes, there are two. First, witness Mechling opines that “a utility cannot provide free service for its customers because doing so would leave the utility unable to fund capital projects or operations.”²¹ This statement responds to an issue that does not exist. No-one In this proceeding, I certainly have neither proposed nor suggested that Pittsburgh Water should “provide free service for its customers.”

Second, witness Mechling asserts that “When customers stop paying their bills or are not asked to pay a significant portion of their bills, Pittsburgh Water experiences lost revenue.”²² Mechling, however, then ignores her own counsel regarding when customers “stop paying their bills.” When low-income customers cannot afford their bills, they frequently “stop paying their bills.” Pittsburgh Water’s own data supports that conclusion. As the Table below shows, since January 2024, the average arrears of Pittsburgh Water’s Confirmed Low-Income customers was \$1,535. Since January 2021, the lowest level of average monthly arrears achieved by Pittsburgh Water’s low-income customers was nearly \$1,200 (January 2021: \$1,182). Using the metric used by the

²⁰ *Id.*, at 10.

²¹ PW St. 6R, at 8.

²² PW St. 6R, at 8.

1 Commission in its quarterly reports on the collections performance of Pennsylvania
2 utilities, including water utilities, the low-income customers of Pittsburgh Water who are
3 in arrears have ranged from 11.8 to 17.6 Bills Behind.²³ Both the average monthly arrears
4 of Pittsburgh Water low-income customers in arrears, and the number of Bills Behind of
5 those customers, have increased not only from January 2021 through June 2025, but also
6 from January 2024 through June 2025.

7 A sizable portion of these arrears place substantial portions of revenues in serious
8 jeopardy of permanent loss. As the Table below shows, from January 2024 through June
9 2025, the average low-income arrears at the time of the disconnection of service was
10 \$4,432. The minimum low-income arrears at the time of disconnection during this recent
11 time period was \$3,563, while the maximum low-income arrears at the time of
12 disconnection was \$5,008. The “loss of revenue” experienced by Pittsburgh Water, in
13 other words, does not occur exclusively because of the offer of discounts. The loss of
14 revenue also occurs, in witness Mechling’s own words, when “customers stop paying
15 their bills.”

²³ The Bills Behind statistic is calculated by dividing the average arrears by the average monthly bill to determine how many “bills” are within the unpaid balance.

Table 3. Pittsburgh Water Confirmed Low-Income Customers: Average Arrears (OCA-IV-20(a), (b), (f))							
Date	Average arrears	Date	Average arrears	Date	Average arrears	Bills Behind	Arrears at DNP
Jan-21	\$1,182.72	Aug-22	\$1,305.99	Jan-24	\$1,439.00	13.8	\$3,563.19
Feb-21	\$1,212.71	Sep-22	\$1,197.47	Feb-24	\$1,473.24	13.2	\$3,669.31
Mar-21	\$1,256.86	Oct-22	\$1,239.92	Mar-24	\$1,488.37	14.4	\$3,836.47
Apr-21	\$1,288.11	Nov-22	\$1,305.41	Apr-24	\$1,505.35	14.1	\$4,014.20
May-21	\$1,293.52	Dec-22	\$1,317.28	May-24	\$1,534.18	14.7	\$4,052.39
Jun-21	\$1,329.50	Jan-23	\$1,311.88	Jun-24	\$1,528.43	14.0	\$4,118.27
Jul-21	\$1,356.92	Feb-23	\$1,361.46	Jul-24	\$1,517.37	12.9	\$4,191.76
Aug-21	\$1,336.13	Mar-23	\$1,410.07	Aug-24	\$1,508.93	14.0	\$4,373.88
Sep-21	\$1,352.26	Apr-23	\$1,445.76	Sep-24	\$1,517.59	13.4	\$4,429.78
Oct-21	\$1,364.31	May-23	\$1,463.25	Oct-24	\$1,532.14	13.2	\$4,539.94
Nov-21	\$1,354.89	Jun-23	\$1,472.15	Nov-24	\$1,522.67	15.0	\$4,589.25
Dec-21	\$1,354.94	Jul-23	\$1,478.74	Dec-24	\$1,535.70	15.5	\$4,711.51
Jan-22	\$1,354.94	Aug-23	\$1,471.25	Jan-25	\$1,563.44	13.7	\$4,825.11
Feb-22	\$1,336.45	Sep-23	\$1,452.04	Feb-25	\$1,583.90	11.8	\$4,891.38
Mar-22	\$1,342.32	Oct-23	\$1,432.06	Mar-25	\$1,584.51	14.5	\$4,996.82
Apr-22	\$1,383.36	Nov-23	\$1,433.08	Apr-25	\$1,607.89	17.6	\$4,965.85
May-22	\$1,383.70	Dec-23	\$1,445.34	May-25	\$1,605.81	17.6	\$4,996.82
Jun-22	\$1,341.63			Jun-25	\$1,586.58	17.0	\$5,008.41
Jul-22	\$1,322.36						

1 This serious loss of revenue which Pittsburgh Water is experiencing from low-income
2 customers, even in the absence of its BDP, is not associated with just a few accounts of
3 Pittsburgh Water. The extent of Pittsburgh Water’s problem can be seen in an
4 examination of the percentage of low-income accounts in arrears. The Pittsburgh Water
5 data is set forth in the Table below. From January 2024 through June 2025, an average of
6 55.9% of Pittsburgh Water’s low-income accounts were in arrears. At no point during

that time period did the percentage of low-income accounts in arrears fall below 50%.

Indeed, the most recent month in which fewer than half of Pittsburgh Water's low-income accounts were in arrears was three years ago, in August 2022 (47.47% low-income accounts in arrears).

Table 4. Percentage of Low-Income Accounts in Arrears
(OCA-IV-20(e))

Date	Percentage LI Accts in Arrears	Date	Percentage LI Accts in Arrears	Date	Percentage LI Accts in Arrears
Jan-21	48.51%	Jul-22	46.12%	Jan-24	57.33%
Feb-21	48.93%	Aug-22	47.47%	Feb-24	56.42%
Mar-21	46.87%	Sep-22	55.31%	Mar-24	56.59%
Apr-21	46.23%	Oct-22	54.87%	Apr-24	56.60%
May-21	47.94%	Nov-22	68.81%	May-24	54.64%
Jun-21	46.89%	Dec-22	54.41%	Jun-24	55.40%
Jul-21	46.46%	Jan-23	54.78%	Jul-24	56.30%
Aug-21	47.07%	Feb-23	54.14%	Aug-24	56.61%
Sep-21	47.48%	Mar-23	54.19%	Sep-24	56.04%
Oct-21	48.62%	Apr-23	54.23%	Oct-24	55.60%
Nov-21	49.20%	May-23	54.42%	Nov-24	56.12%
Dec-21	49.05%	Jun-23	54.41%	Dec-24	56.19%
Jan-22	49.04%	Jul-23	54.48%	Jan-25	55.95%
Feb-22	49.00%	Aug-23	55.53%	Feb-25	55.20%
Mar-22	49.86%	Sep-23	54.58%	Mar-25	56.76%
Apr-22	47.65%	Oct-23	54.89%	Apr-25	54.73%
May-22	47.00%	Nov-23	54.71%	May-25	54.77%
Jun-22	47.55%	Dec-23	55.38%	Jun-25	54.86%

As is evident from the data above, it is not Pittsburgh Water's BDP which is causing the loss of revenue to the utility. Instead, it is the inability-to-pay Pittsburgh Water's

1 unaffordable rates which directly result in a loss of revenue which threatens Pittsburgh
2 Water's ability to maintain its service at current levels.

3 **Q. DOES OFFERING A DISCOUNT ENABLE CUSTOMER PAYMENTS RATHER**
4 **THAN IMPEDE CUSTOMER PAYMENTS?**

5 A. Pittsburgh Water seeks to dismiss the learning of these evaluations since they do not
6 involve regulated water utilities in Pennsylvania. Nonetheless, the empirical evaluations
7 are based on real world evaluations of regulated Pennsylvania utilities. They should not
8 be ignored. Moreover, the significance of the evaluations of Pennsylvania affordability
9 programs lies not only in the results which evaluations of the programs have found, but
10 also in the fact that the evaluations uniformly find these results.

11 For more than 35 years, I have been involved with the affordability programs
12 implemented by Pennsylvania's natural gas and electric distribution utilities. At the
13 direction of the Pennsylvania Public Utility Commission (PUC), independent third-party
14 firms have evaluated these programs. The independent evaluation results for six
15 Pennsylvania gas and electric distribution utilities are presented in Table 5 below. The
16 evaluation results span a number of years, indicating that these results are not a function
17 of any particular external factor that may have existed in a particular year. The results
18 include four electric utilities and two natural gas utilities.

**Table 5. Total Bill Payment Coverage Ratios
Low-Income Customer Assistance Program (CAP) Participants**

	Test Year Enrollees			Net Change Relative to Comparison Group
	Pre-CAP	In CAP	Change	
PGW (2019) ²⁴	72%	92%	20%	36%
PPL (non-htg) (2020) ²⁵	84%	98%	15%	21%
PPL (heating) (2020)	83%	104%	21%	26%
Peoples Gas (2017) ²⁶	85%	123%	39%	36%
First Energy (Met Ed) (non-htg/htg) ²⁷	NA	91%/93%	NA	NA
First Energy (PN) (Non-htg/htg)	NA	91%/119%	NA	NA
First Energy (PP) (non-htg/htg)	NA	100%/98%	NA	NA
UGI (electric) (2012) ²⁸	60%	66%	5%	18%
Duquesne Light (non-htg) (2015) ²⁹	77%	94%	17%	31%
Duquesne Light (htg) (2015)	75%	92%	17%	23%

1 Q. WHAT DO THESE PENNSYLVANIA PROGRAM EVALUATIONS FIND?

²⁴ APPRISE, Inc. (March 2019). Philadelphia Gas Works Universal Service Programs Impact Evaluation, Final Report, at 60, available at <https://www.puc.pa.gov/pcdocs/1614503.pdf> (accessed August 3, 2022).

²⁵ APPRISE, Inc. (January 2020). PPL Electric Utilities Universal Service Programs, Final Report, at 100, available at <https://www.puc.pa.gov/pcdocs/1656535.pdf> (accessed August 3, 2022).

²⁶ APPRISE, Inc. (August 2017). Peoples Natural Gas 2017 Universal Service Program, Evaluation, Final Report, at 77, available at https://www.puc.pa.gov/General/pdf/USP_Evaluation-Peoples.pdf (accessed August 3, 2022).

²⁷ APPRISE, Inc. (January 2017). FirstEnergy Universal Service Programs, Final Evaluation Report, available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-FirstEnergy.pdf (accessed August 3, 2022)..

²⁸ APPRISE, Inc. (July 2012). UGI Utilities, Inc. – Gas Division and UGI Penn Natural Gas, Inc. Universal Service Program, Final Evaluation Report, available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-UGI.pdf (accessed August 3, 2022)..

²⁹ APPRISE, Inc. (July 2015). Duquesne Light Universal Service Programs, Final Evaluation Report, available at https://www.puc.pa.gov/general/pdf/USP_Evaluation-Duquesne.pdf (accessed August 3, 2022).

A. The results presented in Table 5 show the total “bill payment coverage ratio” for participants in the various low-income discount programs of the Pennsylvania utilities, called Customer Assistance Programs (“CAPs”). The bill payment coverage ratio places dollars of payments in the numerator and dollars of bills in the denominator to determine the percentage of bills that have been paid. The Table makes two comparisons. First, the Table shows the bill payment coverage ratio for the year before participants enrolled in CAP compared to the bill payment coverage ratio for the first full year of CAP participation. Second, the Table shows the percentage change for CAP participants (pre-CAP vs. in-CAP) compared to the “net change” relative to a low-income comparison group. The net change subtracts the change within the comparison group from the change in the CAP participant group. If the bill payment coverage ratio for the CAP participants improved by 15%, for example, and the payment coverage ratio for the comparison group improved by 3%, the net change for CAP participants is 12%. In contrast, if the payment coverage ratio for CAP participants improved by 15%, and the payment coverage ratio for the comparison group declined by 3%, the net change for the CAP participants is 18%. The “net change,” in other words, is the change for CAP participants relative to what their change would have been had they been in the comparison group.

The three FirstEnergy utilities (Metropolitan Edison; Penn Power; Penelec) did not have pre-CAP data or comparison group data presented in their program evaluation.

FirstEnergy’s evaluation presented only the in-CAP bill payment coverage ratios.

Table 5 shows not only that in-CAP low-income payment performance resulted in payments of consistently between 90% and 100% (or more) of low-income bills, but the

Table also shows that the bill payment performance significantly improved once a low-income customer enrolled in the percentage of income-based CAP. Setting aside UGI (electric) as an outlier (UGI also has a natural gas division, the program for which was not included in UGI's evaluation),³⁰ the lowest in-CAP payment coverage ratio was 92% (Duquesne Light heating: up from 75%; see also, Philadelphia Gas Works: up from 72%). The smallest improvement in payment coverage ratios (considering only the pre-versus-post participation data) was 15% (Penn Power and Light, PPL), and that increase was from 84% prior to CAP participation to 98% during CAP participation.

Q. DO YOU HAVE FURTHER REASON TO BELIEVE THAT IMPROVED LOW-INCOME PAYMENT PATTERNS WILL OCCUR AS A RESULT OF AN AFFORDABLE DISCOUNT FOR A WATER UTILITY IN PARTICULAR?

A. Yes. I presented a detailed discussion of the relationship between improved utility bills burdens and improved payment patterns in my discussion above. While that detailed discussion was based on multiple studies of *energy* affordability programs, the same results have arisen in the water affordability program for which an evaluation has been performed. I present this discussion simply to demonstrate that the payment improvement advantages I document above are not specific to a particular utility type. With each type of service provided (natural gas, electricity, water), improved payment patterns result from offering a discount that results in an affordable burden. The water tiered discounts,

³⁰ For purposes here, UGI (electric) will be referred to simply as "UGI."

the impacts of which I discuss below, are provided by the Philadelphia Water Department (PWD).

Q. WHY DO YOU PRESENT DATA FROM THE PHILADELPHIA WATER AFFORDABILITY PROGRAM IN THIS RATE PROCEEDING?

A. I present the data from PWD below to show that the impacts of an affordable rate on utility bill payments do not depend on the type of utility service being offered. In my discussion above, I include data from evaluations of both natural gas and electric utilities. In my discussion below, I include data from an evaluation of a water utility. The fact that the data from each type of service lends credibility to the conclusion that an affordable rate will generate the payment impacts I identify for Pittsburgh Water, just as they have for multiple other utilities delivering multiple types of utility services.

Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF THE PWD PROGRAM.

A. PWD has implemented a Tiered Assistance Program (“TAP”). Adopted unanimously by the Philadelphia City Council on November 19, 2015, the Philadelphia initiative was legislatively titled the Income-based Water Rate Affordability Program (“IWRAP”).³¹ IWRAP was implemented on July 1, 2017 and is operationally known as the TAP. In Philadelphia, the City Council legislation directed that: “Monthly [TAP] bills shall be affordable for low-income households, based on a percentage of the household’s income. . . .”³² Each low-income customer’s bill shall be “based upon each Customer’s actual

³¹ Bill No. 140607-AA, amending Philadelphia Code, §19-1605, adopted by the City Council on November 19, 2015. Signed by the Mayor on December 1, 2015.

³² Amended Philadelphia City Code, Section 19-1605(3)(a) (2017).

1 income” and “shall be charged in lieu of the Department’s service, usage, and stormwater
2 charges.”³³

3 The most important policy decision incorporated into this language is that bills “shall be
4 affordable.” The purpose of the Philadelphia legislation was not merely to provide
5 “some” level of discount to low-income customers. Instead, the level of discount is
6 intended to result in an affordable bill for low-income customers. If a customer has a
7 lower income (or a higher bill), the amount of assistance should be increased to reflect
8 the increased dollars needed to make the bill affordable.

9 **Q. WHAT IMPACTS ON LOW-INCOME PAYMENT PATTERNS HAS THE PWD**
10 **PROGRAM GENERATED?**

11 A. The PWD program has generated more complete payments on the part of low-income
12 program participants. In looking at the question of “complete” bill payment for TAP
13 program participants, the metric used below involves an examination of the percentage of
14 bills paid at different measurement points in time. The comparisons examined involve
15 TAP participants (who, by definition, are low-income) and low-income customers who
16 did not participate in TAP (TAP non-participants). The data is set forth in the Table
17 below. PWD data is available for two Fiscal Years (2018, 2019).

³³ Amended Philadelphia City Code, Section 19-1605(3)(a) (2017).

Table 6. Timeliness of Bill Collection (TAP and Non-TAP Low-Income [LI]) ³⁴				
	Percent Collected within 12 Months of Date of Billing		Percent Collected within 24 Months of Date of Billing	
	TAP	Non-TAP LI	TAP	Non-TAP LI
\$s billed in FY20	72.82%	38.14%	N/A ³⁵	N/A
\$s billed in FY19	72.17%	33.38%	87.90%	52.59%
\$s billed in FY18	74.51%	27.22%	95.73%	34.30%
\$s billed in FY17	No TAP ³⁶	36.11%	No TAP	47.80%
\$s billed in FY16	No TAP	39.80%	No TAP	53.33%
\$s billed in FY15	No TAP	39.37%	No TAP	53.32%
\$s billed in FY14	No TAP	40.49%	No TAP	55.04%
\$s billed in FY13	No TAP	42.45%	No TAP	57.06%
\$s billed in FY12	No TAP	39.18%	No TAP	53.26%

1 The collection data measures the percentage of billing in a fiscal year that was collected
2 within a specified number of months after the bills were issued. The first measurement
3 point determines the percentage of bills that were collected within the first twelve months
4 after the bills were issued. The second measurement point determines the percentage of
5 bills that were collected within the first 24 months after the bills were issued. The Table
6 above, for example, shows that 72.17% dollars billed to TAP participants in FY 2019
7 were collected within twelve months from the date they were billed; in addition, 87.90%

³⁴ Before the Philadelphia Water, Sewer and Stormwater Rate Board, Re. Application of the Philadelphia Water Department Proposed Change in Water, Wastewater and Stormwater Rates and Related Charges, Fiscal Years 2022 – 2023, Direct Testimony of Roger Colton on behalf of the Philadelphia Public Advocate, at Appendix B and associated notes (March 22, 2021).

³⁵ 24 months have not elapsed since FY 2020.

³⁶ TAP began in July 1, 2017 (Fiscal Year 2018).

1 of the dollars billed to TAP participants in FY 2019 were collected within 24 months
2 from the date those dollars were billed.

3 Table 6 shows a substantial improvement in the collections by program participants (in
4 comparison to low-income non-participants). The three years of most important
5 comparison in the Table are FY18 (the first year of TAP operation), FY19, and FY20.
6 FY20 is included even though, because of its recent nature, it has collections data only
7 for twelve months.

8 A consistency in the improved timeliness of payments by TAP program participants is
9 seen at both the 12-month and 24-month mark in the Table above. For all three years
10 (FY18, FY19, FY20), at the 12-month mark, program participants out-performed the
11 low-income program nonparticipants by 35% to nearly 50%. The proportion of bill paid
12 by program participants at the 12-month mark in FY18, for example, was more than 47%
13 higher than the proportion of bill paid by low-income TAP non-participants (74.51% vs.
14 27.22% at the same mark). The proportion of bill paid by TAP participants at the 12-
15 month mark in FY20 (72.82%) was 35% higher than the proportion of bill paid by low-
16 income TAP non-participants (72.82% vs. 38.14%) at 12-months.

17 The improved payments expanded through the second year of collections. In FY19, for
18 example, while 87.9% of TAP participant bills had been paid by the 24-month mark, only
19 52.59% of low-income TAP non-participant bills had been paid through the same time
20 period (an improved performance by TAP participants of 49.1% over low-income TAP
21 non-participants). An even greater performance difference can be seen in FY18, with the
22 TAP participant payment of 95.73% by Month-24 being more than 61% higher than the

low-income TAP non-participant performance (34.30%). The TAP results demonstrate that when bills are made more affordable, customers will not only pay their bills in a more complete fashion, but they will also pay their bills in a more timely fashion. They fall into arrears less frequently and, even when they fall into arrears, they succeed in retiring those arrears more quickly.

In the Table above, data for TAP non-participants is also included for FY12 through FY17 even though no discount program existed in those years. This pre-TAP data is presented simply for informational purposes. The pre-TAP data shows that the collections of low-income customers who did not have TAP discounts (because TAP had not yet been created) was reasonably consistent with the collections of low-income customers who qualify for TAP, but, for whatever reason, did not enroll in TAP.

Q. HOW DO YOU RESPOND TO PITTSBURGH WATER WITNESS MECHLING’S REBUTTAL TESTIMONY REGARDING MECHANISMS THROUGH WHICH LOW-INCOME CUSTOMERS ARE ENROLLED IN THE PITTSBURGH WATER BILL DISCOUNT PROGRAM (BDP)?

A. Pittsburgh Water witness Mechling opposes every single recommendation that has been made to increase the enrollment of Pittsburgh Water’s low-income customers in the BDP. Witness Mechling asserts unequivocally that Pittsburgh Water “has made great strides to enroll all eligible customers. . .”³⁷ Moreover, witness Mechling opposes all three recommendations on providing additional outreach to specific populations of customers who evidence payment difficulties. In my Direct Testimony, I recommended that

³⁷ PW St. 6R, at 8.

Pittsburgh Water be directed to include stand-alone Plain Language notices of the availability of the Bill Discount Program and Arrearage Forgiveness Program in three situations: (1) at the time a customer enrolls in a deferred payment arrangement; (2) prior to the disconnection of service for nonpayment; (3) in any situation where a customer has had service disconnected for nonpayment and continues to remain disconnected at the beginning of the cold weather season (December 1st).³⁸ Witness Mechling opposes the recommendation that Pittsburgh Water provide these notices because, she asserts, “Pittsburgh Water has a robust public education campaign to promote and provide information to customers about its low-income customer assistance programs.”³⁹ She argues that I did “not provide any support for [my] view that additional customer notices are necessary to support our collection efforts or to increase customer enrollment in our low-income customer assistance programs.”⁴⁰

Witness Mechling makes these assertions notwithstanding that as of July 2025, Pittsburgh Water had enrolled only 8,538 low-income customers in its BDP.⁴¹ Moreover, as documented above, she makes this assertion notwithstanding the fact that in every month since January 2022, more than half of Pittsburgh Water’s identified low-income customers were in arrears, owing on average more than \$1,500, and being from 13 to nearly 18 Bills Behind on their payments. Despite these substantial, growing, payment

³⁸ OCA St. 6, at 5.

³⁹ PW St. 6R, at 15.

⁴⁰ *Id.*, at 16.

⁴¹ PW Response to OCA-IV-3(a).

difficulties amongst Pittsburgh Water’s low-income population, as Table 7 below shows,
Pittsburgh Water has added fewer than 500 BDP participants since January 2025.

Table 7. BDP Participants by Month (2025)	
2025	Participants
January	8,079
February	8,221
March	8,326
April	8,397
May	8,397
June	8,411
July	8,538

Even though witness Mechling asserts that Pittsburgh Water “has made great strides to enroll all eligible customers. . .,”⁴² she disclaims any ability to determine how many “eligible customers” exist on the Pittsburgh Water system. Witness Mechling, for example, objects to the use of Pittsburgh Water’s own estimated number of 26,834 low-income customers as a standard against which to measure BDP enrollment. She argues that the number of estimated low-income customers included in its affordability analysis “should be viewed as it was intended, an estimate of potential enrollees” and not as an absolute number of low-income customers.⁴³ Her rebuttal, however, refuses to acknowledge, let alone come to grips with, the problem identified by both OWT witness Cicero and myself. Even assuming the legitimacy of Ms. Mechling’s argument, her argument does not support her conclusion that Pittsburgh Water has “made great strides

⁴² PW St. 6R, at 8.

⁴³ PW St. 6R, at 10.

1 to enroll all eligible customers.” To the extent that the Census data is, in witness
 2 Mechling’s words, “not an exact science,” the estimated number of low-income
 3 customers based on that Census data could be low as easily as it could be high.

4 However, just for purposes of analysis, let me assume hypothetically that the Census data
 5 could have an error of plus/minus 25%. This number is far in excess of what the error rate
 6 in the Census will be. I use 25% simply to test the legitimacy of Ms. Mechling’s
 7 argument. Assuming a +/- 25% Census error would mean that the number of estimated
 8 low-income customers in the Pittsburgh Water service territory could be:

- 9 ➤ 26,834 if the Census data is accurate; or
- 10 ➤ 33,543 if the Census data is 25% too low; or
- 11 ➤ 20,126 if the Census data is 25% too high.

12 Given these three scenarios, the July 2025 BDP participation rate of 8,538 would mean
 13 that Pittsburgh Water has enrolled:

- 14 ➤ 32% of its eligible population if the Census estimate is accurate; or
- 15 ➤ 25% of its eligible population if the Census estimate is 25% too low; or
- 16 ➤ 42% of its eligible population if the Census estimate is 25% too high.

17 Even if a clearly excessive “error rate” of 25% is assumed for the Census, in other words,
 18 in no scenario does Pittsburgh Water enroll even half of its eligible low-income
 19 population in its BDP. In no scenario, does Pittsburgh Water come even close to enrolling
 20 “all eligible customers.”

21 The Commission has provided guidance on what level of enrollment they find to be of
 22 concern. In a prior PGW case, for example, involving another municipal utility,
 23 Commissioner Zerfuss stated that “It is important for PGW to implement these

1 protections and benefits, particularly since the record in this case demonstrates that as of
 2 December 2022, less than half of the customers that PGW has identified as low-income,
 3 and less than one-third of PGW’s estimated low-income customers, were enrolled in
 4 CRP. PGW should strive to improve CRP participation, especially in light of the rate
 5 increase customers will experience as a result of this proceeding.”⁴⁴ Building on that
 6 expressed concern, the Commission’s Final Order in that proceeding stated unequivocally
 7 that “we emphasize the need for PGW to improve CRP participation.”⁴⁵

8 **Q. WOULD PROVIDING ADDITIONAL NOTICES UNDER THE THREE**
 9 **CIRCUMSTANCES YOU IDENTIFY BE HELPFUL IN IMPROVING**
 10 **ENROLLMENT?**

11 A. Yes. One illustrative example of how additional notice can be helpful can be found
 12 within the context of Pennsylvania utility regulation. The PUC’s regulations provide that
 13 a customer is exempt from a cash security deposit “when the customer provides income
 14 documents or other information that he or she is eligible for state benefits based upon
 15 household income eligibility requirements that are consistent with those of the public
 16 utility’s customer assistance program.” (56 Pa. Code § 56.41(4)). The question arose
 17 about how such an exemption should be implemented in instances where a customer had
 18 previously posted a cash security deposit and was entitled to a refund. The question
 19 involved whether the deposit could be credited to the customer’s account by the utility, or
 20 whether the customer was entitled to a cash refund.

⁴⁴ Statement of Commissioner Kathryn L. Zerfuss, at 2, November 9, 2023 (internal citations omitted).

⁴⁵ Final Oder, Docket No. R-2023-3037933, at page 221, November 9, 2023.

1 The question arose because some Pennsylvania utilities had adopted internal policies and
 2 procedures which allow the “refund” of a deposit to an income-eligible customer to be
 3 made only in the form of a bill credit. The Commission has explicitly held this procedure
 4 to be unlawful. In the April 4, 2024 decision regarding the Universal Service and Energy
 5 Conservation Plan (USECP) of Columbia Gas, subsequently again affirmed in a PGW
 6 proceeding, the PUC considered whether Columbia Gas could apply an existing security
 7 deposit against a low-income customer’s outstanding arrears before refunding the
 8 difference pursuant to statute and regulation. The PUC held that the Company could not
 9 do so, stating:

10 Accordingly, we direct Columbia to refund security deposits, with applicable
 11 interest, collected from customers who are income-eligible for CAP.
 12 Columbia may apply the security deposit to the account balance only with the
 13 customer’s informed consent. As part of obtaining this informed consent,
 14 Columbia must explain to the customer how applying the security deposit to
 15 the account balance would impact the customer’s monthly bill. (emphasis
 16 added)⁴⁶

17
 18 While those decisions related to Columbia Gas and PGW, the application of the
 19 principles would be the same with respect to my recommendation that Pittsburgh Water
 20 provide a stand-alone Plain Language notice in the three circumstances identified above.

21 This example is not provided because Pittsburgh Water imposes cash security deposits on
 22 low-income households. It rather is illustrative of the role of Plain Language notices in
 23 informing low-income customers of their choices.

⁴⁶ Columbia Gas of Pennsylvania, Inc. Universal Service and Energy Conservation Plan for 2024 - 2028 Submitted in Compliance with 52 Pa. Code § 62.4, Docket M-2023-3039487, Order, at 31 (April, 2024). (hereafter 2024 Columbia USECP Order). See also, Philadelphia Gas Works Universal Service and Energy Conservation Plan for 2023-2027 Submitted in Compliance with 52 Pa. Code § 62.4, Docket M-2021-3029323, Order on Reconsideration, at 17 – 18 (also appropriate to refund deposits directly to customer without seeking customer consent on whether to refund or to credit deposit toward bill).

1 My Direct Testimony states that:

2 . . .before Pittsburgh Water enters into a payment arrangement with a
3 customer, it should be required to provide the customer a stand-alone Plain
4 English notice to that customer of the customer's right to enter into the Bill
5 Discount Program and an explanation of the advantages of that program's
6 arrearage forgiveness benefits. Pittsburgh Water should develop this Plain
7 English notice in collaboration with its LIAAC. As part of the payment
8 arrangement agreement with the customer, Pittsburgh Water should obtain an
9 affirmative acknowledgement that the customer has received and understands
10 this option.⁴⁷

11 In other words, the recommendation I advanced is, as applied to deferred payment
12 arrangements, exactly what the Commission has required with respect to the refund of
13 cash security deposits. Before entering into a deferred payment arrangement calling for
14 the payment of an unpaid arrearage which, if the customer is income-qualified, would be
15 subject to forgiveness, the utility should obtain the informed consent that the customer
16 would prefer to enter into a payment arrangement to pay those arrears over time rather
17 than apply for the BDP and to have those arrears forgiven over time. As the Commission
18 has previously ordered with respect to the refund of deposits, "as part of obtaining this
19 informed consent, [the utility] must explain to the customer how applying the security
20 deposit to the account balance would impact the customer's monthly bill." That is what
21 has been recommended for Deferred Payment Arrangements (DPAs) for Pittsburgh
22 Water, that as part of obtaining this informed consent, Pittsburgh Water must explain to
23 the customer how applying the DPA installments, or entering into the arrearage
24 forgiveness program, will impact the customer's bill.

⁴⁷ OCA St. 6, at 43.

1 The foundation of my recommendation can be found in the Commission's orders.
 2 Pittsburgh Water should enter into a deferred payment agreement with a low-income
 3 customer for payment of an arrears otherwise subject to forgiveness only with the
 4 customer's informed consent. As part of obtaining this informed consent, Pittsburgh
 5 Water must explain to the customer how agreeing to the payment arrangement through
 6 which to pay the account balance, rather than applying for arrearage forgiveness through
 7 the BDP and AFP, would impact the customer's monthly bill.

8 **Q. HAS THE COMMISSION EVER CONSIDERED SUCH OUTREACH**
 9 **PROPOSALS IN OTHER CIRCUMSTANCES?**

10 A. In the 2025 Columbia Gas base rate case, the Office of Consumer Advocate proposed
 11 notice provisions similar to the ones advanced in this proceeding. While that case has not
 12 proceeded to a final order by the Commission, the October 3, 2025, Recommended
 13 Decision approved those proposals. The Recommended Decision found and held:

14 Improved screening and referrals could help ensure households are receiving
 15 the most advantageous available rate and is a statutory requirement.

16 Furthermore, proactive CAP enrollment strategies, such as routine screening,
 17 also serve as a critical collection and cost containment tool that helps reduce
 18 the accrual of unmanageable debts, reduce uncollectible expenses and other
 19 collections costs, and reduce the cost of the CAP arrearage management
 20 program. We believe that the Company would save money on CAP outreach
 21 in the long term.⁴⁸

⁴⁸ Pennsylvania PUC v. Columbia Gas Company of Pennsylvania, Docket R-2025-3053499, Recommended Decision, at 549 – 550 (October 3, 2025) (emphasis added).

1 **Q. DOES PITTSBURGH WATER OBJECT TO TRACKING WHETHER THERE IS**
 2 **A REASONABLE EXPECTATION THAT A CUSTOMER IS A LOW-INCOME**
 3 **CUSTOMER?**

4 A. Yes. Ms. Mechling asserts that my conclusion that Pittsburgh Water “maintains no
 5 mechanism by which it might reasonably identify a customer as low-income outside the
 6 enrollment of that customer in one of Pittsburgh Water’s customer assistance programs”
 7 is “based on his review of Pittsburgh Water’s responses to his very specific data driven
 8 discovery requests about residential customers’ specific household income
 9 information.”⁴⁹ That statement by witness Mechling is a strawman argument which she
 10 then proceeds to disagree with. My conclusion, however, is not based on that strawman,
 11 but is instead based on Pittsburgh Water’s own statement, when asked for its estimate of
 12 the number of low-income customers in its service territory, that “Pittsburgh Water has
 13 no tracking mechanism to report on [that request].”⁵⁰ Witness Mechling does not explain
 14 the basis for her assertion that Pittsburgh Water “has made great strides to enroll all
 15 eligible customers” when it has no idea of how many customers “all eligible customers”
 16 exist.

17 Ms. Mechling resorts again to asserting a strawman argument, which she then dismisses,
 18 when she asserts that Pittsburgh Water does not “collect or maintain data about each of
 19 its customers’ actual household incomes.”⁵¹ As with her strawman argument above, the

⁴⁹ PW St. 6R, at 11.

⁵⁰ PW Response to OCA-IV-2(c).

⁵¹ PW St. 6R, at 12 (emphasis added).

1 argument she responds to is not based on any proposal or recommendation advanced in
2 this proceeding. Nobody in this proceeding, including neither myself nor Mr. Cicero, has
3 proposed or recommended that Pittsburgh Water “collect or maintain data about each of
4 its customers’ actual household incomes.”

5 Every single major Pennsylvania natural gas and electric utility tracks its “confirmed
6 low-income customer” accounts. The definition of “confirmed low-income” is a
7 definition that is set forth in Commission regulation. None of these energy utilities
8 identify their “confirmed low-income” customers by “collect[ing] or maintain[ing] data
9 about each of [their] customers’ actual household incomes.”

10 Indeed, in making her statement, Pittsburgh Water witness Mechling fails to
11 acknowledge the fact that Pittsburgh Water asked the OCA how it might identify its low-
12 income customers without needing to “collect or maintain data about each of its
13 customers’ actual household incomes.” The data request propounded to OCA, and OCA’s
14 response thereto, which Pittsburgh Water witness Mechling chose not to disclose, is
15 attached to this Surrebuttal Testimony as Exhibit OCA-RDC-1SR. As Pittsburgh Water
16 was told:

17 Information that is accepted to meet these regulatory definitions (“reasonably
18 place the customer in a low-income designation”) includes, but is not necessarily
19 limited to, self-certified income obtained through the process of negotiating
20 payment arrangements, participation in a universal service program, receipt of
21 public assistance with incomes that are reasonably consistent with the
22 Commission’s definition of low-income, the provision of customer documentation
23 of income (e.g., tax returns, W2s, pay stubs), or verification by a community-
24 based organization.

25 Moreover, Pittsburgh Water was told:

The following illustrations are provided of information accepted to establish low-income status:

- PECO (gas/electric): Household income – which is used by the Company to calculate a customer’s Federal Poverty Level (FPL) pursuant to Section 1405 of Title 66 – can be provided by the customer verbally to a Company representative. The Company “confirms” low-income status when the customer provides supporting Proof of Income documentation.
- PAWC identifies customers as “confirmed low-income” by reviewing who has been enrolled in the BDP; by who has received a Low-Income Home Water Assistance Program (LIHWAP) grant; and by who has income below the maximum income eligibility as provided through the Ability to Pay Process used to establish payment plans.
- Duquesne Light verifies low-income status first by receiving a LIHEAP grant via the Department of Human Services or enrolling in the Customer Assistance Program (CAP). Customers can provide paystubs, social security award documents, cash assistance verification, zero-income, and W2 forms as proof of low-income status.
- Columbia Gas considers all customers that verbally provide income that calculates at level 1 as confirmed low income. In addition, all customers that receive a LIHEAP grant including those that have not verbally provided income, are considered confirmed low income.
- FirstEnergy customers are deemed to be low-income if, in seeking a deferred payment arrangement, they are willing to discuss income by completing a financial summary to see if they qualify. In addition, FirstEnergy customers may provide documentary proof of income such as pay stubs to cover the last 30-day period, a copy of a pension check, a 1099 tax form, a benefits letter from the current year or a printout of benefits received from the Department of Human Services, current tax return documentation, a letter of determination of a short-term disability, a copy of a letter from the Social Security Administration, a statement from unemployment compensation of expected benefits to be received from the current year, or a statement from workers compensation of expected benefits.

In providing this list of illustrations, duplicate processes have sought to be eliminated. For example, pursuant to statute and Commission regulation, nearly every utility accepts self-certification of information provided in the negotiation of payment arrangements as establishing low-income status.

1 It is important to remember that my Direct Testimony also specifically stated that “Even
 2 though, as a water utility, not required to collect such data, Pittsburgh Water should
 3 nonetheless do so as a matter of sound business practice.”⁵² Note, for example, that
 4 PAWC is amongst the water utilities that collects data to track confirmed low-income
 5 customers.

6 The lack of foundation for Pittsburgh Water’s objection to tracking their customers for
 7 whom they have information that would “reasonably identify them as low-income” can
 8 be discerned from the fact that witness Mechling felt compelled to expand the actual
 9 recommendation in unreasonable and clearly unsupported ways.

10 **Q. TURNING TO PITTSBURGH WATER’S ARREARAGE FORGIVENESS**
 11 **PROGRAM, PLEASE RESPOND TO MS. MECHLING’S TESTIMONY**
 12 **REGARDING COPAYMENTS AND PAYMENT PLANS.**

13 A. Pittsburgh Water witness Mechling testifies that “Mr. Colton’s conclusion that customers
 14 enrolling in the new AFP will be required to enter into a payment arrangement for their
 15 pre-existing arrears is mistaken. . .”⁵³ She continues on to state that “Pittsburgh Water
 16 will not require participants to make a co-payment towards the pre-program arrears.”⁵⁴
 17 She also makes these assertions even though, as noted by OWT witness Cicero,
 18 Pittsburgh Water’s current water and wastewater tariffs retain references to “payment
 19 plans” for AFP participants. She makes these assertions even though when Pittsburgh

⁵² OCA at. 6, at 41.

⁵³ PW St. 6R, at 17.

⁵⁴ Id., at 18.

1 Water was asked to provide “a copy of all current internal policies, procedures, standard
2 operation procedures, or other documents which describes the length and/or terms of
3 payment arrangements which are offered to customers enrolling in the AFP” (emphasis
4 added), the response as recently as July 29, 2025, stated that “Enrollment in the Bill
5 Discount Program and an active payment plan are the precursors for enrollment into the
6 Arrearage Forgiveness Program.” (emphasis added).⁵⁵

7 Ms. Mechling’s representation that Pittsburgh Water’s discovery response was in error,
8 and that, in fact, it does not require low-income customers to enter into payment plans as
9 a “precursor for enrollment into the Arrearage Forgiveness Program” is accepted. While
10 Ms. Mechling commits to remove any reference to payment arrangements “as part of the
11 final compliance tariffs to eliminate any confusion,” Pittsburgh Water should also
12 commit to revise all internal policies, procedures, standard operation procedures, and call
13 center scripts to remove reference to the need for payment plans as a precursor to
14 enrolling in the AFP.

15 Finally, the “confusion” (the term used by witness Mechling herself)⁵⁶ identified by Ms.
16 Mechling lends further support to the need for Pittsburgh Water to provide the stand-
17 alone notices, and to seek the “informed consent” that I have recommended but that Ms.
18 Mechling so adamantly opposes.

⁵⁵ PW Response to OWT-3-17.

⁵⁶ PW St. 6R, at 18.

1 **Q. WHAT IS THE NEXT ASPECT OF WITNESS MECHLING’S REBUTTAL**
 2 **TESTIMONY TO WHICH YOU WISH TO RESPOND?**

3 A. Rebuttal witness Mechling introduces further confusion into Pittsburgh Water’s AFP by
 4 providing directly contradictory testimony in this proceeding. Witness Mechling’s
 5 Rebuttal Testimony states:

6 [I]t is important to encourage customers to pay their obligations when they
 7 become due to avoid the accumulation of debt while supporting the reliability
 8 of service. Allowing customers to catch up on unpaid current charges at any
 9 point in the 24-month period would remove the incentive to consistently pay
 10 a monthly bill, eliminating an elemental benefit of an AFP. . .Providing
 11 arrearage forgiveness on the condition that current bills are paid on time and
 12 in full is intended to be a further incentive for customers to structure their
 13 household budget to consistently pay their monthly bill. For these reasons, we
 14 believe it is important to continue to incentivize customers to pay their bills
 15 on time and in full as a means of receiving the benefits of arrearage
 16 forgiveness.⁵⁷

17 In contrast, in her Direct Testimony, Ms. Mechling described Pittsburgh Water’s AFP by
 18 noting: “Customers who fail to remain current on payment of their billed charges would
 19 have the opportunity to catch-up on their missed payments of charges billed within the 24
 20 months to achieve forgiveness of their frozen, pre-program arrears.” (emphasis added)⁵⁸

21 This issue is not new to the Commission. In establishing policies for the arrearage
 22 forgiveness provisions of the state’s natural gas and electric Customer Assistance
 23 Programs, the Commission found that the unsupported assertions made by Pittsburgh

⁵⁷ Id., at 18 – 19.

⁵⁸ PW St. 6 at 36.

Water Mechling were in error. Contrary to Ms. Mechling’s unsubstantiated assertions, the Commission found:

CAP customers may be more likely to be consistent with monthly payments – even if they fall behind – if there is a continuing opportunity to reduce PPA [pre-program arrears] debt. We find that granting PPA forgiveness with each on-time and in-full monthly payment, regardless of in-program arrears is appropriate and reasonable. Offering retroactive PPA forgiveness can also provide a strong incentive for customers to catch up on missed payments. (emphasis added).⁵⁹

The Commission then found the best approach to be: “Specifically, EDCs and NGDCs should allow PPA forgiveness for each on-time and in-full monthly payment, regardless of in-program arrears, and retroactive PPA forgiveness for any months missed once the customer pays the CAP balance in full.”⁶⁰ As in my Direct Testimony, I recommend that Pittsburgh Water be directed to modify its AFP to reflect this Commission policy.

Q. PLEASE RESPOND TO MS. MECHLING’S REBUTTAL TESTIMONY REGARDING THE CROSS-ENROLLMENT OF PITTSBURGH WATER CUSTOMERS INTO THE BILL DISCOUNT PROGRAM AND ARREARAGE FORGIVENESS PROGRAM.

A. Both my Direct Testimony and the Direct Testimony of OWT witness Cicero recommended that low-income customers who enroll in the Pittsburgh Water Bill Discount Program (BDP) simultaneously, and without further action of the customer, should also be enrolled in the Pittsburgh Water Arrearage Forgiveness Program (AFP). Pittsburgh Water rebuttal witness Mechling opposes this recommendation. She again

⁵⁹ Pennsylvania PUC, Final Policy Statement and Order, Docket M-2019-3012599, at 54 (September 19, 2019).

⁶⁰ Id., at 54 – 55.

1 relies on expanding the recommendation with which she disagrees to an extreme degree
2 in order to find a basis for her opposition. She argues that “Adding automatic enrollment
3 requirements and processes into our current system would force customers into a program
4 without their knowledge or consent, setting them up for a failed AFP experience.”⁶¹

5 Neither Mr. Cicero nor I recommended that Pittsburgh Water customers be “forced into a
6 program without their knowledge or consent” and no reasonable basis can be found in
7 either of our testimonies to support the assertion that that was the recommendation of
8 either of us. The recommendation is that when a low-income customer with a pre-existing
9 arrears enrolls in the BDP—an action clearly taken with the “knowledge and consent” of
10 the customer—that arrearage forgiveness be made an indivisible part of the BDP.

11 Enrollment in the BDP, in other words, would be enrollment in a program with two
12 complementary program components: (1) a component to address the affordability of
13 current bills on a going-forward basis (i.e., the “bill discount”); and (2) a component to
14 address the pre-existing arrears that were incurred during the time prior to BDP
15 enrollment when bills were unaffordable (i.e., the “arrearage forgiveness”). With the
16 elimination of the requirement that AFP participants also enter into a payment
17 arrangement, there is now no difference in the program eligibility requirements for the
18 BDP and AFP. There is no reason that the programs should not be operated in tandem,
19 and that enrollment in the BDP will gain customers the benefit of having their pre-
20 existing arrears forgiven over time.

⁶¹ PW St. 6R, at 21 – 22.

1 The same reasoning applies to enrolling hardship fund recipients into the BDP and AFP
2 at the same time they apply for and are found eligible for a Hardship Grant. In order to
3 receive a Hardship Grant, a customer must make personal contact with Pittsburgh Water.
4 In order to receive a Hardship Grant, a customer must establish that they are income-
5 eligible. In order to receive a Hardship Grant, a customer must have some exchange of
6 interaction with persons representing Pittsburgh Water. To require a customer having
7 undertaken those processes to go through an entirely separate process in order to enroll in
8 the BDP and AFP accomplishes nothing other than to erect barriers to BDP/AFP
9 participation. That barrier should be removed by requiring that income-eligible customers
10 receiving a Hardship Grant will automatically, with no additional action on the part of the
11 customer, also be placed in the AFP. The Hardship Grant application form could, for
12 example, have a line-item which would allow a customer to request that they be enrolled
13 in the BDP and AFP.

14 Ms. Mechling's opposition to automatically enrolling customers receiving a Hardship
15 Grant into the AFP is perplexing at best. Her Rebuttal Testimony concedes that "in its
16 rate filing, Pittsburgh Water proposed to begin automatically enrolling customers
17 receiving Hardship Grants in the Bill Discount Program."⁶² For some reason which Ms.
18 Mechling did not explain, her concern about how "adding automatic-enrollment
19 requirements and processes into our current system would force customers into a program
20 without their knowledge or consent" evaporated for this proposal regarding the AFP. The
21 fact that Pittsburgh Water pursues the "automatic enrollment" of Hardship Grant

⁶² PW St. 6R, at 32.

recipients into the BDP demonstrates the illegitimacy of Ms. Mechling’s earlier stated concerns about the automatic enrollment into the AFP as well.⁶³

Q. PLEASE EXPLAIN THE NEXT ASPECT OF MS. MECHLING’S REBUTTAL TESTIMONY TO WHICH YOU WISH TO RESPOND.

A. Ms. Mechling states in her Rebuttal Testimony that low-income customers are not required to be BDP participants as a condition to participate in the Pittsburgh Water Line Repair and Water Conservation (LRC) program.⁶⁴ She makes this statement notwithstanding the fact that the Customer Assistance Program Script and Checklist to guide Customer Service Representatives on identifying and assisting low-income customers during telephone interactions,⁶⁵ which script was attached to Ms. Mechling’s own testimony as Exhibit JAM-9, states quite explicitly that a customer “must be an active Bill Discount Program customer” to participate in the Line Repair and Conservation Program.⁶⁶ Without acknowledging the provision of mis-information through Pittsburgh Water’s call center, Ms. Mechling nonetheless committed to “review internal training materials and address anything that may create confusion about this point.”⁶⁷ That commitment should be accepted, and Pittsburgh Water should report to its

⁶³ Id., at 35.

⁶⁴ Id., at 40.

⁶⁵ PW. St. 6 at 44, citing Exhibits JAM-9 and JAM-10.

⁶⁶ Exhibit JAM-9 (“CSR: You may be eligible for Pittsburgh Water’s Line Repair and Conservation Pilot Program. This program offers free repairs of private side service line leaks on exposed plumbing. To be eligible for the program you must be an active Bill Discount Program customer. Are you interested in applying for the Bill Discount Program and speaking with a PGH2O Cares Analyst regarding the potential leak repair?”) (emphasis added).

⁶⁷ PW St. 6R, at 41.

LIAAC about the remedies proposed for any “confusion” that “may” have been created by its previous provision of misinformation.

Q. DO YOU HAVE ANY FINAL RESPONSE TO THE REBUTTAL TESTIMONY OF PITTSBURGH WATER WITNESS MECHLING?

A. Yes. The final recommendation which Ms. Mechling opposes is my recommendation to expand funding for a permanent Water Conservation Program from its existing level of \$150,000 annually to an annual level of \$300,000.⁶⁸ Her only basis for opposing the expansion of funding is her unsubstantiated assertion that “based on historical spend, \$150,000 will be sufficient. . .”⁶⁹

In making this assertion, witness Mechling does not acknowledge the hopelessly circular nature of her reasoning. Saying that \$150,000 “will be sufficient” based on “historical spend,” simply argues that because \$150,000 was used in the past, that is the budget that should be used in the future.

Ms. Mechling’s opposition to increasing the budget for the Water Conservation Program is most notable for what it did not seek to rebut. For example:

- Ms. Mechling did not dispute that every Bill Discount Program participant who also receives water conservation assistance, particularly with Pittsburgh Water’s average usage reduction of 17%, will reduce the cost of the bill discounts to Pittsburgh Water and its remaining ratepayers.
- Ms. Mechling did not dispute that given the maximum spending limit of \$1,600 for the Line Repair and Conservation Program, even an annual budget of \$300,000 would serve fewer than 200 participants, less than one-fifth of the

⁶⁸ Id., at 42.

⁶⁹ Id., at 43.

1 Bill Discount Program participants newly-enrolled simply in the most recent
2 twelve months.

3 ➤ Ms. Mechling did not dispute that expanding the Water Conservation Program
4 would reduce costs to all ratepayers by helping to reduce costs both of average
5 residential arrears and of average residential arrears at the time of a
6 nonpayment disconnection.

7 ➤ Ms. Mechling did not dispute that expanding the Water Conservation Program
8 would reduce costs to all ratepayers because, in contrast to Pittsburgh Water’s
9 assertion that typical residential customers have a usage of 3,000 gallons per
10 month, Pittsburgh Water data shows that in 2025, more than one-of-six Bill
11 Discount Program participants had usage of more than 5,000 gallons per
12 month, while more than one of every ten participants had usage of more than
13 6,000 gallons per month.

14 In sum, Ms. Mechling’s circular argument that the \$150,000 water conservation budget
15 will be “sufficient” in the future because that’s what was expended in the past is not
16 sufficient to overcome the systemwide financial benefits derived by Pittsburgh Water that
17 would arise from an expansion of the Water Conservation Program budget by \$150,000 a
18 year (to a total of \$300,000 annually).

19 **Part 2. Response to Pittsburgh Water Witness Rocky Craley.**

20 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**
21 **TESTIMONY.**

22 A. In this section of my Testimony, I respond to the Rebuttal Testimony of Pittsburgh Water
23 witness Rocky Craley. Witness Craley’s Rebuttal Testimony presents a largely
24 theoretical discussion of how to assess “water affordability.”⁷⁰ His testimony is not

⁷⁰ This was acknowledged by witness Craley. “For Pittsburgh Water, Raftelis was tasked with providing Pittsburgh Water and its stakeholders, principally the Low Income Assistance Advisory Committee (“LIAAC”), with an updated shared analytical understanding of the affordability of water, wastewater, and stormwater bills in the Pittsburgh Water service area at the current rates.” PW St. 9R, at 8.

1 particularly relevant to any issue which has been presented to the Commission for
 2 decision in this proceeding.

3 **Q. WHY ISN'T THE RAFTELIS AFFORDABILITY STUDY RELEVANT TO THE**
 4 **RECOMMENDATIONS YOU ADVANCE REGARDING THE STRUCTURE OF**
 5 **THE PITTSBURGH WATER BILL DISCOUNT AND ARREARAGE**
 6 **FORGIVENESS PROGRAMS?**

7 A. By its own terms, the Raftelis Affordability Study was not designed to address issues
 8 regarding the structure of Pittsburgh Water's Bill Discount Program and/or Arrearage
 9 Forgiveness Program. The Raftelis Affordability Study has little role to play in this
 10 proceeding for two reasons: First, the Raftelis Affordability Report explicitly states that:

11 It is important to note that this report is. . .not to recommend what Pittsburgh
 12 Water should do to improve its affordability efforts." (emphasis added)⁷¹

13 It would be difficult to get much clearer than that. Even Raftelis stated in its Affordability
 14 Study that it was not designed to recommend what Pittsburgh Water should or should not
 15 do to improve affordability.

16 Second, the Report explicitly acknowledges, by its own terms, that "It is important to
 17 note the limitations of this report. First, this is an analysis of current affordability and
 18 uses 2024 rates to calculate customer bills. Rates may change in the future and these
 19 changes will certainly impact customer bills."⁷² The issues presented in this proceeding
 20 are not based on the 2024 rates of Pittsburgh Water. The fact that the Raftelis Report used

⁷¹ Raftelis 2024 Affordability Study, at 10.

⁷² Raftelis 2024 Affordability Study, at 1.

2024 rates created “limitations” was an acknowledgement by Raftelis, not an assertion first raised in my Direct Testimony.

Q. DID MR. CRALEY REFERENCE YOUR TREATMENT OF THE RAFTELIS REPORT IN HIS REBUTTAL TESTIMONY?

A. Yes. He states that “Mr. Colton’s stated position was that the Household Affordability Analysis was intended to inform outreach, not evaluate or justify changes to the CAP.”⁷³ His testimony is correct in both regards. First, I concluded that the Raftelis Report “was intended to inform outreach, not to evaluate or justify changes to the CAP.” The Raftelis Report, itself, said: “The new additions to the report enhance PWSA’s ability to more effectively and efficiently reach out to customers in the most vulnerable areas within the service area.”⁷⁴

Second, I concluded that the Raftelis Report was not intended to “evaluate or justify changes to the CAP.” Mr. Craley’s own testimony agreed with that characterization. He said: “Raftelis did not determine the affordability threshold for an individual household within the Pittsburgh Water service area, nor have we played a role in designing the proposed enhancements to the customer assistance program.” (emphasis added).⁷⁵

The question of Pittsburgh Water’s geographic outreach is not a question that has been presented in this proceeding. Given that geographic outreach is not at issue, it is not

⁷³ PW St. 9R, at 10.

⁷⁴ Raftelis 2024 Affordability Study, at 10.

⁷⁵ PW St. 9R, at 8.

necessary to address the Raftelis efforts to “enhance PWSA’s ability to more effectively and efficiently reach out to customers in the most vulnerable areas within the service area.”⁷⁶

Q. DO YOU HAVE A SECOND OBSERVATION ABOUT MR. CRALEY’S REBUTTAL TESTIMONY REGARDING THE RAFTELIS AFFORDABILITY STUDY?

A. Yes. Mr. Craley spends a considerable amount of time in his Rebuttal Testimony responding to what he referred to as my efforts to “attack the analysis in the report. . .”⁷⁷ It is not clear what “attack” he is referencing. In fact, the observations I made about the Raftelis Report included:

- “While the Raftelis 2024 Affordability Study is an important tool to help Pittsburgh Water enhance its outreach throughout the “most vulnerable areas” of its service territory, there are tasks which that Report was not designed to undertake, and decisions which that Report was not designed to support. . .Note that the term “limitations” was the language used by the Report, itself. The word is not used as a pejorative, nor used in derogation of the usefulness of the Report for the purposes for which it was intended. It simply notes that there are purposes for which the Report is not intended to be used.”⁷⁸
- “My inquiry differs from the “affordability” analysis presented in the Pittsburgh Water “Affordability Study” in that my assessment is specifically designed to assess the need for additional assistance in the Pittsburgh Water service territory within the context of the new (and increased) rates which Pittsburgh Water proposes in this proceeding. Since the Raftelis 2024 Affordability Study and my testimony have distinctly different purposes, there is no need to evaluate the Raftelis 2024 Affordability Report. The lack of comment on the Raftelis 2024 Affordability Report should not be construed as any agreement or disagreement

⁷⁶ Raftelis 2024 Affordability Study, at 10.

⁷⁷ PW St. 9R, at 11.

⁷⁸ OCA St. 6, at 18.

1 with either the methodology or the results of that Study. It simply indicates that,
 2 by the explicit terms of that Report, the study does not directly relate to my
 3 Testimony.”⁷⁹

4 My discussion of the Raftelis Report, in other words, was hardly an “attack” on the
 5 “analysis in the report.” I note again that, by its very terms, the Raftelis Report was not
 6 intended to be used to support “what Pittsburgh Water should do to improve its
 7 affordability efforts.” By his own Rebuttal Testimony, Raftelis witness Craley stated that
 8 Raftelis “played [no] role in designing the proposed enhancements to the customer
 9 assistance program.”

10 **Q. DO YOU HAVE AN ADDITIONAL OBSERVATION ABOUT MR. CRALEY’S**
 11 **DISCUSSION OF YOUR RESPONSE TO THE RAFTELIS AFFORDABILITY**
 12 **STUDY?**

13 A. Yes. Witness Craley states that his “primary concern” is my:

14 portrayal that [my] analyses represent *the* way affordability or customer
 15 burden should be evaluated. By not acknowledging alternative approaches,
 16 they imply that their methods are industry standard or even industry best
 17 practice, which is not the case. At this current time, there is no industry
 18 standard or best practice. There are multiple ways to evaluate customer
 19 burden, including-but-not-limited-to percent of household income, percent of
 20 lowest quintile income, percent of federal poverty level income, and
 21 Affordability Ratio at the 20th Percentile Income (“AR20”). It is important to
 22 point out that the USEPA supports that ‘there is no single approach to
 23 defining or measuring water affordability.’⁸⁰

24 Even if true that there are multiple ways by which to evaluate customer burden, including
 25 percent of household income, percent of lowest quintile income, percent of federal

⁷⁹ OCA St. 6, at 19.

⁸⁰ PW St. 9R, at 7.

1 poverty level income, and Affordability Ratio at the 20th Percentile Income (AR20), this
 2 entire policy discussion of the various alternative ways to evaluate customer burden does
 3 not apply to this proceeding. This policy discussion may be interesting in some
 4 theoretical, academic sense. It is, however, not applicable to any decision in this
 5 proceeding. Even if there are alternative ways, those alternative ways were not used by
 6 Pittsburgh Water witness Mechling in presenting Pittsburgh Water's direct case.

7 This is not like the situation where one party has presented one methodology for
 8 determining customer costs to place in a fixed monthly customer charge while a different
 9 party has presented a competing methodology. It is not like the situation where one party
 10 has a preferred method for calculating depreciation lives while a different party has a
 11 competing method.

12 In this proceeding, the methodology used by Pittsburgh Water witness Mechling in her
 13 direct testimony is the same methodology used by me in my direct testimony. Pittsburgh
 14 Water witness Mechling chose to use a percentage of income approach in presenting the
 15 Pittsburgh Water case in this proceeding.⁸¹ Responding to that presentation is not a denial
 16 that there might have been alternative ways that she might have chosen to have used. The
 17 fact is, she chose not to use any of those alternative ways and, accordingly, there was no
 18 need to address those alternatives.

19 Moreover, the problems I identified in my Direct Testimony that are not addressed by
 20 Pittsburgh Water's design of its CAP –decisions in which Raftelis "played no role" and

⁸¹ PW St. 6, Table One and Table Two.

1 decisions which the Raftelis Report was not designed to inform- are not contradicted by
 2 the Raftelis Report. Indeed, the Raftelis Report specifically acknowledges that “this
 3 analysis is not meant to be a true representation of all of the financial challenges faced by
 4 PWSA customers.”⁸² That statement is accurate in that the Raftelis Report did not
 5 “represent all of the financial challenges faced by PWSA customers” and I identified any
 6 number of additional challenges not “represented by” (or discussed by) the Raftelis
 7 Report in my Direct Testimony and explained how and why the Pittsburgh Water CAP,
 8 as designed by the Company, fails to address those challenges.

9 **Q. IS THERE ANOTHER ASPECT OF MR. CRALEY’S REBUTTAL TESTIMONY**
 10 **TO WHICH YOU WISH TO RESPOND?**

11 A. Yes. Witness Craley argued that “it is simply false to state or imply that Pittsburgh
 12 Water does not acknowledge the challenge that its low income customers face in paying
 13 their bills. . .”⁸³ At no place, however, did either I or OWT witness Cicero “state or imply
 14 that Pittsburgh Water does not acknowledge the challenges that its low income customers
 15 face in paying their bills.” Mr. Craley’s effort to convert recommendations for additional
 16 improvement into such a statement is not helpful in assessing how Pittsburgh Water
 17 might adopt improvements. It is surprising that Mr. Craley converted recommendations
 18 on what Pittsburgh Water might do to improve its low-income programs to such a degree.
 19 Remember, the Raftelis Affordability Report did not support what Pittsburgh Water is
 20 doing or is proposing to do. Instead, that Report explicitly stated that the “report is. . .not

⁸² Raftelis 2024 Affordability Study, at 12.

⁸³ PW St. 9R, at 12.

1 to recommend what Pittsburgh Water should do to improve its affordability efforts.”

2 (emphasis added)⁸⁴ The Raftelis Report specifically acknowledge that “this analysis is
3 not meant to be a true representation of all of the financial challenges faced by PWSA
4 customers.”⁸⁵ Finally, Mr. Craley’s own testimony stated that “Raftelis did not determine
5 the affordability threshold for an individual household within the Pittsburgh Water
6 service area, nor have we played a role in designing the proposed enhancements to the
7 customer assistance program.”⁸⁶ In light of this inaction by Raftelis, Mr. Craley’s
8 statements about recommendations that have been made, by individuals who have played
9 a role in designing proposed enhancements to address financial challenges that Raftelis,
10 itself, conceded it did not consider, offer no helpful insights into making decisions in this
11 rate case.

12 **Q. PLEASE RESPOND TO WITNESS CRALEY’S REBUTTAL TESTIMONY**
13 **REGARDING THE “ADMINISTRATIVE COSTS” OF ADOPTING THE**
14 **RECOMMENDATIONS YOU MADE IN YOUR DIRECT TESTIMONY.**

15 A. Pittsburgh Water rebuttal witness Craley referenced the “administrative costs” of
16 adopting the recommendations I advanced in difference places. Witness Craley argued
17 that “Pittsburgh Water, like all utilities, cannot consider customer impacts in a
18 vacuum.”⁸⁷ He asserts both that I was “mostly silent about acknowledging and

⁸⁴ Raftelis 2024 Affordability Study, at 10.

⁸⁵ Raftelis 2024 Affordability Study, at 12.

⁸⁶ PW St. 9R, at 8.

⁸⁷ PW St. 9R, at 5.

1 quantifying the administration costs of the programs and their proposed alternatives,”⁸⁸
 2 and that I “focus exclusively on the impacts to low-income customers.”⁸⁹ In addition, he
 3 argued that Pittsburgh Water must consider costs which include “personnel capacity or
 4 need for additional staff, potential billing system changes, potential new technology, new
 5 partnerships, and additional public education, engagement, and outreach.”⁹⁰

6 It is perplexing how Mr. Craley could, in good faith, make these statements. For example,
 7 when Pittsburgh Water asked OCA in discovery about the administrative costs of
 8 identifying the “confirmed low-income status” of customers, Pittsburgh Water was
 9 informed in my response that while every natural gas and electric distribution utility in
 10 Pennsylvania has such a process, no natural gas or electric distribution utility needs to
 11 devote sufficient administrative costs to that process to have required separate rate case
 12 recovery.⁹¹ Moreover, the delivery of water conservation investments to low-income
 13 customers not only helps to address the unaffordability of bills received by conservation
 14 recipients, but will reduce both the costs of any bill discount and the cost of any arrearage
 15 forgiveness associated with those recipients. My Direct Testimony was quite specific in
 16 stating:

17 This extent of usage reduction not only improves the affordability of bills to
 18 the low-income program participants, it reduces the cost of nonpayment by
 19 these customers. Reducing the costs of nonpayment involves not only a
 20 reduction in Pittsburgh Water expenses that I have discussed elsewhere (e.g.,
 21 write-offs, carrying costs of arrears, collection costs), but, by reducing

⁸⁸ Id., at 6.

⁸⁹ Id., at 12.

⁹⁰ Id., at 7, 12.

⁹¹ OCA Response to PW Data Request Set I, No. 4(c).

1 arrears, the program also helps to reduce the cost of the Arrearage
2 Forgiveness Program by helping low-income customers enter that program
3 with lower pre-program arrears to be forgiven. Finally, . . . participation in the
4 Program will also reduce the cost of the discount. Clearly, a 50% discount on
5 a bill of \$100 imposes a lower system cost than a 50% discount on a bill of
6 \$150.⁹²

7 Mr. Craley chooses to ignore this testimony.

8 Finally, while Mr. Craley chooses to focus on unsupported assertions of increased
9 administrative costs, my Direct Testimony provides extensive empirical evidence on how
10 adopting the recommendations I advance would have the impact of increasing revenue
11 collection and decreasing the cost of nonpayment. Mr. Craley does not explain why he
12 believes that it is better for all ratepayers for Pittsburgh Water to spend administrative
13 dollars on negotiating payment arrangements more than half of which default rather than
14 on enrolling customers in an affordable BDP, and offering reasonable arrearage
15 forgiveness, which have considerably improved payment patterns. Mr. Craley does not
16 explain how administrative expenditures on negotiating payment arrangements, more
17 than half of which fail, is more effective or efficient than enrolling customers in an
18 affordability program which will likely significantly improve payment patterns. Mr.
19 Craley does not explain how administrative expenditures devoted to carrying arrears until
20 customers are nearly 18 months behind, or until they incur an arrearage of \$3,000 or
21 more before finally having service disconnected, is more effective or efficient than
22 enrolling those customers into a program through which customers are paying nearly
23 their complete bill.

⁹² OCA St. 6, at 67 – 68.

1 Moreover, as documented above, adopting enhancements in Pittsburgh Water’s customer
2 assistance program, such as I recommended in my direct testimony, results not only in
3 reduced expenses, but results also in enhanced revenue.

4 **Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?**

5 **A. Yes, it does.**

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Roger Colton, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 6SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature:



Roger Colton

Address:

Fisher Sheehan & Colton
34 Warwick Road
Belmont, MA 02478

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos.
	:	R-2025-3055010 (Water)
	:	R-2025-3055011 (Wastewater)
	:	R-2025-3055012 (Stormwater)
v.	:	
	:	
	:	
Pittsburgh Water and Sewer Authority	:	

SURREBUTTAL TESTIMONY

BARBARA R. ALEXANDER
BARBARA ALEXANDER CONSULTING LLC

ON BEHALF OF
OFFICE OF CONSUMER ADVOCATE

October 14, 2025

1 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

2 A. My name is Barbara R. Alexander. I am the sole member manager of Barbara Alexander
3 Consulting LLC. My address is 44 Beech St., Hallowell, ME 04347. I appear in this case
4 as a witness on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

6 A. I am submitting Surrebuttal Testimony in response to Pittsburgh Water's Rebuttal
7 Testimony by William Pickering (PW St. 1R), Edward Barca (PW St. 2R), and Julie
8 Mechling (PW St. 6R).

9 Q. DOES YOUR SURREBUTTAL TESTIMONY RESPOND TO EVERY STATEMENT
10 MADE BY THESE WITNESSES?

11 A. No. My Surrebuttal addresses the key statements and opinions of these witnesses who
12 respond to my evidence and recommendations as set forth in my Direct Testimony. The
13 failure to respond to any statements by these PW witnesses should not be interpreted as
14 agreement with their statements or recommendations.

15 Q. DO YOU HAVE ADDITIONAL EXHIBITS ATTACHED TO THIS TESTIMONY?

16 A. No.

17 Q. BEFORE TURNING TO SPECIFIC STATEMENTS BY THESE PW WITNESSES, DO
18 YOU HAVE ANY OVERALL SUMMARY OF THEIR REBUTTAL TESTIMONY?

19 A. Yes. These PW witnesses reject every one of my recommendations. For the most part they
20 do not offer any new evidence. Nor do they contradict my evidence on which I relied for
21 my recommendations. Rather, the uniform approach is to reject any suggestion or
22 commitment to maintain, let alone improve, customer service performance as a condition
23 of their plan to raise customer rates in a multi-year rate plan. The justification for this

1 approach is to claim that since no law or regulation requires any of my proposed conditions
2 for their multi-year rate increases, no such requirement should be adopted. Here are a few
3 examples of PW's response to my recommendations:

4 • "Ms. Alexander is essentially alleging that our MYRP proposal should be rejected
5 because we have not included performance standards in our proposal when no such
6 standards are required by the Public Utility Code or the Commission's pronouncements on
7 what needs to be included in an alternative ratemaking proposal." PW Witness Barca, St.
8 2R, page 82, lines 9-16.

9
10 • "In fact, I am advised by counsel that, following a litigated rate case proceeding,
11 the Commission has not directed performance standard measures as a condition of
12 approving a rate case. Counsel further informs me that the statutory authority permitting
13 multi-year rate plans has no specific requirements that performance standard measures
14 must be a part of the grant of a multi-year rate plan." [Footnote omitted]. PW Witness
15 Mechling, St. 6R, page 44, lines 4-8.

16
17 • "Ms. Alexander has not shown that this recommendation is required, necessary, or
18 justifies the cost and administrative burden." [referring to the Root Cause Analysis], PW
19 Witness Mechling, St. 6R, page 48, lines 9-11.

20
21 • "Further, I am not aware of any legal or regulatory requirement that Pittsburgh
22 Water do so." [Referring to analysis of Payment Plans], PW Witness Mechling, St. 6R,
23 page 53, lines 8-9.

24
25 • "Though Pittsburgh Water has elected to provide this document to customers, I am
26 advised by counsel that there is no requirement that Pittsburgh Water issue a written
27 confirmation letter after negotiating a payment plan with a customer." PW Witness
28 Mechling, St. 6R, page 53-54.

29
30 • "I am advised by counsel that there is no requirement that Pittsburgh Water's
31 request for increased rates be conditioned on the recommendations as offered by Ms.
32 Alexander regarding a planned enhancement to Pittsburgh Water's telephony system." PW
33 Witness Mechling, St. 6R, page 56, lines 15-17.

34
35
36 Q. WHAT IS YOUR RESPONSE TO THESE STATEMENTS THAT REJECT ANY
37 COMMITMENTS TO CUSTOMER SERVICE PERFORMANCE AS A CONDITION
38 OF ITS PROPOSED RATE INCREASES OVER A MULTI-YEAR PERIOD?

1 A. I am advised by counsel that this issue will be addressed more fully in briefs. However, as
2 an expert on customer service performance and based on my over 30 years of appearances
3 on behalf of the OCA in Pennsylvania rate cases and other proceedings, PW's opinion is
4 simply wrong and bad public policy. This is a base rate case in which the "adequacy" of
5 customer service and service quality performance is a direct statutory obligation to
6 consider. PW has chosen to propose an optional multi-year rate plan but that rate plan must
7 be considered and approved or rejected in this base rate case. PW should not be able to
8 avoid any consideration of the impact of its rate plan or rates on the performance of its
9 equally applicable duty to provide "adequate" customer service as a condition of any rates
10 approved in this proceeding.

11 Q. DO YOU AGREE THAT ANY DETERIORATION IN CUSTOMER SERVICE
12 QUALITY OR PERFORMANCE CAN BE HANDLED OUTSIDE OF ANY RATE
13 PROCEEDING IF THE MULTI-YEAR RATE PLAN IS APPROVED?

14 A. Theoretically, yes. In practice, no. PW Witness Barca states:

15 Ms. Alexander is essentially alleging that our MYRP proposal should be rejected because
16 we have not included performance standards in our proposal when no such standards are
17 required by the Public Utility Code or the Commission's pronouncements on what needs
18 to be included in an alternative ratemaking proposal. Moreover, such commitments are not
19 needed. Pittsburgh Water is under an ongoing obligation to provide safe, adequate and
20 reasonable service to its customers, and it does that, and will continue to do that. Creating
21 artificial requirements that go beyond those obligations is not appropriate nor legally
22 required, I am informed by counsel. PW St. 2R, page 82, lines 9-16.

23
24 I agree that PW is obligated to provide "safe, adequate and reasonable service" to its
25 customers. If PW "will continue to do that," it should make that commitment as part of this
26 proceeding. The Commission has the authority to initiate an investigation if PW's customer
27 service performance deteriorates during the multi-year rate plan. However, the practical

1 implication of this option means that customers will bear the risk of deterioration of service
2 without any remedy during the multi-year rate plan. As PW knows, there are no actual
3 performance standards for the customer call center, complaint incidence, response to
4 complaints, frequency or volume of violations of Chapter 56, failure to respond to service
5 interruptions and quality of service in a reasonable manner, or any other of the indicators
6 that are reported to the Commission. PW has refused to propose any commitments for
7 customer service performance as part of its multi-year rate plan. Furthermore, any such
8 Commission investigation shifts the burden to the Commission and consumers to document
9 the service quality or customer service performance deterioration in light of the lack of
10 specific performance standards and conduct a lengthy proceeding to consider evidence and
11 determine the proper remedy, all during a time when the previously approved rate increases
12 are taking effect. As a result, the practical answer to the question is “no.”

13 Q. DID PITTSBURGH WATER PROMISE TO IMPROVE SERVICE QUALITY IF ITS
14 MULTI YEAR RATE PLAN IS APPROVED?

15 A. Yes. According to Pittsburgh Water’s primary witness, William Pickering, Chief Executive
16 Officer:

17 Provided that Pittsburgh Water obtains approval for the necessary rate relief,
18 Pittsburgh Water will be in a solid position to continue making progress toward
19 enhancing the quality and effectiveness of customer service, providing responsible
20 and responsive operations service, improving infrastructure reliability, and
21 maintaining regulatory compliance. Progress in these areas has been recognized by
22 customers participating in recent survey efforts. Pittsburgh Water is continuing its
23 significant efforts to provide more reliable service to customers, meet stricter water
24 quality standards, and improve stormwater management. The requested rate relief
25 will provide the revenue necessary to continue these efforts so that we are a utility
26 of the future that delivers the highest possible quality of services to our customers.
27 Continued support from the Commission in the form of rate relief as well as
28 collaborative efforts to improve the safety, quality, and reliability of Pittsburgh

1 Water's water, wastewater, and stormwater services are absolutely essential.¹
2 [Emphasis added]
3

4 While Pittsburgh Water states that this rate increase and multi-year rate increases will
5 support improved performance, there is no actual mechanism in place to assure customers
6 that increased rates will result in improved, let alone continue the current levels of service
7 quality and customer service. PW's assumption that its only duty under this multi-year rate
8 plan is to implement its capital investments to improve the operation of its water and
9 wastewater system is incorrect.

10 Q. IN ADDITION TO REJECTING RECOMMENDATIONS BASED ON THE LACK OF
11 EXPLICIT LAW OR REGULATION, PW WITNESSES ALSO RAISE CONCERNS
12 ABOUT THE COSTS TO IMPLEMENT YOUR AND OTHER OCA
13 RECOMMENDATIONS. PLEASE EXPLAIN.

14 A. PW Witnesses also reject several of my recommendations on the grounds that my proposals
15 do not reflect or acknowledge that additional costs would be incurred to implement them.

16 Several examples:

17 • "I also note that many of the recommendations in the areas of customer service,
18 low-income customer assistance programs and quality of service are offered by the
19 witnesses for other parties as measures that they would like to see implemented without
20 presenting any evidence or even providing a description of an underlying problem that
21 needs to be rectified. They also either completely discount the financial consequences of
22 their recommendations in terms of implementation and customer education costs or
23 downplay the negative impact of increasing Pittsburgh Water's lost revenue." PW Witness
24 Pickering, St. 1R, page 4.

25
26 • "Establishing arbitrary metrics and requiring Pittsburgh Water to constantly
27 evaluate its performance regarding those metrics creates additional costs and burdens
28 which detract from the ability of Pittsburgh Water to focus on customers and systems to
29 best serve their needs." PW Witness Mechling, St. 6R, page 45, lines 16-19.

¹ Pittsburgh Water St. 1 at 14-15.

1
2 • “Ms. Alexander’s proposal would be administratively burdensome. Pittsburgh
3 Water is already short staffed in a way that has delayed its ability to carry out some of the
4 recommendations themselves; attempting to gather data and report on each
5 recommendation would add significant burden to this process.” [Referring to the Root
6 Cause Analysis recommendation] PW Witness Mechling, St. 6R, page 48, lines 4-7.
7

8 Q. IN GENERAL, WHAT IS YOUR RESPONSE TO THE EXCUSE THAT COSTS HAVE
9 NOT BEEN CONSIDERED IN MAKING YOUR RECOMMENDATIONS?

10 Q. My recommendations should not and will not result in any significant increase in costs.
11 While PW’s witnesses claim this concern, none of them have documented any increased
12 costs for my recommendations. My recommendation is to maintain current performance of
13 the call center and meet PW’s own internal performance metrics. My recommendation
14 concerning the root cause analysis reflects policies and procedures to gather and review
15 customer complaint data that already exist. My recommendation for retaining the
16 elimination of payment fees for the customer use of their credit or debit card is already
17 reflected in rates. My recommendation to include a customer’s dispute rights in the already
18 issued payment agreement letter is simply adding a new paragraph to an already computer-
19 generated letter. My recommendation to gather more data on the personal contact prior to
20 termination may require a formal or informal method of gathering such data. However, PW
21 has not identified any specific costs or difficulties in doing so. Finally, my recommendation
22 for a consultation with stakeholders on an ongoing pilot program for its speech analytics
23 pilot is not going to result in any additional costs and was intended to support PW’s
24 approach to evaluating the potential costs and benefits of this proposal with an obligation
25 for consultation and consideration of the views of stakeholders.

1 Q. ARE YOU UNDER ANY OBLIGATION TO PROVE THAT SOMETHING IS
2 “WRONG” PRIOR TO MAKING RECOMMENDATIONS ON CUSTOMER SERVICE
3 QUALITY AND PERFORMANCE?

4 A. No. PW’s reasoning reflects a false choice. I have reviewed PW’s actual performance in
5 my Direct Testimony as well as its actions in response to the settlement in the last rate case.
6 My evidence points to the need for several areas to ensure maintenance of current call
7 center performance and to recommend ongoing root cause analysis of customer complaints,
8 a continuation of the elimination of fees for payment by credit or debit card, and a modest
9 improvement and proposals for ongoing collaboration.

10 Q. PLEASE RESPOND TO PW WITNESS MECHLING THAT THERE IS NO NEED TO
11 EVALUATE THE SUCCESS OR FAILURE OF ITS PAYMENT PLANS.

12 A. PW Witness Mechling states that “Apart from labeling this increase in payment
13 arrangement requests, Ms. Alexander does not explain or present any reasons why this
14 increase should be viewed as problematic.”² Ms. Mechling’s approach would put the cart
15 before the horse. It is not necessary to identify a “problem” prior to undertaking the analysis
16 I recommended. In addition according to Ms. Mechling, PW is not responsible for why
17 customers choose not to comply with their payment plans.³ She also opines that she knows
18 that the reason for the increase in Payment Arrangement Requests (PARs) to the BCS is
19 due to the resumption of collection actions after a self-imposed moratorium to install new
20 software and internal efforts to reach out to customers with overdue bills to enter into

² PW St. No 6R, page 52.

³ PW St. No 6R, page 52, lines 21-22: “It is my experience that a customer’s personal decisions drive their payment plan success or failure.”

1 payment plans.⁴ I find these responses troubling for several reasons. First, at no point does
2 Ms. Mechling take any responsibility for negotiating payment plans that customers can
3 afford. Second, the lack of any rigorous analysis of payment plans and customer success
4 or failure is a recipe for continuing to shift the blame to customers and not explore the
5 potential for reforms that would be successful for both Pittsburgh Water and the customer.
6 I am concerned that it appears that PW is refusing to actually undertake any analysis and/or
7 prejudging the result, neither of which should be viewed as reasonable.

8 Q. PLEASE RESPOND TO MR. BARCA'S AND MS MECHLING'S REASONS FOR
9 REJECTING YOUR PROPOSAL TO CONTINUE TO OFFER NO FEE PAYMENT
10 METHODS FOR CREDIT AND DEBIT CARDS.

11 A. First, it is fair to interpret PW Witness Barca's and PW Witness Mechling's rejection of
12 my recommendation to document any effort to obtain the least cost methodology to handle
13 credit and debit card payments as imprudent. At no point in his Rebuttal does Mr. Barca
14 respond to my recommendation to justify the \$500,000 cost that he attributes to continuing
15 to accept credit and debit card payments without fees. Second, I reject PW's reason for
16 rejecting the use of credit and debit cards without a fee and then promoting the use of other
17 electronic payment methods, such as ACH or the withdrawal of funds from the customer's
18 bank account.⁵ PW should not discriminate in how customers choose to pay their bill but
19 should encourage all the normal and reasonable payment methods without discrimination.
20 PW's justification ignores customers without bank accounts, customers with insufficient

⁴ PW St. No. 6R, page 51, lines 19-22.

⁵ "Pittsburgh Water's goal is to enroll all customers in ACH payments in the future, which will save all ratepayers credit card fees, credit card interest charges, fees/labor for processing paper checks, and paper waste. Customers using ACH or sending paper checks are not assessed any additional processing fees." PW St. No. 6R, page 60, lines 7-10.

1 funds in their checking account, or those who have had checks rejected. Finally, PW's
2 policy would ignore the payment habits of almost 25% of its customers, an approach that
3 does not appear to reflect a customer service oriented business.⁶

4 Q. AS A RESULT OF YOUR CONSIDERATION OF PITTSBURGH WATER'S
5 REBUTTAL, DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATIONS?

6 A. No, I do not. I repeat my recommendations here:

7 • My primary recommendation is that Pittsburgh Water's proposal for a multi-year
8 rate increase not be approved. While other OCA witnesses identify many reasons for their
9 comparable conclusion, the basis for my recommendation is that Pittsburgh Water has not
10 provided any meaningful assurance or mechanism to meet reasonable customer service and
11 service quality performance.

12 • Pittsburgh Water's Call Center should continue to meet its internal standards of an
13 average answer time of 1 minute and an abandonment rate of 3% or less for all its customer
14 queues each quarter.

15 • Pittsburgh Water's "root cause" analysis of customer complaints includes the
16 analysis required by the 2023 Base Rate Case Settlement but the recommendations for
17 reform as a result of that analysis are not yet documented or evaluated. Therefore, I
18 recommend that Pittsburgh Water continue to conduct routine root cause analysis of its
19 customer disputes and the Commissions Bureau of Consumer Services (BCS) and
20 Commission handled complaints and report on the implementation of its current and future

⁶ PW St. No. 6R, page 59.

1 recommendations in its ongoing Quarterly Reports. This ongoing evaluation should also
2 include a review of the success and failure of payment plans.

3 • Pittsburgh Water should continue to maintain its service quality complaint log and
4 evaluate the trends and indicators of the volume and type of complaint over time.

5 • Pittsburgh Water's proposal to impose a transaction fee for payment by credit
6 and/or debit cards by residential customers should be rejected.

7 • Pittsburgh Water has documented that its field representations attempt to contact
8 the customer at the premises immediately prior to termination of service. I recommend that
9 PW develop a more detailed reporting mechanism to identify the basis for why termination
10 was halted. This recommendation will allow a more detailed analysis that may provide an
11 important feedback loop to improve customer communications, especially with regard to
12 payment arrangement options.

13 • Pittsburgh Water's speech analytics proposal, if implemented, is a potentially
14 useful tool to use in auditing and evaluating compliance with internal and regulatory
15 policies to ensure customer satisfaction and the transmittal of required information by
16 customer representatives. I recommend that this project be viewed as a pilot and evaluated
17 in terms of costs and values or benefits to customers in a report to stakeholders within 12
18 months after the date of the final order in this proceeding, or, at the latest, in the next base
19 rate case. This pilot should not be viewed as approval of using speech analytics to replace
20 the use of customer service representatives to present and implement approved regulatory
21 programs and customer rights at this time.

22 Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

1 A. Yes. However, I reserve the right to supplement this testimony if additional relevant
2 information is received.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 7SR, are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: October 14, 2025

Signature: /s/ Barbara R. Alexander
Barbara R. Alexander

Address: Barbara Alexander Consulting LLC
44 Beech Street
Hallowell, ME 04347

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	Docket No. R-2025-3055010
v.	:	R-2025-3055011
	:	R-2025-3055012
Pittsburgh Water and Sewer Authority	:	
d/b/a Pittsburgh Water	:	

OCA HEARING EXHIBIT 1

LIST OF EVIDENCE
TO BE MOVED INTO THE EVIDENTIARY RECORD
BY THE OFFICE OF CONSUMER ADVOCATE

The Office of Consumer Advocate (OCA) intends to submit the following evidence into the evidentiary record in the above captioned proceedings at the scheduled evidentiary hearings in this proceeding.

DIRECT TESTIMONY

Corrected OCA Statement 1:	Corrected Direct Testimony of Micheal Deupree consisting of written testimony with signed verification of Michael Deupree, Senior Research Consultant, Acadian Consulting Group, and the following: • Appendix A (Witness Qualifications) • Exhibit MWD-1 • Errata to OCA's Corrected St. No. 1, Direct Testimony of Michael W. Deupree
OCA Statement 2:	Direct Testimony of Dante Mugrace consisting of written testimony with signed verification of Dante Mugrace, Senior Consultant, PCMG and Associates, LLC, and the following: • Appendix A (Witness Qualifications) • Exhibit DM-1 • Exhibit DM-2 • Exhibit DM-3 • Exhibit DM-4 • Exhibit DM-5 • Exhibit DM-6 • Exhibit DM-7

- Exhibit DM-8
- Exhibit DM-9
- Exhibit DM-10
- Exhibit DM-11
- Exhibit DM-12
- Exhibit DM-13
- Exhibit DM-14
- Exhibit DM-15
- Exhibit DM-16
- Exhibit DM-17
- Exhibit DM-18
- Exhibit DM-19
- Exhibit DM-20
- Exhibit DM-21

Corrected OCA Statement 3:	Corrected Direct Testimony of Christopher C. Walters ¹ consisting of written testimony along with a signed verification of Christopher C. Walters, Consultant, Brubaker & Associates, Inc., and the following: • Appendix A (Witness Qualifications) • Exhibit CCW-1
OCA Statement 4:	Direct Testimony of Jerome D. Mierzwa consisting of written testimony along with a signed verification of Jerome D. Mierzwa, Principal and President, Exeter Associates, Inc.
OCA Statement 5:	Direct Testimony of LeeAnn Wise consisting of written testimony along with a signed verification of LeeAnn Wise, Senior Regulatory Analyst, OCA, and the following: • Exhibit LMW-1 • Exhibit LMW-2
OCA Statement 6:	Direct Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton, and the following: • Exhibit OCA-Colton-1 • Exhibit OCA-Colton-2
OCA Statement 7:	Direct Testimony of Barbara R. Alexander consisting of written testimony along with a signed verification of Barbara

¹ On September 5, 2025, the OCA inadvertently omitted Mr. Walters' Exhibit CCW-1 from OCA Statement 4 which was served. On September 8, 2025, the OCA served Corrected OCA Statement 4 which included Exhibit CCW-1 that is referenced on page 15 of Mr. Walters' Direct Testimony.

R. Alexander, Sole Member Manager, Barbara Alexander Consulting LLC, and the following:

- Exhibit BA-1
- Exhibit BA-2
- Exhibit BA-3
- Exhibit BA-4

REBUTTAL TESTIMONY

OCA Statement 1R: Rebuttal Testimony of Michael Deupree consisting of written testimony along with a signed verification of Michael Deupree, Senior Research Consultant, Acadian Consulting Group.

OCA Statement 6R: Rebuttal Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton.

SURREBUTTAL TESTIMONY

OCA Statement 1SR: Surrebuttal Testimony of Micheal Deupree consisting of written testimony with signed verification of Michael Deupree, Senior Research Consultant, Acadian Consulting Group.

OCA Statement 2SR: Surrebuttal Testimony of Dante Mugrace consisting of written testimony with signed verification of Dante Mugrace, Senior Consultant, PCMG and Associates, LLC, and the following:

- Exhibit DM-SR-1
- Exhibit DM-SR-2
- Exhibit DM-SR-3
- Exhibit DM-SR-4
- Exhibit DM-SR-5
- Exhibit DM-SR-6
- Exhibit DM-SR-7
- Exhibit DM-SR-8
- Exhibit DM-SR-9
- Exhibit DM-SR-10
- Exhibit DM-SR-11
- Exhibit DM-SR-12
- Exhibit DM-SR-13

- Exhibit DM-SR-14
- Exhibit DM-SR-15
- Exhibit DM-SR-16
- Exhibit DM-SR-17
- Exhibit DM-SR-18
- Exhibit DM-SR-19
- Exhibit DM-SR-20
- Exhibit DM-SR-21

OCA Statement 3SR: Surrebuttal Testimony of Christopher C. Walters consisting of written testimony along with a signed verification of Christopher C. Walters, Consultant, Brubaker & Associates, Inc.

OCA Statement 4SR: Surrebuttal Testimony of Jerome D. Mierzwa consisting of written testimony along with a signed verification of Jerome D. Mierzwa, Principal and President, Exeter Associates, Inc.

OCA Statement 5SR: Surrebuttal Testimony of LeeAnn Wise consisting of written testimony along with a signed verification of LeeAnn Wise, Senior Regulatory Analyst, OCA.

OCA Statement 6SR: Surrebuttal Testimony of Roger Colton consisting of written testimony along with a signed verification of Roger Colton, Owner, Fisher Sheehan & Colton.

OCA Statement 7SR: Surrebuttal Testimony of Barbara R. Alexander consisting of written testimony along with a signed verification of Barbara R. Alexander, Sole Member Manager, Barbara Alexander Consulting LLC.

ADDITIONAL EXHIBITS

OCA Hearing Exhibit 1: List of Evidence to be Moved into the Evidentiary Record by the Office of Consumer Advocate (OCA)