

BEFORE THE
PHILADELPHIA WATER, SEWER, AND STORM WATER RATE BOARD

In the Matter of the Philadelphia : **Fiscal Years 2024 – 2025**
Water Department’s Proposed : **Rates and Charges to Become**
Change in Water, Wastewater, : **Effective September 1, 2023**
and Stormwater Rates and : **and September 1, 2024**
Related Charges :

MAIN BRIEF OF THE PUBLIC ADVOCATE

Robert W. Ballenger
Joline R. Price
Daniela Rakhlina-Powsner
Community Legal Services, Inc.
1424 Chestnut Street
Philadelphia, PA 19102
215-981-3700

May 16, 2023

Counsel for Public Advocate

TABLE OF CONTENTS

- I. INTRODUCTION 1
- II. BACKGROUND AND PROCEDURAL HISTORY 3
 - A. Overview of PWD 3
 - B. Order of Proceedings 3
 - C. Public Input and Comments 5
 - D. City Council Input and Comments 6
- III. LEGAL STANDARDS AND RATEMAKING METHODOLOGY 7
 - A. Legal Standards 7
 - B. Ratemaking Methodology 10
- IV. FINANCIAL PLANNING 11
 - A. Financial Plan and Metrics for the Rate Period 11
 - B. Adequacy of Revenues Under Existing Rates 13
- V. ADDITIONAL REVENUES; REVENUE REQUIREMENTS 13
 - A. Operating Revenues 13
 - 1. Average Sales Volumes 14
 - 2. Increased Revenues Attributable to TAP 15
 - B. Capital Improvement Program (CIP) 16
 - 1. FY 2025 CIP 16
 - 2. Capital Improvement Program Rollover 18
 - C. Escalation Factors 19
 - 1. Services 22
 - 2. Materials and Supplies 22
 - 3. Transfers 23
 - 4. Chemical Costs 23
 - 5. Equipment 23
 - D. Construction Fund Balance 23
 - E. Debt Interest Rate 24
 - F. Interest Income 25
 - G. Adjustments for PA Proposed Programs 25
 - H. External Funding 26
- VI. COST OF SERVICE AND RATE DESIGN 27
 - A. Affordability 27
 - B. Water: Capacity Factors 30
 - C. Water: Cost Allocation 36
 - D. Stormwater: Rate Design 38
 - E. Stormwater: Allocation of SMIP/GARP Credits 38
 - F. Stormwater, Residential: Building Type Charges 40
 - G. Stormwater, Residential: Credits for Rain Barrels 40
- VII. TIERED ASSISTANCE PROGRAM (TAP) 42

A.	TAP Enrollment; Improved Collections.....	42
1.	TAP Enrollment Leads to Increased Revenue	43
2.	PWD has Reasonable Methods Available to Increase Enrollment and Retention in TAP.....	48
B.	Reports and Audits	52
1.	PWD is Failing to Track Important Metrics.....	52
2.	PWD Should be Required to Employ Reasonable Data Tracking and Reporting	53
C.	TAP Arrearage Forgiveness	54
1.	Ratable Arrearage Forgiveness	54
2.	Arrearage Forgiveness for TAP Re-Enrollees	56
3.	Arrearage Forgiveness for Occupants	59
VIII.	CUSTOMER SERVICE ISSUES	60
A.	Collection of Court Filing Fee for Municipal Liens.....	60
B.	Municipal Liens on TAP Participants	62
C.	Late Fee Revenues.....	63
D.	Implementation of a Water Conservation Program.....	65
E.	Implementation of an Internal Repair Plumbing Program	67
F.	Expansion of Support for UESF.....	69
G.	Sequestration Practices.....	70
H.	Compliance With 2021 Settlement Agreement.....	72
IX.	OTHER ISSUES.....	74
A.	Housekeeping Changes	74
B.	Miscellaneous Fees and Charges.....	74
C.	<i>Pro Se</i> Participant Haver	75
X.	CONCLUSION.....	76

I. INTRODUCTION

The Philadelphia Water Department (PWD) has proposed increased rates and charges which, if approved, will produce approximately \$242 million in incremental revenues over the two-year rate period, FY 2024-2025. Community Legal Services serves as the Public Advocate, appointed to represent the interests of the Small User Customers, as defined in the Regulations of the Philadelphia Water, Sewer and Storm Water Rate Board (Board). The Public Advocate has submitted multiple adjustments to PWD's revenue requirements, cost of service and rate design, Tiered Assistance Program (TAP) operations, and proposals to address customer service issues.

This Main Brief submits that the following recommendations proffered by the Public Advocate's expert witnesses, in addition to the proposed stipulation regarding sequestration issues, should be approved by the Board in its Final Rate Determination:

- Projected sales volumes should be increased to reflect usage of the three-year average of actual volumes, increasing projections for revenues under existing rates by \$5,610,000 in FY 2024 and \$5,871,000 in FY 2025.
- Improved collection of TAP billings and TAP credits will result in increased revenues of \$8,915,000 in FY 2024 and \$8,915,000 in FY 2025, reducing PWD's need for a rate increase in corresponding amounts.
- PWD's Capital Improvement Program (CIP) budget should be adjusted to remove inflation escalation for FY 2025, in the amount of \$30,188,000. This does not directly impact revenue requirements, but indirectly reduces debt service expense.
- PWD's Capital Improvement Program (CIP) budget should be adjusted downward in the amount of the rollforward adjustments of \$82,940,000 in FY 2024 and \$56,614,000 in FY 2025. This does not directly impact revenue requirements, but indirectly reduces debt service expense.
- Adjustments to PWD's proposed escalation factors should be approved, reducing the following categories of Operations & Maintenance (O&M) expense in the identified amounts:
 - Services: \$7,765,000 in FY 2024, \$15,606,000 in FY 2025.
 - Materials and Supplies: \$1,298,000 in FY 2024, \$2,570,000 in FY 2025.
 - Transfers: \$323,000 in FY 2024, \$640,000 in FY 2025.
 - Chemical Costs: \$11,442,000 in FY 2025.
 - Equipment: \$323,000 in FY 2024, \$757,000 in FY 2025.
- PWD's Construction Fund beginning balance should be adjusted downward by \$8,662,000 in FY 2024 and FY 2025 to reflect the balance at the end of FY 2023. This adjustment does not impact revenue requirements.

- The interest rate for FY 2024 and FY 2025 bond issuances should be reduced to 5.0%, reducing debt service expense by \$1,917,000 in FY 2024 and \$3,748,000 in FY 2025.
- Due to the reduced FY 2024-2025 CIP budget, reducing bond sizing, debt service expense should be reduced by \$3,092,000 in FY 2024 and \$8,088,000 in FY 2025.
- The projected interest rate on PWD funds should be increased to 1.5%, increasing revenues by \$1,821,000 in FY 2024 and \$1,999,000 in FY 2025.
- Financial adjustments associated with Public Advocate program proposals should be reflected in the cost of service as follows:
 - Avoided TAP lien filing fees: \$565,000 in FY 2024, \$565,000 in FY 2025.
 - Low income water conservation program funding should be increased by \$1,730,000 in FY 2024 and \$1,730,000 in FY 2025.
 - PWD should pilot an internal plumbing repair program, allocating \$2,156,000 in FY 2024 and \$2,156,000 in FY 2025.
 - UESF funding should be increased by \$3,000,000 in FY 2024 and \$3,000,000 in FY 2025.
- PWD’s Water Capacity Factors and Cost Allocation should be revised to more accurately capture the cost of service.
- PWD’s Stormwater Rate Design should continue to be reviewed and PWD should be required to propose changes in its next rate proceeding and report its evaluation of residential rain barrel credits.
- Programmatic changes should be adopted to support the foregoing adjustments, with required quarterly reporting obligations imposed:
 - PWD should implement a lien blocker for TAP participants.
 - PWD should expand its low income water conservation program.
 - PWD should implement an internal plumbing repair program.
 - PWD should expand support for UESF.
 - The proposed stipulation regarding sequestration practices should be adopted.
 - PWD should be required to develop and file, within 60 days after the final rate determination, a Customer Education and Outreach Plan with the Board.

Quantifiable adjustments proposed by the Public Advocate are also summarized in Appendix A hereto (Summary of Adjustments, or Summary), which reflects PWD and the Public Advocate’s agreement as to the impacts on revenue requirements in FY 2024 – FY 2025.

II. BACKGROUND AND PROCEDURAL HISTORY

A. Overview of PWD

PWD is a department of the Executive and Administrative Branch of the City of Philadelphia, with the power and authority to operate the City's water supply system. PWD is charged with the construction, maintenance, repair, and improvement of City water supply facilities, including fire and drinking hydrants and water meters, as well as its sewage system and sewage disposal plants.¹ PWD provides retail water, sewer and stormwater services to approximately one-half million customers in Philadelphia. Additionally, PWD is authorized to enter into wholesale contracts to supply water and sewer services to users outside the limits of the City.² Currently, PWD serves Aqua Pennsylvania as a wholesale water customer and has ten wholesale wastewater contracts with regional customers.³ The Water Revenue Bureau (WRB), a division of the Department of Revenue, performs all functions relating to billing and collections on customer accounts of PWD.⁴

For purposes of this brief, the term "PWD" means and includes WRB, to the extent necessary or applicable.

B. Order of Proceedings

PWD commenced this proceeding by Advance Notice on January 24, 2023, and Formal Notice on February 23, 2023. The Public Advocate is a party to this proceeding as required by the Board's regulations. Additionally, three parties informed the Hearing Officer of their desire to participate formally in this proceeding: Philadelphia Large Users Group (PLUG), Michael Skienziewski, and Lance Haver. The Hearing Officer, by order dated March 7, 2023, established the schedule for this proceeding, ordered that hearings would be held telephonically or virtually, and provided guidance regarding responses to discovery and requirements intended to encourage resolution of objections, where possible. Finally, the Hearing Officer included the expectation that participants settle or stipulate to any matters they reasonably can to expedite this proceeding.⁵

¹ Philadelphia Home Rule Charter (HRC) §5-801.

² HRC §5-802.

³ See PWD St. 7 at 12-13.

⁴ PWD St. 5 at 2.

⁵ The Public Advocate's contract likewise recognizes the obligation to endeavor to reach settlements, where possible.

Public input hearings were held on March 22 and March 23, via Zoom, at 3:00 pm and 6:00 pm (both days). An overview of public input and comments in this proceeding is provided in Section II.C.

Pursuant to the Hearing Officer's Order, participant direct testimony was due on April 12, 2023. The Public Advocate filed the direct testimony of Mr. Roger D. Colton and Mr. Jerome D. Mierzwa on that date. Mr. Haver filed his direct testimony also. The Public Advocate requested a one-day extension for certain testimony, which was granted by the Hearing Officer. As a result, the deadline for the testimony of Mr. Lafayette K. Morgan, Jr., and Ms. Jennifer Rogers, was postponed until April 13, 2023. All participants were given an additional day to submit rebuttal testimony, to be filed on April 26, 2023.

The Public Advocate filed its Motion to Exclude from Technical Review and Designate as Public Input, Mr. Haver's testimony on April 20, 2023. PWD supported this motion by the Public Advocate. On April 25, the Hearing Officer denied the Public Advocate's Motion to Exclude. On April 26, the Public Advocate and PWD filed their rebuttal testimony to Mr. Haver's testimony. On the same day, PWD filed its rebuttal testimony to the Public Advocate's witness, Mr. Mierzwa, and PLUG's witness, Ms. LaConte. PLUG also filed rebuttal to Public Advocate witnesses Mr. Mierzwa and Mr. Colton. PWD was granted a one-day extension and filed rebuttal testimony to Public Advocate witnesses Mr. Morgan, Ms. Rogers and Mr. Colton on April 27, 2023.

Technical Hearings were scheduled for May 2-5. On May 2, the parties convened with the Hearing Officer to discuss procedural matters including the lineup of witnesses and a common briefing outline. Hearings were held from May 3 through May 5, during which PWD and Public Advocate witnesses were proffered for cross-examination and redirect. The Public Advocate introduced two hearing exhibits for purposes of cross examination (May 3 and May 5 Hearing Exhibits) and one hearing exhibit constituting the Public Advocate's Outreach Report. PWD introduced one hearing exhibit designated PWD Cross Exhibit 1 (Morgan-Rogers). Mr. Haver participated in cross examination, but did not proffer any exhibit.

Prior to the May 5 hearing, PWD and the Public Advocate entered into a proposed stipulation regarding sequestration issues raised in Mr. Colton's direct testimony on behalf of the Public Advocate and introduced such stipulation on the record. Following the conclusion of the hearings, PWD distributed responses on May 10, 2023 to data requests submitted on the record,

also referred to as Transcript Requests. The Public Advocate and PWD collaborated to identify and agree upon the Summary of Adjustments attached as Appendix A hereto, which reflects the impact of each of the Public Advocate's financial adjustments presented in Public Advocate Statement No. 1 (including Mr. Colton's cost of service adjustments, which were incorporated therein).

C. Public Input and Comments

The Board held four public input hearings and received extensive public input via email correspondence. All told, the Board received 47 public input statements, many of which expressed opposition to rate increases and concerns about the impact of unaffordable water bills to themselves and members of their communities. Based on their statements, the residential customers were almost universally against the rate increases at a time when inflation is high, costs of food and energy are skyrocketing, and wages are stagnating.⁶ Many expressed concerns that those on fixed incomes, particularly seniors, would be disproportionately harmed by rate increases that outpace the cost-of-living increases received by Philadelphians relying on social security or disability benefits.⁷ One individual noted that an increase in costs would further exacerbate unaffordability thereby escalating crime rates as people struggle to find money to keep the water on and put food on the table.⁸ Another noted that higher water rates will cause rents to go up as landlords choose to pass on the costs to their tenants.⁹

Several statements expressed that the last three years have been devastating to Philadelphians, many of whom are still reeling from the financial impacts brought on by the COVID-19 pandemic. They worried that a water rate increase would undermine their recovery.¹⁰ Some noted that water is a basic human need and viewed rate increases as raising barriers to clean and affordable drinking water.¹¹ Additionally, several people urged the City and the Board to look to other solutions before resorting to increasing rates on consumers, some hoping that American Rescue Plan Act (ARPA) funds would be allocated for this purpose.¹²

⁶ Comments of [S. Janicki](#) and [P. Hill](#).

⁷ Comment of [S. Savitz](#) and [R. Mondillo](#).

⁸ March 22 Aftn. Pub. Hrg. Tr. at 52-53 (Comment of [O. Terry](#)).

⁹ March 22 Aftn. Pub. Hrg. Tr. at 41-42 (Comment of [L. Muhammad](#)).

¹⁰ March 22 Aftn. Pub. Hrg. Tr. at 45-56 (Comment of [T. Webb](#)).

¹¹ Comments of [S. Hammerman](#) and [R. Hart](#).

¹² Comments of [Citizens for Pennsylvania's Future](#) and [C. Rice](#).

Finally, some customers expressed a view that PWD is not properly managing the revenue it receives and expressed the belief that PWD should focus on optimizing the money it already has before requesting more.¹³

Several members of the public expressed more generalized frustration with City government leadership while others noted frustration with existing water quality and water department customer services issues.¹⁴ A few shared the belief that high costs will drive people out of the City.¹⁵ Lastly, some commenters expressed concerns that these rate increases will disproportionately harm low income communities of color who are more likely to live in homes that lack efficient appliances they cannot afford to upgrade or have leaks they cannot afford to repair.¹⁶

Although the Public Advocate was not able to identify a basis upon which to recommend the Board deny any rate increase over FY 2024 – FY 2025, its positions endeavor to minimize the financial burden on the Small User Customers through the adjustments to the cost of service and rate design identified in this brief. The Public Advocate’s testimony, as well as PWD’s rebuttal and the cross-examination of Commissioner Hayman are in broad agreement regarding the need for PWD to pursue capital funding from non-ratepayer financed sources, reducing the pressure on customers to pay for important stormwater projects over time. Additionally, the Public Advocate has proposed multiple customer service initiatives that will improve access to affordable water services for those most at risk. Finally, the Public Advocate has proposed program expansion and new program development for those experiencing hardships or who are in need of assistance to reduce water usage and repair interior plumbing. In each respect, the positions the Public Advocate has taken align with and respond to the concerns expressed throughout the public input phase of this rate proceeding.

D. City Council Input and Comments

On February 14, 2023, 14 members of City Council sent a letter to PWD Commissioner Hayman, urging him to explore other options than the instant rate increase request. Specifically, these City Councilmembers urged the Commissioner to utilize American Rescue Plan Act (ARPA) dollars, and other federal funds available. On February 27, 2023, PWD submitted a

¹³ Comments of [S. Harrill](#), [A Serio](#), and [M. Maslin](#).

¹⁴ Comments of [Z. Branch](#), [J. Miron](#), [D. Cruz](#), and [T. Giddens](#).

¹⁵ Comment of [R. Ferro](#).

¹⁶ Comments of [J. Sample](#) and [D. Chau](#).

letter regarding federal funding, clarifying that WIFIA and Pennvest resources are low-interest loans that support PWD’s capital program, but were already taken into account in PWD’s rate filing. Additionally, PWD shared the slides from a March 2023 City Council Rate Update presentation.

According to the record, PWD did request ARPA funding as urged by City Councilmembers. In specific, PWD Deputy Commissioner Lawrence Yangalay wrote to the City’s Director of Finance on March 23, 2023, summarizing City Councilmembers’ and customers’ reactions in opposition to rate increases and requesting that the City allocate to PWD funds to address increasing costs from ARPA or other available sources. PWD also requested additional funding from the City to support customer assistance programs.¹⁷ As set forth in an April 24, 2023 letter from the City Director of Finance,¹⁸ the City declined to provide support from the General Fund to help offset the need for rate increases. According to the Director of Finance, providing General Fund support for the Water Fund would be seen as a credit negative and “there would be costs without clear benefits.”

On May 7, 2023, City Council held hearings on Resolution No. 230061. City Council heard from a PWD panel, a representative of PennFuture, and an attorney from CLS. Two members of the public attended and provided input. The transcript for this hearing will be publicly available.¹⁹ Of significance, Councilmember Gilmore-Richardson suggested, and other City Councilmembers appeared to agree, that further hearings regarding the potential for City Council and the City Administration to take steps to reduce cost burdens imposed on PWD customers, via rates, would likely be convened.

III. LEGAL STANDARDS AND RATEMAKING METHODOLOGY

A. Legal Standards

The paramount standard for all utility ratemaking is the constitutionally-based “just and reasonable” standard. The just and reasonable standard requires a rate-making body to conduct a careful weighing of the interests of customers in affordable rates against the financial needs of the utility. This strict legal standard reflects that utility rates that are not appropriately balanced

¹⁷ Attachment to LH-TR-9.

¹⁸ PWD St. 5-R, Exh. GA-1.

¹⁹ As of the writing of this brief, the transcript has not been posted. When available, it will be posted at: <https://www.transcriptroom.org/tr/CAF/TranscriptsWithoutLogin?serviceName=Transcript%20Room%20-%20Committee%20Hearings>.

can become confiscatory, depriving customers of interests in property if they cannot maintain service at rates that are too high, and depriving utilities of revenues necessary to maintain property dedicated to public service if rates are too low. The rate maker must balance the interests of customers in receiving efficient utility service at the lowest possible rates, and the interest of the utility in obtaining sufficient revenues to conduct its operations, maintain its financial integrity, and achieve access to financial markets for revenue bonds at reasonable rates.²⁰ This constitutionally-based standard is applicable to a municipally-owned utility like PWD with the same force and effect as it is to an investor owned utility.²¹ It has been conclusively established that no applicable constitutional requirement is more exacting than the requirement of “just and reasonable” rates, and this requirement applies in the context of municipal rate-making (it is not limited to ratemaking at the Pennsylvania Public Utility Commission (PUC)).²² Moreover, City Council, in establishing the Board, specifically mandated that “rates and charges shall be just, reasonable and nondiscriminatory,” thereby expressly incorporating the constitutionally-based just and reasonable standard.²³

Satisfying the constitutionally-based “just and reasonable” standard requires a rate maker to base its decision on substantial evidence. The “substantial evidence” standard is a strict standard, resting squarely on the utility, which benefits from no presumption in its favor. Courts evaluating the application of the substantial evidence standard in administrative proceedings have clarified that the sufficiency of the evidence required is directly related to the nature and extent of the authority (i.e., rate increase) requested.²⁴ The Commonwealth Court, on appeal from the 2018 Rate Proceeding, held that the Board’s rate determination would be reviewed pursuant to the standards set forth in 2 Pa. C.S. §754(b), thus confirming that the substantial evidence standard applies.²⁵ Moreover, pursuant to its own regulations, the Board “shall fully consider and give substantial weight” to the record and the report to be prepared by the Hearing Officer. The Board must also incorporate (by reference or otherwise) the portions of the record supporting its conclusions.²⁶

²⁰ Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 607 (1944).

²¹ American Aniline Products, Inc., v. Lock Haven, 135 A. 726 (Pa. 1927).

²² See Public Advocate v. Philadelphia Gas Commission, 674 A.2d 1056, 1061 (Pa. 1996).

²³ See Phila. Code §13-101(4)(d).

²⁴ Lansberry v. Pa. PUC, 578 A.2d 600, 603 (Pa. Commw. Ct. 1990).

²⁵ Public Advocate v. Phila. Water, Sewer, and Storm Water Rate Board, 1070 C.D. 2019 at *10-11 (unpublished memorandum decision).

²⁶ Board Reg. §II.3(a).

At the same time, in weighing the interests of customers and the utility, the Board must necessarily consider concerns raised regarding the quality of PWD's customer service. Pennsylvania and federal courts have recognized, in the context of setting just and reasonable rates, that the impacts upon customer service, and the quality of service provided, are within the scope of regulatory consideration. Moreover, neither statutory law nor the Constitution imposes a unilateral obligation on customers to pay for the cost of service without a reciprocal obligation of the utility to satisfy standards of reasonable service.²⁷ In addition to the judicially established authority and obligation of the Board to consider concerns regarding service,²⁸ it is within the scope of the Board's review to evaluate the extent to which PWD practices may be unnecessarily contributing to customer costs or may improve to the cost-benefit of customers.

Notably, nowhere in the Philadelphia Code or Charter is the term "rate" defined. However, under Pennsylvania law, specifically the Public Utility Code, Section 102, "rate" is defined as:

Every individual, or joint fare, toll, charge, rental, or other compensation whatsoever of any public utility, or contract carrier by motor vehicle, made, demanded, or received for any service within this part, offered, rendered, or furnished by such public utility, or contract carrier by motor vehicle, whether in currency, legal tender, or evidence thereof, in kind, in services or in any other medium or manner whatsoever, and whether received directly or indirectly, ***and any rules, regulations, practices, classifications or contracts affecting any such compensation, charge, fare, toll, or rental.***²⁹

²⁷ See Nat'l Utilities, Inc. v. Pa. PUC, 709 A.2d 972, 979 (Pa. Commw. Ct. 1998), following D.C. Transit Sys., Inc. v. Washington Metro. Area Transit Com'n, 466 F.2d 394, 411 (D.C. Cir. 1972), cert denied.

²⁸ Just as the applicable provisions of the Philadelphia Code and Charter do not define "rate," they likewise fail to define "service." Accordingly, and by analogy, the broad definition applicable under Pennsylvania law should apply. Thus "service" should be understood as follows:

Used in its broadest and most inclusive sense, includes any and all acts done, rendered, or performed, and any and all things furnished or supplied, and any and all facilities used, furnished, or supplied by public utilities, or contract carriers by motor vehicle, in the performance of their duties under this part to their patrons, employees, other public utilities, and the public, as well as the interchange of facilities between two or more of them, but shall not include any acts done, rendered or performed, or any thing furnished or supplied, or any facility used, furnished or supplied by public utilities or contract carriers by motor vehicle in the transportation of voting machines to and from polling places for or on behalf of any political subdivision of this Commonwealth for use in any primary, general or special election, or in the transportation of any injured, ill or dead person, or in the transportation by towing of wrecked or disabled motor vehicles, or in the transportation of pulpwood or chemical wood from woodlots.

66 Pa. C.S. §102 (definitions).

²⁹ 66 Pa. C.S. §102 (definitions) (emphasis added).

Accordingly, and by analogy, the rules, regulations, and practices that affect a rate or amount of a charge to a customer to compensate the utility are inextricable from the rate itself.

In this proceeding, the Public Advocate has identified a number of customer service issues relevant to PWD's revenue requirements, and the costs imposed on its customers, addressed in Section VIII. Where the Public Advocate was able to determine the basis for adjustments to the revenue requirements associated with the applicable programs and policies related to such customer service issues, those adjustments are quantified and recommended for the Board's approval.

B. Ratemaking Methodology

As described in the Direct Testimony of Mr. Morgan and Ms. Rogers, PWD conducted a cost of service study over a six-year period, forecasting revenues, expenses, debt service and other commitments over the period from FY 2023 to FY 2028. In this proceeding, the specific rate increases, and corresponding cost of service to be examined, is limited to FY 2024 and FY 2025.³⁰ FY 2024 and 2025 are the "test years" for purposes of this proceeding, and the determination of whether rate increases are necessary is based on certain assumptions. First, it is assumed that test year financial needs represent normal operations. As a result, revenues and costs that are non-recurring may need to be adjusted and normalized.³¹

Additionally, in order to be included in the cost of service to be recovered through rates, the data must meet the widely accepted regulatory principle of being "known and measurable." To be considered as "known and measurable," the probability of the revenue or cost and the amount of any change must be known with certainty. Although this methodology is far simpler in the context of a past test year, it can be accomplished by applying reasonably scientific adjustments and assumptions for future test years.³²

For PWD, the starting point for forecasting the cost of service is the budget. As explained by Mr. Morgan and Ms. Rogers, the budget provides certain data on which the cost of service is based. PWD's budgets are recorded, and serve as a control on revenues and expenditures. In this respect, the expectation is that the budget will be conservative, to ensure

³⁰ PA St. 1 at 11.

³¹ PA St. 1 at 12.

³² See, e.g., *City of Johnstown v. Pa. PUC*, 133 A.2d 246, 250 (1957) ("There is no precise formula which the commission may apply to every case, but it is required to use some **reasonably scientific** method in its determination.") (citations omitted, emphasis added).

that PWD has authorization to spend. “In other words, within a relevant range, conservative budgets are likely to project expenses that are on the high side and revenues that are on the low side.”³³ As a result, and as explained more fully in Mr. Morgan and Ms. Rogers’ testimony, it is necessary to make adjustments to budgeted forecasts for ratemaking purposes, in order to ensure that the conservative tendency of budgeting does not overstate the need for rate relief. As set forth below, in Section V, the Public Advocate submits that the Hearing Officer should recommend, and the Board should approve, adjustments to the cost of service the Public Advocate has identified, in addition to rate design adjustments and service requirements described herein.

IV. FINANCIAL PLANNING

The Public Advocate is not involved in PWD’s financial planning process, and offers the comments set forth below to emphasize the difference between PWD’s financial plan and forecast and the reality of its financial condition, as such may be determined from time to time.

A. Financial Plan and Metrics for the Rate Period

PWD’s FY 2023 Summary & Five-Year Financial Projection Plan (Financial Plan) for the current rate period is set forth in an attachment to PWD Statement No. 2A (Financial Panel). PWD’s Financial Plan is required to be updated and filed with the Board pursuant to the Philadelphia Code (Code).³⁴ The Financial Plan is an annual requirement for City Council reporting, and an updated requirement to be filed with the Board whenever PWD proposes revisions in rates and charges. As set forth in the Code, the Financial Plan “shall forecast capital and operating costs and expenses and corresponding revenue requirements.” In addition, the plan is required to identify strengths and challenges to overall financial status, including credit ratings, planned and actual debt service coverage, capital and operating reserves and utility service benchmarks. Finally, the Financial Plan is required to compare PWD to “similar agencies in peer cities in the United States.”³⁵ The Board, in setting rates and charges, is required to consider not only PWD’s Financial Plan, but also is obligated to “recognize the importance of financial stability *to customers*.”³⁶ Accordingly, the Code requires that PWD’s financial objectives be balanced against the financial consequences to customers of raising rates.

³³ PA St. 1 at 14.

³⁴ Phila. Code § 13-101(2) (identifying this obligation as PWD’s “Financial Stability Plan.”).

³⁵ Phila. Code §13-101(2).

³⁶ Phila. Code §13-101(4)(b)(1)(emphasis added).

In this proceeding, PWD’s Financial Plan includes proposed metrics included within the Black & Veatch depiction shown on Table C-1³⁷ and described in PWD Statement No. 2A. In pertinent part, PWD proposes to target 1.25x senior debt service coverage in FY 2024 and 2025, while maintaining approximately \$149 million in combined Rate Stabilization Fund (RSF) and Residual Fund (RF) year-end reserves. Attaining this level of senior debt service coverage enables PWD to direct approximately \$54 million (Capital Account Deposit + RF transfer) in FY 2024 and \$60 million in FY 2025 of current customer revenues to the Construction Fund for capital expenditures. According to PWD, this results in a 10.5% and 9.8% rate of “pay-as-you-go” or “pay-go” capital.³⁸

It is important for the Board to recognize the difference between the forecast depiction of PWD’s financial performance in the rate model and the reality of PWD’s future financial performance. PWD consistently outperforms its revenue projections and has done so in each of the last four fiscal years.³⁹ It is also important for the Board to recognize that PWD’s projections understate its actual financial performance by increasing amounts over time, verifying that PWD utilizes conservative budgeting estimates as the basis for its projections. As discussed during the technical hearings, PWD’s January 2021 projection of its financial condition for FY 2022 indicated total senior debt service coverage of 1.20x and year end RSF balance of \$109 million. Just over a year later, PWD projected it would attain 1.20x senior debt service coverage for FY 2022, but that it would have an approximately \$17 million higher, or \$126 million, closing RSF balance. Finally, when PWD reported its actual results from FY 2022, it was revealed that PWD attained total senior debt service coverage of 1.29x and a closing RSF balance of \$139 million. In total, comparing PWD’s January 2021 projection to its actual FY 2022 performance, PWD was able to contribute approximately \$16 million in additional pay-go (due to higher coverage) and amass an additional \$30 million in reserves.⁴⁰ The Board will recall that it approved a rate increase for PWD to attain \$10,411,000 in additional revenues in FY 2022. In comparison, PWD’s total financial outperformance in FY 2022 exceeded the rate relief the Board provided *by more than 325%*.

³⁷ See PWD St. 7, Sch. BV-1.

³⁸ See PWD St. 2A (Financial Plan).

³⁹ May 3, 2023 Tech. Hrg. Tr. at 9-13.

⁴⁰ May 3, 2023 Tech. Hrg. Tr. at 21-25.

Due to the historical outperformance of financial projections, and as discussed during the hearings, the performance outcomes the Board chooses to reflect in the rate model used in this proceeding will undoubtedly underestimate PWD's actual financial performance. Accordingly, although PWD is critical of the Public Advocate's depiction of 1.22x coverage,⁴¹ the Public Advocate submits that this depiction is of no practical concern.⁴² PWD witnesses readily acknowledge that bond ratings agencies have been aware over the past three years that PWD has utilized 1.20x coverage for purposes of establishing and maintaining adequate revenues.⁴³ Despite this depiction, PWD's bond ratings have not declined, and the market for PWD's bonds remains strong. PWD's expressed concerns regarding the depiction of senior debt service coverage are simply overstated. As a result, although the Board may again desire to affirm future financial performance goals for PWD, for ratemaking purposes it need only be concerned with ensuring that at least legally mandated coverage is shown. Put another way, the Board should not justify a rate increase solely for purposes of depicting coverage higher than 1.20x.

B. Adequacy of Revenues Under Existing Rates

As set forth in Public Advocate Statement No. 1, witnesses for the Public Advocate have identified several significant adjustments impacting PWD's revenue requirements in this proceeding. However, on the basis of their review, the Public Advocate does not disagree that PWD's projections indicate that revenues under existing rates are inadequate. The question remains, however, for the Board to determine the extent of such inadequacy. As set forth in the sections that follow, the Public Advocate submits that significant downward adjustments to PWD's requested rate increases should be approved.

V. ADDITIONAL REVENUES; REVENUE REQUIREMENTS

A. Operating Revenues

In this proceeding, the Public Advocate has made three recommendations regarding PWD Operating Revenues. In each case, if approved, the adjustments would result in increased revenues under current rates, obviating, in part, the need for PWD's requested rate increase.

⁴¹ PWD St. 1R at 3-4.

⁴² Likewise, the depiction in Schedule LM_JR-1 of negative transfers of \$8,729,000 in FY 2024 and \$8,543,000 in FY 2025 in the Residual Fund are of no practical concern as they reflect the workings of the Board's rate model and are not a revenue impact adjustment proposed by the Public Advocate. See May 4 Tech. Hrg. Tr. at 94-95.

⁴³ May 3, 2023 Tech. Hrg. Tr. at 31-32.

1. Average Sales Volumes

Mr. Morgan and Ms. Rogers submitted that PWD's calculation of the sales volume per account (water customers) should be revised to utilize the average volumes over the preceding three-year period.⁴⁴ Approving this recommendation would save ratepayers \$5,610,000 in FY 2024 and \$5,871,000 in FY 2025.⁴⁵ PWD contends that this recommendation defies the downward trend in usage PWD has documented for residential customer accounts over recent years.⁴⁶ For this reason, PWD wants to utilize only a single-year's (2022) sales volumes, reflecting the lowest documented consumption level available. PWD's reliance upon a single year's usage is unsupportable.

Although usage for residential 5/8" customers declined from 6.54 mcf/account to 6.29 mcf/account over the period from 2018 through 2022, it remained virtually constant over the three-year period from 2019 through 2021. Indeed, the sharp declines experienced between 2018-2019 and 2021-2022 account for virtually all of the change during the five-year period.⁴⁷ Additionally, as discussed during the hearings, PWD witnesses testified they based their recommendation entirely upon the trend of declining usage, without considering whether this single year, 2022, was representative of average usage.⁴⁸ PWD witnesses were unable to identify or produce any other evidence in support of using 2022's usage for the forecast period. Moreover, PWD's use of a single-year's experience is a departure from the approach it has advocated previously. In 2021, for example, PWD utilized a two-year average as the basis for its projections.⁴⁹ Likewise, in 2018, PWD utilized a two-year average as the basis for usage per account for 5/8" meter General Service Customers.⁵⁰ Finally, in 2016, PWD calculated a projected decrease based on six years of average usage data.⁵¹ With the exception of 2018, when the Public Advocate did not take issue with the level of projected revenue, the Public Advocate has been consistent with the use of a three-year average. In this proceeding, PWD wants to utilize a single data point to estimate future usage, changing again the reference period utilized to calculate the average usage per account to derive its desired result of reflecting less revenues.

⁴⁴ PA St. 1 at 16.

⁴⁵ Appendix A, line 1.

⁴⁶ PWD St. 1R at 5-7.

⁴⁷ See PWD St. 7, Sch. BV-2, Table 1-3.

⁴⁸ May 3 Tech. Hrg. Tr. at 19-20.

⁴⁹ See 2021 General Rate Proceeding, [PWD St. 7A, Sch. BV-5](#) (General Assumptions 1.4.1).

⁵⁰ See 2018 General Rate Proceeding, [PWD St. 9A, Sch. BV-E5](#) (Revenue Projections 1.e).

⁵¹ See 2016 General Rate Proceeding, [PWD Exhibit 5](#) (Revenue Projections 1.c).

In its Rebuttal Testimony, PWD criticizes the revenue adjustment proposed by Mr. Morgan and Ms. Rogers stating, “the Exeter Panel’s proposed adjustment results in total sales levels that the Department has not seen since FY 2018, most notably for Residential and Commercial customers.”⁵² However, on cross examination, Mr. Morgan responded that the number of customers has been increasing while the average usage per account has been decreasing.⁵³ The increasing trend in the number of customers has an offsetting effect on decreased usage. Hence, as the number of customers increases, revenues can increase despite the change in usage. Therefore, arguing that revenue would increase to levels that are near the 2018 level is not a valid basis to disregard the Public Advocate witnesses’ adjustment.

The Public Advocate’s position, arguing for a consistent use of a three-year average across customer classes, is supported both methodologically and by additional evidence on the record. First, the use of a three-year average is more appropriate because it takes into account not just the most recent year’s decline, but the prior two years in which usage remained relatively constant. As set forth in PWD Exhibit 6, not all customer usage has declined over the 5-year period, and, in fact, some customers have experienced increases.⁵⁴ For example, Senior Citizen 5/8” usage has increased over the five-year period as has Industrial 5/8” usage. More significantly, however, usage within the Commercial 5/8” and larger meters has gone up in some years and down in others. Based on these observations, the use of a consistent three-year average better forecasts the actual demands PWD will experience from its customers and is a superior methodology.

The Public Advocate submits that the Board should adopt its adjustment, thereby reducing PWD revenue requirements by \$5,610,000 in FY 2024 and \$5,871,000 in FY 2025.

2. *Increased Revenues Attributable to TAP*

The Public Advocate submits that the Board should adopt two additional revenue adjustments to reflect the improved collectability of TAP billings and TAP Rider revenue, as set forth in Mr. Colton’s testimony, and described more fully in Section VII.A, below. Adopting these adjustments results in additional annual revenues of \$3,988,000 from TAP participants and \$4,927,000 from non-TAP participants over the rate period.⁵⁵ As a result, downward

⁵² PWD St. 1R at 5.

⁵³ May 4 Tech. Hrg. Tr. at 102.

⁵⁴ PWD Exh. 6, Assumptions-4.

⁵⁵ Appendix A, Lines 12-13.

adjustments to PWD’s requested revenue increases should be made, in the amount of \$8,915,000 for FY 2024 and \$8,915,000 for FY 2025, to reflect the recovery of these amounts under existing rates.

B. Capital Improvement Program (CIP)

As set forth in Mr. Morgan and Ms. Rogers’ testimony, the Public Advocate made two recommendations regarding PWD’s Capital Improvement Program and expenditures during the forecast years. The first adjustment, eliminating proposed inflation escalation of FY 2025 CIP amounts by \$30,188,000 impacts (reduces) the amount of PWD’s bond sizing, thus reducing debt service expense.⁵⁶ The second adjustment, modifying the carry forward (or rollforward) of CIP amounts likewise impacts (reduces) the amount of PWD’s bond sizing, thus reducing debt service expense.⁵⁷ Taken together, the reduced bond issue amounts projected as a result of these adjustments reduce debt service expense by \$3,092,000 in FY 2024 and \$8,088,000 in FY 2025.⁵⁸

1. *FY 2025 CIP*

Mr. Morgan and Ms. Rogers recommend the exclusion of \$30,188,000 from PWD’s projections for FY 2025 capital expenditures for ratemaking purposes. As these witnesses explained:

[W]e have removed the inflation escalation related to FY 2025 projects that was included by PWD. It is unreasonable to include an allowance for inflation because when establishing the budget for a future year, consideration is given to the fact that costs in the future period will be higher than the current year. The inclusion of an inflation allowance is also inconsistent with the Department’s FY 2024 claims which do not include an inflation escalation.⁵⁹

PWD submitted, on rebuttal, that the FY 2025 CIP budget was projected in FY 2024 dollars and “does not capture any additional inflation.”⁶⁰ As a result, any inflationary impacts anticipated by PWD in its FY 2024 Capital Budget are, in fact, reflected in the FY 2025 CIP projections. Nonetheless, PWD’s witnesses contend that additional inflation is likely, and so they have inflated the FY 2025 CIP budget for ratemaking purposes.

⁵⁶ Appendix A, Line 2.

⁵⁷ Appendix A, Line 3.

⁵⁸ Appendix A, Line 10b.

⁵⁹ PA St. 1 at 16-17.

⁶⁰ PWD St. 1R at 8.

During the May 3 technical hearing, PWD’s witnesses responded to cross-examination questions concerning the FY 2025-2029 CIP, affirming that the future capital amounts have *not* been submitted for approval by City Council and remain subject to change.⁶¹ Hence, the amounts presented for FY 2025-2029 are currently the best estimates to be used for those periods. PWD claimed that the amount that it has presented as the FY 2025 budget amount is presented in 2024 dollars.⁶² However, this is not a valid reason to include any escalation factor. As stated above, PWD is required by the Rate Board Ordinance to provide its Financial Plan annually. The FY 2025 amount presented in the Financial Plan is the best estimate that is being used by the City Council as it considers budget matters. It is not a rough estimate. Therefore, the unadjusted FY 2025 amount is the most reliable amount to be considered for ratemaking. Escalating the FY 2025 amount, as done by PWD, does not produce a more accurate projection. Additionally, it goes without saying that inflationary impacts reflected in the FY 2024 Capital Budget, embedded in FY 2025 projected costs, may or may not materialize during FY 2024 *or* FY 2025. Finally, and somewhat perplexingly, inclusion of *additional* inflationary adjustments beyond FY 2024 would place the Board in a position of approving anticipated capital projections for purposes of setting rates and charges that are directly at odds with the presentation of projected capital expenditures that has been provided to City Council.⁶³

Importantly, the Philadelphia Home Rule Charter (HRC) is abundantly clear that the capital projections approved by City Council constitute a “blueprint” for actual expenditures in future years. As set forth therein:

The capital program shall embrace all physical public improvements and any preliminary studies and surveys relative thereto, the acquisition of property of a permanent nature, and the purchase of equipment for any public improvement when first erected or acquired that are to be financed in whole or in part from funds subject to control or appropriation by the Council. ***It shall show the capital expenditures which are planned for each of the six ensuing fiscal years.***⁶⁴

⁶¹ May 3 Tech. Hrg. Tr. at 33-34.

⁶² May 3 Tech. Hrg. Tr. at 33-35.

⁶³ The Public Advocate submits that this inconsistency in presentation is contrary to the purposes expressed in the Rate Board Ordinance, namely the Councilmanic Examination of Capital Programming and Budgeting required to be undertaken by City Council (Phila. Code §13-101(1)), its interrelationship with PWD’s Financial Stability Plan (Phila. Code §13-101(2), and the overarching principle that the Board should preside over an open and transparent rate proceeding (Phila. Code §13-101(3)(e)).

⁶⁴ HRC Section 2-303(2) (emphasis added). *See also*, Annotation 1 to HRC §2-303 (“The capital program is a blueprint of capital expenditures for the ensuing six years.”).

As can be plainly seen, this language does not validate PWD’s position regarding the FY 2025 inflation adjustment. Because PWD’s FY 2025-2029 Capital Program constitutes the planned expenditures for capital work over this period, it is inappropriate to approve an inflationary escalation for FY 2025. Indeed, it appears that such escalation is contrary to the presentation of planned expenditures required by the HRC and functions solely for purposes of increasing PWD rates and charges. The Public Advocate’s recommended exclusion of the \$30,188,000 inflation escalation included in PWD’s FY 2025 CIP for ratemaking purposes should be approved.⁶⁵

2. *Capital Improvement Program Rollover*

As explained by Mr. Morgan and Ms. Rogers, the Public Advocate recommends adjustments to the FY 2024 and FY 2025 CIP amounts to recognize that a portion of the budgeted costs will not be utilized in the budget year and, instead, will be expended in subsequent years. Line 3 of Appendix A quantifies this recommendation as resulting in reductions to PWD’s capital projections of \$82,940,000 in FY 2024 and \$56,614,000 in FY 2025. As the Public Advocate’s witnesses explained:

According to PWD, about a third of the FY 2023 CIP appropriations are likely to be rolled over. However, the intent of our adjustment is to normalize the annual amount that is rolled over. We considered a one-third amount to be too high relative to the amounts presented as prior period rollover amounts in FY 2024 and FY 2025. Therefore, we have used an average of the amounts to be rolled over from prior years into FY 2024 and FY 2025.⁶⁶

On rebuttal, PWD’s witnesses urged that the Public Advocate’s adjustment be rejected, claiming the adjustments “completely eliminated” the carry forward amounts for FY 2024 and 2025.⁶⁷ However, in Public Advocate Statement No. 1, the carry forward adjustments are identified in the Public Advocate’s FY 2024-2025 CIP.⁶⁸ Separately, the Public Advocate’s adjustments are also shown in the Public Advocate’s testimony.⁶⁹ Although the Public Advocate’s adjustments are in the same amount as the carry forward amounts (increased in FY 2025 to eliminate the inflation escalation, discussed above), that is because PWD has typically carried over more than it estimates. In response to a discovery request, PWD stated that:

The annual capital budget represents the planned amount of appropriations to provide sufficient authorization for the Department to execute contracts in support of the

⁶⁵ Appendix A, Line 2.

⁶⁶ PA St. 1 at 17.

⁶⁷ PWD St. 1R at 9.

⁶⁸ PA St. 1, Sch. LM_JR-4 at 1, Line 13.

⁶⁹ PA St. 1, Sch. LM_JR-4 at 1, Line 17a.

implementation of its capital program. The executed contract amounts for each project are spent over a varying number of years depending on the type of construction for each contract. The annual capital spending represents the total annual drawdown on the Department's outstanding capital contracts which represent appropriations from various budget years... The total CIP Budget does not represent expected project duration or anticipated cashflows.⁷⁰

Mr. Morgan and Ms. Rogers calculated the average of the amounts to be rolled over, as discussed above. However, those amounts may not be representative because of the negative rollforward for FY 2023, so Mr. Morgan and Ms. Rogers utilized those FY 2024 and 2025 amounts as reasonable proxies for the average that was calculated.

PWD's witnesses incorrectly characterize the Public Advocate's adjustments as eliminating a portion of planned funding for specific projects.⁷¹ The Public Advocate's adjustments are not tied to specific projects, but instead supported by the documented experience regarding PWD budgets and appropriations, including the historical rollforward from one budget year to following years for capital expenditure. If these amounts are not removed, the rates would be established as if all appropriations are expended in each budget year. This is not the case, and the "just and reasonable" standard requires these costs to be removed to avoid charging customers for debt service costs that will be avoided based on PWD's historical carry forward experience.

C. Escalation Factors

As shown in Public Advocate Statement No. 1,⁷² PWD's future operating and maintenance (O&M) expenses have been escalated by differing percentages among and between the various cost categories, such as labor, pension, power, gas, chemicals, etc. Witnesses for the Public Advocate have identified adjustments to the escalation factors applicable to the categories of Services, Materials and Supplies, Transfers, Chemical Costs, and Equipment. In general, the Public Advocate disagrees with PWD's utilization of past inflation metrics, including the Producer Price Index (PPI) for Industrial Chemicals and Construction Equipment and Machinery and the Consumer Price Index (CPI) for the Philadelphia Area. As the Public Advocate's witnesses have testified, "past inflation is not a good predictor of future inflation rates."⁷³ Instead, the Public Advocate recommends utilizing the March 22, 2023 Federal Open Market

⁷⁰ PA-V-1 (response).

⁷¹ PWD St. 1R at 9.

⁷² PA St. 1 at 18 (duplicating PWD St. 7, Sch. BV-2, Table 1-7).

⁷³ PA St. 1 at 19.

Committee (FOMC) Core Personal Consumption Expenditures (PCE) median inflation projections over the rate period. As explained by the Public Advocate’s witnesses, the core PCE “is an economic indicator that measures inflation by tracking the changes in prices of goods and services purchased by consumers in the United States” and is a more reasonable basis upon which to estimate future inflation.

PWD’s witnesses, on rebuttal, pointed out that past FOMC projections have not always been accurate and challenged the use of the PCE as based on monetary policy.⁷⁴ PWD’s witnesses also opined that utilizing one index for purposes of multiple cost classes was inappropriate and did not consider actual experience, noting that actual costs will be driven by market conditions, input costs as well as labor, healthcare, etc.⁷⁵ Finally, PWD’s witnesses point to past positions taken by Public Advocate witnesses concerning expense escalation, pointing out that different indices have been proposed previously.⁷⁶ That change in approach, however, is due to the addition of Ms. Rogers as an expert witness in this proceeding. Ms. Rogers has not previously participated in PWD rate proceedings and is the witness most directly involved in forecasting expense escalation for the Public Advocate.

As to the substance of PWD’s rebuttal, however, the record amply demonstrates the inferiority of reliance upon past inflationary measures, as PWD proposes, for forecasting expenses. As shown during the technical hearings, the annual change in the PPI for chemicals for the 12 months ending October 2021 was 46.2%. In contrast, the annual change declined to 2.7% for the 12 months ending October 2022. Furthermore, since October 2022, the annual change in chemical costs shown in the PPI has declined even more, ultimately reflecting a *negative* inflation rate for the 12 months ended March 2023 of -7.6%.⁷⁷ As PWD’s witnesses ultimately conceded, the past rate of inflation, the 46.2% annual change in PPI for chemicals in October 2021, gives no indication of what the rate would be at a future date, for example March 2023.⁷⁸ While acknowledging the PPI is imperfect, PWD’s witnesses also recognize that the costs to chemical producers will not correlate with PWD’s costs due to other inflationary forces.⁷⁹

⁷⁴ PWD St. 1R at 12.

⁷⁵ PWD St. 1R at 13.

⁷⁶ PWD St. 1R at 14-15.

⁷⁷ May 3 Tech. Hrg. Tr. at 44; PA May 3 Hrg. Exh. at 17.

⁷⁸ May 3 Tech. Hrg. Tr. at 45-46.

⁷⁹ May 3 Tech. Hrg. Tr. at 228-229.

Likewise, with respect to the CPI for the Philadelphia region, PWD acknowledged that the ranges in inflation reported in 2022 (7.3% in February, 8.4% in April), were significantly higher than the ranges reported over the past ten years.⁸⁰ As with the PPI, PWD's witnesses also conceded that reliance upon a 1% change in the CPI, as reported for February 2021 would not have been helpful in predicting the 7.3% annual change in the CPI reported for February 2022.⁸¹ Additionally, PWD witnesses pointed out that certain contracts are adjusted annually based on the CPI.⁸² However, these adjustments, and PWD's actual expenses, will depend on the actual inflation experienced over undesignated, future contract periods and so use of past CPI data remains a poor predictor of future costs. As shown during the technical hearings, reliance upon past inflation measures to escalate costs may radically depart from the actual cost experience due to any number of different factors.

Nonetheless, PWD witnesses on redirect explained the Federal Reserve's use of the federal funds rate to attempt to achieve a goal of reducing inflation and that doing so has a shorter term impact on interest applicable to credit transactions such as credit card loans, car loans and home mortgages.⁸³ They also clarified that the Federal Reserve's target rate of inflation is 2%.⁸⁴ Absent from this discussion, however, was any explicit reference to the escalation factors proposed by the Public Advocate for the cost categories identified, which are higher than the target rate of inflation.⁸⁵ Accordingly, whether the Federal Reserve's target rate is achieved is irrelevant; the point is that the Federal Reserve is taking action via monetary policy to impact inflation and projecting the impact of those actions via the PCE.

Both PWD and the Public Advocate acknowledge that projecting costs into the future requires some degree of speculation. However, as Mr. Morgan testified, "what we're seeing now with the lower inflation rate does indicate that the [Federal Reserve's] policy is taking effect."⁸⁶ Additionally, as Ms. Rogers clarified, "those inflation factors that were used by [PWD]...are all based on backward-looking inflation rates.... [T]he point of an inflation adjustment is not to recover past costs; it's to project inflation that has yet to come."⁸⁷ The Public Advocate's use of

⁸⁰ May 3 Tech. Hrg. Tr. at 46-47; PA May 3 Hrg. Exh. at 18.

⁸¹ May 3 Tech. Hrg. Tr. at 47-48; PA May 3 Hrg. Exh. at 18.

⁸² PWD St. 1R at 15; May 3 Tech. Hrg. Tr. at 230.

⁸³ May 3 Tech. Hrg. Tr. at 219-220.

⁸⁴ May 3 Tech. Hrg. Tr. at 220.

⁸⁵ PA St. 1 at 19-21.

⁸⁶ May 4 Tech. Hrg. Tr. at 112.

⁸⁷ May 4 Tech. Hrg. Tr. at 113-115.

the PCE is an appropriate proposal to project inflationary adjustments broadly for the cost categories identified, particularly since neither CPI nor PPI account for the multitude of factors that can drive actual cost experience across all aspects of the supply chain that impact PWD.⁸⁸

The Public Advocate submits that the Board should approve adjustments to PWD's projected O&M for FYs 2024 and 2025, as applicable, and as quantified in the subsections below. PWD has made no effort to identify a reasonable basis for future cost inflation estimates, instead relying solely on past measures of inflation, which have not been shown to align with its actual cost experience or have meaningful predictive value. Notably, as identified on Line 19 of Appendix A, the reduction to escalation factors proposed by the Public Advocate also reduces the liquidated encumbrances, calculated on a percentage basis.⁸⁹

1. Services

PWD applied escalation factors of 7.77% for FY 2024 and 6.70% for FY 2025 in calculating its projected O&M for Services. These values are based on the CPI for 12- and 24-month historical periods, respectively. The Public Advocate submits that the Board should approve its adjustment to forecast O&M for Services, utilizing the PCE inflation rates of 2.6% for FY 2024 and 2.1% for FY 2025.⁹⁰ This adjustment reduces PWD O&M by \$7,765,000 in FY 2024 and \$15,606,000 in FY 2025, with corresponding reductions to PWD's overall revenue requirements.⁹¹

2. Materials and Supplies

PWD applied escalation factors of 7.77% for FY 2024 and 6.70% for FY 2025 in calculating its projected O&M for Materials and Supplies. These values are based on the CPI for 12- and 24-month historical periods, respectively. The Public Advocate submits that the Board should approve its adjustment to forecast O&M for Materials and Supplies, utilizing the PCE inflation rates of 2.6% for FY 2024 and 2.1% for FY 2025.⁹² This adjustment reduces PWD O&M by \$1,298,000 in FY 2024 and \$2,570,000 in FY 2025, with corresponding reductions to PWD's overall revenue requirements.⁹³

⁸⁸ See, generally, May 4 Tech. Hrg. Tr. at 165-166.

⁸⁹ Appendix A, Line 19. This increases O&M by \$208,000 in FY 2024 and \$3,290,000 in FY 2025.

⁹⁰ PA St. 1 at 19.

⁹¹ Appendix A, Line 4.

⁹² PA St. 1 at 19.

⁹³ Appendix A, Line 5.

3. *Transfers*

PWD applied escalation factors of 7.77% for FY 2024 and 6.70% for FY 2025 in calculating its projected O&M for Transfers. These values are based on the CPI for 12- and 24-month historical periods, respectively. The Public Advocate submits that the Board should approve its adjustment to forecast O&M for Transfers, utilizing the PCE inflation rates of 2.6% for FY 2024 and 2.1% for FY 2025.⁹⁴ This adjustment reduces PWD O&M by \$323,000 in FY 2024 and \$640,000 in FY 2025, with corresponding reductions to PWD's overall revenue requirements.⁹⁵

4. *Chemical Costs*

PWD applied an escalation factor of 23.82% for FY 2025 in calculating its projected O&M for Chemical Costs. This value is based on the PPI for the 24-month historical period. The Public Advocate submits that the Board should approve its adjustment to forecast O&M for Chemical Costs, utilizing the PCE inflation rates of 2.1% for FY 2025.⁹⁶ This adjustment reduces PWD O&M by \$11,442,000 in FY 2025, with a corresponding reduction to PWD's overall revenue requirements.⁹⁷

5. *Equipment*

PWD applied escalation factors of 7.77% for FY 2024 and 6.70% for FY 2025 in calculating its projected O&M for Equipment. These values are based on the CPI for 12- and 24-month historical periods, respectively. The Public Advocate submits that the Board should approve its adjustment to forecast O&M for Equipment, utilizing the PCE inflation rates of 2.6% for FY 2024 and 2.1% for FY 2025.⁹⁸ This adjustment reduces PWD O&M by \$323,000 in FY 2024 and \$757,000 in FY 2025, with corresponding reductions to PWD's overall revenue requirements.⁹⁹

D. Construction Fund Balance

The Public Advocate's witnesses recommended the FY 2023 Construction Fund balance be updated to reflect the FY 2022 ending balance, reducing the FY 2023 balance by \$8,662,000 as shown at Line 9 of Appendix A. PWD's witnesses, in rebuttal, accepted this proposal which

⁹⁴ PA St. 1 at 19.

⁹⁵ Appendix A, Line 6.

⁹⁶ PA St. 1 at 20-21.

⁹⁷ Appendix A, Line 7.

⁹⁸ PA St. 1 at 19.

⁹⁹ Appendix A, Line 8.

does not impact the revenue requirements in this proceeding. The Board should adopt the Public Advocate's uncontested recommendation.

E. Debt Interest Rate

PWD utilized assumed revenue bond interest rates of 5.5% for FY 2024 and 2025.¹⁰⁰ Following the rate period, PWD expects bond interest rates to continue to rise, reaching 6% in FY 2026 and beyond.¹⁰¹ Although the Public Advocate's witnesses recognize that interest rates have recently risen, they nonetheless believe PWD's projections are overstated and specifically submit "that it is speculative at this time to assume that interest rates will grow at the pace the Department has reflected in its cost of service."¹⁰² As a result, the Public Advocate recommends that the assumed interest rate future revenue bond issuances be reduced for ratemaking purposes to 5.0% for FY 2024 and 2025.

PWD's witnesses contend the projected interest rates "are not speculative and appropriately reflect market changes and recent history."¹⁰³ During the technical hearings, PWD clarified that, were it to have issued revenue bonds between January 2022 and April 2023, the interest rates would have been between the range of 1.8% and 3.97%.¹⁰⁴ Accordingly, PWD's projection, that bond interest rates in FY 2024 and 2025 will be 5.5%, represents rates between 40% and 300% higher than what would have applied to recent bond issuances.

The Public Advocate's witnesses convincingly submit that, given the ongoing efforts of the Federal Reserve to control inflation, and the fact that its actions are taking effect (as discussed above), PWD's projected bond interest rate is overstated. A more moderate increase, utilizing a 5.0% interest rate for FY 2024 and FY 2025 bond issuances, is an appropriate reflection of current economic conditions and should be approved by the Board. Approving this adjustment reduces PWD's revenue requirements by \$1,917,000 in FY 2024 and \$3,748,000 in FY 2025.¹⁰⁵

¹⁰⁰ PWD St. 7 at 28. Note that PWD's witnesses rebuttal statement erroneously states the assumed rate of "6.0% for the FY 2025 – FY 2027 borrowings." PWD St. 1R at 19.

¹⁰¹ PWD St. 1R at 18.

¹⁰² PA St. 1 at 21-22.

¹⁰³ PWD St. 1R at 19.

¹⁰⁴ May 3 Tech. Hrg. Tr. at 40-41.

¹⁰⁵ Appendix A, Line 10a.

F. Interest Income

PWD has assumed a 1.0% rate of interest income on fund balances. The Public Advocate's witnesses submit that a higher rate of interest income, 1.5%, should be assumed for the rate period reflecting consistency between the increasing interest on borrowing and the increasing rate of interest earned by institutional funds.¹⁰⁶ On rebuttal, PWD submits that the Board has previously utilized a 1.0% rate of interest income in recent proceedings and that its actual earnings will reflect the market performance of various investments.¹⁰⁷ While interest income projections from prior proceedings are irrelevant, overall market performance supports the Public Advocate's adjustment.

PWD's position on interest income is inconsistent with the position it takes on interest expense. While acknowledging that interest rates are increasing for the purpose of calculating interest expense, PWD refuses to acknowledge that similar market forces are causing the interest rates to increase on funds set aside. Part of PWD's argument is that in past cases where 1% was used for interest income, PWD did not earn 1%. By the same token, in past cases the estimates for debt interest rates were not achieved. Yet in today's environment, PWD (and the Public Advocate) acknowledge that interest rates are increasing and reflect higher interest rates in their respective positions on the cost of debt. Hence, while the interest earned by PWD did not exactly match the estimates used in prior cases, that is not a reason to assume the rates for interest income will be stagnant in the current higher interest rate environment. It is not reasonable, under these circumstances, to assume the interest rate on funds set aside will remain unchanged.

For the foregoing reasons, the Public Advocate submits that PWD's interest income should be projected at 1.5% over the rate period. Reflecting this recommendation in the cost of service reduces PWD's revenue requirements by \$1,821,000 in FY 2024 and \$1,999,000 in FY 2025.¹⁰⁸

G. Adjustments for PA Proposed Programs

As discussed more fully below, the Public Advocate's witness, Roger D. Colton, recommended multiple operational and programmatic adjustments and identified the revenue

¹⁰⁶ PA St. 1 at 22.

¹⁰⁷ PWD St. 1R at 20-21.

¹⁰⁸ Appendix A, Line 11.

requirements impacts and/or costs of implementation of his proposals. Mr. Colton's proposals are set forth in Section VIII, below.

H. External Funding

As set forth in the testimony of Mr. Morgan and Ms. Rogers, the Public Advocate submits that the Board should "explicitly recognize that continuing to fund the City's stormwater remediation program through customer rates and charges represents a significant threat to long-term affordability of life-essential water service for Philadelphians." Furthermore, the Public Advocate's witnesses recommended that the Board require quarterly reporting by PWD detailing its efforts to work with City Council, the Administration, and others to obtain non-ratepayer revenues to fund stormwater capital projects.¹⁰⁹

On rebuttal, PWD's witnesses defended stormwater remediation cost recovery through the existing, parcel-based rates, and criticized the Public Advocate's witnesses for proposing to shift cost responsibility to the City's General Fund.¹¹⁰ While averring that the stormwater rates are "appropriate and in alignment with broader industry standards," PWD's witnesses recognize that a variety of mechanisms have been, and are being, utilized to fund stormwater management in other jurisdictions.¹¹¹ Finally, however, PWD's witnesses acknowledge as follows:

[I]f Exeter is advocating that outside support (either in the form of outside revenues or direct investments) be provided to aid in addressing the requirements of the Consent Order Agreement ("COA"), such support would be welcome. The Water Department has vigorously pursued alternative funding sources from state and federal grants and low interest loans and welcomes any outside support which could be leveraged to mitigate some of these costs to our customers. PWD acknowledges the significant cost of these programs and investments to its customers and the potential impact it may have now and in the future.¹¹²

At the technical hearings, Commissioner Hayman was asked about PWD's willingness to receive and utilize external funding for stormwater capital projects. Commissioner Hayman responded "absolutely," affirming that PWD would accept and spend capital funds for stormwater infrastructure projects from sources other than customer revenues or debt supported

¹⁰⁹ PA St. 1 at 10.

¹¹⁰ PWD St. 1R at 27-30.

¹¹¹ PWD St. 1R at 30-31.

¹¹² PWD St. 1R at 31.

by revenues.¹¹³ Commissioner Hayman also shared that he testified recently before the United States Senate pushing for additional money for water utilities, “especially in Philadelphia.”¹¹⁴

Based both on PWD rebuttal and the statements of Commissioner Hayman, the Public Advocate submits that its witnesses’ recommendations, although not specifically agreed to by PWD as of the date of this brief, are non-controversial and acceptable to PWD. The Board should, in its Final Determination: (1) explicitly recognize that the costs of stormwater overflow remediation projects and their maintenance represent financial challenges to PWD’s customers; (2) acknowledge that PWD is actively seeking revenues from non-ratepayer sources to fund, at least in part, stormwater overflow remediation projects; and (3) require PWD to report to the Board quarterly on the status and activities undertaken in pursuit of such non-ratepayer funding.

VI. COST OF SERVICE AND RATE DESIGN

A. Affordability

During the technical hearings, the Public Advocate’s witness, Mr. Jerome D. Mierzwa, was asked whether, for cost allocation purposes, “affordability” is a principle of sound revenue allocation. Mr. Mierzwa confirmed that, based on his decades of experience, affordability is not a principle of cost allocation and rate design, but a pursuit undertaken after setting the rates and achieved by programs that provide payment assistance.¹¹⁵ As a result, as Mr. Mierzwa explained, issues regarding affordability of service are addressed by other witnesses, specifically Mr. Colton.¹¹⁶ Nonetheless, it is important to emphasize that the recommendations Mr. Mierzwa makes would be advantageous to the Small User Customers whose interests are represented by the Public Advocate, designing rates that more accurately capture the cost of service to them.

The principles of a sound revenue allocation include the following:

- Utilize class cost of service study results as a guide;
- Provide stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers or the utility (gradualism);
- Yield the total revenue requirement;
- Provide for simplicity, certainty, convenience of payment, understandability, public acceptability and feasibility of application; and

¹¹³ May 4 Tech. Hrg. Tr. at 9.

¹¹⁴ May 4 Tech. Hrg. Tr. at 10.

¹¹⁵ May 4 Tech. Hrg. Tr. at 208.

¹¹⁶ May 4 Tech. Hrg. Tr. at 209.

- Reflect fairness in the apportionment of the total cost of service among the various customer classes.¹¹⁷

The Public Advocate generally agrees with PWD that it is reasonable to set rates based on the indicated cost of providing service. However, as discussed below, PWD's CCOS Study does not reflect the appropriate extra capacity factors for the general retail classes, and a reasonable allocation of base costs to Public and Private Fire Protection service. Therefore, PWD's CCOS Study should not be relied upon to determine the distribution of the revenue increase approved in this proceeding. The revised CCOS Study developed by Mr. Mierzwa provides a reasonable basis to determine the distribution of the revenue increase, if any, awarded in this proceeding. With several exceptions that are described below, the Public Advocate proposes that the rates for each customer class be set to recover the cost of service as indicated by Mr. Mierzwa's proposed CCOS Study.¹¹⁸

In this proceeding, PWD is proposing a system average increase in rates for water service of 18.9%. As previously indicated, one of the principles of a sound rate design is gradualism. While there is no hard and fast rule to applying the concept of gradualism, an increase of 1.5 to 2.0 times the system average increase would generally be considered consistent with the principle of gradualism. Increasing the current rates of the Industrial, Hand Billed, and Private Fire Protection classes to the indicated cost of service would result in rate increases which are more than two times the system average increase requested by PWD. Therefore, the Public Advocate is proposing increases for each of these classes equal to two times the system average increase. For the Public Housing Authority class, the Public Advocate is proposing an increase in rates equal to the system average increase. This is consistent with the increase proposed by PWD. Increasing Public Fire Protection rates to the indicated cost of service would result in an increase of 3.5% which is significantly less than the system average increase of 18.9%. To assist in providing for gradualism in the rate increase for the Industrial, Hand Billed, and Private Fire Protection customer classes, the Public Advocate is proposing an increase for Public Fire Protection which is 50% of the system average increase. Finally, the Public Advocate is proposing an increase for the Residential class which recovers the indicated cost of service, plus

¹¹⁷ PA St. 2 at 19-20 (citing Principles of Public Utility Rates, Second Edition, James C. Bonbright, Albert L. Danielsen, David R. Kamerschen; Public Utility Reports, Inc., 1988, pages 383-384.)

¹¹⁸ PA St. 2 at 20.

the difference between PWD’s total cost of service and the revenues to be recovered from the other customer classes.¹¹⁹

If the Board determines that PWD should be authorized to recover revenues in an amount less than requested by PWD in FY 2024, the Public Advocate recommends that the increase proposed for each customer class be scaled back proportionately to reflect the revenues authorized by the Board. A summary of the Public Advocate’s revenue distribution based on the increase requested by the PWD is presented in Table 1. The Public Advocate recommends that to the extent possible, under PWD’s current water rate structure which provides for the same declining block volumetric rates for each general retail customer class, FY 2024 rates be established that provide for the proposed revenues identified in Table 1. If PWD is awarded an increase for FY 2025, the Public Advocate recommends that rates be established for FY 2025 to provide for an equal overall system average percentage increase for each class.¹²⁰

Table 1¹²¹
Comparison of Present and Public Advocate Proposed Rates-FY 2024

	Present Rates (1)	Proposed Rates (2)	Increase (3) = (2)-(1)	Percent (4)
General Service				
Senior Citizens	\$5,151,885	\$5,802,000	\$650,115	12.6%
Residential	169,900,488	194,761,532	24,861,044	14.6%
Commercial	71,663,828	87,690,000	16,026,172	22.4%
Industrial	2,708,368	3,732,168	1,023,800	37.8%
Public Utilities	489,405	654,000	164,595	33.6%
Subtotal:	\$249,913,974	\$292,639,700	\$42,725,726	15.4%

¹¹⁹ PA St. 2 at 20-21.

¹²⁰ PA St. 2 at 21.

¹²¹ PA St. 2 at 22.

Other Services				
Housing Authority	\$6,554,466	\$7,793,305	\$1,238,839	18.9%
Charities & Schools	4,297,017	5,176,000	878,983	20.5%
Hospitals & University	1,628,549	2,186,000	557,451	34.2%
Hand Billed	18,894,388	26,036,728	7,142,339	37.8%
Scheduled (Flat Rate)	3,379	4,379	1,000	7.2%
Subtotal:	\$31,377,800	\$41,196,412	\$9,818,613	31.3%
Private Fire Protection	\$4,358,150	\$6,005,591	\$1,647,441	37.8%
Public Fire Protection	\$7,114,000	\$7,786,298	\$672,298	9.5%
Subtotal:	\$11,472,150	\$13,791,888	\$2,319,738	17.3%
Wholesale	\$3,329,398	\$4,429,000	\$1,099,602	33.0%
Total:	\$296,093,321	\$352,057,000	\$55,963,679	18.9%

B. Water: Capacity Factors

PWD claims that it is proposing rates that generally recover the indicated cost of service from each customer class.¹²² The class cost of service (“CCOS”) Study presented by PWD in this proceeding utilizes the base-extra capacity method set forth in the American Water Works Association’s (“AWWA”) *Principles of Water Rates, Fees and Charges, Manual of Water Supply Practices* (“AWWA M-1 Manual”).¹²³

Under the base-extra capacity method, investment and costs are generally first assigned to utility functional cost centers which include: source of supply, pumping, storage, treatment, distribution, customer, and general administration. These functional costs are then allocated into four primary cost categories: base or average capacity, extra capacity, customer, and direct fire protection. Customer costs are commonly further divided between meter- and service-related, and account- or bill-related costs. Extra capacity costs may also be divided between maximum day and maximum hour costs. Once investment and costs are classified to these primary cost categories, they are then allocated to customer classes. Base costs are allocated according to average water use, and extra capacity costs are allocated on the basis of the excess of peak demands over average demands. Meter- and service-related customer costs are allocated on the

¹²² PA St. 2 at 19.

¹²³ PA St. 2 at 5-6.

basis of relative meter and service investment or a proxy thereof. Account-related customer costs are allocated in proportion to the number of customers or the number of bills.¹²⁴

As shown in Tables 4-5 through 4-7 of PWD's water CCOS Study,¹²⁵ plant investment costs, depreciation expense, and O&M expenses have been assigned to four functional cost centers:

- Raw Water Supply and Pumping;
- Purification and Treatment;
- Transmission and Distribution; and
- Administrative and General.

The costs assigned to these functional cost centers have subsequently been allocated to the following cost categories:

- Base capacity;
- Maximum day extra capacity;
- Maximum hour extra capacity;
- Customer;
- Direct fire protection; and
- Direct wholesale.

Customer costs, such as meters and services, and direct fire protection costs, such as hydrants, are directly assigned to their respective cost category. Remaining costs are allocated to the base, maximum day, and maximum hour cost categories based on the degree to which they are associated with meeting those service requirements. Costs that meet base (average day) service requirements are allocated 100 percent to base category. Costs that meet maximum day service requirements are allocated between the base (72 percent) and the maximum day (28 percent) cost categories. Costs that meet maximum hour service requirements are allocated to the base (47 percent), maximum day (14 percent), and maximum hour (37 percent) cost categories.¹²⁶

Under the base-extra capacity method, system-wide maximum day and maximum hour extra capacity costs are allocated to customer class based on the excess of each class's non-coincident maximum day and maximum hour demands over average day and maximum day

¹²⁴ PA St. 2 at 5-6.

¹²⁵ PWD St. 7, Sch. BV-2.

¹²⁶ PA St. 2 at 8.

demands, respectively.¹²⁷ To determine the maximum day and maximum hour demands of each customer class, PWD relied on maximum day and maximum hour extra capacity factors which it developed.

When asked to explain in detail how the maximum day and maximum hour extra capacity factors for each customer class were determined in PA-IV-11, PWD responded that the extra capacity factors from previous PWD CCOS studies were used, and that PWD “continued to use the results of the capacity factor analysis performed for the prior rate proceeding.” The PWD further indicated that:

The prior capacity factor analysis was completed according to the methodology outlined in Appendix A of AWWA Manual M-1: Principles of Water Rates, Fees, and Charges. Accordingly, at the time of the analysis, Black & Veatch used the monthly customer billing data, and system historical peak demands, and weekly and hourly usage adjustments to derive an estimate of capacity factors for each customer type.¹²⁸

The extra capacity factors reflected in PWD’s water CCOS Study have been used by PWD in its CCOS studies since PWD’s 2016 rate proceeding. The data supporting the extra capacity factors reflected in PWD’s current CCOS Study date back to at least FY 2012.¹²⁹

The Public Advocate generally agrees with PWD’s use of the base-extra capacity methodology. However, the Public Advocate believes that adjustments to the maximum day and maximum hour extra capacity factors relied upon by PWD to allocate costs to the various general retail customer classifications in its CCOS Study are appropriate.

Since the extra capacity factors reflected in its CCOS Study are based on data from prior to FY 2012, the extra capacity factors utilized in PWD’s CCOS Study in this proceeding should be updated to reflect more recent customer usage characteristics.¹³⁰ Ideally, the most reliable and accurate approach to determining extra capacity factors would be to conduct a formal study that samples the actual daily and hourly demands of the various general retail customer classes. However, such studies are generally expensive and time consuming. PWD has not conducted a formal study of actual customer class demands. In lieu of such a study, Appendix A of the AWWA M-1 Manual (“AWWA Method”) presents an alternative approach to developing extra capacity factors. PWD claims to have used the AWWA Method to develop extra capacity

¹²⁷ PA St. 2 at 9.

¹²⁸ PA-IV-11 (response).

¹²⁹ PA St. 2 at 12-13 (citing response to PA-X-2).

¹³⁰ PA St. 2 at 13.

factors. However, the extra capacity factors reflected in PWD's CCOS Study are outdated and inconsistent with those resulting from application of the AWWA Method utilizing more recent usage data.¹³¹

PLUG claims that PWD's CCOS Study utilizes class extra capacity factors based on 2018 billing data.¹³² While this is not accurate and PWD utilized data going back to at least FY 2012 to develop the extra capacity factors reflected in its CCOS Study, PLUG claims that PWD should have provided more recent extra capacity factors.¹³³ PLUG claims that without this updated information, it is difficult, if not impossible, to determine whether PWD's proposed rates are prudent, appropriate, and just and reasonable for each customer class.¹³⁴ As set forth in Mr. Mierzwa's testimony, the Public Advocate has provided updated class extra capacity factors, and a revised CCOS Study, which utilizes the most recent appropriate and updated capacity factors. The Public Advocate's CCOS Study should be utilized to set rates in this proceeding.

To address the use of outdated capacity factors, the Public Advocate has developed extra capacity factors for each general retail customer class included in PWD's CCOS Study using the procedures described under the AWWA Method.¹³⁵ Under the AWWA Method, the year with the highest ratio of system maximum day demand to system average day demand over a representative number of years should be utilized for extra capacity factors.¹³⁶ The year with the highest ratio was FY 2018. However, in the response to PA-IV-II, PWD indicated that its review of FY 2018 billing data by customer class revealed that the maximum month for some customer classes was impacted by a change in the number of bills issued during the monthly billing period, which resulted in overstating the maximum month to average day ratio of the corresponding customer class. Therefore, PWD felt it would not be appropriate to use FY 2018 data to perform an analysis of extra capacity factors using the AWWA Method. Accordingly, the Public Advocate utilized customer billing records from FY 2019 (July 2018 – June 2019) to develop the retail customer class extra capacity factors. FY 2019 represented the year with the second highest

¹³¹ PA St. 2 at 13-14.

¹³² PLUG St. 1 at 3.

¹³³ PLUG St. 1 at 3-4.

¹³⁴ PLUG St. 1 at 4.

¹³⁵ See PA St. 2, Sch. JDM-1.

¹³⁶ AWWA M-1 Manual, 7th Edition, page 373.

ratio of system maximum day demand to system average demand since FY 2018 for which data is available.¹³⁷

There were varying degrees of differences between the customer class specific maximum day and maximum hour extra capacity factors reflected in PWD's CCOS Study from those indicated by Mr. Mierzwa's analysis. Those differences are identified in Mr. Mierzwa's testimony, and generally indicate that the extra capacity factors utilized in PWD's CCOS Study are too low.¹³⁸

In its rebuttal testimony, PWD disagrees with the maximum day and maximum hour extra capacity factors developed by Mr. Mierzwa. More specifically, PWD claims that Mr. Mierzwa: (1) does not base his analysis on data from the year of system peak demand; and (2) he fails to recognize that there are variations between the customer class specific weekly and hourly usage adjustment factors reflected in PWD's CCOS Study and those derived from the calculations presented in the AWWA M-1 Manual.¹³⁹

With respect to basing his analysis from the year of system peak demand, PWD claims that demands from FY 2018 should have been utilized rather than FY 2019 demands.¹⁴⁰ This contention is misplaced since PWD indicated in response to PA-IV-11 that FY 2018 billing data was inaccurate and overstated customer demands. As a result, Mr. Mierzwa utilized FY 2019 data because it represented the year with the second highest ratio of system maximum day demand to system average demand since FY 2018. Moreover, in developing the class extra capacity factors utilized in PWD's CCOS Study, based on the response to PA-X-2, PWD continues to rely upon demands *predating FY 2012*. The response to PA-X-2 indicates that PWD examined utilizing FY 2012 demands in 2018, but decided to utilize demands from a prior period, and to defer adjustment until a formal demand study is performed. Nowhere in the record does PWD indicate which year of system maximum day demand to system average demand was relied upon to develop the extra capacity factors utilized in PWD's CCOS Study. Therefore, it is impossible to determine if the extra capacity factors utilized in PWD's CCOS Study are reasonable.

¹³⁷ PA St. 2 at 14-15.

¹³⁸ PA St. 2 at 15, Sch. JDM-1.

¹³⁹ PWD St. 2R at 2.

¹⁴⁰ PWD St. 2R at 4.

As shown in Mr. Mierzwa's testimony,¹⁴¹ which utilizes the AWWA Method to determine maximum day and maximum hour extra capacity factors, a weekly adjustment factor is used to develop class maximum day extra capacity factors. The AWWA M-1 Manual utilizes a weekly adjustment factor of 1.35 for Residential customers and a factor of 1.17 for Commercial and Industrial customers and Mr. Mierzwa utilized these factors.¹⁴² As also shown in Mr. Mierzwa's testimony, an hourly usage adjustment (Max Hour/Max Day Rates) is used to develop class maximum hour extra capacity factors.¹⁴³ The AWWA M-1 Manual utilizes an hourly adjustment factor of 1.66 for Residential and Commercial customers and a factor of 1.33 for Industrial customers.¹⁴⁴ These are the hourly adjustment factors utilized by Mr. Mierzwa.¹⁴⁵

PWD claims that use of the AWWA Method weekly and hourly adjustment factors does not capture the unique circumstances of the PWD system. PWD claims that one example of PWD's unique circumstances is the fact that it does not experience seasonal peaking to the extent of other utility systems because its urban customer base does not have summer usage peaks tied to irrigation usage. Since the system has a lower maximum day peaking factor, it experiences more diversity in hourly usage adjustments compared to the examples provided in the AWWA Manual.¹⁴⁶ PLUG presents the same argument.¹⁴⁷

As discussed above, in response to PA-IV-11, PWD indicated that it used the method outlined in the AWWA M-1 Manual to determine the extra capacity factors for the various customer classes included in its water CCOS Study. Under the AWWA Method presented in the M-1 Manual, utility specific data is generally to be used to develop extra capacity factors. And, indeed, Mr. Mierzwa's testimony and water CCOS Study does in fact use PWD specific data to determine proposed extra capacity factors. Therefore, the unique usage characteristics of PWD's customers are reflected in the proposed extra capacity factors.¹⁴⁸

If PWD utilized the method outlined in the AWWA M-1 Manual to develop extra capacity factors as it claimed in the response to PA-IV-11, PWD would have used the same weekly and hourly adjustment factors identified in the AWWA M-1 Manual that the Public

¹⁴¹ PA St. 2, Sch. JDM-1.

¹⁴² AWWA M1 Manual at 376; PA St. 2, Sch. JDM-1.

¹⁴³ PA St. 2, Sch. JDM-1.

¹⁴⁴ AWWA M1 Manual at 378.

¹⁴⁵ PA St. 2, Sch. JDM-1.

¹⁴⁶ PWD St. 2R at 3.

¹⁴⁷ PLUG St. 1R at 2.

¹⁴⁸ PA St. 2 at 18-19.

Advocate utilized. Nowhere in the record does PWD identify the weekly and hourly adjustment factors that it utilized to develop the extra capacity factors reflected in CCOS Study under the AWWA Method and, therefore, PWD's extra capacity factors used in its CCOS Study cannot be evaluated or found to be reasonable.

The Public Advocate does not disagree with PWD's claim that the irrigation requirements of its customer base may be lower than that of a typical water utility for which the AWWA Method is designed to determine extra capacity factors. Of the various customer classes served by PWD, the demands of the Residential class would be most affected by the lower irrigation requirements. Importantly, Mr. Mierzwa's calculated maximum day and maximum hour factors for the Residential class do not vary materially from the maximum day and maximum hour factors utilized by PWD in its CCOS Study.¹⁴⁹ As a result, use of the AWWA Method is appropriate, as Mr. Mierzwa submits.

One telling example demonstrating that the extra capacity factors utilized by PWD in its CCOS Study are out of date and should be rejected is the General Service – Industrial class maximum day factor utilized by PWD of 1.60. A maximum day factor of 1.60 means that a customer's usage on the maximum day during the year is 1.60 times its average daily usage. As shown in Mr. Mierzwa's testimony, the average daily use in the month of maximum usage of the General Service – Industrial class was **2.00 times** average annual daily usage.¹⁵⁰ Clearly, the maximum daily usage of the General Service – Industrial class during the year would be greater than the average daily usage in the month of maximum usage and even exceed the 2.00 factor. Thus, the 1.60 maximum day factor of the General Service – Industrial class is demonstrably unreasonable.

C. Water: Cost Allocation

PWD assigned no average day usage volumes which serve as the basis to allocate base functional costs to Public or Private or Fire Protection service. The Public Advocate submits that Public and Private Fire Protection service should be allocated base functional costs.¹⁵¹

With respect to the allocation of base functional costs to Public and Private Fire Protection Service, under the base-extra capacity method, base costs are costs that tend to vary

¹⁴⁹ PA St. 2 at 19.

¹⁵⁰ PA St. 2, Sch. JDM-1.

¹⁵¹ PA St. 2 at 13.

with the quantity of water used, plus the costs associated with supplying, treating, pumping, and distributing water to customers under average load conditions. As indicated in PWD's water CCOS Study,¹⁵² the actual annual use of water to provide Public and Private Fire Protection is identified as 0 gallons. This is unreasonable. PWD's water CCOS Study should be adjusted to reflect the water used to provide Public and Private Fire Protection service. Based on the response to PA-IV-14, the annual water usage associated with Public Fire Protection service is estimated to be 55,000,000 gallons, or 7,400 Mcf. Based on the response to PA-IV-15, the annual water usage to provide Private Fire Protection service has averaged 6,600 Mcf during the period FY 2020 – FY 2022.¹⁵³

PWD disagrees with the Public Advocate's recommendation that base (average day) volumes should be included in the allocation of costs to Public and Private Fire Protection Service because its base volumes were not included in PWD's previous cost of service studies.¹⁵⁴ This is not accurate. In PWD's 2021 rate proceeding, base volumes were reflected in the allocation of costs to Private Fire Protection Service.¹⁵⁵

PWD argues the Public Advocate has not identified a cost of service basis as to why base volumes should be included in the allocation of costs to fire protection service. The cost of service basis is obvious: water is used to provide fire protection service and it is appropriate to allocate the costs associated with the water used to provide fire protection service to fire protection service. The base costs associated providing water for fire protection service are no different than the base costs associated with providing water to all other customer classes.

PWD claims that the AWWA M1 Manual suggests that fire protection service volumes are negligible.¹⁵⁶ The water usage associated with Public and Private Fire Protection Service of 7,400 Mcf and 6,600 Mcf, respectively,¹⁵⁷ are comparable to that of the Public Utilities retail class which are 10,600 Mcf. The Public Advocate does concede that based on the response to PA-XIV-1, the *impact* of including fire protection service base volumes in a CCOS Study is fairly negligible. This supports, rather than refutes, the reasonableness of the Public Advocate's

¹⁵² PWD St. 7, Sch. BV-2, Table 4-4.

¹⁵³ PA St. 2 at 15.

¹⁵⁴ PWD St. 2R at 4.

¹⁵⁵ PA St. 2 at 17-18.

¹⁵⁶ PWD St. 2R at 4.

¹⁵⁷ PA St. 2 at 15 (citing PWD St. 7, Sch. BV-2, Table 4-4).

adjustment. As a result, the allocation of appropriate base volumes for fire protection should be approved by the Board and the Public Advocate's revised CCOS Study should be adopted.

D. Stormwater: Rate Design

During the Technical Hearings, the Public Advocate's witnesses were asked questions about whether stormwater revenue recommendations presented by Mr. Morgan and Ms. Rogers were in conflict with Mr. Mierzwa's stormwater cost allocation recommendations. A participant submitted that these witnesses' positions contradict each other.¹⁵⁸ Multiple attempts were made during the hearings to explain that the stormwater recommendations advanced by the Public Advocate's witnesses are free-standing, complimentary and not in conflict.

Put simply, as applicable to stormwater projects, Mr. Morgan and Ms. Rogers' testimony concerns the sources of revenues available and recommends actions to obtain funding from non-ratepayer revenues. If such funding is available for stormwater capital projects, Commissioner Hayman has indicated PWD will accept and spend it. As a result, over the long term, PWD customers would benefit because PWD's need for projected future borrowing and pay-go capital would be lower, presumably in corresponding amounts. In contrast, Mr. Mierzwa's testimony presents recommendations for design changes to the existing stormwater rate structure, modifying the billing amounts set based on the revenue requirements determined in this proceeding. Mr. Mierzwa's recommendations have no bearing on the cost (or potential external funding) of stormwater capital projects and simply adjust the manner in which costs for stormwater remediation (whatever they may be) are allocated among PWD's customers.

E. Stormwater: Allocation of SMIP/GARP Credits

Mr. Mierzwa recommended that PWD's proposed stormwater rates provide for a more equitable sharing of the costs associated with PWD's SMIP/GARP programs. As explained by Mr. Mierzwa, these programs offer grant funding to non-Residential customers for the design and construction of projects to reduce stormwater runoff. They do not consider affordability, but are premised on the system-wide benefit of reducing runoff. Once completed, the customer who has received the grant is also eligible to receive credits that reduce their overall stormwater charges. Approximately 60 percent of SMIP/GARP program costs are recovered from stormwater customers.¹⁵⁹

¹⁵⁸ May 4 Tech. Hrg. Tr. at 135.

¹⁵⁹ PA St. 2 at 26-27.

As Mr. Mierzwa explained, the issue with PWD's existing and proposed stormwater rates is that residential customers contribute to a substantial portion of the program costs, yet receive no financial benefits.¹⁶⁰ Non-Residential customers receive funding financed by all customers' bills to improve their properties and then earn additional cost savings as a result of the improvement. Mr. Mierzwa submits that the financial benefits should be shared and recommends that Gross Area (GA) and Impervious Area (IA) stormwater rates be based on the average of the rates developed under the existing design and the rates which would result if no GA and IA credits were reflected in the design. As Mr. Mierzwa states, the Public Advocate is willing to consider alternative designs which would provide for more equitable sharing of the financial benefits of SMIP/GARP.¹⁶¹

PLUG submits that Mr. Mierzwa's recommendation should not be adopted. PLUG's rebuttal testimony is predicated on a few important misunderstandings. First, PLUG's witness contends that "all customers benefit from the [SMIP/GARP] program because the retrofits allow PWD to manage stormwater runoff and meet its stormwater management goals."¹⁶² This submission overlooks the key focus of Mr. Mierzwa's testimony, which is the *financial* benefit residential customers do not receive. PLUG also mischaracterizes Mr. Mierzwa's proposal as sharing billing credits, when in fact his proposal is to adjust the GA and IA rates themselves.¹⁶³ PLUG has not provided a counter-proposal for more equitable sharing of SMIP/GARP benefits.

PWD responds that it "is in the process of evaluating both alternative rate structure designs and cost recovery approaches for stormwater credits (including those resulting from the SMIP/GARP program)."¹⁶⁴ PWD also submits that Mr. Mierzwa's recommendation will result in rates that do not recover the cost of service and are contrary to current policy.¹⁶⁵ Ultimately, however PWD expresses its willingness to engage in a comprehensive discussion of potential changes to stormwater cost recovery, but that stakeholder involvement and billing system upgrades are necessary to accomplish any proposed rate structure changes.¹⁶⁶

¹⁶⁰ PA St. 2 at 27.

¹⁶¹ PA St. 2 at 27-28.

¹⁶² PLUG St. 1R at 14.

¹⁶³ PLUG St. 1R at 14.

¹⁶⁴ PWD St. 2R at 9.

¹⁶⁵ PWD St. 2R at 10-12.

¹⁶⁶ PWD St. 2R at 9, 13.

Although the Public Advocate does not concede that significant billing system changes are required to implement Mr. Mierzwa's proposal, it appreciates PWD's willingness to evaluate alternative rate design structures. As a result, the Public Advocate submits that, if the Board does not approve Mr. Mierzwa's recommendation, the Board should require PWD to propose in its next rate proceeding, alternative rate structure design(s) and cost recovery approach(es) to residential stormwater rate design.

F. Stormwater, Residential: Building Type Charges

Mr. Mierzwa reviewed PWD's current stormwater rate design, which charges all residential customers the same monthly amount, and the characteristics of residential properties in Philadelphia. As he explained in PWD's 2021 General Rate Proceeding, the residential GA charge was based on a 2,110 sf. lot with an impervious area of 1,200 sf. In contrast, for 70 percent of housing units, constituting rowhomes, the typical parcel size is 871 sf., less than the size used for both the GA and IA charges. As he concluded, "the stormwater charges for rowhomes may be significantly overstated."¹⁶⁷ Mr. Mierzwa recommended that PWD modify its residential stormwater rate design to provide for charges based on building type after PWD completes its billing system upgrades. He submitted that it may be necessary to phase in this recommendation to provide for gradualism and avoid rate shock.¹⁶⁸

PWD responded that it did not agree with Mr. Mierzwa's specific recommendation "at this time." PWD submitted that exploration of rate design changes should be undertaken with a broader range of stakeholders and that it is willing to provide periodic updates concerning potential changes.¹⁶⁹ The Public Advocate recognizes that additional stakeholder input may be helpful, but submits that the Board should require PWD to propose in its next rate proceeding alternative rate structure design(s) and cost recovery approach(es) to residential stormwater rate design.

G. Stormwater, Residential: Credits for Rain Barrels

Mr. Mierzwa recommended that PWD evaluate whether a rate discount should be provided to residential customers that agree to have PWD install a rain barrel. He noted that "PWD currently offers to install rain barrels on Residential properties at no cost" for purposes of

¹⁶⁷ PA St. 2R at 28.

¹⁶⁸ PA St. 2R at 29.

¹⁶⁹ PWD St. 2R at 15-16.

reducing stormwater flows and sewer overflows during precipitation events.¹⁷⁰ Mr. Mierzwa pointed out that the Town of Ferguson, Pennsylvania, currently provides customers that install a rain barrel a 20% rate discount.¹⁷¹

In rebuttal testimony, PWD's witnesses state that PWD is "willing to evaluate potential residential discounts and credits in the context of a broader review of the stormwater rate structure."¹⁷² They go on to express disagreement with Mr. Mierzwa's recommendation, erroneously conflating his recommendation for an evaluation with a proposal to treat rain barrels analogous to Stormwater Management Practices (SMPs)¹⁷³ designed to manage/capture 1.5 inches of runoff from impervious surfaces.¹⁷⁴ PWD also questions whether the cost of implementing a discount program would exceed the overall level of benefits provided.¹⁷⁵ Finally, PWD's witnesses assert that installation of rain barrels does not count toward the compliance requirements as defined in the City's 2011 Consent Order and Agreement with the Department of Environmental Protection (COA).¹⁷⁶

The Public Advocate's proposal should be approved and PWD should be directed to evaluate a discount for Residential rain barrel installations because, regardless of whether such installations contribute to PWD's compliance with the COA, they contribute to a reduction in overall wastewater flows during precipitation events. In other words, they reduce the volumes that would otherwise flow to PWD treatment plants and/or overflow to the City's rivers and streams. Furthermore, unlike SMPs, the City bears no additional O&M expense to maintain rain barrels installations at Residential properties. As a result, although rain barrels may not capture as much rainfall as SMPs, they are more cost effective (on an equivalent volume basis). Furthermore, offering a credit would provide an incentive for more rain barrel installations, which currently amount to less than 1% of Residential accounts.¹⁷⁷ The Public Advocate maintains that PWD should be required to submit a report to the Board evaluating the potential for a stormwater rate discount for Residential rain barrel installations prior to commencing its next rate proceeding.

¹⁷⁰ PA St. 2 at 29.

¹⁷¹ PA St. 2 at 29-30.

¹⁷² PWD St. 2R at 16.

¹⁷³ See PWD Reg. §600.1 (defining Stormwater Management Practice).

¹⁷⁴ PWD St. 2R at 16.

¹⁷⁵ PWD St. 2R at 17.

¹⁷⁶ PWD St. 2R at 19 (referencing COA filed as PWD Exh. 7).

¹⁷⁷ PA St. 2 at 29; PWD St. 2R at 17.

VII. TIERED ASSISTANCE PROGRAM (TAP)

A. TAP Enrollment; Improved Collections

As Public Advocate witness Mr. Roger D. Colton testified, the current participation rate in TAP is unreasonably low. Mr. Colton estimates, based on U.S. Census data, that PWD serves roughly 170,000 customers who would be income eligible for TAP.¹⁷⁸ By contrast, just 15,032 households are actively enrolled in TAP.¹⁷⁹ In rebuttal, PWD cites to estimates by its consultants from the 2016 rate proceeding that at the time, there were only 56,000 accounts eligible for TAP enrollment.¹⁸⁰ However, when PWD identified residential customers who would be protected from nonpayment terminations due to being low-income or vulnerable, PWD identified 107,119 customers who were eligible for protection.¹⁸¹ As described by Susan Crosby, Deputy Commissioner for Water Revenue, this data came from the Office of Integrated Data for Evidence and Action (IDEA) within the Managing Director's Office.¹⁸² That data included households who had received Medicaid or homeless prevention services within the previous 12 months.¹⁸³ While unable to pinpoint exactly how many of the 107,119 customers were low-income, Ms. Crosby acknowledged that some portion of the difference between PWD's previous estimate of 56,000 eligible customers and the 107,119 identified low-income and/or vulnerable customers would be low-income customers.¹⁸⁴ Assuming all of those 107,119 households are TAP eligible, PWD's participation rate for TAP would be a mere 14%. Even using the ultra-conservative estimate of 56,000 eligible accounts, PWD only would have a participation rate of 26%.¹⁸⁵

Improving TAP enrollment is important for multiple reasons. First, TAP protects enrollees from the impact of the rate increase by providing a bill based on income rather than

¹⁷⁸ PA St. 3 at 28.

¹⁷⁹ PA St. 3 at 28; PA-I-56 (response).

¹⁸⁰ PWD St. 3-R at 6.

¹⁸¹ PA-I-85 (response), PA May 5 Hrg. Exh. at 9.

¹⁸² May 5 Tech. Hrg. Tr. at 23.

¹⁸³ May 5 Tech. Hrg. Tr. at 23. Note the income eligibility for Medical Assistance in Pennsylvania varies, but all households with income at or below 133 percent of FPL are eligible, with some households with higher income being eligible as well. See PA Dep't of Human Svcs, Medical Assistance General Eligibility Requirements, <https://www.dhs.pa.gov/Services/Assistance/Pages/MA-General-Eligibility.aspx> (last accessed May 15, 2023).

¹⁸⁴ May 5 Tech. Hrg. Tr. at 23-24.

¹⁸⁵ This result would still appear unreasonably low. In comparison, in 2021 PGW's low income program had 53,466 customers (28.5% of estimated low-income customers) enrolled and PECO's low income program had 121,408 (32.5% of estimated low income customers) enrolled. See 2021 PUC Universal Service Report, available at: https://www.puc.pa.gov/media/2188/2021_universal_service_report_rev122722.pdf.

usage. Mr. Colton examined the affordability impacts of the proposed rate increase, and found that it would increase both the depth of unaffordability (how unaffordable bills are for low-income customers) and the breadth of unaffordability (where geographically customers are experiencing unaffordability).¹⁸⁶ Mr. Colton also explained that access to safe and affordable water is essential to an adequate quality of life in Philadelphia – water is necessary for drinking, cooking, and sewer needs.¹⁸⁷ Water shutoffs create public health risks because a lack of adequate sanitation can cause diseases to spread and allow people to become sick.¹⁸⁸ Access to water is critical for both mental and physical health.¹⁸⁹ TAP enrollment helps vulnerable low-income households avoid shutoff and maintain connection to critical water service.

Further, PWD’s revenue collections improve when TAP enrollment increases. As described by Mr. Colton, PWD receives increased revenue from both TAP participants and through the TAP Rider relative to what it would have collected from TAP-eligible customers not enrolled in TAP. Finally, as Mr. Colton notes, PWD as a utility has an obligation to offer its customers the most favorable rate available.¹⁹⁰

1. TAP Enrollment Leads to Increased Revenue

Mr. Colton details in his testimony that PWD will collect additional revenue through the operation of TAP.¹⁹¹ TAP participation improves payment performance. As Mr. Colton explains, almost 100% of TAP participants enter the program with some amount of preprogram arrears, meaning they have not been able to keep up with their bills.¹⁹² Once enrolled, however, participation in TAP substantially improves the bill payment patterns and practices of low-income PWD customers.¹⁹³

Mr. Colton further explains that PWD is underestimating its revenue collection related to TAP enrollment. As he explains:

¹⁸⁶ PA St. 3 at 14.

¹⁸⁷ PA St. 3 at 19-20.

¹⁸⁸ PA St. 3 at 20-21

¹⁸⁹ PA St. 3 at 21.

¹⁹⁰ PA St. 3 at 31; See e.g., 66 Pa. C.S. 1303; See also, Jim Rossi, The Common Law “Duty to Serve” and Protection of Consumers in an Age of Competitive Retail Public Utility Restructuring, 51 Vand. L. Rev. 1233, 1246 (1998) (discussing evolution of common law duty to serve and abusive railroad pricing practices); Rhodes-Burford Home Furn. Co. v. Union Elec., 1916 P.U.R. 645, 666 (Mo. Pub. Serv. Comm’n 1915) (“The utility should make it a regular practice to check each customer’s bills ... as often as practicable, and determine accurately whether the customer is being furnished under the most advantageous schedule then in force and effect.”).

¹⁹¹ PA St. 3 at 41-49.

¹⁹² PA St. 3 at 43-44.

¹⁹³ PA St. 3 at 44.

When a low-income customer enrolls in TAP, that customer's bill is essentially divided into two parts. The first part remains a bill that is rendered to the low-income customer in the form of a TAP bill. The second part is no longer rendered to the low-income customer but is instead recognized as a TAP Credit and, as such, is billed to all other ratepayers through the TAP Rider. If an illustrative low-income non-participant has a \$100 bill, for example, when that customer enrolls in TAP, \$40 may be continued to be billed to the customer as a TAP bill, with the remaining \$60 recognized as a TAP Credit and billed to all other customers through the TAP Rider. The \$100 remains the same. That \$100 is simply collected in different ways. When a low-income customer enrolls in TAP, both parts of that bill will result in increased collections by PWD.¹⁹⁴

There are two different ways PWD collections improve when a low-income customer enrolls in TAP. First, the collection rate on the amount billed to the TAP customer improves, as compared to the collection rate for non-TAP low-income customers. In FY 2022, TAP participants had a 72.5% collection rate, while non-TAP low-income customers had a 34.3% collection rate – a difference of 38.2%.¹⁹⁵ In addition, the collection rate for all customers (who pay for discounts through the TAP rider) is 84.13%, versus the 34.3% collected from non-TAP low income customers – a difference of 49.83%.¹⁹⁶

Using the average usage for TAP customers of 0.7 MCF and the projected increase in rates as well as the agreed upon TAP participation rate from the TAP-R proceeding of 16,479, Mr. Colton estimates that the total TAP billing in FY24 would be \$20,328,494 – of which \$9,887,400 are TAP credits collected through the TAP rider, and \$10,441,094 are billed to TAP participants.¹⁹⁷ Based on these numbers, and the difference in collections rates between all customers, TAP customers, and non-TAP low income customers,¹⁹⁸ Mr. Colton estimates the following increased revenues not accounted for by PWD:

- \$3,988,000 based on increased collections from TAP customers compared to non-TAP low income customers (38.2% of \$10,441,094).¹⁹⁹
- \$4,927,000 based on increased collections through the TAP rider compared to non-TAP low income customers (49.83% of \$9,887,400).²⁰⁰

¹⁹⁴ PA St. 3 at 45.

¹⁹⁵ PA St. 3 at 46.

¹⁹⁶ PA St. 3 at 47.

¹⁹⁷ PA St. 3 at 48-49.

¹⁹⁸ As a proxy for all non-TAP low-income customers, Mr. Colton uses the collection rates for "TAP Customers Outside of TAP Enrollment." See PA St. 3 at 15.

¹⁹⁹ PA St. 3 at 48-49.

²⁰⁰ PA St. 3 at 48-49.

In rebuttal, PWD asserts that Mr. Colton’s calculation of improved collectability is overstated, relying upon the system-wide Collection Factors (discussed below) used to project system revenues.²⁰¹ As a result, PWD claims its projections already account for current TAP participants and so any increased collections should only reflect the increase in TAP participation, not the full TAP participation.²⁰² As a threshold matter, it’s important to note that PWD concedes, with limited exception, that Mr. Colton’s analysis regarding TAP collectability is correct. Nonetheless, PWD suggests two additional adjustments to Mr. Colton’s proposed framework. First, PWD submits that because the average TAP credit is based on average TAP billings during calendar year 2022, it is more appropriate to use existing rates than proposed rates.²⁰³ Second, PWD argues that the Collectability factor should be based on the average system-wide payment pattern over FY 2020-2022.²⁰⁴ Comparing TAP billing to TAP customers outside of TAP, PWD suggests the average difference over FY 2020 to FY 2022 is 30.48% rather than 38.2%.²⁰⁵ Likewise, comparing collectability of TAP credits, PWD suggests the average difference over FY 2020 to FY 2022 is 42.54% rather than 49.83%.²⁰⁶

The Public Advocate submits that PWD’s Collection Factors do not account for TAP collectability, it is appropriate to use the full TAP participation estimate, and that PWD’s rebuttal adjustments should not be adopted. Furthermore, the Public Advocate submits that PWD’s passing suggestion that collectability adjustments should be deferred to a TAP-R proceeding must be rejected.

Contrary to PWD’s assertions, Mr. Colton’s adjustment is not reflected in historic collections experience. For ratemaking purposes, certain “Collection Factors” are determined based on gross billings and applied to project PWD’s operating revenues. According to PWD, the operating revenue is determined through a two-step process. The first step involves establishing a projection of gross billings. “[T]he second step estimates the operating retail cash receipts by applying receipt factors (‘collection factors’) to the corresponding gross billings.”²⁰⁷

²⁰¹ PWD St. 3R at 11-12, 15.

²⁰² PWD St. 3R at 11-12, 16.

²⁰³ PWD St. 3R at 13.

²⁰⁴ PWD St. 3R at 12, 16.

²⁰⁵ PWD St. 3R at 12.

²⁰⁶ PWD St. 3R at 16.

²⁰⁷ PWD St. 7 at 12.

However, as PWD clarified, “TAP discounts and TAP-R surcharge billings are excluded from the cost-of-service analysis.”²⁰⁸ Furthermore, according to PWD witnesses: “For the purposes of determining Base Rates, TAP revenue loss is not included. Table C-1A: Base Rates (Schedule BV-1) excludes revenue loss associated with TAP discounts and revenues associated with TAP-R surcharge rates. The TAP discounts’ exclusion from the Base Rates analysis is also shown on Line 13 of Table C-3: Projected Revenue Under Existing Rates (*Schedule BV-1*).”²⁰⁹ These statements confirm that the improved collectability associated with TAP, identified by Mr. Colton, has never been taken into considered in estimating PWD’s projected revenues.

PWD’s assertion that the revenue adjustment should be limited to just the increased projected participation rate for the next rate period (beginning September 1, 2023) is misguided. There is no dispute that there has been a large fluctuation in TAP enrollment.²¹⁰ This is at least partially due to customers failing to recertify and falling off the program. As discussed further below, however, PWD is implementing an extended recertification time period to 3 years, which will keep more customers in TAP longer.²¹¹ As a result, the impact of TAP on revenue will be greater because customers will not fall out as much as they previously have. Indeed, in calculating the adjustment based on collections from TAP customers, Mr. Colton explicitly looked at the difference in collectability between TAP customers and TAP customers outside of TAP (and not, for example, all low-income customers). The significant improvements in collectability calculated by Mr. Colton are simply not accurately reflected using the collection factors proposed by PWD witnesses on a gross billings and gross revenues basis. PWD witnesses have clearly articulated that their revenue projections do not consider the impact of TAP on collectability.²¹² For these reasons, it is appropriate for the Board to utilize the total TAP participation levels, since the improved collectability is in no way constrained to new entrants to the program.

²⁰⁸ PWD St. 7 at 12.

²⁰⁹ PWD St. 7 at 17-18.

²¹⁰ TAP participants and TAP bills for each month, July 2017 – January 2023 were provided in response to PA-I-56(b) (participants) and PA-I-56(e) (TAP bills).

²¹¹ PA St. 3 at 37.

²¹² See PWD St. 7, Sch. BV-2, ES-10 (explaining tables projecting system projected revenues are shown with or without TAP-R *surcharge* rates); see also PWD St. 7 at 5 (“The Water Department proposes rate increases that will go into effect on September 1st of each fiscal year. The Cost of Service Study and proposed rates described herein apply only to PWD’s ‘Base Rates,’ which exclude revenue loss associated with providing TAP discounts and the TAP Rate Rider Surcharge (‘TAP-R’) revenues.”).

Contrary to PWD's submission, it is not appropriate to use existing, FY 2022, rates (or, by extension, credits) to calculate the TAP collectability improvement PWD will experience in future fiscal years. PWD's argument disregards the entire projection methodology utilized to determine base rates in this proceeding, which fully forecasts two future test years to project revenue requirements. The use of the rates in effect over the two forecast years is necessary to calculate the improved collectability associated with TAP over the corresponding period. PWD can provide no reasoned basis to apply one rate schedule to develop overall revenue projections and a separate rate schedule to project revenue adjustments identified by Mr. Colton. The Board should reject PWD's suggestion, which is not supported by the methodology used to project PWD' rates.

The Public Advocate also disagrees with PWD's proposal to utilize the average improved collectability over FY 2020-2022 calculated by PWD's rebuttal witnesses. As a threshold matter, however, it should be noted that if PWD's averages for TAP billings (30.48%) and TAP Credits (42.54%) were utilized, there would still be a basis for a substantial revenue adjustment favorable to the Small User Customers, reducing the rate relief requested. Nonetheless, PWD's proposal is inappropriate, and the improved collectability associated with TAP as calculated by Mr. Colton should be utilized by the Board and the revenue adjustments approved. Put simply, the basis for PWD's calculations has not been shown and PWD has not calculated the adjustment based on its alternate recommendation. Furthermore, given the recertification policy changes implemented by PWD in 2022, it is far more reasonable to utilize the most recent improved payment patterns as reflective of the conditions TAP customers will experience going forward.

Mr. Colton's adjustment, based on improved collectability of TAP discounts and credits should be adopted by the Board. The following considerations illustrate why Mr. Colton's adjustment is appropriately based upon all revenues associated with TAP:

- Under the PWD analysis, if the historic TAP participation rate and the projected TAP participation rate are equal to each other, the adjustment based on collectability would be zero.
- If the collectability from TAP participants changed substantially, whether it increased or decreased, under the PWD analysis, there would be no adjustment.
- Using PWD's approach, even if the dollar amounts of TAP credits changed substantially, there would be no adjustment if the number of TAP participants did not change.

Each of these examples demonstrate the necessity of the adjustment that Mr. Colton proposed based on his analysis (to which PWD agreed in principle), which is based on the collectability of revenues.

Finally, the Public Advocate strongly disagrees with PWD's assertion that the revenue impact of improved collectability should be determined in a subsequent TAP-R reconciliation proceeding.²¹³ Lost billings attributed to TAP discounts are passed through to all other ratepayers through the TAP Rider that is subject to an annual true-up through the TAP-R proceedings.²¹⁴ The TAP-R proceedings, however, do not address collectability. They are administrative in nature, seeking only to reconcile the projected TAP discounts with actual TAP discounts and establish reasonable expectations of future TAP credits.²¹⁵ Collectability has never been an issue in TAP-R reconciliation proceedings, but has, in fact, been a subject of PWD base rate proceedings.²¹⁶

PWD's projected revenues do not take into account the change in collectability associated with TAP, as demonstrated in Mr. Colton's testimony. As a result, unless and until the adjustments proposed by the Public Advocate are adopted, PWD's projected revenues will be understated due to the omission of improved collectability that PWD will continue to experience by virtue of TAP participation. For all of the foregoing reasons, Mr. Colton's revenue adjustments should be approved, increasing PWD's projected revenues, and offsetting the need for rate relief, by \$8,915,000 in each year of the rate period, FY 2024 and FY 2025.

2. PWD has Reasonable Methods Available to Increase Enrollment and Retention in TAP

TAP benefits participants by delivering an affordable bill while also benefiting all customers through improved collectability of TAP billings and discounts. As a result, it is imperative that the Board consider all options PWD has at its disposal to increase enrollment in TAP. Mr. Colton makes several suggestions in his testimony as to how PWD can increase TAP enrollment through cross enrollment with City and State programs, by easing documentation requirements, and by expanding pathways for recertification so that TAP enrollees don't fall off the program for failure to recertify.

²¹³ PWD St. 3R at 15.

²¹⁴ PWD St. 7 at 18.

²¹⁵ See, e.g., PWD St. 7, Sch. BV-2, ES-9 n.3.

²¹⁶ See 2018 Final Rate Determination at 83-85.

a. Cross-Enrollment/Prequalification Through Data Sharing

Mr. Colton recommends that PWD work to increase enrollment in TAP by using the following data sources: the City's Owner Occupied Payment Agreement (OOPA) program; the City's Office of Integrated Data for Evidence and Action within the Managing Director's Office; the Pennsylvania's Department of Human Services, which administered the Low Income Household Water Assistance Program (LIHWAP); and, PGW's Customer Responsibility Program.²¹⁷ In rebuttal, PWD notes that it is already working on cross-enrollment or prequalification with regards to OOPA, IDEA data, and LIHWAP recipients.²¹⁸

Ms. Susan Crosby, Deputy Commissioner for Water Revenue confirmed in hearings that PWD does not oppose Mr. Colton's recommendation for automatic enrollment and/or prequalification with regards to OOPA enrollees,²¹⁹ IDEA data,²²⁰ and LIHWAP recipients.²²¹ Ms. Crosby clarified that the goal with each process would be prequalification rather than automatic enrollment, and explained the difference as follows:

[A]uto enrollment . . . means that it happens without any human touch. It's completely automated. And that's not what our design is. Our design is to have the information from . . . outside data sources put into our CAMP application processing system to prepopulate all of the necessary fields in order to make the decision. And then, just as we do with all of our applications, we're going to have our applications, we're going to have our staff review that information in a double-blind fashion to approve the appropriate program. So we're not going to change our QA/QC process as part of this program. We want to ensure that we're doing the best and most accurate work. So it's better to say prequalification, because it is going to have a human touch.²²²

Ms. Crosby confirmed that the ultimate goal would be that nothing would be needed from the customer to complete the enrollment.²²³ In rebuttal and in the hearing, PWD noted varying timeframes to get the prequalification process set up. Based on PWD's commitment to setting up these prequalification processes to increase TAP enrollment, the Public Advocate requests that the Rate Board require PWD to provide quarterly reporting explaining its progress on these efforts. The reports should identify the City or State officials contacted, along with the date of

²¹⁷ PA St. 3 at 31-35.

²¹⁸ PWD St. 3R at 6-9.

²¹⁹ May 5 Tech. Hrg. Tr. at 15.

²²⁰ May 5 Tech. Hrg. Tr. at 19.

²²¹ May 5 Tech. Hrg. Tr. at 20.

²²² May 5 Tech. Hrg. Tr. at 17-18.

²²³ May 5 Tech. Hrg. Tr. at 16.

the contact and the substance of the discussion; a timeline for future implementation; and a detailed description of the operational barriers, if any, to implementation.

The Board should also require PWD to include in its reports progress and/or discussions with PGW regarding cross-enrollment or prequalification with PGW's Customer Responsibility Program. PWD, in rebuttal, characterizes PGW as an "independent company governed by the Pennsylvania Utility Commission" and notes that any data-sharing or automatic enrollment would have to be at the agreement of PGW and comply with PUC restrictions on data-sharing.²²⁴ While the Public Advocate acknowledges that PGW is not a City department like PWD, it is still a utility owned, managed and regulated (in part) by Philadelphia City Government, serving many of the same low income households PWD serves. PWD should take reasonable steps to discuss whether and how data-sharing between the two utilities could work.

b. Documentation Requirements

As detailed by Mr. Colton, the vast majority (80%) of TAP application denials have been due to "missing or invalid income or residence documentation."²²⁵ PWD notes in rebuttal that as of April 2023, customers will only need to provide one proof of residency and one proof of income per household member with income, and will accept documents from within the last 12 months.²²⁶ When asked whether that change in policy would have changed the outcome for recently denied applications, PWD responded that "[t]he exact number of customers that would definitively have been enrolled had the policy been different in past months cannot be provided."²²⁷ PWD noted however that there were 182 applications between November and February that were denied due to missing or invalid proof of residency, and that those types of denials are likely to be reduced by the new guidance.²²⁸ Given the possible impact these policy changes could have, the Board should require continued reporting on the number of TAP applications and denials, disaggregated by reason for denial. To reduce the administrative burden of monthly reporting, the Public Advocate believes quarterly reporting of monthly data would be appropriate going forward. PWD should also report on the impact of this policy change at its RCAS meetings.

²²⁴ PWD St. 3R at 9.

²²⁵ PA St. 3 at 30.

²²⁶ PWD St. 3R at 4.

²²⁷ PA-TR-1 (response).

²²⁸ PA-TR-1 (response).

c. Recertification

Failure or inability to recertify has been a well-documented obstacle to continued participation in TAP, limiting the overall participation rate in the program. Mr. Colton notes in his direct testimony that the all time number of TAP participants is 54,794.²²⁹ PWD disputes this number, stating that the number of unique customers who had been TAP participants is actually 28,578.²³⁰ Regardless of which number is used, with a current enrollment of 15,032, PWD has failed to retain a large number of TAP enrollees – somewhere between 48% and 73%. The Public Advocate is encouraged that PWD has moved to a three-year recertification cycle, which will help retain customers on TAP.²³¹ Nonetheless, PWD submits that Mr. Colton’s suggestion to implement a text-based recertification system should be rejected outright, speculating as to the practicality and efficiency of using resources for this purpose.²³²

In other aspects of its operations, PWD has responded to the increased use of e-commerce in today’s world and the “clear customer preference” that customers have in using electronic communications.²³³ As Mr. Colton noted, for example, “[t]he trend of customers preferring to make payments via electronic means (ECK) rather than through the mail is evident. While electronic bill payments have more than tripled through this fiscal year, the percentage of payments made by mail (both in dollar terms and in numbers of payments) has decreased by more than 30%.”²³⁴ In contrast, PWD continues to force TAP participants to use “old technology” both in receiving reminders of the need to recertify, and in submitting recertification documentation.²³⁵ The Public Advocate submits that PWD should test a text-based recertification program to improve TAP retention. If successful, text-based recertification would help ensure the TAP rates remain available to low-income customers, promoting continued affordability and increase collectability. For these reasons, the Board should require quarterly reporting on the implementation, results and design of a text-based pilot recertification program.

²²⁹ PA St. 3 at 29.

²³⁰ PWD St. 3R at 5. PWD cites to its response at PA-I-26E to support its number, but that only cross references a different discovery response, PA-I-56. That response does not contain the 28,578 number provided by PWD in Rebuttal. By contrast, Mr. Colton’s estimate can be found in the response to PA-I-25E. Attachment PA-I-25_E5_2022, in the tab Summary (all time) for the week ending 2/18/2023.

²³¹ PWD St. 3R at 5.

²³² PWD St. 3R at 10-11.

²³³ PA St. 3 at 39.

²³⁴ PA St. 3 at 38.

²³⁵ PA St. 3 at 38-39.

B. Reports and Audits

1. *PWD is Failing to Track Important Metrics*

Mr. Colton recommends in his testimony that PWD be required to start reasonable data tracking as a means of controlling costs associated with nonpayment and to promote participation in low-income affordability programs. Mr. Colton discusses in detail the metrics that PWD does not track, based on responses to discovery. He concludes that the untracked data includes: basic billing and payment data disaggregated by zip code; information regarding arrears and payment difficulties; and, information regarding collections and the impact of collections activities.²³⁶ As Mr. Colton notes, these types of metrics are critical to measuring PWD's performance when it comes to billing, collections and controlling costs.²³⁷ As Mr. Colton concludes:

PWD is failing to take those actions which a reasonably prudent utility would take in order to control its costs. For example, while PWD does not “anticipate” any cost savings from its increase in the threshold of nonpayment disconnections to \$1,000, it could provide no empirical basis for the existence (or not) of such savings. (PA-VI-24). Nor could it make any projections of the dollar impact on collections by implementing this increased threshold. (PA-VI-25). Even though it increased its shutoff threshold to \$1,000, it does not have information on the number of accounts that have account balances of \$1,000 or more. (PA-VI-26(A)). It does not track the number of accounts that have account balances greater than \$1,000 (thus qualifying for a nonpayment shutoff) that do not get disconnected. (PA-VI-27(B)). It does not have information on the number of accounts with account balances exceeding \$1,000 that were reconnected after a nonpayment disconnection (PA-VI-29), let alone what the account balances were at the time of reconnection. (PA-VI-30(A) – 30(B)).

I agree with the World Bank's blog when it states, “as the management guru Peter Drucker famously said, ‘If you can't measure it, you can't manage it.’ If you don't measure, then how do you know how you are doing? How do you know if you are doing well? Or poorly?”²³⁸

The Board must require PWD to start tracking data to permit adequate review of PWD practices and policies that impact customer rates and charges. Without such information, PWD billing and collection activities, contributing to costs passed on to customers, cannot be reviewed to ensure their reasonableness in the context of setting customer rates and charges.

²³⁶ PA St. 3 at 51-54.

²³⁷ PA St. 3 at 50-51, 54.

²³⁸ PA St. 3 at 54.

2. *PWD Should be Required to Employ Reasonable Data Tracking and Reporting*

Mr. Colton recommends that PWD collect and report the following data, by zip code, tracked on a monthly basis:

- The dollars of billed revenue to residential customers;
- The dollars of receipts actually collected from residential customers;
- The number of bills rendered to residential customers;
- The number of payments received by or on behalf of residential customers;
- The mean and median residential customer bill;
- The aggregate dollars of residential arrears;
- The number of residential accounts in arrears.
- The percentage of residential accounts in arrears;
- The average residential arrears of residential accounts in arrears;
- The number of residential accounts with a \$0 balance by month;
- The number of shutoff notices issued to residential accounts;
- The average arrears on residential accounts to whom a shutoff notice was issued;
- The number of residential nonpayment disconnections;
- The average arrears on residential accounts disconnected for nonpayment;
- The aggregate dollars of arrears on disconnected residential accounts;
- The number of residential reconnections after a nonpayment disconnection;
- The number of residential accounts in arrears more than 30 days not on agreement;
- The dollars of residential arrears (older than 30 days) not on agreement;
- The average arrears of accounts in arrears (more than 30 days) not on agreement;
- The number of residential accounts in arrears (more than 30 days) on agreement;
- The dollars of residential arrears (older than 30 days) on agreement; or
The average arrears of accounts in arrears more than 30 days on agreement.²³⁹

Collecting this data would improve PWD performance in controlling customer service and collection costs, and as a result, would benefit all PWD ratepayers. PWD, in response, suggests that any additional reporting requirements would not be in the best interest of ratepayers, because new reports would require staff time and development resources.²⁴⁰ PWD's argument, at its core, is that additional reporting is not beneficial, simply because it would increase costs. This is a fundamental misunderstanding of Mr. Colton's suggestion – Mr. Colton is suggesting PWD invest in tracking and collecting data so that it can measure its performance and, as discussed above, evaluate the reasonableness of policies/practices that impact customer

²³⁹ PA St. 3 at 55-56.

²⁴⁰ PWD St. 3R at 19.

rates and charges. This critically important assessment can't be done without underlying data. PWD's argument that this tracking and reporting simply cannot be done because it would cost money, without any analysis of the benefits or the actual underlying costs, is disingenuous. Followed to its logical conclusion, PWD's argument would mean no costs are ever worth incurring, regardless of the benefit. This of course is fundamentally untrue – costs must be compared to benefits. In Mr. Colton's expert opinion, tracking these metrics, by zip code and by month, will lead PWD and its stakeholders to be able to engage in necessary analysis to understand whether PWD's billing and collections practices are appropriate to their mission – ensuring revenue comes back to the utility.

PWD also notes that its current water accounting and billing system is going through infrastructure and software upgrades and so all “non-urgent enhancements” are on hold until the upgrades take place.²⁴¹ As a result, the Public Advocate requests the Board require PWD to report quarterly on the specific work done to upgrade accounting and billing systems, the extent of work remaining to be done, an estimated timeline for completion, and, once upgrades are completed, the monthly billing and collection data identified by Mr. Colton (set forth above).

C. TAP Arrearage Forgiveness

1. *Ratable Arrearage Forgiveness*

Mr. Colton's testimony identifies several concerns with PWD's implementation of the earned forgiveness of pre-program arrearages component of TAP. The final Rate Determination in the 2021 General Rate Proceeding acknowledged serious questions about how PWD provides arrearage forgiveness.²⁴² On May 31, 2022, PWD adopted new regulations implementing “ratable” arrearage forgiveness.²⁴³ Those regulations set forth that in July 2022, all customers “maintaining enrollment in TAP” were to receive lump sum retroactive forgiveness proportional to the number of full monthly payments of TAP Bills issued on or after September 1, 2020.²⁴⁴ However, according to analysis by Mr. Colton, PWD appears to be improperly implementing this arrearage forgiveness.

²⁴¹ PWD St. 3R at 20.

²⁴² PA St. 3 at 56.

²⁴³ PA St. 3 at 57.

²⁴⁴ PA St. 3 at 58.

Consistently, more than 90% of customers newly enrolling in TAP brought pre-program arrearages into the program.²⁴⁵ Given that the vast majority of TAP customers enroll with preprogram arrears, it logically follows that the number of customers receiving lump sum forgiveness in July would have been pretty high. Yet, only roughly 60% of TAP participants received arrearage forgiveness in July 2022.²⁴⁶

The regulations further provide that after July 2022, for each full monthly payment made, PWD forgives 1/24th of the principal balance.²⁴⁷ Critically, this new regulation does not require on-time payments to receive arrearage forgiveness. Each full TAP bill earns forgiveness of 1/24th of principal. According to Mr. Colton’s analysis, after July 2022, the number of TAP participants receiving arrearage forgiveness dropped precipitously to between 19% and 31% of accounts.²⁴⁸

Mr. Colton explained why this data cannot support the conclusion that TAP participants are earning the forgiveness they are entitled to:

Two different lines of analysis lead to this conclusion. First, the Chart below presents the “payment coverage ratio” for TAP participants for each month compared to the percentage of TAP participants receiving arrearage forgiveness. The “payment coverage ratio” is a simple ratio. It places TAP payments in the numerator and TAP bills in the denominator. It would not be possible to (1) have nearly 100% of TAP participants bringing pre-program arrears into TAP; (2) have TAP participants routinely paying between 80% and 100% of their TAP bill each month, and (3) have less than 25% of those participants qualify for arrearage forgiveness.²⁴⁹

In addition, the percentage of TAP participants who paid their bill in full and on-time between July 2022 and January 2023 was between 50% and 60% - and yet after July 2022, the participants receiving forgiveness was fewer than half that percentage.²⁵⁰

PWD claims in rebuttal testimony that arrearage forgiveness is operating as required, stating that “[w]ithin that framework, there are a variety of circumstances that might influence whether a customer receives forgiveness in a particular month.”²⁵¹ PWD offers some possible scenarios that might explain a customer not receiving forgiveness, but fails to show that these

²⁴⁵ PA St. 3 at 57-58.

²⁴⁶ PA St. 3 at 59.

²⁴⁷ PA St. 3 at 58 (citing PWD Reg. § 206.7(e)).

²⁴⁸ PA St. 3 at 59.

²⁴⁹ PA St. 3 at 60-61.

²⁵⁰ PA St. 3 at 61 - 62.

²⁵¹ PWD St. 3R at 22.

scenarios explain the discrepancies identified by Mr. Colton.²⁵² For example, PWD suggests that some customers may not have had arrears eligible for forgiveness at initial enrollment, yet it is undisputed that 90% of TAP enrollees have preprogram arrears. PWD suggests that customers might have received full forgiveness, but PWD cannot reconcile this suggestion with the fact that in July 2022 (22 months after September 2020), no customer could have achieved 24 months of payments. Finally, PWD points to other hypothetical scenarios (e.g., bankruptcy, LIHWAP grants, etc.) that may or may not explain some of the customers not receiving arrearage forgiveness.²⁵³

The Public Advocate submits that an account-specific audit of TAP participation should be required, to ensure that each customer who should have received arrearage forgiveness has received that forgiveness. To the extent that TAP customers who are making full TAP payments are not being granted forgiveness as they complete their full payments, irrespective of whether those payments are timely, they are being denied rate benefits to which they are entitled under both City ordinance and City regulations. The Board should require PWD to provide an accounting of TAP participants by month starting on July 1, 2022 and ending June 30, 2023, as recommended by Mr. Colton.²⁵⁴ PWD has not provided sufficient justification for the discrepancies between the number of in-full payments and the number of participants receiving arrearage forgiveness. Because TAP is a rate, the payment of which entitles the TAP customer to forgiveness of pre-TAP arrears, the Board may reasonably require PWD to ensure that customers are receiving the legally-required benefits associated with payment.

2. Arrearage Forgiveness for TAP Re-Enrollees

As established in Mr. Colton's testimony, only those TAP participants enrolled in TAP on July 1, 2022 received retroactive arrearage forgiveness – 1/24th of principal for each full TAP payment made since September 2020. Customers who had been enrolled between September 2020 and July 2022, but who were not in TAP on July 1, 2022, did not receive any retroactive

²⁵² PWD St. 3R at 22.

²⁵³ PWD St. 3R at 22.

²⁵⁴ For each account, PWD should report: (1) the total dollars of pre-program arrears existing on each TAP account in each month; (2) the total dollars for current service appearing on bills for each account beginning with July 2022 and continuing until the accounting is complete; (3) the total dollars paid on behalf of that account beginning with July 2022 and continuing until the accounting is complete; (4) the total dollars of arrearage forgiveness that have been credited to the account beginning in July 2022 and continuing until the accounting is complete. To the extent that this accounting reveals arrearage forgiveness that had been earned, but had not been granted, that arrearage forgiveness should be retroactively credited to the customer's account irrespective of whether the customer remains a TAP participant. PA St. 3 at 63-64.

arrearage forgiveness.²⁵⁵ Nor do those customers receive that retroactive arrearage forgiveness immediately upon reenrollment back into TAP. Rather, the first TAP bill payment following reenrollment in TAP triggers the earned principal arrearage forgiveness.²⁵⁶ As Mr. Colton's analysis demonstrates, TAP re-enrollees since July 1, 2022 did not receive retroactive arrearage forgiveness at the time they reenrolled in TAP:

The data shows that, whether or not PWD granted retroactive arrearage forgiveness to customers who were TAP participants on July 1, 2022, it does not appear that PWD has been granting retroactive arrearage forgiveness to prior TAP participants who re-enroll in TAP "as of" (i.e., on or after) July 1, 2022. Consider that it is possible to determine the number of new TAP enrollees in any given month who are prior TAP participants with arrearage forgiveness. I then compare a hypothetical forgiveness of 50% of those arrears to the total arrears that were forgiven in the month. Remember, that beginning July 1, 2022, the arrears for prior TAP participants who re-enroll in TAP are to receive a retroactive arrearage forgiveness equal to "a one-time lump sum forgiveness of Pre-TAP arrears, in an amount calculated by multiplying the amount of the Customer's Pre- TAP arrears by 1/24 and then by the number of full monthly payments of TAP Bills issued on or after September 1, 2020." Remember, further, that in the time period July 2022 to the present, as I documented above, between 50% and 60% of TAP participants made full and timely payments of their TAP bills from September 2020 through June 2022. Remember, further, that the regulation does not require TAP payments made during that period to have been "timely" in order to generate an arrearage forgiveness credit. Given those observations, consider that:

- Even if the pro rata share of arrearage forgiveness is only 50% of the preprogram arrears on TAP participant bills when they re-enroll had PWD granted this forgiveness, it would have exceeded the total forgiveness granted by PWD in the period July 2022 through January 2023. It is thus possible to conclude that PWD did not grant forgiveness to these prior TAP participants.
- If PWD's grant of ratable retroactive arrearage forgiveness to prior TAP participants reflected their payment coverage ratio in the period September 2020 through June 2022, a percentage that is reflected in the regulatory language (forgiveness based on "the number of full monthly payments of TAP Bills issued on or after September 1, 2020"), the amount of forgiveness for prior TAP participants would be not simply in excess of the total arrears actually forgiven subsequent to July 2022, but would be substantially in excess of that total arrears.

²⁵⁵ PA St. 3 at 73-74.

²⁵⁶ See PWD St. 3R at 23.

- The failure to grant ratable retroactive arrearage forgiveness to prior TAP participants who re-enroll in TAP and made payments in the time period of September 2020 to June 2022 would be a significant dollar figure.
- As more and more months elapse beyond July 2022, the number of prior TAP participants who are re-enrolling in TAP, and who would be entitled to ratable retroactive arrearage forgiveness for the full payments they made between September 2020 and June 2022, is declining, along with the dollar amount of forgiveness that would be granted.²⁵⁷

Again, PWD does not directly address Mr. Colton’s analysis or the discrepancies he identifies. Nor does PWD provide any evidence to disprove Mr. Colton’s findings. Rather, PWD simply reiterates its policy – that re-enrollees receive retroactive forgiveness after their first bill payment following reenrollment.²⁵⁸

As recommended above, PWD should be required to undertake and provide an account-specific audit of TAP participants by month starting on July 1, 2022 and continuing through June 30, 2023 that reports for each account: (1) the total number of TAP participants in each month that had, at some point in the period September 2020 through June 2022, been a TAP participant;²⁵⁹ (2) the total dollars of pre-program arrears existing on that account as of July 2022; (3) the total dollars for current service appearing on bills for each account beginning with September 2020 and continuing until July 1, 2022; (4) the total dollars paid on behalf of that account beginning with September 1, 2020 and continuing until July 1, 2022; and (5) the total dollars of arrearage forgiveness that were credited to the account beginning in the month in which the customer re-enrolled in TAP. To the extent that this audit reveals arrearage forgiveness that had been earned pursuant to the City’s regulations, but had not been granted, that arrearage forgiveness should be retroactively credited to the customer’s account irrespective of whether the customer remains a TAP participant.

PWD asserts that to the extent this recommendation requires providing customer names, addresses and financial information, that disclosure is prohibited by City policy and State and Federal law.²⁶⁰ Further, PWD states that it is already providing monthly reports to the Rate

²⁵⁷ PA St. 3 at 72-74.

²⁵⁸ See PWD St. 3R at 23.

²⁵⁹ See PA-I-7 (PWD concedes that it can track applications that are received from customers who had previously been enrolled in TAP).

²⁶⁰ PWD St. 3R at 24.

Board, implying an account specific audit wouldn't be necessary. However, the current monthly reports don't do the type of account-by-account analysis that is needed in this situation. To the extent required, any of this accounting that is reported to the Board or made public can be redacted to protect private customer information.

In addition, the Board should require PWD to provide retroactive arrearage forgiveness to eligible re-enrollees at the time of re-enrollment – rather than their current stated policy, which requires one full payment after re-enrollment. PWD's current policy is directly in conflict with its regulation, which requires only that “[a]s of July 1, 2022, all Customers maintaining enrollment in TAP will receive a one-time lump sum forgiveness of PreTAP arrears....”²⁶¹ The regulation does not require a customer to make an additional payment to receive already earned forgiveness.

As noted above, because TAP is a rate, the payment of which entitles the TAP customer to forgiveness of pre-TAP arrears, the Board may reasonably require PWD to ensure that customers are receiving the legally-required benefits associated with payment. Accordingly, as recommended by Mr. Colton, the Board should require PWD to refund, either as a bill credit or as a cash payment to the customer, at the customer's discretion, all dollars of payments made by the customer toward pre-program arrearages that should have been ratably, retroactively forgiven pursuant to PWD regulations,. The value of the refunds should be escalated from the date the forgiveness should have been provided in the first instance to the date on which it is provided at a rate equal to the short-term borrowing of unsecured residential credit.

3. Arrearage Forgiveness for Occupants

PWD regulations define “pre-TAP arrears” for both owners and occupants as “the sum of all unpaid service, usage, and stormwater charges at the property, calculated at the time of first enrollment in TAP.”²⁶² This is in contrast to the treatment of tenants, whose pre-TAP arrears only include charges at the property when the tenant was responsible for water service under the lease.²⁶³ Yet PWD does not distinguish between homeowners, tenants and occupants in its TAP application process. Nor is it able to provide specific reporting of the number of occupants approved for TAP, instead collapsing tenants and occupants into the same category.²⁶⁴ By not

²⁶¹ PWD Reg. § 206.7(c).

²⁶² PWD Reg. § 206.6(m).

²⁶³ PWD Reg. § 206.6(m).

²⁶⁴ PA St. 3 at 77

tracking occupants separately from tenants, PWD is unable to actually follow its own regulations to ensure that full account balances are placed in occupant customer's pre-TAP arrears.²⁶⁵ Rather than respond to these operational concerns, PWD merely restates the policies set forth in its regulations.²⁶⁶

In the absence of a showing by PWD that Mr. Colton's operational concerns are unfounded, the Board should require PWD to again do an account-specific audit of occupant customer TAP participants for July 2022 until present. Specifically, this auditing should include: (1) the total dollars of arrears on the occupant's property existing at the time the occupant became a TAP participant; (2) the total dollars of arrears that were included on the occupant's TAP account as a "pre-TAP arrears" subject to forgiveness; and (3) the proportion of pre-TAP arrears that have been forgiven to date. To the extent that the dollars of arrears on the occupant's property are more than the dollars of arrears deemed to be "pre-TAP arrears" subject to forgiveness, the amount of pre-TAP arrears should be adjusted to include the larger amount and the customer's account should be retroactively credited with arrearage forgiveness based on that larger amount.

The Public Advocate notes that the proposed stipulation regarding sequestration issues, discussed below, recognizes that transferring balances to pre-TAP arrears is currently a manual process both for occupants and tenants alike. As a result, the Public Advocate maintains that the recommended audit, described above, should also examine whether tenants who have enrolled in TAP have had balances appropriately transferred and made subject to arrearage forgiveness.

VIII. CUSTOMER SERVICE ISSUES

A. Collection of Court Filing Fee for Municipal Liens

As discussed in Section VIII.B, below, PWD continues to lien properties for balances that have been frozen and placed into TAP pre-program arrears. When it does so, it also places a court filing fee on the TAP customer's bill. As Mr. Colton discusses, this placement of a lien filing fee onto the TAP customer's bill is in direct contravention to the language of TAP's enabling statute, which states that "Low-income customers who are enrolled in IWRAP *shall be required to make no additional payment in respect to any pre-IWRAP arrears* to maintain

²⁶⁵ PA St. 3 at 77-78.

²⁶⁶ PWD St. 3R at 24-25.

service.”²⁶⁷ Although PWD counters that TAP customers are only required to pay TAP charges to maintain service,²⁶⁸ that is not the message conveyed by including additional charges on the TAP customer’s bill associated with the lien filing. The Public Advocate submits that PWD should discontinue filing liens to secure debts incurred by TAP customers, as discussed below, and likewise discontinue imposing lien filing fees on TAP participants bills.

As Mr. Colton explained:

The lien fee is a fee imposed by the judicial system on PWD when a lien is filed against a TAP participant. It is PWD’s choice to pass that dollar amount on to customers by including it on a TAP participant’s bill. Given that the City’s legislation provides that “pending enforcement actions shall be discontinued after a customer enters into [TAP],” incurring the lien fee involves an unreasonable action by PWD. PWD should not be allowed to include that lien fee in rates to be charged to customers. As of June 30, 2022, PWD had imposed liens on 40.8% of TAP participants (4,086 / 10,042). As of February 28, 2023, PWD had imposed liens on 34.1% of TAP participants (5,132 / 15,032). Using the lien fee of \$91.45 identified by PWD, applying the average percentage of TAP participants on whom PWD has imposed liens (given the data PWD provided when asked) (37.5%), and using the expected FY2024 TAP participation rate agreed upon by PWD and the Public Advocate in the TAP-R settlement (16,479), reinstating the TAP hold on liens would affect 6,176 TAP participants. I recommend that \$564,795 (6,176 x \$91.45) in PWD expenses associated with TAP lien fees be disallowed in FY 2024 and FY 2025.²⁶⁹

Mr. Colton’s recommendation recognizes the reality that PWD’s filing of liens to secure pre-TAP indebtedness is a cost created by PWD that is ultimately passed on to other customers. It is true that the TAP customer receives a bill reflecting a TAP lien charge, and thus is advised that the City’s action has increased their indebtedness. As a result, Mr. Colton’s criticism, that PWD is taking collections actions contrary to City ordinance, is well put.

More importantly, however, is that the cost incurred by the City is totally avoidable and simply serves to increase the rates and charges billed to non-TAP customers. Indeed, as the City recognizes, when a debt is forgiven, as is the case with pre-TAP arrears, the associated water lien is *vacated*.²⁷⁰ Unlike when a lien and associated filing fees are paid in full, resulting in *satisfaction* of the claim, pre-TAP debt forgiveness results in the liens becoming null and void

²⁶⁷ PA St. 3 at 103 (citing Phila. Code §19-1605(3)(h)).

²⁶⁸ PWD St. 3R at 31.

²⁶⁹ PA St. 3 at 104:4-18.

²⁷⁰ PA St. 3 at 99 (citing response to PA-VI-11).

without payment of the underlying debt or the lien fees.²⁷¹ As a result, the entire filing fee associated with the City's liens is a cost that is never intended to be repaid by the TAP customer. As a result, imposing liens on TAP customers' properties creates costs for PWD that are not necessary and reasonable and should not be included in the cost of service for ratemaking purposes. The Board should reduce PWD's projected O&M by \$565,000 in FY 2024 and \$565,000 in FY 2025 to disallow these costs in rates.²⁷²

B. Municipal Liens on TAP Participants

Under current practices, when a customer is enrolled in TAP, PWD will move forward with placing a lien on the property for the customer's debt, including debt that constitutes pre-program arrears subject to earned forgiveness. In order to avoid incurring the costs Mr. Colton recommends be disallowed in Section VIII.A, Mr. Colton recommends that PWD adopt a "lien blocker" for TAP participants, as well as declare that pre-program arrears that are frozen and eligible for forgiveness should not be claims that are due to the City or considered unpaid.²⁷³ As Mr. Colton explains:

There is no exception in the Regulations for pre-TAP arrears that PWD chooses to seek to enforce through the lien process. A customer who is enrolled in TAP "will earn forgiveness" under specified circumstances. Those circumstances are defined in the Regulations ("upon making each full month payment of the TAP Bill"). Thus, under the City Council's *legislation*, the customer is *entitled* to that complete forgiveness when those circumstances are met ("Earned forgiveness of arrearages shall be available under such terms and conditions as are adopted by regulation").

For this provision of arrearage forgiveness issue, while PWD is authorized to promulgate regulations to implement an arrearage forgiveness program, PWD actions are thus constrained by the language of the ordinance directing that arrearage forgiveness be "available." To the extent that the PWD actions make arrearage forgiveness *unavailable*, those actions are unauthorized by, and in conflict with, the City's ordinance creating TAP.²⁷⁴

PWD glosses over Mr. Colton's suggestion that frozen pre-program arrears cannot be considered as claims due to the City or considered to be unpaid, as long as the customer remains on TAP.²⁷⁵

Indeed, PWD's witnesses appear to concede that PWD does in fact consider liened pre-TAP

²⁷¹ See *Black's Law Dictionary* 1546 (7th ed. 1999) (definition of "vacate.")

²⁷² PA St. 3 at 104; Appendix A, Line 14.

²⁷³ PA St. 3 at 97.

²⁷⁴ PA St. 3 at 98:18-31.

²⁷⁵ See PWD St. 3R at 32.

indebtedness different from other lien water debt, suggesting that pre-TAP debt is “albeit protected debt.”²⁷⁶ This terminology “albeit protected debt” has no source or reference and appears to be a made-up phrase. Nonetheless, it conveys, indirectly, what Mr. Colton’s testimony proves directly: placing liens for pre-TAP arrears on TAP customers’ accounts, thereby securing them and creating additional debt, is inconsistent with TAP, its authorizing ordinance, and the availability of pre-program arrearage forgiveness.

City Council, in the ordinance requiring the establishment of TAP, specifically articulated that TAP participants would “be required to make no additional payment in respect to any [pre-TAP] arrears to maintain service.”²⁷⁷ Likewise, City Council mandated that standards be adopted to *discontinue* pending enforcement actions after a customer enrolls in TAP.²⁷⁸ PWD’s TAP lien practices contravene both the purpose and language of City Council’s ordinance. Rather than discontinuing enforcement actions, by placing a lien, PWD actually *commences* enforcement action, signaling to the TAP customer that collection of pre-TAP arrears will be accomplished, if not voluntarily by means of customer payment, then involuntarily by recovering the debt in a proceeding *in rem*. This directly conflicts with the mandate that earned forgiveness *shall* (must) be available to the TAP participant.

While the Board cannot directly require PWD to implement a lien blocker, it is clearly necessary that PWD conform its practices to the intent of City Council and stop imposing liens on TAP customers’ homes. Significantly, if PWD adopts Mr. Colton’s recommendation it would avoid incurring the lien filing costs, the recovery of which is not intended to be accomplished by PWD in connection with the TAP program. As a result, as Mr. Colton submits, the projected lien filing fees should be denied for purposes of determining PWD revenue requirements. In doing so, the Board will ensure that imprudent and unnecessary costs, contrary to the purpose and intent of TAP, are excluded from the cost of service to the benefit of all customers.

C. Late Fee Revenues

Mr. Colton proposes that the Board approve additional costs to support programs for the specific purpose of benefitting the customers who are most likely face late fee charges imposed by PWD. He explains:

²⁷⁶ PWD St. 3R at 32.

²⁷⁷ Phila. Code §19-1605(3)(h).

²⁷⁸ Phila. Code §19-1605(3)(m).

PWD imposes a “penalty” for unpaid water charges (hereafter, “late payment charge”). PWD could provide no cost basis for the late payment charge. Instead, PWD cites a municipal ordinance for its authority to impose such a charge. (PA-I-38, citing Philadelphia Code, Section 19-1606(2)). Not only does the late payment charge lack a cost basis, in addition, PWD has no basis upon which to conclude that its late payment charge serves as an incentive to pay, either for residential customers as a whole or for low-income customers. (PA-I-52). PWD has no basis to conclude that imposing its late payment charge reduces residential bad debt (PA-I-53(c)). Nor does it have any basis to conclude that imposing its late payment charge reduces residential arrears. (PA-I-54(c)).

Despite its lack of functionality, either to recover identified costs, or to serve as an incentive to pay, or as a mechanism to control bad debt or arrears, from June 2021 through December 2022, PWD charged a total of \$22,308,948 in late payment charges to 2,911,371 accounts. On average, each month, PWD imposes \$1,174,155 in late payment charges to 153,230 customers. (PA-I-49). In the 12-months July 2021 through June 2022, PWD imposed \$13,738,767 in late payment charges. Moreover, the amount of late payment charges has been increasing on a year-over-year basis. While PWD imposed \$6,252,491 in late payment charges from July 2021 through December 2021, it imposed \$7,527,489 in late payment charges for the corresponding six month period of July through December 2022, an increase of 20%.

Billing \$22.3 million in revenue from a charge that is neither cost-based, nor which serves any identified functionality, is a tremendous burden to impose on PWD customers.²⁷⁹

As detailed by Mr. Colton, there is no basis upon which to conclude these late payment charges serve as an incentive to pay, or reduce residential bad debt or residential arrears.²⁸⁰ The Public Advocate submits that the Board should include in the cost of service funding for specific programs that will help reduce residential bad debt or residential arrears, keeping households connected to water service.²⁸¹ By implementing these programs, PWD will benefit the customer base most likely to incur or pay such late payment charges in the first place, reducing their burden and improving collections.²⁸² Because of the low TAP enrollment across PWD’s customer base, most low-income customers are not protected from these late payment charges. In addition, many of the areas within the PWD service territory with the highest concentrations of poverty have the lowest TAP participation rates.²⁸³

²⁷⁹ PA St. 3 at 79:7-80:6.

²⁸⁰ PA St. 3 at 79.

²⁸¹ PA St. 3 at 80.

²⁸² PA St. 3 at 80.

²⁸³ PA St. 3 at 81.

PWD argues in its Rebuttal that this proposal (colloquially referred to as an “earmark”) conflicts with the provisions of the General Ordinance concerning application of Project Revenues.²⁸⁴ PLUG in rebuttal asserts generalized statements regarding late fees, without challenging Mr. Colton’s conclusion that PWD’s specific charges are not cost-based and lack functionality.²⁸⁵ Furthermore, PLUG’s fairness argument vis-à-vis other customer classes is misguided for the simple reason that Mr. Colton’s analysis only takes into consideration late fees charged to residential customers.²⁸⁶ Mr. Colton recognizes that PWD is required to charge specified late payment charges on delinquent bills, and that revenues must be applied consistent with the General Ordinance.²⁸⁷ Mr. Colton is not challenging PWD’s imposition of late payment charges, but is proposing PWD’s rates be set including costs for programs specifically intended to benefit customers by avoiding additional late fees.

PWD fundamentally misunderstands the recommendation Mr. Colton is making. Mr. Colton is not recommending that the specific dollars collected as late payment charges be segregated from all other revenues nor accounted for in any specific way. Rather, he simply acknowledges that these payments constitute revenues that PWD collects and can be recognized as adequate within the cost of service to ensure funding for the programs he identifies. Including for ratemaking purposes the costs of the programs Mr. Colton suggests, as discussed below, would be no different than recognizing any cost otherwise included in PWD projections. Based on the volume of late payment charges, most likely charged to low-income customers who struggle to pay their bills, it is reasonable to provide additional investment in programs that will help prevent these charges in the future and reduce the burden they place on low-income customers. The Public Advocate notes that funding these programs would also be responsive to several concerns raised during public input hearings.

D. Implementation of a Water Conservation Program

To help those customers that are most impacted by late fees, PWD should expand its water conservation program to specifically direct additional water conservation investments to low-income customers. As Mr. Colton notes, PWD has refrained from accounting for inflation in

²⁸⁴ PWD St. 1R at 24.

²⁸⁵ PLUG St. 1R at 15.

²⁸⁶ PA St. 3 at 79, referring to PA-I-49 (reporting dollars of *residential* late fee revenue and number of *residential* accounts paying a late charge).

²⁸⁷ PA St. 1 at 23.

its Low Income Conservation Assistance Program (LICAP) budget.²⁸⁸ The Public Advocate asserts that PWD should, in conjunction with documentation from its contractor, issue an inflation adjusted budget for LICAP.²⁸⁹ Furthermore, additional funding should be approved to target new TAP enrollees, therefore providing benefits to both the customer who receives the support and the entire rate base since it will reduce the amount of TAP credit needed.²⁹⁰ Additionally, the Board should require PWD to allocate funding to a water conservation component to Low Income Usage Reduction Program (LIURP)²⁹¹ jobs completed by PWDs sister utilities. PECO and PGW have already undertaken the process of outreach and intake and adding PWD funding would allow the program to reach more customers without much of an administrative burden.²⁹²

With the budget for LICAP as is, PWD is only able to serve 2,330 low-income households a year out of an estimated 170,000 low income customers, meaning it would take 70 years to service all of them.²⁹³ Cost reductions commonly associated with low-income conservation investments include savings such as reduced bad debt, reduced working capital, and reduced credit and collection expenses.²⁹⁴ The existence of direct financial benefits to utilities arising from conservation programs targeted specifically to low-income households has been recognized for over 35 years.²⁹⁵

PWD does not directly respond to Mr. Colton's recommendations regarding LICAP. Indeed, PWD's lack of consideration of Mr. Colton's testimony that increased funding is needed to help defray costs for low income customers and all customers paying for TAP credits is striking. Instead, PWD simply repeats its irrelevant assertion that funds can't be specifically earmarked, and notes, that as part of its current LICAP funding, cross-referrals between PWD and PECO/PGW do occur.²⁹⁶ As discussed above, the Public Advocate is recognizing a connection between a source of revenue (customers who are charged late payment charges, often because they cannot afford bills) and a demonstrated need to be met, to the benefit of all

²⁸⁸ PA St. 3 at 82.

²⁸⁹ PA St. 3 at 82

²⁹⁰ PA St. 3 at 83

²⁹¹ See 52 Pa. Code §§54.72, 62.2 (defining LIURP).

²⁹² PA St. 3 at 83.

²⁹³ PA St. 3 at 84. Even using PWD's estimate of 56,000 TAP-eligible households, which, as discussed above, is surely an underestimate, it would take 24 years to service all of them.

²⁹⁴ PA St. 3 at 84-85.

²⁹⁵ PA St. 3 at 84-85.

²⁹⁶ PWD St. 3R at 27.

ratepayers. The Public Advocate requests the Board direct PWD to increase LICAP funding to adjust for inflation and to serve more households. At the existing LICAP fee of \$300 per job, approving the inflation adjustment would reflect an additional \$600,000 in FY 2024 and FY 2025 expenses in revenue requirements.²⁹⁷ Increasing the program to serve more households would reflect an additional \$1,130,000 in FY 2024 and FY 2025 expenses in revenue requirements.²⁹⁸

E. Implementation of an Internal Repair Plumbing Program

Mr. Colton proposes that PWD fund a pilot interior plumbing repair program for low income households with high water consumption, with eligibility going up to 250% of the Federal Poverty Level, which would include customers eligible for TAP and for extended payment arrangements.²⁹⁹ Addressing high water consumption from those in need of interior plumbing repairs who cannot afford them reduces water usage (and associated cost of service) and benefits all ratepayers by reducing the amount of uncollectables that result from customers' inability to pay high usage bills due to leaks.³⁰⁰ It also furthers the general goal of water conservation.³⁰¹ Mr. Colton specifically recommends allocating \$2,156,000 million over the next 3 years.³⁰² PWD should mirror Pittsburgh Water & Sewer Authority's (PWSA) approach by targeting those with average monthly usage at or above 7.35 CCF. Mr. Colton notes that that threshold can be adjusted if the program yields too many or too few program participants.³⁰³ Repairs that have the most significant impact on usage should be prioritized.³⁰⁴ Mr. Colton recommends implementing the pilot program in the following manner:

No cost internal plumbing repair services will be offered to an eligible property at an initial not-to-exceed cost. The specific repair services to be offered will be based on the needs of the property as may be implemented within the initial not-to-exceed cost. Those repairs that will have the most significant impact on reducing usage will be prioritized. If a determination is made by the contractor that additional repairs beyond the initial not-to-exceed cost repairs could be beneficial, that information will be documented by the contractor and provided to PWD staff. It will then be further evaluated to determine

²⁹⁷ PA St. 3 at 83; Appendix A, Line 16.

²⁹⁸ PA St. 3 at 89; Appendix A, Line 15.

²⁹⁹ This suggestion mirrors a program recently approved by the PUC for PWSA. PA St. 3 at 87.

³⁰⁰ PA St. 3 at 87; see also PA St. 3 at 91 ("For the non-low income customer, their costs are also higher both in terms of shouldering a larger burden of the uncollected costs incurred when the low income customer cannot pay the increased costs and paying the increased overall system costs that occur from the waste of water.").

³⁰¹ PA St. 3 at 87.

³⁰² PA St. 3 at 87; Appendix A, Line 17.

³⁰³ PA St. 3 at 88-89

³⁰⁴ PA St. 3 at 89.

whether or not the additional work would be beneficial based on a consideration of (1) the level of the daily high consumption, (2) the estimated dollar amount of damage caused to the customer's property by the leak; (3) the amount of outstanding unpaid charges for the property, (4) the anticipated effect of the proposed repairs on reducing the high consumption, resulting in significant bill savings and usage reductions for the customer, and (5) the number of other properties eligible for services from the remaining budget....

All work will be performed by licensed plumbing contractors. If, upon the date set for the initial repair work, the contractor identifies an urgent need that the contractor can address at that time, but which exceeds the scope of the initial not-to-exceed budget, the contractor will be directed to contact the PWD team. Additional repair work may be authorized at the discretion of PWD based upon consideration of the guidelines identified above.

Eligible properties may receive a repair of a leak on exposed plumbing and installation of: (1) two faucet aerators, (2) one low flow showerhead; and (3) one low flow toilet replacement. The proposed not to exceed cost of these three services is \$2,500. PWD's contractor will have the flexibility, based on the needs of the specific property, to determine which of these services or any combination thereof would best address the high consumption and may implement them so long as the cost to implement is within the not-to-exceed initial cost.³⁰⁵

Mr. Colton's proposal recognizes that those who are at or below 250% FPL are unable to afford internal plumbing repairs. Furthermore, the pilot would providing meaningful assistance to customers generally, helping to reduce uncontrollable usage and high uncollectible bills.³⁰⁶ Following the initial three-year pilot, Mr. Colton recommends the program be evaluated to determine whether or not it is cost efficient and is providing measurable results.³⁰⁷ The evaluation will provide PWD and other stakeholders an opportunity to evaluate whether program improvements or refinements are necessary to continue to provide water repair assistance.

In response to Mr. Colton's proposal, PWD merely states that "a program of this type would duplicate the efforts (programs) or other City and non-profit agencies serving low-income customers."³⁰⁸ However, PWD fails to acknowledge that the existing programs in the City do not have nearly the resources to address the full scope of home repairs needed in the City of

³⁰⁵ PA St. 3 at 89-90.

³⁰⁶ PA St. 3 at 91.

³⁰⁷ PA St. 3 at 90.

³⁰⁸ PWD St. 3R at 28.

Philadelphia.³⁰⁹ Indeed, funding a pilot for internal plumbing repairs would address a specific need for many PWD customers, to the benefit of both the customer themselves and the rate base as a whole. The Public Advocate submits that the Board should include the cost of the pilot program, \$2,125,000 in the cost of service for FY 2024 and FY 2025³¹⁰ and require PWD to report quarterly on its progress toward implementation and, once implemented, work performed (repairs conducted, disaggregated by type).

F. Expansion of Support for UESF

PWD provides matching grants for emergency hardship grants provided by UESF. While helpful, the existing grants do not come close to meeting the needs of PWD customers in arrears.³¹¹ UESF grants have not kept pace with the growth in arrears.³¹² As demonstrated by Mr. Colton, more than 45,000 customers have arrears greater than \$1000.³¹³ Simply put, the current UESF budget of 300,000 is grossly inadequate to meet the need of PWD customers.³¹⁴ The Public Advocate recommends that PWD increase its budget for UESF to \$3,000,000 and that the Board include this expense for ratemaking purposes for FY 2024 and 2025.³¹⁵ Doing so would reduce late payment charges as well as uncollectible expenses associated with households unable to pay their full bills.

As explained by Mr. Colton, UESF grants are only provided to customers who have had their service disconnected or are in danger of disconnection. However, due to protections against shutoff put in place by PWD (namely the \$1,000 balance threshold for shut off), many households are not be eligible for UESF grants.³¹⁶ Mr. Colton proposes that UESF hardship grants be available to help pay balances of \$500 or more, irrespective of their shutoff status.³¹⁷ He also recommends increasing eligibility to households at or below 250% FPL, as well as making these grants available to non-customers such as tenants who demonstrate that they are

³⁰⁹ See Michaëlle Bond, Repairing all the homes in the Philly area would cost at least \$2.7 billion, Phila. Inquirer (March 14, 2023), available at <https://www.inquirer.com/real-estate/housing/home-repair-cost-grants-pennsylvania-philadelphia-fed-funding-20230314.html> (“Philadelphia residents face long wait lists for free or reduced-cost help from home repair programs in the city.”).

³¹⁰ Appendix A, Line 17.

³¹¹ PA St. 3 at 93.

³¹² PA St. 3 at 93-94.

³¹³ PA St. 3 at 94. This \$1000 threshold is important – currently, \$1000 in arrears is the threshold at which PWD will issue a shutoff notice and the threshold at which PWD will impose a lien. Id.

³¹⁴ PA St. 3 at 94.

³¹⁵ Appendix A, Line 18.

³¹⁶ PA St. 3 at 96.

³¹⁷ PA St. 3 at 96.

required to pay their water bills but cannot get the bill in their name.³¹⁸ Such households are shut out of TAP and therefore are unprotected from water rate increases, even as they struggle to afford increasing costs of water. Rather than respond to Mr. Colton’s substantive proposal to increase funding for grants to be used by UESF, PWD states that “contributions to UESF are interconnected with PECO and PGW, any additional contributions to UESF would greatly impact our sister utilities and would require further negotiation and discussion.”³¹⁹ PWD provides no further detail or context regarding potential impacts on PECO or PGW. Moreover, to the extent negotiations and discussions are in fact necessary, the Public Advocate submits that they can reasonably take place over the next handful of months.³²⁰

The Public Advocate submits that PWD should increase its allocation for grant assistance to UESF by \$3,000,000 and provide the funding with the conditions listed above (that it be available to any household with a back balance of \$500 or greater, regardless of shutoff status, and that non-customers who show responsibility for the water bill be eligible for these grants as well). The Public Advocate submits that the Board should include the \$3,000,000 increased UESF grant assistance as an expense for ratemaking purposes and require PWD to report quarterly on its progress toward implementation and utilization of increased grant amounts to benefit PWD customers.

G. Sequestration Practices

At the March 22, 2023 afternoon Public Input Hearing, Ms. Roxane Crowley, an attorney who represents low-income Philadelphians who contact the “Save Your Home Philadelphia” hotline, testified about her clients’ experiences with the City’s water sequestration program.³²¹ The City is permitted by the Municipal Claims and Tax Liens Law (MCTLL) to petition the Court of Common Pleas to appoint a sequestrator to collect “rents, issues, and profits” to satisfy outstanding municipal liens associated with water and wastewater service.³²² However, as Ms. Crowley testified, her clients have been taken to Court in sequestration proceedings where there are no rents, issues or profits to collect. Indeed, Ms. Crowley testified that the City is pursuing

³¹⁸ PA St. 3 at 96.

³¹⁹ PWD St. 3R at 30:14-16.

³²⁰ Given the Board is required to render a Final Determination within 120 days of PWD’s Formal Notice, it is reasonable to expect PWD can operationalize the Public Advocate’s recommendation within a corresponding timeframe.

³²¹ March 23 Aftn. Pub. Hrg. Tr. at 26.

³²² 53 P.S. §7275.

sequestration against homeowners and occupants where the customer is enrolled in TAP and an outstanding balance has not been transferred into pre-TAP arrears as it should have been.³²³ In one instance, Ms. Crowley reported the City demanded payment of \$6,000 from a homeowner to avoid the appointment of a sequestrator. The homeowner was thereafter unable to make mortgage payments and is facing foreclosure.³²⁴

Mr. Colton testified that “[t]he circumstances described by Ms. Crowley represent a clear violation of City Regulations” which require “all unpaid service, usage, and stormwater charges at the property” to be included in pre-TAP arrears for homeowners and occupants.³²⁵

Additionally, Mr. Colton observes that continued collections actions violate the Philadelphia Code provisions that ensure that pending enforcement actions shall be discontinued after a customer enrolls in TAP.³²⁶ In response to Public Advocate discovery, PWD asserted that, *as a matter of policy*, all prior debt is transferred to occupant customer accounts and included in pre-TAP arrears and claimed that no petitions have been filed “against properties *owned by* TAP customers.”³²⁷ However, those statements do not dispute that the City has *maintained, in practice*, sequestration actions against occupants enrolled in TAP.

In confidential discovery responses, the Public Advocate identified the properties referred to by Ms. Crowley in testimony, as well as four other properties (and associated Common Pleas Court Docket numbers), demonstrating the City has maintained sequestration actions against properties where there are no rents, issues or profits, without transferring balances to occupant customers and even after occupant enrollment in TAP. In rebuttal, PWD asserts that the sequestration program has benefitted City collections and points to a letter by counsel for the Public Advocate acknowledging that City data is imperfect and recognizing that City policy is to discontinue sequestration proceedings once it is demonstrated that there are no tenants in the property.³²⁸ Additionally, the City recognized that the properties identified confidentially through discovery are no longer involved in sequestration proceedings because there are no tenants at the premises and/or the customers have enrolled in TAP.³²⁹

³²³ March 23 Aftn. Pub. Hrg. Tr. at 26.

³²⁴ March 23 Aftn. Pub. Hrg. Tr. at 26-27.

³²⁵ PA St. 3 at 106 (citing PWD reg. §206.6(m)).

³²⁶ PA St. 3 at 106 (citing Phila. Code §19-1605(3)(m)).

³²⁷ PA St. 3 at 107 (citing responses to PA-XI-1, 3, and 14(D)).

³²⁸ PWD St. 3R at 33.

³²⁹ PWD St. 3R at 34.

Mr. Colton recommended that an outside auditor should be retained to examine whether there are TAP participants who have not had their pre-TAP arrears determined correctly, consistent with PWD Regulations.³³⁰ He further submitted that the auditor should report its findings to the Board and that PWD should make diligent efforts to identify others who may have been charged inappropriately.³³¹ Ultimately, counsel for the Public Advocate and PWD were able to successfully enter into a proposed stipulation, which was entered on the record at the May 5, 2023 Technical Hearing. Pursuant to the proposed stipulation, PWD and the Public Advocate recognize that efforts are ongoing to ensure that balance transfers occur in a timely fashion, but are currently accomplished manually. Additionally, the City agrees to promptly discontinue sequestration proceedings upon learning that an occupant customer resides in the property and does not pay rent. In such instances, the City will timely effectuate any balance transfers and ensure that earned arrearage forgiveness is credited if the customer enrolls in TAP.³³² The stipulation contains similar assurances regarding balance transfers for tenant customers who enroll in TAP.

Although PWD and the Public Advocate were not able to agree upon specific steps PWD should take to resolve any ongoing issues regarding sequestration involving occupant customers, the stipulation reflects a commitment to doing so. Counsel for the Public Advocate anticipates continuing to discuss with counsel for PWD those reasonable steps to be taken to protect PWD customers and avoid the unnecessary expense associated with pursuing the Court appointment of a sequestrator where no rents may be collected. The Board should approve the proposed stipulation.

H. Compliance With 2021 Settlement Agreement

Mr. Colton analyzes PWD's compliance with the Settlement Agreement in the 2021 Rate Case and notes a number of concerns based on PWD's filed monthly reports. First, while a report section is labelled "efforts to reduce TAP denials and program turnover," most monthly reports only provide information on the reasons for application denial, with no information about program turnover.³³³ As detailed by Mr. Colton, there is no data or information in the monthly

³³⁰ PA St. 3 at 108.

³³¹ PA St. 3 at 108.

³³² May 5 Proposed Stipulation, available at: <https://www.phila.gov/media/20230509161346/Stipulation-on-Sequestration-Issues-2023.05.05.pdf>.

³³³ PA St. 3 at 110.

reports that would allow insights into the extent to which program turnover is occurring.³³⁴ In addition, the reports lacked information on the amount of pre-TAP arrears that were not forgiven due to the TAP participant's failure to recertify.³³⁵

Finally, PWD, in its monthly reports, was to report on progress regarding a number of different efforts, including:

- “[G]reater outreach in the Black community in concert with community organizations.”
- PWD’s commitment to “organize and participate in community meetings, summits, or other gatherings.”
- PWD’s commitment to “organize and participate in . . . meetings with Black community leaders and Black grassroots community members to discuss what aspects of processes related to TAP application, enrollment, and recertification can be improved upon.”³³⁶

While PWD’s reports repeatedly stated that PWD was “currently planning” community meetings, summit and other gatherings, at no time did the reports reference actual community meetings or gatherings.³³⁷ PWD does not directly respond to Mr. Colton’s critiques of its reporting, but rather explains the activities it has undertaken and notes, with regards to TAP recertification and arrearage forgiveness, “[i]f the Advocate wanted more data (more detailed reports) he [sic] needed only to ask for it.”³³⁸ The Advocate appreciates this sentiment, but notes that earlier in PWD’s rebuttal, PWD refused to consider doing more data tracking on a variety of metrics.³³⁹ As a result, the Public Advocate maintains that PWD’s data tracking and reporting remains an important aspect for the Board to address in this Rate Determination.

Given PWD’s lack of full compliance with the reporting requirements of the 2021 Rate Determination, the Public Advocate submits that the Board should direct PWD to continue its reporting as required by the 2021 Rate Case, with adjustments to provide the data described above regarding program turnover, TAP recertification, and TAP arrearages. To reduce the burden of producing reports monthly, the Public Advocate submits that quarterly reporting of monthly data is appropriate. In addition, the Advocate submits that the Board should require

³³⁴ PA St. 3 at 111.

³³⁵ PA St. 3 at 111-112.

³³⁶ PA St. 3 at 112 (internal citations omitted).

³³⁷ PA St. 3 at 112.

³³⁸ PWD St. 3R at 37:8.

³³⁹ See Section VII.B, regarding reports and audits.

PWD to file with the Rate Board a “Consumer Education and Outreach Plan” within 60 days of the Board’s Final Determination. As described by Mr. Colton:

This Plan should include the following elements:

- An identifications, by Census Tract, of neighborhoods with high penetrations of Poverty having disproportionately low penetrations of TAP participants;
- An identification, by Census Tract, of neighborhoods with high penetrations of low-income Black TAP nonparticipants;
- An outreach plan identifying the means by which PWD will engage *grassroots* outreach for new first-time TAP enrollment in the neighborhoods identified in the first two sections;
- An outreach plan directed toward making specific contact within an identified time-certain among: (1) Black community leaders, and (2) Black grassroots community organizations, for purposes of promoting new first-time TAP enrollment;
- The outreach plans submitted in response to the two directives presented above shall include: (1) the name(s) of the PWD staffperson(s) (or newly created positions) charged with implementing those plans; (2) the financial and other resources to be devoted to implementing the plans; (3) the timeline in which the plan will be implemented; (4) measurable outcome metrics by which the success of the plan will be measured; and (5) the process by which actual outcomes will be compared to these measurable outcomes for purposes of targeting those processes that are in most need of improvement, setting realistic improvement goals, and selecting an appropriate process improvement technique.³⁴⁰

IX. OTHER ISSUES

A. Housekeeping Changes

The Public Advocate has no housekeeping changes to address.

B. Miscellaneous Fees and Charges

The Public Advocate has reviewed PWD’s proposed miscellaneous fees and charges and has not found them to be unreasonable.

³⁴⁰ PA St. 3 at 113:19-114:17.

C. *Pro Se* Participant Haver

As set forth above, *pro se* participant Mr. Haver submitted direct testimony which the Public Advocate sought to be designated as Public Input. Although the Hearing Officer denied the Public Advocate's motion, the applicable order provided the following guidance to participants and the Board:

- To the extent Mr. Haver's testimony is competent, material and relevant, it will be considered. Where it is not, it will be given no weight.
- The Board has stated that it will no longer entertain Mr. Haver's unsupported allegations against the Public Advocate and the Hearing Officer.³⁴¹
- The Public Advocate's motion represented a moderate approach to testimony that on its face contains clearly irrelevant and inappropriate material. If granted the motion would have permitted Mr. Haver's testimony to remain on the record.³⁴²

Based on the Hearing Officer's guidance, the Public Advocate has identified only one factual assertion in Mr. Haver's testimony warranting a response.

The Public Advocate's witnesses, on rebuttal, responded to Mr. Haver's assertion that "borrowing from a public bank would save literally 10's of millions of dollars for rate payers."³⁴³ As explained by Mr. Morgan and Ms. Rogers, there is, in fact, no public bank in Philadelphia. In 2022, City Council passed a bill (Bill No. 210956-A02³⁴⁴) titled "Signifying the intention of the City of Philadelphia to organize the Philadelphia Public Financial Authority..." That bill authorizes the City Solicitor to form this Authority by filing with the Pennsylvania Department of State (DOS). No such filing appears in the records of the DOS.³⁴⁵

Appended to Mr. Morgan and Ms. Rogers' rebuttal as an appendix is the Public Bank Feasibility Study (dated September 2020) prepared for the City. It details some logistical obstacles to implementing a public bank in Philadelphia. In brief, the Feasibility Study states:

To render a public bank legally feasible, the City of Philadelphia—and once established, the City-controlled public bank authority—must act at the City and Commonwealth to:

³⁴¹ The Public Advocate's witnesses rebutted allegations regarding conflicts of interest, misleading statements, the need for rate relief and opinions regarding ratemaking. See PA St. 1-R at 2-3.

³⁴² April 25 Order Denying Public Advocate's Motion to Exclude.

³⁴³ LH St. 1 at 3.

³⁴⁴ Certified copy available at: <https://phila.legistar.com/LegislationDetail.aspx?ID=5346357&GUID=00DC3873-9635-4513-BC58-F25D00A8C90D&Options=ID|Text|Search=210956>.

³⁴⁵ This can be confirmed at any time via the publicly accessible database available here: <https://file.dos.pa.gov/search/business>.

1. Secure enabling legislation through the Commonwealth's Economic Development Financing Law (EDFL) to permit the City to create and control an authority that would serve as a public bank
2. Apply to become an enumerated bank through the Pennsylvania Department of Banking and Securities, in compliance with the Pennsylvania Banking Code of 1965 regulations
3. Serve as a City depository, after changing the Philadelphia Code³⁴⁶

Because Philadelphia has not formed a public bank, and the legal and practical steps necessary to lend money to or receive deposits from PWD have not been taken, the Public Advocate has not identified any current savings to PWD associated with such bank.

X. CONCLUSION

The Public Advocate respectfully submits that the Hearing Officer should recommend, and the Board should approve, the recommendations set forth in this Main Brief, to ensure just and reasonable rates for the Small User Customers.

³⁴⁶ PA St. 1-R (Appendix A at 22).

BEFORE THE
PHILADELPHIA WATER, SEWER, AND STORM WATER RATE BOARD

In the Matter of the Philadelphia : **Fiscal Years 2024 – 2025**
Water Department’s Proposed : **Rates and Charges to Become**
Change in Water, Wastewater, : **Effective September 1, 2023**
and Stormwater Rates and : **and September 1, 2024**
Related Charges :

APPENDIX A
SUMMARY OF PUBLIC ADVOCATE ADJUSTMENTS

Adjustments	FY 2024	FY 2025	Summary Category
	(\$1,000)	(\$1,000)	
1 Revised calculation of the sales volume per account (water customers) to reflect a three-year average	(\$5,610)	(\$5,871)	Rev
2 CIP - removed the inflation escalation related to FY 2025 projects	\$0	(\$30,188)	Excluded
3 CIP - used an average of the amounts to be rolled over from prior years into FY 2024 and FY 2025	(\$82,940)	(\$56,614)	Excluded
4 Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Services	(\$7,765)	(\$15,606)	200
5 Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Materials and Supplies	(\$1,298)	(\$2,570)	300
6 Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Transfers	(\$323)	(\$640)	800
7 Utilized the core PCE inflation projections from FOMC (2.1% in FY 2025) for Chemical Costs	\$0	(\$11,442)	307
8 Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Equipment	(\$323)	(\$757)	400
9 Updated the Construction Fund's beginning balance consistent with new information from PWD	(\$8,662)	(\$8,662)	Excluded
10a 0.5% Decrease from PWD Proposal of 5.5% / Increased the bond interest rate by 1.0% from the rate experienced in FY 2023 (5.0%)	(\$1,917)	(\$3,748)	DS
10b Reduced Bond Issue Amount	(\$3,092)	(\$8,088)	DS
11 Recognized a .50% (50 basis points) increase in the interest paid on funds held by PWD	(\$1,821)	(\$1,999)	Int Inc
12 Improved Collection of TAP Billings (Increase revenues under existing rates)	(\$3,988)	(\$3,988)	Other Rev
13 Improved Collection of TAP Credits (Increase revenues under existing rates)	(\$4,927)	(\$4,927)	Other Rev
14 Remove Lien Filing Fees for TAP (O&M adjustment)	(\$565)	(\$565)	200
15 Fund LICAP for PGW/PECO LIURP Customers (O&M adjustment)	\$1,130	\$1,130	200
16 Fund LICAP for TAP Customers (O&M adjustment)	\$600	\$600	200
17 PILOT Internal Plumbing Repair Program (O&M adjustment)	\$2,156	\$2,156	200

18	Increase UESF Funding (O&M adjustment)	\$3,000	\$3,000	200
19	Liquidated Encumbrances (Schedule LM_JR-3, Line 15a)	\$208	\$3,290	Liq Enc
20	Debt Service Coverage (Schedule LM_JR-1, Line 34x) - Decrease from PWD proposed 1.25 to 1.22 (FY 24) and 1.23 (FY 25)	(\$8,729)	(\$8,543)	DS Coverage
21	Total	(\$124,867)	(\$154,032)	
22	Excluded	(\$91,602)	(\$95,464)	Excluded
23	Adjustment Total	(\$33,264)	(\$58,567)	