BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

In the Matter of the Philadelphia Water Department’s Proposed Changes in Water, Wastewater and Stormwater Rates and Related Charges: 2023 General Rate Proceeding

RATE DETERMINATION

Philadelphia Water, Sewer and Storm Water Rate Board
Sonny Popowsky, Chair
Tony Ewing, Vice-Chair
Abby L. Pozefsky, Secretary
McCullough Williams III, Member
Debra McCarty, Member

June 21, 2023
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I. OVERVIEW

Before the Philadelphia Water, Sewer, and Storm Water Rate Board (Rate Board or Board) for consideration and disposition is the rate filing made by the Philadelphia Water Department (PWD or the Department1) for approval to increase water, sewer and stormwater rates and related charges for service effective for service rendered on and after September 1, 2023 (FY 2024), and September 1, 2024 (FY 2025) (the 2023 Rate Proceeding2). These increases are intended to generate additional first year revenues of approximately $80.41 million above current rates in FY 2024 and total additional revenues of approximately $162.131 million above current rates in FY 2025.3 Citing rising costs in labor, chemicals, materials, equipment, services and capital investment, PWD asserted that rate relief is necessary for it to provide “. . . safe, high quality drinking water and wastewater services without any major service interruptions or system failures.”4

Pursuant to the Rate Board’s regulations,5 a thorough review of the filing was conducted. Participants, in addition to PWD, included the Public Advocate,6 the Water Revenue Board (WRB), the Philadelphia Large Users Group (PLUG), PECO Energy Company and two individuals, Lance Haver and Michael Skiendzielewski. After extensive discovery, four public hearings, four days of technical hearings, substantial public comment and the submission of written briefs, on May 30, 2023, Hearing Officer Marlane R. Chestnut issued her Hearing Officer Report (May 30, 2023 Hearing Officer Report7) in which she made a number of recommended adjustments to the Department’s filing that resulted in a recommended base rate revenue increase

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1 PWD is a City department, with responsibility for provision of water, sewer and stormwater services in the City of Philadelphia. To the extent required by the context, PWD includes the Water Revenue Bureau (WRB), which as part of the City’s Department of Revenue, provides all billing and collection functions for charges by the Department.
3 The FY 2025 revenue increase of $162.131 million reflects $99.154 million arising from the FY 2024 increase (annualizing the $80.412 million revenue from approximately 10 months of FY 2024 to reflect 12 months of revenues in FY 2025) and $62.977 million in additional revenues from the first approximately 10 months of the additional rate increase proposed to begin in FY 2025. See Appendix, Table C-1A, line 10. This does not include the impact of the annual reconciliation of the TAP (Tiered Assistance Program) rates and revenues, which are the subject of a separate proceeding.
4 PWD St. 1 at 11.
5 https://www.phila.gov/media/20230104134648/Amendment-to-Rate-Board-Procedures-2022-11-09.pdf
6 We contracted with Community Legal Services (CLS) to act as Public Advocate to represent the concerns of residential consumers and small commercial users in this rate proceeding, pursuant to our regulations at II.B.2.
of $56.752 million in FY 2024 compared to revenues under existing rates (rather than the $80.412 million requested by PWD) and a total FY 2025 revenue increase of $126.770 million over current rates\textsuperscript{8} rather than the $162.131 million requested by PWD.\textsuperscript{9} Pursuant to the schedule established, Exceptions to the Hearing Officer Report were filed by PWD, the Public Advocate, PLUG, Mr. Haver and Mr. Skiendzielewski.

As discussed in more detail below, we hereby adopt and incorporate the \textit{May 30, 2023 Hearing Officer Report} except as otherwise indicated. Additionally, we grant or deny the Exceptions, consistent with this Opinion and Order.\textsuperscript{10} We therefore find that, as discussed in detail below, the revenue requirements for FY 2024 ($61.022 million over current rates) and FY 2025 ($132.283 million total increase over current rates) shown on Table C-1A (Appendix)\textsuperscript{11} are supported by the record, are in compliance with the \textit{Rate Ordinance}\textsuperscript{12} (Chapter 13-100 of the Philadelphia Code) and other applicable requirements and covenants, and direct the Department to prepare and submit a tariff consistent with this rate determination.

It is never easy to approve any increase in the rates PWD’s customers must pay in order to maintain their access to this essential service. It is especially difficult in these challenging times, when it is clear that people are struggling. The record, however, does establish the need for rate relief at some level. As discussed in more detail below, The Council of the City of Philadelphia (City Council) requires\textsuperscript{13} us to set rates and charges sufficient for the Department to

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\textsuperscript{8} Pursuant to the Rate Board’s \textit{Regulations} at § I (l.1) and II.B.7, the recommended revenue requirement contained in Rate Determination was calculated utilizing the Rate Board Model, a financial spreadsheet owned by the Rate Board and provided to the participants to calculate the effect on revenue requirements of potential revenue and cost adjustments. Its use by the Rate Board is mandated by Section II.B.7(b): “The Board shall utilize the Model in its Rate Determination to calculate the overall effects of its decision on revenue requirements authorized to be sought from retail customers via Water Department rates and charges.”

\textsuperscript{9} The Hearing Officer’s proposed revenue increase for FY 2025 reflects $69.996 million arising from the FY 2024 increase ($61.022 million annualized to reflect 12 months of revenue) and $56.774 million in additional revenues in FY 2025 from the approximately 10 months of the rate increase that begins September 1, 2024. See the Appendix attached to the Report, Table C-1A, line 10a. Lines marked “a” in the tables represent adjustments to PWD’s filing.

\textsuperscript{10} All exceptions and arguments in the record were duly considered. Any exception or argument that is not specifically addressed shall be deemed to have been considered and denied without further discussion.

\textsuperscript{11} This revenue increase for FY 2025 reflects $75.268 million arising from the FY 2024 increase ($61.022 million annualized to reflect 12 months of revenue) and $57.105 million in additional revenues in FY 2025 from the approximately 10 months of the rate increase that begins September 1, 2024. See Table C-1A, line 10a, included in the attached Appendix. Lines marked “a” in the tables represent our adjustments to PWD’s filing.

\textsuperscript{12} \url{https://codelibrary.amlegal.com/codes/philadelphia/latest/philadelphia_pa/0-0-0-286498}

produce a level of revenue to cover its expenses and debt service, and satisfy applicable financial metrics in order to access the capital market at reasonable rates (as well as other requirements and mandates), in order to provide the safe and adequate service its customers are entitled to, while still ensuring that the rates and charges are just, reasonable, and equitably apportioned.

II. HISTORY OF THE PROCEEDING\textsuperscript{14}

PWD filed its \textit{Advance Notice}\textsuperscript{15} with City Council and the Rate Board on January 24, 2023, and its \textit{Formal Notice} with the City’s Records Department and the Rate Board on February 23, 2023, containing proposed changes to the rates and related charges for water, sewer and stormwater service effective September 1, 2023 (FY 2024), and September 1, 2024 (FY 2025), along with supporting statements and exhibits.\textsuperscript{16} In compliance with the Rate Board’s mandate for an open and transparent examination of the Department’s proposed rates and charges, the Board \textit{regulations}\textsuperscript{17} at II.A(c) require the submission of certain technical information, including (1) all financial, engineering and other data upon which the proposed rates and changes are based; (2) evidence demonstrating that the proposed rates were developed in accordance with sound utility rate-making practices, and are consistent with the current industry standards for water, wastewater and stormwater rates and with the Department’s bond covenants and other legal requirements; and (3) any material required by order of the Board in the last rate case. To support its proposed rates and charges, PWD presented the direct testimony, schedules, and exhibits of a number of witnesses:

\footnotesize
\textsuperscript{14} This discussion adopts, incorporates and supplements the History of the Proceeding contained in the May 30, 2023 Hearing Officer Report, Section II.
\textsuperscript{15} https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-rate-proceeding/#advance-notice-of-filing
\textsuperscript{16} Also on January 24, 2023, the Department filed its annual TAP-R Reconciliation, Advance Notice. These rates are the subject of a separate proceeding, \textit{2023 TAP Rate Adjustment}, https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/
\textsuperscript{17} https://www.phila.gov/media/20230120160159/WRB-regulations-restated-with-amendments-2022-11-09.pdf
- Randy E. Hayman, Esq. (PWD Water Commissioner) (PWD St. 118);
- The Financial Panel, consisting of the testimony and exhibits of Lawrence Yangalay, Lawrence Rich, and Patricia Rogalski (PWD St. 2A19) and the Financial Advisors, Peter Nissen and Charles Matthews (PWD St. 2B20);
- The Capital Panel, consisting of the testimony and exhibits of Stephen Furtek, Trisha Grace, Vahe Hovsepian, and William Dobbins (PWD St. 321);
- The Operations Panel, consisting of the testimony and exhibits of Benjamin Jewel, Brendan Reilly, Linda Kramer, and Stephen Junod (PWD St. 422);
- The WRB (Water Revenue Bureau) Panel, consisting of the testimony and exhibits of Susan Crosby, Esq. (PWD St. 523)24;
- The Raftelis Financial Consultants Panel, consisting of the testimony and exhibits of Jon Pilkenton Davis, Henrietta Locklear, and Jennifer (Fitts) Tavantzis (PWD St. 625);
- The Black & Veatch Panel, consisting of the testimony and exhibits of Ann Bui, Dave Jagt, and Brian Merritt (PWD St. 726); and
- The Communications and Engagement Panel, consisting of the testimony and exhibits of Glen Abrams, Laura Copeland, and Paul Fugazzotto (PWD St. 827).

24 This statement and Sch. BV-2 (attached to PWD St. 6) were later revised.
The general public was notified through information made available on the Rate Board’s website and PWD’s website and e-notification system as well as publication in various Philadelphia newspapers and social media channels. In addition, participants to PWD’s 2021 general rate proceeding as well as the 2022 special rate proceeding were notified by e-mail of this proceeding and provided an opportunity to participate.

At our August 10, 2022 meeting, we authorized the renewal for additional one-year terms of the contracts with Community Legal Services to act as Public Advocate to represent the concerns of small user customers (all residential customers and small business customers, typically with 5/8 inch meters), Amawalk Consulting to provide technical services, and Marlane R. Chestnut to serve as Hearing Officer.

The Rate Ordinance (Phila. Code § 13-101(4)(b)(.4)) provides that the decision by the Board to approve, modify, or reject the proposed rates and charges shall be made in a timely manner, but “no later than 120 days from the filing of notice of any proposed change in rates and charges.” See also, the Rate Board’s regulations at Section IIA.1(b): “Consistent with Section 13-101, the Rate Proceeding shall be conducted within 120 days of the filing of the Formal Notice and shall address only rates and charges and topics directly related thereto.” The schedule adopted in this proceeding was in compliance with this deadline, together with other timing requirements specified in the Board regulations.

In addition to the Department and the Public Advocate, participants included the Water Revenue Bureau (WRB), PECO Energy Company (PECO), the Philadelphia Large Users Group (PLUG), and two individual customers, Lance Haver and Michael Skiendzielowski.

29 “If the Board is unable to act on proposed rates and charges in the time required herein, the Water Department may establish emergency rates and charges on a temporary basis pending a final determination by the Board.” Phila. Code § 13-101(8).
30 The Water Revenue Bureau, which is part of the City’s Department of Revenue, provides all billing and collection functions for charges by the Department.
31 PLUG is an ad hoc group of large volume customers who receive water, sewer, and stormwater service from the Department pursuant to the Industrial and Hospital/University Rate schedules. PLUG St. 1 at 1.
City Council on February 2, 2023, adopted Resolution No. 230061, which authorized the Committee on Transportation and Public Utilities to hold hearings to examine the Philadelphia Water Department’s request to increase water, sewer, and stormwater rates and charges and its impact on the citizens of Philadelphia. On February 13, 2023, State Representative Darisha Parker sent a letter to the Rate Board expressing her concern about the impact of any rate increase.

Fourteen members of the City Council signed and sent to PWD a letter dated February 14, 2023, expressing their concerns and recommending that the Department look for alternatives to increasing rates:

[We] recommend the utilization of the funds the City received from the American Rescue Plan Act (ARPA), a plan which specifically authorized municipalities to use funding to support infrastructure needs. The City has over $800 million in ARPA funds remaining that are waiting to be spent and run the risk of being recollected. Philadelphia will also be receiving $500 million in newly allocated federal funding for water infrastructure improvements, which will allow for lead pipe replacement. These funds take off some of the burden and need for additional resources to pay for improvement and repairs.

PWD, by memorandum dated February 27, 2023, responded to the Rate Board’s request for further information regarding these sources of funding described in the February 14, 2023 letter. It described the successful efforts it had made to secure $697 million in low-interest loans from the Water Infrastructure Finance and Innovation Act (WIFIA), of which PWD ultimately received a commitment for $340 million, and its successful efforts to secure an additional $160 million in low-interest loans from PENNVEST. PWD also provided its March 2023 City Council Rate Update presentation. Subsequently, the Department sent a letter to the City’s Finance Director dated March 23, 2023, requesting that the City allocate to PWD funds to address increasing costs from ARPA or other available sources. PWD also requested additional

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33 This hearing, conducted via Zoom, was held on May 8, 2023.
36 https://www.phila.gov/media/20230228103526/Rate-Board-Information-Request-Response-2023-02-27.pdf
funding from the City to support customer assistance programs. The Water Department subsequently stated in its rebuttal testimony that PWD “was informed that the ARPA funds were already allocated in the General Fund for other uses” and attached a letter from the City Finance Director dated April 24, 2023, declining the Department’s request. PWD St. 5-R at 3-4 and Sch. GA-1.

An on-the-record prehearing conference to address preliminary procedural issues was held via Zoom (a teleconferencing software platform) in this proceeding on March 7, 2023. All participants to the rate filing were invited by e-mail to participate; in addition, the notice of the prehearing conference was advertised in accordance with the Rate Board’s regulations, and a further notice and the code to participate were posted on the Rate Board's website. At that prehearing conference, a schedule was adopted, and directives were issued regarding discovery and the holding of hearings. These determinations were memorialized in a Prehearing Conference Order dated March 7, 2023.

Four public hearings were held. All were conducted with the option to participate via Zoom online or telephonically. The Rate Board, the Department and the Public Advocate worked together to ensure that outreach and notice were provided to the public to support maximum awareness of the scheduled hearings. See, PA Outreach Report. These hearings were held in the afternoons (3:00 p.m.) and evenings (6:00 p.m.) of March 22 and March 23, 2023. The testimony presented at these hearings, as well as other submissions made by customers to the Rate Board, is posted on the Rate Board’s website and discussed below. In all, 30 members of the public provided testimony, which included comments and suggestions. PWD later submitted a Response that provided further information addressed to specific issues raised at the public

38 https://www.phila.gov/media/20230308091818/PHC-Order-2023-03-07.pdf
39 https://www.phila.gov/media/20230502184431/Outreach-Report-Exhibit-2023-Rate-Case-Final.pdf
hearings. The testimony presented at these hearings, as well as the more than 40 written comments we received directly, are discussed in the May 30, 2023 Hearing Officer Report at Section IV.

Direct testimony was filed on March 22, 2023. Mr. Haver submitted his own statement, Haver St. 1.\(^{43}\) PLUG submitted the statement and exhibits of Billie LaConte (J. Pollock, Incorporated) (PLUG St. 1\(^{44}\)). The Public Advocate submitted the joint direct testimony of Lafayette K. Morgan, Jr. and Jennifer L Rogers (Exeter Associates, Inc., PA St. 1\(^{45}\)), Jerome D. Mierzwa (Exeter Associates, Inc., PA St. 2\(^{46}\)) and Roger D. Colton (Fisher Sheehan & Colton, PA St. 3\(^{47}\)), each with accompanying schedules and/or exhibits.

Rebuttal testimony responding to participants’ direct testimony was filed by PWD, the Public Advocate and PLUG. PWD submitted PWD Rebuttal St. 1-R\(^{48}\) (addressed to PA witnesses Morgan and Rogers), PWD Rebuttal St. 2-R\(^{49}\) (addressed to PA witness Mierzwa), PWD Rebuttal St. 3-R\(^{50}\) (addressed to PA witness Colton), PWD Rebuttal St. 4-R\(^{51}\) (addressed to PLUG witness LaConte) and PWD Rebuttal St. 5-R\(^{52}\) (addressed to participant Haver). The Public Advocate submitted PA St. 1-R\(^{53}\) (addressed to Mr. Haver), and PLUG submitted PLUG St. 1-R\(^{54}\) (addressed to PA witnesses Mierzwa/Colton).

Throughout the course of the proceeding, Hearing Officer Chestnut issued a number of procedural Orders.\(^ {55}\) In addition to the Prehearing Conference Order, these include (1) Order Denying Haver Motion to Disclose\(^ {56}\) (March 20, 2023); (2) Order Sustaining Objections to

\(^{43}\) https://www.phila.gov/media/20230412173301/Lances-Direct-Testimony.pdf
\(^{44}\) https://www.phila.gov/media/20230412173305/PLUG-Direct-Testimony-B-LaConte-A9574581.pdf
\(^{45}\) https://www.phila.gov/media/20230418152235/PA-St-1-Morgan-Rogers.pdf
\(^{46}\) https://www.phila.gov/media/20210324163526/PA-St-2-Mierzwa.pdf
\(^{47}\) https://www.phila.gov/media/20210324163618/PA-St-3-Colton.pdf
\(^{48}\) https://www.phila.gov/media/20230429143008/PWD-REBUTTAL-STATEMENT-1-MORGAN-AND-ROGERS.pdf
\(^{49}\) https://www.phila.gov/media/20230429143009/PWD-REBUTTAL-STATEMENT-2-MIERZWA.pdf
\(^{50}\) https://www.phila.gov/media/20230429143003/PWD-REBUTTAL-STATEMENT-3-COLTON.pdf
\(^{51}\) https://www.phila.gov/media/20230429143004/PWD-REBUTTAL-STATEMENT-4-LACONTE.pdf
\(^{52}\) https://www.phila.gov/media/20230429143005/PWD-REBUTTAL-STATEMENT-5-HAVER.pdf
\(^{53}\) https://www.phila.gov/media/20230429143006/PA-St-1-R-Morgan-Rogers.pdf
\(^{54}\) https://www.phila.gov/media/20230509161349/Rebuttal-Testimony-LaConte-2023.04.27.pdf
(March 26, 2023); (3) Order Denying Public Advocate’s Motion to Exclude (April 15, 2023); and (4) Order Sustaining PWD Objections to Skiendzielewski Information Requests (May 1, 2023).

After proper notice and publication, technical review hearings were held as scheduled on May 2-5, 2023. All hearings were conducted via Zoom, were open to the public and advertised consistent with Rate Board regulations. The first day (May 2, 2023) was a further prehearing conference addressed to the discussion of procedural issues, with the remaining days (May 3-5, 2023) devoted to the presentation for cross-examination of the various witnesses who had submitted written testimony. Hearing Exhibits were presented by PWD (PWD Hearing Exhibit 1) and the Public Advocate (May 3, 2023 Hearing Exhibit, May 5, 2023 Hearing Exhibit). The transcripts of each day’s hearing are posted on the Rate Board’s website. May 2, 2023, May 3, 2023, May 4, 2023, May 5, 2023.

Written briefs were timely filed by the Department, the Public Advocate, Mr. Haver, and Mr. Skiendzielewski (who also subsequently submitted a supplemental Brief).

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57 https://www.phila.gov/media/20230331130819/Order-Haver-Discovery-2023-March-26-FINAL.pdf
59 https://www.phila.gov/media/20230508093258/Order-Skiendzielewski-Discovery-2023-FINAL.pdf
61 PLUG witness LaConte was excused from appearing, as no participant had cross-examination for her.
63 https://www.phila.gov/media/20230502184434/May-3-Hearing-Exhibit-PA.pdf
64 https://www.phila.gov/media/20230508093257/May-5-Hearing-Exhibit.pdf
66 https://www.phila.gov/media/20230509134429/Technical-Hearing-Transcript-2023.05.03-General-Rate-Proceeding.pdf
67 https://www.phila.gov/media/20230510193057/Technical-Hearing-Transcript-2023.05.04-General-Rate-Proceeding.pdf
68 https://www.phila.gov/media/20230510193057/Technical-Hearing-Transcript-2023.05.05-General-Rate-Proceeding.pdf
70 https://www.phila.gov/media/20230516185423/Public-Advocate-Brief-Final.pdf
71 https://www.phila.gov/media/20230519074732/Brief-PLUG.pdf
72 https://www.phila.gov/media/20230516135328/2023-Water-Rate-brief-Haver.pdf
Hearing Officer Chestnut issued the **May 30, 2023 Hearing Officer Report**. After carefully considering and addressing the positions of the participants as well as the record produced in this proceeding, she found that the Department had established a need for rate relief and recommended a number of adjustments to PWD’s filing. Exceptions were filed by PWD,\(^{75}\) the Public Advocate,\(^ {76}\) PLUG,\(^ {77}\) Mr. Haver\(^ {78}\) and Mr. Skiendzielewski\(^ {79}\) (who submitted an additional Exception\(^ {80}\)). These Exceptions are discussed below.

### III. RATE STANDARDS\(^ {81}\)

As correctly set forth in the **May 30, 2023 Hearing Officer Report**, the revenue impact of PWD’s proposed rates and charges which are the subject of this proceeding must be evaluated to ensure compliance with the rate standards contained in the **Rate Ordinance**, as well as any other applicable requirements or covenants.

The Rate Board was established to determine whether the rates and charges for water, sewer, and stormwater service proposed by the Water Department should be accepted, rejected, or modified, after an open and transparent review process. The **Rate Ordinance** that established the Rate Board contains the following standards that the Board must consider in making its rate determinations. See, the **Rate Ordinance**, Phila. Code § 13-101(4), which states:

(4) Standards for Rates and Charges.

(a) Financial Standards. The rates and charges shall yield to the City at least an amount equal to operating expenses and debt service, on all obligations of the City in respect of the water, sewer, storm water systems and, in respect of water, sewer and storm water revenue obligations of the City, such additional amounts as shall be required to comply with any rate covenant and sinking fund reserve requirements approved by ordinance of Council in connection with the authorization or issuance of water, sewer and storm water revenue bonds, and proportionate charges for authorization or issuance of water, sewer and storm water revenue bonds.

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\(^{75}\) [https://www.phila.gov/media/20230606090443/2023-PWD-Exceptions.pdf](https://www.phila.gov/media/20230606090443/2023-PWD-Exceptions.pdf)


\(^{77}\) [https://www.phila.gov/media/20230606090441/2023-PLUG-exceptions.pdf](https://www.phila.gov/media/20230606090441/2023-PLUG-exceptions.pdf)

\(^{78}\) [https://www.phila.gov/media/20230606090440/2023-Haver-exception-to-HE.pdf](https://www.phila.gov/media/20230606090440/2023-Haver-exception-to-HE.pdf)

\(^{79}\) [https://www.phila.gov/media/20230606090445/2023-Skiendzielewski-exception-to-HE.pdf](https://www.phila.gov/media/20230606090445/2023-Skiendzielewski-exception-to-HE.pdf)


\(^{81}\) This discussion adopts, incorporates and supplements the discussion contained in the **May 30, 2023 Hearing Officer Report**, Section III.
revenue bonds, and proportionate charges for all services performed for the Water Department by all officers, departments, boards or commissions of the City.

(b) The rates and charges shall yield not more than the total appropriation from the Water Fund to the Water Department and to all other departments, boards or commissions, plus a reasonable sum to cover unforeseeable or unusual expenses, reasonably anticipated cost increases or diminutions in expected revenue, less the cost of supplying water to City facilities and fire systems and, in addition, such amounts as, together with additional amounts charged in respect of the City’s sewer system, shall be required to comply with any rate covenant and sinking fund reserve requirements approved by ordinance of Council in connection with the authorization or issuance of water and sewer revenue bonds. Such rates and charges may provide for sufficient revenue to stabilize them over a reasonable number of years.

(.1) In fixing rates and charges the Board shall recognize the importance of financial stability to customers and fully consider the Water Department’s Financial Stability Plan. In addition, the Board shall determine the extent to which current revenues should fund capital expenditures and minimum levels of reserves to be maintained during the rate period. When determining such levels of current funding of capital expenditures and minimum levels of reserves, the Board shall consider all relevant information presented including, but not limited to, peer utility practices, best management practices and projected impacts on customer rates. …

(.2) Rates and charges shall be developed in accordance with sound utility rate making practices and consistent with the current industry standards for water, wastewater and storm water rates. Industry standards include the current versions of American Waterworks Association (AWWA) Principles of Rates, Fees and Charges Manual (M-1) and Water Environment Federation’s Wastewater Financing & Charges for Wastewater Systems.) …

(c) The rates and charges shall be equitably apportioned among the various classes of consumers.

(d) The rates and charges shall be just, reasonable and nondiscriminatory as to the same class of consumers.

In addition, the Rate Ordinance provides for other types of special rates and charges, including those for service provided to charitable institutions, places of worship, public

Further, § 13-101(2) of the Rate Ordinance provides that the Water Department:

. . . .shall develop a comprehensive plan (“Financial Stability Plan”) which shall forecast capital and operating costs and expenses and corresponding revenue requirements. It shall identify the strengths and challenges to the Water Department’s overall financial status including the Water Fund’s credit ratings, planned and actual debt service coverage, capital and operating reserves and utility service benchmarks. It shall compare the Water Department to similar agencies in peer cities in the United States. A Financial Stability Plan shall be submitted to Council every four (4) years and updated prior to proposing revisions in rates and charges.83

Reduced to its essentials, this standard requires that rates be set at a level that produces revenue sufficient for the Department to meet its expenses and debt service. Other factors to be considered include the impact of the rate decisions on customers as well as the Department, industry standards applicable to water, wastewater and stormwater rates, recognition of the parameters set forth in the Financial Stability Plan required by City Council and a requirement that rates be just, reasonable, nondiscriminatory and equitably apportioned among the various classes of consumers.

As described above, PWD’s rates must also be set at a level that produces sufficient revenue to ensure compliance with the covenants made by the City pursuant to the 1989 General Bond Ordinance, which are described in PWD’s Brief at 20-22, and the statements and schedules noted there. As explained in PWD St. 2A, Sch. FP- 5 at 3-4:

In the 1989 General Bond Ordinance, the City covenanted with the bondholders that it will impose, charge and collect rates and charges in each fiscal year sufficient to produce annual net revenues which are at least 1.20 times the debt service requirements, excluding the amounts required for subordinated bonds (as defined in the 1989 General Bond Ordinance). In addition, the City’s covenants to

82 The full text of the relevant ordinances and regulations are posted on the Rate Board’s website, at the section entitled “Regulations & Relevant Legal Authority,” About | Water, Sewer & Storm Water Rate Board | City of Philadelphia (https://www.phila.gov/departments/water-sewer-storm-water-rate-board/about/)
83 The updated Financial Plan is included with PWD St. 2A, Schedule FP-1.
its bondholders require that net revenues in each fiscal year must be equal to 1.00 times (A) annual debt service requirements for such fiscal year, including the amounts required for subordinated bonds, (B) annual amounts required to be deposited in the debt reserve account, (C) the annual principal or redemption price of interest on General Obligation Bonds payable, (D) the annual debt service requirements on interim debt, and (E) the annual amount of the deposit to the Capital Account (less amounts transferred from the Residual Fund to the Capital Account).

Further, pursuant to the 1989 General Bond Ordinance, the City will, at a minimum, impose, charge and collect in each fiscal year such water and wastewater rents, rates, fees and charges and shall yield Net Revenues (defined for purposes of this covenant particularly, calculated to exclude any amounts transferred from the Rate Stabilization Fund to the Revenue Fund in, or as of the end of, such fiscal year) which will be equal to at least 0.90 times Debt Service Requirements for such fiscal year (excluding principal and interest payments in respect of Subordinated Bonds and transfers from the Rate Stabilization Fund). In this testimony, the above covenants are referred to collectively as the “Rate Covenants.”

In the 2018 Rate Determination, the Rate Board set forth targets for several financial metrics to be considered by the Department in its future operations and by the Board in its future rate decisions. These targets included a 1.3x senior debt service coverage ratio; a $150 million combined reserve balance in the Department’s Rate Stabilization Fund (RSF, $135 million) and Residual Fund ($15 million); and 20% cash financing for capital expenditures. The reasons for setting such targets for the 2018 rate proceeding included the need to support the credit ratings for the Department's bonds as higher credit ratings make it easier and less expensive to borrow money, providing interest savings for all customers for many years to come. See, 2018 Rate Determination at 18-33.84

These financial metrics were to some extent discussed by the Rate Board in the 2022 Special Rate Proceeding,85 a limited proceeding regarding the potential downward adjustment of water, sewer and stormwater incremental rates and charges previously approved to take effect September 1, 2022 (FY 2023), as provided by the 2021Rate Determination86 issued on

84 The Board noted in its Order that those financial targets “are not mandated requirements and should not be considered to be either strict ceilings or floors.” 2018 Rate Determination at 23.
June 16, 2021. That 2021 Rate Determination discussed and approved without modification a Joint Petition for Partial Settlement\(^87\) entered into by the Department and the Public Advocate. One of the issues addressed there was whether PWD’s better than projected FY 2021 financial performance, as measured by the Rate Stabilization Fund balance as of June 30, 2021, warranted any reduction to the already-approved FY 2023 incremental revenue increase. While the Rate Board did authorize a $3 million reduction to the FY 2023 base rate incremental increase, we made it clear that it the decision to use a lower RSF balance as the minimum threshold in that limited proceeding did not represent any indication that the RSF target of $135 million on an ongoing basis had been changed or lowered.

In Section VI, below, we address the appropriate financial metrics to consider in this proceeding.

IV. PUBLIC INPUT\(^88\)

In compliance with both the Rate Ordinance and our Regulations at Section II.B.4(a)-(h), four public hearings were held in this proceeding, so that PWD’s customers could learn about the proposed revenue increase and the positions promoted by the active participants, express their concerns and offer suggestions.\(^89\) As described in the May 30, 2023 Hearing Officer Report, Section IV, each session lasted from one to two hours; all were very well attended. Over 30 customers commented on the proposed increase in rates or asked questions, in addition to many more observers who attended without offering comments.\(^90\) Virtually everyone expressed concerns about the affordability of water service, especially during this challenging time, as well as the necessity of any rate increase in light of possible other funding sources.

We must thank those customers who were able to take the time to attend one of the public hearings or who sent a comment. This information was thoughtful, helpful, sincere and

\(^{87}\) https://www.phila.gov/media/20210505154832/Joint-Petition-for-Partial-Settlement.pdf

\(^{88}\) This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section IV.

\(^{89}\) In addition, customers with specific affordability, billing or service concerns were able to be connected directly with PWD or Public Advocate representatives to assist them privately.

\(^{90}\) The total number of participants (which included representatives of the Rate Board, PWD and the Public Advocate) for each session ranged from 75 to 130.
compelling and serves to remind us all that our rate determinations are not made in a vacuum. The decision about the rates and charges for water service, an essential utility, has a direct impact on the lives of the Department’s customers. We can assure PWD’s customers that we have fully considered these testimonies in making our determination.

V. NECESSITY FOR RATE RELIEF

Citing the result of rising costs for labor, chemicals, materials, supplies and regulatory compliance, combined with capital program needs, PWD presented testimony and evidence intended to establish that revenue produced by the existing rates will not be sufficient during the prospective rate period, FY 2024 and FY 2025, for it to continue to provide safe and adequate service to its customers at a reasonable cost, including the ability to finance infrastructure improvements. The PWD Financial Panel explained in PWD St. 2A at 6:

Revenues at current rates are not projected to pay all of the projected expenses in the Rate Period. Operating costs are projected to increase from FY 2023 to FY 2024. The overall capital program budget for FY 2023 to FY 2028 is also higher than previously estimated.

In FY 2024, without rate relief, the Department would not be able to meet the 90% test (Senior Debt Coverage from Current Revenues). PWD would not be able to maintain cash reserve targets in FY 2024 and would be required to make a substantial withdrawal from cash reserves to meet obligations and minimum debt service coverage requirements. The depletion of cash reserves would leave the Department with few options on a going-forward basis to fulfill its mission of providing high-quality, reliable service to its customers. Without rate relief, it is projected that the Department would not be able to meet the 90% test in FY 2025 and could deplete the Rate Stabilization Fund (“RSF”) balance by the end of FY 2025.

The Department’s revenues and revenue requirement for the FY 2024 and FY 2025 rate period were derived from the cost-of-service study utilizing six years of data forecasting revenues, expenses, debt service and other commitments over the period from FY 2023 to FY 2028 (the “study period”) performed by Black & Veatch and set out in PWD St. 7. As a part of that analysis, the costs of providing service to various customer types were matched with their

91 This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section V.
92 PWD St. 2A, Schedule FP-1.
associated service demands. As required by the Rate Ordinance, § 13-101(4)(b)(2), this was done utilizing general ratemaking principles and industry standards, including the AWWA’s “Principles of Water Rates, Fees, and Charges Manual of Water Supply Practices M1” (the AWWA Manual or the M1 Manual) and “Financing and Charges for Wastewater Systems;” Manual of Practice M27 (MoP 27) of the Water Environment Federation’s (WEF); and WEF’s “User Fee Funded Stormwater Programs.”

The Public Advocate, through extensive information requests, scrutinized the Department’s filing and recommended that the Rate Board make a number of adjustments to the revenue requirement requested by PWD. It recognized that some amount of rate relief is necessary, although in its Brief at 13 it did not quantify this amount: “However, on the basis of [the PA witnesses’] 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.”

The only participant to contest the necessity for any rate relief was Mr. Haver, who recommended that the Rate Board deny the proposed rate increase entirely, based on what he described as PWD’s failure to adequately control costs and/or seek additional sources of funding from external sources, rather than from PWD’s ratepayers. He specifically alleged that PWD is not focused on cutting costs because it has not conducted an operational audit, has no benchmarks, does not have a specific program to reward employees for cost cutting suggestions, has failed to seek political support for external funding, and has not examined other specific actions he has

93 These are listed in the PA Brief, Appendix A.
94 In their direct testimony, PA witnesses Morgan and Rogers quantified the effect of their analysis to recommend that the requested revenue increase should be reduced to $47,147 million in FY 2024 and an additional $45,410 million in FY 2025 from the approximately 10 months of the rate increase that begins September 1, 2024, to “reduce costs that appeared to be excessive and to reflect certain costs at a more reasonable level.” PA St. 1 at 5-6, Sch. LM_JR-1.
recommended, such as combining operations with the other City-owned utility, Philadelphia Gas Works (PGW). Haver Brief, throughout. 95

**Hearing Officer Recommendation:** Although the Hearing Officer agreed (May 30, 2023 Hearing Officer Report at 22) that every effort should be made to keep the water, wastewater and stormwater rates as low as possible by ensuring that the rates ultimately approved by the Board are based on reasonable cost projections and allocations and by encouraging PWD to seek out non-ratepayer sources of funding, she rejected Mr. Haver’s position that the Rate Board should deny the proposed rate increase entirely. As she pointed out in the May 30, 2023 Hearing Officer Report at 21, there is no legal authority for the Rate Board to set rates and charges that do not recover reasonably forecasted expenses, simply to force PWD to undertake certain actions. “To deny the requested rate increase entirely would be irresponsible, and possibly a violation of the Rate Ordinance (and the bond covenants, should PWD fail to sustain the required coverages) if PWD were denied sufficient revenues to meet its FY 2024 and FY 2025 expenses and debt obligations.”

**Exceptions:** Mr. Haver in his Exceptions (¶¶ 17, 18) repeated his position that no revenue increase should be approved: “The only way to get PWD to make cost savings and innovation priorities is to cut their yearly access to rate increases . . . No rate increase, of any amount should be granted. PWD should be forced, by the need for funds to seek savings, innovations and funding from governmental forces. PWD will only do so, if it needs to.”

**Board Decision:** Upon consideration of the record on this issue and the arguments presented by the participants, we accept the Hearing Officer’s recommendation to reject the proposal to deny the requested rate increase entirely.

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95 On May 27, 2023, Mr. Haver submitted a “Motion to Remove Hearing Examiner,” to which PWD on June 9, 2023, filed a Memorandum in Opposition. PLUG joined in PWD’s Opposition to the Motion. After discussion at our June 14, 2023 meeting, we denied the Motion.

96 https://www.phila.gov/media/20230606090440/2023-Haver-exception-to HE.pdf
The record produced in this proceeding makes it clear that the revenue produced at the current level of rates and charges is simply inadequate for PWD to continue to provide safe and adequate service to its customers at a reasonable cost, including the ability to finance infrastructure improvements. Certainly, the Board agrees that PWD should take every reasonable step to reduce expenses (including the costs of borrowing) as much as possible, and to aggressively seek alternative funding from sources other than its customers. To deny the requested rate increase entirely at this time, however, would be irresponsible, and possibly a violation of the Rate Ordinance (and the bond covenants, should PWD fail to sustain the required coverages) if PWD’s rates and charges are not sufficient for the Department to produce a level of revenue to cover its expenses and debt service, and satisfy applicable financial metrics in order to access the capital market at reasonable rates (as well as other requirements and mandates). Under the terms of our Rate Ordinance, there is no legal authority for the Rate Board to set rates and charges that do not recover reasonable expenses and capital expenditures, simply as a means of forcing PWD to undertake certain actions. Indeed, denial of any rate increases now would violate City Council’s instruction to consider rates and charges that “provide for sufficient revenue to stabilize them over a reasonable number of years” and its requirement that we “recognize the importance of financial stability to customers and fully consider the Water Department’s Financial Stability Plan.”

VI. FINANCIAL PLAN AND METRICS

No participant excepted to the recommendation contained in the May 30, 2023 Hearing Officer Report (Section VI at 25) that the 1.25x senior debt coverage ratio proposed by the Department be used in setting rates in this proceeding; and that the prospective financial metric targets developed in the 2018 Rate Determination be maintained. In light of the Department’s

97 This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section VI.
98 These targets include a 1.3x senior debt service coverage ratio; a $150 million combined reserve balance in the Department’s Rate Stabilization Fund (RSF, $135 million) and Residual Fund ($15 million); and 20% cash financing (pay-go) for capital expenditures. In adopting these metrics, the Rate Board made it clear that they are targets, not requirements: “These metrics approved by the Board are not mandated requirements and should not be considered to be either strict ceilings or floors, except and to the extent required by City Council or applicable bond covenants. Rather, the Board’s determinations in this regard should be viewed as targets to be considered by the Department in its future operations and by the Board in determining the need for future rate increases.” 2018 Rate Determination at 23.
recent and projected financial performance, they are reasonable, comply with applicable legal requirements and will assist the Department to maintain its current credit ratings.

VII. REVENUE REQUIREMENT

A. Overview

The Department’s revenue requirements are set by determining the appropriate levels of cash, debt service coverage and other financial metrics necessary to enable PWD to pay its bills and maintain efficient access to the capital markets at reasonable rates. PWD claimed that since the 2021 general rate proceeding, it has experienced and continues to experience an increased level of expenditures related to materials, supplies, equipment, chemicals, services, workforce costs and other expenses, compared with final 2021 rate case projections for FY 2023. The Department’s Financial Panel addressed this in their Direct Testimony, PWD St. 2A at 11:

The Department needs higher rates (increased additional revenues) so that it will have additional cash-in-hand to pay its bills when due and to maintain efficient access to the capital markets at reasonable cost. As explained above, the Department’s FY 2023 financial results, as compared to the prior rate case projections, demonstrate a pattern of increased expenses above prior rate case levels which are continuing into FY 2024, FY 2025 and beyond. Absent rate relief, the Department's financial results will continue to deteriorate and financial reserves could be depleted by the end of FY 2025. This approach (running a deficit with rates not high enough to meet revenue requirements and using limited financial reserves to make up the difference) is unsustainable. The Department has no choice but to request that rates be raised. As always, the Department’s financial condition is a major concern to rating agencies and investors. It is particularly concerning for FY 2024 and FY 2025, given the Department’s needs to access the capital markets to finance its sizeable and increasing Capital Improvement Program as well as the need for revenues to pay for increased operating and maintenance expenses.

The revenue amount determined by PWD to be necessary for it to continue to provide service was determined through the cost-of-service study (COSS; also Class Cost of Service Study, CCOSS) performed by Black & Veatch, using a proprietary model that has been used by the Department for many years. The cost-of-service analysis provides the basis for

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99 This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section VII.
designing a rate structure that allows the utility to recover costs from its customers equitably. As a part of this analysis, the costs of providing service to various customer types are matched with their associated service demands. The first step in the COSS, Revenue & Revenue Requirements, establishes how much money the utility needs to meet its fiscal year operating and capital obligations; this step includes a review of operations and maintenance (O&M) expenses, debt service payments, funding for specific deposits and reserves, and the cost of capital improvement projects that the utility does not fund via debt or contributions from third parties. PWD St. 7 at 7, Sch. BV-2. Specific adjustments to PWD’s claimed revenue requirements were proposed by the Public Advocate and evaluated by the Hearing Officer as discussed in the May 30, 2023 Hearing Officer Report.

B. Operating Revenues

1. Average Sales Volumes

Operating revenues include retail water and sanitary sewer service and quantity charges, stormwater management service charges, and extra-strength surcharge, as well as wholesale contract customer water and sewer charges. For the retail operating revenues, PWD projected gross billings and then applied collection factors. To project water and sewer gross billings, for each fiscal year of the Study Period, the Department applied the FY 2023 schedules of water and sewer service to the projections of number of accounts, and billed water and sewer volumes. It also applied the FY 2023 schedules of stormwater services to projections of the number of accounts, billable impervious area, and billable gross area associated with the services. For applying collection factors, the Department estimated the operating retail cash receipts by applying receipt factors to the corresponding gross billings. Regarding wholesale operating revenues, the only wholesale water customer at present is Aqua Pennsylvania. Wholesale water revenues are projected using billed water volume estimated based on the historical three-year average for Aqua Pennsylvania. For wastewater, the Department projected revenues for wholesale customers by applying the contracted rates per the latest agreements to estimated wastewater billed volumes and loadings based on the historical three-year average for each customer. Revenues

100 The quantifiable adjustments recommended by the Advocate are included in its Brief at Appendix A.
under existing rates were adjusted to reflect hydraulic and hydrologic modeling. PA St. 1 at 15-16; PWD St. 7 at 11-2; Sch. BV-2, Table C-1A.

The Public Advocate proposed an adjustment to projected operating revenues by “adjusting the billed volume per account values for water customers. The Department has used a one-year period (FY 2022) to determine the sales volume per account. We have instead revised the calculation of the sales volume per account to reflect a three-year average covering FY 2020, FY 2021, and FY 2022. The use of a single year is too short a period to develop the normalized volume going forward through FY 2023.” PA St. 1 at 16; PA Brief at 14-15.

**Hearing Officer Recommendation:** Hearing Officer Chestnut accepted this adjustment, rejecting PWD’s rebuttal that it produces an overly optimistic estimate, and that it “defies the trend of decreasing use per customer observed over the last five years.” PWD Rebuttal St. 1 at 5. She explained, May 30, 2023 Hearing Officer Report at 28:

As shown on the table included in PWD Rebuttal St. 1-R at 5, it is simply not correct that sales volumes have declined steadily every year, either by rate class or on a system basis, although the overall trend is downward. For example, actual total retail system sales (in Mcfs) decreased from 5,833,763 (FY 2020) to 5,681,907 (FY 2021) and increased to 5,820,175 (FY 2022). While using a 3-year average may result in an optimistic projection, it is not unreasonable given the fluctuating levels of demand. Generally, it is advisable to use a multi-year period to normalize revenues or expenses, and it is appropriate to do so here.

**Exceptions:** PWD Excepted to this recommendation. PWD contended that use of the 3-year average (FY 2020 – FY 2022) is overly optimistic in that it produces a result that is contrary to the decline in billed sales volume per account experienced over at least the past five years, and which discounts the recent developments regarding Vicinity Energy’s construction of its new water treatment facility (significantly reducing usage projected for one of PWD’s largest customers) during the prospective rate period. PWD Exceptions101 at 2-4.

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Board Decision: Upon consideration of the record on this issue and the arguments presented by the participants, we accept in part the Hearing Officer’s recommendation to adopt the Public Advocate’s proposal to adjust the projected sales volumes to reflect a 3-year average (FY 2020- FY 2022) rather than the single year (FY 2022) used by PWD. Using a multi-year average generally is an appropriate method of normalization and should be used here. There was no showing that FY 2022 sales volume per account utilized by the Department is better representative of the conditions that will be in effect during the prospective rate period.102 Adopting the Public Advocate’s sales volume adjustment in full would increase revenues at existing rates and therefore reduce the required rate increase by $5.610 million in Fiscal Year 2024 and $5.871 million in Fiscal Year 2025.

However, we grant PWD’s Exception that this adjustment should be modified to reflect the anticipated water revenue that will be lost as the result of the planned reduction in usage (and thus revenue) by the loss of one of its largest customers, Vicinity Energy.103 PWD noted that the expected loss in water sales for Vicinity was 90,000 thousand cubic feet (MCF) per year. The Technical Consultant to the Rate Board advises, and we find, that it is reasonable to estimate that the loss of such sales would reduce annual water revenues under rates that were in effect in FY 2023 by $3.044 million.104 Applying this offset to the Hearing Officer’s sales volume adjustment results in a net increase in existing revenues and a concomitant reduction in the required rate increase of $2.566 million in FY 2024 and $2.827 million in FY 2025.

102 In addition, we note that PA witness Morgan contended that the number of customers has been increasing while the average usage per account has been decreasing. The increasing trend in the number of customers has an offsetting effect on decreased usage. Hence, as the number of customers increases, revenues potentially can increase despite the change in usage. May 4, 2023 Hearing Transcript at 102.
103 PWD St. 7 at 14-15. There, the Department notes that Vicinity is a Top 10 customer and that beginning in FY 2024, this customer’s annual water usage is anticipated to drop by 90,000 thousand cubic feet (Mcf).
104 Key assumptions in developing this estimate include: (1) The revenue reduction is based solely on losses in consumption-based sales; no reductions are assumed for meter-based revenues, sewer and stormwater revenues and TAP-R; (2) The loss in sales is spread uniformly at 7,500 MCF per month and is applied to the two water rate blocks with the lowest unit rates per MCF; i.e., for usage greater than 100 MCF per month, since PWD did not state that all Vicinity water sales are being eliminated. The estimated annual lost water revenues under existing rates are calculated using two months of FY 2022 rates (July 2022-August 2022) and ten months of FY 2023 rates (September 2022-June 2023).
2. Increased Revenue Attributable to TAP

As discussed in more detail below in Section IX.A, the record establishes that as the result of the efforts undertaken by PWD (and WRB), TAP (the Tiered Assistance Program) enrollment is likely to increase during the rate period at issue here. As extensively discussed in Mr. Colton’s testimony (PA St. 3 at 40-48) and in the PA Brief at 43-48, this is expected to result in improved collection of TAP billings, due to the higher collectability rates of TAP participants compared to non-TAP low-income customers, as well as the higher collectability factor of non-TAP customers who are subject to the TAP-R rider (which is essentially, a surcharge to recover the revenue loss attributable to the TAP customers as they do not pay for the full cost of service).

Based on its contention that neither the payments received from TAP participants (the TAP billed revenue), nor the revenue received from non-TAP participants (the TAP surcharge revenue) are reflected in the cost-of-service study (COSS) used to establish the revenue requirement and thus PWD’s rates and charges, the Public Advocate proposed two adjustments to reflect improved collectability of TAP billings and TAP surcharge revenue resulting from the TAP program.

**Hearing Officer Recommendation:** In the May 30, 2023 Hearing Officer Report at 54-57, the Hearing Officer recommended that we reject the first adjustment (regarding TAP participant billings) but accept the second component (regarding TAP-R surcharge revenue). She found that the revenue derived from the TAP customers through their discounted bills is already included in base rates. To the extent that TAP customers pay a larger share of their discounted bills than non-TAP low-income customers, that fact should already be reflected in PWD’s base rate collectability factors. She recommended, however, that we accept the second adjustment (TAP surcharge revenues collected from non-TAP customers) as those revenues are tracked separately and are not included in PWD’s COSS. The effect of this adjustment is to increase

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105 TAP is a low-income customer assistance program mandated by City Council (Phila. Code, § 19-1605, calling the program “IWRAP”) that allows low-income customers (and others suffering certain special hardships) to pay reduced bills based upon a percentage of their household income, not water usage. Revenue losses associated with the program are reconciled annually. The [2023 TAP-R reconciliation proceeding](https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/) can be found at https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/
revenues under existing rates (and therefore reduced required additional revenue requirements) by $4,927,000 in both FY 2024 and FY 2025.

**Exceptions:** The Department excepted to this recommendation, [PWD Exceptions](https://www.phila.gov/media/20230606090443/2023-PWD-Exceptions.pdf) at 6-10. The Department argued that the collection factors utilized in both the base rate and TAP-R proceedings reflect collections from TAP and non-TAP billings — including TAP-R billings and revenues. Further, the Water Department noted that the adjustment is unnecessary, as collectability is addressed in TAP-R proceedings. [PWD Exceptions](https://www.phila.gov/media/20230606090443/2023-PWD-Exceptions.pdf) at 7.

**Board Decision:** Upon consideration of the record on this issue and the arguments presented by the participants, we reject the Department’s Exception. We adopt the Hearing Officer’s recommendations that we reject the Public Advocate’s adjustment regarding TAP participants’ billed revenue, but that we accept the proposed $4,927,000 adjustment relating to TAP surcharge revenue that is paid by all non-TAP customers. As demonstrated by Public Advocate witness Colton, the average collectability rate for payments made through the TAP surcharge is nearly 50 percentage points higher (84.13% vs. 34.3%) than the comparable rate for low-income non-TAP customers. (PA Brief at 44) and as noted by the Public Advocate in its Brief at page 45-46, “Contrary to PWD’s assertions, Mr. Colton’s adjustment is not reflected in historic collections experience.” (Quoting PWD testimony that “TAP discounts and TAP-R surcharge billings are excluded from the cost-of-service analysis.” [PWD St. 7](https://www.phila.gov/media/20230606090443/2023-PWD-Exceptions.pdf) at 12). We agree that higher collectability resulting from the TAP program should be reflected in rates as a reduction of $4.927 million to the Department’s proposed rate increases in both Fiscal Years 2024 and 2025.

We also agree with the Public Advocate that this difference in collectability is not addressed in the limited TAP-R proceedings. As stated by the Public Advocate in its Brief at page 48: “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. 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

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expectations of future TAP credits. Collectability has never been an issue in TAP-R reconciliation proceedings, but has, in fact, been a subject of PWD base rate proceedings.” (Footnotes omitted).

C. Capital Improvement Program Budget

The largest initiatives in the Capital Improvement Program (CIP) include: (i) the Green City, Clean Waters Program; (ii) the Drinking Water Revitalization Plan; and (iii) the Renewal and Replacement of Other Older Infrastructure. PWD Capital Panel, PWD St. 3 at 9; PWD St. 7, Sch. BV-1, Table C-7.

The Black and Veatch Panel explained that the CIP budget is appropriation-based. The FY 2023 CIP costs reflect the Water Department’s adopted FY 2023 budget appropriation, and the FY 2024 CIP costs reflect the proposed FY 2024 budget appropriation. The figures for FY 2025 to FY 2028 reflect the Water Department’s submitted capital program and, according to the Department do not include any allowance for inflation.107 For this proceeding, PWD added an inflation factor of 4% to the years beginning with FY 2025, based on the panel’s review of industry cost indices, including the Engineering News Record Construction Cost Index and the Handy-Whitman Construction Cost Index. PWD St. 7 at 25-26.

As set forth in Mr. Morgan and Ms. Rogers’ testimony108 (PA St. 1 at 16-17), the Public Advocate made two recommendations regarding PWD’s CIP expenditures during the forecast years. The first adjustment, eliminating proposed inflation escalation of FY 2025 CIP amounts by $30,188,000, would reduce the amount of PWD’s bond sizing, thus reducing debt service expense. The second adjustment, modifying the carry forward (or roll forward) of CIP amounts ($82,940,000 in FY 2024 and $56,614,000 in FY 2025), would likewise reduce the amount of PWD’s bond sizing, thus reducing debt service expense. Taken together, PA states that 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.

107 PWD witness Jagt: “In the 2024 dollars, correct. It still does not reflect any adjustment for inflation . . . It reflects the fact that the planning only includes the 2024 or that level of dollars at that time and requires an adjustment going forward.” May 3, 2023 Hearing Transcript at 35-36.
108 PWD refers to these witnesses as the Exeter Panel.
**Hearing Officer Recommendation:** The Hearing Officer recommended that we not accept either of these proposed adjustments to the CIP budget. As she explained in the [May 30, 2023 Hearing Officer Report](#) at 31, the Public Advocate’s proposal to remove the inflation adjustment is not appropriate, as PWD’s FY 2025 CIP budget is based on FY 2024 dollars, and therefore should be adjusted to reflect additional inflation which is likely to occur between now and when the final version of the FY 2025 CIP is adopted. She further recommended that we not accept the Public Advocate proposal to modify the carryforward amounts for FY 2024 and FY 2025 by applying a multi-year average, although she recognized that some adjustment might be appropriate to reflect that not all of the CIP budget is expended in any particular year. [May 30, 2023 Hearing Officer Report](#) at 32.

**Exceptions:** The Public Advocate excepted to both issues addressed in the Hearing Officer’s recommendation concerning the CIP budget. [PA Exceptions](#) at 1-4. With respect to the FY 2025 inflation adjustment, the Advocate contended that the recommendation fails to reflect that the amount presented as the CIP budget for FY 2025 does not reflect the approved budget amount but rather represents the best estimate of PWD’s FY 2025 budgeted expenditures and is “likely” to change when presented for City Council approval. [PA Exceptions](#) at 2. The Public Advocate also excepted to the Hearing Officer’s further recommendation that we reject the proposed adjustment to the CIP rollforward amounts for FY 2024 and FY 2025, asserting that this is an appropriate normalization adjustment that is adequately supported by the record. [PA Exceptions](#) at 3.

**Board Decision:** Upon consideration of the record on this issue and the arguments presented by the participants, we reject the Public Advocate’s Exception and adopt the Hearing Officer’s recommendation that neither of these adjustments be accepted. As she explained in the [May 30, 2023 Hearing Report](#) at 29-32, PWD’s FY 2025 CIP budget is based on FY 2024 dollars, and therefore should be adjusted to reflect additional inflation between now and when the final version of the FY 2025 CIP is adopted. We further find that there is insufficient support for the Public Advocate’s proposed adjustment to the CIP budget rollforward amounts. To adopt this
recommendation, as presented, could result in insufficient funding for the planned projects in the capital program.

D. Escalation Factors

PWD’s prospective 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. As set out in PWD St. 7 at 20-25, Black & Veatch’s escalation factors for the various cost categories identified in the FY 2023 budget are based upon the Department’s historical experience and recognized cost indices, including the Producer Price Index (PPI) for Industrial Chemicals and Construction Equipment and Machinery and the Consumer Price Index (CPI) for the Philadelphia Area for Services, Materials and Supplies, and Transfers. These escalation factors are applied to the projected FY 2023 expenses (for each of the respective cost categories) beginning in FY 2024. Escalation factors used in projecting operating and maintenance (O&M) expenses are discussed in the Cost-of-Service Report (PWD St. 7, Schedule BV-2) and further information is provided in the white paper entitled “Inflation and Cost Escalation Pressures” (PWD St. 7, Schedule BV-4: WP-1).

Explaining that “past inflation is not a good predictor of future inflation rates,” the Public Advocate recommended instead utilizing the March 22, 2023 Federal Open Market Committee (FOMC) Core Personal Consumption Expenditures (PCE) median inflation projections over the rate period. These projections are 2.6% and 2.1% for 2024 and 2025, respectively. PA St. 1 at 21. 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.” The Public Advocate witnesses were particularly critical of PWD’s use of the recent historic increase in the CPI for certain categories of expense, noting that the CPI includes such items as food and energy and is known to be much more volatile than other inflation measures.

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109 Although the PA witnesses used an average of prior years to derive their proposed adjustment (PA Brief at 18-19), PWD argued that the impact of the proposed adjustment is to completely eliminate the $82,940,000 and $56,614,000 carry-forward amounts for FY 2024 and FY 2025. PWD Brief at 18-19.
110 PA St. 1 at 19. They noted that recent high rates of inflation have in fact been decreasing.
Based upon its application of recent historical CPI growth in the Philadelphia area, PWD projected escalation increases of 7.77% in FY 2024 and 6.70% in FY 2025 in services, materials and supplies, and transfers. The Public Advocate proposed adjustments utilizing the core PCE to the escalation factors applicable to the categories of Services, Materials and Supplies, Transfers, Chemical Costs, and Equipment.

**Hearing Officer Recommendation:** As discussed in the [May 30, 2023 Hearing Report](#) at 32-34, the Hearing Officer accepted the Public Advocate’s proposed escalation in part; she recognized that these different accounts are not uniformly subject to inflation, and therefore it was appropriate to apply different cost indices to anticipated costs. She found that use of the PCE to predict inflationary increases is more appropriate for several accounts (Services, Materials and Supplies, and Transfers) than the generic, historic Consumer Price Index (CPI-PA) used by PWD. She further found PWD’s proposed escalation rates for chemicals and equipment, which are based on the specific Producer Price Index for those cost categories, to be more appropriate. Her recommendations:

1. **Forecast O&M for Services**: utilizing the PCE inflation rates for FY 2024 and FY 2025. 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;

2. **Forecast O&M for Materials and Supplies**: utilizing the PCE inflation rates for FY 2024 and FY 2025. 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; and

3. **Forecast O&M for Transfers**: utilizing the PCE inflation rates for FY 2024 and FY 2025. 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.

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111 [PA St. 1](#) at 19.
**Exceptions:** PWD excepted to the recommendation to utilize the core PCE rather than the CPI-PA for the Services, Materials and Supplies, and Transfers accounts. The Department asserted that the PCE has not previously been used in Rate Board proceedings, that it is “more of an extension of federal monetary policy and does not reflect specific cost pressures or market conditions facing the Department,” and that it understates the level of inflation the Department is experiencing. [PWD Exceptions](#) at 4-6.

**Board Determination:** Upon consideration of the record on this issue and the arguments presented by the participants, we accept the Hearing Officer’s recommendations concerning the appropriate escalation factors to apply to these specified O&M accounts. Use of the PCE (2.6% for FY 2024, 2.1% for FY 2025) for Services, Materials and Supplies and Transfers, rather than the recent historic inflation measured by the CPI (7.77% for FY 2024, 6.70% for FY 2025) is appropriate as the CPI reflects high recent inflation, includes such items as food and energy, and is known to be much more volatile than other inflation measures. On the other hand, we agree with the Hearing Officer that use of the specific Producer Price Index (PPI) as proposed by PWD for Industrial Chemicals and Construction Equipment and Machinery is appropriate. As noted in the Department’s [Brief](#) at 50-51, PPI is a leading indicator for future chemical and equipment expenses and therefore is a reasonable predictor of future costs for chemicals and equipment. The overall effect of these adjustments is to reduce operating expenses (and thereby reduce any revenue increase) by $9.386 million in FY 2024 and by $18.816 million in FY 2025.

**E. 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 in its [Brief](#), Appendix A, line 9. PWD’s witnesses, in rebuttal, accepted this proposal which does not impact the revenue requirements in this proceeding. Hearing Officer Chestnut, in the [May 30, 2023 Hearing Officer Report](#) at 34-35, recommended that the Rate Board accept this adjustment. No exceptions were filed. We accept this recommendation.
F. Debt Interest Rate

PWD utilized assumed revenue bond interest rates of 5.5% for FY 2024 and FY 2025. Following the rate period, PWD expects bond interest rates to continue to rise, reaching 6% in FY 2026 and beyond. PWD St. 7 at 28. Although the Public Advocate’s witnesses recognized that interest rates have recently risen, they nonetheless believe PWD’s projections are overstated and submitted “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.” As a result, the Public Advocate recommended that the assumed interest rate future revenue bond issuances be reduced for ratemaking purposes to 5.0% for FY 2024 and 2025. PA Brief at 24.

Hearing Officer Recommendation: In the May 30, 2023 Hearing Report at 35-36, Hearing Officer Chestnut recommended adoption of the Public Advocate’s proposed adjustment. She noted that during the technical hearings, PWD’s Financial Panel agreed that, were the Department 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%. May 3, 2023 Hearing Transcript at 40-41. She found that a more moderate increase, utilizing a 5.0% interest rate for FY 2024 and FY 2025 bond issuances, should be approved by the Rate Board.

Board Determination: No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation that utilizing a 5.0% interest rate for FY 2024 and FY 2025 bond issuances is an appropriate reflection of the prospective economic conditions likely to be in effect during the rate period. This adjustment in interest cost reduces PWD’s revenue requirements by $1.917 million in FY 2024 and $3.748 million in FY 2025.

G. Interest Earnings on Reserves

Non-Operating Income of the Water Department consists primarily of interest earnings on the amounts within certain funds and accounts. PWD St. 7, Schedule BV-1, Table C-3 contains projections of interest income on balances held by those funds and accounts. PWD assumed a 1.0% rate of interest income on these fund balances. The Public Advocate’s witnesses proposed that a higher rate of interest income, 1.5%, should be assumed for the rate period
reflecting consistency between the moderately increasing interest on borrowing and the increasing rate of interest earned by institutional funds.\textsuperscript{112} On rebuttal, PWD contended 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.\textsuperscript{113}

\textbf{Hearing Officer Recommendation}: The Hearing Officer accepted the Public Advocate’s proposed adjustment, stating that interest income changes should be consistent with increases in interest expense. She recommended that the Rate Board should adopt this proposal. \textit{May 30, 2023 Hearing Officer Report} at 36.

\textbf{Exceptions}: PWD did not except to the recommended adjustment itself but did question how it was incorporated into the Model used by the Rate Board to generate the recommended revenue requirement. \textit{PWD Exceptions} at 14.

\textbf{Board Determination}: No exceptions were filed to the recommended adjustment. We accept the Hearing Officer’s recommendation that the interest income on PWD accounts be increased from 1.0\% to 1.5\%. Both the Department and the Public Advocate, in their respective proposals as to the appropriate interest expense, recognize that interest rates have been increasing. This has the effect of reducing PWD’s revenue requirements by $1,821,000 in FY 2024 and $1,999,000 in FY 2025. PWD’s Exception as to incorporation of this adjustment in the Model is addressed below, in Section VII.H.

\textbf{H. Use of the Rate Board Model}

In its \textit{Exceptions} at 13-16, PWD asserted that the tables attached to \textit{the May 30, 2023 Hearing Officer Report} that were generated by the Rate Board “Simple” Model to calculate the revenue requirements in this proceeding do not appear to (i) carry-through the adjustments for interest earnings and liquidated encumbrances or (ii) accurately present the billed volume adjustment.

\textsuperscript{112} \textit{PA St. 1} at 22.  
\textsuperscript{113} \textit{PWD Rebuttal St. 1} at 20-21.
**Board Determination:** Pursuant to the Rate Board’s Regulations at § I (1.1) and II.B.7, the recommended revenue requirement contained in this Rate Determination was calculated utilizing the Rate Board Model, a financial spreadsheet owned by the Rate Board and provided to the participants to calculate the effect on revenue requirements of potential revenue adjustments. Its use by the Rate Board is mandated by Section II.B.7(b): “The Board shall utilize the Model in its Rate Determination to calculate the overall effects of its decision on revenue requirements authorized to be sought from retail customers via Water Department rates and charges.”

We recognize the limitations of the Model – it is intended to provide a usable way for participants (and the Rate Board) to calculate the impact of adjustments to the Department’s filing on the prospective revenue requirement but is not detailed like the proprietary Black & Veatch model used to generate the compliance filing, which contains the specific rates and charges to be included in the tariff. We further note that this is the first occasion we have had to utilize the Model to derive the revenue impacts of our determination, and that is not surprising that there will need to be technical corrections made as we and the participants gain experience in its use.

With respect to the specific items brought up by PWD, we reviewed the Model and the Board Chair sought clarification from the Rate Board’s Technical Consultant, Amawalk Consulting Group, who developed the Model. Our understanding of these specific issues, based on this discussion, is as follows:

1. **Interest Income:** PWD contended that the interest earnings adjustment shown in Table C-1A attached to the May 30, 2023 Hearing Officer Report was overstated, as it appears to reflect acceptance of all of the Public Advocate’s proposed adjustments. It also asserted that the Model is not capable of calculating changes in interest earnings when making changes to the revenue requirements. We agree that the Model is not capable of recalculating interest earnings in this manner but note that the anticipated impact of a more detailed calculation would be de minimis here. No adjustment to Table C-1A will be made with respect to this issue at this time.
(2) **Liquidated encumbrances**: PWD in its Exceptions contended that Table C-1A does not reflect the correct liquidated encumbrances projections based upon the adjustments made in the May 30, 2023 Hearing Officer Report with respect to Class 200 and 300 expenses. It asserted that the necessary adjustment to liquidated encumbrances can be calculated by applying 16.11% to the total projected Water Department Class 200 and 300 projections (excluding SMIP/GARP, because it is assumed that those budgets will be fully spent) and those amounts can then be input into the Model on Line 15a of Table C-6 to reflect the updates. Based on the adjustments adopted in the Report, PWD contended that the adjustment for liquidated encumbrances would increase revenue requirements by about $1.2 million in FY 2024 and about $2.5 million in FY 2025. [PWD Exceptions] at 15, Appendix B.

The Department is correct that an adjustment to the liquidated encumbrances should have been made. Liquidated encumbrances are calculated as a percentage of certain accounts; in this case, PWD calculated the percentage to be applied as 16.11% of projected Services (Class 200) and Materials and Supplies (Class 300), based on the average of the actual ratio of liquidated encumbrances to expenses for FY 2020 to FY 2022 (excluding SMIP/GARP). Since liquidated encumbrances serve as an offset (reduction) to total expenses, acceptance of this exception will increase total expenses (and thus total revenue requirements) by $1,226,000 in FY 2024 and by $2,469,000 in FY 2025. This adjustment is reflected in Table C-1A attached to this Rate Determination.

(3) **Billed volume:** The Department further contended that the recommended adjustments in the Board Model to revenue were applied solely to water revenue, although the impact of the adjustments affects the wastewater revenue requirement as well. We agree in principle that this is a correct statement; the Model was used to apply all adjustments to revenues under existing rates to water revenues in the absence of a specific breakdown between the services. Table C-1A shows total revenue requirements. When the Department prepares its compliance filing to generate the tariff incorporating the Rate Board’s determination, it will develop the

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114 Briefly, an encumbrance is an expense that is anticipated to be charged to the Water Fund. Liquidated encumbrances represent cancelled commitments for which funds had been committed.
specific water, wastewater and stormwater rates needed to achieve the Rate Board’s approved overall revenue requirement. No adjustment to Table C-1A with respect to this issue is therefore necessary at this time.

VIII. COST OF SERVICE / RATE DESIGN

A. Water: Extra Capacity Factors

Generally, a cost-of-service study (COSS, or Class Cost of Service Study, CCOSS) for a water utility assigns to each class of customers its proportionate share of the utility’s total cost of service. The primary purpose of a cost-of-service study is to allocate a utility's overall revenue requirements to the various classes of service in a manner that reflects the relative costs of providing service to each class. Utilities perform cost-of-service studies to determine what it costs to serve their customers, both in total and by individual rate class. A cost-of-service study is one of the most effective analytic tools that a utility can rely on for designing rates that equitably assign cost responsibility to each customer rate class. Cost-based rates that generate revenue from each class of customer in proportion to the cost to serve each customer class will avoid cross-class subsidies.

Here, a cost-of-service study was performed by Black & Veatch and discussed in PWD St. 7 at 6-45, and the attached Schedules BV-1 (summary tables relating to the comprehensive COSS, including the projection of combined revenue and revenue requirements, customer bill impacts, and associated rate schedules for water, sanitary sewer, and stormwater service) and BV-2 (Cost of Service Report presenting the detailed cost-of-service analysis, including projection of revenue and revenue requirements, underlying assumptions, allocation of

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115 Again, to be clear, the compliance filing (the actual rates and charges it contains) will allocate among the customer classes and types of service our determination as to PWD’s overall revenue requirement during the prospective rate period.
116 This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section VIII.
117 The Rate Ordinance requires the Board to provide for rates and charges that are “equitably apportioned among the various classes of consumers.” Phila. Code §13-101(4)(c).
costs to the water and wastewater systems, projection of stormwater billable units of services, supporting wholesale analyses, and rate design).


Those guidelines provide for a three-step process, employed by Black & Veatch here: (1) **Revenue Requirement**: Compares the revenues of the utility to its operating and capital costs to determine the adequacy of the existing rates to meet its obligations; (2) **Cost-of-Service Analysis**: used to functionalize, allocate, and equitably distribute the revenue requirements to the various customer classes of service (e.g., residential, commercial) served by the utility for the prospective rate period. Black and Veatch (PWD St. 7 at 8-9) explained that this analysis involves multiple levels of cost allocation, namely: (ii) Allocation of identified costs (e.g., O&M expense debt service, reserves, cash funded capital) to functional cost centers and then to cost components, (iii) Calculation of unit cost for each cost component, and (iv) Determination of the cost for each customer type by multiplying the unit cost of each component by the number of units of service associated with each customer type; and (3) **Rate Design**: uses the results from the revenue requirement and cost-of-service analysis to establish cost-based rates designed to collect the distributed revenue requirements from each class of service.119 PWD St. 7 at 6-9; Sch. BV-2.

Black & Veatch used the base extra-capacity method to allocate costs to the various customer rate classes according to their respective service requirements. The base-extra capacity method considers base costs (O&M expenses, capital costs), extra capacity costs (additional costs

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118 https://engage.awwa.org/PersonifyEbusiness/Bookstore/Product-Details/productId/61556627
119 Black & Veatch noted that because the Water Department uses receipts to calculate revenues, its “collection lag factor” must be evaluated. The lag factor reflects a final adjustment to the cost-of-service rates to recognize the fact that there will be a proration of billings between the existing and proposed rates during the first month following the effective date of the rate increase, as well as the fact that not all the fiscal year billings are fully collected within that fiscal year.
for maximum day and maximum hour demands), customer costs (meter maintenance and reading, billing, collection, accounting), and fire protection costs (hydrants, water towers, oversized mains, pumps). 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 basis of relative meter and service investment. Account-related customer costs are allocated in proportion to the number of customers or the number of bills. Sch. BV-2.

No participant disagreed with the use of this methodology, although both the Public Advocate and PLUG expressed concern with the age of the data used to derive the extra capacity factors and recommended that the extra capacity factors should reflect more recent data than that used by Black & Veatch in the COSS. They both noted that the extra capacity factors reflected in PWD’s water COSS study have been used by PWD since PWD’s 2016 rate proceeding and includes data going back to FY 2012. PA Brief at 32; PA St. 2 at 12-13; PLUG Brief at 6-7.

The Public Advocate proposed that the Rate Board should adopt the revised extra capacity factors for each general retail class developed by its witness Mierzwa and discussed in his testimony at PA St. 2 at 14-15, which utilized customer billing records from FY 2019 (July 2018 – June 2019) to develop retail customer class extra capacity factors using the AWWA Methodology, as FY 2019 represented the year (after FY 2018) with the second highest ratio of system maximum day demand to system average demand for which data is available. PA Brief at 33-36.

Both PWD and PLUG opposed the use of the Public Advocate’s adjusted extra capacity factors. PWD asserted that (1) Mr. Mierzwa did not base his analysis on data from the year of system peak demand (FY 2018); and (2) he failed to recognize that there are variations between the customer class specific weekly and hourly usage adjustment factors reflected in PWD’s COSS Study and those derived from the calculations presented in the AWWA M-1

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120 PWD's COSS utilized 2.09 as the system-wide maximum day extra-capacity factor and 1.39 as the system-wide maximum hour extra-capacity factor. Sch. BV-2 at 4-8.
Manual, as the AWWA Methodology uses generic assumptions for the weekly and hourly usage adjustments to represent a typical water utility.\textsuperscript{121} PLUG agreed that Mr. Mierzwa used generic data that is not reflective of PWD’s system characteristics, and pointed out that use of these adjusted extra capacity factors would “dramatically” reallocate PWD’s water revenue requirement among the various customer classes based on estimated data. \textbf{PWD Brief} at 82-82.; \textbf{PLUG St. 1-R} at 5; \textbf{PLUG Brief} at 3-6.

**Hearing Officer Recommendation:** Although she agreed with the Advocate and PLUG that it is no longer appropriate for PWD to utilize data dating back to FY 2012, Hearing Officer Chestnut recommended that we not accept the Public Advocate’s adjusted extra-capacity factors in this proceeding: “As noted by PLUG in its \textit{Brief} at 4, 6 (Tables 2 and 3), this will result in a substantial shifting in class cost responsibility (and therefore revenue recovery from each class), and I am hesitant to make a recommendation based on estimated extra capacity factors rather those developed from actual or current data.” \textit{May 30, 2023 Hearing Officer Report} at 42-43. She further recommended that we direct PWD to perform a complete study of customer usage factors for consideration in the next general rate proceeding. \textit{May 30, 2023 Hearing Officer Report} at 43.

**Exceptions:** Both the Public Advocate and the Department excepted to this recommendation. In its \textbf{Exceptions} at 4-5, the Advocate contended that use of the Department’s capacity factors is inherently unreliable, as it is based on data from some unidentified period prior to 2012. It further noted that its adjusted extra capacity factors use “. . . actual PWD data from FY 2019 (capturing unique characteristics of PWD’s service territory).” \textbf{PA Exceptions} at 5. PWD in its \textbf{Exception} at 12 contended that the Rate Board does not have the authority to “require a formal study of “rate class” usage characteristics be undertaken and completed and certify same before the next rate filing can be made,” as directed in the \textit{May 30, 2023 Hearing Officer Report} at 43.\textsuperscript{122}

\textsuperscript{121} \textbf{PWD St. 2R} at 2.
\textsuperscript{122} The Public Advocate also supported the recommendation of the Hearing Officer that PWD conduct a formal study of its class usage characteristics prior to filing its next rate proceeding. \textbf{PA Exceptions} at 5.
**Board Decision:** Upon consideration of the record on this issue and the arguments presented by the participants, we accept the Hearing Officer’s recommendation that we not utilize the Public Advocate’s adjusted extra-capacity factors in this proceeding, although we agree that it is no longer appropriate for PWD to include data dating back to FY 2012. As noted by PLUG in its Brief at 4, 6 (Tables 2 and 3), acceptance of the Advocate’s adjusted extra capacity factors will result in a substantial shifting in class cost responsibility (and therefore revenue recovery from each class), and we are reluctant to do that based on estimated extra capacity factors rather than those developed from actual or current data.

However, we adopt the Hearing Officer’s recommendation to direct PWD to perform a study of customer usage factors prior to its next base rate proceeding, and to incorporate this load study into the COSS to ensure that it is reflective of PWD's current operating usage and characteristics. Although in its Exceptions at 11-12, PWD contended that we lack jurisdiction to order this, it failed to explain how requiring this information is outside our ratemaking authority. A competent cost of service study is necessary to make rate determinations that not only produce the revenue requirement necessary to satisfy the requirements in the Rate Ordinance (Phila. Code § 13-101(4)) that rates be set at a level that produces revenue sufficient for the Department to meet its expenses and debt service, but that such rates and charges shall be equitably apportioned among the various classes of consumers. It is necessary that we have before us a cost-of-service study that is based on current and accurate usage data to fulfill that mandate.

**B. Water: Cost Allocation to Public / Private Protection Service**

PWD assigned no average day usage volumes (which serve as the basis to allocate base functional costs) to Public or Private Fire Protection service; the COSS incorporated estimated volumes. The Public Advocate submitted that Public and Private Fire Protection service should be allocated base functional costs, which are costs that tend to vary with the quantity of water used, plus the costs associated with supplying, treating, pumping, and distributing water.

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123 For example, the Industrial class max day/max hour capacity factor increases from 160/200 to 330/440 using the PA adjusted capacity factors. Table 2, PLUG Brief at 4.
124 PWD St. 7, Sch. BV-2, Table 4-4, which identified the actual annual use of water to provide Public and Private Fire Protection as 0 gallons. Responses to PA-IV-14, PA-IV-15.
to customers under average load conditions.  

\textbf{Hearing Officer Recommendation:} Hearing Officer Chestnut recommended that we not accept this proposed adjustment, finding that the Department is correct, this is a standby service and the Public Advocate’s proposal to reflect an estimate of unmetered annual water use for fire protection is not consistent with the methodology used in AWWA’s M1 Manual. \textit{May 30, 2023 Hearing Officer Report} at 43-44.

\textbf{Board Determination:} No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation that we reject this proposed adjustment to the cost allocation to the public and private fire protection service. Increasing the Total Test Year Water Use units to reflect an estimate of unmetered annual water use for fire protection (basically, standby service) would be inconsistent with the methodology reflected in AWWA’s M1 Manual.

\section*{C. Water: Revenue Increase Allocation}

In its Brief at 27-30 (citing \textit{PA St. 2} at 20-22), the Public Advocate proposed to allocate any revenue increase in a manner consistent with its cost of service analysis, with exceptions for those customer classes that would receive more than twice the average rate increase proposed by the Department. For those customer classes, the Public Advocate recommended that they receive an increase no greater than twice the system average increase.

PLUG, through the testimony of its witness LaConte, recommended that any revenue adjustments approved by the Board be allocated consistent with PWD’s COSS. \textit{PLUG Brief} at 12. As PLUG noted in its Brief with respect to the Public Advocate’s proposed revenue allocation: “The Board should not approve such drastic revenue allocation adjustments based on estimated capacity factors.” \textit{PLUG Brief} at 6.
PWD also objected to the Public Advocate’s proposed revenue increase allocation. In its Brief at 88-90, the Department asserted that its proposed cost allocation and rate design are consistent with industry best practices and are premised upon cost causation. It further contented some of PA witness’s Mierzwa’s specific class allocations may not be achievable, given PWD’s current rate structure.

**Hearing Officer Recommendation:** In the [May 30, 2023 Hearing Officer Report](#) at 44-45, Hearing Officer Chestnut explained that as she did not recommend that the Rate Board accept the Public Advocate’s proposed COSS extra capacity adjustment, any revenue increase approved by the Rate Board should be allocated consistent with PWD’s COSS. In the event the Rate Board determines that the record supports a revenue requirement less than that requested by PWD, then any revenue increase should be scaled back proportionally among the customer classes.

**Exceptions:** In its [Exceptions](#) at 5, the Public Advocate suggested that the Board should implement its revenue allocation methodology, which is consistent with principles of gradualism and establishes an appropriate rate design for all customer classes.

**Board Determination:** As discussed above, we are hesitant to adopt a revenue requirement allocation that results in a substantial shifting of cost responsibility among the customer classes based on the record produced in this proceeding. We agree with the Hearing Officer. We adopt the revenue allocation proposed by the Department and direct that any reduction in the revenue requirement resulting from this Rate Determination should be allocated proportionately among the customer classes.\(^{125}\)

**D. Stormwater: Allocation of SMIP / GARP Credits, Building Type Charges, Credits for Rain Barrels**

As explained in the [May 30, 2023 Hearing Officer Report](#) at 45-48, generally, all properties in the City of Philadelphia are assessed a monthly stormwater charge (the Stormwater Management Services charge, SWMS) to recover the cost the City incurs for managing

\(^{125}\)A cost-of-service study like that mandated in Section VIII.A above could of course lead to a different allocation in future rate proceedings.
stormwater. The amount charged for stormwater on a monthly bill depends on the type of property. The stormwater charge for residential customers is a flat fee based on the average property size and impervious area; condominiums are billed like non-residential properties, based on the specific total and impervious areas of the property, divided equally among all water accounts on the property; and commercial properties are billed based on the specific square footage of impervious area covering the property and the total square footage of the property. There are discounts and exemptions for parcels that meet certain criteria regarding green spaces. The charge is based on the square footage of Gross Area (GA) and Impervious Area (IA). This is a component of the strategy known as Green City, Clean Waters.

In his testimony (PA St. 2 at 26-30), PA witness Mierzwa found that while PWD’s stormwater COSS and analysis is generally reasonable, he had three proposals concerning the stormwater rates and credits: first, he recommended that the stormwater rates adopted in this proceeding be designed so that all customers share in the Stormwater Management Incentive Program (SMIP) and Greened Acre Retrofit Program Grants (GARP) (collectively SMIP/GARP Program) billing credits which are currently assigned only to those customers that participate in the SMIP/GARP Program. Second, he recommended that the Department modify the residential rate design to provide for charges based on residential building type, rather than the current flat fee. Finally, he recommended that PWD be directed to evaluate whether a rate discount should be provided to residential customers that agree to have PWD install a 24-inch rain barrel on their property. PA Brief at 39-41.

PWD opposed adoption of these proposals by the Rate Board in this proceeding. It contended in its Brief at 94-97 that these stormwater recommendations are not ripe for consideration at this time and should be rejected in this proceeding, but expressed its willingness to continue to evaluate these proposals as part of a discussion with stakeholders of the design and recovery of costs related to the stormwater credits and incentives programs.

**Hearing Officer Recommendation:** While she declined to recommend adoption of the Public Advocate’s stormwater proposals in this proceeding, Hearing Officer Chestnut recommended that we direct PWD to evaluate these issues as part of its on-going discussions with stakeholders regarding stormwater costs and credits, to report on those discussions and to be
prepared to address these proposals in its next general rate proceeding. May 30, 2023 Hearing Officer Report at 48.

**Board Determination:** No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation. In light of the on-going discussions concerning these and other issues regarding stormwater management costs and credits, it is premature to evaluate the merits of these specific proposals here. We therefore direct PWD to continue those discussions, to report on those discussions and to be prepared to present and respond to specific proposals in its next general rate proceeding.

**E. Stormwater: External Funding**

The Public Advocate requested that the Board should explicitly recognize that the costs of stormwater overflow remediation projects and their maintenance represent financial challenges to PWD’s customers, and therefore direct PWD to actively seek revenues from non-ratepayer sources to fund, at least in part, stormwater overflow remediation projects and to report to the Board quarterly on the status and activities undertaken in pursuit of such non-ratepayer funding. PA St. 1 at 10; PA Brief at 26-27. It acknowledged that PWD Commissioner Hayman had affirmed that PWD would accept and spend capital funds for stormwater infrastructure projects from sources other than customer revenues or debt supported by revenue, and he had further testified that that he testified recently before the United States Senate “pushing for additional money for water utilities, especially in Philadelphia.” May 4, 2023 Hearing Transcript at 9-10.

Although not addressed in its Brief, PWD apparently did not oppose this suggestion. As stated by PWD in its rebuttal testimony (PWD St. 1-R at 31):

[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.
Hearing Officer Recommendation: In the May 30, 2023 Hearing Officer Report at 49, the Hearing Officer recommended that we adopt the Public Advocate’s proposal.

Board Determination: No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation. We agree that every effort should be made to lessen the financial burden on PWD’s customers. Therefore, we direct PWD to continue to actively seek revenues from non-ratepayer sources to fund, at least in part, stormwater and combined sewer overflow remediation projects and to report to the Board on the status and activities undertaken in pursuit of such non-ratepayer funding.

IX. TIERED ASSISTANCE PROGRAM (TAP)¹²⁶

TAP (the Tiered Assistance Program) is a low-income customer assistance program, mandated by City Council, that allows low-income customers (and others suffering certain special hardships) to pay reduced bills based upon a percentage of their household income, not water usage.¹²⁷ The TAP-R surcharge is charged to customers who do not receive the discount, and revenue losses associated with the program are reconciled annually.¹²８ This program makes monthly bills more affordable and consistent for eligible residents. It was very clear from the compelling testimony presented by numerous customers at the public hearings that bills for essential water and wastewater service – even at PWD’s current rates and charges – are simply not affordable for many people. It is essential that as many eligible people as possible who need assistance enroll in the program in order to maintain their service. In addition, as discussed in the testimony presented by Public Advocate witness Roger Colton (and addressed below), PWD’s revenue collections improve when TAP enrollment increases. The Public Advocate has presented a number of specific proposals relating to the TAP program, PA St. 3.¹²⁹

¹²⁶ This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Section IX.
¹²⁷ Phila. Code, § 19-1605 (calling the program “IWRAP”).
¹²⁸ The 2023 TAP-R reconciliation proceeding can be found at https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/
¹²⁹ PLUG notes that while it is not taking a position on the merits of the Public Advocate’s proposals to enhance TAP enrollment, it urges the Rate Board to consider that the important policy benefits of TAP do not come without cost. As stated by Ms. LaConte, “every discounted TAP bill produces a corresponding increase for the non-TAP customers.” PLUG Brief at 11.
A. Enrollment

There is some disagreement as to the actual number of PWD customers currently enrolled in TAP. The Advocate’s position, described in the testimony of its witness Colton (PA St. 3 at 28, citing the response to PA-I-56), is that 15,032 households are actively enrolled in TAP. It claimed that this enrollment is unreasonably low, given Mr. Colton’s estimate that PWD serves roughly 170,000 customers who would be income eligible for TAP based on US Census data (PA St. 3 at 28); it also noted the testimony presented by PWD witness Susan Crosby (Deputy Commissioner for Water Revenue) that identified 107,119 households who had received Medicaid or homeless prevention services within the previous 12 months, although it was not possible to determine how many of those households were TAP-income eligible. PA Brief at 42.

PWD asserted that Mr. Colton has overstated the number of eligible TAP participants, and understated the number of TAP participants, or customers receiving other assistance; PWD contended that as of February 20, 2023, the number of unique customers who had been TAP participants was 28,578. The Department also offers the Senior Citizen Discount program (which provides a 25% discount for eligible seniors), which is separate from TAP, and represents an additional population of approximately 21,000 customers, thus showing that PWD provides “financial assistance for over 48,000 customers.” PWD St. 3-R at 5; PWD Brief at 104.

Regardless of the actual participation rate, it is clear that TAP enrollment is likely to increase as the result of specific steps that are being undertaken. Deputy Commissioner Crosby testified¹³⁰ that there is progress on development of a process intended to allow increased use of data-sharing among the City’s Owner Occupied Payment Agreement (OOPA) program;¹³¹ the City’s Office of Integrated Data for Evidence and Action (IDEA) within the Managing Director’s Office; and the Pennsylvania Department of Human Services (which administers the Low Income Household Water Assistance Program, LIHWAP), with the goal of cross

¹³⁰ May 5, 2023 Hearing Transcript at 17-18.
¹³¹ The Revenue Department underwent a two-year upgrade and conversion of its taxpayer and customer data to a new accounting and billing system. OOPA agreements are administered through this system, so the City worked with developers to establish a data connection to make enrollment from OOPA into TAP possible. However, the conversion process was not able to replicate the existing flow of information, so enrollment from OOPA into TAP will continue to require a degree of manual review and approval until the development is completed. PWD Brief at 105.
enrollment/precertification, so that information does not need to be provided to PWD by applicants based on other City administrative data that verifies eligibility:132

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.”

The Department (PWD Brief at 106) explained, “The process with the Commonwealth has taken longer than expected, but earlier this year, the parties finalized a data-sharing agreement and began to share data for use in the program. Preparation in various areas is underway to realize LIHWAP to TAP pre-qualification, including technology changes, staff training, and communications materials. The City estimates that all necessary processes will be completed in this calendar year to enroll the first group of prequalified LIHWAP customers into TAP.”

The Public Advocate also recommended that this data sharing include PGW, the Philadelphia Gas Works. While it recognized that PGW is not a City department like PWD and is subject to the jurisdiction of the Public Utility Commission, it still serves many of the same low income households PWD serves. The Public Advocate contended that PWD should take reasonable steps to discuss whether and how data-sharing between the two utilities could work.

In addition to the information data sharing, PWD has changed its internal review policies to reduce burdens on TAP applicants. Prior to April 1, 2023, the customer assistance program required customers to submit two proofs of residency, and one proof of income per household member with income with their application. In some cases, one proof would require two documents, and some documents were required to be dated in the last six months. In consideration of concerns regarding the complicated and numerous requirements, the Department

132 Ms. Crosby confirmed that the ultimate goal would be that no additional information would be needed from the customer to complete the enrollment.
adjusted its review policy to allow fewer and older documents to be submitted. As of April 2023, customers only need to submit proof of residency in addition to proof of income. Only one copy of any document is required, and all documents may be dated within the last 12 months. Written materials – the customer service application, regulations, and guidance materials – are currently being updated to reflect the change in policy. Another policy change is that PWD is implementing an extended recertification time period to 3 years, which will keep more customers in TAP longer.\footnote{PA St. 3 at 37.}

The Public Advocate recommended that “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.” Further, noting that failure or inability to recertify has been a well-documented obstacle to continued participation in TAP, limiting the overall participation rate in the program, the Advocate suggested that PWD be directed to develop and test a text-based recertification program to remind TAP participants of the need to recertify as well as a text-based system for allowing customers to submit necessary recertification documents, citing the increased use of e-commerce (including the online payment of PWD bills) in today’s world and the “clear customer preference” that customers have in using electronic communications.\footnote{Currently, customers who need to recertify receive a paper copy of the application and an email notification. PWD Brief at 107.} PWD Brief at 51.

PWD has opposed the use of text messaging, saying that this is not practical at the present time: “Significant effort and expense would need to be put toward programming, testing, and ongoing technical support, in addition to training for Department representatives to provide support to customers, auditing, and communication with customers.” PWB Brief at 107-108. Explaining that PWD and WRB already engage in various types of reporting and data tracking to evaluate TAP, the Department further opposed the additional reporting requested by the Public Advocate, citing the increased costs and resources that would be required, especially since at the
current time all non-urgent enhancements are on hold until the upgrades to the water accounting and billing system known as Basic2 are going through infrastructure and software upgrades. PWD Brief at 108-109.

**Hearing Officer Recommendation:** In the May 30, 2023 Hearing Officer Report at 52-53, the Hearing Officer accepted the Public Advocate’s recommendations that the Department be directed to consider the possibility of data-sharing with PGW (recognizing that it is not a City Department), to continue reporting TAP enrollment data (including the number of TAP applications and denials, disaggregated by reason for denial) on a quarterly basis and to consider implementation of a text-based notification and/or recertification program.

**Exceptions:** In its Exceptions at 10-11, the Department objected to the recommendations that it be directed to consider the possibility of data sharing with PGW and to consider the use of a text-based pilot TAP notification and/or recertification program, as it claims these administrative actions are outside the Rate Board’s authority.

**Board Determination:** First, we need to recognize that PWD and the Water Revenue Bureau have taken substantive and substantial steps to lower the barriers to TAP enrollment and reenrollment for PWD’s customers, many of whom would have great difficulty in affording this essential service. We commend them for this.

The record is clear that increasing the enrollment of eligible TAP participants not only helps those customers maintain essential water and sewer services but also increases PWD’s overall collections. We would be remiss if we did not strongly encourage the Department and other City agencies to consider and take all cost-effective steps to increase and maintain enrollment for eligible customers that cannot otherwise pay their water and sewer bills in full.

We recognize that we do not have the expansive authority of the Public Utility Commission in this area. The Department is correct that the Board cannot direct PWD or other City agencies in collections efforts and cannot mandate the specific implementation design of low-income assistance programs like TAP. It should be noted, however, that as part of a settlement in our 2021 General Rate Proceeding, PWD voluntarily agreed to a number of reporting requirements.
regarding enrollment in the TAP program and other issues. 2021 Rate Determination at 45-47. These reports are useful to the Board and we request that they continue, though we agree with the position expressed by both the Department and the Public Advocate that in the future those reports should be provided to the Board on a quarterly rather than a monthly basis.

As for the additional TAP recommendations sought by the Public Advocate in this proceeding, we encourage the Department to include in its upcoming quarterly reports to the Board any consideration it has given (1) in consultation with other City agencies, PGW, and the Public Advocate to the possibility and cost-effectiveness of the data-sharing of participants in TAP and PGW’s Customer Responsibility Program,135 and (2) in consultation with other City agencies, any consultants, and the Public Advocate136 to the possibility and cost-effectiveness of implementing a text-based notification and/or recertification program.

B. TAP Data Reporting and Account Audits

PA witness Colton recommended in his testimony that PWD be required to start expanded data tracking as a means of controlling costs associated with nonpayment and to promote participation in low-income affordability programs, and provided a list of data that he thought would be useful. He further suggested that PWD be directed to provide reports and account-specific audits of TAP accounts to ensure that the TAP enrollees received the appropriate arrearage forgiveness (both the ratable forgiveness, and the one-time lump sum retroactive forgiveness) to which they were entitled, and that occupants not be grouped with tenants for purposes of calculating arrearage forgiveness. PA St. 3 at 51-56, PA Brief at 53-54.

The Department opposed the additional reporting, citing the resources that would be required to accomplish this. It pointed out that it (with the WRB) already engages in various types of reporting and data tracking and that all non-urgent enhancements were previously and continue to be on hold until the infrastructure and software upgrades to the water accounting and

135 We note that such data-sharing already works with LIHWAP, even though the state agency administering LIHWAP is not a City agency and, indeed, is less City-related than PGW.
136 We do not mandate that PWD consult with anyone in either of these matters, or that it includes the Public Advocate in every such consultation. We urge such consultation and consideration and encourage PWD to report on any efforts that are made.
billing system known as Basis2 take place in the coming months. PWD Brief at 108-109. It opposed the proposal regarding reporting and account-specific auditing relating to arrearage forgiveness, asserting that arrearage forgiveness is properly implemented. PWD Brief at 109-114.

**Hearing Officer Recommendation:** The Hearing Officer agreed that as a general matter, tracking these metrics will be helpful to the Department so that it can measure its performance and evaluate the reasonableness of policies/practices that impact customer rates and charges, and therefore recommended continued reporting on a quarterly basis of detailed TAP enrollment data. She recognized, however, that new reporting obligations should not be imposed while PWD’s system upgrades are taking place, and suggested that PWD, WRB and the Public Advocate consult as to what information reasonably can be compiled. May 30, 2023 Hearing Officer Report at 59. She further recommended that the Department be directed to provide an accounting of TAP participants, TAP re-enrollees and occupant customer accounts, and to provide retroactive arrearage forgiveness for those customers who had earned such forgiveness but not received it.

**Exceptions:** PWD excepted to these reporting requirements and arrearage forgiveness audits, alleging that they are unduly burdensome, and not feasible due to the current functionality of the Basis2 and CAMP systems. Specifically, it explained that: (1) with respect to the directive to provide updates as to the status of the anticipated upgrade to the current accounting and billing system: there will be no updates as the billing system upgrade is anticipated in FY 2026 and an RFP has not yet been issued; and (2) it opposed the recommendation to provide an accounting of TAP participants by month from July 1, 2022 to June 30, 2023 (in order to audit the one-time lump sum retroactive forgiveness of customers that re-entered TAP) as the TAP reports to the Rate Board that the City currently provides includes principal and penalty forgiveness amounts for TAP customers; requiring these additional reporting breakdowns would be an administrative burden to the City because those functions are not within CAMP’s current design. Finally, the Department disagreed that PWD regulations137 require that occupant accounts not be grouped for reporting purposes with tenant accounts. PWD Exceptions at 12-13.

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137 PWD Regulation Section 206.1
PLUG also submitted an Exception, in which it requested clarification as to the process that will be used for cost recovery of retroactive arrearage forgiveness to be provided to those TAP enrollees who had earned such forgiveness but not received it, including “stakeholder and Rate Board review of rate or surcharge adjustments.”

**Board Determination:** Upon consideration of the record on this issue and the arguments presented by the participants, we will grant PWD’s Exceptions in part. First, we agree with the Hearing Officer ([May 30, 2023 Hearing Officer Report](#) at 59) that the expanded data tracking proposed by the Public Advocate would indeed be unduly burdensome at this time, although once the billing system upgrade is complete, additional data might reasonably be provided. We encourage the Public Advocate and the Department, along with any other interested stakeholders, to continue to work together on this. While this more detailed information might be helpful, it is not reasonable and may well be beyond our authority to impose new reporting obligations at this time. We do encourage reporting of pertinent available data.

With respect to arrearage forgiveness, we find that PA witness Colton presented a compelling analysis that there may be problems with PWD’s application of the ratable forgiveness and lump sum forgiveness of the pre-program arrearages component of TAP.138

As set out in PA witness Colton’s direct testimony [PA St. 3](#) at 57-59, although more than 90% of customers newly enrolling in TAP brought pre-program arrearages into the program, only roughly 60% of TAP participants received arrearage forgiveness in July 2022. After July 2022, the number of TAP participants receiving arrearage forgiveness dropped to between 19% and 31% of accounts. The Advocate explained the result of this analysis in its [Brief](#) at 55:

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

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138 Ratable forgiveness” refers to the monthly proration of arrearage forgiveness. PWD’s regulations (CITE) provide that after July 2022, for each full monthly payment made, PWD forgives $1/24th of the principal balance. Each month a TAP participant makes a complete payment, 1/24th of their pre-program arrearage is vested.138 In addition, PWD’s Regulations, Section 206.7(c), provides 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.
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.  

While we agree that this analysis shows that there may be a problem in how PWD has been implementing arrearage forgiveness, we do agree with the Department that it would be unduly burdensome to require PWD to perform an account-specific monthly audit of all TAP participants (from July 1, 2022 to June 30, 2023) and to provide retroactive arrearage forgiveness to each customer who has earned but not received that benefit over the last year.

However, arrearage forgiveness appears to be an important factor in keeping TAP participants enrolled. We believe that prospectively PWD should be making every effort to ensure that TAP participants receive the arrearage forgiveness they’ve earned through making payments. Therefore, we direct PWD to put in place a process to verify whether the arrearage forgiveness aspect of TAP is working as intended, and direct it to inform us in its future quarterly reports what steps it has taken to determine whether eligible customers are in fact receiving the benefits to which they are entitled and how effective those steps have been. 

C. Municipal Liens

The Public Advocate made two recommendations concerning the Department’s practice of filing municipal liens relating to balances that include TAP pre-program arrearages and showing the associated court filing fee on the customers’ bills. The Public Advocate proposed that PWD should discontinue filing liens to secure these arrearages by applying a “lien blocker” so 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. PA Brief at 62-63. It also proposed a disallowance calculated by Mr. Colton of the expenses associated with these liens (a reduction in

139 PA St. 3 at 60-61.
140 It is unnecessary to discuss PLUG’s Exception on this issue as we are not directing that additional retroactive forgiveness be provided at this time.
141 A municipal lien is a secured governmental claim against a property for unpaid debts, taxes or services related to the property, such as real estate taxes or (in this case) water service. Municipal liens are authorized and regulated by the state’s Municipal Claim and Tax Lien Law, the Act of May 16, 1923, P.L. 207, No. 153 Cl. 53, as amended, 53 P.S. §§ 7101 and following.
projected O&M by $565,000 in FY 2024 and $565,000 in FY 2025, **PA St. 3** at 104): “Because these preprogram arrearage balances are subject to earned forgiveness, this cost 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. 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 without payment of the underlying debt or the lien fees. 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.”

In addition, the Public Advocate asserts that the filing of these liens is contrary to the Ordinance that established IWRAP (TAP’s predecessor assistance program), which provided that participants would “be required to make no additional payment in respect to any [pre-TAP] arrears to maintain service” and that “standards be adopted to discontinue pending enforcement actions after a customer enrolls in TAP.”

PWD opposed both these suggestions. With respect to the proposal to utilize lien blockers on TAP participant account, it noted that the City established its lien policy in conjunction with its collaboration with the First Judicial District and as implemented by the City’s Law Department, and the Rate Board cannot change that policy. Further, it noted that although these fees do appear on the monthly bill, they are never included in the calculation of a TAP bill required monthly payment amount. With respect to the proposal to disallow the court filing fees associated with these liens, the Department’s position is that these fees are a necessary expense set by the First Judicial District to maintain compliance with the Municipal Claim and Tax Lien Act and as such are a reasonable cost of doing business. **PWD Brief** at 115-117.

**Hearing Officer Recommendation:** Hearing Officer Chestnut concluded that the Rate Board has no authority to direct the use of lien blockers or to alter the existing lien policy, so did not recommend their adoption by the Rate Board. She nevertheless urged the Department to consider their use, noting that it seems to be a reasonable approach to recognizing the existence

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142 Phila. Code §19-1605(3)(h), (m).
143 Act of May 16, 1923, P.L. 207, No. 153 Cl. 53, as amended, 53 P.S. Sections 7101 et seq.
and impact of arrearage forgiveness. It would avoid the necessity of treating the preprogram arrearages – which are not subject to collection action – as debts for which liens are applied. She further found no basis for the proposed expense disallowance, as these expenses will be incurred by PWD during the prospective rate period. [May 30, 2023 Hearing Report](#) at 63-65.

**Exceptions:** The Public Advocate excepted to the recommendation to decline to disallow these lien expenses, which it contended are avoidable and serve only to increase costs which must be recovered from PWD’s non-TAP customers. It asserted that the associated expenses can be disallowed in this proceeding by the Rate Board based on its “inherent” power to determine the legitimacy or appropriateness of O&M expenses included in PWD’s cost of service. It further noted that the expense in question is an “. . . entirely voluntary activity and is not dictated by either the Municipal Claims and Tax Liens Act (MCTLA) or the First Judicial District of Pennsylvania.” [PA Exceptions](#) at 5-7.

**Board Determination:** We recognize that the perfection of water and sewer liens ensures that legitimate debts are paid to the Water Fund when property ownership is transferred. We have no authority over the City’s determination of whether liening is appropriate and are mandated to set rates funding such fees (to the First Judicial District) if they are legitimately incurred. We encourage the Department, however, to consult with the Law Department to determine the extent to which liening TAP or TAP-eligible accounts is lawful and, even if so, whether it would be more cost-effective not to lien certain categories of delinquencies. Such discussions may also consider the extent to which lien blockers would be appropriate. We ask the Department to report to the Board on such discussions.

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144 The perfection of liens on water and sewer delinquencies is legal work that, under Sections 4-400 and 8-410 of the Philadelphia Home Rule Charter, is controlled by the Law Department, though undertaken in consultation with PWD and WRB.
X. OTHER ISSUES

A. Late Fee Revenues

The Public Advocate proposed that the Rate Board direct that a portion of late fee revenues be used to fund specific programs that will help reduce residential bad debt or residential arrears and keeping households connected to water service, alleging that these fees are not cost-based and lack “functionality,” as PWD was unable to provide evidence that they serve as an incentive to pay or reduce residential bad debt. PA St. 3 at 79. These programs include (1) additional support for water conservation efforts by increasing funding for LICAP (Low Income Conservation Assistance Program) and adding a water conservation component to LIURP (Low Income Usage Reduction Program); (2) implementation of an internal plumbing repair program; and (3) expanded support for hardship grants provided through the UESF (Utility Emergency Services Fund). PA Brief at 65-70. This proposal was opposed by both PWD and PLUG. PWD Brief at 117-118; PLUG Brief at 10-11.

Hearing Officer Recommendation: Hearing Officer Chestnut recommended that we not accept this proposal: “Although it is possible that PWD and its customers would likely benefit from the proposal, I cannot recommend its adoption. Clearly, while the Rate Board is empowered to evaluate the expenses and other elements that comprise the Department’s cost of service projected to occur during the prospective rate period to ensure that there will not be an under or over recovery, and to set rates that equitably recover those costs, the Rate Board has no authority to direct how the Department provides that service, or how it utilizes the revenue it receives.” May 30, 2023 Hearing Report at 66.

Board Determination: No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation.

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This discussion adopts, incorporates and supplements the discussion contained in the May 30, 2023 Hearing Officer Report, Sections X (Customer Service Issues) and XI (Other Issues).
B. Sequestration (Stipulation)

The Municipal Claim and Tax Lien Law authorizes the City 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. This legal remedy is provided through the City’s Sequestration Program that targets properties with rental income, including commercial mixed-use, tenant-occupied and multi-unit properties. At one of the public hearings, Roxane Crowley, Esq., a Philadelphia Legal Assistance 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, in that sequestration was being sought for ineligible properties and that the City is pursuing 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.

The Public Advocate and the City have tendered to the Board a proposed Stipulation on Sequestration Issues. Pursuant to the proposed stipulation, both parties 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. The stipulation contains similar assurances regarding balance transfers for tenant customers who enroll in TAP.

The Public Advocate in its Brief at 72 noted, “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

146 53 P.S. §7275.
147 March 22, 2023, 3:00 p.m., Transcript at 25-28.
unnecessary expense associated with pursuing the Court appointment of a sequestrator where no rents may be collected. The Board should approve the proposed stipulation.”

The Department indicated its agreement: “The City and the Advocate will continue to discuss the most feasible way to review accounts in Sequestration and identify improvements to the process. In view of the above, PWD requests that the Rate Board approve the Stipulation and take no further action concerning Mr. Colton’s recommendations in connection with Sequestration issues.” PWD Brief at 124.

Hearing Officer Recommendation: The Hearing Officer recommended that the Rate Board accept the Stipulation and urged the Department and the Public Advocate to continue to work together to resolve these issues. May 30, 2023 Hearing Report at 66-68.

Board Determination: No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation and urge the Department and the Advocate to continue to work cooperatively to resolve these issues.

C. Compliance with 2021 Settlement Agreement

The 2021 Joint Settlement Agreement, approved by the Rate Board in its 2021 Rate Determination, contained a number of commitments on the part of the Department to work with community groups, and to provide monthly reports to the Rate Board concerning TAP enrollment and turnover. The Public Advocate contended in this proceeding that while PWD has been filing the monthly reports, they do not contain sufficient information (such as information on the amount of pre-TAP arrears that were not forgiven due to the TAP participant’s failure to recertify or the extent to which program turnover is occurring) to allow insights into the extent to which program turnover is occurring. The Public Advocate therefore requested that the Rate Board direct PWD to continue its reporting as required by the 2021 Rate Determination, with adjustments to provide the data described above regarding program turnover, TAP recertification, and TAP

148 These Reports can be found at the Rate Board’s website, under the 2021 General Rate Proceeding section. https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2021-rate-proceeding/#reports-from-the-water-department
arrearages. To reduce the burden of producing reports monthly, the Public Advocate suggested that quarterly reporting of monthly data is appropriate. The Public Advocate also alleged that PWD has failed to engage in community outreach, as required by the 2021 Settlement Agreement at 8. It requested that PWD be directed to engage develop and implement a “Customer Education and Outreach Plan.” PA Brief at 74.

PWD objected on the basis that this would require the Department to analyze hundreds of census tracts in the City for race, poverty, and TAP participation, and noted that it already reported its various activities in connection TAP customer education and outreach in its Monthly Reports to the Rate Board. PWD Brief at 124-125.

**Hearing Officer Recommendation:** The Hearing Officer agreed that continued reporting of the current metrics and data (supplemented to include data concerning program turnover, TAP recertification, and TAP arrearages) was not burdensome, especially when provided on a quarterly basis. With respect to the additional, more detailed metrics requested by the Public Advocate, she concluded that any such reporting will need to wait for the on-going upgrades to the PWD/WRB systems to be able to be reported, and therefore should not be required at this time.

The Hearing Officer also agreed with the Advocate that it does not appear that PWD has fully met the 2021 settlement commitments regarding community engagement, particularly with the Black community, and urged PWD to do a better job of demonstrating its commitment to engage with community leaders and grassroots community members. She declined to recommend approval of the specific outreach suggested by the Public Advocate, however, finding it to be unreasonably burdensome. May 30, 2023 Hearing Officer Report at 68-70.

**Board Determination:** No exceptions were filed on this issue. We accept the Hearing Officer’s recommendation.

**D. Housekeeping Changes / Miscellaneous Fees and Charges**

Other than the changes shown in the proposed rates and charges (PWD Exh. 3), the Department did not propose any material language changes. None of the participants commented
on or objected to these language or housekeeping changes. They appear reasonable and therefore should be permitted to go into effect.

None of the participants commented on or objected to the updated miscellaneous fees and charges (PWD Exh. 3, Section 6; PWD St. 7, Sch. BV-3). They appear reasonable and therefore should be permitted to go into effect.

E. Objections of Mr. Skiendzielewski

Michael Skiendzielewski, a pro se intervenor, filed Exception #1 and Exception #2, in which he complained that the Hearing Officer violated the Prehearing Conference Order by issuing an Order Sustaining Objections to Discovery sustaining PWD’s Objections to his information requests, Discovery Request I and Interrogatories and Requests for Production. All of these information requests, many of which are quite voluminous, relate to issues relating to excavation projects including associated HELP loans.

In his Email Response to PWD Objections, Mr. Skiendzielewski alleged they were necessary to show that “There is clear, factual and indisputable information, evidence, and senior level decision-making that demonstrates the failure and inability of PWD to properly, professionally, accurately and competently evaluate, diagnose, plan for and execute the task of long lateral sewer repair while failing to identify concomitant, related and critical other elements that needed to be brought to the attention of senior management. . . . examples of unprofessional and unethical conduct and decision-making over the span of several years re the PWD HELP loan under the direct control of the counsel to the Water Rate Board.” He also noted his desire for “management and operational review and monitoring of excavation projects.” Further, Mr. Skiendzielewski alleged they were necessary to show that “[t]here is clear, factual and indisputable information, evidence, and senior level decision-making that demonstrates the failure and inability of PWD to properly, professionally, accurately and competently evaluate, diagnose, plan for and execute the task of long lateral sewer repair while failing to identify concomitant, related and critical other elements that needed to be brought to the attention of senior management. . . . examples of unprofessional and unethical conduct and decision-making over the span of several years re the PWD HELP loan under the direct control of the counsel to the Water Rate Board.”

149 https://www.phila.gov/media/20230606090445/2023-Skiendzielewski-exception-to-HE.pdf
151 https://www.phila.gov/media/20230429143755/Lateral-questions-MS.pdf
152 https://www.phila.gov/media/20230429143753/WRB2023petitionNEW.pdf
execute the task of long lateral sewer repair while failing to identify concomitant, related and critical other elements that needed to be brought to the attention of senior management.”

These Exceptions are denied. Hearing Officer Chestnut’s order clearly was properly issued and certainly was within the scope of her authority, as discussed in the May 30, 2023 Hearing Officer Report at 70-74. Further, it is clear from his Exceptions that Mr. Skiendzielewski continues to raise issues he has been advised on a number of occasions that the Rate Board cannot address in the context of a general rate proceeding such as this one. As stated by Mr. Skiendzielewski in his Exception #2, unnumbered page 3, “More to the point here in this exception, the construction protocol would be extremely valuable as I share the details of PWD management action, decisions, correspondence, facts, etc. here from the start of the work at my residence in 2014 through the succeeding years until now . . Yes, it is about the inequity, unfairness and lack of integrity with which exactly the same PWD HELP loans were issued, managed and resolved.”

As noted in both the Hearing Officer’s Discovery Order and the May 30, 2023 Hearing Officer Report, we cannot address these issues and they will not be further considered.154

XI. CONCLUSION

Based on the record produced in this proceeding and in accordance with the discussions, findings and resolutions discussed above, we therefore:

(1) Grant or deny the Exceptions filed by the Philadelphia Water Department, the Public Advocate, the Philadelphia Large Users Group, Lance Haver and Michael Skiendzielewski consistent with this Rate Determination;

154 Mr. Skiendzielewski complained that the Prehearing Conference Order directed participants to confer before objecting to information requests, yet the Hearing Officer told the Water Department that it need not confer with him after those objections were filed but before she ruled. The Hearing Officer properly recognized that as an immaterial issue, given the timing and purpose of his requests.
(2) Adopt the May 30, 2023 Hearing Officer Report issued by Hearing Officer Chestnut to the extent consistent with this Rate Determination;

(3) Permit the Philadelphia Water Department to place into effect the uncontested tariff changes and changes in miscellaneous rates and charges;

(4) Direct the Philadelphia Water Department to produce the reports as specified in this Rate Determination;

(5) Find that the revenue requirements for Fiscal Years 2024 and 2025 set forth in Table C-1A, set forth in the attached Appendix, are in compliance with the Rate Ordinance and other applicable requirements;

(6) Direct the Philadelphia Water Department to prepare and submit a tariff consistent with this rate determination, for service rendered on and after September 1, 2023, and September 1, 2024; and

(7) Resolve any issue not expressly determined by this Rate Determination by adopting the Hearing Officer’s proposed resolution.

Sonny Popowsky, Chair
Tony Ewing, Vice-Chair
Abby L. Pozefsky, Secretary
McCullough Williams III, Member
Debra McCarty, Member
APPENDIX: TABLES
## TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS
BASE RATES EXCLUDING TAP-R SURCHARGE
(in thousands of dollars)

Summary to Accompany the Rate Board Determination

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Water Service - Existing Rates</td>
<td>294,038</td>
<td>296,093</td>
<td>298,680</td>
</tr>
<tr>
<td>1a</td>
<td>Water Service - Existing Rates</td>
<td>294,038</td>
<td>298,659</td>
<td>301,507</td>
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<tr>
<td>2</td>
<td>Wastewater Service - Existing Rates</td>
<td>472,292</td>
<td>476,637</td>
<td>478,997</td>
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<tr>
<td>2a</td>
<td>Wastewater Service - Existing Rates</td>
<td>472,292</td>
<td>476,637</td>
<td>478,997</td>
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<tr>
<td>3</td>
<td>Total Service Revenue - Existing Rates</td>
<td>766,330</td>
<td>772,731</td>
<td>777,677</td>
</tr>
<tr>
<td>3a</td>
<td>Total Service Revenue - Existing Rates</td>
<td>766,330</td>
<td>775,297</td>
<td>780,504</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Calc %</th>
<th>Months</th>
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<tr>
<td>4</td>
<td>FY 2023</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>FY 2024</td>
<td>12.75%</td>
</tr>
<tr>
<td>5a</td>
<td>FY 2024</td>
<td>9.64%</td>
</tr>
<tr>
<td>6</td>
<td>FY 2025</td>
<td>8.80%</td>
</tr>
<tr>
<td>6a</td>
<td>FY 2025</td>
<td>8.16%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Total Additional Service Revenue Require</td>
<td>-</td>
<td>80,412</td>
<td>162,131</td>
</tr>
<tr>
<td>10a</td>
<td>Total Additional Service Revenue Require</td>
<td>-</td>
<td>61,022</td>
<td>132,283</td>
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<tr>
<td>11</td>
<td>Total Water &amp; Wastewater Service Revenue</td>
<td>766,330</td>
<td>853,142</td>
<td>939,807</td>
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<tr>
<td>11x</td>
<td>Other Income (a)</td>
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<td></td>
<td></td>
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<tr>
<td>11a</td>
<td>Total Water &amp; Wastewater Service Revenue</td>
<td>766,330</td>
<td>836,318</td>
<td>912,787</td>
</tr>
<tr>
<td>11xa</td>
<td>Other Income (a)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td>Other Operating Revenue</td>
<td>29,601</td>
<td>29,664</td>
<td>29,713</td>
</tr>
<tr>
<td>12a</td>
<td>Other Operating Revenue</td>
<td>29,601</td>
<td>34,591</td>
<td>34,639</td>
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<tr>
<td>13</td>
<td>Debt Reserve Fund Interest Income</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13a</td>
<td>Debt Reserve Fund Interest Income</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14</td>
<td>Operating Fund Interest Income</td>
<td>1,882</td>
<td>1,982</td>
<td>2,023</td>
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<tr>
<td>14a</td>
<td>Operating Fund Interest Income</td>
<td>1,882</td>
<td>3,803</td>
<td>4,022</td>
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<tr>
<td>15</td>
<td>Rate Stabilization Interest Income</td>
<td>1,365</td>
<td>1,339</td>
<td>1,336</td>
</tr>
<tr>
<td>15a</td>
<td>Rate Stabilization Interest Income</td>
<td>1,365</td>
<td>1,339</td>
<td>1,336</td>
</tr>
<tr>
<td>16</td>
<td>Total Revenues</td>
<td>799,178</td>
<td>886,128</td>
<td>972,880</td>
</tr>
<tr>
<td>16a</td>
<td>Total Revenues</td>
<td>799,178</td>
<td>876,052</td>
<td>952,785</td>
</tr>
</tbody>
</table>

## OPERATING EXPENSES
**TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS**
**BASE RATES EXCLUDING TAP-R SURCHARGE**
*(in thousands of dollars)*

**Summary to Accompany the Rate Board Determination**

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Total Operating Expenses</td>
<td>(564,671)</td>
<td>(611,326)</td>
<td>(654,537)</td>
</tr>
<tr>
<td>17a</td>
<td>Total Operating Expenses</td>
<td>(564,671)</td>
<td>(603,166)</td>
<td>(638,190)</td>
</tr>
<tr>
<td></td>
<td><strong>NET REVENUES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Transfer From/(To) Rate Stabilization Fund</td>
<td>5,000</td>
<td>100</td>
<td>600</td>
</tr>
<tr>
<td>18a</td>
<td>Transfer From/(To) Rate Stabilization Fund</td>
<td>5,000</td>
<td>100</td>
<td>600</td>
</tr>
<tr>
<td>19</td>
<td>NET REVENUES AFTER OPERATIONS</td>
<td>239,507</td>
<td>274,902</td>
<td>318,943</td>
</tr>
<tr>
<td>19a</td>
<td>NET REVENUES AFTER OPERATIONS</td>
<td>239,507</td>
<td>272,986</td>
<td>315,195</td>
</tr>
<tr>
<td></td>
<td><strong>DEBT SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Outstanding Bonds</td>
<td>(187,747)</td>
<td>(185,847)</td>
<td>(183,090)</td>
</tr>
<tr>
<td>20a</td>
<td>Outstanding Bonds</td>
<td>(187,747)</td>
<td>(185,847)</td>
<td>(183,090)</td>
</tr>
<tr>
<td>21</td>
<td>Pennvest Parity Bonds</td>
<td>(10,935)</td>
<td>(12,031)</td>
<td>(16,329)</td>
</tr>
<tr>
<td>21a</td>
<td>Pennvest Parity Bonds</td>
<td>(10,935)</td>
<td>(12,031)</td>
<td>(16,329)</td>
</tr>
<tr>
<td>22</td>
<td>Projected Future Bonds</td>
<td>-</td>
<td>(21,083)</td>
<td>(53,880)</td>
</tr>
<tr>
<td>22a</td>
<td>Projected Future Bonds</td>
<td>-</td>
<td>(19,167)</td>
<td>(50,132)</td>
</tr>
<tr>
<td>23</td>
<td>Commercial Paper</td>
<td>(900)</td>
<td>(900)</td>
<td>(900)</td>
</tr>
<tr>
<td>23a</td>
<td>Commercial Paper</td>
<td>(900)</td>
<td>(900)</td>
<td>(900)</td>
</tr>
<tr>
<td>24</td>
<td>WIFIA</td>
<td>(17)</td>
<td>(956)</td>
<td>(956)</td>
</tr>
<tr>
<td>24a</td>
<td>WIFIA</td>
<td>(17)</td>
<td>(956)</td>
<td>(956)</td>
</tr>
<tr>
<td>25</td>
<td>Total Senior Debt Service</td>
<td>(199,582)</td>
<td>(219,878)</td>
<td>(255,154)</td>
</tr>
<tr>
<td>25a</td>
<td>Total Senior Debt Service</td>
<td>(199,582)</td>
<td>(217,961)</td>
<td>(251,406)</td>
</tr>
<tr>
<td>26</td>
<td>TOTAL SENIOR DEBT SERVICE COVERAGE</td>
<td>1.20</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>26a</td>
<td>TOTAL SENIOR DEBT SERVICE COVERAGE</td>
<td>1.20</td>
<td>1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>27</td>
<td>Subordinate Debt Service</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>27a</td>
<td>Subordinate Debt Service</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>28</td>
<td>Transfer to Escrow</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>28a</td>
<td>Transfer to Escrow</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>29</td>
<td>Total Debt Service on Bonds</td>
<td>(199,582)</td>
<td>(219,878)</td>
<td>(255,154)</td>
</tr>
<tr>
<td>29a</td>
<td>Total Debt Service on Bonds</td>
<td>(199,582)</td>
<td>(217,961)</td>
<td>(251,406)</td>
</tr>
<tr>
<td>30</td>
<td>CAPITAL ACCOUNT DEPOSIT</td>
<td>(23,383)</td>
<td>(24,295)</td>
<td>(25,242)</td>
</tr>
<tr>
<td>30a</td>
<td>CAPITAL ACCOUNT DEPOSIT</td>
<td>(23,383)</td>
<td>(24,295)</td>
<td>(25,242)</td>
</tr>
<tr>
<td>31</td>
<td>TOTAL COVERAGE (\frac{L19}{L25+L27+L30})</td>
<td>1.07</td>
<td>1.13</td>
<td>1.14</td>
</tr>
<tr>
<td>31a</td>
<td>TOTAL COVERAGE (\frac{L19a}{L25a+L27a+L30a})</td>
<td>1.07</td>
<td>1.13</td>
<td>1.14</td>
</tr>
</tbody>
</table>
# TABLE C-1A: PROJECTED REVENUE AND REVENUE REQUIREMENTS
BASE RATES EXCLUDING TAP-R SURCHARGE
(in thousands of dollars)

Summary to Accompany the Rate Board Determination

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Description</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>RESIDUAL FUND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Beginning of Year Balance</td>
<td>16,102</td>
<td>15,095</td>
<td>15,079</td>
</tr>
<tr>
<td>32a</td>
<td>Beginning of Year Balance</td>
<td>16,102</td>
<td>15,095</td>
<td>15,079</td>
</tr>
<tr>
<td>33</td>
<td>Interest Income</td>
<td>155</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>33x</td>
<td>Plus:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33a</td>
<td>Interest Income</td>
<td>155</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>33ax</td>
<td>Plus:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>End of Year Revenue Fund Balance</td>
<td>16,542</td>
<td>30,729</td>
<td>38,547</td>
</tr>
<tr>
<td>34a</td>
<td>End of Year Revenue Fund Balance</td>
<td>16,542</td>
<td>30,729</td>
<td>38,547</td>
</tr>
<tr>
<td>34x</td>
<td>Additional Rev Req Needed</td>
<td>0</td>
<td>0</td>
<td>(1)</td>
</tr>
<tr>
<td>35</td>
<td>Deposit for Transfer to City General Fund</td>
<td>1,945</td>
<td>1,999</td>
<td>2,026</td>
</tr>
<tr>
<td>35x</td>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35a</td>
<td>Deposit for Transfer to City General Fund</td>
<td>1,945</td>
<td>1,999</td>
<td>2,026</td>
</tr>
<tr>
<td>35ax</td>
<td>Less:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Transfer to Construction Fund</td>
<td>(16,600)</td>
<td>(29,800)</td>
<td>(34,400)</td>
</tr>
<tr>
<td>36a</td>
<td>Transfer to Construction Fund</td>
<td>(16,600)</td>
<td>(29,800)</td>
<td>(34,400)</td>
</tr>
<tr>
<td>37</td>
<td>Transfer to City General Fund</td>
<td>(1,945)</td>
<td>(1,999)</td>
<td>(2,026)</td>
</tr>
<tr>
<td>37a</td>
<td>Transfer to City General Fund</td>
<td>(1,945)</td>
<td>(1,999)</td>
<td>(2,026)</td>
</tr>
<tr>
<td>38</td>
<td>Transfer to Debt Service Reserve Fund</td>
<td>(1,105)</td>
<td>(1,096)</td>
<td>(4,298)</td>
</tr>
<tr>
<td>38a</td>
<td>Transfer to Debt Service Reserve Fund</td>
<td>(1,105)</td>
<td>(1,096)</td>
<td>(4,298)</td>
</tr>
<tr>
<td>39</td>
<td>End of Year Balance</td>
<td>15,095</td>
<td>15,079</td>
<td>15,078</td>
</tr>
<tr>
<td>39a</td>
<td>End of Year Balance</td>
<td>15,095</td>
<td>15,079</td>
<td>15,078</td>
</tr>
<tr>
<td></td>
<td><strong>RATE STABILIZATION FUND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Beginning of Year Balance (c)</td>
<td>138,989</td>
<td>137,760</td>
<td>133,625</td>
</tr>
<tr>
<td>40a</td>
<td>Beginning of Year Balance (c)</td>
<td>138,989</td>
<td>137,760</td>
<td>133,625</td>
</tr>
<tr>
<td>41</td>
<td>Deposit From/(To) Revenue Fund</td>
<td>(5,000)</td>
<td>(100)</td>
<td>(600)</td>
</tr>
<tr>
<td>41a</td>
<td>Deposit From/(To) Revenue Fund</td>
<td>(5,000)</td>
<td>(100)</td>
<td>(600)</td>
</tr>
<tr>
<td>42</td>
<td>Deposit From/(To) TAP-R</td>
<td>3,771</td>
<td>(4,036)</td>
<td>476</td>
</tr>
<tr>
<td>42a</td>
<td>Deposit From/(To) TAP-R</td>
<td>3,771</td>
<td>(4,036)</td>
<td>476</td>
</tr>
<tr>
<td>43</td>
<td>End of Year Balance</td>
<td>137,760</td>
<td>133,625</td>
<td>133,501</td>
</tr>
<tr>
<td>43a</td>
<td>End of Year Balance</td>
<td>137,760</td>
<td>133,625</td>
<td>133,501</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Sonny Popowsky, Chair, Philadelphia Water, Sewer and Storm Water Rate Board

FROM: Daniel W. Cantú-Hertzler, Senior Attorney DWCH

DATE: June 21, 2023

RE: 2023 General Rate Proceeding – Determination of Water Department General Rates and Charges Beginning 9/1/2023 and 9/1/2024

I have reviewed the attached Rate Determination of the Philadelphia Water, Sewer and Storm Water Rate Board. Pursuant to Section II.A.2 of the Rate Board Regulations and Section 13-101(7) of the Philadelphia Code, the Water Department commenced this General Rate Proceeding by filing a Formal Notice on February 23, 2023 following and incorporating its Advance Notice of January 24, 2023. The Rate Board concluded this General Rate Proceeding by adopting this Rate Determination on June 21, 2023 at a duly advertised special meeting.

The Rate Board is the independent rate-making body established by ordinance of City Council pursuant to Section 5-801 of the Philadelphia Home Rule Charter to fix and regulate rates and charges for water and sewer services. The attached document is the Rate Board’s Rate Report under Section 13-101(8) of the Philadelphia Code, and is the Rate Board’s Rate Determination pursuant to Sections I(o) and II.A.3 of the Rate Board Regulations. I find the attached Rate Determination to be legal and in proper form.

In accordance with Section 13-101(8) of the Philadelphia Code and Section II.A.3(c) of the Rate Board Regulations, you may forward the Rate Determination to the Department of Records for filing. As stated in the Rate Determination and consistent with Section 13-101(3)(e) of the Code and Section II.A.3(d) of the Rate Board Regulations, the effective dates of the changes in the rates and charges will be September 1, 2023 and September 1, 2024 if the Water Department files its conforming Rates and Charges at least ten days prior to that date.

Attachment

cc (w/att): All Rate Board Members (via E-mail)
MEMORANDUM

TO:       James Leonard, Records Commissioner
FROM:    Sonny Popowsky, Chair, Philadelphia Water, Sewer and Storm Water Rate Board
DATE:     June 21, 2023
RE:       2023 General Rate Proceeding – Determination of Water Department General Rates and Charges Beginning 9/1/2023 and 9/1/2024

Pursuant to Section 5-801 of the Philadelphia Home Rule Charter, Section 13-101 of the Philadelphia Code, and the Regulations of the Philadelphia Water, Sewer and Storm Water Rate Board, and at the direction of the Rate Board in its public meeting of June 21, 2023, I am forwarding herewith for filing the Rate Determination of the Philadelphia Water, Sewer and Storm Water Rate Board on the 2023 General Rate Proceeding, which constitutes the Rate Report and Rate Determination of the Rate Board, along with a memorandum of approval from the Law Department. The Rate Board has approved changes in rates and charges effective on September 1, 2023 and September 2, 2024.

On February 23, 2023, following Advance Notice filed with City Council and the Rate Board on January 24, 2023, the Water Department filed a Formal Notice entitled “Formal Notice of Proposed Changes in Water, Sewer and Stormwater Rates and Related Charges (FY 2024 and FY 2025),” commencing a General Rate Proceeding. In accordance with the Charter, Code, and Regulations noted above, the Rate Board’s Hearing Officer held a procedural conference and supervised discovery among the five entities and two individuals registered as participants in the rate proceeding. Four public hearings on this matter were held on March 21 and March 22, 2023, and were well attended; more than 30 presented comments. The Board received more than 40 additional public comments outside of the hearings before the record was closed. Technical hearings were held on May 2-5, 2023, and the participants added additional documents to the record. Transcripts, comments, and all other documents comprising the record are posted on the Rate Board’s website at https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-rate-proceeding/.

On May 30, 2023, the Hearing Officer filed her Report, summarizing the record and making recommendations for the resolution of the issues. Five participants filed exceptions. The Rate Board deliberated the issues in its monthly public meeting on June 14, 2023, and adopted the attached Rate Determination at a special public meeting on June 21, 2023 by vote of 4-0. All meetings and hearings were duly noticed.

We expect that the Water Department will timely file Rates and Charges in conformance with the Rate Determination.

Attachments:  Law Department Approval Memo
                  Rate Determination, 2023 General Rate Proceeding