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

In the Matter of the Philadelphia Water : 2023 TAP-R Reconciliation
Department's Proposed Changes in Rates and : Proceeding – FY 2024
Related Charges :

RATE DETERMINATION

This report addresses the filing made by the Philadelphia Water Department (PWD or Department)¹ to implement the annual reconciliation adjustment to the Tiered Assistance Program Rate Rider (TAP-R) by revising related water, sewer and fire service connection quantity charges (2023 TAP-R adjustment) in accordance with the TAP-R tariff previously approved by the Philadelphia Water, Sewer and Storm Water Rate Board (Rate Board). On January 24, 2023, the Department filed an [Advance Notice](#)² with the City Council of Philadelphia (city Council) and the Philadelphia Water, Sewer and Storm Water Rate Board (Rate Board) of its request to implement the annual reconciliation adjustment to the Tiered Assistance Program Rate Rider (TAP-R) and to revise related water, sewer, and fire service connection quantity charges accordingly.³ [Formal Notice](#)⁴ of the proposed reconciliation adjustments was filed with the Department of Records on February 23, 2023. Both Notices contained supporting schedules and exhibits as required by the [regulations](#) (Sections II.A.2 and II.C.1) promulgated by the Rate Board. The Formal Notice consisted of schedules (Schs. BV 1-5, Schs. RFC 1-3) and exhibits (PWD Exhs.

¹ The Water Department is a City department, with responsibility for provision of water, sewer and stormwater services in the City of Philadelphia. It also makes wholesale water sales to neighboring communities.

² <https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/#advance-notice-of-filing>

³ TAP is a customer assistance program, mandated by City Council, that allows low-income customers to pay reduced bills based upon a percentage of their household income. See Philadelphia Code, § 19-1605 (calling the program “IWRAP”). The TAP-R rider, with parameters set by the Rate Board in its [2018 general rate determination](#), tracks revenue losses resulting from application of the TAP discount, in order to permit annual reconciliation if they are greater or less than projected. The TAP-R surcharge is charged to customers who do not receive the discount.

⁴ <https://www.phila.gov/departments/water-sewer-storm-water-rate-board/rate-proceedings/2023-annual-rate-adjustment/#formal-notice>

1A and 1B) setting forth the calculations of the reconciliation and proposed rates and charges. The proposed TAP-R rates and charges were designed to take effect on September 1, 2023 (FY 2024).

TAP is a customer assistance program mandated by City Council⁵ that allows low-income customers to pay reduced bills based upon a percentage of their household income. Monthly bills are not based on usage; they are capped as a percentage of income and are constant each month while the customer is enrolled in the program. The TAP-R rider tracks revenue losses resulting from application of the TAP discount, to permit annual reconciliation if they are greater or less than projected. The TAP-R surcharge is charged to customers who do not receive the discount.

The purpose of this proceeding is to permit an annual reconciliation of the revenue impacts associated with TAP by comparing PWD's actual experience to the projections used to set the rates for the review period. It is purely a calculation in which a formula already adopted by the Rate Board is applied. Depending on the actual revenue experience, the rates and charges for the next rate period may be adjusted up or down.

Before us is the [Hearing Officer Report](#)⁶ of Hearing Officer Marlane R. Chestnut, dated May 8, 2023. We will adopt and incorporate that Report, which contains the history of the proceeding, and, after a complete discussion and review of the record, recommends that we approve the proposed rates and charges for the TAP-R surcharge contained in the [Joint Petition for Settlement of TAP-R Proceeding](#)⁷ (Joint Petition, Settlement Petition,) submitted by the active participants, the Philadelphia Water Department (PWD or the Department) and the Public Advocate, dated April 18, 2023.⁸ The proposed rates are based on actual TAP-R participation in the past and reasonable projections of participation in the coming year and find substantial support in the record.

⁵ See [Philadelphia Code, § 19-1605](#) (calling the program "IWRAP").

⁶ <https://www.phila.gov/media/20230509161423/Hearing-Officer-Report-TAP-R-2023.05.08.pdf>

⁷ <https://www.phila.gov/media/20230418152239/PWD-TAP-R-Joint-Settlement-Agreement-APR18-Combined.pdf>

⁸ The [Joint Petition](#) is attached to this Rate Determination.

Hearing Officer Chestnut addressed and rejected the [Objection](#)⁹ to the Proposed Settlement raised by Lance Haver, an individual participant, who did not challenge the proposed rates which are the subject of proceeding¹⁰ but rather alleged that that the proposed settlement should be rejected for lack of public participation at the public hearing. As she noted in the Hearing Report at 6, the public hearing associated with this limited, annual reconciliation proposing a reduction in the TAP-R surcharge rates was properly noticed, with prominent posting on the Rate Board's website and the requisite publication in three local newspapers. She therefore rejected this contention and recommended that the approve the proposed rates contained in the [Joint Petition](#). No exceptions were filed to the [Hearing Officer Report](#).

After full consideration of the Opposition submitted by Mr. Haver and a full review of the record, we agree with the Hearing Officer's recommendation that, for service rendered on and after September 1, 2023, the Department should be permitted to decrease the current TAP-R water surcharge rates from \$1.03/Mcf¹¹ to \$0.15/Mcf, and to decrease the sewer surcharge rate from \$1.63/Mcf to \$0.24/Mcf. See [Joint Petition](#), Exh. 1.

The rates and charges are in compliance with applicable ordinances and regulations and our [2018 Rate Determination](#),¹² which set forth the basis for calculating and adjusting the TAP-R surcharge to fund this low-income customer assistance program.. The record of this proceeding fully supports the conclusion that these rates provide a reasonable basis for recovery of TAP-R costs, and therefore are just and reasonable. They are based on a projected average monthly number of TAP participants for the next rate period (September 2023 to August 2024) of 16,479¹³ that represents a reasonable compromise from the Department's projected average monthly enrollment of the 17,289 or the 15,485 suggested by the Public Advocate.

⁹ <https://www.phila.gov/media/20230429143751/Opposition-to-proposed-settlement.pdf>

¹⁰ As noted in the Hearing Officer Report at 6, fn 19, Mr. Haver did not submit testimony or attend either the public hearing or technical hearing.

¹¹ Fire protection customers are also subject to a TAP-R surcharge rate, and which is incorporated in the quantity charge. Therefore, the change in the water rate will also apply to the Fire Protection TAP-R surcharge.

¹² <https://www.phila.gov/media/20180713144736/2018-RATE-DETERMINATION-TIMESTAMPED.pdf>

¹³ See [Joint Petition](#) at ¶ 25.

Because TAP-R reconciliation proceedings reconcile actual costs of the program against costs projected in the prior year's proceeding, any difference in the agreed monthly number now will result in an adjustment in next year's proceeding. For that reason, and because of the modest differences in the expert testimony, it would not be cost-effective for us to attempt to determine the average number of TAP participations with greater precision than the settlement number.

We note that these rates, after a full opportunity for review and discovery, were agreed to by both active participants, PWD and the Public Advocate. Other than Mr. Haver, no participants objected to the May 8, 2023 [Hearing Officer Report](#), no participant objected to the actual proposed rates and no exceptions were filed to the [Hearing Officer Report](#).

Therefore, we find the modified TAP-R rates contained in Exhibit 1 to the [Joint Petition](#) to be just and reasonable and authorize the Department to file revised rates and charges as proposed, effective for service rendered on and after September 1, 2023.

Date: June 21, 2023

Sonny Popowsky, Chair
Tony Ewing, Vice-Chair
Abby L. Pozefsky, Secretary
McCullough Williams III, Member
Debra McCarty, Member

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

Re: Philadelphia Water Department : 2023 TAP-R Adjustment Proceeding
Proposed Charges in Rates and Charges :

JOINT PETITION FOR SETTLEMENT OF TAP-R PROCEEDING

The Philadelphia Water Department (“PWD” or “Department”) and the Public Advocate (“Advocate”) (collectively, “Joint Petitioners”) submit this Joint Petition for Settlement (“Joint Petition” or “Settlement”) of the Tiered Assistance Program Rate Rider (TAP-R) Reconciliation proceeding and request that Hearing Officer Marlane Chestnut (“Hearing Officer”) (i) approve the settlement of this proceeding without modification consistent with this Joint Petition; and (ii) recommend that the Philadelphia Water, Sewer and Storm Water Rate Board (“Rate Board”) approve the Settlement and authorize the Department to file modified Rates and Charges related to TAP-R to become effective on September 1, 2023. In support of the proposed Settlement, the Joint Petitioners state the following:

I. BACKGROUND

A. TAP Program and TAP-Rate Rider

1. The Tiered Assistance Program (“TAP”) is an assistance program that allows low-income customers to pay reduced bills based on a percentage of their income.

2. The TAP Rate Rider is a ratemaking tool that allows PWD to recover lost revenue requirements (costs) or reduce future costs, if actual costs are less than projected.¹ TAP-R rates are charged to customers not enrolled in TAP and are intended to recover the revenue losses (i.e., costs) associated with the program.

3. The cost of TAP (recovered via the TAP Rate Rider) may change over time due to multiple factors, including: (i) the number of low-income households that enroll in the program (“TAP Participants”); (ii) water usage; (iii) changes in PWD’s non-discounted rates; (iv) the projected number of TAP Participants; and (v) the level of discounts needed to provide affordable bills to TAP Participants.

¹ In the 2018 Rate Proceeding, the Advocate and PWD reached agreement regarding, and the Rate Board subsequently approved, many of the significant aspects of a reconcilable TAP Rate Rider. Simply stated, this rider tracks revenue losses resulting from application of the TAP discounts and permits annual reconciliation of such costs to prevent either over- or under-recovery of TAP revenue losses through TAP-R Surcharge.

4. PWD reviews and proposes adjustments to the TAP Rate Rider annually to account for changes in actual and projected TAP costs and the extent to which those costs were over- or under-collected during a prior period.

5. The TAP-R Reconciliation filing submitted the Department's proposed annual adjustment to the TAP Rate Rider; and the modification of related water, sewer and fire connection quantity charges.

6. The following PWD rates and charges will be affected if the Rate Board approves the Joint Settlement:

<u>Rates and Charges</u>	<u>Section Reference</u>
Total Water Quantity Charges	Section 2.1(c)(1)
Total Sewer Quantity Charges	Section 3.1(b)(1)
Total Fire Service Quantity Charges	Section 9.1(d)(1)
TAP-R Surcharge Rates	Section 10.3

B. 2023 TAP-R Proceeding

7. The Department commenced the 2023 TAP-R proceeding by filing its Advance Notice and Formal Notice of the proceeding on January 24, 2023² and February 23, 2023,³ respectively. Copies of the Advance Notice and Formal Notice are posted on the Rate Board website and are incorporated by reference.

8. These filings were made consistent with Sections II.A.2 and II.C.1 of the Rate Board's regulations.

9. PWD proposed that changed TAP-R rates and charges would take effect on September 1, 2023.

10. The participants in the 2022 Special Rate Proceeding and the 2022 TAP-R Proceeding were notified by e-mail of the opportunity to participate in the 2023 TAP-R Proceeding.

11. The general public was notified through information made available on the Rate Board's website as well as publication in Philadelphia newspapers. Legal notices related to the Advance Notice and Formal Notice were timely published in three local newspapers.

² <https://www.phila.gov/media/20230124153640/TAP-R-Reconciliation-Proceeding-Advance-Notice-2023-01-24.pdf>

³ <https://www.phila.gov/media/20230224210019/TAP-R-Reconciliation-Proceeding-Formal-Notice-final.pdf>

12. The Public Advocate was designated a participant in this proceeding pursuant to the terms of the Board’s regulations.

13. The Public Advocate submitted written discovery requests by e-mail on February 21, 2023 to which PWD responded on February 27, 2023. Copies of the discovery responses are posted on the Rate Board’s website and are incorporated by reference.

14. Lance Haver intervened (*pro se*) in this proceeding on February 1, 2023. The Philadelphia Large Users Group (“PLUG”), via counsel, confirmed PLUG’s interest in this proceeding on February 23, 2023. All are participants in this proceeding.

15. None of the participants identified in Paragraph 14 conducted discovery as part of the 2023 TAP-R Proceeding.

16. The schedule for the proceeding provided that written testimony in response to the Department’s proposed annual adjustment, if any, would be submitted by March 21, 2023.

17. The Public Advocate filed written testimony on March 21, 2023. None of the other non-Department participants (described in Paragraph 14) filed written testimony by the above stated deadline.

18. In its written testimony, Public Advocate recommended a projected number of TAP Participants for August 2024 (at the end of the next rate period) be reduced to 15,670 from the Department’s original projected number of TAP Participants for August 2024 (17,289).

19. The Department’s original proposal would result in average monthly number of TAP participants (for Sept. 2023 to Aug. 2024) being 17,289. The Public Advocate’s recommendation would result in the average monthly number of TAP participants (for Sept. 2023 to Aug. 2024) being 15,483.

20. The application of the different monthly projected number of TAP Participants (described in Paragraphs 18 and 19) would result in different TAP-R rates, as shown in the table below:

	Department’s Original Proposal Schedule BV-1	Public Advocate’s Original Proposal Schedule LKM-1
Water TAP-R Surcharge	\$0.21 /MCF	\$0.09 /MCF
Wastewater TAP R-Surcharge	\$0.34 /MCF	\$0.14 /MCF

21. Based upon the negotiated settlement, the Department agreed to withhold written rebuttal testimony which would have been filed on April 7, 2023.

22. The Hearing Officer scheduled public input and technical hearings for April 11, 2023. All hearings in this proceeding are virtual and telephonic. Transcripts from these hearings are posted on the Rate Board’s website and incorporated by reference.

23. Legal notices related to the technical and public input hearings were timely published in three local newspapers.

24. The Department and the Public Advocate conducted negotiations between themselves to achieve a settlement of issues being contested between them in the proceeding. As a result of said negotiations, Joint Petitioners were able to reach the Settlement set forth herein.

25. The Department and Public Advocate agreed that the projected average monthly number of TAP Participants for the Next Rate Period (September 2023 to August 2024) should be 16,479. This agreement does not endorse any of the methodologies or calculation methods employed by any party to project the number of TAP Participants.

26. The Department and Public Advocate agree to the TAP-R surcharges shown below.

	Settlement Proposal
Water TAP-R Surcharge	\$ 0.15/MCF
Wastewater TAP-R Surcharge	\$ 0.24/MCF

This agreement does not endorse any of the methodologies or calculation methods employed by any party to calculate TAP-R surcharges.

27. On April 7, 2023, the Department and the Public Advocate informed the Hearing Officer and the other participants that they had reached an agreement as to the proposed adjustment to TAP-R rates, as memorialized in this Joint Petition.

28. The other participants were provided with the terms of the tentative Settlement reached by the Joint Petitioners on April 10, 2023.

29. Participant briefs and/or the settlement are due by April 20, 2023.

30. The Joint Petitioners proffer the following Settlement Exhibit in support of the Settlement: Exhibit 1 - Proposed Settlement – TAP-R Reconciliation Calculations.

31. In light of the Settlement and the fact that PWD and the Public Advocate endorse its terms, the Settlement Exhibit should be accepted into the record. In addition, the Joint Petitioners stipulate to the authenticity of and admission into the evidentiary record in this matter of the Settlement Exhibit listed in Paragraph 30 of this Joint Petition.

32. The Joint Petitioners are in full agreement that this Settlement is in the best interest of the Department and its customers and is therefore in the public interest as well as in compliance with the ordinances governing this proceeding and provide a reasonable basis for recovery of TAP costs in this proceeding.

33. It is agreed and understood by the Joint Petitioners that the other participants may file written comments to the Joint Petition by the brief deadline, April 20, 2023, or as otherwise directed by the Hearing Officer.

II. TERMS AND CONDITIONS

The Settlement consists of the following terms and conditions:

34. The Joint Petitioners agree and submit that modified TAP-R rates and charges (set forth in Settlement Exhibit 1) should be approved by the Rate Board.

35. The proposed Settlement will result in a decrease in TAP-R rates for PWD customers during the Next Rate Period, as described above, subject to reconciliation in a future proceeding.

36. PWD and the Public Advocate submit that the TAP-R rates set forth in the Joint Statement should be approved as they are just and reasonable, comply with the ordinances governing this proceeding and provide a reasonable basis for recovery of TAP costs in this proceeding.

III. PUBLIC INTEREST CONSIDERATIONS

37. Joint Petitioners submit that this Settlement is reasonable and in the public interest for the following reasons:

(a) The Settlement provides for a decrease of the TAP-R service revenues during the Next Rate Period in accordance with the reconciliation calculations, as modified by the Settlement.

(b) Acceptance of the Settlement will avoid the necessity of further administrative proceedings and/or court proceedings at substantial cost to Joint Petitioners, other parties and PWD ratepayers.

(c) The Settlement will use a projected number of TAP Participants that is reasonable in light of the City of Philadelphia's average projected TAP enrollment (for Sept. 2023 to Aug. 2024).

(d) The Joint Petitioners arrived at terms of Settlement after submission of the TAP-R filing, conducting discovery and engaging in settlement negotiations. The terms and conditions of Settlement constitute a carefully negotiated package representing reasonable compromises as to the issues presented all of which are supported by the record of this proceeding.

IV. ADDITIONAL TERMS AND CONDITIONS

38. This Settlement is proposed by the Joint Petitioners to resolve the issues presented in this proceeding and is made without admission against or prejudice to any position which any Joint Petitioner might adopt during subsequent litigation or in further litigation of this case.

39. Each term and condition set forth in this Joint Petition, whether or not set out in a numbered paragraph, shown in a table or other graphic presentation, bolded, italicized or otherwise emphasized, or set forth in the body, a footnote, or parenthetical, or appendix, is material consideration to the entry into this Settlement by the participants signing below.

40. This Settlement is conditioned upon the Rate Board's approval of the terms and conditions contained herein without modification. If the Rate Board disapproves the Settlement or modifies the terms and conditions herein, the Settlement may be withdrawn, by a Joint Petitioner, upon written notice to the Rate Board and all active participants in this proceeding communicated within three business days of the entry of a final order of the Rate Board in this proceeding. In the event the Rate Board disapproves the Settlement, or any Joint Petitioner elects to withdraw as provided above, the Joint Petitioners reserve their respective rights to fully litigate this case. Joint Petitioners agree that while the Settlement, upon Rate Board approval, will be fully enforceable according to its terms, the Joint Petition does not expressly or implicitly represent approval of any specific claims made in this proceeding and the Joint Petitioners agree not to contend otherwise in future proceedings.

41. Joint Petitioners will make reasonable, good faith efforts to obtain approval of the Settlement by the Hearing Officer and the Rate Board without modification. If the Hearing Officer recommends that the Rate Board adopt the Settlement, as proposed herein, the Joint Petitioners agree to waive filing exceptions. Joint Petitioners, however, do not waive their rights to file exceptions (a) with respect to any modification of the terms and conditions of the Settlement or any additional matter proposed by the Hearing Officer in her report (b) to correct an error or misstatement in the Hearing Officer's report, or (c) to any issue not resolved by this Settlement.

V. CONCLUSION

WHEREFORE, Joint Petitioners, by their respective counsel, request the following:

1. That the Hearing Officer admit Settlement Exhibit 1, as described in Paragraph 30 of this Joint Petition, into the record of this proceeding.
2. That the Hearing Officer recommend the approval of the Settlement by the Rate Board, as described in this Joint Petition.
3. That the Rate Board approve the Settlement and find the modified TAP-R rates to be just and reasonable and authorize the Department to file revised rates and charges as proposed by the Department the TAP-R filing.
4. That the Rate Board enter its final Rate Determination in this matter consistent with the terms and conditions of Settlement.

Respectfully submitted,

/s/ Andre C Dasent

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For the Philadelphia Water Department

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For the Public Advocate

List of Settlement Exhibits

Exhibit 1 - Proposed Settlement – TAP-R Reconciliation Calculations.

Table 1 - Calculation of TAP Rider Rates Effective September 01, 2023 (FY 2024)

		TOTAL	Water	Wastewater
		Amount	Amount	Amount
(1)	C = Projected TAP Billing Loss ^a	\$ 9,948,981	\$ 3,979,592	\$ 5,969,389
(2)	E = Experienced & Estimated Net Over/Under Collection ^b	\$ 7,670,612	\$ 3,073,156	\$ 4,597,456
(3)	I = Interest on Experienced & Estimated Net Over/Under Collection ^c	\$ 152,907	\$ 61,361	\$ 91,546
(4)	Net Recoverable Costs ^d : (C) - (E + I)	\$ 2,125,462	\$ 845,075	\$ 1,280,387
(5)	S = Projected Non-TAP Sales for Next Rate Period (MCF) ^e		5,755,278	5,441,899
(6)	TAP-R Surcharge^f: (4)/(5)		\$ 0.15 /MCF	\$ 0.24 /MCF

- Notes:
- ^a Recoverable TAP Billing Loss for the Next Rate Period. Refer to Table 2 for additional information.
 - ^b Actual TAP Discounts versus TAP Revenue Collection for the Most Recent Period. Refer to Tables 3-W and 3-WW for further information.
 - ^c Simple Annual Interest on Net Over/Under Collection for the Most Recent Period. Refer to Tables 4-W and 4-WW for further information. Interest rate of 4.66% as of December 01, 2022.
 - ^d Net Recoverable Costs.
 - ^e Estimated water and sewer sales for Non-TAP Customers for the Next Rate Period based upon the average monthly Non-TAP sales volume for the 12 month period of December 2021 to November 2022. Next Rate Period is assumed to be September 01, 2023 to August 31, 2024.
 - ^f TAP-R Surcharge for the Next Rate Period.

Philadelphia Water Department
Table 2 - Projected TAP Lost Revenue (C-Factor) for Next Rate Period

Period	September 01, 2023 through August 31, 2024			Water			Wastewater
				40%			60%
(1)	Projected TAP Billing Loss ^a	\$	9,948,981	\$	3,979,592	\$	5,969,389

Notes:

^a Projected TAP Billing Loss based upon the agreed upon Projected Average Monthly Number of TAP Participants of 16,479 and the Average TAP Discount per Participant of \$50.31.

^b Allocation between Water and Wastewater per proposed PWD Regulations - Rates and Charges Effective September 01, 2023 Section 10.1(a)(i) and Section 10.1(a)(ii).

Philadelphia Water Department
Table 3-W - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period

Billing Period	Total Actual TAP Discounts (Credits)	Billed TAP Water Sales (Mcf)	Total TAP-R Billed to TAP Participants	Adjusted Actual TAP Discounts (Credits)	Billed Non-TAP Water Sales (Mcf)	TAP-R Billed Non-Tap Water Sales	Estimated TAP-R Revenues Experienced	Over/(Under) Collection
	(1)	(2)	\$ 1.030 (3) = (2) * \$ 1.030/Mcf	\$ 97.32% (4) = [(1) - (3)] * 0.9732	(5)	\$ 1.030 (6) = (5) * \$ 1.030/Mcf	\$ 97.32% (7) = (6) * 0.9732	(8) = (7) - (4)
Prior E & I Factor Adjustments								\$ (80,140)
(a) Sep-22	\$ 313,912	11,153	\$ 11,487	\$ 294,320	587,290	\$ 604,909	\$ 588,697	\$ 294,377
(a) Oct-22	\$ 303,974	10,403	\$ 10,715	\$ 285,400	490,408	\$ 505,120	\$ 491,583	\$ 206,183
(a) Nov-22	\$ 294,356	10,100	\$ 10,402	\$ 276,344	451,894	\$ 465,450	\$ 452,976	\$ 176,632
(a*) Dec-22	\$ 314,106	10,758	\$ 11,081	\$ 294,904	479,607	\$ 493,995	\$ 480,756	\$ 185,852
(a*) Jan-23	\$ 352,604	12,141	\$ 12,505	\$ 330,984	479,607	\$ 493,995	\$ 480,756	\$ 149,772
(e) Feb-23	\$ 306,503	11,195	\$ 11,530	\$ 287,068	479,607	\$ 493,995	\$ 480,756	\$ 193,688
(e) Mar-23	\$ 310,555	11,343	\$ 11,683	\$ 290,862	479,607	\$ 493,995	\$ 480,756	\$ 189,894
(e) Apr-23	\$ 314,661	11,493	\$ 11,837	\$ 294,708	479,607	\$ 493,995	\$ 480,756	\$ 186,048
(e) May-23	\$ 318,820	11,644	\$ 11,994	\$ 298,603	479,607	\$ 493,995	\$ 480,756	\$ 182,152
(e) Jun-23	\$ 323,035	11,798	\$ 12,152	\$ 302,552	479,607	\$ 493,995	\$ 480,756	\$ 178,204
(e) Jul-23	\$ 327,306	11,954	\$ 12,313	\$ 306,551	479,607	\$ 493,995	\$ 480,756	\$ 174,205
(e) Aug-23	\$ 331,633	12,112	\$ 12,476	\$ 310,603	479,607	\$ 493,995	\$ 480,756	\$ 170,153
Total	\$ 3,811,464	136,094	\$ 140,175	\$ 3,572,898	5,846,050	\$ 6,021,434	\$ 5,860,060	\$ 2,207,022
Adjustment for Prior Estimates								\$ 866,135

From Table 3-W-A

Notes:

- (a) - Actuals
- (a*) - Actuals for TAP Discount and TAP Billed Volume, Estimates for Non-TAP Billed Volume.
- (e) - Estimated
- (1) - TAP Actual Discounts reflect water's 40.0% allocated portion of the Total TAP Discount.
- (2) - Estimated TAP Discount per participant and estimated billed sales volume per participant reflect projections developed by Raftelis. Refer to RFC-3.
- (3) & (6) - Water TAP-R Rates per PWD Regulations - Rates and Charges Effective September 1, 2022 Section 10.3(a)(1).
- (4) & (7) - Adjusted for system-wide collection factor in accordance with PWD Regulations - Rates and Charges Effective September 1, 2022 Section 10.1(b)(3).
- (5) - Estimated Non-TAP water sales volumes for December 2022 through August 2023 are based upon average sales for prior 12 month period.
- (8) - Over/(Under) Collection is based upon Rates that are inclusive of Prior E-Factor and I-Factor. The presented "Prior E & I Factor Adjustments" includes these amounts from 2022 Annual Rate Adjustment.

Total E-Factor Recovery \$ 3,073,156

Line 2 in Summary Table

Philadelphia Water Department
Table 3-WW - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period

Billing Period	Total Actual TAP Discounts (Credits)	Billed Sewer Volume TAP Participants (Mcf)	Total TAP-R Billed to TAP Participants	Adjusted Actual TAP Discounts (Credits)	Billed Non-TAP Sewer Volume (Mcf)	TAP-R Billed Non-Tap Water Sales	Estimated TAP-R Revenues Experienced	Over/(Under) Collection
	(1)	(2)	\$ 1.630 (3) = (2) * \$ 1.630/Mcf	\$ 97.32% (4) = [(1) - (3)] * 0.9732	(5)	\$ 1.630 (6) = (5) * \$ 1.630/Mcf	\$ 97.32% (7) = (6) * 0.9732	(8) = (7) - (4)
Prior E & I Factor Adjustments								\$ (121,580)
(a) Sep-22	\$ 470,868	11,152	\$ 18,177	\$ 440,559	552,367	\$ 900,359	\$ 876,229	\$ 435,670
(a) Oct-22	\$ 455,961	10,403	\$ 16,956	\$ 427,240	463,873	\$ 756,112	\$ 735,848	\$ 308,608
(a) Nov-22	\$ 441,533	10,098	\$ 16,460	\$ 413,681	427,595	\$ 696,981	\$ 678,302	\$ 264,621
(a*) Dec-22	\$ 471,159	10,793	\$ 17,592	\$ 441,411	453,492	\$ 739,191	\$ 719,381	\$ 277,970
(a*) Jan-23	\$ 528,905	11,049	\$ 18,009	\$ 497,204	453,492	\$ 739,191	\$ 719,381	\$ 222,176
(e) Feb-23	\$ 459,755	11,195	\$ 18,247	\$ 429,675	453,492	\$ 739,191	\$ 719,381	\$ 289,705
(e) Mar-23	\$ 465,833	11,343	\$ 18,488	\$ 435,356	453,492	\$ 739,191	\$ 719,381	\$ 284,025
(e) Apr-23	\$ 471,991	11,493	\$ 18,733	\$ 441,111	453,492	\$ 739,191	\$ 719,381	\$ 278,270
(e) May-23	\$ 478,231	11,644	\$ 18,980	\$ 446,943	453,492	\$ 739,191	\$ 719,381	\$ 272,438
(e) Jun-23	\$ 484,553	11,798	\$ 19,231	\$ 452,851	453,492	\$ 739,191	\$ 719,381	\$ 266,530
(e) Jul-23	\$ 490,959	11,954	\$ 19,486	\$ 458,837	453,492	\$ 739,191	\$ 719,381	\$ 260,544
(e) Aug-23	\$ 497,449	12,112	\$ 19,743	\$ 464,904	453,492	\$ 739,191	\$ 719,381	\$ 254,477
Total	\$ 5,717,196	135,033	\$ 220,102	\$ 5,349,772	5,525,259	\$ 9,006,171	\$ 8,764,806	\$ 3,293,453
Adjustment for Prior Estimates								\$ 1,304,002

From Table 3-WW-A

Notes:

- (a) - Actuals
- (a*) - Actuals for TAP Discount. Estimates for TAP Billed Volume and Non-TAP Billed Volume.
- (e) - Estimated
- (1) - TAP Actual Discounts reflects water's 60.0% allocated portion of the Total TAP Discount.
- (2) - Estimated TAP Discount per participant and estimated billed sales volume per participant reflect projections developed by Raftelis. Refer to RFC-3.
- (3) & (6) - Sewer TAP-R Rates per PWD Regulations - Rates and Charges Effective September 1, 2022 Section 10.3(b)(1).
- (4) & (7) - Adjusted for system-wide collection factor in accordance with PWD Regulations - Rates and Charges Effective September 1, 2022 Section 10.1(b)(3).
- (5) - Estimated Non-TAP water sales volumes for December 2022 through August 2023 are based upon average sales for prior 12 month period.
- (8) - Over/(Under) Collection is based upon Rates that are inclusive of Prior E-Factor and I-Factor. The presented "Prior E & I Factor Adjustments" includes these amounts from 2022 Annual Rate Adjustment.

Total E-Factor Recovery \$ 4,597,456

Line 2 in Summary Table

Philadelphia Water Department										Original Estimates		Adjustment				
Table 3-W-A - Prior Reconciliation Adjustment - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period										Over/(Under) Collection		Delta				
Prior Reconciliation Period with Updated Actuals										Over/(Under) Collection		Delta				
Billing Period	Total Actual TAP Discounts (Credits)	Billed TAP Water Sales (Mcf)	Total TAP-R Billed to TAP Participants	Adjusted Actual TAP Discounts (Credits)	Billed Non-TAP Water Sales (Mcf)	TAP-R Billed Non-Tap Water Sales	Estimated TAP-R Revenues Experienced	Over/(Under) Collection		(9)	(10) = (8) - (9)					
	(1)	(2)	(3) = (2) * \$ 0.690/Mcf	(4) = [(1) - (3)] * 0.9732	(5)	(6) = (5) * \$ 0.690/Mcf	(7) = (6) * 0.9732	(8) = (7) - (4)								
Sep-21	\$ 334,263	12,761	\$ 8,805	\$ 316,736	504,318	\$ 347,979	\$ 338,654	\$ 21,917	\$	21,917	\$ 0	\$	\$ 0			
Oct-21	\$ 375,321	13,790	\$ 9,515	\$ 356,002	515,236	\$ 355,513	\$ 345,985	\$ (10,017)	\$	(10,017)	\$ 0	\$	\$ 0			
Nov-21	\$ 334,569	12,289	\$ 8,480	\$ 317,350	453,477	\$ 312,899	\$ 304,514	\$ (12,836)	\$	(12,836)	\$ 0	\$	\$ 0			
Dec-21	\$ 329,707	12,157	\$ 8,388	\$ 312,707	460,229	\$ 317,558	\$ 309,048	\$ (3,660)	\$	(3,660)	\$ 0	\$	\$ 0			
Jan-22	\$ 314,241	11,559	\$ 7,976	\$ 298,057	480,394	\$ 331,472	\$ 322,588	\$ 24,531	\$	(314)	\$ 24,845	\$	\$ 24,845			
Feb-22	\$ 248,892	9,245	\$ 6,379	\$ 236,013	418,522	\$ 288,780	\$ 281,041	\$ 45,027	\$	(314)	\$ 45,342	\$	\$ 45,342			
Mar-22	\$ 242,588	9,105	\$ 6,283	\$ 229,972	464,529	\$ 320,525	\$ 311,935	\$ 81,963	\$	(314)	\$ 82,277	\$	\$ 82,277			
Apr-22	\$ 198,366	7,461	\$ 5,148	\$ 188,040	458,093	\$ 316,084	\$ 307,613	\$ 119,573	\$	(314)	\$ 119,887	\$	\$ 119,887			
May-22	\$ 184,464	7,016	\$ 4,841	\$ 174,809	441,556	\$ 304,674	\$ 296,508	\$ 121,700	\$	(314)	\$ 122,014	\$	\$ 122,014			
Jun-22	\$ 192,873	7,263	\$ 5,011	\$ 182,827	475,378	\$ 328,010	\$ 319,220	\$ 136,392	\$	(314)	\$ 136,706	\$	\$ 136,706			
Jul-22	\$ 218,907	8,162	\$ 5,632	\$ 207,559	507,361	\$ 350,079	\$ 340,697	\$ 133,138	\$	(19,141)	\$ 152,279	\$	\$ 152,279			
Aug-22	\$ 235,189	8,848	\$ 6,105	\$ 222,945	519,627	\$ 358,543	\$ 348,934	\$ 125,989	\$	(56,795)	\$ 182,784	\$	\$ 182,784			
Total	\$ 3,209,378	119,655	\$ 82,563	\$ 3,043,017	5,698,718	\$ 3,932,115	\$ 3,826,735	\$ 783,718	\$	(82,416)	\$ 866,135	\$	\$ 866,135			
Total										\$	783,718	\$	(82,416)	\$	866,135	Adjustment for Prior Estimates

Notes:
 (1) - TAP Actual Discounts reflect water's 40.0% allocated portion of the Total TAP Discount.
 (2) - Updated TAP Discounts and billed sales volume to reflect actuals for January 2022 through August 2022 as provided by Raftelis. Refer to Schedule RFC-3.
 (3) & (6) - Water TAP-R Rates per PWD Regulations - Rates and Charges Effective September 1, 2021 Section 10.3(a)(1).
 (4) & (7) - Adjusted for system-wide collection factor in accordance with PWD Regulations - Rates and Charges Effective September 1, 2021 Section 10.1(b)(3).
 (5) - Billed Non-TAP Water Sales, updated to reflect actual billed water sales volumes for January 2022 through August 2022.
 (8) - Updated Over/(Under) Collection
 (9) - Over/(Under) Collection for September 2021 to August 2022 as calculated during the prior TAP-R Reconciliation Determination.
 (10) - Difference between Updated Over/(Under) Collection and Original Estimates.

Philadelphia Water Department										Original Estimates		Adjustment				
Table 3-WW-A - Prior Reconciliation Adjustment - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period										Over/(Under) Collection		Delta				
Prior Reconciliation Period with Updated Actuals										Over/(Under) Collection		Delta				
Billing Period	Total Actual TAP Discounts (Credits)	Billed Sewer Volume TAP Participants (Mcf)	Total TAP-R Billed to TAP Participants	Adjusted Actual TAP Discounts (Credits)	Billed Non-TAP Sewer Volume (Mcf)	TAP-R Billed Non-Tap Water Sales	Estimated TAP-R Revenues Experienced	Over/(Under) Collection		(9)	(10) = (8) - (9)					
	(1)	(2)	(3) = (2) * \$ 1.090/Mcf	(4) = [(1) - (3)] * 0.9732	(5)	(6) = (5) * \$ 1.090/Mcf	(7) = (6) * 0.9732	(8) = (7) - (4)								
Sep-21	\$ 501,395	12,758	\$ 13,906	\$ 474,424	474,201	\$ 516,879	\$ 503,027	\$ 28,603	\$	28,602	\$ 0	\$	\$ 0			
Oct-21	\$ 562,981	13,786	\$ 15,027	\$ 533,269	484,290	\$ 527,876	\$ 513,729	\$ (19,540)	\$	(19,540)	\$ 0	\$	\$ 0			
Nov-21	\$ 501,853	12,286	\$ 13,392	\$ 475,370	428,074	\$ 466,600	\$ 454,095	\$ (21,275)	\$	(21,275)	\$ 0	\$	\$ 0			
Dec-21	\$ 494,560	12,154	\$ 13,248	\$ 468,413	437,814	\$ 477,217	\$ 464,428	\$ (3,985)	\$	(3,985)	\$ 0	\$	\$ 0			
Jan-22	\$ 471,361	11,558	\$ 12,598	\$ 446,468	455,863	\$ 496,891	\$ 483,574	\$ 37,106	\$	(2,629)	\$ 39,735	\$	\$ 39,735			
Feb-22	\$ 373,337	9,245	\$ 10,077	\$ 353,525	399,126	\$ 435,048	\$ 423,389	\$ 69,863	\$	(2,629)	\$ 72,493	\$	\$ 72,493			
Mar-22	\$ 363,882	9,104	\$ 9,923	\$ 344,473	443,444	\$ 483,354	\$ 470,400	\$ 125,927	\$	(2,629)	\$ 128,556	\$	\$ 128,556			
Apr-22	\$ 297,549	7,460	\$ 8,131	\$ 281,662	434,412	\$ 473,510	\$ 460,820	\$ 179,158	\$	(2,629)	\$ 181,787	\$	\$ 181,787			
May-22	\$ 276,695	7,016	\$ 7,647	\$ 261,838	419,413	\$ 457,160	\$ 444,908	\$ 183,070	\$	(2,629)	\$ 185,700	\$	\$ 185,700			
Jun-22	\$ 289,310	7,263	\$ 7,917	\$ 273,852	449,029	\$ 489,441	\$ 476,324	\$ 202,472	\$	(2,629)	\$ 205,101	\$	\$ 205,101			
Jul-22	\$ 328,360	8,162	\$ 8,896	\$ 310,902	476,873	\$ 519,791	\$ 505,861	\$ 194,959	\$	(30,870)	\$ 225,828	\$	\$ 225,828			
Aug-22	\$ 352,784	8,847	\$ 9,643	\$ 333,945	482,090	\$ 525,478	\$ 511,395	\$ 177,451	\$	(87,350)	\$ 264,801	\$	\$ 264,801			
Total	\$ 4,814,068	119,638	\$ 130,405	\$ 4,558,140	5,384,627	\$ 5,869,245	\$ 5,711,949	\$ 1,153,809	\$	(150,194)	\$ 1,304,002	\$	\$ 1,304,002			
Total										\$	1,153,809	\$	(150,194)	\$	1,304,002	Adjustment for Prior Estimates

Notes:
 (1) - TAP Actual Discounts reflects sewer's 60.0% allocated portion of the Total TAP Discount.
 (2) - Updated TAP Discounts and billed sales volume to reflect actuals for January 2022 through August 2022 as provided by Raftelis. Refer to Schedule RFC-3.
 (3) & (6) - Sewer TAP-R Rates per PWD Regulations - Rates and Charges Effective PWD Regulations - Rates and Charges Effective September 1, 2021 Section 10.3(b)(1).
 (4) & (7) - Adjusted for system-wide collection factor in accordance with PWD Regulations - Rates and Charges Effective September 1, 2021 Section 10.1(b)(3).
 (5) - Updated to reflect actual billed water sales volumes for January 2022 through August 2022.
 (8) - Updated Over/(Under) Collection
 (9) - Over/(Under) Collection for September 2021 to August 2022 as calculated during the prior TAP-R Reconciliation Determination.
 (10) - Difference between Updated Over/(Under) Collection and Original Estimates.

Philadelphia Water Department
Table 4 -W - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period

Billing Period	Difference in Collection Water Portion From Table 3-W (1)	Cumulative Over/(Under) Collection Water Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (3) = (2) * [4.66% / 12]
Sep-22	\$ 294,377	\$ 294,377	\$ 1,143.16
Oct-22	\$ 206,183	\$ 500,560	\$ 1,943.84
Nov-22	\$ 176,632	\$ 677,193	\$ 2,629.76
Dec-22	\$ 185,852	\$ 863,045	\$ 3,351.49
Jan-23	\$ 149,772	\$ 1,012,817	\$ 3,933.11
Feb-23	\$ 193,688	\$ 1,206,505	\$ 4,685.26
Mar-23	\$ 189,894	\$ 1,396,399	\$ 5,422.68
Apr-23	\$ 186,048	\$ 1,582,447	\$ 6,145.17
May-23	\$ 182,152	\$ 1,764,599	\$ 6,852.53
Jun-23	\$ 178,204	\$ 1,942,804	\$ 7,544.55
Jul-23	\$ 174,205	\$ 2,117,009	\$ 8,221.05
Aug-23	\$ 170,153	\$ 2,287,161	\$ 8,881.81
Total			\$ 60,754

Adjustment for Prior Estimates \$ 607

Total I-Factor Recovery \$ 61,361

Line 3 in Summary Table

Notes:

- (1) Difference in collection from Total of Column 8 - Table 3-W.
- (3) Interest calculated monthly based on 1-year interest rate for constant maturity U.S. Treasury Securities as published in the Federal Reserve Statistical Release H.15 (519) on December 01, 2022.

Philadelphia Water Department
Table 4 -WW - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period

Billing Period	Difference in Collection Sewer Portion From Table 3-WW (1)	Cumulative Over/(Under) Collection Sewer Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (3) = (2) * [4.66% / 12]
Sep-22	\$ 435,670	\$ 435,670	\$ 1,691.85
Oct-22	\$ 308,608	\$ 744,279	\$ 2,890.28
Nov-22	\$ 264,621	\$ 1,008,899	\$ 3,917.89
Dec-22	\$ 277,970	\$ 1,286,869	\$ 4,997.34
Jan-23	\$ 222,176	\$ 1,509,045	\$ 5,860.13
Feb-23	\$ 289,705	\$ 1,798,751	\$ 6,985.15
Mar-23	\$ 284,025	\$ 2,082,776	\$ 8,088.11
Apr-23	\$ 278,270	\$ 2,361,046	\$ 9,168.73
May-23	\$ 272,438	\$ 2,633,484	\$ 10,226.70
Jun-23	\$ 266,530	\$ 2,900,013	\$ 11,261.72
Jul-23	\$ 260,544	\$ 3,160,557	\$ 12,273.50
Aug-23	\$ 254,477	\$ 3,415,034	\$ 13,261.72
Total			\$ 90,623

Adjustment for Prior Estimates \$ 923

Total I-Factor Recovery \$ 91,546

Line 3 in Summary Table

Notes:

- (1) Difference in collection from Total of Column 8 - Table 3-WW.
- (3) Interest calculated monthly based on 1-year interest rate for constant maturity U.S. Treasury Securities as published in the Federal Reserve Statistical Release H.15 (519) on December 01, 2022.

Philadelphia Water Department					
Table 4 -W-A - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period					
Billing Period	Prior Reconciliation Period with Updated Actuals			Original Estimates	Adjustment
	Difference in Collection Water Portion From Table 3-W-A (1)	Cumulative Over/(Under) Collection Water Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (3) = (2) * (0.25% / 12)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (4)	Cumulative Over/(Under) Collection Water Portion (5) = (3) - (4)
Sep-21	\$ 21,917	\$ 21,917	\$ 4.57	\$ 4.57	\$ 0.00
Oct-21	\$ (10,017)	\$ 11,901	\$ 2.48	\$ 2.48	\$ 0.00
Nov-21	\$ (12,836)	\$ (935)	\$ (0.19)	\$ (0.20)	\$ 0.00
Dec-21	\$ (3,660)	\$ (4,595)	\$ (0.96)	\$ (0.96)	\$ 0.00
Jan-22	\$ 24,531	\$ 19,936	\$ 4.15	\$ (1.02)	\$ 5.18
Feb-22	\$ 45,027	\$ 64,964	\$ 13.53	\$ (1.09)	\$ 14.62
Mar-22	\$ 81,963	\$ 146,926	\$ 30.61	\$ (1.15)	\$ 31.76
Apr-22	\$ 119,573	\$ 266,499	\$ 55.52	\$ (1.22)	\$ 56.74
May-22	\$ 121,700	\$ 388,199	\$ 80.87	\$ (1.28)	\$ 82.16
Jun-22	\$ 136,392	\$ 524,591	\$ 109.29	\$ (1.35)	\$ 110.64
Jul-22	\$ 133,138	\$ 657,729	\$ 137.03	\$ (5.34)	\$ 142.36
Aug-22	\$ 125,989	\$ 783,718	\$ 163.27	\$ (17.17)	\$ 180.44
Total		\$	\$ 600	\$ (7)	\$ 607
Total			\$ 600	\$ (7)	\$ 607

Adjustment for Prior Estimates Included in Table 4-W

Notes:

- (1) Difference in collection from Total of Column 8 - Table 3-W-A.
- (3) Interest calculated monthly based on 1-year interest rate for constant maturity U.S. Treasury Securities as published in the Federal Reserve Statistical Release H.15 (519) on December 01, 2021.
- (4) Difference in collection from Total of Column 8 - Table 3-W (Prior Reconciliation).

Philadelphia Water Department					
Table 4 -WW-A - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period					
Billing Period	Prior Reconciliation Period with Updated Actuals			Original Estimates	Adjustment
	Difference in Collection Sewer Portion From Table 3-WW-A (1)	Cumulative Over/(Under) Collection Sewer Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (3) = (2) * (0.25% / 12)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (4)	Delta Prior Period Estimates (5) = (3) - (4)
Sep-21	\$ 28,603	\$ 28,603	\$ 5.96	\$ 5.96	\$ 0.00
Oct-21	\$ (19,540)	\$ 9,063	\$ 1.89	\$ 1.89	\$ 0.00
Nov-21	\$ (21,275)	\$ (12,212)	\$ (2.54)	\$ (2.54)	\$ 0.00
Dec-21	\$ (3,985)	\$ (16,198)	\$ (3.37)	\$ (3.37)	\$ 0.00
Jan-22	\$ 37,106	\$ 20,908	\$ 4.36	\$ (3.92)	\$ 8.28
Feb-22	\$ 69,863	\$ 90,772	\$ 18.91	\$ (4.47)	\$ 23.38
Mar-22	\$ 125,927	\$ 216,699	\$ 45.15	\$ (5.02)	\$ 50.16
Apr-22	\$ 179,158	\$ 395,857	\$ 82.47	\$ (5.57)	\$ 88.04
May-22	\$ 183,070	\$ 578,928	\$ 120.61	\$ (6.11)	\$ 126.72
Jun-22	\$ 202,472	\$ 781,400	\$ 162.79	\$ (6.66)	\$ 169.45
Jul-22	\$ 194,959	\$ 976,358	\$ 203.41	\$ (13.09)	\$ 216.50
Aug-22	\$ 177,451	\$ 1,153,809	\$ 240.38	\$ (31.29)	\$ 271.67
Total		\$	\$ 880	\$ (43)	\$ 923
Total			\$ 880	\$ (43)	\$ 923

Adjustment for Prior Estimates Included in Table 4-WW

Notes:

- (1) Difference in collection from Total of Column 8 - Table 3-WW-A.
- (3) Interest calculated monthly based on 1-year interest rate for constant maturity U.S. Treasury Securities as published in the Federal Reserve Statistical Release H.15 (519) on December 01, 2021.
- (4) Difference in collection from Total of Column 8 - Table 3-WW (Prior Reconciliation).