

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

1. Please provide a summary schedule showing all revenue and expense adjustments for FY24 and FY25 similar to the schedule format on page 23 of PA Statement 1 supporting the proposed change to the additional revenues in FY 24 and FY 25.

Response:

Description	FY 2024	FY 2025
Revised calculation of the sales volume per account (water customers) to reflect a three-year average	(\$5,609,663) <sup>1</sup>	(\$5,871,068) <sup>1</sup>
CIP - removed the inflation escalation related to FY 2025 projects	-	(\$30,188,000)
CIP - used an average of the amounts to be rolled over from prior years into FY 2024 and FY 2025	(\$82,940,000)	(\$56,614,000)
Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Services	(\$7,765,459)	(\$16,029,830)
Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Materials and Supplies	(\$1,298,064)	(\$2,570,014)
Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Transfers	(\$323,155)	(\$639,809)
Utilized the core PCE inflation projections from FOMC (2.1% in FY 2025) for Chemical Costs	-	(\$11,442,813)
Utilized the core PCE inflation projections from FOMC (2.6% in FY 2024, 2.1% in FY 2025) for Equipment	(\$322,744)	(\$756,589)
Updated the Construction Fund’s beginning balance consistent with new information from PWD	(8,662,394) <sup>2</sup>	(8,662,394) <sup>2</sup>
Increased the bond interest rate by 1.0% from the rate experienced in FY 2023 (5.0%)	(\$5,008,773)	(\$11,835,981)
Recognized a .50% (50 basis points) increase in the interest paid on funds held by PWD	(\$1,668,220) <sup>1</sup>	(\$1,687,298) <sup>1</sup>
Improved Collection of TAP Billings (Increase revenues under existing rates)	\$3,988,498	\$3,988,498
Improved Collection of TAP Credits (Increase revenues under existing rates)	\$4,926,821	\$4,926,821
Remove Lien Filing Fees for TAP (O&M adjustment)	(\$564,795)	(\$564,795)
Fund LICAP for PGW/PECO LIURP Customers (O&M adjustment)	\$1,129,500	\$1,129,500
Fund LICAP for TAP Customers (O&M adjustment)	\$600,000	\$600,000
PILOT Internal Plumbing Repair Program (O&M adjustment)	\$2,156,250	\$2,156,250
Increase UESF Funding (O&M adjustment)	\$3,000,000	\$3,000,000

<sup>1</sup> Effect on Revenue Requirement.

<sup>2</sup> Value reflects change to the beginning balance of the Construction Fund, not impact on the Revenue Requirement.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

2. Please provide work papers, with all formulas intact, supporting each revenue and expense adjustment stated in PA Statement 1 and the workpapers supporting Schedule LM\_JR-1 through Schedule LM\_JR-5.

Response:

The workpapers are attached in Attachment 1-02.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

3. Have you independently reviewed revenue and expense adjustments detailed in Mr. Colton's testimony (PA Statement 3) and shown in the table on page 23 of PA Statement 1.

Response:

No, Mr. Colton will address questions regarding his adjustments.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

4. Please confirm or deny that in making normalization adjustments over a designated period (e.g., three years) some examination is required to make sure there are no anomalies during the period proposed to be used that could bias the result rather than reflect normal experience.

Response:

Confirmed. In making normalization adjustments over a designated period , the aim is to account for anomalies in the test year. Therefore, examination is warranted if a longer time frame is required to smooth out the outlier into representative data.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

5. Please confirm or deny that billed usage per account for 5/8” residential customers was consistently declining before the pandemic (prior to FY20).

Response:

Confirmed.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

6. Please confirm or deny that the Philadelphia Water, Sewer and Storm Water Rate Board (Rate Board) found (or approved) in its Rate Determinations in 2016 and 2018 declining usage due to lower usage per account.

Response:

Finding nothing to the contrary, we will confirm.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

7. Please confirm or deny that residential billed volume per account is a primary driver of operating revenues (given 400,000+ PWD residential accounts).

Response:

Confirmed.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

8. With reference to PA Statement 1 at 17 (lines 1-3), please provide the basis for the statement that in establishing the PWD Capital Budget for future years that consideration is given to the fact that costs in the future will be higher than the current year.

Response:

In forming a budget, it is generally standard practice to account for expected costs in the future, which would therefore account for inflation.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

9. With reference to PA Statement 1 at 17 (lines 10-15) and 21 (lines 18-20), for purposes of normalizing construction expenditures to be carried forward, what period is proposed to be utilized (i.e., state number of years, specific period).

Response:

The statement at page 17, lines 10-15 of PA Statement 1 originated from PWD’s response to PA-VIII-7. In the response, PWD stated: “Approximately a third of the FY 2023 CIP Budget is likely to be carried over to FY 2024. Note this is an estimate of the cumulative carryforward of available appropriation balances.” Using the one-third rate to calculate the prior year’s carryover resulted in an amount that appeared excessive compared to other data reviewed. For example, the FY 2025 carryover amount from FY 2024 would be approximately \$252,418 ( $\$764,903 \times 33\%$ ). Instead of attempting to normalize the prior years’ carryover amounts reflected in FY 2024 and FY 2025, the witnesses used the values provided by PWD in its analysis.

Regarding discussion at page 21, lines 18-20 of PA Statement 1, PWD’s response to PA-X-5 (A) provides the updated balance which the witnesses used.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

10. Please provide the amounts and the basis for the proposed carry forward adjustments. Identify the components of the proposed FY 23, FY 24 and FY 25 annual carry forward adjustments including the budgeted amounts carried forward from prior years and budget amounts carried forward to future years.

Response:

Please see the response to Set I-9.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

11. With reference to PA Statement 1 at 19 (lines 1-15), please provide (i) a detailed description of Federal Open Market Committee (FOMC) core inflation projections referred to in your testimony together with source documentation; and (ii) a list items that are included or excluded in this index of inflation.

Response:

(i) The FOMC projections for core personal consumption expenditures (PCE) are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. Core PCE inflation is the percentage rates of change in the price index for PCE excluding food and energy. The Core PCE inflation projections provided by the FOMC as of March 22, 2023 spans a range as follows:

	2018	2019	2020	2021	2022	2023	2024	2025
Actual	2.0%	1.6%	1.4%	4.7%	4.8%	-	-	-
Upper End of Range	-	-	-	-	-	4.1%	3.1%	3.0%
Upper End of Central Tendency	-	-	-	-	-	3.9%	2.8%	2.2%
Median	-	-	-	-	-	3.6%	2.6%	2.1%
Lower End of Central Tendency	-	-	-	-	-	3.5%	2.3%	2.0%
Lower End of Range	-	-	-	-	-	3.5%	2.1%	2.0%

Note that in the above table, the data for the actual values of the variables are annual.

The source documentation is:

Board of Governors of the Federal Reserve System, Federal Open Market Committee, “March 22, 2023: FOMC Projections materials, accessible version,”  
<https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20230322.htm>.

(ii) The core PCE inflation rate is the percentage rates of change in the price index for personal consumption expenditures less food and energy.

The list of items included in the general PCE can be broken down into a list of well over 300 items. As a result, we are providing a source to retrieve the information, rather than the full list itself detailed here. A list of the underlying category detail for PCE can be found here:

Bureau of Economic Analysis, National Data – National Income and Product Accounts, Table 2.4.5U. “Personal Consumption Expenditures by Type of Product,”  
<https://apps.bea.gov/iTable/?reqid=19&step=2&isuri=1&categories=survey#eyJhcHBpZCI6MTksInN0ZXBzIjpbMSwyLDNdLCJkYXRhIjpbWyJjYXRIZ29yaWVzIiwvVW5kZXJseWluZyJd>

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

[LFsiTkIQV9UYWJsZV9MaXN0IwiMjAxNyJdXX0=](#)

The Core PCE excludes food and energy, the composition of which can be found here:

Bureau of Economic Analysis, “Composition of PCE food and energy,”

<https://www.bea.gov/sites/default/files/2018-04/Composition%20of%20food%20and%20energy%20excluded%20from%20Core%20PCE%20Price%20Index.xls>.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

12. Please confirm or deny whether changes in prices for items such as phosphoric acid, sodium hydroxide, sodium hypochlorite, blended sodium phosphate and activated carbon are included in this inflation index

Response:

Denied. The core PCE does not identify those items specifically as included. The core PCE projection makes it easier to see the underlying inflation trend. While it may not cover all items with such specificity, it is a reasonable measure of price inflation to come. Note that the PPI used by the Department for chemicals (PPI – Industrial Chemicals; Series ID WPU061) has shifted dramatically in only the past few months alone, and if the most recent value from March 2023 were referenced rather than October 2022, it would in fact be negative inflation (-7.6%) for the most recent twelve months. The witnesses believe that past inflation is a poor predictor of future inflation rates and we therefore disagree with its use regardless. This swing is, in fact, an excellent example of why past inflation is an unreliable measure.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

13. Please confirm or deny whether changes in prices for lab equipment or related services are included in this index of inflation.

Response:

Denied. The core PCE does not identify those items specifically as included. The core PCE projection makes it easier to see the underlying inflation trend. While it may not cover all items with such specificity, it is a reasonable measure of price inflation to come.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

14. Please confirm or deny whether changes in prices for materials such as ductile iron pipe and curb stops are included in this index of inflation.

Response:

Denied. The core PCE does not identify those items specifically as included. The core PCE projection makes it easier to see the underlying inflation trend. While it may not cover all items with such specificity, it is a reasonable measure of price inflation to come.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

15. Please confirm or deny that even generally reported rates of inflation (Consumer Price Index) have ranged from 7.7% (October 2022) down to 5.0% (in recent past).

Response:

Confirmed. We assume the Department is referring to the United States general CPI-U unadjusted percent 12-month change. This value has fluctuated quite widely in recent times. Previously, from January 2013 through March 2021 – a span of over 8 years – the general CPI-U has remained within the bounds of negative 0.2% up to a maximum of positive 2.9%. With the abnormally high inflation of 2022, we confirm the value did hit 7.7% in October 2022 and does appear to be declining again, reaching 5.0% in March 2023..

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

16. Do you dispute the fact that PWD's cost per ton for chemicals experienced in 2023, as specifically referenced in PWD Statement 4 at 4 (lines 7-12), shows an increase from 26.7% to 141.8% over FY 2022 levels.

Response:

No, we do not dispute this, however the point of an inflation adjustment is not to recover past costs. It is utilized to account for increasing costs in a future year because of expected inflation yet to come. The witnesses believe that past inflation is not a good predictor of future inflation rates. The FOMC has provided a forward-looking measure of core PCE which is a more appropriate measure for future expectations. PWD has offered no reasonable future-looking inflation rate.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

17. Do you dispute the fact that PWD has generally experienced a 43% increase in costs for materials in FY23 and that it is paying costs for valves, sleeves, couplings and ductile iron pipe in maintenance activities as set forth in Schedule OP-1 that far exceed the 2.1% - 2.6% recommended for an inflation factor in PA Statement 1 at 19 (lines 17-20), 20 (lines 11-14), 21 (lines 3-7).

Response:

We do not dispute this, however the point of an inflation adjustment is not to recover past costs. It is utilized to account for increasing costs in a future year because of expected inflation yet to come. The witnesses believe that past inflation is not a good predictor of future inflation rates. The FOMC has provided a forward-looking measure of core PCE which is a more appropriate measure for future expectations.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

18. With reference to PA Statement 1 at 22 (lines 4-8), please confirm or deny that the statement refers to the PWD response to PA-V-4.

Response:

Confirmed.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

19. If the prior question is confirmed, please also confirm that the PWD in its response to PA-V-4, in fact, recommended increasing interest rates by 1% from 2022 Special Rate Proceeding yielding 5.5% and 6.0% interest rates.

Response:

In the response to PA-V-4, PWD did indicate that increasing rates by 1% would yield 5.5% and 6.0%.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

20. With reference to PA Statement 1 at 22 (lines 4-8), please explain how in adopting the recommendation set forth in the response to PA-V-4, your proposal as to interest rates to be utilized is so different.

Response:

The recommendation is different because when all the data is considered, the 5.5% and 6.0% used by PWD do not appear to be supported.

The 1.0% increase recommended by the Financial Advisors is, to a large extent, anecdotal. There is no data to show the derivation of the 1.0% increase besides the assertions of the Financial Advisors.

In the March 2, 2022 memo presented as Attachment PA-V-4B, the Financial Advisors recommended that PWD should use 4.0%, 4.5% and 6.0% interest rates for budgeting purposes for FY 2023, 2024 and 2025, respectively. Evidence provided by PWD states that interest rates on tax-exempt municipal bond rates measured by the BVAL quoted yield on AA and A-rated bonds were 3.76% and 4.14%, respectively on January 26, 2023. PWD bonds are rated A+ or A1 (depending on the rating agency reviewed), according to the Peer Utility Comparison attached to the Financial Panel's testimony. Hence, the continued use by PWD of 4.0% as the cost of debt for FY 2023 appears reasonable. Therefore, applying the Financial Advisors 1.0% increase to the FY 2023 cost of debt of 4.0% is reasonable.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

21. With reference to PA Statement 1 at 22 (lines 22-26) and 23 (lines 1-2), please confirm or deny that actual interest income reflects market considerations (investments made) and is not based on a calculation of simple interest.

Response:

The witnesses understanding was influenced by PWD response to PA-IX-7. In that response, PWD stated: “The 1.0% interest rate is consistent with the assumption for interest income and debt service reserve interest income interest rates in recent rate proceedings. The annual interest earnings are adjusted to reflect the market value of investments which in FY 2022 resulted in negligible interest earnings.”

While PWD is projecting higher interest rates for debt financing, it is proposing to retain the interest rate for interest income at an unchanged rate. If one accepts that interest rates are increasing for debt financing, it is unreasonable to assume that interest rates for income will remain unchanged.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

22. With reference to the recommendation made in PA Statement 1 at 22, please confirm or deny that actual interest income recognized by PWD in FY22 was less than 0.5%.

Response:

The witnesses have not analyzed PWD actual FY 2022 earnings. Therefore, they are unable to confirm or deny the 0.5% value.

Before The  
Philadelphia Water, Sewer and Storm Water Rate Board  
2023 General Rate Proceeding Fiscal Years 2024 – 2025  
Interrogatories and Requests for Production of Documents  
To The Public Advocate  
Set I

23. With reference to PA Statement 1 at 6-10, do you agree that the recommendation for stormwater management cost recovery is a part of a larger policy discussion involving other stakeholders; and that neither PWD or the Rate Board can make this decision in isolation?

Response:

The witnesses agree.