PHILADELPHIA WATER DEPARTMENT
REBUTTAL STATEMENT NO. 1

BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

In the Matter of the Philadelphia Water Department's Proposed Change in Water, Wastewater and Stormwater Rates and Related Charges	Fiscal Years 2024 - 2025

Rebuttal Testimony

on behalf of

the Philadelphia Water Department

to

Public Advocate Witnesses

Lafayette K. Morgan, Jr.

and Jennifer L. Rogers

Dated: April 26, 2022

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

1. PLEASE STATE YOUR NAMES AND POSITIONS.

1. My name is Lawrence Yangalay. My position with the Philadelphia Water Department ("PWD" or the "Department") is Acting Deputy Commissioner of Finance.

Testifying with me are **Valarie J. Allen** of the law firm Ballard Spahr who serves as the Department's Bond Counsel; **Charles Mathews**, who is a Director of Public Financial Management; **Peter Nissen**, who is the Managing Director of Acacia Financial Group, Inc.; **Ann Bui, Dave Jagt** and **Brian Merritt** who are members of the Black & Veatch Management Consulting, LLC ("Black & Veatch" or "B&V") team; **Stephen J. Furtek** who is the General Manager of the Department's Engineering and Construction Division; and **Benjamin Jewell**, who is the Deputy Commissioner of Operations for the Philadelphia Water Department ("PWD" or "Department").

2. HAVE ANY WITNESSES ON THIS PANEL PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

2. Yes. I provided testimony and schedules in PWD Statement 2A. Charles Mathews and Peter Nissen provided testimony and schedules in PWD Statement 2B. Stephen J. Furtek provided testimony and schedules in PWD Statement 3. Benjamin Jewell provided testimony and schedules in PWD Statement 4. Black & Veatch provided direct testimony in PWD Statement 7.

3. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

3. In this rebuttal, we provide the Department's response to recommendations and criticisms of Lafayette K. Morgan, Jr. and Jennifer L. Rogers (collectively, the "Exeter Panel" or "Exeter") in their direct testimony (PA Statement 1) submitted on behalf of the Public Advocate ("Advocate" or "Public Advocate").

II. NEED FOR RATE RELIEF

4. DOES THE EXETER PANEL CONCLUDE THAT THE DEPARTMENT NEEDS RATE RELIEF?

4. Broadly speaking, the Exeter Panel concludes that the Department does need rate relief for FY 2024 and FY 2025. The differences between the Department's recommendation on incremental additional revenues and the Exeter Panel's recommendation can be summarized as follows:

Recommended Incremental Additional Revenues (Dollars in Thousands)		
	PWD	**Public Advocate**
FY 2024	$80,412	$47,147
FY 2025	$62,977	$45,410

5. DOES THE DEPARTMENT AGREE WITH THE CONCLUSIONS OF THE EXETER PANEL?

5. The Department is responding to the Exeter Panel's recommendations and adjustments in Sections II through X of this rebuttal testimony.

6. DOES THE DEPARTMENT BELIEVE THAT THE EXETER PANEL'S PROPOSALS, IF ACCEPTED, WOULD BE GOOD FOR PWD OR ITS CUSTOMERS?

6. No. Taken as a whole, the Exeter Panel's proposals would leave the Department underfunded, potentially compromising both the level of service provided to customers and the Department's financial standing. In Sections II-X of this testimony, we criticize the Exeter Panel's recommendations for the reasons explained in detail below.

III. FINANCIAL REQUIREMENTS

7. DOES THE EXETER PANEL CONTEST ANY OF THE FINANCIAL REQUIREMENTS AND GOALS SET FORTH IN THE DEPARTMENT'S FINANCIAL PLAN?

7. Yes. The Financial Plan (Schedule FP-1) calls for debt service coverage of 1.25 times for both FY 2024 and FY 2025, which is below the approved targeted metric of 1.30 times. (See Schedule BV-1, Table C-2, line 5). The Exeter Panel, without explanation, adjusts (lowers) debt service coverage to 1.22 times for FY 2024 and 1.23 times for FY 2025. (Schedule LM_JR-5, line 6a).

The Exeter Panel offers no rationale or explanation for its adjustment to debt service coverage. They appear to merely allow the debt service coverage to "fall out" from their analysis, which their testimony indicates was developed using the model provided by the Rate Board. Although the model provided by the Rate Board does not provide a specific user input for senior debt service coverage, it does provide a user input for the Cash Funded Capital Ratio. The Cash Funded Capital Ratio input allows the user to adjust the level of cash funding reflected in the annual revenue requirements which subsequently impacts the debt service coverage ratios. By maintaining the original value for the Cash Funded Capital Ratio based on the Department's filing, the Exeter Panel's proposed adjustments to reduce the annual capital expenditures also reduces the amount of cash funded capital and the resulting debt service ratios. To maintain the Department's objective to meet a 1.25 senior debt service coverage, the Cash Funded Capital Ratio should be increased to reflect the appropriate level of cash funding required to support the 1.25 senior debt service coverage objective.

As discussed in PWD Statement 2 at 15, it is important for the Rate Board to reaffirm the long-term debt service coverage target of 1.30 times the Senior Debt Service Coverage Ratio, as it "*not only memorializes these goals along with resulting rate increases, but also assists the Department with its persuasion of the rating agencies to maintain or improve the Department's credit ratings.*" In addition, using 1.25 Senior Debt Service coverage, which is below the stated target, to set rates in this proceeding, shows a reasonable commitment of working toward this goal and building "*to sustain debt service coverage levels above the minimum levels required by the Rate Covenants to provide a hedge against unanticipated cost increases or revenue losses, as well as to provide bondholders comfort that the Department will meet its covenants with investors.*"

The Exeter Panel adjustment (without explanation) is a mistake that pulls PWD farther away from the targeted financial metric.

IV. OPERATING REVENUES

8. PLEASE RESPOND TO THE EXETER PANEL'S ADJUSTMENT TO THE DEPARTMENT'S PROJECTED OPERATING REVENUES.

8. The Exeter Panel recommends adjusting the projection of operating revenues. They specifically recommend a revised calculation of sales volume per account to reflect a three-year average covering FY 2020, FY 2021, and FY 2022. (PA Statement. 1 at 16). This approach defies the trend of decreasing use per customer observed over the last five years.

We disagree with this recommendation. As demonstrated in the following table, applying the Exeter Panel's proposed adjustment results in total sales levels that the Department has not seen since FY 2018, most notably for Residential and Commercial customers.

LINE NO.	DESCRIPTION	Actual FY 2018	Actual FY 2019	Actual FY 2020	Actual FY 2021	Actual FY 2022	Projected FY 2023
Water System (Mcf)							
1	Residential	3,099,478	3,014,087	3,009,590	3,080,445	3,053,350	3,144,197
2	Senior Citizens	123,537	129,989	129,858	127,214	123,911	123,458
3	Commercial	1,568,082	1,558,562	1,590,687	1,542,241	1,663,824	1,712,641
4	Industrial	96,751	154,824	99,535	84,616	88,098	76,319
5	Public Utilities	9,622	8,929	9,498	9,275	9,849	10,880
6	**Subtotal General Service**	**4,897,470**	**4,866,391**	**4,839,168**	**4,843,790**	**4,939,033**	**5,067,495**
7	PHA	158,068	157,347	140,652	145,316	154,693	145,186
8	Charities and Schools	161,720	157,659	136,933	113,224	137,520	120,513
9	Hospitals and Universities	252,658	286,455	228,052	93,694	104,294	72,228
10	Hand Billed	470,231	428,623	479,337	475,823	484,406	500,386
11	Scheduled (Flat Rate)	13	13	36	38	32	72
12	Private Fire Protection	15,880	8,487	9,585	10,022	197	2,274
13	**Total Retail Customers**	**5,956,039**	**5,904,975**	**5,833,763**	**5,681,907**	**5,820,175**	**5,908,154**

As noted in the current and prior rate proceedings, the 5/8" general service customers have experienced a continued trend of decreasing usage per customer. Using a three-year average resets the usage to reflect demand levels from prior years, resulting in an overly optimistic projection of billed volumes, billings, and revenues.

For example, as presented in Table 1-3 of Schedule BV-2, the Residential Customers (5/8" Meters) average demand has been decreasing over time.

	Historical (Fiscal Year)				
Description	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Billed Volume Per Account (Mcf/Account)	6.54	6.42	6.42	6.40	6.29
Annual Change	(2.82%)	(1.83%)	0.00%	(0.31%)	(1.72%)
3 Year Average Change		(1.90%)	(1.56%)	(0.72%)	(0.68%)

Using a three-year average to establish a basis for the FY 2023 projected volumes, the projection basis would be 6.37 Mcf/Account, which is 1.27% higher than the average demand in FY 2022. Application of this projection basis would offset almost two years of the projected average decrease of 0.68% per year.

This is also the case for Commercial Customers with greater than 5/8 meters; as presented in the following table, the average demand has been decreasing over time:

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Annual Billed Volume Per Account (Mcf/Account)	152.07	146.62	150.22	137.59	141.17
Annual Change	(2.87%)	(3.58%)	2.46%	(8.41%)	2.60%
3-Year Average Change	-2.73%	-3.40%	-1.37%	-3.28%	-1.25%

Using a three-year average to establish a basis for the FY 2023 projected volumes, the projection basis would be 142.99 Mcf/Account, which is 1.29% higher than the average demand in FY 2022. Applicaiton of this basis would offset one year of the projected average decrease of 1.25% per year.

The Board should reject the Exeter Panel's recommendation to establish projected billed water volumes based on a three-year average. As demonstrated above, this proposed approach ignores the longer-term trend of reduced volumes reflected in the uncontested volume escalation factors. Applying their approach actually offsets demonstrated long-term trends and results in overly optimistic levels of water sales volumes, billings, and revenues.

V. CAPITAL IMPROVEMENT PROGRAM

9. DID THE EXETER PANEL PROPOSE ANY ADJUSTMENTS TO THE DEPARTMENT'S PROJECTED CAPITAL IMPROVEMENT PROGRAM, WHICH IS SUMMARIZED IN SCHEDULE BV-1, TABLE C-7?

9. Yes. First, the Exeter Panel recommends removing the inflation escalation related to FY 2025 projects. (PA Statement 1 at 16-17). See Schedule BV-1, Table C-7, line 11. Second, the panel recommends changes to the carry-forward adjustments to supposedly normalize the annual amount rolled over to a future year (PA Statement 1 at 17). See Schedule BV-1, Table C-7, line 13.

10. DO YOU AGREE WITH THE EXETER PANEL'S REMOVAL OF THE INFLATION ESCALATION FOR FY 2025?

10. No. As a practical matter, PWD's FY 2025 Capital Improvement Program (CIP) budget was established based on the proposed FY 2024 to FY 2029 CIP and is based upon FY 2024 dollars and does not capture any additional inflation, which is likely to occur between now and when the final version of the FY 2025 CIP is adopted. In view of the above, it is appropriate, for rate-making purposes, to include an inflation adjustment in the cost-of-service analysis for FY 2025 so that the CIP financing will be sufficient during the rate period.

In addition, Exeter's removal of the inflation factor is inconsistent with prior rate proceedings. In prior proceedings, an inflation factor was applied to the CIP budget for the years beyond the adopted or proposed CIP budget year. Mr. Morgan did not contest this adjustment in prior rate proceedings. The Rate Board has also approved this adjustment in prior proceedings.

Finally, please note that although Exeter proposes to remove the inflation for FY 2025, his exhibit tables continue to reflect the FY 2025 inflation adjustments proposed by the Department (Schedule LM_JR-4 Page 1 of 4, line 11).

11. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDED CHANGES TO THE CARRY-FORWARD ADJUSTMENTS?

11. No. The carry-forward reflected in the Department's rate filing was established to support the funding of the capital program. Note that the detailed list of projects provided in response to PA-V-2 supported the following projected budget:

Capital Program Area	**FY 2024**	**FY 2025**
Conveyance	$161,318,328	$224,305,391
Collectors	$184,266,915	$191,370,489
Facilities	$344,929,512	$410,069,382
Total [1]	$690,514,755	$825,745,262
Roll-forward Adjustments: Baxter Clearwell Basin	$125,000,000	
AMI	$20,000,000	
Revised Total	**$835,514,755**	**$825,745,262**
Total Inflated Adjusted CIP Budget	$847,846,000	$841,488,000
Less Vehicles	$12,000,000	$12,000,000
Total Inflated Adjusted CIP Excluding Vehicles [2]	**$835,846,000**	**$829,488,000**

[1] – From PA-V-2

[2] – From PWD Statement 7: Schedule BV-1 – Table C-7

Although the Exeter Panel states that they "used an average of the amounts to be rolled over from prior years into FY 2024 and FY 2025," their actual adjustments completely eliminated the $82,940,000 and $56,614,000 carry forward adjustments in FY 2024 and FY 2025.

Any proposed reductions to the projected carry-forward will result in insufficient funding for the planned projects in the capital program. For example, by eliminating the Department's $82,940,000 carry forward adjustment in FY 2024, the Exeter Panel has also eliminated a portion of the Department's planned funding source for the

PENNVEST supported Baxter Clearwell Basin project (PA-VIII-8 and PA-IX-14). Moreover, as stated in PWD Statements 3 and 4, planned projects are required to replace aging infrastructure, make necessary additions/improvements, and undertake repairs to increase operational efficiency.

Note that although the Exeter Panel proposes to adjust the carry-forward adjustments, their exhibit tables continue to reflect the projected carry-forward amounts proposed by the Department (Schedule LM_JR-4 Page 1 of 4, line 13).

12. DO YOU AGREE WITH THE EXETER PANEL'S CHANGES TO THE PROJECTED CAPITAL EXPENSES ASSOCIATED WITH THESE ADJUSTMENTS?

12. No. Both the inflation and carry-forward adjustments proposed by the Exeter Panel are adjustments to the annual appropriations associated with the Department's capital budget. The annual appropriations provide the authority to execute contracts with vendors for design and construction services associated with the Department's capital program. The estimate of project expenditures reflects the spending or draw down of the Department's outstanding encumbrances associated with the design and construction contracts. Any adjustment to the annual budget appropriations would not be reflected as a 1:1 adjustment to the project expenses in the same year, as the budget funds projects of various durations. In reality, reducing the budgeted appropriations in FY 2024 would result in reductions to project expenditures from FY 2024 to 2028.

We recommend that the Board reject the Exeter Panel's proposed reduction to the estimated capital spending because their adjustment is overstated based on their proposed adjustments, and that it removes expenses associated with planned capital projects.

VI. EXPENSE ESCALATIONS

13. DID THE EXETER PANEL PROPOSE ANY ADJUSTMENTS TO THE DEPARTMENT'S PROJECTED OPERATION AND MAINTENANCE EXPENSES, WHICH ARE SUMMARIZED ON SCHEDULE BV-1, TABLE C-6?

13. Yes. The Exeter Panel recommends changes to the escalation factors proposed by PWD regarding Services, Materials and Supplies, Transfers, Chemical Costs, and Equipment – as summarized in Schedule BV-1: Table C-6.

For escalation factors applicable to the above O&M expense categories, the Exeter Panel is recommending the use of March 22, 2023, Federal Open Market Committee ("FOMC") Core Personal Consumption Expenditures median inflation projections ("PCE") for Calendar Years 2024 and 2025 of 2.6% and 2.1%, respectively.

14. DO YOU AGREE WITH THE EXETER PANEL'S USE OF THE PCE?

14. No. We believe that the recommendations offered by the Exeter Panel should be rejected, and the factors proposed by the Department should be accepted.

First, with respect to the Federal Reserve's economic projections of future inflation, the Exeter Panel opines that "*if past inflation was a good predictor of future inflation, higher inflation would have been forecast for this year.*" PA Statement 1 at 19 Lines 8 to 9. At the FOMC annual March meetings of 2021 and 2022, the Summary of Economic Projections released showed that even the Federal Reserve is not the best at predicting future outcomes. The table below shows the FOMC Core PCE projections at the March meetings for 2021 through 2023.

	2021	**2022**	**2023**	**2024**	**2025**
March 2021	2.2	2.0	2.1		
March 2022		4.1	2.6	2.3	
March 2023			3.6	2.6	2.1

Source: FOMC Summary of Economic Projections 2021-2023

Second, the PCE projections are tied to monetary policy and reflect the targets set forth by the Federal Reserve. The Federal Reserve has historically targeted an inflationary rate in the 2-3% range, and this practice continues to be reflected in their released reports.

Using an index projection that is, at its core, tied to monetary policy and reflects the optimism of the Federal Reserve to manage inflation is not indicative of reality. The PCE indicates where the Federal Reserve would like the inflation level to be over time.

15. WHY IS THE EXETER PANEL'S USE OF THE PCE NOT APPROPRIATE FOR PROJECTING COSTS IN SERVICES, MATERIALS & SUPPLIES, EQUIPMENT, TRANSFERS, AND CHEMICALS?

15. The Exeter Panel proposes broadly applying the PCE to the identified cost categories. We disagree with this approach. Using one index to measure cost impacts for such diverse

cost classes (e.g., chemicals, equipment, material and supplies) is inappropriate and does not reflect the Department's actual experience.

When developing escalation factors, it is appropriate to review the following:

- Planned or previously agreed upon cost increases stipulated in PWD contracts or similar agreements;
- Actual PWD experience concerning their various cost classes; and
- Various cost indices published by such entities as the Bureau of Labor and Statistics CPI and PPI data, Handy Whitman Construction Indices, etc.

See PWD Statement 7, Schedule BV-4: WP-1. As discussed further below, the Exeter Panel's recommendation does not reflect a reasoned approach to potential inflation impacts in different cost categories.

16. PLEASE FURTHER EXPLAIN WHY GENERAL UTILIZATION OF THE PCE IS INAPPROPRIATE IN PROJECTING FUTURE REVENUE REQUIREMENTS?

16. As alluded to above, using one index to measure cost impacts for such diverse cost classes is inappropriate and does not reflect the Department's actual experience. Each cost has unique factors to consider. For example, with chemical costs, escalation factors will be driven by market conditions and input costs. Equipment will be driven by manufacturing capacity as well as input materials costs. Other forces, such as the cost of labor, healthcare costs, labor availability, etc., will drive service costs.

Further, PWD has proposed a 2-year rate request. As prices fluctuate year to year, changes in costs over time should be considered, acknowledged, and evaluated against other information which might suggest otherwise. It is not unreasonable, to consider escalation factors based upon a period greater than the last 12 months when rates are requested over a multi-year period (in this case, 2-years).

Black & Veatch selected the use of CPI as the PPI for materials and supplies, and equipment, as these categories for PWD reflected a mix of types. CPI was utilized as it tempered the escalation factors and appeared reasonable, given more recent experience. As presented in PWD Statement 7, Schedule BV-4:WP-1, in Table 3, the PPI figures all imply higher costs in these areas.

Black & Veatch's approach to deriving escalation factors has been consistent with past rate proceedings. Exeter's position, however, has changed over the years, ranging from use of a Gross Domestic Product Index Blue Chip indicator (2016 Rate Proceeding) to using all PWD experience (2018 Rate Proceeding). During the 2020 Rate Proceeding, Mr. Morgan stated that *"[T]he use of a 2-year average suggests that at least one year is in the past. In my opinion, past inflation is not a good predictor of future inflation. Hence, I disagree with this approach. Instead, I have used the most recent CPI data for the Philadelphia area (February 2021) of 1.0 percent. This approach is reasonable because it is the most recent known indicator of inflation moving forward.*[1] " If we were to follow Exeter's position from the last rate proceeding, the resulting escalation factors would be considerably higher. Black & Veatch's balanced approach tempers inflation volatility while recognizing that the Federal Reserve's stance on easing households from economic shock has changed as they take an aggressive position on taming inflation.

[1] See 2022 Rate Proceeding PA Statement No. 1. At 23, Lines 12 through 16.

The forecast inflation rates utilized by the Exeter Panel are unlikely to capture the changes in more specific cost categories.

17. DO YOU HAVE ANY OTHER CONCERNS REGARDING THE EXETER PANEL'S RECOMMENDED USE OF PCE FOR SERVICES AND TRANSFERS?

17. Yes. As noted in PWD Statement 4 at 13, PWD has several large-scale service-related contracts tied to overall CPI for all consumers. As previously noted: "*An example of this type of contract is the Biosolids Recycling Center Operation Service Agreement with Philadelphia Biosolids Services (PBS), a joint venture led by Synagro. The Fixed Capacity Charge in this contract is adjusted annually based on changes in the CPI for All Urban Consumers – Northeast United States or other specified indices.*" The response to PA-III-27 provided examples of how major services contracts are adjusted, such as:

- Biosolids Recycling Center (BRC) contracts are adjusted using CPI for All Urban Consumers – Northeast United States.
- The Sludge Transport by Barge Contract using CPI for All Urban Consumers – Philadelphia Region.
- Hach Instruments Parts and Supplies Service contract is adjusted using CPI for All Urban Consumers – Philadelphia Region.

Based upon the foregoing, the PCE should not be applied to escalate service costs, as CPI is included in major service contracts. Per these service-related contracts, actual escalation of costs will be based upon historical CPI for all consumers and not the projected core inflation figures for PCE, as suggested by the Exeter Panel. The Exeter

Panel's recommendation should be rejected.

Transfer costs largely capture services and support from other departments within the City. Similar to services, the same logic should apply to establishing escalation factors here.

19. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDED CHANGE TO OPERATING EXPENSES FOR EQUIPMENT AND CHEMICALS, FOR THE RATE PERIOD?

19. No. As discussed above, PCE is inappropriate to apply as an escalation factor chemicals and equipment in this rate proceeding.

The forecast inflation rates utilized by the Exeter Panel are unlikely to capture the specific costs. For example, with respect to Chemicals and Equipment, the Exeter Panel acknowledges there are no forecasted inflation rates available:

> "*We have used the general inflation rate projections because we were unable to obtain a projected inflation rate that is specific to chemical costs.*" PA Statement 1 At 20 Lines 17 to 18.

> "*We have used the general inflation rate projections because we were unable to obtain a projected inflation rate that is specific to equipment*." PA Statement 1 At 21 Lines 10 to 12.

The lack of a forecasted inflation figure does not alleviate the need to evaluate different, specific escalation factors for critical cost components in operating and maintaining a water utility. Given the Water Department's recent experience with both Chemicals and Equipment contracts, as discussed in PWD Statement 4, a forecasted figure for core inflation is unlikely to capture the specific cost pressures for these areas or reflect specific market conditions. Like most utilities, PWD sees pricing and contracts for these vendors annually. Price increases will tend to lag with each contract renewal, meaning PWD's exposure to longer-term inflationary pressures may not diminish in the near term. PPI provides a more indicative and market-specific indicator of where prices may head in the Department's immediate 12 to 24 months for the Water Department.

Given that PPI is a leading indicator for future chemical and equipment expenses, it is in fact a predictor of future costs as PWD must review contracts with these providers/vendors routinely. Producers are sure to pass along cost increases as needed.

VII. CONSTRUCTION FUND BALANCE

20. PLEASE RESPOND TO THE RECOMMENDED ADJUSTMENT TO THE CONSTRUCTION FUND BEGINNING BALANCE FOR FY 2023.

20. We accept the Exeter Panel's proposal to update the construction fund FY 2023 beginning balance to reflect the final FY 2022 ending balance. This update does not impact the overall projected CIP financing the Department recommends in this proceeding.

Note that although the Exeter Panel proposes adjusting the construction fund beginning balance for FY 2023, their exhibit tables continue to reflect the construction fund balance reflected in the Department's rate filing.

VIII. DEBT SERVICE

21. PLEASE RESPOND TO THE EXETER PANEL'S RECOMMENDED ADJUSTMENT TO THE BOND INTEREST RATE.

21. The Exeter Panel states, "PWD projected annual interest rates of 5.5% and 6.0% for new bond issuances for FY 2024 and FY 2025, respectively." The Exeter Panel recommends using annual interest rates of 5.0% for FY 2024 and FY 2025 bond issuances. (PA St. 1 at 21-22).

We disagree with the recommendation of the Exeter Panel.

First, for clarification, PWD has utilized assumed revenue bond interest rates of 5.5% for FY 2024 and FY 2025 assumed borrowings (2023 General Rate Proceeding - PWD Statement No. 7, page 28) rather than 5.5% for the FY 2024 borrowing and 6.0% for the FY 2025 borrowing represented in PA Statement 1, page 21.

As acknowledged in PA Statement 1, interest rates have risen significantly in the past 15 months. The rate on the 30-year US Treasury Bond has risen from 2.12% in January 2022 to 3.72% in April 2023 (1.60% increase). Long-term tax-exempt municipal bond rates as reported by Municipal Market Data on TM3 for "A" rated entities have risen from 1.81% to 3.97% (2.16% increase) in the same period.

Please recall that with respect to interest rates assumed for revenue bond borrowings in the 2022 Special Rate Proceeding (PWD Statement No. 3), PWD, in consultation with its financial advisors, utilized borrowing rates of 4.0% for the FY 2023 borrowing, 4.5% for the FY 2024 borrowing, and 5.0% for the FY 2025 – FY 2027 borrowings.

For the calculations contained in the 2023 General Rate Proceeding, PWD assumed interest rates, again in consultation with its financial advisors, for revenue bond borrowings of 5.5% for the FY 2024 borrowing (a 1.0% increase from the 2022 Special Rate Proceeding), 5.5% for the FY 2025 borrowing (a 0.5% increase from the 2022 Special Rate Proceeding), and 6.0% for the FY 2025 – FY 2027 borrowings (a 1.0 % increase from the 2022 Special Rate Proceeding).

These assumptions for future interest rates by PWD are intended to be reflective of current market rates, but also conservative for uncertain future events. PWD believes an increase in the assumed interest rates for revenue bond borrowings from the 2022 Special Rate Proceeding to the 2023 General Rate Proceeding of between 0.5% and 1.0% is reasonable in comparison to the increase of comparable tax-exempt interest rates of more than 2.0% over the same period.

PA Statement No. 1 indicates that "we believe 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." (PA Statement 1, page 22, lines 15 to 17) PWD believes that the rates used in the 2023 General Rate Proceeding are not speculative and appropriately reflect market changes and recent history.

22. PLEASE RESPOND TO THE EXETER PANEL'S RECOMMENDED ADJUSTMENT TO THE PROJECTED REVENUE BOND ISSUANCES.

22. As noted in Section V, Capital Improvement Program, the Exeter Panels proposes reductions to the CIP funding by eliminating the FY 2025 CIP inflation adjustment and the budget carry-forward adjustments in FY 2024 and FY 2025. Based on these proposed adjustments to the CIP budget appropriations, they subsequently propose reductions to the annual capital spending and projected bond issues in FY 2024 and FY 2025. As mentioned in response to Question 12, capital budget appropriations provide funding for the design and construction of projects with durations of 2 to 5 years. As such, the proposed 1:1 reduction of the capital budget and resulting capital expenditures overstates the impact of Exeter's proposed budget adjustments. These reductions to the capital spending in FY 2024 and FY 2025 subsequently overstate the reductions to the proposed FY 2024 and FY 2025 bond issuances. As noted in prior responses, the adjustments effectively eliminate budgets and spending associated with specific projects.

We recommend that the Board reject the Exeter Panel's proposed reductions to the proposed FY 2024 and FY 2025 revenue bond issues on the basis that their reductions are overstated and that it removes funding associated with planned capital projects.

IX. INTEREST INCOME

23. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDED CHANGE TO NON-OPERATING INCOME, INTEREST INCOME, TABLE C-3, LINES 16-19, FOR THE RATE PERIOD?

23. No. We disagree with this recommendation of the Exeter Panel. As detailed in response

to PA-IX-7, the 1.0% interest rate is consistent with the assumption for interest income and debt service reserve interest income 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. In other words, PWD's assumed interest rate is based upon the fact that fund balances are not subject to simple interest earnings, but rather reflect the market performance of various investments. While interest rates have increased with the Federal Reserve's recent actions, PWD's earnings on fund balances will be influenced by overall market performance and not simply treasury notes.

Please note that the Department's 1.0% interest earnings rate assumption is optimistic relative its actual interest earnings in FY 2022. For example, the FY 2022 interest earnings of $575,643 recognized on the Debt Service Reserve represents the average interest rate of 0.3% based on the FY 2021 end-of-year balance of $193,105,446.

The Exeter Panel's recommended adjustment to the interest earnings rate is solely based on the recent federal interest rate adjustments and doesn't acknowledge the potential variety of investments and potential impact of market valuation.

X. ADJUSTMENTS FOR MR. COLTON PROPOSALS

24. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION TO INCREASE REVENUES UNDER EXISTING RATES BY $3,988,498 FOR THE IMPROVED COLLECTION OF TAP BILLINGS?

24. No. As adopted by the Exeter Panel (PA Statement 1 at 23) the above adjustment should be rejected.

As discussed in PWD Rebuttal Statement 3, the improved collection of TAP billings suggested by Mr. Colton and adopted here by the Exeter Panel are 1) overstated and 2) any "improved collections" under TAP bills associated with TAP customers is already reflected in the collection factors utilized in this proceeding. Collection factors are based upon actual billings and receipts, which includes the billing and collection associated with customers enrolled in TAP. See PWD Rebuttal Statement 3 Section V. Collectability of TAP Revenue.

25. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION TO INCREASE REVENUES UNDER EXISTING RATES BY $4,926,821 FOR THE IMPROVED COLLECTION OF TAP CREDITS?

25. No. As discussed in PWD Rebuttal Statement 3 Section VI. Collectability of TAP-R Revenue, recovery of TAP credits (i.e. discounts) is addressed via the TAP-R surcharge and subject to a separate proceeding before the Rate Board, which has already been agreed upon with the Public Advocate and the Water Department. TAP discounts are not included as a revenue requirement in base rates and should be handled accordingly. TAP-R revenues and TAP discounts are only presented in Table C-1B, to allow the derivation and presentation of the overall financial performance. As noted in PWD Statement 7, Table C-1A is the basis for determining base rate revenue requirements. Any adjustments to TAP discounts and TAP-R revenues are the subject of the TAP-R rate reconciliation proceeding. Therefore, Mr. Colton's suggested adjustment, as adopted by the Exeter Panel (PA Statement 1 at 23), should be rejected.

26. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION TO DECREASE OPERATING EXPENSES BY $564,795 SO AS TO REMOVE PROJECTED LIEN FILING FEES?

26. No. As discussed in PWD Rebuttal Statement 3 Section XII. Municipal Liens, lien fees are a necessary expense to maintain compliance with the Municipal Claims and Tax Lien Act. As such, the lien fees are a legitimate expense of the Department, which should be reflected in its annual revenue requirement.

27. DO YOU AGREE WITH THE RECOMMENDATION THAT THE DEPARTMENT SET ASIDE REVENUES FROM LATE PAYMENT CHARGES FOR SPECIFIC PURPOSES?

27. No.

The Philadelphia Code requires the Department to charge specified late payment charges on delinquent bills.[2] Under the Restated Water and Wastewater General Revenue Bond Ordinance of 1989, as amended and supplemented ("General Ordinance"), the late payment charges constitute Project Revenues (as defined in the General Ordinance) that support the revenue bonds issued by the Department and its operating requirements. This means that the late payment charges must be applied consistent with the "flow of funds" prescribed in the General Ordinance (often described as a waterfall) and in the same manner as other Project Revenues.[3]

[2] Philadelphia Code, Section 19-1606(2).
[3] Schedule FP-2 at 9.

The Exeter Panel (implicitly) and Mr. Colton (explicitly) recommend that the late payment charges be earmarked (dedicated) to specific operating expenses (uses and programs).

We disagree with that recommendation. The establishment of a dedicated fund is in conflict with the provisions of the General Ordinance concerning application of Project Revenues. The General Ordinance does not contemplate or permit the segregation of certain Project Revenues for, or the creation of a special fund in favor of, certain Operating Expenses over others. All Project Revenues must be available to pay all Operating Expenses.

The General Ordinance provides that as Project Revenues are collected and deposited from time to time into the Revenue Fund, if they are not used for Operating Expenses, they go next to pay debt service, and then on to the next bucket in the flow of funds.[4] That is what Bondholders (and the City) contracted for when they purchased the City's water and wastewater revenue bonds; and it is what the City has represented in its bond disclosure would happen. The City cannot change that without the prior consent of a majority of the Bondholders. To attempt to do so may create material risk for the City and the Water Fund of a ratings downgrade, increase in borrowing costs, and even litigation.

In view of the above, we disagree with the recommendation for the segregation and establishment of a dedicated fund of late payment fees.

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[4] Schedule FP-2 at 9.

28. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION TO INCREASE OPERATING EXPENSES BY $1,129,500 TO FUND LICAP FOR PGW/PECO LIURP CUSTOMERS?

28. No. As discussed in PWD Rebuttal Statement 3 Section IX. Water Conservation, this recommendation is already in place. Additional operating expenses do not need to be directed toward this effort.

Additional reasons for rejecting this proposal are stated in response to Question 27 above (based upon the requirements of the General Ordinance).

29. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION TO INCREASE OPERATING EXPENSES BY $600,000 TO FUND LICAP FOR TAP CUSTOMERS?

29. No. As discussed in PWD Rebuttal Statement 3 Section IX. Water Conservation, this approach is already in place. Additional operating expenses do not need to be directed toward this effort.

Additional reasons for rejecting this proposal are stated in response to Question 27 above (based upon the requirements of the General Ordinance).

30. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION THAT THEY SPEND AN <u>ADDITIONAL</u> $2,156,250 IN EACH YEAR OF THE RATE

PERIOD TO IMPLEMENT A PILOT INTERIOR PLUMBING REPAIR PROGRAM?

30. No. As stated in PWD Rebuttal Statement 3 Section X. Interior Plumbing Repair Program, a pilot interior plumbing program, as recommended by Mr. Colton, would be duplicative of existing efforts of other City and non-profit agencies. Therefore, we recommend the Rate Board not approve this recommendation.

Additional reasons for rejecting this proposal are stated in response to Question 27 above (based upon the requirements of the General Ordinance).

31. DO YOU AGREE WITH THE EXETER PANEL'S RECOMMENDATION THAT THE DEPARTMENT SPEND AN <u>ADDITIONAL</u> $3,000,000 IN EACH YEAR OF THE RATE PERIOD TO MATCH EMERGENCY HARDSHIP GRANTS PROVIDED THROUGH THE UTILITY EMERGENCY SERVICES FUND (UESF)?

31. No. PWD already provides funding to UESF together with other local utilities (PECO and PGW). Any increased funding should be the upshot of discussions with UESF and the other participating utilities and reflect a shared responsibility for emergency services. As stated in PWD Rebuttal Statement 3 at XI. Expanded Support for UESF, this recommendation must be explored with PWD's sister utilities. Therefore, this adjustment should be rejected by the Rate Board at this time.

Additional reasons for rejecting this proposal are stated in response to Question 27 above (based upon the requirements of the General Ordinance).

XI. STORMWATER

31. DOES THE EXETER PANEL MAKE ANY POLICY RECOMMENDATIONS REGARDING STORMWATER?

31. Yes. The Exeter Panel argues for a shift in the cost responsibility for stormwater from PWD to the City. (PA St. 1 at 6-9). They specifically recommend that the Rate Board explicitly recognize that continuing to fund the City's stormwater remediation program through customer rates and charges represents a significant threat to the long-term affordability of life-essential water service for Philadelphians. (PA St. 1 at 10). The Exeter Panel further recommends that the Rate Board direct PWD to provide quarterly reports detailing its efforts to work with the City Administration, City Council, and other stakeholders to implement a funding approach to stormwater remediation that relies upon non-ratepayer revenues, including tax and other City revenues, as well as state and federal infrastructure funding. (PA St. 1 at 10).

32. PLEASE RESPOND TO THE ABOVE POLICY RECOMMENDATIONS.

32. PWD disagrees with the policy recommendations of the Exeter Panel concerning stormwater cost recovery. The Exeter recommendations ignore the fact that PWD's stormwater costs are already recovered via a parcel area-based fee, consisting of a gross area (GA) and impervious area (IA) components. This basis of cost recovery was established after an extended evaluation process (over several years) involving affected stakeholders.

Section 6.1.1 Stormwater Services Background of Schedule BV-2, provides a brief overview of the long history behind PWD's current stormwater charges, an excerpt of which is provided below:

"<u>The Water Department has been responsible for providing stormwater services to the City of Philadelphia since its creation</u>. Historically, stormwater costs were recovered from customers through the Water Department's rates and charges. The Water Department <u>fully transitioned</u> the Stormwater Management Service Charge ("SWMS Charge") to a parcel area-based SWMS Charge, as of July 1, 2013. Prior to the transition to the parcel area-based SWMS Charge, stormwater costs were recovered from customers via a meter-based stormwater charge with the customers sanitary service fees. Under this approach, equivalent meter sizes were used as a proxy for the demand a customer places on stormwater services. While customers were charged on the same basis, water meter size (or water use) does not directly correlate to the generation of stormwater, or the demand placed on the Water Department's system and/or services. In addition, the use of equivalent meter as the basis for the stormwater charged did not capture properties without water meters, such as parking lots, which generate stormwater runoff and may place a demand on the system and/or services.

Based upon prior rate proceedings as well as discussions with City stakeholders, the Water Department undertook a process in the 1990s to develop and implement a more acceptable and technically appropriate methodology for stormwater cost recovery. <u>The underlying change in cost recovery recognizes that stormwater costs of service are not related to sanitary service requirements, which are generally related to customers' water use, and that a more appropriate basis would be a measure of (or surrogate for) the generation of stormwater runoff. As a result of this process, the Water Department chose a methodology that considered (1) the overall area of customer properties (i.e.,</u>

gross area), and (2) stormwater runoff potential, including the impervious area of the property was identified as a more appropriate basis for recovery of stormwater costs. These two elements are recognized in the two primary components which make up the SWMS Charge, namely the GA and IA charges. The parcel area-based fee is far more equitable, compared to an equivalent meter basis, as it better recognizes the generation of stormwater runoff from both pervious and impervious surfaces, associated demands placed on systems or services, and includes customers without a water meter, who previously did not contribute to cost recovery.

While this change in cost recovery approach was initially identified in the 1990s, billing data development and billing system updates to enable the use of a parcel area-based fee took several years. The Water Department began to transition customers to the current SWMS rate structure in July 2010. In the past, it was not unusual for stormwater costs to be recovered from customers via charges based upon water or sewer system attributes (such as water meter size). However, with improved data availability and technology, recovering stormwater costs via area-based fees has become far more widely used and publicly accepted nationwide. Further, WEF's User Fee Funded Stormwater Programs manual provides guidance on the development and implementation of such stormwater fees, and recognizes the methodology employed by the Water Department as one of the five named "Property Characteristics-Based Stormwater User Fee Methods,[5]" which provide an equitable and defensible basis for establishing a stormwater rate structure and estimating units of service by customer class."

Exeter's recommendations are an obvious departure from cost-of-service principles.

[5] See Section 5.4 of WEF's "User-Fee-Funded Stormwater Programs" Manual.

Shifting responsibility for the revenue requirements to the City assumes that the General Fund can absorb portions of the stormwater cost recovery (for areas such as streets/sidewalks) without adversely impacting other General Fund services. Further, the basis for recovering those costs from the General Fund would primarily impact the same population (or a portion thereof) the Water Department serves via increased property tax, or other taxation means, which may impact the business and residents of the City in other ways.

The Exeter Panel appears to confuse the billing mechanism with the basis of billing. While PWD's stormwater charges appear on customer's utilities bills, these fees are based upon the previously mentioned parcel-area based methodology employed by the Water Department. In PWD's case, the basis and rate methodology underlying PWD's stormwater charges is appropriate and in alignment with broader industry standards. We acknowledge that other jurisdictions have varied approaches to stormwater cost recovery and use a variety of billing mechanism to collect those fees (or assessments). The Exeter Panel cites the City of Durham, North Carolina and Arlington County, VA in their testimony. We would add that in the case of the City of Durham, North Carolina, Stormwater Utility Fees are included on customers' water/sewer utility bills[6]. Arlington County, VA's current Sanitary District Tax is based on assessed property value[7], which is not based upon cost causation principles. The Sanitary District Tax is collected via the City's Property Tax Assessment system. The County is currently exploring the creation of a stormwater fee, which would employ a similar rate methodology to PWD's but

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[6] See Stormwater Utility Fee Frequently Asked Questions, Question 8. How long is my billing cycle? https://www.durhamnc.gov/Faq.aspx?QID=799

[7] See Tax Rates: https://www.arlingtonva.us/Government/Programs/Budget-Finance: *"The CY 2022 rate is $1.03 (number includes $0.017 Sanitary District Tax) per $100 of assessed value."*

would only recognize impervious area as the basis of the charge under the current proposal.

The point of the foregoing is that communities use a variety of means by which to assess stormwater customers their respective fees, such as including charges on local utility bills, as line items on property tax bills, and as separate standalone stormwater bills. For any stormwater fee, the revenue requirements are primarily based upon the agency delivering the services and responsible for maintaining the associated assets, and the scope/extent of those services.

Please note with respect to Atlanta's Municipal Option Sales Tax ("MOST") – cited by Exeter – that these revenues do not cover the full cost of stormwater-related services and improvements, and are directed to Atlanta's Department of Watershed Management, which receives revenues from several sources including water and sewer charges.

Based on the foregoing, PWD disagrees with the Exeter Panel recommendation for a change in stormwater cost recovery. However, if 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.

If the Exeter Panel is recommending a broader policy change than seeking additional support for stormwater cost recovery, then a more comprehensive discussion is required involving the City Administration and City Council. This Rate Proceeding is not the appropriate forum for this broader discussion and decision-making regarding this policy recommendation.

33. CAN YOU PROVIDE FURTHER FEEDBACK ON THE VARIOUS STATEMENTS, SUGGESTIONS, AND APPROACHES CITED BY THE EXETER PANEL AS JUSTIFICATION FOR THEIR RECOMMENDATIONS?

33. The Exeter Panel's arguments appear to be based on the premise (and in a number of instances seem to imply) that stormwater costs are recovered via water charges or from water customers. As detailed in the previous response, stormwater charges are determined via the detailed allocation process, which separates sanitary sewer and stormwater costs from the system's overall wastewater costs as described in Sections 6 through 8 of Schedule BV-2.

The Exeter Panel includes the following statement made in PA Statement 1 at 8 Lines 7 to 11:

> *"Currently, impervious areas such as streets and sidewalks contribute to stormwater runoff that is handled by PWD's wastewater system, and the costs to treat that water are being recovered fully from PWD customers. In short, it is the City's responsibility to bear the cost to control and treat stormwater that is discharged into the waterways from within the confines of the City."*

The recovery of costs related to streets and sidewalks was addressed via the previous Citizens Advisory Committee (CAC) processes and affirmed during prior rate proceedings.

With respect to Stormwater Utility Industry practices, the approach of exempting streets/sidewalks from stormwater charges is commonly used by many stormwater utilities nationwide. The 2021 Black & Veatch stormwater survey indicates that the majority of the utilities surveyed exempt streets and public right-of-ways from stormwater charges. The Exeter Panel cite the City of Durham, NC and Arlington County, VA in their testimony. Durham's stormwater utility fee is not assessed to streets/public rights-of-way. For Arlington County, VA, streets and sidewalks are not currently assessed via the existing sanitary district tax nor are they proposed to be assessed a fee under the proposed stormwater utility fee.

If the revenue requirements associated with streets/sidewalks are to be recovered from the City, this would most likely come as a transfer from the General Fund. This approach would shift the cost recovery from "user fees" to "taxes." The majority of the City's revenues come from property taxes. Funding these costs via property taxes would shift the cost recovery basis from parcel-based characteristics, which are generally aligned and related to the contribution/generation of stormwater runoff to assessed value. Assessed value is unrelated to runoff generation potential and further shifts costs to non-exempt properties. In contrast, PWD's fees are charges to parcels within the City (as defined in PWD rates and charges). The potential outcome from Exeter's suggested approach moves away from the cost causation principle employed in establishing the stormwater services charges and breaks from the rationale nexus that exists between stormwater services and the recovery of the associated costs via a parcel area-based fee.

The Water Department has been constructing stormwater management practices within the public right-of-way throughout the City. Further, roads and public sidewalks are an integral part of the City's collection system. Therefore, it is appropriate to recover the costs associated with Streets/Sidewalks from all the stormwater ratepayers.

The following statement is made in PA Statement 1 at 9 Lines 21 to 24, regarding the City of Durham, North Carolina's Stormwater Utility Fee:

> *"It is not a rate or charge connected to the delivery of drinking water or treatment of household wastewater."*

The same can be said for Philadelphia's stormwater charges, as the cost recovered via the parcel area-based stormwater fees are related to the use of the stormwater systems (combined and separate) and stormwater's proportionate share of wastewater treatment. The use/impact on these systems is related to the contribution of runoff from properties. The impervious area and gross area serve as a surrogate for estimating the potential contribution of stormwater runoff from any parcel within the City. Except for PWD's facilities, all parcels are subject to the stormwater management service charges, as defined under PWD's rates and charges.

Revenue sources are of important note in the case of PWD. Under the Water Department's current COA, the City can petition PADEP for a time extension, if the wastewater component of the customer's bill *"were to exceed 2.27% of median household income or in the case of a force majeure event.*[8]*"* Should the City employ a different approach or means to generate stormwater-related revenues, it's unclear if this affordability threshold would still be applied. It may impact the Water Department's

[8] See PWD Exhibit 5 – Official Statement Series page 33.

(and, therefore, the City's) ability to renegotiate aspects of the COA in the future.

As indicated in the prior response, this Rate Proceeding is not the appropriate venue for funding decisions involving the City as a whole. As described above, the Exeter Panel's attempt to make a cost-of-service-based argument related to stormwater costs has already been the topic of extensive stakeholder engagement and previous rate proceedings and has largely been addressed. These arguments should be ignored and disallowed by the Rate Board.

XII. CONCLUSION

33. DOES THIS CONCLUDE THIS REBUTTAL TESTIMONY?

33. Yes, it does.