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 2022 - 2023

Rebuttal Testimony

of

Melissa La Buda, Valarie J. Allen, Katherine Clupper, Peter Nissen, Stephen J. Furtek, Susan M. Crosby, and Black & Veatch Management Consulting, LLC

on behalf of

the Philadelphia Water Department

Topics Addressed:

Need for Rate Relief

Financial Requirements

Adjustments to Projected Revenues

Adjustments to Operating Expenses

Adjustment to SMIP/GARP

Amortization Adjustments

CIP Adjustments

Debt Interest Rate

Availability of Federal Stimulus Relief

Known Changes to PWD's Financial Projections

Dated: April 7, 2021

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q1. PLEASE STATE YOUR NAMES AND POSITIONS.

A1. My name is **Melissa La Buda**. My position with the Philadelphia Water Department, also referred to in this rebuttal testimony as "PWD" or the "Department," is Deputy Commissioner of Finance.

Testifying with me are **Valarie J. Allen** of the law firm Ballard Sphar who is the City's Bond Counsel; **Katherine Clupper**, who is the Managing 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 Department's General Manager of the Engineering and Construction Division; and **Susan M. Crosby** who is the Deputy Revenue Commissioner in charge of the WRB.

Q2. HAVE ANY WITNESSES ON THIS PANEL PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?

A2. Yes. I provided testimony in PWD Statement 2. **Valarie J. Allen** prepared Schedule ML-3. **Katherine Clupper** and **Peter Nissen**, prepared Schedule ML-6. **Black & Veatch** provided testimony in PWD Statements No. 7A and 7B. **Stephen J. Furtek** provided testimony in PWD Statement 3. **Susan M. Crosby** provided testimony in PWD Statement 5.

Q3. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A3. In this rebuttal, we provide the Department's response to the adjustments, recommendations and criticisms that Mr. Lafayette Morgan has expressed in his direct testimony (PA Statement 1) on behalf of the Public Advocate.

We specifically address the following areas of Mr. Morgan's testimony:

- Need for Rate Relief
- Financial Requirements
- Adjustments to Projected Revenues
- Adjustments to Operating Expenses
- Adjustment to SMIP/GARP
- Amortization Adjustments
- CIP Adjustments
- Debt Interest Rate
- Availability of Federal Stimulus Relief
- Known Changes to PWD's Financial Projections

Q4. PLEASE IDENTIFY THE SCHEDULES THAT ACCOMPANY THIS REBUTTAL TESTIMONY.

A4. The following schedules accompany our rebuttal testimony.

Schedule ML-10: Memorandum from the City's Director of Finance

Schedule ML-11: Memorandum from the City's Office of Sustainability

II. PWD'S NEED FOR RATE RELIEF

Q5. DOES MR. MORGAN CONCLUDE THAT THE DEPARTMENT DOES NOT NEED RATE RELIEF?

A5. Yes. Broadly speaking, Mr. Morgan concludes that the Department does not need rate relief based either on his adjustments to revenues and revenue requirements or on the availability of federal stimulus relief (or both).[1]

Q6. DOES THE WITNESS PANEL AGREE WITH MR. MORGAN'S CONCLUSION?

A6. No. Mr. Morgan is wrong. The Department responds to Mr. Morgan's recommendations and adjustments in Sections II through IX of this rebuttal testimony. The Department also updates the record regarding the availability of federal stimulus relief in Section X of this rebuttal testimony.

Q7. DOES THE WITNESS PANEL BELIEVE THAT MR. MORGAN'S PROPOSALS, IF ACCEPTED, WOULD BE GOOD FOR PWD OR ITS CUSTOMERS?

A7. No. Mr. Morgan's proposals will leave the Department underfunded, potentially compromising both the level of service provided to customers and the Department's financial standing. In Sections III-VIII of this testimony, we criticize Mr. Morgan's approach for several reasons, including his adjustments related to projected revenues, expenses, SMIP/GARP, the CIP as well as other issues. Most prominently, however, Mr. Morgan's use of overly optimistic adjustments to historical data in projecting revenues

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[1] Mr. Morgan concludes that, as a result of his adjustments, a rate increase is unnecessary, and that the Department can manage its coverage requirements by utilizing Rate Stabilization Fund transfers. PA Statement 1 at 6. He also indicates that the Department is likely to receive a significant amount of federal stimulus funding and that there should be accounting and reporting of such funding to reduce the rate impact on customers during the rate period. PA Statement 1 at 5.

for the rate period (FY 2022 and FY 2023) leads to his erroneous finding that rate relief is unneeded. Simply put, he assumes that the Department will be operating under "normal" circumstances. However, given the pandemic, this is clearly not the case. And while regulated utilities can address revenue shortfalls or unexpected conditions via revenue decoupling mechanisms, riders, or other similar frameworks, the Department does not have this ability. PWD's financial plan and rates must reflect the economic circumstances presented, i.e., the impact of the COVID pandemic and the associated economic downturn.

Q8. DOES THE WITNESS PANEL HAVE ANY OVERALL RESPONSE TO MR. MORGAN'S CONCLUSIONS AND RECOMMENDATIONS ON THE NEED FOR RATE RELIEF?

A8. We do not agree with Mr. Morgan's conclusions and recommendations on the need for rate relief. For the reasons presented throughout this rebuttal testimony, we believe the basis for Mr. Morgan's conclusions and recommendations, which are founded on the overly optimistic projection of water sales volumes and resulting revenues, are not consistent with the Department's recent historical experience and ignore the challenges the Department has confronted during the pandemic.

First, the Department provides essential services to its customers and as such, must have sufficient resources to operate and meet its mandate. In determining the level of resources needed, the Department is required to base its rate filing on reasonable projections. As required in it's regulations, prior to proposing revisions to the rate and charges, the Department developed a comprehensive plan ("Financial Stability Plan") which forecasts capital and operating costs and expenses and corresponding revenue requirements. In fixing rates and charges, the *"Board shall recognize the importance of financial stability to customers and fully consider the Water Department's Financial Stability Plan."* The Financial Stability Plan reflects that the Department must have sufficient resources to operate the system and provide for its customer's service requirements and meet the legal financial requirements of the General Bond Ordinance. The Department developed the Financial Stability Plan to reflect reasonable projections based on the available information, experience regarding the challenges the Department is facing during the pandemic, and its staff's thorough understanding of the Department's revenues, revenue requirements and service needs.

Second, Mr. Morgan's testimony ignores the fact that the Department is in a financial deficit. As highlighted in PWD Statement 2, the Department has taken several actions to navigate the pandemic and hopes to resume more normal operations and continue with necessary improvements in FY 2022. As further noted in the above testimony, revenues were insufficient in FY 2020 to meet all operating expenses, requiring a withdrawal from Rate Stabilization Fund of $33 million. An additional withdrawal is anticipated in FY 2021. The intent of the proposed revenue adjustments, as proposed, is to meet the operating and financial requirements without continually drawing down reserves.

The Department's current financial position due to the ongoing pandemic and the associated economic downturn is not the only reason why rate relief is required. The Department did request additional revenues for FY 2020, which reflected the need for additional revenues prior to the pandemic, but withdrew the rate request due to the pandemic. Operational activities delayed due to the pandemic need to be addressed before they require more costly solutions. Critical capital improvements must proceed to address pressing level of service needs and repair infrastructure. Regardless of the economic conditions and the pandemic, the Department must still meet ongoing regulatory mandates, as well as City ordinances and court decisions. Taken as a whole, for all these reasons, we believe that Mr. Morgan's claim that no rate relief is needed should be rejected because:

1. The revenue projections do not reflect reality,
2. It will force the Department to make further operational cuts that will reduce customer service levels,
3. It will further delay necessary capital improvements that will result in higher incurred costs, and
4. It jeopardizes the Department's financial condition.

The rest of this rebuttal testimony presents further evidence supporting the Deparment's position regarding the errors behind Mr. Morgan's proposals.

III. FINANCIAL REQUIREMENTS

Q9. DOES MR. MORGAN CONTEST ANY OF THE FINANCIAL REQUIREMENTS AND GOALS SET FORTH IN THE DEPARTMENT'S FINANCIAL PLAN?

A9. No. In fact, Mr. Morgan states that he accepts the Department's goals for senior debt service coverage, the Rate Stabilization Fund, and the Residual Fund. PA Statement 1 (Morgan) at 33-35.

However, while not contesting the above goals, as discussed below, his overly optimistic revenue assumptions (dismissing the impact of the pandemic) camouflage his apparent intent to defer rate increases until the future (FY 2024 and beyond). This could leave the

Department with insufficient revenues in FY 2022 and FY 2023 — placing service reliability at risk and calling into question whether the Department's financial goals can be met in future years.

Q10. MR. MORGAN CONCLUDES THAT THE DEPARTMENT IS NOT CLOSE TO VIOLATING THE FINANCIAL REQUIREMENTS BEFORE THE END OF FY 2023. DOES THE PANEL AGREE?

A10. No. As discussed previously and demonstrated throughout this rebuttal testimony, Mr. Morgan's conclusions are founded on unrealistic projections of revenues and understated revenue requirements.

As stated in PWD Statement 7A, without the Department's proposed increased revenues, the Department will fail to meet the 90% test in FY 2023, which would result in a technical default.

Based on the reasonable projections of revenues under existing rates and revenue requirements reflected in the Department's Financial Stability Plan, if the Board were to approve the percentage revenue adjustments reflected in Mr. Morgan's schedule LKM-1, -1.64% in FY 2022 and 2.08% in FY 2023, the Department will fail to meet the 90% in FY 2022, which would result in a technical default. In addition, the Department would not have revenues and sufficient available reserves to meet any of the General Bond Ordinance debt service coverage requirements in FY 2023.

IV. MR. MORGAN'S ADJUSTMENTS TO PROJECTED REVENUES

Q11. DID MR. MORGAN PROPOSE ANY ADJUSTMENTS TO PROJECTED REVENUES FOR THE RATE PERIOD?

A11. Yes. Mr. Morgan's proposes five adjustments to projected revenues, which would theoretically add $42.834 million in revenues to FY 2022 and an additional $35.005 million in revenues to FY 2023. PA Statement 1 (Morgan), at Schedule LKM-6.

Q12. DOES THE DEPARTMENT AGREE WITH MR. MORGAN'S PROPOSED ADJUSTMENTS TO PROJECTED REVENUES FOR THE RATE PERIOD?

A12. No. As alluded to above, Mr. Morgan's proposed adjustments to revenues are unrealistic — running counter to empirical evidence that revenues are falling and the obvious impact of the pandemic on non-residential customer demand (with many businesses shuttered, bankrupt or out of existence). His testimony is also inconsistent with the position of PA witness Roger Colton. Mr. Colton presents information regarding the adverse, long-term effects of the pandemic. (*See* PA Statement 3 (Colton) at 22).

A. Number of Accounts

Q13. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO THE NUMBER OF ACCOUNTS (GROWTH RATE) THAT WOULD THEORETICALLY ADD REVENUES OF $3.225 MILLION TO FY 2022 AND $4.956 MILLION TO FY 2023. PA STATEMENT 1 (MORGAN) AT 14-17 AND SCHEDULE LKM-6.

A13. Mr. Morgan applies a 0.35% growth rate to the number of accounts based upon his calculated 3-year compound annual growth rate (CAGR) for the period FY 2018 to FY

2020. This adjustment is applied for each year of the rate period. See, Schedule LKM-6. Mr. Morgan's states his CAGR calculation is based on the historic total number of accounts but we were unable to replicate his analysis. Further, he blanketly applies his account growth to all customers including fire hydrants (public fire) and unmetered private fire service.

The table below shows the Total Water Accounts including and excluding Unmetered Fire Service. See, Exhibit 6, Water Accounts – Customer 1 on page 108 and set forth in the table below.

	FY 2018	**FY 2019**	**FY 2020**
Total Water Accounts (excluding Unmetered Fire Service)	526,002	523,528	521,236
Total Water Accounts (including Unmetered Fire Service)	533,812	532,701	531,201

It is clear from the table, however, that the total number of water accounts has *decreased* (not increased) during the period FY 2018-2020. The calculated CAGR associated with the accounts over this three-year period is -0.5% based on Total Accounts excluding Unmetered Fire Service or -0.2% based on Total Accounts including Unmetered Fire Service. Applying either factor, in the context of account growth means that PWD revenues would be lower than what Mr. Morgan suggests. Based on the foregoing, Mr. Morgan's proposal to increase the number of accounts by 0.35% is clearly in-error and should be rejected.

B. Base Consumption

Q14. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO THE BASE CONSUMPTION (VOLUME PER ACCOUNT) THAT WOULD THEORETICALLY ADD REVENUES OF $7.105 MILLION IN FY 2022 AND $7.249 MILLION IN FY 2023. PA STATEMENT 1 (MORGAN) AT 14-17 ANS SCHEDULE LKM-6.

A14. Mr. Morgan projects base consumption (volume per account) using a three-year average (as opposed to the two-year average used by PWD). Under his proposal, historical billed water usage for fiscal years 2018, 2019 and 2020 is used. Please note this usage data is unadjusted. This is problematic, as unadjusted historical data does not accurately reflect the impact of the pandemic (an anomalous event beginning in March 2020).

It is empirically obvious that sales volumes for FY 2020 were impacted by the pandemic and continue to impact FY 2021. The business lockdowns and social distancing efforts to slow the spread of COVID-19 started in mid-March 2020. Businesses were actually shuttered, and office buildings left vacant at or about this time. The point of the foregoing is that the impact of the pandemic must be appropriately recognized in revenue projections for the rate period. Stated differently, any analysis of COVID impacts must sort out customer demands before and after the onset of the pandemic.

Since the FY 2021 escalation factors used to project demand per account were established by comparing the billed volumes prior to the onset of the pandemic (March 2020) and thereafter, it is appropriate to exclude the partially impacted FY 2020 billed sales volumes. Mr. Morgan does not make this adjustment in his analysis. As a result, when Black & Veatch replicated Mr. Morgan's proposed approach as described in his testimony, we found that revising the basis of projection to reflect the three-year average based on FY 2018 to FY 2020 reduced projected billed volume and the resulting projected revenues. Considering that billed water volumes in FY 2020 were partially impacted by the pandemic, Black & Veatch's proposed two-year average would be more appropriate for cost of service rate-making since using Mr. Morgan's proposed approach as described in his testimony, (i.e., using a three-year average including the FY 2020 demands[2]) coupled with the application of COVID related volume escalation factors would double-count the impact of the pandemic. For this reason, we recommend that the Rate Board disregard Mr. Morgan's proposed adjustment.

Finally, we note that there is an inconsistency between Mr. Morgan's schedules and his testimony. Specifically, based on the information provided by Mr. Morgan in response to our interrogatory request, we found that the analysis reflected in the schedules included with the testimony use base volumes that reflect a three-year average based on FY 2017 to FY 2019 data. This is not consistent with Mr. Morgan's testimony, which purports including the use of FY 2020 data.

C. Volume Escalation Factors

Q15. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO SALES VOLUME PER ACCOUNT (VOLUME ESCALATOR) THAT WOULD THEORETICALLY ADD REVENUES OF $5.593 MILLION IN FY 2022 AND

[2] *See* PA Statement 1 (Morgan) at 16, lines 9 to 10: "the FY 2020 volumes should have been used in the development of the sales volume per account."

\$9.448 MILLION IN FY 2023. SEE PA STATEMENT 1 (MORGAN) AT 14-17 AND SCHEDULE LKM-6.

A15. Mr. Morgan proposes the following two adjustments to the volume escalation factors used for the projection of the FY 2021 sales volume per account:

COVID-related adjustments. Mr. Morgan proposes to revise the FY 2021 volume escalation factors strictly on the basis that he could not recalculate the escalation factors proposed by Black & Veatch based on the data provided in PA-ADV-4. As explained in the response to PA-ADV-5, the volume escalation factors in the Cost of Service Analysis, as presented in Table 1 of Schedule BV-6:WP-1, were adjusted so that the resulting projected overall usage by customer type for FY 2021 (which uses FY 2018-2019 average usage per account as the projection basis) would approximate the estimated FY 2021 usage included in the response attachment to PA-ADV-4.

During the development of the Cost of Service Analysis, Black & Veatch did consider the approach proposed by Mr. Morgan, which simply applies the mathematical result of the ratio of the water sales volumes during COVID and water sales prior to the onset of the pandemic (March 2020), but found that for some customer types the resulting volume was not consistent with the average water sales volumes PWD experienced during COVID. Therefore, Black & Veatch adjusted the volume escalation factors so that the resulting FY 2021 volumes by customer type were consistent with the average water sales during COVID based on the data presented in PA-ADV-4. We recommend that the Board disregard the volume escalation factors proposed by Mr. Morgan and accept the volume escalation factors reflected in Black & Veatch's Cost of Service Analysis which reflect the average water sales volumes PWD has experienced during the pandemic.

Projected Residential Declining Consumption. Mr. Morgan proposes to remove the 2% decrease in consumption for the 5/8” residential customers in FY 2023, as reflected in the Cost of Service Analysis. Mr. Morgan states that the assumption of declining residential consumption is unreasonable because it ignores the growth history for other customer groups. Mr. Morgan’s position is incorrect. As demonstrated in the historical billing data for 5/8” general service customers and recognized in the Rate Board’s determinations for the 2016 and 2018 rate proceedings, PWD has been experiencing a long-term trend of reduced consumption from these customers. As presented in the response to PA-ADV-4, the COVID pandemic has had a significant impact on general service customers. The following table summarizes the impact the COVID pandemic has had on the water sales volumes for general service customer types:

Customer Type	**Water Sales Volume Impact**
Residential	6.0%
Commercial	(7.4%)
Industrial	(17.0%)
Public Utilities	(9.8%)

As presented in the above table, residential customers have experienced an increase in demands due to the changes in customer usage patterns during the pandemic. The other general service customer types have experienced a decrease in demand during the same period.

It is reasonable to attribute the consumption increase seen in residential accounts during COVID as due to stay-at-home orders. As such, it is reasonable to anticipate that, as stay at home orders are lifted, the residential customers future water sales volumes will continue to reflect the long-term trend of annual reduction in water sales volumes due to ongoing customer conservation efforts, such as updating to lower water use appliances and fixtures.

Mr. Morgan's proposed revision to exclude the long-term reduction to 5/8" residential customer water sales volumes overstates the Department's water sales during the rate period and the resulting revenue projections. We request that the Rate Board deny the proposed revision and accept the more reasonable assumption reflected in the Cost of Service Analysis.

Q16. HOW DOES THE PROJECTION OF BILLED WATER VOLUMES BASED ON MR. MORGAN'S PROVIDED ANALYSIS COMPARE TO THE DEPARTMENT'S ACTUAL EXPERIENCE?

A16. The following table presents the Department's historical billed water volumes and the projection of billed water volumes based on Mr. Morgan's provided analysis.

Fiscal Year	**Billed Water Volume (Mcf)**	**Annual Change**
Historical Data		
2016	6,139,002	
2017	6,094,673	-0.7%
2018	5,956,039	-2.3%
2019	5,904,975	-0.9%
2020	5,833,763	-1.2%
Projected – LKM Provided Analysis		
2021	5,992,661	2.7%
2022	6,013,635	0.4%

2023	6,034,683	0.4%

As presented in the table above, the Department's historical billed volume has reflected an annual decrease in each year during the past five years. However, the projected billed water volume based on Mr. Morgan's provided analysis reflects an increase in the billed water volume each year with the most significant increase reflected during the pandemic in FY 2021. This comparison illustrates how the projected water sales volumes and resulting revenue projection reflected in Mr. Morgan's schedules are not consistent with the Department's historical experience, especially considering the pandemic's impact.

D. Collection Rate

Q17. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO THE COLLECTION RATE (COLLECTION FACTOR) THAT WOULD THEORETICALLY ADD REVENUES OF $29.903 MILLION IN FY 2022 AND $13.344 MILLION IN FY 2023. PA STATEMENT 1 (MORGAN) AT 14-17 AND SCHEDULE LKM-6.

A17. Mr. Morgan proposes to remove the PWD adjustments to historical average collection factors that reflect COVID impacts. Instead, he proposes to establish projected revenues under existing rates based on unadjusted historical average collection rates. This is clearly wrong. His approach ignores the impact that the COVID pandemic has had on the collections associated with the Department's billings. It also runs counter to his apparent recognition that the Department's actual collections experience in April to June 2020 was negatively impacted by the COVID pandemic. Nonetheless, Mr. Morgan refuses to make any adjustment to historical average collection factors.

It bears emphasis that the use of unadjusted collection factors, in the manner suggested by Mr. Morgan, clearly overstates the Department's revenues because the collection levels after the onset of the pandemic (March 2020) do not support the same level of collections realized historically. This is a flaw in his recommendation.

In contrast, Black & Veatch's analysis of COVID impacts indicates that PWD historical collection factors should be adjusted by 8%, 6%, and 4% in FY 2021, 2022 and 2023, respectively. Specifically, the Department's current year collections were more than 10% less than historical average in May and June (2020). The average reduction to the current year collections during the months of April to June (2020) averaged 8.4% less than the Department's historical average collections over the same period during the prior year. The assumptions reflected in the Cost of Service Analysis take into account these basic facts that reflect available data. Moreover, given the recent extension of the moratorium on shut-offs through April 2022, it is reasonable to assume that collections will continue to be less than the Department's historical average experience over the rate period.

As part of his argument, Mr. Morgan states that "before the Board authorizes rates that reflect the 8%, 4% and 2% used by the Department to reduce collections, the availability of the relief funds should first be reflected as an offset to any reduced collections in order to determine the actual revenue collection loss." This position does not reflect the reality of how stimulus relief funds will reach the Department or eligible customers. As will be addressed in more detail later in this rebuttal, the Department will not receive any direct stimulus monies from the ARAP. Further, the amount of money allotted to low-income customers is limited and reflects only a portion of the Department's delinquent accounts.

Finally, Mr. Morgan's collection rate recommendation completely ignores COVID-19 and is inconsistent with the testimony of Public Advocate witness, Roger Colton, who describes the pandemic and associated economic impacts as significant and relevant to this rate proceeding. Mr. Colton states that "Simply because the data above was generated in the 'early' months of the pandemic does not mean that the information (and lessons to be learned from the information) is now outdated." In addition, regarding the economic impact of the COVID pandemic, Mr. Colton makes the following statement:

> *"The COVID-19 pandemic imposes two distinctly different crises to the customers of PWD. On the one hand, there is the public health crisis. On the other hand, however, there is the associated economic crisis. The economic impacts of the COVID-19 pandemic may persist for years to come and any PWD response to this economic crisis should take this long-term nature into account.*
>
> *It should be recognized that the economic crisis which is associated with the COVID-19 pandemic will not be resolved when there is a publicly available vaccine. The economic impacts will result in a long-term economic disruption for customers of PWD."*

PA Statement 3 (Colton) at 22. Taken together (recognizing that collection rates should reasonably reflect COVID impacts and the inconsistency between the Public Advocate's statements), we request that the Rate Board reject Mr. Morgan's collection rate recommendation and accept the assumptions reflected in the Cost of Service Analysis.

E. Sales to Aqua

Q18. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO SALES TO AQUA THAT WOULD THEORETICALLY ADD REVENUES OF

$8,000 IN FY 2022 AND $8,000 IN FY 2023. PA STATEMENT 1 (MORGAN) AT 14-17 AND SCHEDULE LKM-6.

A18. Mr. Morgan contests the use of 65,000 Mcf in projecting Aqua PA's water usage for the study period. He states that "65,000 Mcf is less than the average usage for this customer and I have not seen any justification for the use of the lower level of usage." Mr. Morgan is mistaken. Aqua PA's water usage for the FY 2022 and 2023 was based on a 3-year average of historical usage (FY 2018 to FY 2020). The calculated average was merely rounded to the nearest thousand MCF. Aqua PA's historical usage was provided in PWD Exhibit 6 at page 135 and is presented in the table below.

	FY 2018	FY 2019	FY 2020	Average
Usage (MCF)	67,031	60,951	67,537	65,173

As shown in the table, Aqua PA's average 3-year usage is 65,173 MCF. Applying rounding, 65,000 MCF was utilized for projections purposes.

Black & Veatch's approach of using a 3-year historical average of Aqua PA's usage is reasonable for rate-making and consistent with Mr. Morgan's suggested application of 3-year averages found throughout his testimony. Mr. Morgan's suggestion to use the FY 2020 usage of 67,537 Mcf here is in contradiction with his generally stated position that use of a 3-year average is appropriate. PA Statement 1 (Morgan) at 26, Lines 2-3. Based on the foregoing, the Department requests that Mr. Morgan's adjustment be rejected.

V. MR. MORGAN'S ADJUSTMENTS TO PROJECTED OPERATING EXPENSES

Q19. MR. MORGAN EXPLAINS THAT THE METHODOLOGY USED BY THE DEPARTMENT CAUSES REVENUES TO BE UNDERSTATED AND EXPENSES TO BE OVERSTATED. PA STATEMENT 1 (MORGAN) AT 13. PLEASE RESPOND.

A19. PWD's projections do not consistently overstate revenues and understate expenses. As stated in PWD Statement 2, "The 2018 general rate case contained projections for FY 2019 and FY 2020. Projected revenue requirements from that rate proceeding are compared with actual results in Schedule ML-9. As described therein, PWD ended FY 2019 in-line with projections and ended FY 2020 with expenses higher than projections." Mr. Morgan's general observations do not conform to the reality of PWD's operations for the period reported above; and the Finance division's intent on keeping tight controls on budget process and expenditure levels going forward.

A. <u>Escalation Factors</u>

Q20. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO ESCALATION FACTORS THAT WOULD THEORETICALLY DECREASE OPERATING EXPENSES BY $2.094 MILLION IN FY 2022 AND BY $2.753 IN FY 2023. PA STATEMENT 1 (MORGAN) AT 19-25 AND SCHEDULE LKM-6.

A20. Mr. Morgan proposes to adjust escalation factors for Class 200 (Other Services), Class 300 (Materials & Supplies), Class 400 (Equipment) and Gas costs. We disagree with Mr. Morgan's proposal for the following reasons.

When developing escalation factors, Black & Veatch reviews the following:

- Planned or previously agreed upon cost increases as stipulated in PWD contracts or similar agreements;
- Guidance from other City department's such as the Office of Sustainability and the Managing Directors Office;
- Actual PWD experience with respect to their various cost centers; and
- Various cost indices as published by such entities as the Bureau of Labor and Statistics CPI and PPI data, Handy Whitman Construction Indices, etc.
    - The factors are evaluated in accordance with PWD's fiscal years (i.e., July to June).

We do not apply escalation factors with a broad brush. We consider each cost area, cost index and time frames on their own merits. We also weigh the Department's actual experience considering both short and long-term trends, prior to selecting a reasonable spend factor.

Each cost has unique factors to consider. For example, with Gas costs, escalation factors will be driven by both market conditions as well as approved customer rate increases. Equipment will be driven by manufacturing capacity as well as input materials costs. Service costs will be driven by other forces such as the cost of labor, healthcare costs, labor availability, etc.

Further, PWD has proposed a 2-year rate request. As prices fluctuated year to year, changes in costs over time should be considered and acknowledged as appropriate 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).

Mr. Morgan proposes that the Department ignore recent experience with respect to revenues, while insisting that cost escalation factors, based on more recent experience, should be utilized when projecting costs. Conversely, Mr. Morgan's colleague, Mr. Mierzwa cites that it does not make sense to reduce rates in the face of "rising costs."

For Class 200 Service Costs, Black & Veatch selected a 2-year escalation factor based upon CPI. It did so after considering the following:

- Class 200 services consist of professional, financial, environmental and maintenance related services, a broader escalation factor was evaluated that captures a range of costs. CPI provides an overall sense of anticipated costs increases for the Philadelphia Area. For CPI in the Philadelphia Region, the calculated average increases, based upon PWD's fiscal year (i.e., July to June), where as follows:
  - 1-Year – 1.53%
  - 2-Year – 1.59%
  - 3-Year – 1.44%
  - Given the close ranges between the 1-year and 2-year increases, Black & Veatch selected to use the 2-year inflation factor of 1.60% in FY 2023 and assumed 0% in FY 2022, as the rate request covers FY 2022 and FY 2023.

As our analysis was conducted in the Fall of 2021, we did not have access to the most current CPI data (i.e., February 2021) in the development of our analysis. In addition, we expect that inflation data over the last 12 months is not likely to hold over the next 2.5 years. Using a 2-year average increase, based the period of February 2019 to 2021, would result in an escalation factor of 1.8%, which is greater than the escalation factor currently proposed. Mr. Morgan's testimony states that he used a 1.0% escalation factor for services but fails to mention his analysis, provided in his response to discovery3, why he

[3] See PWD-PA Set 2 (Morgan) Question 3 Response.

only includes an escalation factor beginning in FY 2023.

For Class 400 equipment, we selected the average of the 2 and 3-year escalation factors based upon the PPI for Construction & Machinery Equipment after considering the following:

- Producer Costs offer a good measure of anticipated price increases. PPI for Construction Machinery & Equipment, the average increases based upon PWD's fiscal year (i.e. July to June), where as follows:
    - 1-Year - 2.4%
    - 2-Year – 3.35%
    - 3-Year – 2.24%
    - Given the variability in this expense, as well as PWD's recent experience, Black & Veatch evaluated the average of the 2 and 3-year increase, which resulted in the selection of the 2.8% escalation factor, which balances, the 2 and 3-year PPI increase.

For Class 300 Materials & Supplies:

- PPI for Materials for Construction, the average increases in PPI where as follows:
    - 1-Year - 0.72%
    - 2-Year – 2.87%
    - 3-Year – 2.40%
    - Given the variability in this expenses, Black & Veatch evaluated the average of the 2 and 3-year increase, consistent with the approach used for Equipment, where PPI was also cited. The average of the 2 and 3-year escalation factors was evaluated, resulting in the 2.63% escalation factor, which again balances the 2 and 3-year PPI increase.

The basis for Black & Veatch escalation factors are described our testimony and associated schedules, which were available for Mr. Morgan's review. In fact, the PPI index references are also provided. For Materials for Construction, we reference, Series ID WPUID612 as cited in Appendix F of PWD Statement 7A Schedule BV-6. Based upon the most recent (i.e., February 2021), the associated escalation factor would be derived as follows:

- February 2020 PPI – 252.8
- February 2021 PPI – 272.9
    - 12-month escalation = [(272.9/252.8)-1] X 100 = 8.0%

Mr. Morgan's suggestion is to use the same escalation factor of 1.3% based upon the PPI index for Construction Machinery and Equipment for both Class 300 Material and Supplies and Class 400 Equipment. This is not clearly stated in his testimony. In addition, Mr. Morgan does not mention the results for the PPI Index cited by Black & Veatch for Materials for Construction as referenced above, which indicates an increase over the most recent 12 months, that more than supports the proposed escalation factor for Materials and Supplies. Further, it suggests that it should be revised upwards to 8% if Mr. Morgan's approach is deemed acceptable. That said, we believe our original application of a 2.63% escalation factor for these costs is reasonable.

As our analysis was conducted in the Fall of 2021, we did not have access to the most current PPI data (i.e., February 2021) in the development of our analysis. In addition, we expect that inflation data over the last 12 months is not likely to hold over the next 2.5 years.

For Gas Costs: Mr. Morgan's exclusion of any escalation in Gas Costs in the Rate Period ignores the rate increase approved, in November 2020, by the Pennsylvania Public

Utility Commission for Philadelphia Gas Works (at Docket No.: R-2020-3017206). The approved increases are phased-in and go into effect for service rendered on or after January 1, 2021, for service rendered on or after July 1, 2021 and, for service rendered on or after January 1, 2022.[4] The escalation in Gas Costs provided by the City's Office of Sustainability was confirmed in April 2021, as shown in Schedule ML-11. It is, therefore, more reasonable (given that there are approved increased in the future[5]) than Mr. Morgan's elimination of any escalation factor.

B. Actual to Budget Factor

Q21. PLEASE RESPOND TO MR. MORGAN'S PROPOSED ADJUSTMENT TO ACTUAL TO BUDGET FACTORS THAT WOULD THEORETICALLY DECREASE OPERATING EXPENSES BY $612,000 MILLION IN FY 22 AND BY $676,000 IN FY 23. PA STATEMENT 1 (MORGAN) AT 19-25 AND SCHEDULE LKM-6.

A21. As addressed in PWD Statement 7A, Page 18 of 50, in the response to question 16, Black & Veatch explains that, "The Water Fund's FY 2021 budget (approved as of December 2020) is used as the beginning base budget for the projections of Operation and Maintenance (O&M) expenses for the Study Period. The base budget is then adjusted to reflect the actual to budget spending factors. These adjusted FY 2021 O&M expenditures serve as the basis for projecting O&M expenses for FY 2022 through FY 2026." Black & Veatch's proposed use of the 2-year actual to budget factor considers the most current operating conditions and most recent budget adjustments. These factors are reasonable in estimating future operating expenses.

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4 https://www.puc.pa.gov/press-release/2020/puc-approves-lower-rate-increase-than-requested-by-pgw

5 BV used electricity escalation factors of 0% and 0.5% in FY 22 and FY 23, respectively. The new figures (as of April 2021) suggest that the electricity escalation factors should be higher: 0.5% in FY 22 and 4.5% in FY 23.

Mr. Morgan states that he "applied the 3-year actual to budget factor to those costs that the Department did not use the two-year average to determine the actual to budget factor." As detailed in Pages 19 – 20 of PWD Statement No. 7A, and further explained and detailed in both the Cost of Service Report (refer to Schedule BV-5) as well as Table 5 as provided in Schedule BV-6: WP-1 Schedule BV-6: WP-1, "Philadelphia Water Department Financial Plan: Revenue and Revenue Requirement Assumptions," 2-year actual to budget factors were not used, for a handful of expense categories, under the following categories:

1. When the calculated 2-year actual to budget factor, yields a result greater than 100% (meaning spending exceeded budget), a 100% actual to budget factor was applied;
2. When the FY 2021 budget was reduced below the actual FY 2020 spending, a 100% actual to budget factor was applied;
3. When the FY 2021 budget was reduced to reflect more current spending levels, the historical actual expenses were compared against the reduced budget level to derive the associated spend factor;
4. When non-typical expenses were experienced, the associated fiscal year was not used in deriving the spend factor;
5. When 100% of the FY 2021 budget is anticipated to be expended; and
6. Where the City provided detailed expense projections that the Department will be responsible for. A 100% spend factor was applied to the provided expense projections.

Category	Department / Class / Description
1	• Planning & Environmental Services / 100 / Salaries & Wages • Public Affairs / 100 / Salaries & Wages
2	• Operations / 400 / Equipment • Planning & Environmental Services / 200 / Services • Public Affairs / 200 / Services
3	• Fleet Management / 300 / Materials and Supplies
4	• Finance / 800 / Transfers
5	• Rate Board / 100, 200 and 300 / Personnel, Services and Materials & Supplies
6	• City Finance / 100 / Pension, Pension Obligations and Benefits[6]

Mr. Morgan further claims that "The Department's reason for not applying the two-year average appears to be more subjective than data driven. In other words, no data was provided to justify the departure from the use of the two-year average." However, the as previously, explainations were provided. Further, the detailed data supporting the selection of the actual to budget factors was provided in PWD Exhibit 6.

Our application of a 2-year historical average is consistent with that used in the 2018 rate proceeding, and in fact, Mr. Morgan did not contest this approach in his testimony for that proceeding. Further, Mr. Morgan's proposed use of the 3-year actual to budget factors, does not reflect current operating conditions nor the overall reduced budget for the Department. In addition, he does not acknowledge the reasons stated for the

[6] We would note that the City recently informed the Department that their FY 2020 expenses for Pensions and Pension Obligations were undercharged and the Department will be charged $3.16 million in FY 2021 for these FY 2020 costs.

exceptions to the use of the 2-year actual to budget factor, which are based upon review of the Deparment's current budget, prior actual expenses, and identifiable exceptions. Application of 3-year actual to budget factor is likely to understate Department expenses.

Although in his testimony, Mr. Morgan proposes the use of a 3-year actual to budget factor for the calculation of the cost of service, he does not consistently apply the 3-year average actual to budget factors in his analysis. Mr. Morgan only revised the actual to budget factors for the Department cost centers from the 2-year average to the 3-year average. He does not revise the actual to budget factors for the Water Fund's budgted costs from other City departments. If Mr. Morgan's proposed approach was applied to the entire Water Fund budget, the projected O&M expenses would be higher than those reflected in the Cost of Service analysis.

VI. MR. MORGAN'S ADJUSTMENTS TO SMIP/GARP

Q22. DID MR. MORGAN PROPOSE ANY ADJUSTMENTS TO PROJECTED BUDGET FOR STORMWATER MANAGEMENT INCENTIVES PROGRAM (SMIP) AND GREENED ACRES RETROFIT PROGRAM (GARP)?

A22. Yes. Mr. Morgan's proposes to decrease the planned budget for SMIP/GARP by $10 million in FY 22 and by $10 million in FY 23. PA Statement 1 (Morgan), at 26-28 and Schedule LKM-6. In the alternative, Mr. Morgan proposes to decrease the planned budget for SMIP/GARP by $5 million for each FY in the Rate Period.

Q23. DOES THE DEPARTMENT AGREE WITH MR. MORGAN'S PROPOSED ADJUSTMENTS TO PLANNED BUDGETS FOR SMIP/GARP?

A23. No. Mr. Morgan's SMIP/GARP adjustment is short-sighted and unreasonable. SMIP/GARP expenditures are a part of the delivery mechanism to help PWD reach its 15-year milestone under the Consent Order and Agreement (COA).

Q24. PLEASE ELABORATE.

A24. SMIP/GARP is part of the City's approach to compliance with the requirements of COA. PWD Exhibit 7; see also PWD Statements 3 and 4. The COA requires PWD to address combined sewer overflows (CSO) over a 25-year term ending in 2036. The COA requires interim milestones at the end of the fifth, tenth, fifteenth and twentieth years. The 10-year milestone (in 2021) occurs before the start of the Rate Period.

Looking ahead to the 15th-year milestone (in 2026), the Department continues to review program cost and delivery to optimize the program while satisfying the necessary regulatory requirements. PWD Statements 3 and 4 explain that, in the Rate Period, expenditures can be expected to increase to achieve the milestone targets associated with the COA.

As of the most recent projections, the Department the Department is reasonably projecting that it will spend $25 million per year in the Rate Period on SMIP/GARP in operation and maintenance costs. Mr. Morgan simply recommends reduction of that projected expenditure. Neither Mr. Morgan nor any other witness testifying on behalf of the Public Advocate does anything to explain or demonstrate that compliance with the 15th-year milestone can be achieved, if the spending levels for SMIP/GARP are reduced to Mr. Morgan's recommended levels.

VII. MR. MORGAN'S AMORTIZATION ADJUSTMENTS

Q25. MR. MORGAN PROPOSES THE AMORTIZATION (NORMALIZATION) OF CERTAIN EXPENSES. PA STATEMENT 1 (MORGAN) AT 13. PLEASE RESPOND.

A25. As a cash-based utility, PWD fully pays for all expenses incurred within the year that they are incurred, and must have the cash available to do so. From an accounting and budgeting perspective, normalization is not feasible for PWD. If these expenses were subject to capitalization, then they could be financed via long-term debt thereby extending the period of recovery in rates to the life of the bond – but they are not. The net impact of normalization forces PWD to rely upon cash reserves to pay obligations when they are due. Continued (and mandated) reliance on cash reserves to pay current bills is not a sound financial practice.

Q26. PLEASE RESPOND TO MR. MORGAN'S PROPOSED AMORTIZATION ADJUSTMENT TO RATE CASE EXPENSES THAT WOULD THEORETICALLY DECREASE EXPENSES BY $1.033 MILLION IN FY 22 AND BY $1.047 MILLION IN FY 23. PA STATEMENT 1 (MORGAN) AT 28-29 AND SCHEDULE LKM-6.

A26. It is not necessary to amortize rate case expenses to normalize these expenses. The projected operating expenses reflected in the cost of service study are established based on PWD's budget and actual to budget factors based on the Department's historical spending levels relative to their budget. The projected O&M expenses based on actual to budget factors reflect normalized costs. The actual to budget factor based on historical spending reduces the budget to the average spending levels, which would reflect normalized expenses. Therefor making additional amortization adjustments would understate costs.

The following example is provided for illustrative purposes. If the Department spends $8 million of a $10 million budget in non-rate case years, but spends the full $10 million in rate case years, their average actual to budget factor is 90%. Based on the $10 million budget and the 90% actual to budget factor, the projected annual spending is projected as $9 million per year, which would reflect the normalization of the additional $2 million rate case expense. Any further amortization adjustment to the projected O&M expenses would understate the costs for the projected test years.

	Historical Data				Projected Test Years		
	Year 1	Year 2	Average		Year 1	Year 2	Total
Actual	8	10	18		9	9	18
Budget	10	10	20		10	10	20
Factor	80%	100%	90%		90%	90%	90%
Expenses					9	9	18
Adjustment					(1)	(1)	(2)
Adjusted					8	8	16

With respect to rate case related expenses, when the Department submits a full rate filing, there are activities which span fiscal years leading up to the filing. This includes on-going reporting, annual updates to the City's Five-Year Plan, the Capital Account Deposit as well as routine reviews and updates to supporting programs and policies across the Department. Since the inception of the Rate Board, rate filings have occurred every two years. In addition to more routine activities, there are ongoing activities the Department engages in to help review and refine the Department's cost of service studies.

For example, in FY 2019, the Department engaged in an alternative rate structure analysis, this included examination of the current declining block rate structure for water quantity charges, exploring other rider mechanisms for costs such as pensions and evaluating stormwater credits and incentives programs. As these were just initial steps and involved preliminary discussion with stakeholders, the Department anticipates that further exploration of these areas will occur again following the current rate proceeding.

In addition to the above, the Department submits the TAP Rate Rider Reconciliation on an annual basis. Further, some of the policy and program areas identified by Mr. Mierzwa and Mr. Colton in their respective testimony, need to be evaluated prior to the next rate proceeding. Again, in this instance, this would occur during the period between rate proceedings.

The majority of rate case related expenses are included in the Department's Finance Division Class 200 costs. As shown in the table below, the actual expenses incurred in this area are fairly similar the past four fiscal years. Normalization as Mr. Morgan has proposed and included in his adjustments understates expenses in this area.

Finance	FY 2020	FY 2019	FY 2018	FY 2017
Class 200 Services	$ 7,312,002	$ 7,328,266	$ 7,882,538	$ 8,384,056

This data was previously presented in Schedule BV-6: WP-1, "Philadelphia Water Department Financial Plan: Revenue and Revenue Requirement Assumptions" and PWD Exhibit 6. It's clear from the table above that normalization in this area will over adjust costs and understate ongoing expenses.

Q27. SPEAKING OF RATE CASE EXPENSES, MR. MORGAN PROPOSES THAT EXPENSES RELATED TO PWD STATEMENT 8 BE EXCLUDED. PA STATEMENT 1 (MORGAN) AT 28-29; PA STATEMENT 3 (COLTON) AT 122. PLEASE RESPOND.

A27. This adjustment by Mr. Morgan is based on a relevancy conclusion made by Mr. Colton. The response to Mr. Colton, in PWD Rebuttal Statement 3, is incorporated herein by reference. The Department also maintains that this adjustment should be rejected. The participants do not get to determine the testimony of opposing parties. The Board can rule upon the same based on the merits.

Q28. DO THE SCHEDULES PRESENTED IN MR. MORGAN'S TESTIMONY CONSISTENTLY PRESENT THE THEORETICAL IMPACT OF HIS PROPOSED EDITS?

A28. No. The schedules presented in Mr. Morgan's testimony do not consistently present the theoretical impact of his proposed revisions. The following table presents a comparison of the impact of the O&M related adjustments presented in Schedule LKM-6 with those presented in Schedules LKM-1 and LKM-3.

Description	**FY 2021**	**FY 2022**	**FY 2023**
Schedule LKM-6			
O&M Escalation Rate	NA	$ (2,094)	$ (2,753)
Actual to Budget Factors	NA	(612)	(676)
SMIP/GARP	NA	(10,000)	(10,000)
Normalize Rate Case Expense	NA	(1,033)	(1,047)
Total Annual Impact	NA	$ (13,739)	$ (14,476)
Schedules LKM-1 and LKM-3			
Total O&M Expenses	$524,653	$531,981	$544,956
PWD Rate Filing	525,844	543,868	558,009
Total Annual Impact	$ (1,191)	$ (11,887)	$ (13,053)
Difference	NA	$ (1,852)	$ (1,423)

Based on the total annual impacts of the O&M Adjustments presented in Schedules LKM-1 and LKM-3, it appears that the annual impacts of the O&M Adjustments presented in Schedule LKM-6 are overstated.

VIII. MR. MORGAN'S CIP ADJUSTMENTS

Q29. DID MR. MORGAN PROPOSE ANY ADJUSTMENTS TO THE DEPARTMENT'S PROJECTED CAPITAL IMPROVEMENT PROGRAM ("CIP")?

A29. Yes. Mr. Morgan removed the inclusion of the 3.0% inflation to the FY 2023 capital expenditures. PA Statement 1 (Morgan) at 29. Mr. Morgan states that he removed the inflation because the inflation amount is not part of the budgets the Department has projected for the future.

Q30. DO YOU AGREE WITH MR. MORGAN'S REMOVAL OF THE 3% INFLATION FACTOR?

A30. No. As noted in PWD Statement No. 7A, page 24 Lines 4 to 10, the initial CIP program budget includes the Department's:

1. Adopted FY 2021 budget appropriation;
2. Proposed FY 2022 budget appropriation; and
3. Submitted FY 2023 to FY 2026 capital program.

The Department's 6-year capital program (FY 2022-2027) is based on FY2022 costs and years 2023 - 2027 are shown in FY 2022 dollars, however the capital program is approved on an annual basis and inflationary increases are included in the annual submissions. So even though the 6-year CIP is shown in the initial budget year dollars, those initial budget year dollars are adjusted for inflation annually for each subsequent 6-year submittal of the CIP. Therefore, it is appropriate to include inflation when calculating future expenditures.

As noted above, the FY 2023 to FY 2026 figures included in the Cost of Service analysis reflect the plan submitted to City Council and do not include any inflationary adjustments. This is essentially the same basis used in prior rate proceedings, whereas 2 years of the CIP budget have been approved and the remaining years reflect PWD's plan. Further, it's reasonable to expect an increase in overall project costs for FY 2023 and beyond.

The application of an inflation factor to project CIP budget has been utilized and approved in conjunction with prior Rate Proceedings including the 2018 Rate Determination. In fact, Mr. Morgan did not object to the use of an inflation factor during the prior two proceedings.

IX. MR. MORGAN'S DEBT INTEREST RATE ASSUMPTIONS

Q31. DID MR. MORGAN PROPOSE ANY ADJUSTMENTS DEBT INTEREST RATE ASSUMPTIONS?

A31. Yes. Mr. Morgan proposes that interest rates on proposed new debt financing be 3%. PA Statement 1 (Morgan) at 29. Mr. Morgan states that he derived the 3.00% interest by averaging the interest rates on debt financing for 2019 and 2020. The average rate from that calculation was 2.86%, which he rounded up to 3% as a reasonable approximation. Mr. Morgan accepted the 2.0% interest rate on commercial paper debt as a reasonable interest rate.

Q32. DOES THE DEPARTMENT AGREE WITH MR. MORGAN'S PROPOSAL TO USE A 3% INTEREST RATE ON PROPOSED NEW DEBT FINANCING?

A32. No. Mr. Morgan questions the planning use of the interest rate of 5% or 5.25% in calculating debt service as a result of the availability of Penn Vest Loans which have a lower interest rate as well as the current interest rate environment. While he is correct that the current rate environment is low, the Department anticipates the issuance of two financings during the rate period. The Department needs to preserve the flexibility to structure its debt to match the lives of the assets financed, which could result in issuing debt in the part of the yield curve that has higher rates. Using an above market rate is a conservative approach and would be considered best practice. While Penn Vest loans do have a lower interest rate, the Department needs to apply for the loans, competing with other state borrowers, and there is no certainty that future capacity will be available.

Q33. PLEASE RESPOND TO MR. MORGAN'S PROPOSAL TO REMOVE DEBT ISSUANCE COSTS, WHICH WOULD THEORETICALLY DECREASE EXPENSES IN FY 2022 BY $1.560 MILLION AND IN FY 2023 BY $3.250 MILLION. SEE PA STATEMENT 1 (MORGAN), SCHEDULE LKM-4 AT PAGE 2, LINE 3A.

A33. It is not realistic to assume that the Department will incur zero costs over two fiscal years to issue long-term debt. The projected expenses shown on Table C-8, line 3, are reasonable and consistent with the actual costs of issuance and with projections of costs of issuance in prior rate proceedings.

Although Mr. Morgan's testimony states that no issuance costs were presented in Attachment PA-ADV-10, this referenced attachment does present the issuances costs for the following revenue bonds issued during FY 2019 and FY 2020:

Series 2019A - $736,505
Series 2019B - $1,752,210
Series 2018A - $1,837,752

X. AVAILABILITY OF FEDERAL STIMULUS RELIEF

Q34. PLEASE DESCRIBE THE STIMULUS RELIEF AVAILABLE UNDER RECENTLY PASSED FEDERAL LEGISLATION.

A34. The federal government recently enacted two laws that create two categories of stimulus relief. The first category relates to support for Infrastructure. The second category relates to customer assistance.

Section 9901 of the American Rescue Plan Act[7] provides funds to certain governmental entities that may be used, among other things, to make necessary investments in water, sewer, or broadband infrastructure.

Section 2912 of American Rescue Plan Act allocates $500 million to the U.S. Department of Health and Human Services (HHS) to assist low-income households that pay a high proportion of household income for drinking water and wastewater services. The funds under Section 2912 of American Rescue Plan Act are in addition to the funds under the Consolidated Appropriations Act.[8] Section 501 of the Consolidated Appropriations Act allocates $638 million to the HHS to carry out a Low-Income Household Drinking Water and Wastewater Emergency Assistance Program.[9]

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[7] Public Law No: 117-2, which was enacted on March 11, 2021.
[8] 116 P.L. 260; 134 Stat. 1182, which was enacted on December 27, 2020.
[9] *See, e.g.,* 15 USC § 9058a.

Q35. DO ANY OF THE PARTIES BELIEVE THAT THE AVAILABILITY OF FEDERAL STIMULUS RELIEF NEGATES THE DEPARTMENT'S NEED FOR RATE RELIEF?

A35. Yes. Mr. Morgan states that the amount of stimulus funding the Department is likely to receive will be "significant" or "extensive." PA Statement 1 (Morgan), at 5, 6, 8. Mr. Morgan further states that amount of federal stimulus funds negates the need for increased rates and charges or "change the Department's cost of service in this proceeding." Similar beliefs were expressed at the public hearing and by Mr. Haver in his Motion for Continuance.

Q36. AS A THRESHOLD MATTER, DOES THE DEPARTMENT AGREE WITH THOSE PARTIES (AND THE BELIEF) THAT THE PASSAGE OF FEDERAL STIMULUS RELIEF MAKES A RATE INCREASE UNNECESSARY?

A36. No. It is wrong to conclude that PWD will have a "windfall" of stimulus relief. At this point in time, it is too early to assess the full impact for the Department of the availability of federal stimulus relief. While the full impact is not known, it does not appear that the Department will be receiving stimulus relief so as to prevent the need for increases in rates and charges.[10]

Q37. DOES THE DEPARTMENT ANTICIPATE RECEIVING ANY OF THE STIMULUS RELIEF TARGETED FOR INFRASTRCUTURE?

A37. No. PWD does not expect to receive direct stimulus payments through the City. The scope of relief to be provided to the Department is described in the memorandum from

10 *See*, Schedule ML-10 (Memorandum from the City's Director of Finance).

the City's Finance Director, Rob Dubow, to the Department, dated March 26, 2021. (Schedule ML-10.).

Q38. DOES THE DEPARTMENT ANTICIPATE RECEIVING ANY OF THE STIMULUS RELIEF TARGETED AT CUSTOMER ASSISTANCE?

A38. Yes. The stimulus relief targeted for customer assistance is being distributed by the HHS. It is clear, based on the federal legislation, that the stimulus funds being distributed by the HHS will be limited to certain households. The Department, at this point, is not aware of the eligibility criteria, the amount, frequency, and conditions for receipt of the funds. It is, at this point, not reasonable to predict what additional funds may be distributed either directly or indirectly to eligible households. Therefore, additional revenues were not estimated by the Department and were not included in the Cost of Service Report for the Rate Period.

The Department would also note that the above-described stimulus relief is separate from funding from the Utility Emergency Services Fund ("UESF").

Q39. DOES THE DEPARTMENT EXPECT TO RECEIVE OTHER FORMS OF ASSISTANCE FROM THE CITY?

A39. Yes. As explained in the Memorandum from the City's Finance Director (in Schedule Ml-10) the City will support the Department in determining how to access the customer assistance funding administered by the HHS and support the Department as it applies for grants or other funding for water and wastewater system improvements.

Schedule ML-10 also indicates that the Office of the Director of Finance has been examining the reallocation of pension fund responsibility among the City's various funds going forward. Based on Schedule ML-10, the reallocation will have no impact on the total amount contributed to the Pension Fund, as the amount being paid by the General Fund will increase in an amount equal to the reduction in contributions from the other funds, starting in FY22.

Q40. DOES THE UNCERTAINTY IN THE TIMING AND AMOUNTS OF STIMULUS RELIEF FROM HHS MEAN THAT THE RATE BOARD CANNOT RELY UPON PWD PROJECTIONS OF REVENUES AND EXPENSES FOR THE RATE PERIOD?

A40. No. First, it's important to recall that the nature of fully projected future test years (FPFTYs) is that they are based entirely on projections. As such there is always a level of uncertainty in projections. However, uncertainty related to items does not render a projection unreliable. With the use of a FPFTY, there will always be the potential of revisions of projections as events develop and trends change. If the FPFTY budgeting process is rigorous and well established, that FPFTY projection will be a reasonable reflection of what the utility may experience during the period studied. We firmly believe that PWD's budgeting process is rigorous and well documented and produces reliable results.

Second, as noted above, the current information does not prove that the Department will be receiving federal stimulus relief during the rate period so as to prevent the need for increases in rates and charges. The funds being distributed by the HHS will be limited to certain households. Nothing suggests that those funds (even if combined with the funds from UESF) will be sufficient to provide all of the additional revenues required by the

Department in the Rate Period.

XI. KNOWN CHANGES TO PWD FINANCIAL PROJECTIONS

Q41. HAVE EVENTS OCCURRED, OTHER THAN THE PASSAGE OF FEDERAL LEGISLATION, THAT HAVE IMPACTED THE DEPARTMENT'S FINANCIAL PROJECTIONS.

A41. Yes. Even without stimulus relief, PWD's need for rate relief has materially changed based on external circumstances. Significantly, based on the information in Schedule ML-10, the Department expects to potentially have lower costs due to a reallocation of pension fund responsibility (in FY 22 and prospectively). Taken in isolation, this is anticipated to reduce the requested revenue adjustment by $25.5 million per year. However, it should be noted that there may be other expenses, which have the potential to impact the Department's projected costs up or down as more information becomes available, since the development of the cost of service analysis and the Department may not realize the total savings presented in the Memorandum from the City's Finance Director.

Q42. PLEASE PROVIDE MORE DETAILS ON THE REALLOCATION.

A42. The City intends to move from allocating pension cost from an allocation based on each employee's plan's normal and unfunded pension amounts, to a "one-rate" plan, where the rate applied is the same for each employee. Since the Water Fund currently employs more employees in older pension plans, its allocated cost will be reduced under the new allocation, while the General Fund, which has a higher percentage of employees in newer plans, will see its costs increase. Moving to a "one-rate" plan treats each employee equally, regardless of plan.

Schedule ML-10 indicates that, as a result of the preliminary analysis by the Office of the Director of Finance, the City is likely to reduce the amount that the Water Fund contributes to the Pension Fund by more than $25 million annually. That amount is the preliminary calculations based on Fiscal Year 2020 data. It may or may not be reflective of the approximate amounts and/or percentage fund allocations on a go-forward basis.

Q43. ARE THERE REVISED PROJECTIONS FOR THE RATE PERIOD BASED ON THE ABOVE-DESCRIBED CHANGES?

~~A43.~~ Not at this time. Black & Veatch will provide updated Tables to reflect the changes caused by the reallocation of pension costs and other changes agreed upon or as requested by the Rate Board. Those updated tables will not, however, incorporate anticipated increased expenses associated with lead and copper rule (LCR) changes (in FY 2023) and reductions in revenues related to lower penalty revenues as a result of the moratorium and the pending reduction in water usage by one[11] of the Department's Top 20 Customers.

XII. CONCLUSION

Q44. IS THERE ANYTHING ELSE THE DEPARTMENT WOULD LIKE TO ADD?

A44. Yes. The Department is willing to discuss the settlement of some or all of its proposals.

[11] The Department has received a permit request from Vicinity Energy that proposes the construction of a water treatment facility intended to reduce their water consumption.

Q45. DOES THIS CONCLUDE THIS REBUTTAL TESTIMONY?

A45. Yes, it does.

CITY OF PHILADELPHIA

OFFICE OF THE DIRECTOR OF FINANCE
Room 1330 Municipal Services Building
1401 John F. Kennedy Boulevard
Philadelphia, PA 19102
(215) 686-6140
FAX (215) 568-1947

ROB DUBOW
Director of Finance

Date: March 26, 2021

To: Melissa LaBuda, Deputy Water Commissioner

From: Rob Dubow, Director of Finance

Subject: American Rescue Plan Act

CC: Randy E. Hayman, Water Commissioner
Michael A. Carroll, Deputy Managing Director

Thanks for your memo of March 22nd concerning funds available to the City of Philadelphia under the American Rescue Plan (ARP). You have asked what kind of assistance the Water Fund could receive related to the ARP. I will detail that potential assistance and other action that the Administration plans to take that should have an impact on your rate case.

In the memo you ask both for direct assistance and for support in obtaining other ARP funding. I will first address the possibility of direct assistance to the Water Fund through the ARP. As we are developing the FY22-FY26 Five Year Plan, we are considering how to allocate the funds available under the ARP. Unfortunately, the revenue losses, new spending, and increased spending for existing services created by the pandemic resulted in substantial deficits in the General Fund in both FY21 and in FY22. That means that all of the estimated funding that the City will receive from the Coronavirus Local Fiscal Recovery Fund will go to the City's General Fund to address the impacts of the pandemic. We expect that the upcoming budget will include shifting of some costs currently borne by the Water Fund to the General Fund; however, overall, the ARP funds are needed to maintain services provided by the General Fund. Without directing that funding to the General Fund, we would be forced to make cuts that would impede the economic relief that the ARP is designed to support

There are, however, a series of actions that we will take to help the Water Fund, including the following:

- Through the Office of Recovery and Grants, we will support the Water Department in determining how to access the ARP funding administered by the Department of Health and Human Services to provide grants for the purpose of assisting public water systems and wastewater treatment works to reduce arrearages and rates for low-income households.

- We will support the Department as it applies for grants or other funding under ARP for any water and wastewater system improvements.

- As you know, the Office of the Director of Finance has been doing an analysis to determine whether we should change the way pension costs are allocated among the City's various funds going forward. As a result of the preliminary analysis for that reallocation, we are likely to reduce the amount the Water Fund contributes to the Pension Fund by more than $25 million annually. The change will have no impact on the total amount contributed to the Pension Fund as the amount being paid by the General Fund will increase in an amount equal to the reduction in contributions from the other funds, starting in FY22. This change should have a greater impact on the Water Fund than the amounts you requested from the ARP.

I understand that these changes will not eliminate the need for a rate increase but may help to reduce the scale of that need and provide needed support for customers who would have to pay for those increases.

THE CITY OF PHILADELPHIA
OFFICE OF
SUSTAINABILITY

MEMO

TO: Melissa LaBuda, Philadelphia Water Department
CC: Jaclyn Rogers, Emily Hill, Paul Kohl, Dominic McGraw
FROM: Madeline Schuh
DATE: April 6, 2021
SUBJECT: Utility Escalation Factors for the Philadelphia Water Department

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Background

At the request of the Philadelphia Water Department (PWD), this memo outlines PWD's utility cost escalation between FY22 and FY26. The Energy Office, housed in the Office of Sustainability, purchases Electricity, Natural Gas, and Vehicle Fuel on behalf of the City (including PWD). As such, the Energy Office has information on how hedge purchases and rate cases impact future costs.

Electricity

The City purchases electricity in a two-part process — supply and distribution. Electricity supply is purchased through a third party while distribution is provided by PECO. This allows the City to hedge electricity costs by purchasing future electricity supply. Current electricity hedges are in place through FY22 and will incorporate electricity from its executed solar electricity power purchase agreement (PPA) by June 2022. The PPA will serve as a 20-year hedge in electricity markets for future price increases.

The other portion of electricity costs, distribution, is provided by PECO. PECO filed a rate case with the Pennsylvania Public Utility Commission (PUC) in March 2021. If passed, rate increases would take effect in January 2022, and distribution costs would rise approximately 11% by FY23. However, due to strategic procurement through electricity hedges, the increases will have a modest effect on total electricity costs. For reference, PECO distribution costs are approximately 20% of the Water Fund's total electricity costs.

After accounting for completed electricity purchases, the solar PPA, future markets, and potential increases in PECO costs, the Energy Office anticipates a 0.5% increase in FY22. However, between FY22 and FY23, total electricity costs are expected to rise by 4.5%. In the following years, a relatively flat escalation rate for electricity prices is expected, as outlined in the table below.

Year Transition	Escalation Rate
FY21 to FY22	0.5%
FY22 to FY23	4.5%
FY23 to FY24	1.0%
FY24 to FY25	1.0%
FY25 to FY26	1.0%

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Natural Gas

The City has purchases of natural gas for Fiscal Years FY21 and FY22. Projections for future escalation curves beyond hedges are primarily based on the forward NYMEX natural gas market and Winter Basis Strips from Transco Z6 (NNY) North. Winter Basis strip prices are used as a proxy for all months as they tend to have the most volatile cost changes. PWD's use is not driven by weather patterns as much as the General Fund use and thus is more sheltered from the basis market (and price volatility). We do not anticipate significant increases to commodity prices for PWD over the next five years.

Beyond natural gas commodity, the other significant portion of natural gas costs come from distribution services provided by PGW. PGW filed a rate case in February 2020 and the Pennsylvania Public Utility Commission (PUC) issued a final order on January 1, 2021. As a result of the ruling, the City's PGW rates began increasing incrementally in January 2021. The City's natural gas costs will continue to increase, rising by approximately 7% by mid-FY23. This increase is expected to be followed by a relatively flat escalation through FY26. The escalation based on the rate increase schedule and the City's portfolio of PGW accounts. Please see the table below for the estimated year-over-year natural gas cost increases.

Year Transition	Escalation Rate
FY21 to FY22	5.5%
FY22 to FY23	1.5%
FY23 to FY24	1.5%
FY24 to FY25	1.0%
FY25 to FY26	1.0%

Next Steps

The Energy Office will provide regular updates to PWD on the purchases and impacts to electricity and natural gas rates, as well as escalation projections. Please feel free to reach out if there are any questions.

Madeline Schuh
Senior Energy Management Analyst
Madeline.schuh@phila.gov