

BEFORE THE
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

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| PHILADELPHIA WATER |) | FY 2019-2021 RATES |
| DEPARTMENT |) | |

MAIN BRIEF OF THE PUBLIC ADVOCATE

June 4, 2018

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I. INTRODUCTION AND PROCEDURAL HISTORY

The Philadelphia Water Department (PWD¹) submitted its Advance Notice, on February 12, 2018, followed by its Formal Notice, on March 14, 2018, to the Philadelphia Water, Sewer, and Storm Water Rate Board (Board), commencing the process of review of PWD's proposed \$116 million water rate increase for FY 2019-FY 2021 (hereinafter, this "2018 Rate Case"). PWD proposes three stepped increases in rates to recover additional revenues of \$9.204 million in FY 2019 (reflecting a 1.60% increase in revenues from rates), \$26.133 million in FY 2020 (reflecting an additional 4.50% increase in revenues from rates), and \$27.107 million in FY 2021 (reflecting a further 4.50% increase in revenues from rates).² In combination, the resulting rate increases to residential customers utilizing five hundred cubic feet (5 CCF) per month of water are projected to be approximately 11% over the three-year period for which PWD requests additional revenues from rates. See PWD Exhibit 2.

The Public Advocate commenced advance discovery prior to PWD's filing of its Advance Notice, issuing Advance Interrogatories and Requests for Production of Documents on October 24, 2017. Pursuant to the schedule promulgated by Hearing Officer Nancy Brockway, pre-hearing discovery continued until May 3, 2018.

On April 20, active parties participated in a prehearing meeting concerning procedural aspects of the rate review process, to discuss procedural aspects of the rate proceeding and timelines for and objections to discovery requests, as well as other procedural matters.

Procedural guidelines that were adopted in the 2016 rate proceeding establishing PWD's FY

¹ As used herein, "PWD" means and includes the Philadelphia Water Revenue Bureau (WRB), to the extent required by the context.

² Each of these increases is proposed to be effective for 10 months of the first fiscal year in which implemented, and to continue in place thereafter. See PWD St. 9A, Sch. BV-E1, Table C-1.

2017-FY 2018 rates and charges (hereinafter, the 2016 Rate Case), were distributed by Hearing Officer Brockway on March 23, 2018 for use in this 2018 Rate Case.

Testimony of active participants (other than PWD) was submitted on April 20. The Public Advocate submitted Direct Testimony of Lafayette K. Morgan, Jr. (PA St. 1), Direct Testimony of Jerome D. Mierzwa (PA St. 2), and Direct Testimony of Roger D. Colton (PA St. 3), each with accompanying schedules and/or exhibits. The Philadelphia Land Bank submitted the Direct Testimony of Angel Rodriguez. PennEnvironment Research & Policy Center (PennEnvironment) submitted the Direct Testimony of Stephanie Wein. PWD submitted rebuttal testimony consisting of five statements, addressing various matters raised by the Public Advocate's Direct Testimony, on May 4, 2018. Also on May 4, 2018, the Philadelphia Large Users Group (PLUG) submitted Rebuttal Testimony of Richard A. Baudino. During the technical hearings, PWD, the Philadelphia Land Bank, and the Public Advocate entered Errata Sheets concerning previously filed testimony, and several additional errata were addressed orally on the hearing record.

Public Input hearings were held on April 16, April 17, April 19, April 20, April 23, April 24, April 25, April 30 and May 2. A further Public Input session was convened during the Technical Hearings on May 11, 2018 to receive the written statement of Fire Department Commissioner Adam K. Thiel. Members of the public were also encouraged to submit statements in writing and electronically to the Board. Technical Hearings were conducted on May 10, May 11, May 14, May 15, and May 17.

PWD's Advance Notice and Formal Notice, all discovery responses, discovery motions and objections, other motions and responses/correspondence, public input statements, participant testimony, public input transcripts and technical hearing transcripts have been entered on the

record of this proceeding. As discussed at length below, this Main Brief contains the Public Advocate's response to PWD's Motion in Limine, which should be denied.

II. SUMMARY OF THE PUBLIC ADVOCATE'S POSITION

As set forth in this Main Brief, the Public Advocate makes multiple recommendations regarding the unjustness and unreasonableness of PWD's proposed rate increase. A significant factor driving the Public Advocate's recommendations is the accumulated balance in PWD's primary cash reserve fund, the Rate Stabilization Fund. A foundational assumption in the 2016 Rate Case was that PWD would spend down this reserve to \$111 million before seeking to increase costs to customers. PWD has not done so. Through its overly complicated, confidential and proprietary rate model, PWD has consistently projected withdrawals from accumulated reserves which simply do not occur, largely because of conservative estimates of revenues and expenditures. And, indeed, PWD's justification for its rate increase proposal is, in part, the desire to accumulate even more in reserves than it could conceivably require, as shown by its consistent historical "outperformance."

PWD's elaborate rate model is the subject of a confidentiality agreement between certain parties. The use of the model, which is extraordinarily complicated, is a task that is virtually impossible for anyone other than its creators, PWD's consultants Black & Veatch, to undertake. Within the confines of a PWD rate proceeding, it is not possible for the Public Advocate, or any non-PWD party to this proceeding, to become adequately familiar with the rate model and its myriad interconnections to be certain of its correct use. As a result, a significant aspect of this proceeding, the model itself, defies the openness and transparency required by City Council in establishing standards for rate proceedings and vesting the Board with the authority to fix and regulate rates and charges.

However, as discussed extensively on the record in this proceeding, PWD's rate model does not calculate PWD's proposed revenue requirements. Unlike the equation presented to the Board by its consultant,³ PWD's rate model does not function as an equation or formula in which, for example, the revenue requirements shown adjust when estimates of future expenditures change. Illogically, even a \$10 million downward adjustment to a single operating expense in PWD's rate model has virtually no effect on the calculation of revenue requirements. See, e.g., 5/14 Tr. at 139:1-141:2; PA Hearing Ex. 7 at 42-47. Revenue requirements utilized in the PWD rate model are, to a significant degree, input separately by a user of the model. PWD's rate model performs various other calculations, for example debt service coverage and application of selected spend factors and expense escalation factors. But, PWD's rate model primarily serves as a vehicle that permits the model's operator to use historical information, enter financial aspirations for future periods, and illustrate potential outcomes for future periods based on innumerable assumptions, including user-designated levels of rate increases.

The Public Advocate and its consultants have attempted to utilize the Black & Veatch model, but has ultimately relied upon PWD's consultants to "run the model" with all of the Public Advocate's adjustments. Black & Veatch's calculation of the cumulative impact of the Public Advocate's adjustments, provided in response to Transcript Request 23(B), is attached as Appendix A. The output of the Black & Veatch model, shown on Appendix A, demonstrates that, after entering taking into account the Public Advocate's recommendations regarding PWD's Financial Stability Plan, as well as the specific adjustments to the assumptions utilized to calculate PWD's Revenue Requirements, PWD simply does not need to increase rates at this

³ See PA Hearing Ex. 7 at 32.

time.⁴ The Public Advocate’s financial plan and revenue requirement adjustments, as revised, was distributed in response to Transcript Request 17, and is attached as Appendix B hereto.

Appendix A shows the results of the Public Advocate’s financial plan and revenue requirement adjustments, with no base rate increase assumed over the three years, FY 2019, FY 2020 and FY 2021. Each of the Public Advocate’s financial plan and revenue requirements adjustments are discussed in this Main Brief. However, to be clear, as generated by Black & Veatch, Appendix A shows a net revenue increase associated with the recovery of TAP costs through PWD’s proposed TAP Rider. This illustration was determined by PWD’s consultants, and does not take into account the specific TAP Rider proposed by Mr. Colton. Mr. Colton’s TAP Rider would recover a marginally higher amount in FY 2019 and FY 2020, and a marginally lower amount in FY 2021, as discussed in Section XIV.A. Notwithstanding PWD’s inclusion of TAP Rider revenues as “additional service revenue” in the CLS Scenario (consistent with Mr. Morgan’s testimony), it is evident that, in fact, there is no need to raise rates to recover TAP costs.

As shown in Appendix A, even after taking into account the Public Advocate’s financial and revenue requirement assumptions, the resulting balance in the Rate Stabilization Fund exceeds \$200 million in each of the three fiscal years in PWD’s proposed rate period. However, the Public Advocate submits that projections beyond two years are inherently unreliable for ratemaking purposes, and that the Board should only consider approval of a rate period for FY 2019 and FY 2020. Still, this level of reserves is more than sufficient to offset the need for *any increase* in rates and charges, including through the implementation of the TAP Rider. As such,

⁴ The Board would be justified in concluding that PWD demonstrates no need for a rate increase based solely on the fact that PWD projects having nearly \$190 million in its Rate Stabilization Fund at the end of FY 2018, when its 2016 Rate Case projection anticipated spending that fund down to \$111 million by the end of FY 2018. Compare PWD St. 9A, Sch. BV-E1, Table C-1, with the Board’s 2016 Rate Case Determination (June 7, 2016), Appendix A.

the Board should, instead of approving incremental revenue recovery through the TAP Rider, approve the “transfer” of revenue recovery to the TAP Rider, with corresponding downward adjustments to base rate revenues, in order to reflect that no increase whatsoever, whether through base rates or the TAP Rider, is necessary or appropriate.

As discussed more fully below, in addition to the financial plan and revenue requirement adjustments, the Public Advocate opposes any adjustment to customer rates and charges to pay for public fire protection expenses. These expenses are, under the Philadelphia Code, not properly charged to PWD customers through rates. Moreover, there is no policy basis that supports the shift of these costs. The Public Advocate also has identified that rate design adjustments are necessary to appropriately reflect the class cost of service and recommends no increase to the volumetric rate for water for the 0 to 2 MCF usage block. The Public Advocate also recommends that PWD conduct a study to determine potential customer class specific usage rates. Regarding TAP, implemented following the determination of the Board in the 2016 Rate Case, the Public Advocate has identified significant, necessary administrative improvements as well as a proposed administrative expense limitation, which the Board should endorse in its determination in this case. The Public Advocate has also proposed a TAP Rider to recover the costs not only of rate discounts, but of arrearage forgiveness, and presents several other specific improvements to the calculation methodology proposed by PWD. Finally, the Public Advocate submits that the Board should include in its determination the finding that PWD’s shut off notice practices are unfair and deceptive, and as a consequence deny PWD’s proposal to increase the miscellaneous charge imposed to restore service after non-payment shut off.

In order to assist in the review of each of the specific recommendations discussed in this Main Brief, the Public Advocate includes Appendix C, which provides a list and brief summary

of the major issues presented by the Public Advocate for a determination in this 2018 Rate Case. Appendix C is intended solely for ease of review and does not modify any of the Public Advocate's positions expressed in this Brief. To the extent of any difference between this Brief and the necessarily abbreviated summaries in Appendix C, this Brief shall control.

III. OVERVIEW OF PWD'S RATEMAKING METHODOLOGY

A. Projection of Expenses and Revenues

PWD's FY 2019, FY 2020 and FY 2021 rate increase request consists of three "fully forecasted test years". PA St. 1 at 7:16-18; 5/14 Tr. at 49:3-9. The baseline information, upon which PWD's FY 2019, FY 2020 and FY 2021 projections are established, is not actual financial operating results. It is based on budgeted data and forecast assumptions concerning FY 2018. As Mr. Morgan observes, "PWD used its Fiscal Year 2018 operating budget as the starting basis for the development of its FY 2019, FY 2020 and FY 2021 Operation and Maintenance (O&M) expense projections." PA St. 1 at 16:29-31. Based on PWD's FY 2018 budget, PWD applies a series of assumptions to try to anticipate and project what its expenses will be over the three Fiscal Years for which it is requesting additional rates in this 2018 Rate Case. Mr. Morgan explains:

The first step in the process was to calculate what the Department termed to be the "expected expenditure level". The expected expenditure level is derived by multiplying the FY 2018 budgeted expenditures by historical "actual-to-budget factors". These "actual-to-budget factors" are also referred to as "budget factors" or "spend factors". The actual-to-budget factors are calculated by dividing the actual level of expenditures by the budgeted level of expenditure for each category of expenses. Although the workpapers showed 1-year, 2-year, 3-year and 5-year historical average spend factors (Assumptions-22A), the Department used the 2-year average spend factor for the period FY2015-FY2016 for the majority of the categories. In general, the spend factors are consistently less than 100 percent for various categories of expenses because the Department does not spend the full budgeted amount for many budget categories. After the FY 2018 expected expenditure level was determined by applying the actual to budget factors to the FY2018 budgeted expense, the projected levels of expenses for FY 2019, FY 2020 and FY 2021 were determined by applying inflation escalation factors to adjusted FY 2018 amounts in order to reflect the expected expenditure levels. In addition, specific adjustments were

added to some of the expected expenditure levels such as for SMIP/GARP and additional labor expense.

PA St. 1 at 16:31-17:15.

It is essential that the Board realize that, in projecting future expenditures, PWD does not yet have an accurate picture of its FY 2018 results.⁵ Accordingly, PWD's baseline budget year expenditures for FY 2018, upon which it projects future needs, are not yet known.

Second, PWD projects certain additional costs, so-called "Additional Adjustments for Projected Operating Expenses." See PWD St. 9A, Sch. BV-E5: WP-1, at 7 (identifying five additional adjustments). These adjustments include an additional \$10 million annual expense for SMIP/GARP (discussed more fully below), additional staffing costs for Operations, Planning & Environmental Services and City Finance, and higher levels of anticipated indemnities. PWD and the Public Advocate have reached agreement regarding an adjustment to the proposed additional staffing costs, and the Public Advocate has not raised an issue with PWD's projected indemnities. Accordingly, of the Additional Adjustments, the Public Advocate and PWD continue to have substantive disagreement regarding the funding of a proposed \$10 million increase in SMIP/GARP through higher customer rates and charges.

In addition, for purposes of projecting retail revenues, PWD's starting point relies upon data from the current and prior fiscal years.⁶ PWD explains that, in calculating its revenue requirements for water and sewer service under current rates, it estimates usage based on FY 2016 sales volume and number of accounts (with certain projection factors), and then applies FY 2018's schedules of water and sewer usage rates and service. PWD St. 9A at 24:17-24. For

⁵ The same was true in the 2016 Rate Case during which PWD overstated its Rate Stabilization Fund withdrawal by more than \$35 million. See Section VIII.A.

⁶ PWD also takes into account wholesale water and wastewater revenues, as well as other operating revenue (e.g., fees, fines, grants, transfers), and non-operating revenue (e.g., interest and earnings on funds and accounts). PWD St. 9A at 27:15-28:17.

stormwater, PWD applies FY 2018 GA and IA rates to projected Gross Area (GA) and Impervious Area (IA), and adds the Billing & Collection charges for the number of stormwater accounts. PWD St. 9A at 25:1-4. PWD makes adjustments for discounts for all eligible customer types, and calculates the private fire protection charges and surcharges for customers with high strength wastewater discharge. PWD St. 9A at 25:5-11. Finally, as Mr. Morgan explains:

Once the Department calculates its operating revenue from each customer type, collection factors are applied to determine the operating retail revenue cash receipts. The collection factors represent the multi-year payment pattern for the billing year (payments received within 12 months) and the two prior fiscal years' billing which are broken down into payments within 13-24 and after 24 months. Essentially the collection factors break down the percent of revenue from a specific billing period that is collected within the three periods – within 12 months, 13 to 24 months and beyond 24 months. The collection factors used in the cost of service by PWD are based upon a five-year historical period (FY 2012 through FY 2016).

PA St. 1 at 20: 13-21.

As discussed below, the Public Advocate proposes a modification to PWD's collection factor, to make more appropriate use of the most recent collection experience.

In addition to deriving a baseline expectation of revenues and expenses based on PWD's FY 2018 budget and assumptions from prior years, PWD projects changes in operating expenditures. As Mr. Morgan explains:

[A]fter the expected level of expenses were determined by the application of actual-to-budget factors to budgeted FY 2018 expense, those budgeted expense categories or object classes were increased by escalation factors to project the anticipated expenses for FY 2019, FY 2020 and FY 2021

PA St. 1 at 21:9-12.

Mr. Morgan summarizes the various cost escalations presented in Black & Veatch's workpapers, designated as Exhibit 6 of PWD's Formal Notice, in his testimony as follows:

| Philadelphia Water Department O&M Escalation Factors | | |
|---|------------------------|---|
| Cost Class | Description | Annual Escalation |
| 100 | Labor Costs | FY 2019 – 2.5%, FY 2020 – 3.0% FY 2021 – FY 2023 - 3.0% |
| 220 | Power | FY 2019 - FY 2020– 0.0% FY 2021 - FY 2023 3.0% |
| 221 | Gas | FY 2019 – 4.0%, FY 2020 – 0.0% FY 2021 - FY 2023 – 3.0% |
| 200 | Services | FY 2019 – FY 2023 - 3.4% |
| 200 | Public Property | FY 2019 – 1.66%, FY 2020 – 1.60%, FY 2021 – 1.56% FY 2022 – 3.44%, FY 2023 – 2.06% |
| 307 | Chemical Costs | FY 2019 – 6.7%, FY 2020 – 3.8% FY 2021 - FY 2023 – 1.0% |
| 300 | Materials and Supplies | FY 2019 - FY 2023 - 0.5% |
| 400 | Equipment | FY 2019 - FY 2023 - 1.3% |
| 500 | Indemnities | FY 2019 - FY 2023 – 0.0% |
| 800 | Transfers | FY 2019 - FY 2023 – 2.5% |

See PA St. 1 at 22. As explained more fully below, the Public Advocate proposes adjustments to the escalation factors applied to the Class 220 Power, Class 221 Gas, Class 307 Chemical Costs, Class 800 Transfers, and Class 200 Services⁷ cost classifications.

B. Bond Ordinance Requirements

As Mr. Morgan explains, the model used to determine the proposed revenue requirement is primarily driven by estimates of revenues and expenses. PA St. 1 at 32:8-10. However, additional factors must be considered, as set forth in the testimony of PWD’s rate consultants, Black & Veatch. First, the requirements under the Amended and Restated General Water and Wastewater Revenue Bond Ordinance of 1989 (General Bond Ordinance) must be satisfied. As

⁷ This class expense is identified as Other Class 200 Expense in Mr. Morgan’s testimony. PA St. 1 at 24:3; Sch. LKM-2, line 6.

summarized in Mr. Morgan's testimony, there are two specific requirements under the General Bond Ordinance:

- 120% Test: net revenues (including transfers from the Rate Stabilization Fund to the Revenue Fund) must be equal to at least 1.20 times the debt service requirements for the fiscal year (excluding the principal and interest payments in respect of Subordinated Bonds).
- 100% Test: rents, rates, fees and charges must yield net revenues (including transfers from the Rate Stabilization Fund to the Revenue Fund) equal to at least 1.00 times the sum of
 - the debt service requirements (including debt service requirements in respect of Subordinated Bonds);
 - Amounts required to be deposited into the Debt Reserve Account during such fiscal year;
 - The principal or redemption price of and interest on General Obligation Bonds payable during such fiscal year;
 - Debt service requirements on interim debt payable during such fiscal year; and
 - The Capital Account Deposit to the Construction Fund for such fiscal year (less any amounts transferred from the Residual Fund to the Capital Account during such fiscal year).

See PA St. 1 at 32:12-33:7.

In addition, as Mr. Morgan explains, the City has covenanted with Assured Guaranty Municipal Corporation (AGM) to satisfy the following requirement:

- 90% Test: rates and charges shall be sufficient on an annual basis to yield net revenues (excluding amounts transferred from the Rate Stabilization Fund to the Revenue Fund) at least equal to 90 percent of the debt service requirements (excluding debt service due on any Subordinated Bonds).

PA St. 1 at 33:8-24.

C. The Floor and Ceiling for Rates and Charges – Philadelphia Code

As Mr. Morgan explains, the Water Rate Board Ordinance establishes certain standards for rates and charges. PA St. 1 at 34:1-17. These standards should be viewed as setting both a “floor” and a “ceiling” on PWD rates and charges. As set forth in Section 13-101(4)(a) of the Philadelphia Code:

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

PWD may argue that this “floor” imposes an absolute requirement on the Board to ensure that current rates and charges compensate PWD for 100% of its operating expenses, debt service, rate covenant and sinking fund reserve requirements, and proportionate charges for other City departments. However, this would be an erroneous interpretation for multiple reasons.

First, there’s nothing in the Philadelphia Code that requires the Board to accept as true PWD’s estimates of future expenses. In fact, the Code specifically reserves to the Board the right to approve, modify, or reject PWD’s proposed rates and charges. Phila. Code §13-101(4)(b)(iii). In other words, because projected expenses are drivers of PWD’s rate request, the Board has authority to assess their reasonableness in any determination approving, modifying or rejecting future rates and charges.

Moreover, the language does not impose a flat requirement that rates and charges actually yield the product of all expenses identified in Section 13-101(4)(a) of the Philadelphia Code. Indeed, Bill No. 130251, which established the Rate Board and set forth this standard, included a flat requirement that “rates and charges shall yield to the City at least an amount equal to” the

enumerated expenses when it was originally introduced. That language was subsequently amended to include the specific qualifier that rates and charges “shall be such as shall yield” the product of those expenses. A copy of Bill No. 130251, as introduced, is attached hereto as Appendix D. The very clear language of the final ordinance, codified at Section 13-101 of the Philadelphia Code, thus states that rates and charges “shall be such as shall yield” the product of those expenses. In other words, rates and charges shall be “of that kind” as shall yield sufficient revenues for the indicated obligations.⁸ In assessing whether rates and charges are of a kind or character as shall yield the product of the enumerated expenses, an important consideration is the extent to which revenues have already been “yielded” from customers and remain available to satisfy PWD obligations. As set forth in Section 13-101(4)(b)(i) of the Philadelphia Code, the Board must determine the “minimum levels of reserves to be maintained during the rate period” when fixing rates and charges. Accordingly, the Code is clear that the Board must take into account reserves when determining what, if any, new revenues are necessary to meet PWD’s obligations. Notably, all of the reserves PWD maintains in its Residual Fund and Rate Stabilization Fund constitute payments from customers – amounts which reflect the “yield” from previously paid rates and charges – and the majority of those reserves (the balance in the Rate Stabilization Fund) are available to be counted toward PWD’s senior debt service coverage test.

Finally, in no way does the specified language impose an obligation that rates and charges be such as shall yield the product of the enumerated expenses as of any specific point in time, nor at all times. Were that the case, PWD’s Rate Stabilization Fund would never be utilized, contrary to the provisions of the Philadelphia Code requiring the Board to determine minimum levels of reserves. Notably, PWD projects transfers from the Rate Stabilization Fund

⁸ See Black’s Law Dictionary, 1446 (7th Ed. 1999) (defining “such” as “of this or that kind”); In re Brock, 166 A. 785, 787 (Pa. 1933) (defining “such” to mean “of that kind” and “having the particular quality or character specified.”)

to the Revenue Fund demonstrating its intention to utilize this reserve to cover ongoing expenses. See TR-23(B).

In establishing rates and charges which are such as to yield sufficient funds to cover operating expenses, debt service, rate covenant and sinking fund reserve requirements, and proportionate charges for other City department charges, the Board is not obligated to approve rates that cover each and every projected expense, in full. Rather, the Board is required to ensure that the overall rates and charges do not fall below this floor, taking into account not only what PWD will actually spend, but what the Board believes it should spend from current rates based on the record before it, as well as the extent to which additional rates and charges are necessary given the extent of PWD existing reserves.

As Mr. Morgan explains, the Philadelphia Code also establishes a “ceiling” on rates and charges. PA St. 1 at 34:16-17. As set forth in Section 13-101(4)(b) of the Philadelphia Code:

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

During this 2018 Rate Case proceeding, Hearing Officer Brockway raised a question about this section of the Philadelphia Code. See 5/14 Tr. at 274:22-275:18. In essence, Hearing Officer Brockway questioned whether this language operated in one-direction, only allowing the Board to consider reasonably anticipated cost increases (as opposed to cost decreases) or reasonably anticipated diminutions in expected revenue (as opposed to increases in expected revenue). As written, the language operates as a ceiling on rates and charges, which prohibits the Board from

increasing rates and charges based on expected revenue decreases or anticipated expense increases which are not reasonable. As long as the Board's rate determination does not exceed that ceiling, nothing in this provision prevents the Board from taking into account cost reductions and revenue increases. In fact, it should be noted that, as shown in PWD's own model, PWD's projections specifically take into account that actual costs in certain areas have decreased over time. See, e.g., PWD Exhibit 6 at 184, PWD Operating and Maintenance Expenses Summary, Class 220 Power (expenses declined from \$24,841,360 in FY 2012 to \$20,071,556 in FY 2016), Class 800 Transfers (expenses declined from \$9,074,729 in FY 2012 to \$8,100,186 in FY 2016).

D. PWD Financial Stability Plan

In addition, as part of its rate forecast, PWD has submitted its Financial Stability Plan. See PWD St. 2, Sch. ML-2. PWD's Financial Stability Plan sets forth PWD's proposals to target increased debt service coverage, increase the portion of capital construction funded through current customer payments (i.e., "pay-as-you-go" or "paygo" capital spending), and to maintain specified levels of reserves in its Rate Stabilization Fund and Residual Fund throughout the rate increase period. These proposals are incorporated into PWD's rate request, and are discussed at more length in Section VIII of this Brief.

IV. APPLICABLE STANDARDS

In evaluating PWD's requested rate increase, the Board must ensure that applicable substantive and procedural legal standards for utility rate making are followed. As discussed more fully below, central to this analysis is the requirement that rates and charges satisfy the constitutionally-based standard of "just and reasonable" rates, which is expressly incorporated into PWD ratemaking. Furthermore, the Board must ensure that the due process standards applicable to Local Agency Adjudications are satisfied, including the requirement that the Board lack even the appearance of potential bias or lack of impartiality. In addition, the Philadelphia

Code specifies that the Board's decision must be "in accordance with sound utility rate making practices" as well as "consistent with industry standards."

A. Legal Standards for Rates

The paramount standard for all utility ratemaking is the constitutionally-based "just and reasonable" standard. Although not an arithmetic formula, the just and reasonable standard requires a rate making body to conduct a careful weighing of the interest of customers in affordable rates against the financial needs of the utility. This strict legal standard reflects ultimately that utility rates that are not appropriately balanced can become confiscatory, depriving customers of interests in property if they cannot maintain service at rates that are too high, and depriving utilities of revenues necessary to maintain property dedicated to public service if rates are too low. Accordingly, the rate maker must balance the interests of customers in receiving efficient utility service at the lowest possible rates, and the interest of the utility in obtaining sufficient revenues to conduct its operations, maintain its financial integrity and achieve access to financial markets for revenue bonds at reasonable rates. Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 607 (1944). This constitutionally-based standard is applicable to a municipally owned utility like PWD with the same force and effect as it is to an investor owned utility. American Aniline Products, Inc., v. Lock Haven, 135 A. 726 (Pa. 1927). Moreover, in Pennsylvania, it has been conclusively established that no applicable constitutional requirement is more exacting than the requirement of "just and reasonable" rates, and this requirement applies in the context of municipal rate making (it is not limited to ratemaking at the Pennsylvania Public Utility Commission (PUC)). See Public Advocate v.

Philadelphia Gas Commission, 674 A.2d 1056, 1061 (Pa. 1996).⁹ Moreover, City Council, in establishing the Board, specifically mandated that “rates and charges shall be just, reasonable and nondiscriminatory,” thereby expressly incorporating the constitutionally-based just and reasonable standard. See Phila. Code § 13-101(4)(d).

In weighing the interests of customers and the utility, the Board must necessarily consider all concerns raised regarding the quality of PWD’s customer service. Pennsylvania and federal courts have recognized, in the context of setting just and reasonable rates, that the impacts upon customer service, and the quality of service provided, are within the scope of regulatory consideration. Moreover, neither statutory law nor the Constitution imposes a unilateral obligation on customers to pay for the cost of service without a reciprocal obligation of the utility to satisfy standards of reasonable service. See Nat’l Utilities, Inc. v. Pa. PUC, 709 A.2d 972, 979 (Pa. Commw. Ct. 1998), following D.C. Transit Sys., Inc. v. Washington Metro. Area Transit Com’n, 466 F.2d 394, 411 (D.C. Cir. 1972), *cert denied*.

In addition to the judicially established authority and obligation of the Board to consider concerns regarding service, City Council has expressly articulated that part of the Board’s inquiry is related to service. The Ordinance establishing the Board (codified in Philadelphia Code Chapter 13-100 governing Water, Sewer and Storm Water Rates) provides that the Board shall fully consider the Water Department’s Financial Stability Plan, (Phila. Code § 13-101(4)(b)(i)), which Plan shall identify “utility *service* benchmarks,” (Phila. Code § 13-101(2)). PWD reports the significance of customer service in its Financial Stability Plan: “In fulfilling its mission, the utility seeks to be customer-focused, delivering services in a fair, equitable, and cost-effective manner, with a commitment to public involvement.” PWD St. 2,

⁹ PGW became subject to PUC rate oversight as a result of the Natural Gas Choice and Competition Act in 1999, three years after the Pennsylvania Supreme Court decisively held that the “just and reasonable” standard applied to the municipally-owned PGW.

Sch. ML-2 at 2. Several clear customer service issues have been identified in the course of this proceeding and are thoroughly examined on the record as set forth more fully in Sections XII, XV and XVI; these are relevant to PWD and the Board, as they pertain to PWD's Financial Stability Plan. Much of the Public Advocate's consideration of these issues was undertaken in response to PWD claims, expressed in PWD's direct testimony, presented to the Board to inform it of PWD's views on customer service. Furthermore, as discussed fully below, the Public Advocate's customer service recommendations are directly tied to specific assumptions and calculations affecting rates and charges in this 2018 Rate Case. Clearly, these service-related issues are within the scope of the determination of just and reasonable rates and charges under the applicable legal standards applying to PWD ratemaking.

Satisfying the constitutionally-based "just and reasonable" standard requires a rate maker to base its decision on substantial evidence. The "substantial evidence" standard is a strict standard, resting squarely on the utility, which benefits from no presumption in its favor. Courts evaluating the application of the substantial evidence standard in administrative proceedings have clarified that the sufficiency of the evidence required is directly related to the nature and extent of the authority (i.e., rate increase) requested. Lansberry v. Pa. PUC, 578 A.2d 600, 603 (1990). In the context of PWD's request to increase rates to recover an additional \$116 million over three fiscal years, this standard is high.

The substantial evidence standard is explicitly made applicable to the Board's rate determination pursuant to Pennsylvania's Administrative Agency Law. See 2 Pa. C.S. §754.¹⁰ Accordingly, PWD must prove each element underlying its rate increase request with substantial and legally credible evidence. Substantial evidence means "such relevant evidence as a

¹⁰ This conclusion is necessitated by Pennsylvania law as a result of the framework for ratemaking by the Board established pursuant to the Philadelphia Home Rule Charter and Philadelphia Code. See Section IV.B.

reasonable mind might accept as adequate to support a conclusion.” Phila. Gas Works v. Pa. PUC, 898 A.2d 671, 675 n.9 (Pa. Cwmlth. 2006); Motor Freight Exp. v. Pa. PUC, 121 A.2d 671 (Pa. Super. 1956) (internal citations omitted). This standard requires more than a mere trace of evidence or the suspicion of the existence of such a fact sought to be established. See Norfolk & Western Ry. Co. v. Pa. PUC, 413 A.2d 1037 (Pa. 1980). Although there is no precise formula which the Board must apply, the Board is required to utilize some reasonably scientific method in its rate determination. City of Johnstown v. Pa. PUC, 133 A.2d 246, 250 (Pa. Super. 1957). Moreover, pursuant to its own regulations, the Board “shall fully consider and give substantial weight” to the record and the report to be prepared by Hearing Officer Brockway. The Board must also incorporate (by reference or otherwise) the portions of the record supporting its conclusions. Board Reg., § II.10(a).

B. Due Process Standards for PWD Rate Case

Prior to and throughout the course of this 2018 Rate Case, the Public Advocate has maintained that the Board must, at a minimum, ensure that the due process rights of participants are observed. Primarily, the Public Advocate has expressed dismay that the Philadelphia City Treasurer (Ms. Rasheia Johnson) is poised to participate in deliberation and voting on a final decision regarding PWD’s request for increased rates and charges for FY 2019, FY 2020 and FY 2021.¹¹ The Public Advocate filed its Motion for Recusal of Ms. Rasheia Johnson and accompanying Memorandum of Law on April 6, 2018 (together, hereinafter, “Recusal Motion”). The Recusal Motion is incorporated herein by reference.¹² Thereafter, the Public Advocate filed its Motion for Entry of Order and Certification of Issues for Appeal (hereinafter, “Motion for

¹¹ See also Written Public Input of Jacquelyn Brown, May 25, 2018.

¹² The Public Advocate’s Recusal Motion may be accessed at: <https://beta.phila.gov/media/20180409105529/Verified-Motion-to-Recuse-R-Johnson-And-Memo-of-Law.pdf>

Appeal”), seeking permission to appeal to the Court of Common Pleas to verify that this 2018 Rate Case constitutes an adjudication and that the City Treasurer’s service on the Board violates the Philadelphia Home Rule Charter and the provisions of the Philadelphia Code establishing the Board. That Motion for Appeal is incorporated herein by reference.¹³

The Public Advocate maintains that the City Treasurer should be recused from participation in the 2018 Rate Case. As the Public Advocate has explained, City Council’s establishment of an independent rate-making body, charged with rendering an appealable final determination, constitutes an adjudication under Pennsylvania Law. As a result, the substantial body of due process case law in Pennsylvania requires that the Board must not only be impartial, but must avoid even the appearance of bias or impropriety. The fundamental fairness of this 2018 Rate Case would be violated, and a significant due process violation actually realized, if the City Treasurer participates in the deliberation and voting on PWD proposed rates and charges. The City Treasurer’s clear obligations with respect to PWD financial matters, supported by the substantial evidence produced in this 2018 Rate Case,¹⁴ indicates not only the appearance of potential bias, but the actual existence of likely conflicts of interest that violate the due process rights of parties challenging the requested rate increases. Although PWD and the Board’s counsel disagree, their bases for doing so stem from fundamentally unsupportable readings of prior case law, as well as abandonment of well-settled principles of statutory interpretation.

¹³ The Public Advocate’s Motion for Appeal may be accessed at: <https://beta.phila.gov/media/20180426113231/MotionforOrderandCertificationofIssuesforAppealFILED.pdf>

¹⁴ As set forth in the Public Advocate’s Recusal Motion, obtaining this substantial evidence has been impeded at each conceivable turn by PWD, which has utilized delay tactics and insufficient responses to obstruct discovery of the direct and indirect role of the City Treasurer with respect to PWD financial matters. Remarkably, PWD has not even provided meaningful responses to the Hearing Officer’s discovery directed to specific PWD personnel. Instead, PWD has submitted responses prepared by financial advisors retained and compensated by the City Treasurer’s Office, attempting to further obfuscate the clear picture of the City Treasurer’s conflicted status. See HO-I-1.

Without restating all of the arguments set forth in the Public Advocate’s Recusal Motion and Motion for Appeal, which are expressly incorporated by reference herein, several additional observations must be made at this time.

First, the Board previously held, in explicit language in its determination in the 2016 Rate Case that its decision was appealable. See 2016 Rate Case Determination at 13 (“Any part[y] to the proceedings of the Board affected by the Rate Report may appeal to the Court of Common Pleas in Philadelphia. Appeals shall be made within thirty (30) days of the filing of the Board’s Rate Report with the Department of Records.”). This statement, which largely incorporates the language of the Philadelphia Code, was correct then, and it is correct in this 2018 Rate Case. Indeed, for the Board to now contend that its determinations are not appealable would reopen its determination in the 2016 Rate Case to possible challenge through an original jurisdiction action in equity.¹⁵ More importantly, if the Board’s final determination in this 2018 Rate Case seeks to undermine the appeal rights of participants, the Board would be in direct violation of the express language of the Philadelphia Code, requiring that: “Any party to the proceedings of the Board affected by the Rate Report may appeal to the Court of Common Pleas in Philadelphia. Appeals shall be made within thirty (30) days of the filing of the Board’s Rate Report with the Department of Records.” Phila. Code § 13-101(9). Disregarding this provision of law has ramifications under the Pennsylvania Constitution. Indeed, the Pennsylvania constitution specifically states “there shall be such other rights of appeal as may be provided by law.” PA. CONST. art. V, §9.

¹⁵ The Board’s counsel appears to contend that the language of the Philadelphia Code, expressly authorizing an appeal within 30 days, simply sets a timeline for any possible legal challenge, but does not authorize an actual “appeal.” No legal support for this proposition was provided and none is available. Such an interpretation would only be possible if Philadelphia City Council had the authority, by ordinance, to override the Commonwealth Judicial Code, and the statute of limitations imposed thereby. There is no circumstance in which this theory could be proven to be correct.

Counsel for PWD and for the Rate Board continue to rely upon a seriously flawed interpretation of Public Advocate v. Brunwasser, 22 A.3d 261 (Pa. Commw. Ct. 2011). In short, they contend that Brunwasser case restated well-settled law and so applies to the Rate Board’s determination in this 2018 Rate Case. Neither contention is true. The Commonwealth Court specifically recognized that its review of the appealability of a PWD rate determination had not been previously addressed, and so was a matter of first impression.¹⁶ More importantly, however, the Commonwealth Court specifically addressed its holding solely to a “PWD rate determination” – in other words, the holding in Brunwasser only applies to a determination of rates and charges made by PWD. As discussed at length in the Recusal Motion, the amendment to Philadelphia’s Home Rule Charter and the establishment of an independent rate-making body, the Rate Board, fundamentally changes the factual and legal analysis conducted in the Brunwasser case. Indeed, the Commonwealth Court in Brunwasser, in determining that PWD rate increases were not appealable specifically relied upon the absence of any statute or ordinance authorizing an appeal. Both PWD and the Rate Board’s counsel give no consideration to the effects of the changes implemented by City Council, and their impact on the due process analysis that must now apply to rate determinations before the Rate Board.

Counsel for the Rate Board contends that City Council did not specifically mean to provide for a right of appeal, notwithstanding the express language of the ordinance establishing the Rate Board. That interpretation is unsupportable under rules of statutory construction,¹⁷ which apply not only to Pennsylvania Statutes, but to ordinances of Pennsylvania municipalities, like Philadelphia. See City of Philadelphia v. Litvin, 211 Pa. Super. 204, 209, 235 A.2d 157, 159

¹⁶ Brunwasser, 22 A.3d 268-69 (“Accordingly, neither CEPA I nor CEPA II resolve the question that is now before the Court—namely, whether challenges to PWD rate determinations lie in the trial court’s appellate jurisdiction. We, therefore, must address the issue.”)

¹⁷ See 1 Pa. C.S §§1901-1991 (“Rules of Construction”).

(1967) (“In construing a city ordinance, the same rules are applied as those which govern the construction of statutes.”). According to Pennsylvania law, the object of statutory interpretation and construction is to ascertain and effect the intent of the legislature. 2 Pa. C.S. §1921(a). In ascertaining that intent, the law provides: “when the words of a statute are clear and free from all ambiguity, the letter of it is not to be disregarded under the pretext of pursuing its spirit.” 2 Pa. C.S. §1921(b). It is only in the event that words are not explicit that legislative history should be consulted to ascertain meaning. 2 Pa. C.S. §1921(c)(7).

Putting aside that the language utilized by Philadelphia City Council explicitly authorizes an appeal within 30 days, and identifies the appropriate forum for a Local Agency Appeal under Pennsylvania law, the legislative history clearly does not support the Rate Board counsel’s contention that City Council did not intend to authorize an “appeal.”¹⁸ Primarily, this is because the Rate Board’s counsel did not rely upon the legislative history to Bill No 130251, which established the Rate Board. Instead, he relied upon Committee Hearings regarding Bill No. 120177 and Resolution No. 120188, which authorized the change to the Home Rule Charter and the subsequent creation, by separate ordinance, of the Rate Board. At the time Bill No. 120177 and Resolution No. 120188 were under consideration, in April 2012, City Council clearly expressed its intent to work with the City Administration and other stakeholders to determine how the Rate Board would be comprised.¹⁹ It was not until Bill No. 130251 was introduced, almost a full year later, on April 4, 2013, that the composition of the Rate Board had been given significant thought. Notably, that Ordinance, as introduced, included the specific right of appeal

¹⁸ Letter from Daniel W. Cantu-Herzler to Rasheia R. Johnson (April 17, 2019) at 3-4, available at: <https://beta.phila.gov/media/20180419112630/DWCHtoJohnson20180417recusaladvice.pdf>

¹⁹ See Remarks of Council President Clark Hearing of Committee on Law and Government (April 19, 2012), at 70:4-13 (“I talked to members of the Administration, expressed at least from a personal perspective -- because I can't speak for other members -- a willingness to work on legislation that we can work together on that will put people at a comfort level, but have the necessary transparency and the necessary process in place that whenever we do what we do, people can have some level of comfort.”).

that is incorporated in the Philadelphia Code to this day. There is no legislative history on Bill No. 130251 that supports the view of the Rate Board's counsel, nor that calls into question City Council's clear and unambiguous intent that Board rate determinations be appealable.

Finally, to the extent PWD and the Rate Board's counsel rely upon case law developed regarding the framework of quasi-legislative ratemaking that applied prior to the creation of the Rate Board, that reliance is misplaced.²⁰ Fundamentally, that interpretation disregards the fact that PWD files its request for an increase in rates and charges, by petition,²¹ and must adhere to the determination of an independent board. It is clearly erroneous to assert that no party's rights or obligations are determined by the Board when, in fact, PWD has commenced this proceeding for the sole purpose of seeking the right to charge increased rates to its customers. Conferring that right upon PWD triggers a corresponding obligation on the part of customers to pay for higher rates and charges. Again, for purposes of Pennsylvania law, it is essential to recall the legal definition of "adjudication" is as follows:

Any final order, decree, decision, determination or ruling by an agency affecting *personal or property rights*, privileges, immunities, duties, *liabilities or obligations* of any or all of the parties to the proceeding in which the adjudication is made. 2 Pa. C.S. § 101 (emphasis added).

Under this definition from Pennsylvania's Local Agency Law, there is no question that the Board's rate determination constitutes an adjudication of PWD's right to charge higher rates, as well as the rights and obligations of participating customers concerning PWD's charging of those rates.

The Public Advocate has given careful thought to whether there is any matter that is raised before the Board in this proceeding regarding which the City Treasurer's vote would be

²⁰ See Letter from Daniel W. Cantu-Herzler to Rasheia R. Johnson (April 17, 2019) at 2-4, available at: <https://beta.phila.gov/media/20180419112630/DWCHtoJohnson20180417recusaladvice.pdf>

²¹ Phila. Board of Ethics, General Counsel Opinion No. 2015-501 (Jan. 28, 2015) at 3 (explaining that PWD initiates the process for a rate change by filing a petition with the Rate Board.).

permissible. As the review process in this proceeding has demonstrated, changes to assumptions regarding revenues and O&M expenses directly impact upon the calculation of coverage in the PWD rate model. 5/14 Tr. at 141:7-143:8; 145:10-23. PWD asserts that coverage is essential to its credit ratings, and lists maintaining and improving coverage as one of the key goals of its Financial Stability Plan. See, e.g., PWD St. 2 at 15:17-22; 17:20-18:2. Because one of the City Treasurer's core functions and express obligations is to maintain or improve credit ratings of PWD, any adjustment to revenues or expenses presents a nexus to coverage, and to the express functions of the City Treasurer. See Recusal Motion; PA-I-1 through PA-I-8. Similarly, PWD asserts that increasing current customer contributions toward capital expenditures, so-called "paygo," and maintaining specified levels of reserves are essential to maintaining and improving its credit rating. See PWD St. 2, Sch. ML-6 (Memorandum from Financial Advisory) at 4-5. Accordingly, the City Treasurer's participation in voting on PWD's Financial Stability Plan would create the clear appearance of bias, and demonstrate possible actual bias, given the City Treasurer's obligations regarding PWD credit ratings, custody of reserves, and investment policies with respect to those reserves. Additionally, PWD asserts that the credit rating agencies are reassured by, and take into account PWD's TAP program when assessing the affordability of rates and charges, thereby suggesting that maintaining the TAP program is also a credit-positive for PWD. 5/15 Tr. at 82:16-83-3. As a result, given the City Treasurer's obligations regarding PWD credit ratings, it would be impermissible for the City Treasurer to participate in deliberations or voting regarding the proposed TAP Rider and adjustments to the implementation or operation of TAP. The Public Advocate has not located any issues within the purview of this rate determination for which the City Treasurer's service and fiduciary relationship with PWD imposes anything less than an absolute requirement of recusal. The Board should not permit the

City Treasurer to vote on any aspects of this rate proceeding, as doing so would compromise the integrity of the Board, demonstrating clear potential for and possible actual bias, which is impermissible in this 2018 Rate Case.

C. Sound Utility Rate Making Practices and Current Industry Standards

Pursuant to the Philadelphia Code, rates and charges shall be developed “in accordance with sound utility rate making practices.” In addition, pursuant to the Philadelphia Code, rates and charges shall be developed “consistent with current industry standards.” The Philadelphia Code is clear that current versions of the American Water Works Association (AWWA) Principles of Rates, Fees and Charges Manual (M1) and Water Environment Federation's Wastewater Financing & Charges for Wastewater Systems may be utilized to determine whether rates and charges are consistent with *industry standards*. The Philadelphia Code provides no further guidance regarding sources to utilize to determine sound utility ratemaking practices.

One fundamental standard for utility ratemaking, that must be considered by the Board, is the “known and measurable” standard, which requires all ratemaking claims to be based upon known, measurable and reasonable expenses. Office of Consumer Advocate v. City of Lancaster – Sewer Fund, 100 Pa. PUC 174 (2005). It is universally recognized among utility ratemaking authorities. The failure to support cost estimates in satisfaction of the “known and measurable standard” constitutes an evidentiary failure by the utility to demonstrate the necessity of increased rates. The known and measurable standard is recognized by the American Water Works Association as a fundamental standard in ratemaking. According to the AWWA:

The fact that expenses are not the same as those observed in past periods is not, by itself, evidence of unreasonable rates. Past cost trends may be modified to compensate for known and measurable cost changes in the future. Such projected costs are often used to establish a target revenue requirement for a test or base year for developing rates. These expected or projected costs will be analyzed to determine the proper user charge revenue requirements.

W. Corssmit (Ed.), Water Rates, Fees, and the Legal Environment, AWWA, 2nd Ed., 18 (emphasis added).

Moreover, the M1 recognizes that, for adjustments to reflect future costs beyond a historical test year, the known and measurable standard applies. See M1 (7th Ed.) at 12.

The M1 clearly indicates that the “known and measurable” principle applies to pro forma expenses utilizing a traditional test year. M1 (7th Ed.) at 12. However, it nowhere states that this standard ceases to apply for purposes of projected test years. 5/14 Tr. at 108:18-23. Rather, the AWWA utilizes different terminology, *functionally embodying the same concept*. The M1 requires that projected future expenses be either “known and measurable” or “well-considered estimates.” M1 (7th Ed.) at 12. Moreover, as set forth above, the AWWA’s Water Rates, Fees, and the Legal Environment clearly articulates that the known and measurable standard is used to *establish revenue requirements for a test year*, not simply to depart from a test year on a pro forma basis. Accordingly, the AWWA implicitly recognizes that the “known and measurable” standard applies to projecting revenue requirements, regardless of whether the utility sets rates on utility basis or cash needs basis. At a minimum, even substituting the M1’s language that such estimates be “well-considered,” it is fundamental to the determination of customer rates that such estimated expenditures satisfy a threshold level of reasonableness, demonstrating certainty that they will, in fact, occur.

Ultimately, Pennsylvania courts have determined that the “known and measurable” standard applies to a utility that sets rates on a cash basis. The Pennsylvania Supreme Court has decisively held that there is no basis, under Pennsylvania law, to distinguish between a generally accepted ratemaking principle because the utility is, or is not, municipally-owned.²² See Shirk v.

²² It should come as no surprise that the M1 advises readers to consult with legal counsel before a major decision or change concerning rates; the M1 is not a state-specific guide, nor a legal treatise on utility ratemaking. M1 (7th Ed.) at 255.

City of Lancaster, 169 A. 557, 562 (1933) (“In general, however, the business of supplying water by a municipality must be regarded and dealt with in the same manner as that of a private corporation. Should the supplying of water be determined to be a governmental function, inevitably there would follow endless confusion in the administration of the basic principles underlying the same business in the identical matter of rates, and also in other public and private relations which come before the courts.”) Accordingly, examining a rate request by PGW, a municipal utility which establishes rates according to a cash flow methodology substantially similar to PWD’s methodology,²³ the PUC determined, and the Commonwealth Court (the intermediate appellate court) upheld, that the known and measurable standard applies for purposes of forecasting future revenue requirements. Philadelphia Gas Works v. Pa. PUC, 2009 WL 9098313, at *5 (Pa. Commw. Ct. 2009) (rejecting five year forecast for purposes of setting rates because such forecast was not known and measurable; determining that lower level of revenue increase than requested was sufficient to satisfy all of the required elements of PGW’s cash flow rate method on a projected test year basis).

In Pennsylvania, regardless of what may be inferred from the M1 manual, the known and measurable standard applies by law to PWD ratemaking. Mr. Morgan correctly contends that “known and measurable” is the proper standard to apply in assessing PWD’s projected revenue requirements. As Mr. Morgan states:

It is also important that both adjusted and unadjusted test year data meet the widely-accepted regulatory principle of being “known and measurable”. To be considered as

²³ See, e.g., 52 Pa. Code §69.2702 (“The Commission is obligated under law to use the cash flow methodology to determine PGW’s just and reasonable rates. Included in that requirement is the subsidiary obligation to provide revenue allowances from rates adequate to cover its reasonable and prudent operating expenses, depreciation allowances and debt service, as well as sufficient margins to meet bond coverage requirements and other internally generated funds over and above its bond coverage requirements, as the Commission deems appropriate and in the public interest for purposes such as capital improvements, retirement of debt and working capital.”).

“known and measurable”, the probability that the revenue or cost will change must be certain and the amount of the change must be known with certainty.

PA St. 1 at 9:6-10.

V. SCOPE OF THE BOARD’S AUTHORITY

The Philadelphia Code provides for the appointment of an “independent rate-making body” vested with the power to “fix and regulate rates and charges for supplying water, sewer and storm water service for accounts and properties located in the City of Philadelphia... without further authorization of Council.” Phila. Code § 13-101(3). When the Water Department petitions for an increase in rates and charges, the Board is required to conduct “open and transparent processes and procedures for public input and comment” and to convene rate hearings according to its regulations. Phila. Code § 13-101(3)(e).

In the course of this 2018 Rate Case, the question has arisen whether the Board has the authority to take certain actions regarding customer service provided, or failing to be provided, by PWD. PWD submitted a Motion in Limine, seeking to strike certain testimony of the Public Advocate’s witness, Roger D. Colton, contending that such testimony is “beyond the scope of a rate proceeding before the Philadelphia Water, Sewer and Storm Water Rate Board.” PWD Motion in Limine at 1. PWD’s motion, and the reasons why it must be denied, are addressed in Section VI and the subject matter of such motion is discussed more fully in Sections XII and XVI. In support of its motion, PWD contends that the Board lacks the power to direct how the Water Department (and WRB) provides service. Id. at ¶12. PWD’s motion relies upon the Memorandum of the City Solicitor in the 2016 Rate Case, which was accepted by the Board. The Advocate submits that the Memorandum of the City Solicitor propounded an overly narrow view of the Board’s authority, which is not supported by the language of the Rate Board ordinance. Indeed, that Memorandum states that the Board “has no authority beyond its mandate

to ‘fix and set rates and charges’ and to ‘approve, modify or reject the [Water Department’s] proposed rates and charges.’ 2016 Rate Case Determination at 46. In reaching this conclusion, the City Solicitor disregarded specific language of the Philadelphia Code conferring broader powers on the Board.

In Pennsylvania, as elsewhere, the law recognizes that administrative agencies have both express and implied powers. In addition to those powers explicitly conferred by statute, an administrative agency has any powers implicitly necessary to accomplish its express mandate. Our Lady of Victory Catholic Church v. Department of Human Services, 153 A.3d 1124, 1130 (Pa. Commw. 2016). When an administrative agency is vested with a general grant of authority by statute, its implicit powers are interpreted more expansively. See, e.g., Burger v. Bd. of School Directors of McGuffey School District, 839 A.2d 1055, 1061-62 (Pa. 2003) (holding that school boards are vested with the implied power to implement interim suspensions of school officials, pursuant to a statutory grant of “all necessary powers to enable them to carry out [the School Code’s] provisions”); see also Commonwealth v. Beam, 788 A.2d 492, 496 (Pa. 20002) (holding that the Department of Transportation had the implied authority to bring an action in equity against an unlicensed airport in light of a statutory provision that grants it the power to “promulgate and enforce regulations as necessary to execute the powers vested in it by this part and other laws relating to aviation, airports and air safety within this Commonwealth”).

City Council has vested the Rate Board with such additional authority as may be necessary to ensure that the rates and charges it approves are actually implemented. By express delegation, City Council conferred upon the Board the power to “fix and regulate rates and charges for supplying water.” Philadelphia Code § 13-101(3) (emphasis added). Contrary to

the City Solicitor's Memorandum, the Board's authority is not limited to "fixing and setting" rates and charges, but includes the additional power to "regulate" rates and charges.

That the power to "fix" rates and charges and the power to "regulate" rates and charges are two separate powers is an inescapable consequence of the Philadelphia Home Rule Charter framework. Under the Charter, each City department has the authority to promulgate such regulations "as may be necessary and appropriate in the exercise of *its* powers and performance of *its* duties." Phila. Charter §8-407. Thus, the Charter-based regulatory power of each department is limited to those powers and duties performed by the department. The power expressly conferred on the Board, the power to "regulate" rates and charges for water service cannot refer to the Board's Charter-based power to promulgate its own regulations. Because rates and charges are fixed by the Board, but billed to customers by PWD, the regulation of those rates and charges necessarily constitutes an additional power, vested in the Board by City Council ordinance, to exercise further authority to ensure those rates and charges are actually implemented.

The statutory canon of surplusage requires that, whenever possible, "each word in a statutory provision be given meaning." See In re Employees of Student Services, Inc., 432 A.2d 189, 195 (Pa. 1981). Applying this statutory canon in this context requires that "regulate" be interpreted as having a meaning distinct from "fix." The way "fix" and "regulate" are used in Title 13 of the Philadelphia Code countervails against interpreting the words as subcomponents of an indivisible term of art. While "regulate" never appears in the absence of "fix" in Section 13-101 of the Philadelphia Code, "fix" is not always accompanied by its partner. For example, the Code provides that "[i]n *fixing rates and charges* the Board shall recognize the importance of financial stability to customers and fully consider the Water Department's Stability Plan."

Philadelphia Code §13-101(4)(i) (emphasis added). If “fix and regulate” were a single, undivided term of art, then “regulating” would have appeared alongside “fixing” in this section. See 1. Pa. C.S. §1903(a) (“Words and phrases shall be construed according to the rules of grammar.”). Because it does not, “regulate” must have a meaning distinct from “fix.”

The word “regulate” implies a broad grant of authority to the Rate Board. When interpreting a statute, words and phrases must be construed “according to their common and approved usage.” 1 Pa. C.S. §1903(a). A court can turn to a dictionary to ascertain the common and approved usage of a word. St. Ignatius Nursing Home v. Department of Public Welfare, 918 A.2d 838, 845 (Pa. Commw. Ct. 2007). Indeed, “regulation” is defined as “the act or process of controlling by rule or restriction” or “a rule or order, having legal force, issued by an administrative agency or a local government.”²⁴ Accordingly, the Board’s authority to regulate includes the act or process of controlling, as well as the issuance of rules and orders having legal force. The authority to control rates, and issue orders concerning rates, must be interpreted as a grant of broad power to the Rate Board, in the vein of the Burger and Beam cases discussed above, to take all necessary action to effectuate the purpose of its statutory mandate.

The Rate Board has the implicit power to require changes in PWD practices and customer service to the extent such changes are necessary to effectuate the express statutory mandates imposed upon the Board, i.e., to “fix and regulate” rates and charges. Moreover, in fixing rates, the Rate Board is required to “recognize the importance of financial stability *to customers*.” Philadelphia Code § 13-101(4)(i) (emphasis added). Clearly, Council intended that PWD practices not undermine the financial stability of customers, or create or exacerbate financial instability for customers. The Board is clearly authorized in the context of a rate determination to take into account the adequacy (or inadequacy) of PWD’s efforts to implement and deliver

²⁴ See Black’s Law Dictionary, 1289 (7th Ed. 1999) (defining “regulation”).

approved rates, as PWD's failure to do so contravenes the Board's authority and can contribute to customer financial instability. Cf. 5/11 Tr. at 18:8-19:24 (PWD expressing no opinion about the Board's authority to act on erroneous rates). As the "provisions of a statute shall be liberally construed to effect their objects and to promote justice" (1 Pa.C.S. § 1928(c)),²⁵ the Rate Board's power to regulate rates must be construed to grant it the implicit power to make determinations regarding administrative changes to the extent necessary to accomplish the Board's express purposes.

VI. PWD'S MOTION IN LIMINE MUST BE DENIED

As mentioned above, PWD submitted a Motion in Limine, seeking to strike certain testimony of the Public Advocate's witness, Roger D. Colton, contending that such testimony is "beyond the scope of a rate proceeding before the Philadelphia Water, Sewer and Storm Water Rate Board." PWD Motion in Limine, at 1. PWD contends that significant portions of Mr. Colton's testimony should be stricken from the record, specifically those sections concerning (1) the structure and operation of PWD's Tiered Assistance Program (TAP), and (2) PWD's unfair and deceptive shutoff notice practices. In total, PWD's Motion in Limine seeks to strike approximately 60 pages of Mr. Colton's testimony. PWD's Motion in Limine should be denied for multiple reasons.

As a threshold matter, granting PWD's Motion in Limine would be contrary to the purposes of this evidentiary proceeding and improperly restrict the Public Advocate's ability to present its case and rebut PWD evidence.

While the ability to restrict interrogation at trial makes the in limine order a powerful weapon, such power also makes it a potentially dangerous one. Consequently, before granting a motion in limine, the courts must be certain that such action will not unduly restrict the opposing party's presentation of its case. An order in limine should only be

²⁵ As noted above, rules of statutory construction, like 1 Pa. C.S. §1928(c), are applicable to municipal ordinances like the Philadelphia Code.

used as a shield and never to gag the truth and permit other evidence to mislead the jury because the order prevents such evidence from being rebutted.

75 Am. Jur. 2d Trial § 44.

Granting PWD's Motion in Limine would have the unacceptable consequence of "gagging the truth" and preventing PWD's own evidence from being subject to rebuttal. That would be fundamentally unfair. PWD's own submission, first in its Advance Notice and then in its Formal Notice filings, has sought to introduce evidence and testimony concerning customer affairs and topics to which the Public Advocate is entitled to respond. The Direct Testimony of Joanne Dahme on behalf of the Philadelphia Water Department contains as one of its core purposes "describ[ing] the outreach undertaken by the City for the Tiered Assistance Program." PWD St. 5 at 1. This testimony goes at length into the steps PWD has taken in its so-called "comprehensive campaign" dedicated to TAP education and public engagement. Similarly, the Direct Testimony of Michelle L. Bethel and RaVonne A. Muhammad on behalf of the Water Department state:

The purpose of our testimony is to describe WRB and its role related to billing, accounting and collection activities for water and wastewater services. We will also discuss the Tiered Assistance Program ("TAP") and other customer assistance and customer service programs that are administered by WRB.

PWD St. 7 at 2.

Furthermore, PWD's Motion in Limine was filed three days after PWD submitted its rebuttal testimony, in which PWD did in fact respond, at least in part, to Mr. Colton's factual analysis²⁶ regarding the following:

- Overcomplexity of the TAP Application. PWD St. 4R at 3:14-4:17.

²⁶ As discussed during the technical hearings, PWD's rebuttal testimony contained multiple statements identified as the position of PWD's witnesses, but in reality reflecting legal opinion the witnesses were admittedly incompetent to proffer. There is a serious question regarding the weight to be afforded PWD's rebuttal testimony, especially to the extent it reflects the opinions of PWD's lawyers.

- Customer harms from unreasonable delays in processing TAP applications. PWD St. 4R at 5:14-6:24.
- Retroactive adjustments to TAP bills due to delay in approval. PWD St. 4R at 7:1-7:13.
- Stays of enforcement, including liens on TAP customer properties. PWD St. 4R at 7:15-8:10.
- Determination of the most affordable bill option. PWD St. 4R at 8:12-8:24.
- Arrearage forgiveness. PWD St. 4R at 9:1-9:17; PWD St. 5R at 8:20-9:3.
- Outreach and intake methods (including LEP customer issues). PWD St. 4R at 9:9-11:16.
- The fairness and deceptiveness of PWD shut off notices. PWD St. 4R at 13:20-14:23.

Accordingly, the Hearing Officer has a robust record of opinions from both sides, PWD and the Public Advocate, regarding the majority of the issues PWD identified as subject to its Motion in Limine, and the Hearing Officer should not exclude any of those factual statements from the record. It cannot reasonably be argued that PWD can introduce evidence about its TAP outreach and administration processes, as well as collection practices, without other parties being permitted to examine the reasonableness and efficiency of those practices. Indeed, PWD believed its own position on those practices and processes were so important as to be the subjects of two separate filed statements in both Advance and Formal Notices, indicating that it wanted those subjects to be examined by the Board in this proceeding, in furtherance of its request for additional rates and charges! To suggest the Public Advocate cannot examine the factual basis for PWD's own testimony and respond with its own position is fundamentally incorrect and would restrict the Board to a record which unreasonably shields PWD's submission from criticism or examination.

Furthermore, central to the Board's determination of PWD rates and charges is the Board's reliance upon a thorough record, developed under the oversight of Hearing Officer Brockway. Indeed, City Council expressly requires that this 2018 Rate Case be conducted in an "open and transparent" manner, explicitly requiring that the public be heard in any rate case.

Contrary to this obligation, PWD appears to assert that the Board must place its fingers in its ears every time any participant or customer raises issues about PWD service. This is, of course, incorrect substantively and procedurally.

In the context of establishing rates and charges, longstanding legal precedent supports the Board's power not only to take into consideration issues regarding customer service, but also to act upon them in the process of setting rates. Federal and state courts have consistently upheld utility commissions' decisions in favor of "[p]reconditions to fare increases designed to assure quality of service." D.C. Transit Sys., Inc. v. Washington Metro. Area Transit Comm'n, 466 F.2d 394, 422 (D.C. Cir. 1972), *cert denied* ("preconditioning further consideration of a fare increase upon remedial steps by Transit is the only method of assuring that the public interest will be protected."). In Pennsylvania, the Commonwealth Court applied the reasoning of D.C. Transit to uphold a Pennsylvania Utility Commission's decision denying a regional water utility a rate increase due to its poor customer service. Nat'l Utilities, Inc. v. Pa. PUC, 709 A.2d 972, 979 (Pa. Commw. Ct. 1998).

Equally important as the Board's legal authorization to act upon service-related matters in setting rates is that in establishing the Board, and mandating that it consider significant public input, City Council expressed its intent that the Board understand and take into account the very tangible, lasting, and personal impact that higher rates and charges have on Philadelphia families. Indeed, in acting upon PWD's request for increased rates in the 2016 Rate Case, the Board considered public input statements concerning the difficulty of obtaining service, and mandated that PWD undertake additional reporting obligations. See 2016 Rate Case Determination at 40. PWD complied with that requirement. It should go without saying that those who will have to pay more for PWD services should have a voice, unlimited by technical rate-making expertise, to

indicate what their needs are and how they are or are not being met. But more importantly, in the context of setting higher rates, those voices, asking for better service, better communication, quicker access to assistance, and fairer treatment are fundamental, core concerns that should be embraced by the Board (and PWD). PWD does not exist for the sole purpose of pumping water to each customer connected to its mains. It exists to serve those customers, on reasonable terms and conditions, and the quality of service is and must always be an item of inquiry in any rate proceeding.

PWD acknowledged, in its own testimony, the importance to the Board of considering how it is implementing TAP and what practices it undertakes to collect revenues from customers. The Public Advocate's responsive testimony, concerning TAP administration and collection-related shut-off notices, directly addresses with appropriate evidence the standard according to which PWD seeks to be judged. Granting PWD's Motion in Limine would impermissibly prevent the Public Advocate from advancing rate-related changes, concerning the availability of TAP rates and the amount of miscellaneous charges that PWD seeks to increase in this proceeding. Both of these inquiries are discussed more fully below.

Finally, as discussed more fully below, PWD fundamentally mischaracterizes Mr. Colton's testimony, asserting that it is not relevant to granting or denying PWD's proposed rate increase and not reasonably part of the Public Advocate's case regarding the proposed rate increase. Regarding TAP administration, Mr. Colton makes multiple recommendations, which are indeed tied directly to rates and charges. First and foremost, TAP establishes income-based rates for enrolled participants, which are determined according to calculations approved by the Board in the 2016 Rate Case. Mr. Colton's recommendations relate directly to PWD's administration of rates, and the fundamental need to ensure that, as the law requires, service is

provided on reasonable terms to all Philadelphians willing to pay the rates fixed by the Board for the service and comply with PWD rules and regulations.²⁷ Furthermore, Mr. Colton has recommended that PWD's recovery of TAP administrative costs be limited to 10% of program costs. This is a rate recommendation, made in this case, for the purpose of limiting PWD's cost recovery to reasonable amounts. Finally, as discussed below, PWD's shut off notice practices are directly relevant to PWD's proposal to increase the miscellaneous charge associated with restoring service after non-payment shut-off. The Public Advocate recommends the Board approve no increase to that charge at this time, as described below.

Contrary to PWD's position, the scope of this proceeding is not so narrow as PWD would have the Board believe. The Board has both the authority to "fix" rates and charges (including the extent to which those rates compensate for administrative expenses) and to "regulate" rates and charges (e.g., to make determinations, to the extent reasonably necessary, regarding PWD's noncompliance with prior Board rate determinations). Ultimately, the reasonableness of PWD service is an appropriate matter for thorough and careful examination in the context of a rate making proceeding. Virtually all of the in-person public input testimony raised concerns about the extent to which PWD was actually meeting the customer service needs of PWD customers. The courts have viewed this examination as fundamental to a rate-making authority and even upheld limitations on the recovery of rates and charges, when customer service falls below acceptable standards. Mr. Colton's testimony is, in all parts, directly relevant to multiple considerations before the Board in this proceeding. PWD's Motion in Limine should be denied.

²⁷ See, e.g., 64 A. Jur. 2d Public Utilities §13; Nolte v. City of Olympia, 982 P.2d 659, 667 (Wash. Ct. App. 1999) (as exclusive provider of water and sewer service, city owes public duty to serve all within service area subject to reasonable conditions as allowed by law).

VII. THE BOARD SHOULD LIMIT ITS CONSIDERATION TO A TWO-YEAR RATE PERIOD

As discussed above, PWD seeks to implement three stepped rate increases over FY 2019, 2020 and 2021, which would increase an average residential customer's rates by approximately 11% over current rates. As Mr. Morgan explains:

The Department has chosen a three-year rate period (FY 2019-FY2021) for the rates it requests to be approved in this proceeding. The reason that the Department provides for the use of the three-year period is that the AWWA's "Principles of Water Rates, Fees, and Charges Manual of Water Supply M1" (the "AWWA Manual") acknowledges that government-owned utilities may use multi-year rate periods and may phase in rates over the multi-year rate period. The Department also cites the cost of rate case proceedings and administrative ease as reasons for proposing the three year rate plan.

However, I believe the three-year rate plan is not a reasonable approach to use for determining PWD's rates because, as I will explain later, PWD has demonstrated an inability to accurately forecast its cost of service for ratemaking purposes. The Department has consistently forecasted revenues on the low side and expenses on the high side. A contributing factor to the inaccurate forecasts is PWD's lack of adherence to accepted ratemaking practices or standards in developing its cost of service. The consequence of this is that ratepayers pay rates that are higher than needed, and those funds do not get refunded.

The nature of financial projections and forecasting is that the further out in time one projects the less accurate the forecast. Given that PWD's forecast is consistently inaccurate, the FY 2021 test year is too far out to be reliable for ratemaking purposes. Therefore, if the Board finds that a rate increase is justified, I recommend that the Board limit the rate increase to a two-year rate plan.

PA St. 1 at 6:15-7:10.

Mr. Morgan explains that PWD's lack of adherence to accepted ratemaking practices is demonstrated by its use of budgeting tools, which may be appropriate for planning, in place of appropriate and accepted ratemaking tools. See, e.g., PA St. 1 at 23 (regarding the use of the City's Five Year Plan for purposes of projecting power and gas costs). Furthermore, Mr. Morgan indicates that speculative, year-over-year increases in assumed interest on debt service are not known and measurable, and, when used in the past, have proven to be completely

incorrect. See, e.g., PA St. 1 at 27 (2016 Rate Case interest expense was projected to increase, but did not). Additionally, Mr. Morgan opines that it is standard ratemaking practice to normalize non-recurring expenditures, since they do not occur every year and failing to do so would result in over-collection. PA. St. 1 at 30:16-22. These examples constitute but a few examples of the clear evidence, upon which Mr. Morgan relies, to conclude that PWD does not adhere to accepted ratemaking practices. PWD's response does not adequately address the substance of these observations. Instead, PWD counters with the assertion that its reserves and credit rating demonstrate its ratemaking practices are not unacceptable. PWD St. 1R at 6:23-7:2; PWD Response to TR-21. This empty rhetoric notwithstanding, credit rating agencies do not set ratemaking standards and PWD's assertion cannot justify a projection of future revenue requirements that is certain to be wrong.

Mr. Morgan documents the consequences of PWD's overly conservative revenue and O&M projections. According to his analysis, over the six year period 2012-2017, the approved rates, which have been lower than PWD's proposed rates, have still understated revenues by \$68.576 million and overstated expenses by a total of \$73.336 million, as follows:

| | <u>Actual Results</u> | | | | | |
|---------------------------------------|--------------------------------------|--------------------|--------------------|-------------------|---|-------------------|
| | <u>Based upon FY 2013 Proceeding</u> | | | | <u>Based upon FY 2017-2018 Proceeding</u> | |
| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> |
| Water & Wastewater Service Rev. | \$ 568,378 | \$ 580,180 | \$ 617,225 | \$ 646,702 | \$ 654,351 | \$ 681,634 |
| Other Income | <u>23,303</u> | <u>26,550</u> | <u>25,794</u> | <u>30,144</u> | <u>24,555</u> | <u>39,011</u> |
| Total Revenues | <u>\$ 591,681</u> | <u>\$ 606,730</u> | <u>\$ 643,019</u> | <u>\$ 676,846</u> | <u>\$ 678,906</u> | <u>\$ 720,645</u> |
| | | | | | | |
| Total Operating Expense | <u>\$ 375,085</u> | <u>\$ 399,316</u> | <u>\$ 410,797</u> | <u>\$ 426,767</u> | <u>\$ 432,857</u> | <u>\$ 480,257</u> |
| | | | | | | |
| | <u>Rate Case Estimates</u> | | | | | |
| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> |
| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> |
| Water & Wastewater Service Rev. | \$ 565,396 | \$ 576,239 | \$ 615,631 | \$ 639,682 | \$ 644,102 | \$ 675,376 |
| Other Income | <u>18,924</u> | <u>22,293</u> | <u>22,143</u> | <u>22,457</u> | <u>23,829</u> | <u>23,178</u> |
| Total Revenues | <u>\$ 584,320</u> | <u>\$ 598,532</u> | <u>\$ 637,774</u> | <u>\$ 662,139</u> | <u>\$ 667,931</u> | <u>\$ 698,554</u> |
| | | | | | | |
| Total Operating Expense | <u>\$ 390,033</u> | <u>\$ 417,619</u> | <u>\$ 427,730</u> | <u>\$ 429,937</u> | <u>\$ 452,179</u> | <u>\$ 480,917</u> |
| | | | | | | |
| | <u>Actual minus Rate Case</u> | | | | | |
| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> |
| | <u>2012</u> | <u>2013</u> | <u>2014</u> | <u>2015</u> | <u>2016</u> | <u>2017</u> |
| Water & Wastewater Service Rev. | \$ 2,982 | \$ 3,941 | \$ 1,594 | \$ 7,020 | \$ 10,249 | \$ 6,258 |
| Other Income | <u>4,379</u> | <u>4,257</u> | <u>3,651</u> | <u>7,687</u> | <u>726</u> | <u>15,833</u> |
| Actual Revenues Over/(Under) Budget | <u>\$ 7,361</u> | <u>\$ 8,198</u> | <u>\$ 5,245</u> | <u>\$ 14,707</u> | <u>\$ 10,975</u> | <u>\$ 22,091</u> |
| | | | | | | |
| Operating Expense Over/(Under) Budget | <u>\$ (14,948)</u> | <u>\$ (18,303)</u> | <u>\$ (16,933)</u> | <u>\$ (3,170)</u> | <u>\$ (19,322)</u> | <u>\$ (660)</u> |

See PA St. 1 at 12:1-4.

During the technical hearings, the Public Advocate explored PWD's projections of revenue requirements for the prior two proceedings, as well as this 2018 Rate Case, as they have varied over time. This analysis confirms that the further out PWD projects its needs, the more unreliable its projections become. In its 2016 Rate Case, PWD projected a need for \$736.593 million in total service revenue in FY 2019. In this proceeding, a mere two years later, PWD estimates its total service revenue requirements as \$712.767 million. PA Hearing Ex. 7 at 41. PWD's 2016 Rate Case projection was approximately \$24 million off *in the third year*. Over a longer period, the disparity between PWD's projected and actual revenue requirements increases. In the 2012 rate proceeding (which sought increased rates for FY 2013-2016), PWD indicated that, at the time of filing, it was projecting a need for service revenue of \$731.252 million

beginning in FY 2017. PA Hearing Ex. 7 at 48. In fact, at the time PWD filed its 2016 Rate Case, PWD acknowledged that it's total estimate of necessary service revenue for FY 2017 had declined to \$675.376 million. PA Hearing Ex. 7 at 49. PWD's 2012 rate case projection was thus approximately \$56 million off *in the fifth year*.²⁸ PWD responded that the disparity can be attributed to "different assumptions" and "different levels of revenue increases in years prior" as well as the difference between PWD's financial plan and Board approved rates. 5/14 Tr. at 164:1-22. Indeed, this proves the Public Advocate's point: Assumptions about expenses and revenues should adjust over time, and take into account actual experience. The question is whether that period of time should be shorter or longer.

An additional consideration must be taken into account when examining this issue: the amount of PWD reserves. As discussed more fully below, PWD has historically overestimated its use of the Rate Stabilization Fund, projecting higher withdrawals than actually occur. Indeed, in the 2016 Rate Case, according to PWD's calculations adopted in the Board's Rate Determination, PWD projected spending down the Rate Stabilization fund to \$111 million by the end of FY 2018. Instead, PWD now projects having nearly \$190 million in that fund as of the end of FY 2018. Remarkably, in FY 2016, the year in which PWD requested \$106 million in rate increases, and received \$89.5 million increase in rates, PWD projected utilizing almost \$37 million of its Rate Stabilization Fund in order to stave off a higher rate increase. In fact, PWD withdrew less than \$2 million from that fund. Accordingly, even as PWD's projections of its revenue requirements become increasingly unreliable the farther out they are forecast, its projections regarding the expenditure of existing reserves to offset the need for higher rates are flawed from the outset, and remain understated throughout the rate period.

²⁸ It should also be noted that PWD did not implement a rate increase for FY 2016, despite PWD's projected need for an additional \$42.702 million in service revenues for that fiscal year. PA Hearing Ex. 7 at 48.

Although PWD's witnesses assert, in rebuttal, that PWD does adhere to accepted ratemaking practices and tout Black & Veatch's 50 years of involvement in developing the M1 and other practice manuals, they contend that the M1 and other rate manuals are intended as guidance, and that specific circumstances of the utility must also be considered.²⁹ PWD St. 1R at 6:4-11. Importantly, however, they concede that establishing cost-based rates is an important component in a well-managed and operated water utility, as specifically addressed in the M1 manual. 5/14 Tr. at 111:21-112:2. In addition, they agree that fairness and equity are cornerstones of the establishment of cost based rates. 5/14 Tr. at 112:3-6. Regarding PWD's specific circumstances, Black & Veatch contend that local law, including the provisions of the Rate Board Ordinance, codified at Philadelphia Code § 13-101, provide support for a three-year rate period, and that this is consistent with the AWWA's guidance regarding government-owned utilities. PWD St. 1R at 7:13-8:6.

Putting aside the fact that PWD's witnesses are totally incompetent to testify regarding matters of legal interpretation,³⁰ the provisions of the Philadelphia Code do not express any stronger support for a three-year rate period than they do for a two-year rate period, like the two-year rate period the Board approved in the 2016 Rate Case. During the technical hearings, PWD witnesses struggled to identify language in the Philadelphia Code that supports their view that the language "fully contemplates that rates will be established for a prospective period

²⁹ On rebuttal, PWD also claims (for the first time) that a three-year rate period should be approved in order to give PWD time to conduct a rate design study. This assertion is immaterial to this issue as well as unfounded. It is addressed more fully Section XI.E below.

³⁰ On several occasions, it became necessary during technical hearings, to clarify that large portions of PWD's rebuttal testimony was clearly informed by, if not written directly by, PWD counsel. Although certainly there are legal issues in this proceeding that should be explored, PWD's witnesses are not qualified to offer interpretations of law, and their rebuttal statements should be severely discounted. At a minimum, the Hearing Officer and/or Board should take notice of the fact that none of PWD's rebuttal witnesses were forthcoming in their testimony about relying upon legal advice, and take appropriate steps to ensure that future testimony does not omit this important information.

(reasonable number of years).” PWD St. 1R at 8:2-3. First, PWD witnesses indicated their opinion relied upon the language in Section 13-101(4)(b) that states that “rates and charges may provide for sufficient revenue to stabilize them over a reasonable number of years.” 5/14 Tr. at 77:19-78:19. However, the Public Advocate demonstrated that this language had been in place in the Philadelphia Code since prior to 1957. See PA Hearing Ex. 6 (1957 Ordinance, p. 259). Additionally, even after this language was in place for more than a decade, a prior water commissioner clearly explained that he anticipated needing to raise rates about every four years, and would do so in a single increase, rather than in stepped increases. PA Hearing Ex. 7 at 27; 5/14 Tr. at 81:15-84:6. Although PWD now argues that the Code clearly contemplates the three-year stepped rate increases it proposes, this interpretation is not supported by historical operations, and was not shared by prior PWD personnel overseeing rate increases closer in proximity to the inclusion of that language in the ordinance.

On redirect, PWD’s witnesses further muddled the waters, attempting to bolster their rebuttal with further commentary that relied upon interpretation of the Philadelphia Code. As PWD’s witness explained, after conferring with Black & Veatch (but not with PWD), she also relied upon Section 13-101(1)(c) of the Philadelphia, which merely states “[t]he reserves necessary to stabilize rates for 3, 4 and 5 year periods.” PA Hearing Ex. 7 at 22; 5/15 Tr. at 18:1-5. However, PWD’s witness confessed that she could not interpret that language. 5/15 Tr. at 35:16-19. Notably, Section 13-101(1), of which paragraph (c) is a part, pertains exclusively to an independent examination of operations that must be periodically conducted by qualified consultants who will advise City Council directly. No part of Section 13-101(1) (titled “Councilmanic Examination”) establishes any standard relevant to establishing rates and

charges, as those standards are separately articulated under Section 13-101(4) (titled “Standards for Rates and Charges”). See PA Hearing Ex. 7 at 22-23.

The Public Advocate submits that neither the M1 manual, nor the Philadelphia Code provide any greater or lesser support for a three-year rate proceeding than a two-year rate proceeding. The issue the Board must address is the increasing unreliability of PWD’s rate projections the farther out in time anticipated revenues and expenses are forecast. Given the clear demonstration that PWD will not be correct about the amount of revenues it needs from customers in FY 2021, based on the study performed for this 2018 Rate Case, the Board should, if it approves any increase or change in rates and charges, not exceed a two-year rate period.

VIII. PWD FINANCIAL STABILITY PLAN ASSUMPTIONS ARE UNREASONABLE AND SHOULD NOT BE ADOPTED BY THE BOARD IN SETTING RATES

As set forth in Section 13-101(4)(b)(i) of the Philadelphia Code, “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.” Furthermore, the Board is required to determine “the extent to which current revenues should fund capital expenditures and minimum levels of reserves to be maintained during the rate period.” Phila. Code §13-101(4)(b)(i). PWD’s Financial Stability Plan, or Financial Plan, was filed with the Direct Testimony of Melissa LaBuda on behalf of the Philadelphia Water Department, PWD Statement No. 2. PWD’s Financial Stability Plan hinges on three primary initiatives,³¹ which are presented to the Board in support of PWD’s request for higher rates: (1) PWD proposes to increase capital

³¹ Note that PWD’s Financial Stability Plan also includes PWD’s plan for strategic debt issuance. Assumptions regarding debt issuance expense and interest rates are separately discussed in this Brief. The majority of the considerations regarding debt service that the Board must focus on relate to the ongoing expense and the mix of paygo and debt financing, which are addressed at length herein. The extent to which PWD’s future debt issuances are “strategic” is largely beyond the ability of Board members to assess, except for the City Treasurer, who would continue to have a conflicted role due to her direct involvement in such issuances.

funding from current revenues (so-called “paygo”), working toward a 20% paygo threshold; (2) PWD proposes to target debt service coverage on revenue bonds of 1.28x in FY 2019 and 1.30x in FY 2020 and FY 2021; and (3) PWD proposes to target a minimum year-end balance of \$150 million in its Rate Stabilization Fund and \$15 million in its Residual Fund. See PWD St. 2, Ex. ML-2.

PWD urges the Board to establish rates to achieve the targets in PWD’s Financial Stability Plan, based on its witnesses’ view that higher targets for reserves, debt service and paygo capital will positively impact PWD’s credit rating. See, e.g., PWD St. 2, Sch. ML-6 (providing opinion of PWD financial advisor that the proposals set forth in PWD’s Financial Stability Plan “insure the Department maintains the necessary credit rating to successfully enter the bond market and achieve a cost of capital that benefits rate payers.”). PWD’s credit rating is already high, and there has been no indication that it will be downgraded. Similarly, there is no indication that PWD cannot successfully enter the bond market with its current credit ratings and, indeed, PWD is successfully doing so on an ongoing basis. Furthermore, after PWD’s 2016 Rate Case, even after the Board made significant downward adjustments to PWD’s rate increase request, PWD’s credit rating was maintained by two credit rating agencies and improved by one rating agency. 5/15 Tr. at 97:1-6.

While PWD focuses purely on the potential impact of its financial policies on its bottom line, it inadequately considers the impact of those policies on customers. In fact, as PWD acknowledges, service area wealth and rate affordability are factors that all three credit rating agencies take into account. 5/15 Tr. at 76:20-23. Indeed, according to Fitch, service area wealth consists of 12.5% of its rating scorecard. 5/15 Tr. at 76:16-19; See PWD St. 2R at 11 (Table). To assess revenue defensibility, Fitch specifically considers it a “weaker” attribute for residential

charges for combined water/sewer systems to exceed 2% of median household income (MHI). PWD St. 2R, Sch. R2-2, Fitch 4. PWD exhibits weaker service area wealth, according to Moody's. See PWD St. 2R at 11 (Table). Given that PWD's current charges already exceed 2% of MHI, a rate increase would weigh against improvement in this aspect of PWD's ratings scorecard. See 5/15 Tr. at 80:3-21. Notwithstanding these facts, PWD's witnesses submit that affordability is not a matter that is the subject of extensive conversations with credit ratings agencies, and that the TAP program provides reassurance to those agencies. 5/15 Tr. at 84:21-85:4; 82:16-83:3. However, given the readily available means to determine that PWD's rates currently exceed 2% of MHI, there is no significance to the fact that affordability is not extensively discussed between PWD's financial consultants and credit rating agencies. More importantly, however, TAP simply does not impact upon this equation. Currently, MHI in PWD service territory is approximately \$40,000 per year. 5/15 Tr. at 80:3-7. Tens of thousands of households at MHI are simply ineligible for TAP. The average persons per household in Philadelphia is 2.59.³² Even if rounded up to 3 persons, median household income of \$40,000 would place an average household at approximately 200% of FPL. TAP is unavailable to assist that family on the basis of its income.

While the Board is required to review PWD's Financial Stability Plan, and give it due consideration, it is not required to adopt it as a standard for ratemaking. The Board's legal obligations, at their core, require a balancing of PWD's interests against those of its customers. To an average Philadelphia family, PWD's rates and charges already exceed amounts which the credit ratings agencies find affordable. Moreover, significant public input from customers with modest and/or fixed-incomes specifically highlighted the payment difficulties that higher bills

³² See U.S. Census Bureau QuickFacts, Philadelphia County, Pennsylvania, available at <https://www.census.gov/quickfacts/fact/table/philadelphiacountypennsylvania/PST040216> (confirming median household income and family size).

would create.³³ Based upon its review of the record in this proceeding, the Public Advocate recommends that the Board seek to rebalance PWD's financial objectives with the critical need to maintain affordability. On this basis, the Board should fix rates with the following targets and considerations in mind: (1) PWD should target paygo capital of \$45 million per year; (2) PWD need not target higher debt service coverage, as the projections indicate that with paygo capital of \$45 million per year, PWD will exceed the legally-mandated standard of 1.20x; and (3) the Board should take notice of the adequacy of PWD's current reserves, which far exceed the amount it indicated it would target in the 2016 Rate Case, and specify that PWD should aim to maintain at least \$100 million in combined Rate Stabilization Fund and Residual Fund reserves.³⁴

In addition to affordability concerns, the Board must acknowledge PWD's long history of "outperformance" in assessing its proposed Financial Stability Plan. PA St. 1 at 19:4-5; 5/15 Tr. at 98:20-23; PWD St. 2, Sch. ML-2 at 4-11. In reality, "out-performance" is a misnomer – PWD consistently attains higher revenues and incurs lower expenses as a direct consequence of the overly conservative assumptions employed by PWD in its rate model. PA St. 1 at 39:7-10. PWD asserts that, as a result of improved financial controls, its actual experience has aligned with its forecast, promising lowering variances going forward. PWD St. 1R at 25:18-25. This is

³³ See, e.g., April 16, 2018 Testimony of Alicia Lee Scott, Angela Foster, Antonia Batts, Sandra Swenson; April 17, 2018 Testimony of Madeline Dunn, Dita White-Williams, Jimmy Battle, Jacquelyn Brown, Vernell Lloyd, Charlotte Mears, LaRhonda Roberts; April 19, 2018 Testimony of Linda Colwell-Smith (oral and written statements), Susan Guest, Bernadette Freedman, Rosemarie Citrina Stewart; April 20, 2018 Testimony of Cora Turpin, Salima Ellis, Cecile T. Mack, Grace Carter; April 23, 2018 Testimony of Mari Gonzales; April 25, 2018 Testimony of Darlene Carter, Adriana Youngblood; May 2, 2018 Testimony of Henry Balzer; Written Statement of Maryann Zindell, "jliss14389," Joseph Bernstein, Fulvio Acosta, Bernadette Freedman, "Staci," David Wengert, Josephine Cittadini, Jacquelyn Brown, and Alison Williams.

³⁴ As discussed in Section VIII.A below, PWD's credit ratings are determined, in part, based on days cash on hand comparisons with other utilities, which include significant sources of PWD cash outside of the Rate Stabilization Fund and Residual Fund. These sources of PWD cash have increased over recent years.

demonstrably incorrect. PWD's response to PA-ADV-14 (see PA Hearing Ex. 7 at 50-53) indicates that, in total, PWD's 2017 actual O&M expense was only \$659,000 different than PWD's projections in the 2016 Rate Case. However, this is not the result of PWD's forecast being correct. Rather, it is due to a City accounting determination totally unrelated to PWD operations, which resulted in a single large unanticipated expense for fringe benefits that offset the significant underestimations of O&M expenses in other categories. See PA Hearing Ex. 7 at 51 (identifying nearly \$8 million additional fringe benefit expense).

Nonetheless, PWD contends that it has improved financial controls, primarily by aligning its projected expenses with those included in the City's Five-Year Plan. 5/14 Tr. at 183:13-21. Because the Five-Year Plan is revised annually, its assumptions for future years are subject to frequent adjustments. 5/14 Tr. at 183:22-184:10. However, the source of PWD's fringe benefit assumptions is the *City's Five-Year Plan*. See 5/15 Tr. at 59:20-23. Accordingly, although PWD's use of the City's Five-Year Plan in the 2016 Rate Case resulted in a significant underestimation of fringe benefit expense, there is no evidence that demonstrates that PWD's method of projecting O&M expenses in FY 2017 was more accurate than in prior years. PWD had to request a transfer of nearly \$5 million in appropriations to cover additional pension expense allocated to O&M (instead of to capital financing) as a result of a City policy change in FY 2017. PWD TR-13; cf. 5/14 Tr. at 186 ("It's a very, very small amount. I believe it was less than two million dollars."). That same change accounts for a shift of \$12.5 million in FY 2018. PWD St. 9A, Sch. BV-E5:WP-1, at 6. Accordingly, it is reasonable to assume that, had that shift not occurred, PWD would have significantly outperformed its FY 2017 estimate of O&M expenses by at least \$5 million, and possibly as much as \$12.5 million in FY 2017. 5/14 Tr. at 186.

In addition, as in many prior years, PWD's overall projections taking into account revenues and expenses remained overly conservative in FY 2017. See PA St. 1 at 12. Because PWD's over-performance must be anticipated, and due to the significant accumulation of PWD reserves in excess of projections in the 2016 Rate Case, the Public Advocate submits that employing lower targets for paygo capital and reserve requirements are reasonable and necessary adjustments to PWD's projected basis for future revenue requirements.

A. Appropriate Minimum Level of Reserves

PWD proposes that the Board approve its financial plan with the goal of maintaining a minimum year-end balance of \$150 million in the Rate Stabilization Fund and \$15 million in the Residual Fund. PWD St. 2, Sch. ML-2, at 21. In the 2016 Rate Case, PWD requested that the Board approve rates with the expectation that it would maintain \$110 million in the Rate Stabilization fund (by the end of FY 2018) and \$15 million in the Residual Fund. As the Board's decision in the 2016 Rate Case indicates, for ratemaking purposes, the Board approved those projections. See 2016 Rate Case Determination, Appendix A. However, the Board did not reach any explicit conclusion regarding the reasonableness of PWD's reserve request, nor the extent to which PWD consistently overestimates its projected use of accumulated reserves. The Board must take up these matters in this 2018 Rate Case. Phila. Code §13-101(4)(b)(i).

PWD consistently maintains higher reserves than projected, which is the consequence of its conservative revenue and expense assumptions. Mr. Morgan testified:

The combination of under-projected revenues and over-projected expenses during previous rate cases has directly contributed to the accumulation of funds in PWD's Rate Stabilization Fund over the period FY 2012 through FY 2017 well above what was projected. In fact, documentation produced in this proceeding demonstrates that PWD's forecast Rate Stabilization Fund balances have been consistently projected at unrealistically low levels, suggesting the accuracy of PWD's rate model is a longstanding problem.

PA St. 1 at 13:21-14:2.

Based on its projections in the last two rate cases, PWD has produced total reserves which wildly exceed the projections it utilizes in seeking rate increases. PWD confirms the excess reserves it has accumulated, showing actual cash reserves of between \$216 and \$220 million for each year 2015-2017. PWD St. 2, Sch. ML-2, at 13. As shown below, PWD's actual accumulated Rate Stabilization Fund reserves were \$131,933,966 in excess of the projections by the end of FY 2015, and were a further \$51,754,121 in excess of projections by the end of FY 2017.

| <u>Philadelphia Water Department</u> | | | | | | |
|--------------------------------------|--------------------------------------|----------------------|----------------------|----------------------|---|----------------------|
| <u>Rate Stabilization Fund</u> | | | | | | |
| <u>Rate Case Projections</u> | <u>Based upon FY 2013 Proceeding</u> | | | | <u>Based upon FY 2017-2018 Proceeding</u> | |
| | <u>FY2012</u> | <u>FY2013</u> | <u>FY2014</u> | <u>FY2015</u> | <u>FY2016</u> | <u>FY2017</u> |
| Beginning of Year Balance | \$156,563,000 | \$142,128,000 | \$ 98,513,000 | \$ 78,188,000 | \$206,206,000 | \$ 169,306,000 |
| Deposit From (To) Revenue Fund | <u>(14,435,000)</u> | <u>(43,615,000)</u> | <u>(20,325,000)</u> | <u>(3,675,000)</u> | <u>(36,900,000)</u> | <u>(19,300,000)</u> |
| End of Year Balance | <u>\$142,128,000</u> | <u>\$ 98,513,000</u> | <u>\$ 78,188,000</u> | <u>\$ 74,513,000</u> | <u>\$169,306,000</u> | <u>\$150,006,000</u> |
| <u>Actual</u> | <u>FY2012</u> | <u>FY2013</u> | <u>FY2014</u> | <u>FY2015</u> | <u>FY2016</u> | <u>FY2017</u> |
| Balance at July 1 | \$157,050,373 | \$165,906,600 | \$161,463,768 | \$184,795,581 | \$206,446,966 | \$ 205,760,960 |
| Deposit from Operating Fund | 8,525,507 | - | 22,924,772 | 21,456,199 | (1,629,000) | (4,563,000) |
| Interest Earnings | 438,097 | 223,120 | 407,041 | 195,186 | 942,994 | 562,161 |
| Deposit to Operating Fund | - | (4,665,952) | - | - | - | - |
| Balance at June 30 | <u>\$166,013,977</u> | <u>\$161,463,768</u> | <u>\$184,795,581</u> | <u>\$206,446,966</u> | <u>\$205,760,960</u> | <u>\$201,760,121</u> |
| Over/Under Rate Case Projection | <u>\$ 23,885,977</u> | <u>\$ 62,950,768</u> | <u>\$106,607,581</u> | <u>\$131,933,966</u> | <u>\$ 36,454,960</u> | <u>\$ 51,754,121</u> |

PA St. 1 at 15:1.

PWD's request to raise the minimum level of targeted Rate Stabilization Fund reserves from \$110 million to \$150 million is unreasonable in light of PWD's persistent actual attainment of excess reserves, constituting revenues from PWD customers that were beyond what PWD claimed it needed in raising rates. As Mr. Morgan states, PWD's maintenance of excessive reserves is fundamentally at odds with its request for higher rates:

I do not believe the \$150 million balance recommended by PWD should be established as the minimum level of reserves in this proceeding. This \$150 million goal is an increase of \$40 million above the \$110 million goal stated by PWD in the 2016 rate case. I do not believe PWD's Rate Stabilization Fund, which maintains a significantly higher balance

than PWD projected in its last rate case, should target a minimum balance more than 36% higher than PWD indicated was appropriate just two years ago. Instead, I recommend the Board take notice of the sufficiency of reserves based on my estimates and incentivize PWD to continue to outperform its budget and ratemaking estimates and/or to make prudent use of accumulated reserves in order to direct additional revenues, without the necessity of a rate increase, to capital spending and stormwater incentives.

PA St. 1 at 14:1-22.

In addition, the significance of reserves in PWD's Rate Stabilization Fund is muted, to a significant degree, by the emphasis that the credit ratings agencies place on the calculation of days cash on hand (DCH). When comparing utilities, the credit rating agencies examine available sources of cash which include funds in reserves like the Rate Stabilization and Residual Funds, but also take into account the reality of additional cash, recognized for accounting purposes, by PWD. For this purpose, cash includes what is designated "Equity in the Treasurer's Account" and contributes to PWD's total DCH calculation. 5/17 Tr. at 95:20-96:9. In determining PWD's DCH, for FY 2016 and FY 2017, PWD acknowledges that an additional \$79 million and \$95 million, respectively, were available for cash purposes in those two years. TR-19.

The Philadelphia Code requires that the Board take into account "all relevant information presented, including, but not limited to, peer utility practices, best management practices and projected impacts on customer rates," when determining appropriate minimum levels of reserves. Phila. Code §13-101(4)(b)(i). In addition to the necessary recognition that PWD's rates have historically recovered more than necessary from customers, achieving higher than necessary levels of reserves in the Rate Stabilization Fund, the Board should also recognize that DCH is an important measure for comparing PWD to its peers.

PWD's calculations demonstrate that, with a targeted minimum of \$110 million in the Rate Stabilization Fund, it achieved a total of 300 DCH in FY 2016. PWD St. 2, Sch. ML-2 at

28. Indeed, this level of DCH places PWD “*ABOVE*” the A utility median. PWD St. 2, Sch. ML-2 at 25. Accordingly, by the measure utilized to compare PWD to its peers, increasing the target for Rate Stabilization Fund balances is not necessary to maintain PWD’s credit rating. Furthermore, PWD has identified no need, in operation, to target higher levels of reserves. As demonstrated by the Public Advocate’s Table C-1, even after projections of potential withdrawals, PWD would maintain sufficient reserves in its Rate Stabilization Fund over two-year or three-year rate periods, even if no rate increase is approved by the Board. As indicated above, the Public Advocate recommends that the Board take notice of the sufficiency of PWD reserves at the current time, and determine for ratemaking purposes that PWD should aim to maintain at least \$100 million in combined Rate Stabilization Fund and Residual Fund reserves.

B. Capital Spending and PAYGO

PWD proposes to fund its capital program through a combination of debt financing and current revenues, with a goal of increasing the amount customers pay through current rates to 20% of overall capital expenditures. Using its assumptions of capital spending, PWD projects that it will not actually reach the 20% goal and categorizes this as a “compromise between a revenue-funded capital program and mitigated rate increases.” PWD St. 2, Exh. ML-2, at 18. Ultimately, PWD’s projections rely upon multiple assumptions regarding the extent to which PWD will approximate expenditures of capital budget amounts, as such are estimated and inflated for future years, and the amount and sources of current customer revenues for capital expenditures.

As discussed below, the Board is not authorized to increase PWD’s legally determined Capital Account Deposit. The Board must focus on the total amount of current customer revenues to fund capital expenditures, with the legally-fixed 1% Capital Account Deposit and available transfers from the Residual Fund. Furthermore, the Board should reject PWD’s

unreasonable projection of capital expenditures, and determine for ratemaking purposes that PWD should achieve a minimum target of \$45 million in annual “paygo” capital from current revenues.

1. Capital Account Deposit

Regarding the source of current customer revenues, PWD proposes an unsupportable 0.5% increase in the mandatory Capital Account Deposit (defined as 1% of depreciated plant, property and equipment), which would direct an additional \$12 million per year to fund construction costs. This proposal was rejected by City Council and the Board lacks the authority to approve it in this rate proceeding. On the basis of the Public Advocate’s review of all relevant assumptions utilized by PWD in projecting capital spending and paygo, the Public Advocate recommends that the Board establish rates and charges with the assumed goal of directing \$45 million in current customer revenues to capital work annually, while maintaining the Capital Account deposit at 1%.

PWD’s proposal includes an increase in the mandatory Capital Account Deposit of 0.5%, in order to direct additional funds to paygo capital. As Black & Veatch describe it, PWD is requesting a change in a mandatory annual revenue requirement, which was established by City Council: “[U]nder the 1989 General Ordinance, there is a mandatory annual revenue requirement referred to as the Capital Account Deposit. This annual requirement, which ranges from approximately \$35.7 Million to \$40.8 Million during the study period, is to be used for financing major capital improvements directly from annual system revenues.” PWD St. 9A at 49. In addition to being completely unnecessary, the Board is not authorized to increase PWD’s Capital Account Deposit.

As discussed at length in the Public Advocate's Recusal Motion, the City Treasurer and PWD supported an amendment to the General Bond Ordinance, via City Council Bill No. 171110, that would increase this mandatory deposit from 1% to 1.5%. Recusal Motion at ¶52-50; 27-30 (Memorandum). As Mr. Morgan correctly testified: "I have been advised by counsel that such legislation was amended to eliminate the increase in the Capital Account Deposit, and that the amended legislation was passed by City Council without such increase." PA St. 1 at 29:19-21. Accordingly, as has been the case since at least 1993, the Capital Account Deposit is defined as follows:

"Capital Account Deposit Amount" means an amount equal to one percent (1%) of the depreciated value of property, plant and equipment of the System or such greater amount as shall be annually certified to the City in writing by a Consulting Engineer as sufficient to make renewals, replacements and improvements in order to maintain adequate water and wastewater service to the areas served by the System.

PA-I-21(Attachment 1).

As provided in this definition, the Capital Account Deposit is a fixed annual amount,³⁵ which is not subject to adjustment by the Board in a rate proceeding, but can only be adjusted based on an annual certification to the City by a Consulting Engineer. The Board is not a Consulting Engineer, nor does the Board certify to the City the sufficiency of the Capital Account Deposit to fund capital improvements. PWD's proposal that the Board increase its mandatory Capital Account Deposit at 1.5% of depreciated plant, property and equipment for FY 2019, FY 2020 and FY 2021 is directly in conflict with the terms of PWD's General Bond Ordinance.

³⁵ This fixed amount is to be contrasted with the minimum coverage levels (which PWD may exceed in operation) set by the General Bond Ordinance. See, e.g., 5/15 Tr. at 109:14-110:8.

Nor does PWD witnesses' opinion that additional paygo financing should be accomplished via an increase in the Capital Account Deposit constitute a certification to the City³⁶ under the terms of the General Bond Ordinance. As explained in the Memorandum from Bond Counsel, included with PWD testimony, the Capital Account Deposit is made annually on June 20 of each fiscal year. PWD St. 9A, Sch. ML-3 at 9. This deposit is the last step in PWD's flow of funds (or waterfall) prior to depositing any remaining funds in the Residual Fund. PWD St. 9A, Sch. ML-3 at 8. Accordingly, it is simply impossible for a Consulting Engineer to make a certification at this time, even for FY 2019, that there should be an increase in the Capital Account Deposit to be made on June 20, 2019. Furthermore, the express language of the General Bond Ordinance requires such certification to be made annually.³⁷ It expresses no authorization, whatsoever, to pre-certify an increased Capital Account Deposit for three years in advance.

2. Projected Capital Expenditures Support \$45 Million Annual Paygo

The Philadelphia Code requires that the Board consider "all relevant information presented including, but not limited to, peer utility practices, best management practices and projected impacts upon customer rates" when determining the levels of current funding of capital expenditures. Phila. Code §13-101(4)(b)(i). At direct issue in the consideration of paygo capital is the extent to which customers should have to pay more now for capital work, as opposed to

³⁶ The Board is an "independent rate-making body," established by the City, but which determines PWD rates and charges without further authorization. The Board does not act as, or on behalf of, the City of Philadelphia or any other department of the City of Philadelphia, but must comply with the standards established by ordinance. Phila. Code §13-101(3).

³⁷ Ultimately, even if such a certification is made at some future date, that determination is made for purposes of effectuating, in operation, an annual transfer of funds to the Capital Account which is beyond the purview of the Board in establishing rates.

paying for debt service over a long period of years.³⁸ Furthermore, the Board must consider PWD’s projected capital expenditures, and the unreasonable assumptions PWD has utilized, which form a core component of its request for higher rates and charges.

As shown in the testimony of Black & Veatch, PWD has projected the budget for its capital improvement program at \$364.728 million, \$376.131 million, and \$388.158 million, for FY 2019, FY 2020 and FY 2021, respectively.³⁹ PWD St. 9A, Sch. BV-E1, Table C-7, line 11. These amounts reflect the estimated expenditures for various types of projects, which are estimated by PWD over the three fully projected test years, and increased by a 2.5% inflation adjustment that compounds each year. PWD St. 9A, Sch. BV-E1, Table C-7 line 10, note (b). Accordingly, it is important that the Board recognize that PWD’s estimates of future expenses are based upon projections which include not only increased spending, but compounding inflation adjustments atop such increases, projecting even higher costs in the future.

To determine how much financing is necessary to source to debt and current revenues, PWD estimates that it will spend 90% of its *inflated* capital program (or CIP) budget. On this basis, PWD calculates its net cash financing, and the requested amounts of paygo capital, as follows:

| | FY 2019 | FY 2020 | FY 2021 |
|---|---------------|---------------|---------------|
| Total CIP Inflated | \$364,728,000 | \$376,131,300 | \$388,157,700 |
| Total Net Funding (After Inflation) @ 90% | \$328,255,000 | \$338,518,000 | \$349,342,000 |
| PWD Paygo (PWD St. 2, ML-2 at 18) | \$55,900,000 | \$62,600,000 | \$62,700,000 |
| PWD Paygo % of Net Funding | 17.03% | 18.49% | 17.95% |

³⁸ The Board should also be cognizant that increasing the Capital Account Deposit drives down total coverage. PWD St. 9A, Sch. BV-E5:WP-3 at 4 (increasing the Capital Account Deposit Amount would result in “a decrease in Total Debt Service coverage by FY 2023 from approximately 1.17 to 1.12”). This depiction of reduced coverage would be at odds with the long-held financial presentation imposed by the General Bond Ordinance. Indeed, increasing PWD’s Capital Account Deposit, contrary to the actions of City Council in rejecting an amendment to do the same, would fundamentally alter the depiction of coverage in the PWD financial model.

³⁹ It is also important to recognize that City Council has not yet approved PWD’s budget for any of the fiscal years for which PWD is seeking higher rates.

The extent to which PWD meets, or exceeds, its goals for paygo spending are determined both by the amount of current customer revenues directed to capital work, as well as the amount of actual capital spending PWD undertakes in future years. On the basis of PWD's actual, historical rate of capital spending compared to capital budgets, PWD's utilization of a 90% estimate is unsupportable.

As Mr. Morgan testified:

The projected capital program total annual expenditures for the projection period were determined by applying a factor of 90% to the annual inflated capital program budget. However, in the response to PA-VI-27, the data shows that the actual to budget ratios for capital spending to be well below the 90% claimed by the Department. Therefore, I believe the 90 percent claimed by the department is not reasonable for ratemaking purposes.

Based upon the data provided in the response to PA-VI-27, I have calculated a 76 percent actual to budget ratio for the most recent three-year period. Therefore, I am recommending an adjustment to reduce the 90 percent actual to budget ratio claimed by the Department. This adjustment, entered into the Black & Veatch proprietary rate model, projects PWD's net funding requirement for capital projects to be approximately \$100 million less than what PWD estimated over FY 2019 and 2020. As a result, the Capital Account Deposit and available Residual Fund transfers to the Construction Fund represent a larger percentage contribution toward capital projects from current revenues during the FY 2019 and FY 2020 rate period.

PA St. 1 at 28:10-25.

PWD affirmed its historical results in rebuttal testimony, demonstrating that its actual to budget expenditure ratio was 62.13% for FY 2013, 60.82% for FY 2014, 67.45% for FY 2015, 65.90% for FY 2016 and 82.12% for FY 2017. PWD St 2R at 15:3-7. PWD has never attained a 90% ratio of actual to budget expenditures for capital, and it is unreasonable to assume for ratemaking purposes that PWD will attain that rate in the future.⁴⁰ Accordingly, applying PWD's requested

⁴⁰ PWD argues that the amount it has "obligated" or "encumbered" for capital expenditures has increased in recent years, and so its 90% expenditure level is appropriate. PWD St. 2R at 15:9-16. However, PWD's data does not indicate that increased obligations increase its rate of expenditure against its capital

paygo amounts, compared to the \$45 million target recommended by the Public Advocate, to the reasonably anticipated expenditure of 76% of PWD’s inflated capital budget, demonstrates the following rates of paygo contributions:

| | FY 2019 | FY 2020 | FY 2021 |
|---|---------------|---------------|---------------|
| Total CIP Inflated | \$364,728,000 | \$376,131,300 | \$388,157,700 |
| Total Net Funding (After Inflation) @ 76% | \$277,193,280 | \$285,859,788 | \$294,999,852 |
| PWD Paygo (PWD St. 2, ML-2 at 18) | \$55,900,000 | \$62,600,000 | \$62,700,000 |
| PWD Paygo % of Net Funding | 20.17% | 21.90% | 21.25% |
| Public Advocate Paygo (PWD St. 2, ML-2 at 18) | \$45,000,000 | \$45,000,000 | \$45,000,000 |
| Public Advocate Paygo % of Net Funding | 16.23% | 15.74% | 15.25% |

However, again, because PWD’s outperformance must be assumed, the Public Advocate’s recommendation constitutes a reasonable floor on the amount of paygo contributions that can be expected based on the PWD’s historical operating results. As Mr. Morgan explains:

Because the amount that may actually be available for such purposes is, to an extent, determined by PWD’s operational choices during the fiscal year, I believe current revenues can fund reasonable and appropriate contributions toward capital expenditures, including as a result of PWD’s likely “outperforming” of its projections and utilization of accumulated reserves.

PA. St. 1 at 28:25-29:5.

Based on the near certainty that PWD will outperform its projections, Mr. Morgan identifies those net revenues in excess of projections which PWD attains as an incentive to prudently direct funds to certain efforts, such as SMIP/GARP (discussed below) and to the Residual Fund for construction purposes. PA St. 1 at 39:10-11.

budget. When PWD’s obligations as a percentage of budget increased from 75.03% to 77.12% between 2013 and 2014, its expenditure as a percentage of budget decreased from 62.13% to 60.82%. Similarly, when PWD’s obligations as a percentage of budget increased from 90.58% in 2015 to 102.13% in 2016, PWD’s expenditure as a percentage of budget declined from 67.45% to 65.90%. PWD St. 2R at 15:3-7.

3. The Public Advocate's Model Demonstrates \$45 Million Paygo is a Suitable Minimum for Ratemaking Purposes

The Board is constrained by the Philadelphia Code to determining “the extent to which current revenues should fund capital expenditures.” Phila. Code §13-101(4)(b)(i). The Board lacks authority to adjust PWD’s Capital Account Deposit. Accordingly, the Board must determine the appropriate mix of current customer contributions to PWD capital work from the 1% Capital Account Deposit and other available sources of funds. Under the flow of funds in PWD’s rate model, which mirrors Section 4.06 of the General Bond Ordinance, after all required and discretionary transfers (including, e.g., transfers to/from the Rate Stabilization Fund) are made, any inter-fund loans are repaid, and the Capital Account Deposit is made, any remaining project revenues (i.e., revenues from rates and charges) are transferred to the Residual Fund. See PA-I-21 (Attachment 1). The Board must look to the Residual Fund to determine the extent to which it can establish paygo funding targets, given that the Board cannot modify the mandatory Capital Account Deposit. Thus, for ratemaking purposes, the Board must consider the availability of funds from the Residual Fund for construction purposes, together with a 1% Capital Account Deposit, for purposes of satisfying the “extent to which current revenues should fund capital expenditures.” Phila. Code §13-101(4)(b)(i).

As described above, the Board should establish a threshold of \$45 million per year for paygo capital, with the explicit recognition that PWD’s outperformance may result in exceeding that standard. As depicted in Appendix A, under the Public Advocate’s assumptions, including an aggregate annual minimum funding of \$45 million in paygo, the model depicts a \$15 million ending balance in the Residual Fund, and more than \$225 million remaining in the Rate Stabilization Fund at the end of FY 2019, FY 2020 and FY 2021. Accordingly, under the Public Advocate’s assumptions, excess funds are available from the Rate Stabilization Fund to be

transferred to the Revenue Fund for other purposes, including potential transfer to the Construction Fund. See Appendix A; 5/14 Tr. at 137:5-18 (demonstrating that excess funds flow to the Residual Fund); 154:18-155:4 (discussing transfers from the Residual Fund to the Construction Fund).

A minimum paygo funding of \$45 million for each year in the proposed two year rate period is appropriate, recognizing both that the Public Advocate's assumptions increase the availability of funds for potential discretionary uses and the certainty that PWD will continue to outperform its projections.

C. Debt Service Coverage

PWD propounds multiple views, which often conflict, regarding the purposes and import of increasing debt service coverage. On the one hand, PWD's Deputy Commissioner in charge of finance refers to increasing coverage as a lever to direct funds toward capital expenditures. 5/15 Tr. at 101:1-5. On another hand, debt service coverage is presented as a crucial indicator of creditworthiness which impacts PWD's credit rating. The credit rating agency reports attached as exhibits to PWD's testimony confirm that coverage is a significant focus in determining PWD's credit rating. PWD St. 2, Sch. ML-4. Finally, on yet another hand, PWD appears to submit that coverage is a panacea, enabling PWD to accomplish any myriad of worthy goals, such as paying for affordability programs, funding the Rate Stabilization Fund to mitigate future increases, and contributing to paygo. 5/15 Tr at 83:4-11. This last view of coverage is a broad misconception, as increasing coverage does not increase funds available for affordability programs nor direct dollars toward the Rate Stabilization Fund to mitigate rate increases. Coverage is calculated on the basis of net revenues after operations. PWD St. 9A, Sch. BV-E1, Table C-1, line 23. PWD's affordability programs are accounted for in the rate model as reductions to other operating revenues, and so are factored into net revenues prior to the

calculation of coverage. PWD St. 9A, Sch. BV-E1, Table C-3. In addition, only withdrawals from the Rate Stabilization Fund to the Revenue Fund are counted toward coverage. PWD St. 9A, Sch. BV-E1, Table C-1. The definition of “net revenues” in the General Bond ordinance specifically *excludes* “the amounts, if any, transferred from the Revenue Fund to the Rate Stabilization Fund.” PA-I-21 (Attachment 1).

As correctly understood, PWD’s coverage depiction is the reflection of a calculation that takes into account decisions made by PWD, including where to direct additional funds among various possible spending goals, as well as how much funds to direct to or from the Rate Stabilization Fund. For purposes of its rate presentation, PWD’s coverage numbers are “solved for” through a combination of revenue and expense projections, including additional revenues from increased rates, Rate Stabilization Fund deposits or withdrawals, the effect of the Capital Account Deposit, and debt service projections. 5/14 Tr. at 216:19-218:11. Changing any of these assumptions modifies the depiction of coverage, in some way, big or small. See, e.g., 5/14 Tr. at 131:1-145:23. As a result, the Public Advocate submits that the Board’s obligation is to ensure that legally mandated coverage requirements are satisfied.⁴¹ The Board may enable PWD

⁴¹ Confusingly, PWD bristles at Mr. Morgan’s observation that PWD has, in prior rate proceedings, based its revenue requirement upon attaining its legally-mandated 1.20x coverage. See PA St. 1 at 34:22-25. In rebuttal, PWD expresses flat disagreement, indicating that PWD has not in fact previously based its revenue requirement upon attaining 1.20x coverage. PWD St. 2R at 10:20-23. During the technical hearings, after significant back and forth, PWD effectively acknowledged that its disagreement was based solely on the 2016 Rate Case. 5/15 Tr. at 75:3-17. It should be noted that PWD’s direct testimony verifies Mr. Morgan’s statement, providing as follows:

It should be noted that the Water Department has utilized the Rate Stabilization Fund balances in the past several years to “manage” its revenue increases such that they are effectively used to provide the minimum required 1.20 coverage level stipulated in the 1989 General Ordinance.

PWD St. 9A at 48:22-25.

This is but another basis for the Hearing Officer and the Board to discount PWD’s rebuttal testimony, which, in addition to expressing opinions regarding subject matters beyond the expertise or knowledge of PWD witnesses, flatly contradicts other direct statements by PWD.

to depict higher coverage. But it must not mandate that a particular, predetermined higher coverage level be attained, as doing so would necessarily involve sustained operational oversight of PWD actual spending that is outside of the Board's capacity and is administratively unworkable. As shown in Appendix A, after accepting all of the Public Advocate's recommendations, and not accounting for the virtual certainty of continued outperformance, PWD would meet or exceed its legally mandated coverage requirements, with the capability to further exceed those requirements by spending down the significant reserves that have accumulated.

IX. FIRE PROTECTION

PWD's 2018 Rate Case requests approval of an illegal and fundamentally unfair shift of the costs of public fire protection from the City's General Fund to PWD customers through fixed, meter based service charges. PWD St. 9A at 120:22-24. As identified by PWD, this proposal shifts the burden of approximately \$7.9 million in costs from the Philadelphia General Fund (tax base) to PWD customers (rate base). PWD St. 9A, Sch. BV-E5:WP-1 at 1. PWD acknowledges that this proposal constitutes a new obligation to retail customers in this 2018 Rate Case, and the cost of public fire protection has never previously been considered for recovery through PWD customer rates. 5/14 Tr. at 19:20-20:1.

A. Philadelphia Law Prohibits the Shift of Public Fire Protection Costs to PWD Customers

Since prior to 1957, the Philadelphia Code has required that rates and charges be determined after "excluding" the cost of serving City facilities and fire systems. PA Hearing Ex. 6 (1957 Water Rate Ordinance). That language remains in the Philadelphia Code today:

The rates and charges shall yield not more than the total appropriation from the Water Fund to the Water Department and to all other departments...plus a reasonable sum to cover unforeseeable or unusual expenses, reasonably anticipated cost increases or

diminutions in expected revenue, less the cost of supplying water to City facilities and fire systems...

Phila. Code §13-101(4)(b)(emphasis added). See also PA Hearing Ex. 6 at 259, PA Hearing Ex. 7 at 22.

PWD may assert, similar to the public input statement of the Fire Commissioner, that the word “City” modifies “fire systems,” and that the term “City fire systems” supports its argument.⁴² Effectively, what PWD would argue is that “City fire systems” does not refer to the system of fire hydrants serving the purposes of providing public fire protection, but instead refers to sprinkler systems in City facilities. This position cannot be supported after more than 61 years of adherence by PWD to the language of the Philadelphia Code that requires rates and charges to be calculated after removing costs attributed to the system of fire hydrants.

Moreover, the term “fire systems” is plural not because it is intended to apply to sprinkler systems at multiple city facilities, but in full recognition of the fact that there were two separate systems of fire hydrants in Philadelphia, each of which constituted a “fire system.” PA Hearing Ex. 6 (article titled “Think you can’t park there?”); 5/15 Tr. at 110:23-114:9. When referring to these networks of hydrants, City Council, like the Water Commissioner, used the terminology “fire systems.”⁴³ Black & Veatch uses the same terminology, referring to Philadelphia’s present remaining fire hydrant system as the “standard pressure fire system” for the O&M and capital costs directly related to public fire protection. PWD St. 9A at 60:13-16. Indeed, the term “fire

⁴² The terms “City Fire System” and “Philadelphia Fire System” are not utilized anywhere in the Philadelphia Code. The term “Fire Systems” is used precisely one time, in Section 13-101 of the Code.

⁴³ If Council had wanted to incorporate language permitting some or all of the costs of public fire protection to be charged to PWD ratepayers, it could simply have looked to the language of the Public Utility Code for guidance. Indeed, the Public Utility Code was amended in 1995 to ease the burden of fire protection costs on municipalities by permitting 75% of the costs of furnishing water to public fire hydrants to be charged to customers. See 66 Pa. C.S. 1328; legislative history at http://www.legis.state.pa.us/cfdocs/billInfo/bill_history.cfm?year=1995&sind=0&body=H&type=B&bn=714. Notably, even if it were permissible under the Philadelphia Code to impose the costs of public fire protection on PWD customers through rates, which it is not, Pennsylvania law provides no support for the proposition that 100% of that costs should be borne by ratepayers.

systems” as used in the Philadelphia Code, means and includes the system of public fire protection, which has at times consisted of both a high pressure and a standard pressure fire system. 5/15 Tr. at 111:20-114:9. In contrast, Council has utilized included specific terminology regarding sprinkler systems, standpipes, and the like, when it has referred to those types of fire protection measures. See Philadelphia Code, Chapter 9: Fire Protection Systems.

When Bill No. 130251 was enacted, City Council continued to require as a rate standard that the costs associated with fire systems be excluded from rates and charges, leaving those costs to be paid by the General Fund. Notably, while establishing the Rate Board, and rearticulating as well as modifying certain standards for establishing PWD rates and charges, City Council left the long-standing language regarding fire systems unaltered in Bill No 130251. Council continued to use the longstanding terminology that excluded fire protection costs from being passed on to retail ratepayers. Put simply, public fire protection costs are not legally permitted to be charged to PWD’s retail customers under the Philadelphia Code.

B. Neither Public Policy Nor Industry Practice Justify Charging PWD Customers for Public Fire Protection

As the Public Advocate’s witness, Mr. Colton, observes, PWD claimed that this change was required pursuant to a “directive” from the City of Philadelphia. PA St. 3 at 90:3-6; PWD St. 9A at 26:20-22. However, PWD could identify no formal policy, adopting body, or even the existence of a meeting at which the City of Philadelphia formally adopted a change in policy. PA St. 3 at 90:29-91:4. Furthermore PWD could identify no communication or conversation with any member of Philadelphia’s City Council or the Mayor or his staff regarding this proposal. PA St. 3 at 91:6-10. The sole basis for PWD’s statement that it was required, by a “directive” from the City of Philadelphia, to include public fire protection expense in customer rates was a March 2, 2018 letter from the First Deputy Managing Director, stating that the

Managing Director's Office (MDO) and the Philadelphia Fire Department "[a]re recommending that the costs associated with fire protection" be shifted to PWD customers.⁴⁴ PA St. 3 at Appendix D. The First Deputy Managing Director's "recommendation" has belatedly found its way into this 2018 Rate Case as a "directive," precluding discussion. This "directive" post-dates PWD's February 13, 2018 Advance Notice filing, when PWD indicated it would request approximately \$8 million in additional retail customer rates and charges to pay for fire protection costs. PWD St. 9A at 26:20-22 (Advance Version). Ultimately, it is not clear that the City has made a final determination that it desires to shift public fire protection costs from the General Fund to PWD's retail customers, as PWD acknowledges that it would only budget for the expense if approved by the Board. 5/15 Tr. at 115:17-20.

As the Hearing Officer is aware, PWD attempted to introduce Philadelphia Fire Department Commissioner Adam Thiel as a witness in the rebuttal stage of this 2018 Rate Case, but, pursuant to discussions between PWD, the Public Advocate and the Hearing Officer, it was agreed that Mr. Thiel would have an opportunity to provide a public input statement. As a consequence, Section V of PWD's Rebuttal Statement Number 4, consisting of Questions and Answers numbered 16 through 18, were deemed withdrawn. 5/10 Tr. at 140:15-143:6. Mr. Thiel appeared at a public input session convened for the purpose of submitting his statement on May 11, 2018. Mr. Thiel's written statement, entered on May 11, 2018 as Public Input on the

⁴⁴ At this time, although PWD has provided no documentation or discovery response to explain the source of any supposed "directive" regarding shifting public fire protection costs to customers, it is clear that at some point prior to February 13, PWD was party to some other discussion or written process by which a change in policy was contemplated, for purposes of this rate proceeding. The nature of that process, and the participants involved, has been completely shielded from review, despite clear requests from the Public Advocate. See responses to PA-V-7, PA-V-8, PA-V-9. Thus, the sole basis for this change appears to be a one-page, single-sided letter from the MDO which fails to address the legal impediments and ratemaking ramifications of the shift. Indeed, the letter is not a pronouncement of "policy" or a "directive" which has been adopted by the City of Philadelphia. Rather, it constitutes an explanation of the position of the MDO and the Fire Department, from their perspective, regarding the appropriateness of recovering fire protection charges from PWD customers.

record of this 2018 Rate Proceeding, purports to interpret sections of the Philadelphia Code, as well as argue appropriate ratemaking standards, making multiple references to the AWWA M1 manual. The Board should give no weight to Mr. Thiel's public input statement; Mr. Thiel lacks legal and ratemaking expertise, and does not set policy regarding water rates and charges. As discussed below, to the extent the Board desires, as a policy matter, to evaluate the positions of the Managing Director's Office and the Fire Department, countervailing policy considerations overwhelmingly demonstrate a need to reject this proposal. However, the shift of fire protection costs to customers is impermissible under the local, organic law of the City of Philadelphia.

PWD's argument relies heavily upon assertions that collecting fire protection costs through water rates and charges is "consistent with industry accepted practice." PWD St. 9A at 27:1-3. However, PWD was unable to identify any Pennsylvania municipal water utilities that collect public fire protection costs through rates and charges. No such list is available to the parties, nor to PWD witnesses, who claim that PWD's proposed rate-based recovery of public fire protection costs is consistent with industry accepted practice. PA St. 3 at 92:12-20. PWD may argue the M1 manual, and incorporation of reference to that as supplying certain information regarding ratemaking standards, supports its position. It does not. As a threshold matter, at the same time City Council incorporated explicit reference to the M1 manual as an industry standard for developing rates and charges, it retained the long-standing language regarding fire protection service, clearly indicating that no change to that language was necessary or appropriate. PA Hearing Ex. 7 at 23. The M1 is also very clear in stating that charging water customers for public fire protection is an "alternative and contemporary" approach, which, as PWD witnesses verified, only recently (around the beginning of this century) became acceptable as an approach to utility ratemaking. 5/14 Tr. at 25:13-26:8. Indeed, the M1 confirms that the

traditional means of recovery of these costs, which is still the “conventional” or “ordinary” (as opposed to alternative) way to do so, is through ad valorem or other taxes. 5/14 Tr. at 23:2-19. Accordingly, the M1 does not sanction a change, but simply recognizes that in some places, utilities are seeking to recover these costs from ratepayers. Unless or until City Council determines that the alternative approach described in the M1 manual constitutes a better policy for Philadelphia, the traditional approach remains the law in Philadelphia.

Ultimately, shifting this cost is not supported by sound policy. As Mr. Colton demonstrates, the City’s “policy perspective” is based on seriously flawed assertions. PA St. 3 at 102:14-15. First, fire protection is a public good. Access to it cannot be limited to only those who pay. PA St. 3 at 93. Fire protection is closely analogous to street lighting – which is a public function paid for by the government through taxes. As Mr. Colton points out, consistent with the recognition of this public good, other states have determined that street lighting is a governmental, not utility, function required to be paid for by the municipality through tax or other non-rate revenue. PA St. 3 at 94:1-16. These decisions highlight the policy rationale that a public good, like fire protection, is a governmental function that should be paid for through taxes.

Mr. Colton correctly demonstrates that the costs of public fire protection are simply not causally linked to maintaining the system to provide water/sewer service to PWD’s customers. The Fire Department does not exist to meet the needs of or serve ratepayers – its mission is to serve the *public*. PA St. 3 at 95, n 47. The Fire Department relies upon PWD to maintain capacity to fight fires for the benefit of everyone who “lives in, works in, plays in, shops in or otherwise visits physical structures within the city.” PA St. 3 at 95:1-3. In the same way, it is fundamentally inappropriate to assert that ratepayers are those who own properties in

Philadelphia, and so receive the benefit of public fire protection. Indeed, the Fire Department's mission directly contradicts this statement. Fundamentally, public fire protection is explicitly intended to benefit a larger group than ratepayers. It is intended to benefit the public – meaning all those who may be found in Philadelphia, whether for work, commerce, vacation, enterprise, residency, or other reasons. To assert that somehow a vast number of these members of the public, those who are not customers of PWD, do not benefit from the City fire system is manifestly erroneous. PA St. 3 at 100:19-101:1.

Mr. Colton also demonstrates that the shift of public fire protection costs from the General Fund to the rate base would create inequities. PWD's witnesses and the Public Advocate agree that fairness and equity are cornerstones of the establishment of cost based rates. 5/14 Tr. at 112:3-6. But rate-based recovery of fire protection costs would violate these fundamental principles in several ways. Rate-based recovery of fire protection creates inequity between different types of housing units, and the customers who live in them.

It is inappropriate to ignore that higher value properties receive a greater benefit from public fire protection than lower value properties. Because of this, the "traditional" means of funding these public goods have relied upon progressive taxation, which is more reflective of the value of the property benefit received. In contrast, under PWD's proposal, four individually metered dwelling units in a single building would pay the same as four individually metered buildings, such as single family homes, even though the cost of serving a single structure with four dwelling units would not be the same as the cost of serving four single-family homes. PA St. 3 at 95. Because residents of multi-family homes have substantially lower incomes than the residents of detached single family homes, but would be asked to pay the same monthly charges, PWD's proposal would create an inequitable shift of the true cost of service from higher income

families, with higher property values, to lower income families, with lower property values. PA St. 3 at 97-98. Similarly, such a shift would impose the obligation to pay for fire protection on tenants, who have significantly lower incomes, on average, than property owners. Again, the property value of the benefit of fire protection is conferred on the property owner, not the tenant. While the tenant certainly benefits from fire protection, so does the owner. PWD's proposal would only charge the tenant who is a customer for the benefit to be conferred on both the tenant and the landlord. PA St. 3 at 98-99; 101-102.

PWD's proposal to shift the cost of public fire protection, approximating \$8 million per year, from the tax base to the rate base is not supportable as a policy matter, nor is it permissible under the long-standing provisions of the Philadelphia Code. While PWD appears to rely upon other City departments, such as the Managing Director's Office and the Fire Department, as having directed that this change be made, PWD cannot point to any process by which this supposed new "policy" was developed, nor whether it was adequately or even carefully informed, taking into account its clear negative consequences and lack of legal authority. Ultimately, the Board should not, and must not, approve a change in financial responsibility for public fire protection costs that is so clearly unwarranted and unauthorized by law.

X. REVENUE REQUIREMENTS ADJUSTMENTS

As discussed in Section II, PWD's proprietary rate model serves primarily as a depiction rather than a calculation of PWD's proposed revenue requirements. The model does not adjust revenue requirements automatically to take into account modifications of O&M expense and other proposed adjustments. Accordingly, the Board must be very clear in instructing PWD that it reflect any changes the Board determines as downward adjustments to PWD's proposed revenue requirements, directly reducing PWD's proposed rate increases. Furthermore, on the

basis of the Public Advocate's assessment, the proposed adjustments identified by the Public Advocate demonstrate no need for PWD to increase its rates and charges. See Appendix A.

A. SMIP/GARP

In this 2018 Rate Case, PWD has proposed, as part of its projection of additional O&M expenses upon which its net revenue requirement is based, an increase of \$10 million per year to fund two stormwater management programs. Mr. Morgan provides background on the history and funding of these programs:

The Stormwater Management Incentives Program (SMIP) and the Greened Acre Retrofit Program (GARP) are two stormwater management programs that PWD maintains. The SMIP provides grants to non-residential property owners to design and build stormwater retrofit projects resulting in greened acres that the Department can count toward compliance with the performance requirements in the Consent Order and Agreement with PaDEP. The GARP provides grant funding to companies or contractors to construct stormwater projects across multiple properties in the Department's service area. In the first year 1 (2012) of the SMIP, its budget was \$3.35 million. By 2015, after the GARP began, the combined budget was \$10 million. In the 2016 rate proceeding, the Board approved an increase in the Department's rates, in part, in order for PWD to spend \$15 million in FY 2017 and \$15 million in FY 2018 on those programs. But, in fact, in FY 2017 the Department spent \$16.7 million on the program. In FY 2018, the Department projects spending \$20 million on SMIP/GARP. Accordingly, although the Board increased rates in order for PWD to spend \$15 million in FY 2018, the Department has decided to invest an additional \$5 million in this program in the current fiscal year. Those additional funds, if not spent on SMIP/GARP, would otherwise be available to contribute to higher levels of reserves in PWD's Rate Stabilization Fund.

PA St. 1 at 17:19-18:11.

Mr. Morgan recommends that the Board not include PWD's projected increase in SMIP/GARP expenses in determining any rate increase that the Board may authorize in the 2018 Rate Case. Primarily, Mr. Morgan recognizes that PWD's outspending in FY 2017 and FY 2018 demonstrates that PWD is capable of directing excess net revenues, beyond its projections, toward SMIP/GARP. PWD St. 1 at 19:3-13. As reflected in the 2016 Rate Case decision, PWD customer rates were increased to provide additional funding to these programs, just two years ago, contributing to a 72.9% growth rate in this area of expenditure. PA St. 1 at 18:21-22.

Although PWD did not respond regarding whether it would spend more on SMIP/GARP in the absence of Board approval of its rate case projection of a \$10 million increase in expenditure,⁴⁵ history affirms that PWD would do so, if funds were available. PWD's rebuttal testimony acknowledges that PWD has directed discretionary funds to increase SMIP/GARP grants. PWD appears to deny that there is a direct nexus between PWD's SMIP/GARP expenditures in excess of the 2016 Rate Case projections and its available reserves. PWD St. 1R at 13:5-12. In fact, however, PWD submits that it intends to fund a portion of its future SMIP/GARP expenditures from the Rate Stabilization Fund, directly establishing the same nexus observed by Mr. Morgan. PWD St. 1R at 14:1-6.

Ultimately, PWD maintains that SMIP/GARP not only help PWD to meet its greened acres requirements under its Consent Order and Agreement (COA) with the Pennsylvania Department of Environmental Protection, but also that these grant programs save maintenance expense for PWD, and constitute the most affordable way to pursue combined sewer overflow remediation. However, the Public Advocate remains concerned about the equities associated with these programs, which charge all customers for benefits that are solely available to non-residential customers. See PA-V-18. Through these programs, PWD directs grant dollars to non-residential customers and vendors for non-residential construction projects. Once completed, PWD also reduces ongoing stormwater charges paid by those customers to reflect the reduced stormwater runoff contributed by their parcels.⁴⁶ See PA-II-4 (Attachment); 4/19 Public

⁴⁵ See 5/14 Tr. at 235:22-236:16.

⁴⁶ Record support for SMIP/GARP falls within two categories: (1) support of PWD's stormwater management program, and the role of SMIP/GARP in that context (see, e.g., May 25 Comments of PennFuture and NRDC; Testimony of Stephanie Wein on behalf of PennEnvironment; May 2 Testimony of Julie Slavet; emails to the Board generated via https://pennenvironment.webaction.org/p/dia/action4/common/public/index.sjs?action_KEY=26006), and (2) support for efforts to foster sustainable businesses and the role of SMIP/GARP in promoting access to

Input Tr. at 61:1-17. Accordingly, those customers who receive SMIP/GARP grants actually contribute less, in ongoing rates and charges, to the funding of future incentive grants for other customers. See PA-II-5 (explaining that SMIP/GARP costs are allocated 60% to stormwater and 40% to sanitary). The Public Advocate submits that increased funding for SMIP/GARP incentive grants, which trigger recipients' reduced contributions toward stormwater costs and future incentive grants, should not be the basis for increased rates and charges imposed on the majority of PWD customers – the small users – who are incapable of benefiting from either.

PWD has shown that, due to its consistent outperformance of projections, it can direct discretionary resources to SMIP/GARP projects, including a projected \$5 million beyond what it projected for FY 2017 in the 2016 Rate Case. As a result, and given PWD's inconsistent explanation regarding the extent to which its projected revenue increase requests a full \$10 million in additional rates and charges to fund this program, the Public Advocate maintains that no additional O&M expense for SMIP/GARP incentive should be recognized for ratemaking purposes. PWD should be incentivized to direct additional, discretionary funds, toward these programs, as it has done in FY 2017 and FY 2018, without additional rate relief.

B. Collection Factors

Among the assumptions utilized to calculate revenue requirements for its fully projected future test years, PWD includes a calculation of so-called "collection factors" which are applied to reflect the payments PWD anticipates it will actually receive on issued bills. As explained by Mr. Morgan:

Once the Department calculates its operating revenue from each customer type, collection factors are applied to determine the operating retail revenue cash receipts. The collection factors represent the multi-year payment pattern for the billing year (payments received within 12 months) and the two prior fiscal years' billing which are broken down into

PWD funds for construction purposes (see, e.g., May 25 Comments of PennFuture and NRDC, Public Comment of Anna Shipp, Sustainable Business Network of Greater Philadelphia, March 21, 2018.).

payments within 13-24 and after 24 months. Essentially the collection factors break down the percent of revenue from a specific billing period that is collected within the three periods – within 12 months, 13 to 24 months and beyond 24 months. The collection factors used in the cost of service by PWD are based upon a five-year historical period (FY 2012 through FY 2016).

PA St. 1 at 20:13-21.

In Mr. Morgan’s testimony, he recommended utilization of a three-year average, which is more consistent with the two-year average utilized by PWD to forecast revenue for the projected test years. PA St. 1 at 20:22-25. Subsequent to submitting his testimony, however, Mr. Morgan recognized that he had made an error in his use of the proprietary Black & Veatch rate model. 5/15 Tr. at 140:19-23.

During the technical hearings, the Public Advocate presented calculations of the collection factors proposed by PWD and the Public Advocate. See PA Hearing Ex. 7 at 56. As proposed by PWD, the overall 96.54% collection factor used to adjust non-stormwater only billings would be calculated as follows (averaging highlighted cells):

| FY | Billing Year | Billing Year +1 | Billing Year +2+ |
|---------|--------------|-----------------|------------------|
| 2016 | 86.84% | NA | NA |
| 2015 | 87.03% | 8.24% | NA |
| 2014 | 86.17% | 8.61% | 1.00% |
| 2013 | 84.80% | 9.80% | 1.69% |
| 2012 | 84.67% | 9.67% | 1.99% |
| Average | 85.90% | 9.08% | 1.56% |
| Total | | | 96.54% |

In contrast, as proposed by the Public Advocate, the overall 97.12% collection factor used to adjust non-stormwater only billings would be calculated as follows (averaging highlighted cells):

| FY | Billing Year | Billing Year +1 | Billing Year +2+ |
|---------|--------------|-----------------|------------------|
| 2016 | 86.84% | NA | NA |
| 2015 | 87.03% | 8.24% | NA |
| 2014 | 86.17% | 8.61% | 1.00% |
| 2013 | 84.80% | 9.80% | 1.69% |
| 2012 | 84.67% | 9.67% | 1.99% |
| Average | 86.68% | 8.88% | 1.56% |
| Total | | | 97.12% |

As shown above, the Public Advocate’s proposal is to use the most recent three years of data from each of the three periods, whereas PWD’s proposal is to utilize five years of data from the “Billing Year” period, four years of data from the “Billing Year +1” period, and three years of data from the “Billing Year +2+” period. Under the Public Advocate’s proposal, PWD’s collection factor would increase by 0.58%, reflecting assumed additional payments from customers, and reducing the need for an increase in rates and charges. As set forth in the Public Advocate’s response to Transcript Request 17([Appendix B](#)), the effect of this adjustment is to reduce PWD’s revenue requirement (by increasing revenues) by \$3,909,000 in FY 2019, \$4,031,000 in FY 2020 and \$4,179,000 in FY 2021. Notwithstanding the projected impacts in FY 2021, the Public Advocate maintains that the Board should only consider a two-year rate period in this 2018 Rate Case.

As discussed during the technical hearings, in the 2016 Rate Case, the Board approved increased rates and charges that were calculated using a three-year collection factor calculation, performed in an identical manner to that recommended by the Public Advocate in this case. 5/14 Tr. at 189:10-14; PA Hearing Ex. 7 at 54-55. In addition, according to PWD, it outperformed its projections of service revenues by \$10.249 million in FY 2016 and \$8.623 million in FY 2017. PA Hearing Ex. 7 at 53 (PA-ADV-14). Accordingly, based on actual dollars received, the most recent collection experience is more favorable, and should be taken into account by the Board.

In other words, the Board should lean toward the approach that reflects a stronger rate of collection.

Moreover, PWD's approach is not reasonable. As shown by the tables above, PWD's "Billing Year" collection factor has improved substantially in the most recent three years, demonstrating that a five year average, for this factor alone, would underestimate the likely performance based on the most recent experience. Indeed the difference between a three and five year collection factor for "Billing Year" collections is 0.78% (86.68% - 85.90%). This substantial difference must not be disregarded. Moreover, as proposed by the Public Advocate, the most recent three years of experience in the "Billing Year +1" factor more accurately reflect the trend of those aged bills, for which collections have declined during the period that the "Billing Year" collections have increased. Contrary to these clear indicators, PWD proposes to maintain a higher "Billing Year +1" factor, which unduly relies upon data that no longer appears representative of likely collections. While PWD maintains that using all information available to it is preferable (see, e.g., 5/14 Tr. at 188:17-22; 189:18-190:10; 248:15-249:2), the Public Advocate submits that doing so fails to afford appropriate weight to the most recent experience, which indicates that a higher collection factor must be utilized to project future payments.

In addition, the Public Advocate submits that there is a further good reason to rely upon the most recent, three year average collection experience. The intersection of PWD collections and the new TAP rates has not been thoroughly evaluated. However, Mr. Colton demonstrates that the majority of arrears owed by TAP participants are aged arrears, which fall in to the Billing Year +1 and Billing Year +2+ collection factors. As more customers enroll in TAP, and are provided affordable bills, it can reasonably be anticipated that the "Billing Year" collection factor will improve, and that unless arrearage forgiveness is implemented, the Billing Year +1

and Billing Year +2+ collection factors will not improve to the extent that they include TAP arrears (since TAP participants are not required to make any payment on those bills). See, e.g., PA St. 3 at 64:5-7 (observing that the average pre-existing arrears of TAP participants falls into the 24+ month age range).

C. Expense Escalation

As discussed above, under PWD's fully projected rate model, items of O&M expense are first adjusted from a base year budget (FY 2018 in this case), by so-called "spend factors," representing the extent to which the budget for those cost items has actually been utilized for spending purposes. Then, to project the needs for future years, those adjusted O&M expenses are increased by so-called "escalation factors" representing inflation, cost increases, or other proposed drivers of additional future costs. As explained by Mr. Morgan, the Board should approve the adjustments to PWD's expense escalation factors set forth in the subsections below.

1. Power and Gas Expense

PWD proposes expense escalation of 3% for Power costs (Class 220) and Gas costs (Class 221) in FY 2021. As Mr. Morgan explains, the City's Energy Office projected no increase in Power costs for FY 2019 or FY 2020. PA St. 1 at 23:1-3. The City's Energy Office projected a 4% increase in gas costs based on the settlement of a recent PGW rate case. PA St. 1 at 23:18-19. For FY 2021, however, PWD includes a 3% escalation factor to both Power and Gas expense, because such rate is utilized in the City's five-year plan. PA St. 1 at 23:4-6, 21-22. Mr. Morgan explains:

If the Board approves a three-year rate period, I am recommending an adjustment that removes the three percent escalation...for FY 2021 because it is not known and measurable. The City's five-year plan is a planning tool. While it may be reasonable to use the three percent escalation rate for planning purposes, for ratemaking purposes, the costs must meet the standard of known and measurable. Therefore, the three percent escalation of power costs should be removed.

PA St. 1 at 7-13.

As discussed above “known and measurable” is a fundamental standard of ratemaking that applies to ensure that rates are cost-based, satisfying core obligations of fairness and equity. Accordingly, just as PWD’s base budget, the FY 2018 budget, must first be adjusted based on actual, historical spend factors, so is it only reasonable for ratemaking purposes to escalate projected expenditures when the basis of those projections is both “known and measurable.” PWD appears to agree, in large part, with this principle. Indeed, PWD acknowledges that even expense escalations for fully projected test years must be based on reasonable estimates of future expenses that will actually be incurred, based on known experience. In other words, as PWD puts it:

PWD uses fully projected test years in establishing rates that incorporate (i) any known changes to O&M expenditures as part of a normal budgeting best practice, and (ii) reasonable assumptions that are based on historical actual experience.

PWD St. 1R at 7:19-22 (emphasis added).

Contrary to its own express acknowledgment of the manner in which reasonable assumptions for future expenditures are determined for PWD ratemaking, the sole justification for the escalation factor is its inclusion in the City’s five-year plan. PWD has made no demonstration that the 3% escalation factors are based on any known or available data, historical experience, or other reasonable information. The sole source of this assumption is a memorandum from the City’s Energy Office stating that after FY 2020, the Energy Office recommends using a standard escalation rate of 3%, “consistent with the General Fund’s five year plan.” PWD St. 9A, Sch. BV-E5:WP-1, Ex. 8 at 31.

Under any conceivable standard for the projection of future O&M expenses, PWD’s 3% expense escalation falls short and is nothing more than a contingency, that lacks any reasonable

basis whatsoever. PWD asserts that it is unreasonable to assume that these costs will not increase (PWD St. 1R at 18:10-11); however this is not the appropriate standard in this 2018 Rate Case. PWD is the proponent and must carry its burden to demonstrate with substantial evidence the need for the rate relief it seeks. In other words, PWD must demonstrate that costs will increase to justify inclusion of its 3% Power and Gas expense escalation in FY 2021. PWD has fallen far short of satisfying that burden and so, if the Board approves a three-year rate period (which it should not), the Public Advocate submits that the Board should assume no increase in Power and Gas costs, denying PWD's 3% expense escalation factor.

2. Chemical Cost Escalation

PWD's Formal Notice included proposed expense escalation for Chemicals (Class 307) of 6.7% for FY 2019, 3.8% for FY 2020, and 1% for FY 2021. PWD St. 9A, Sch. BV-E5:WP-1 at 5. As Mr. Morgan summarized:

According to PWD, the escalation factors for chemicals cost of 6.7 percent for FY 2019 and 3.8% for FY 2020 are based on PWD's recent experience. A 1.0 percent escalation factor is assumed for 2021. When asked to provide support for the 6.7 percent and the 3.7 percent escalation factors, the Department provided an analysis comparing budgeted data. In my opinion budgeted data are not indicative of the actual experience as claimed by the Department. Moreover, the total cost of chemicals is not only affected by the unit cost of the chemical but also by the actual quantities of the various chemicals that are utilized. The comparison of the budgeted data does not bear this out. The burden of proof is on PWD to support its cost, and the budgeted data provided in the response to the Public Advocate's data request fails to provide adequate support.

In order to assess the Department's recent experience with chemical costs, I reviewed the historical chemical expense trend. According to information contained in the Department's filing, it experienced a 0.62 percent and 7.15 percent decrease in chemical expense in FY 2015 and 2016. Hence, the Department's recent experience with chemical cost is not consistent with the increase it has projected in its filing. Therefore, I believe the chemical cost escalation proposed by the Department is unreasonable.

PA St. 1 at 25:4-21.

On the basis of this review, Mr. Morgan recommended that PWD's Chemical costs be projected to remain flat and that no expense escalation be approved for ratemaking purposes. PA St. 1 at 25:24-26:1.

PWD accepted Mr. Morgan's adjustment for FY 2019 and FY 2020, agreeing that its Chemical costs should not be escalated during those projected test years. See PWD TR-23(A). However, PWD maintains that its 1% increase for FY 2021 should be approved. PWD seeks to justify this increase as: "a nominal annual escalation of 1% for FY 2021 through FY 2023 based upon a review of the overall consumer price index and PWD's recent experience." PWD St. 1R at 19:21-23. As discussed above, PWD's "recent experience" demonstrates that PWD experienced decreases in expenditures for Chemical costs in FY 2015 and FY 2016. PWD provides no explanation or support for why its Chemical costs would increase in FY 2021, after experiencing actual decreased expenditures and agreeing that no increase should be assumed for ratemaking purposes in FY 2019 and FY 2020. Indeed, if the consumer price index were a reasonable basis to project future Chemical costs, PWD's recent historical expenditures would, at a minimum, indicate that some increased spending had been required, consistent with such an inflation proxy. No such information exists.

PWD will submit that the Board should approve this 1% Chemical expense escalation, based on the expertise of its staff in projecting these costs. PWD stated: "Mr. Morgan does not appear to recognize the respective expertise of PWD Operations staff in establishing the cost escalation factors based upon both their 'known and measurable' experience or their professional judgment as the entity responsible for procuring chemicals needed to treat both source water and wastewater." PWD St. 1R at 20:1-5. The experience and judgment of PWD staff is not the focus of either Mr. Morgan's adjustment or the expense escalation at issue. PWD has provided

no support for its 1% Chemical expense escalation, and no amount of experience or judgment possessed by its staff can rectify PWD's fundamental failure to demonstrate that this escalation is based on a "known and measurable," or even reasonably estimated, assumption of future costs.

3. Class 200 Services Expenses and Class 800 Transfers

PWD proposes a 3.4% expense escalation factor for Class 200 Services and a 2.5% expense escalation factor for Class 800 Transfers. As Mr. Morgan explained, when asked to support the basis for these escalation factors, PWD referred to Schedule BV-E5:WP-1 Appendices 4 and 5. See PA-VI-1(D), (H). Appendix 5 is titled "O&M Cost Industry Indices Data" and contains no information that explains PWD's expense escalations for Class 200 Services and Class 800 Transfers. However, Appendix 4 provides the historical expenditures in these categories for FY 2014, FY 2015 and FY 2016. Upon review of these historical expenditure levels, Mr. Morgan concluded that, for both categories of expense, a different escalation factor should be utilized. PA St. 1 at 24:20-22; 26:17-18. In both cases, the Public Advocate's proposal is to use a 1.98% expense escalation factor.⁴⁷

With respect to Class 200 Services, PWD's use of a 3.4% expense escalation is not consistent with its own evidence. As shown in Schedule BV-E5:WP-1, Appendix 4, PWD's actual 2 year growth rate for Class 200 Services expense is 3.3%. See 5/15 Tr. at 158:19-159:1 ("The[re] were instances that some of the factors – one of the factors, I should say, that they use is not even tied to this [chart], so that's part of the problem.") More importantly, actual expenses for Class 200 Services did not increase at all, and in fact went down from FY 2015 to FY 2016, the second to third year utilized in calculating the 2 year growth rate. As a result, it is not clear

⁴⁷ Mr. Morgan's testimony, on page 26, includes a typographical error, indicating that a 2.18% escalation should be utilized for Class 800 Transfers. This section of Mr. Morgan's testimony should state that a 1.98% escalation factor is proposed for Class 800 Transfers, as is proposed for Class 200 Services.

that the two year growth rate reflects a reasonable assumption for this category of expense, which has most recently declined. Accordingly, rather than rely solely on the PWD's expenditures from this single cost category, Mr. Morgan proposes a "blended rate" of expenditures, based on the Appendix 4. He explains:

On Appendix 4, the Department calculates a 3.15 percent average two-year increase in expenses for the period 2014-2016. However, SMIP/GARP costs, which experience significant growth of 72.86% during the same period were included in the determination of the growth rate. When the SMIP/GARP costs are removed, the growth in the expenses is only 1.98 percent. Therefore, I believe it is appropriate to remove the SMIP and GARP costs from the derivation of the historical growth rate because the SMIP/GARP costs are costs over which the Department has the ability to exercise discretion. The purpose of using the historical growth rate is to estimate the growth in expenses that occur over time from external factors. Therefore, I recommend that the escalation rate for general expenses should be 1.98 percent.

PA St. 1 at 24:12-21.

Mr. Morgan's approach thus utilizes most of the data on Appendix 4, excluding the increased SMIP/GARP expense, to derive a rate of projected growth that takes into account historical data regarding actual expenditures across a larger group of categories. This approach captures the larger trend in expense increase, disregarding SMIP/GARP which increased not due to increased cost, but because PWD increased the programs.

Similarly, for Class 800 Transfers, PWD proposes to use the two year growth rate shown on Appendix 4, rounded up to 2.5%. Actual spending experience shows significant volatility, with an approximate 19% reduction in spending from FY 2014-2015, followed by a nearly 30% increase from FY2015-2016. The compound rate of growth determined over such a short period, and on the basis of this single category of expenditure, is not supportable as costs have been shown to vary significantly in either direction. Accordingly, Mr. Morgan proposes using the blended 1.98% expense escalation, explaining:

My approach to determining a reasonable escalation factor for Transfers is similar to the approach taken for general expenses, that is, I calculated an escalation factor based upon the average historical change in these costs after removing those costs that are specifically adjusted elsewhere in the cost of service.

PA St. 1 at 26:13-16.

The Public Advocate submits that expense escalation for Class 200 Services and Class 800 Transfers should be adjusted to reflect Mr. Morgan's blended rate of 1.98%. Actual, historical expenditures in Class 200 Services declined during the most recent year utilized in the rate model and expenditures for Class 800 Transfers demonstrate significant volatility over a short period of time. For both categories of expense, it is reasonable and prudent to utilize an average based on a broader group of expenditures, in order to estimate an escalation factor that is representative of the larger circumstances regarding PWD's O&M expenses.

D. Non-Recurring Expenses Should Be Appropriately Normalized

As discussed above, in several respects, PWD's proposed 2018 Rate Case departs from accepted ratemaking practices. Mr. Morgan explains:

It is normal accepted ratemaking practice for utilities to amortize or normalize non-recurring or extraordinary expenditures both on their books and for ratemaking purposes. The rationale is to spread cost over the periods that benefit from the expenditure or to prevent over collection of costs. For example, the expenses incurred for presenting a rate case (legal, consultants, etc.) are usually amortized (or normalized) to reflect a reasonable filing period between rate cases.

PA St. 1 at 10:2-7.

In substance, failing to normalize non-recurring expenses, which are incurred in one fiscal year, but included in projected O&M expenses for all future years, permits PWD to charge customers multiple times for costs that it only incurs once. PWD argues that it simply cannot normalize these expenditures, because under the accounting rules applicable to PWD, "expenditures are recognized and recorded as expenses at the time they are paid or encumbered." PWD St. 1R 12:7-8. PWD cites no authority for the proposition that its cash basis of accounting overrides the

“sound utility ratemaking practices” that the Board must follow in developing rates and charges. Phila. Code §13-101(4)(b)(ii). Indeed, as discussed above, the Philadelphia Code does not require that the Board set rates that yield 100% of all of PWD’s O&M expenses in each fiscal year. It requires that rates and charges be “such as shall yield” sufficient revenues for PWD’s operations. Phila. Code §13-101(4)(a). This language authorizes and empowers the Board, for ratemaking purposes, to normalize expenses to avoid their duplication in rates while nonetheless ensuring that PWD’s rates are adequate *over time* to fund operations.

Furthermore, PWD’s assertion that it cannot, for ratemaking purposes, normalize or amortize nonrecurring expenses is fundamentally at odds with the explicit recognition in the Philadelphia Code that accumulated reserves are available to “stabilize rates.” Phila. Code §13-101(1)(c). The General Bond Ordinance established the Rate Stabilization Fund, directing that amounts accumulated in that fund can be transferred to the Revenue Fund for purposes of contributing to revenues available for operating expenses. PA-I-21(Attachment 1) (definition of “Net Revenues”). The Rate Stabilization Fund exists, in other words, in order to “stabilize rates and revenues and expenses that are out of alignment temporarily until they get back into alignment.” 5/14 Tr at 265:1-3. Under PWD’s theory, the Board should permit PWD to recover multiple times for the same expense, completely disregarding the purposes of the Rate Stabilization Fund.

Finally, PWD asserts that, in effect, through its annual budgeting process, overall O&M expenses are in fact normalized. PWD St. 1R at 11:19-22. Accordingly, PWD avers, without any support on the record of this proceeding, that it has somehow taken into account, for budgeting purposes, the non-recurring nature of expenses in prior fiscal years when projecting its budget for successive fiscal years. As discussed in depth above, PWD’s rates are forecast on the

basis of the adjusted FY 2018 budget, with escalation factors applied to forecast future expenses in the three fully forecast test years. PWD's FY 2019 Budget has not been finalized, and its FY 2020 and FY 2021 Budgets have not even been contemplated. Accordingly, there is simply no support whatsoever for the premise that PWD's non-recurring expenses in its base year have somehow been shifted, for purposes of projecting future rates, to compensate for other non-recurring expenses anticipated in future years. Ultimately, failing to normalize expenses for ratemaking purposes violates the fundamental precept, which PWD acknowledges applies in this 2018 Rate Case, that rates be cost-based. The non-recurring expenses, discussed below, occur one time; charging customers for them over each forecast test year is impermissible because PWD has not identified the applicable cost-basis for them in each of the forecast test years.

1. Rate Case Expense

Mr. Morgan identifies PWD's estimated rate case expense as a non-recurring cost which should be normalized for ratemaking purposes. He explains:

PWD has estimated the total cost of this proceeding to be \$3,188,000 which is included in the FY 2018 budget (PA-IX-23). I am recommending that rate case expenses be normalized over 2 years. Rate case expenses are incurred as a result of the Department filing to increase rates and not a normal cost that is incurred annually. It is standard ratemaking procedure that since these costs are not incurred every year, they should be normalized over the benefit period to avoid an overcollection of the cost. Also, given that I am recommending a two-year rate increase, this approach is consistent with the period over which the rates from this proceeding will be in effect.

PA St. 1 at 30:14-21.

Although PWD responds that it could experience a revenue "shortfall" as a result of Mr. Morgan's normalization recommendations, PWD acknowledges that in so asserting, it completely ignores the existence of the Rate Stabilization Fund. 5/14 Tr. at 90:4-92:17. The substance of PWD's concern is that, in the year in which rate case expense is incurred, the revenues may not completely align with that expense. 5/14 Tr at 92:4-9. As discussed above,

the temporary misalignment of revenues and expenses is one of the purposes served by the Rate Stabilization Fund. Moreover, by normalizing rate case expense over the anticipated period between rate cases, PWD would fully recover that expense. PWD acknowledges this to be true. 5/14 Tr. at 96:1-7.

PWD further contends that, although described as rate case expense, the one-time projected cost should be included in all projected rate years because, in effect, PWD may spend it on something else. The following back and forth, from the May 14 Technical Hearing demonstrates that PWD has simply projected its anticipated rate case expense into future years, without identification of what non-rate case services will be required or compensated for:

[PWD Witness]...When we talk about rate case cost, the costs that are budgeted and projected for 2019 are the costs that are expected to be incurred in 2019. And then if there is a cost that is projected for 2020, that 2020 is the cost that we expect to incur for 2020. Now, is it exactly for rate case? It may not be exactly for rate case. It is for services that the same team of people that -- an example of a rate case is the same people are -- same group of consultants are going to be providing services, because they have already been selected for multiple years to provide services.

* * * * *

[Public Advocate] But have you identified those costs for fiscal 2020 at this time, what those costs would be?

[PWD Witness]: The costs are identified on the basis of projection, based off of the 2018 figures.

5/14 Tr. at 96:16-99:3.

As set forth in PWD's response to Public Advocate discovery (PA-IX-23), PWD's rate case expenses, which are included in the FY 2018 budget and utilized for purposes of projecting rates for FY 2019-2021 are as follows:

Rate Proceedings Expenses and Proposed Expenses

| | 2016 Rate Proceeding | 2018 Rate Proceeding |
|--|----------------------------|----------------------------|
| | Expenses (\$) | Budget (\$) |
| Water Rate Board | | |
| Hearing Officer | 62,000 | 61,980 |
| Board's Technical Expert | 32,000 | 76,180 |
| Public Advocate | 300,000 | 325,000 |
| Board's Counsel and Personnel | 9,000 | 120,000 |
| Court Reporting | 17,000 | 25,000 |
| Remaining Budget TDB | - | 361,840 |
| Sub-total | \$ 420,000 | \$ 970,000 |
| Water Department Consultants and Experts | | |
| Cost of Service, Rate Design, Billing System Reporting , Testimony | 1,300,000 | 1,043,000 |
| Cost of Service Reporting ⁽¹⁾ | | 200,000 |
| Financial Advisory | 55,000 | 55,000 |
| PWD Outside Rate Counsel ⁽²⁾ | 160,000 | 170,000 |
| City Personnel Cost ⁽³⁾ | 695,000 | 750,000 |
| Sub-total | \$ 2,210,000 | \$ 2,218,000 |
| TOTAL | \$ 2,630,000 | \$ 3,188,000 |

⁽¹⁾ Cost of Service Reporting was included as Billing System Reporting in 2016 Rate Proceeding

⁽²⁾ Includes Bond Council

⁽³⁾ Estimated Amounts used for City Personnel Cost

Of this the total rate case expense budget, \$3,188,000, Mr. Morgan identifies that, with the exception of \$361,840 (the amount designated as “Remaining Budget TBD”), the entire budget clearly relates solely to the functions to be performed in this 2018 Rate Case. Indeed, after the conclusion of this proceeding, none of the specifically identified expenses will recur.

Accordingly, for ratemaking purposes, the total amount to be normalized over the rate period selected by the Board is \$2,826,160. If normalized over two years, this results in a downward expense adjustment of \$1,413,080 for FY 2019 and FY 2020. If normalized over three years, this results in a downward expense adjustment of \$1,884,107 for FY 2019, FY 2020 and FY 2021. See PA TR-17 ([Appendix B](#)). Note, however, that this amount may be subject to further adjustment, since the Black & Veatch rate model would also take into account potential spend and/or expense escalation factors.

2. TAP Implementation Costs

Similar to Rate Case Expense, PWD's FY 2018 budget, upon which its fully projected test year expense assumptions are based, includes substantial expenditures for the implementation of the Tiered Assistance Program (TAP). As Mr. Morgan explains:

The FY 2018 budget includes an increase of \$1,569,366 in contracted services related to the Tiered Assistance Program (TAP) and other regulatory matters. The Department explains that \$1,100,000 of this total represents costs related to the WRAP/TAP implementation cost, bond engineering, affordable rate studies and reporting. I am recommending an adjustment to normalize the \$1,100,000 over a 2-year period. The implementation of the TAP program is a non-recurring event. Therefore, the inclusion of the full costs in rates as a normal recurring cost would result in an overstatement of expenses.

PA St. 1 at 31:20-32:2.

The fundamental arguments, for and against normalization of this expense, are essentially the same as those discussed regarding Rate Case Expense. However, unlike Rate Case Expense, "implementation" of TAP has already occurred, and will not recur. See 5/14 Tr. at 106:5-9. Accordingly, although PWD claims it has identified additional expenses for the implementation of TAP, in excess of those included in its FY 2018 Budget, those expenses have not been included in the FY 2018 Budget assumptions upon which rates are forecast. See 5/14 Tr. at 104:8-17. Moreover, the Public Advocate's recommendation takes into account that, with a new program, adjustments to TAP may be necessary during the period between rate cases. Again, PWD has identified no specific costs associated with "implementation of TAP" during FY 2019, FY 2020 or FY 2021. However, because the Public Advocate has made recommendations concerning program modifications, and to continue to support modifications to the TAP program as may be necessary, it is appropriate to account for some incremental expense associated with refining PWD processes and administration of TAP. For this purpose, the Public Advocate's normalization adjustment is reasonable and necessary, to take into account those improvements

to TAP which the Board should order as part of this proceeding, and the work to be accomplished by PWD prior to its next rate proceeding.

As Mr. Morgan demonstrates, if the \$1,100,000 implementation cost is normalized over two years, the result is a \$550,000 downward expense adjustment. See PA St. 1 at LKM-2. If that cost is normalized over three years, the result is a \$733,333 downward expense adjustment. TR-17. As with rate case expense, this amount may be subject to further adjustment, since the Black & Veatch rate model would also take into account potential spend and/or expense escalation factors.

E. Debt Interest Rate

PWD's Formal Notice included forecast assumptions regarding interest rate expenses for recent and future debt issuances. Mr. Morgan explains:

The interest rates the Department has used to derive interest expense is based on 5.25 percent for FY 2017, 5.25 percent for FY 2018, 5.50 for FY 2019, 5.75 for FY 2020 and 6.0 percent for FY 2021.

PA St. 1 at 26:23-25.

Mr. Morgan asserts that assumption of annual 0.25% increases in interest for future periods is speculative, and fails to meet the "known and measurable" standard. PA St. 1 at 27:5-9. Indeed, Mr. Morgan observes that, in PWD's 2016 Rate Case, rates were approved with similar assumptions about increased future interest rates, which never occurred. PA St. 1 at 27:9-13. When examining both the past actual interest rates, and projected future interest rates, Mr. Morgan submits that PWD's assumptions are flawed.

Regarding interest on FY 2017 and FY 2018 bond issues, Mr. Morgan recommends that PWD utilize an interest rate of 5%. PWD disagrees, responding that "[t]he projected debt service associated with bonds issued in FY 2017 and FY 2018 reflects the actual debt service schedules associated with the Water and Wastewater Revenue Bonds Series 2017A and the

Water and Wastewater Revenue Refunding Bonds Series 2017B.” PWD St 1R at 22:1-5.

However, Mr. Morgan’s recommendation is based on the direct rates of interest stated in the debt service schedules included with the Official Statements for Revenue Bond Series 2017A and Refunding Bonds Series 2017B, both of which list the interest rate at “5.000%.” See PA-ADV-16 (Attachment); PA St. 1 at 26:25-27:4. Accordingly, the Board should require that PWD adjust its interest rate assumptions to 5% for 2017 and 2018 bond issues.

Mr. Morgan recommended that PWD utilize an assumption of 5.25% for debt issuances proposed for FY 2019 and FY 2020, recognizing, as discussed above, that PWD’s projected 0.25% increase per year was speculative. PWD agreed with Mr. Morgan’s recommendation, stating that “[t]he proposed 5.25% interest rate assumption is reasonable for the projected bond issuances during FY 2019 to FY 2021.” PWD St. 1R at 21:23-25. Despite the explicit recognition of this reasonable assumption in its rebuttal testimony, PWD appears to continue to contend that its interest rate assumption for FY 2021 bond issues should be higher. See PWD TR-23; see also PWD Hearing Exhibit 2 (“Summary of Public Advocate Adjustments Acceptable to Philadelphia Water Department”).

Although PWD concedes the reasonableness of Mr. Morgan’s projected 5.25% interest rate for FY 2019 and FY 2020, it is unclear what interest rate assumption PWD may seek to utilize for FY 2021. As stated in the Formal Notice, PWD’s proposal was for “6.25 percent for each of the bond issues proposed during FY 2021 through FY 2023.” See PWD St. 9A at 39:3-4. PWD references this section of its testimony in PWD Hearing Exhibit 2, indicating that it maintains its interest rate assumption of 6.25% for FY 2021. In contrast, however, PWD asserted in response to a Public Advocate discovery request:

As stated in the response to PA-I-9, the decision regarding interest rate assumptions were [sic] made in consultation with the Department’s financial advisors, PFM and Acacia

Financial by reviewing historic interest rates trends over an extended time horizon while including a moderate increase to develop projected debt service.

Note: As stated in response to PA-ADV-31, the interest rate for each of the bond issues proposed during FY 2021 through FY 2023 is 6.00%.

PA-IV-29.

Similarly, as presented in PWD's response to Transcript Request 23(B), PWD's revised Table C-1, produced to show the impact of the adjustments it has agreed to, PWD intends to utilize 6.0% interest for FY 2021.

Regardless of whether PWD intends to utilize a 6.0% or 6.25% interest rate for purposes of its FY 2021 projection, the Board should not approve rates for FY 2021 at this time and should instead limit consideration to a two-year rate period. But, in the event it does approve a three-year rate period, neither 6.0% nor 6.25% is a reasonable estimate. As discussed above, PWD's estimates in the 2016 Rate Case were wrong, even over a two-year rate period. PWD has shown itself incapable, regardless of its reliance upon financial advisors retained for it by the City Treasurer's Office, of projecting interest rates for bonds that are not even contemplated for issuance until sometime two or more years from now. If the Board approves a three-year rate period, it should utilize a consistent 5.25% interest rate assumption for bond issuances over FY 2019, FY 2020 and FY 2021.

F. Mutually Agreed Revenue Requirement Adjustments

The following revenue requirement adjustments, proposed by Mr. Morgan, have been agreed to and are supported by PWD and the Public Advocate.

- **Additional Staffing Operating Labor Expense.** PWD agrees that actual to budget factors should be applied to these expenses, as identified by Mr. Morgan. See PA St. 1 at 19:19-20:9; PWD Hearing Ex. 2. This adjustment should be applied over the rate period determined by the Board.

- Debt Issuance Costs. PWD agrees that its projected debt issuance costs should reflect its historical cost, as described by Mr. Morgan. See PA St. 1 at 27:22-28:3; PWD TR-23. Accordingly, PWD's debt issuance cost should be set at 0.56%.
- Capacity to Pay Energy Cost. PWD agrees to eliminate \$1,493,250 from each year of the Board's approved rate period, which amount was identified as "capacity to pay for energy cost due to weather related events and also to account for energy not purchased in advance." See PA St. 1 at 31:4-14; PWD Hearing Ex. 2.

XI. RATE DESIGN ADJUSTMENTS

PWD utilizes the base extra-capacity method of assigning the costs of service to each customer class in its water class cost of service ("CCOS") study. This method is set forth in the M1. The results of PWD's CCOS study have been relied upon to design rates for water service. The Public Advocate's witness, Mr. Mierzwa, reviewed PWD's application of the base extra-capacity method used in its CCOS study and determined that PWD has designed rates which significantly exceed the cost of providing service to the Residential customer class, and that even the existing rates of the Residential customer class are more than sufficient to recover the indicated cost of service. See Errata Sheet to Direct Testimony of Jerome D. Mierzwa (Table) (hereinafter, "Mierzwa Errata Sheet"). Most Residential and Senior Citizens class consumption currently falls within the 0 to 2 Mcf usage block. Accordingly, the Board should maintain and not increase the current 0 to 2 Mcf usage block for water service during the rate period.⁴⁸

⁴⁸ The Public Advocate's recommendation regarding usage blocks only applies to water service. Sanitary sewer rate design consists of flat monthly charges (based on meter size) and uniform, non-varying quantity charges. PA St. 2 at 19:15-18. PWD proposed to maintain its parcel-based stormwater cost allocation methodology, with 80% of related costs allocated based on impervious area and 20% allocated based on gross property area. Residential customers pay uniform monthly stormwater charges. PA St. 2 at 20:3-12. The Public Advocate proposed no change to PWD's wastewater and stormwater class cost of service studies, with the exception that, if the Board approves any increase in rates, such increase be proportionately scaled back to achieve the revenue increase approved by the Board. PA St. 2 at 20:23-21:3.

In addition, PWD currently uses the same water usage rates for all customer classes. This makes it nearly impossible to set rates to recover the indicated cost of water service for each customer class. The Public Advocate recommends that the Board make a determination in its rate order that PWD should propose separate water usage rates for each customer class, ideally in PWD's next proceeding.

A. The System-Wide Extra-Capacity Factors Reflected in PWD's Class Cost of Service Study Should Be Adjusted to Reflect More Recent Experience

Consistent with the procedures described in the M1 manual as shown on Tables W-8 through W-10 of PWD's CCOS study, costs have been assigned to four functional cost centers:

- Raw Water Supply and Pumping
- Purification and Treatment
- Transmission and Distribution
- Administrative and General

The costs assigned to these functional cost centers have subsequently been allocated to the following cost categories:

- Base capacity;
- Maximum day extra capacity;
- Maximum hour extra capacity;
- Customer; and
- Direct fire protection.

Customer costs, such as meters and services, and direct fire protection costs, such as hydrants, are directly assigned to their respective cost category. Remaining costs are allocated to the base, maximum day, and maximum hour cost categories based on the degree to which they are associated with meeting those service requirements. Costs that meet base (average day)

service requirements are allocated 100 percent to base category. Costs that meet maximum day service requirements are allocated between the base and the maximum day cost categories. Costs that meet maximum hour service requirements are allocated to the base, maximum day, and maximum hour cost categories.

Based on what PWD claims is recent experience, PWD's CCOS study reflects a maximum day to average day ratio of 1.40, or 140 percent. This reflects the highest maximum day ratio experienced since FY 2012. PLUG St. 1R at 3:9-11. Based on more recent experience, Mr. Mierzwa recommended the use of a maximum day ratio of 1.30, or 130 percent, which is reflective of the highest maximum day to average day ratio experienced during the last 5 years. The 1.30 maximum day ratio is consistent with PWD's actual maximum day experience for FY 2013, FY 2014, and FY 2017. See PA-II-8; PWD St. 3R at 13:21-24. There is no dispute between the parties that the appropriate maximum hour ratio to use in PWD's CCOS study is 1.90. The Advocate recommends that the Board approve use of a maximum day ratio of 1.30 in PWD's CCOS study. This is consistent with the M1 which requires the use of "the highest ratio of system maximum-day ('MD') demand to system average-day ('AD') demand over a representative number of recent years." M1 (7th Ed.) at 373.

Mr. Baudino, testifying on behalf of the Philadelphia Large Users Group ("PLUG") recommends that 1.40 is the appropriate maximum day ratio to use in PWD's CCOS study because it reflects the highest ratio experienced during the 2012-2016 study period examined by Black & Veatch to determine the maximum day ratio. The Public Advocate agrees with PLUG that it is reasonable to use the most recent 5-year period to determine an appropriate maximum day factor, but continues to support the use of the 1.30 ratio recommended by Mr. Mierzwa on the basis that such recommendation gives due weight to the most recent information.

Regardless of whether the Board determines that the appropriate maximum day ratio to use in PWD's CCOS study is 1.30 or 1.40, the Public Advocate notes that the allocated cost of serving each class is not materially affected by whether the 1.30 or 1.40 maximum demand ratio is used. The maximum day ratio was initially addressed by the Public Advocate due to inconsistencies between PWD's testimony and its CCOS study which have now been corrected. The differences between PWD's and the Public Advocate's CCOS study results are most significantly attributable to the class specific extra-capacity factors assigned to each class which are subsequently discussed.

B. The Customer Class Specific Extra-Capacity Factors Included in PWD's CCOS Study Should Be Revised

Under the base extra-capacity method, maximum day and maximum hour extra-capacity costs are allocated to customer class based on the excess of each class' non-coincident maximum day and maximum hour demands over average day and average hour demands, respectively. When asked to explain in detail how the maximum day and maximum hour extra-capacity factors for each customer class were determined in Public Advocate Data Request PA-ADV-42, PWD responded:

The customer type extra-capacity factors were determined based on previous cost of service studies and rate proceedings. To review and verify the reasonableness of the capacity factors, Black & Veatch performed a capacity factor analysis according to the methodology outlined in Appendix A of AWWA Manual M-1: Principles of Water Rates, Fees, and Charges. Accordingly, Black & Veatch used the FY 2016 monthly customer billing data, and system historical peak demands, and weekly and hourly usage adjustments to derive an estimate of capacity factors for each customer class.

Mr. Mierzwa found that ideally, the most reliable approach to determining customer class extra-capacity factors would be to conduct a formal study that samples the actual daily and hourly demands of the various customer classes. However, he noted that such studies are

generally expensive and time consuming and that the PWD has not conducted a formal study of actual customer class demands. In lieu of such a study, and as indicated previously in response to PA-ADV-42, Appendix A of the M1 (“AWWA Method”) presents an alternative approach to developing extra-capacity factors. PWD claims to have used the AWWA Method to develop extra-capacity factors. However, the extra-capacity factors reflected in PWD’s CCOS study are inconsistent with those resulting from application of the AWWA Method. PA St. 2 at 14:20-15:4.

Mr. Mierzwa independently developed customer class extra-capacity factors based on the procedures described under the AWWA Method. To develop these factors, Mr. Mierzwa used the system-wide maximum day and maximum hour demands previously identified, and customer billing records from FY 2014-FY 2016 (July 2013 – June 2016). He notes that, however, the resulting customer extra-capacity factors would not vary significantly if data solely from FY 2016 had been utilized, which was the approach PWD claimed to use in PA-ADV-42. PA St. 2 at 15:8-14.

There were varying degrees of difference between both the customer class specific maximum day and maximum hour extra-capacity factors reflected in PWD’s CCOS study and those indicated by Mr. Mierzwa’s analysis. Among the most significant of these differences affecting the CCOS study results is that the maximum hour and extra-capacity factors used by PWD for the Residential and Senior Citizen classes are too high, while the factors for the Commercial class are too low. PWD presented its analysis of customer class extra-capacity factors using the AWWA Method in PA-VII-7. Presented in the table below is a comparison of the class extra-capacity factors used by PWD in the CCOS study submitted as part of PWD’s

Formal Notice,⁴⁹ and those developed by Mr. Mierzwa⁵⁰ and PWD⁵¹ using the AWWA Method.

As shown below, the class extra-capacity developed by Mr. Mierzwa and PWD using the AWWA Method are similar, and in particular for the Residential and Senior Citizens customer classes. The Board should approve the use of the class extra-capacity factors developed by the Public Advocate to revise PWD's CCOS study and use the results of the revised CCOS study to establish rates in this proceeding.

| | <u>AWWA Method</u> | | | | | |
|----------------------------------|--------------------------------------|-------------------------|---------------------------|-------------------------|---------------------------------------|-------------------------|
| | <u>PWD CCOS Study Factors</u> | | <u>PWD Factors</u> | | <u>Public Advocate Factors</u> | |
| | <u>Maximum Day</u> | <u>Maximum Hour</u> | <u>Maximum Day</u> | <u>Maximum Hour</u> | <u>Maximum Day</u> | <u>Maximum Hour</u> |
| General Service-Residential | 2.00 | 3.60 | 1.95 | 3.24 | 1.90 | 3.15 |
| General Service-Commercial | 1.80 | 2.65 | 2.02 | 3.35 | 1.85 | 3.05 |
| General Service-Industrial | 1.60 | 2.00 | 2.13 | 2.83 | 1.85 | 2.45 |
| General Service-Public Utilities | 1.60 | 2.00 | 1.66 | 2.21 | 3.15 | 5.25 |
| P.H.A. | 1.90 | 3.13 | 2.07 | 3.44 | 1.85 | 3.05 |
| Charity/Schools | 1.80 | 2.70 | 1.84 | 3.06 | 1.90 | 3.15 |
| Senior Citizens Discount | 2.00 | 3.60 | 1.91 | 3.17 | 1.90 | 3.15 |
| Hand Bill | 1.80 | 2.70 | 1.81 | 3.01 | 1.70 | 2.80 |
| Hospital/University | 1.80 | 2.33 | 2.07 | 3.44 | 2.00 | 3.30 |
| Scheduled | 2.00 | 3.60 | 2.26 | 3.75 | 2.40 | 4.00 |

C. The CCOS Study Sponsored by the Public Advocate Should Be Approved by the Board and Used to Design Rates in This Proceeding

The CCOS study sponsored by the Public Advocate utilizes extra-capacity factors which are reasonable and, therefore, the results of the Public Advocate's CCOS study should be used as a guideline to setting rates in this proceeding. A comparison of the results of PWD's CCOS study and the CCOS study sponsored by the Public Advocate is presented below.

⁴⁹ See PWD Ex. 6 at 723 (Table W-11: Estimated Units of Service for Retail Water Customers Test Year 2019).

⁵⁰ See PA St. 2, Sch. JDM-1.

⁵¹ See PA-VII-7.

Comparison of Class Cost of Service Study Results and Revenues under Existing Rates

| General Service | PWD Filed (1) | Revised (2) | Revenues at Existing Rates (3) | Difference (4) = (2)-(3) |
|-------------------------|--------------------------|------------------------|---|-------------------------------------|
| Residential | \$159,910,000 | \$153,349,000 | \$161,416,441 | (\$8,067,441) |
| Senior Citizens | 4,712,000 | 4,535,000 | 4,808,089 | (273,089) |
| Commercial | 59,115,000 | 63,126,000 | 59,524,948 | 3,601,052 |
| Industrial | 3,186,000 | 3,498,000 | 3,306,084 | 191,916 |
| Public Utilities | 388,000 | 604,000 | 431,736 | 172,264 |
| Subtotal: | \$227,311,000 | \$225,112,000 | \$229,487,298 | (\$4,375,298) |
| Other Retail Service | | | | |
| Housing Authority | \$6,553,000 | \$6,540,000 | \$6,156,440 | \$383,560 |
| Charities & Schools | 5,603,000 | 6,029,000 | 5,727,773 | 301,227 |
| Hospitals & University | 7,665,000 | 8,947,000 | 7,343,824 | 1,603,176 |
| Hand Billed | 20,059,000 | 20,536,000 | 16,985,587 | 3,550,413 |
| Scheduled (Flat Rate) | 0 | 0 | 1,227 | (1,227) |
| Private Fire Protection | 2,318,000 | 2,316,000 | 3,271,631 | (955,631) |
| Public Fire Protection | 0 | 0 | 0 | 0 |
| Wholesale | 3,759,000 | 3,788,000 | 3,246,853 | 541,147 |
| Total: | \$273,268,000 | \$273,268,000 | \$272,220,633 | \$1,047,367 |

Note: Cost of service study includes allocated discounts.

See Mierzwa Errata Sheet.

D. The Public Advocate's and PWD's CCOS Studies Both Support Maintaining the Current 0 to 2 Mcf Block Rates

As shown in the class cost of service study comparison above, the existing rates of the Residential and Senior Citizens customer class are well in excess of the rates necessary to recover the indicated cost of service for those classes under the Public Advocate's CCOS study, and are even sufficient to recover the indicated cost of service under PWD's CCOS study. Most Residential and Senior Citizen class consumption falls with the 0 to 2 Mcf usage block. Since the existing rates of the Residential and Senior Citizen's customer class are sufficing to recover the indicated cost of service, the Board should maintain the existing 0 to 2 Mcf usage block rates,

and any increase authorized by the Board in this proceeding should be recovered through a proportional increase to PWD's remaining usage block rates which are currently less than the 0 to 2 Mcf block rates. See PA St. 2 at 18:4-9.

PLUG claims that maintaining the current 0 to 2 Mcf usage block rates could result in rate shock to other customers. To support its claim, PLUG presents a hypothetical example where the Board approves a 10 percent increase in PWD's retail water service rates. This would be equal to an increase in retail water service rates of \$26.9 million. PLUG's claim should be dismissed. PWD is only requesting an increase in retail water service rates of \$0.7 million for FY 2019, \$6.6 million for FY 2020, and \$13.7 million for FY 2021. As proposed, the amount of PWD's rate increase allocable to water service reflects overall, systemwide increases of 0.30% in FY 2019, and 2.60% increases in FY 2020 and 2021. See PWD Statement 9A, Sch. BV-E1, Table W-6. These increases, allocated to the higher usage block rates, while maintaining the existing 0 to 2 Mcf usage block rates, will not approximate the hypothetical rate of increase submitted by PLUG, and will not result in rate shock.

E. The Board's Order Should Include a Determination That PWD Should Propose Customer Class Specific Water Usage Rates

The water usage charges currently assessed by PWD and those proposed by PWD in this proceeding vary based on monthly consumption. The currently effective usage rates are as follows:

| Usage Block | Charge Per Mcf |
|--------------------|-----------------------|
| 0 to 2 Mcf | \$41.11 |
| 2 to 100 Mcf | \$35.91 |
| 100 to 2,000 Mcf | \$29.28 |
| Over 2,000 Mcf | \$28.48 |

See, e.g., PWD Ex. 3B (redline showing currently effective and proposed FY 2019 rates).

These rates are applicable for all metered water usage for all customer classes. As such, a change in one usage block rate will generally affect the revenues recovered from all customer classes. Because of this, it is nearly impossible to set rates to recover the indicated cost of service for each customer class. Therefore, the Board should require PWD to adopt separate volumetric usage rates for each customer class in its next proceeding. In this proceeding PWD's witness indicated that the costs associated with a study to determine individual rates for each customer class were discussed in the 2016 proceeding. 5/14 Tr. 59:14-60:65; see also 5/14 Tr. at 226:20-227:4. In the 2016 proceeding, PWD indicated that the cost of such an effort would range from \$180,000 to \$250,000. 4/11/2016 Tr. at 33:8-34:11. Based on the range of cost projected, the Public Advocate questions PWD's claim, raised in rebuttal testimony, that conducting a study to determine potential individual volumetric rates would not be feasible with a two-year rate period. See PWD St. 1R at 5:15-24.

Ultimately, the timing of PWD's submission of a future request to increase rates and charges is substantially uncertain. But, even if such study cannot be completed prior to PWD's submission of another request for increased rates and charges, the timing of a rate study does not compensate for or rectify the unreasonableness and unreliableness of projecting revenue requirement assumptions for FY 2021 three years in advance. Accordingly, the Public Advocate submits that the Board should not rely upon PWD's assertions regarding a future rate design study as support for a three year rate period.

XII. NECESSARY IMPROVEMENTS TO TAP ADMINISTRATION

On behalf of the Public Advocate, Mr. Colton examined the structure and operation of PWD's new Tiered Assistance Program (TAP), implemented in 2017. As a result of the Board's final determination in the 2016 Rate Case, PWD was directed to implement TAP as a percentage of income payment program, which provides TAP customers with bills that are calculated as a

fixed percentage of household income (HHI), as follows: 2% of HHI for customers with income between 0-50% FPL (subject to a minimum bill of \$12 per month); 2.5% of HHI for customers with income between 51%-100% FPL; and 3% of HHI for customers with income between 101-150% FPL. As Mr. Colton recognizes, TAP establishes the “rate” for water, sewer and stormwater service for TAP customers, “charged in lieu of the Department’s service, usage and stormwater charges” and requiring them “to make no additional payment” in respect to arrears. PA St. 3 at 7:13-14; Phila. Code §§19-1605(3)(a), (3)(h). Because TAP constitutes a rate the availability of that rate to customers and PWD’s policies and practices regarding that rate directly affect the charges billed to customers and are subject to a determination by the Board in the course of “fixing and regulating” rates and charges. See Section V; PA St. 3 at 24:12-13. Issues regarding TAP administration and operation are thus appropriately considered in this 2018 Rate Case. PA St. 3 at 7:13-15. As discussed in Section VI, PWD’s Motion in Limine must be denied as the implementation of TAP rates is appropriately before the Board.

A. TAP Enrollment Delay Must Be Addressed

As of May 22, 2018, PWD has enrolled 8,960 based on applications submitted between July 1, 2017 (the date that TAP was implemented) and March 31, 2018. Although this is certainly a start, it falls well short of the estimates in the 2016 Rate Case, which anticipated enrollment approximating 31,000 by the end of FY 2018. See 2016 Rate Case PA St. 3 at 30:19-22. On behalf of the Public Advocate, Mr. Colton examined data from PWD regarding the time periods between customers’ submission of applications and PWD’s status updates on those applications – namely, approvals and determinations of incomplete status. Mr. Colton concludes that there is a substantial delay, and urges remedial action to be taken. Specifically, Mr. Colton recommends that TAP rate include a retroactive adjustment, to provide customers the benefits of TAP discounts that would have been received had PWD acted upon applications within a

reasonable period. PA St. 3 at 8:2-5. Although PWD contends that it cannot implement retroactive billing, this is simply incorrect. PWD acknowledges it not only possesses, but utilizes, the capability to make retroactive billing adjustments on a daily basis. 5/11 Tr. at 51:2-4.

Mr. Colton's calculations demonstrated the following unacceptable timeframes for acting on TAP applications:

- Regarding approved applications submitted in the first quarter (July – September, 2017):
 - More than half of all approvals (53.1%) occurred more than 60 days after the application was submitted.
 - Nearly half of all approvals (48.7%) of all approvals occurred more than 90 days after the application was submitted.
- Regarding approved applications submitted in the second quarter (October – December, 2017), more than 60% of all applications were approved more than 60 days after the application was submitted.

PA St. 3 at 8:14-21.

Similarly, Mr. Colton demonstrates that “[i]t is not simply approvals that are taking unreasonably long periods of time to obtain....It is taking an unreasonably long period of time for any status update to be generated by PWD.” PA St. 3 at 9:2-4. According to the data:

- For the first quarter of applications (July – September, 2017), PWD took up to 60 days simply to determine an application was “incomplete.” For nearly one in five applications, it took PWD more than 120 days to determine the application was incomplete. PA St. 3 at 9:6-10:2.

- For the second quarter of applications (October – December, 2017), nearly 90% of the applications that were found to be incomplete did not receive that determination for more than 60 days after the date of application.

PA St. 3 at 10:2-4.

Due to these extraordinary delays, Mr. Colton determined that TAP applicants are being deprived of substantial amounts of discounts – discounts that are simply “lost.” For those persons who enrolled in TAP from July 1, 2017 through January 19, 2018, and faced delays in TAP approval, these lost discounts amounted to nearly \$700,000, representing unaffordable bills that were rendered in excess of the TAP rate bills for which customers were subsequently found eligible. PA St. 3 at 10:20-11:2. The majority, nearly \$400,000, of those lost discounts were attributable to customers who waited more than 120 days for their TAP application to be approved. PA St. 3 at 11:3-4. Ultimately, however, these numbers do not take into account the TAP applicants for whom no determination has been made, or for whom approval may be obtained only after resubmitting or responding to an application determined to be incomplete.

As Mr. Colton concludes, the failure to deliver TAP bills in a reasonable time after application creates lost opportunities and undermines the purpose of TAP. During the period TAP applicants wait for approval, they are delivered unaffordable bills, which they cannot afford to pay. PA St. 3 at 11:15-18. PWD contends, erroneously, that these customers are not harmed because, during the lengthy period they wait for news on their TAP application, they are not subject to termination for non-payment. PWD St. 4R at 6:16-18. However, this position disregards the accumulation of debts by those customers, the potential consequences associated with that debt, and the strain that unaffordable bills can place on a household’s limited resources. 5/11 Tr. at 23:11-29:5.

On the basis of PWD's unacceptable delay in processing TAP applications, Mr. Colton recommends a billing adjustment, "retroactive to the first full billing cycle after PWD received a complete TAP application." PA St. 3 at 12:4-6. As PWD acknowledges, it can retroactively adjust previously issued bills in the event a customer is billed at the incorrect rate. 5/11 Tr. at 50:17-24. The same adjustment mechanism can, and should be, implemented in connection with the TAP rate program. This is particularly true given that the delay in approving applications is solely the result of actions or inactions on PWD's part. Furthermore, to the extent a TAP applicant has made payments while awaiting approval that are in excess of the retroactively adjusted TAP bills, those payments should be applied first to those adjusted TAP bills, and then the excess payments should be applied to the account as a credit, available to satisfy future TAP bills. PA St. 3 at 12:19-13:2.⁵²

The approach Mr. Colton recommends, requiring TAP approval to take effect, including retroactively by adjustment, is closely analogous to Philadelphia Gas Works' Senior Discount Program, provided for in the 1972 Management Agreement/Ordinance regarding the operation of PGW by the Philadelphia Facilities Management Corporation. That Ordinance provides that, after application "the reduction shall then take effect at the start of the succeeding billing period." PFMC Management Agreement/Ordinance, at VII(7); see PA St. 3 at 14:3-9. Accordingly, not only is Mr. Colton's recommendation for retroactive adjustment of bills to rectify PWD's unacceptable delay in approving applications necessary and reasonable, it mirrors the standard that applies to an existing Philadelphia utility discount program, which also requires proof of eligibility (residence and customer status).

⁵² Philadelphia Code §19-1605(3)(e), which provides that "any amount paid for a monthly [TAP] bill in excess of the customer's current water liabilities shall reduce the balance of his or her arrears," does not conflict with this proposal. This provision is not applicable to bills issued prior to TAP approval, which are not issued at TAP rates. See PA St. 3 at 12:4-11.

B. TAP Application Changes

Based on his review of PWD's TAP application, Mr. Colton makes several recommendations in order to ensure that PWD's application complies with the Philadelphia Code, and to ensure that customers are not discouraged from or prevented from accessing TAP due to unreasonable application requirements. The Board should include a determination in its rate order that Mr. Colton's recommendations should be implemented by PWD.

1. Social Security Numbers

Mr. Colton testifies that, based on the application itself, "PWD appears to demand that a TAP applicant provide a Social Security Number for every household member between the ages of 18 and 65." PA St. 3 at 21:1-3. He explains that requirements to disclose Social Security Numbers have been rejected time-after-time by the Pennsylvania Public Utility Commission (PUC) in its oversight of bill affordability programs for PUC-regulated utilities. PA St. 3 at 21:3-10. Although not binding on PWD, those determinations demonstrate that it is unreasonable to require Social Security Numbers for a program like TAP. PA St. 3 at 21:17-18. Ultimately, PWD acknowledges that a Social Security Number is not actually required to process a TAP application, and provision of a Social Security Number is optional. 5/11 Tr. at 37:10-12. However, PWD could not identify anywhere in the application or application instructions where a customer would be informed of the optional nature of Social Security Numbers. 5/11 Tr. at 38:1-6. Accordingly, PWD's application creates the risk that a customer, who may not have Social Security Numbers for all household members between age 18 and 65 will delay submitting an application, assume they are not eligible to participate, or otherwise struggle to complete the application due to what appears to be, but is not actually, a requirement to provide Social Security Numbers.

2. Time Limit for Return of Application

PWD includes two statements in its TAP application packet, which impose inconsistent and unauthorized time limits for customers to complete and return their applications. As Mr. Colton recognizes, no time limit is authorized by the Philadelphia Code. PA St. 3 at 22:9. Still, PWD indicates that applications must be completed within 21 days in its TAP application cover letter, then on the first page of the TAP application warns that “applications must be received within 14 days of requesting the form.” PA St. 3 at 22:10-15. Ultimately, Mr. Colton concludes that these timelines can discourage applications from being returned, and may not even be feasible given the potential for delay in receiving the application after request. PA St. 3 at 22:15-23:5. In any event, the deadlines imposed are neither authorized by the Philadelphia Code, nor reasonable in duration. PA St. 3 at 23:7-12.

3. Residence and Financial Hardship Determinations From OOPA

Mr. Colton determines that PWD is not fully complying with the provisions of the Philadelphia Code, requiring that, in administering TAP, PWD “shall accept determinations of income and/or residency made within the prior twelve months pursuant to [Philadelphia Code] §19-1305.” PA St. 3 at 28:12-13; 31:15-21. This section, governing the City’s Owner Occupied Payment Agreement (OOPA) program, provides income-based tax hardship agreements to low income homeowners and equitable owners in Philadelphia. The ordinance authorizing TAP expressly required PWD to accept determinations made pursuant to OOPA with the goal of streamlining TAP access for customers who are known by the City to be low income owner occupants.

Despite the clear language of the Philadelphia Code, PWD has not included any instruction in TAP application materials to inform customers that OOPA determinations may be utilized for TAP eligibility. PA St. 3 at 28:17-20. Nor does PWD cross-check enrollment in

OOPA for active or defaulted customers who participated in PWD's pre-existing low income program, the Water Revenue Assistance Program (WRAP). PA St. 3 at 28:23-24. Furthermore, PWD does not, in fact, "accept" determinations pursuant to OOPA, but instead requires independent information, which it then utilizes for purposes of potentially altering a customer's OOPA agreement. PA St. 3 at 29:3-8.

As Mr. Colton recognizes, the most common basis for determining that a TAP application is "incomplete" or "denied" is that it is missing income information. PA St. 3 at 30:13-15. The fact that PWD is required to utilize OOPA information for this purpose, but does not do so, not only fails to satisfy the requirements of the law, but directly contributes to lower enrollment and maintaining barriers to TAP which City Council expressly sought to eliminate.

4. Unnecessary Acknowledgements/Requirements

PWD's TAP application requires customers who report zero income to provide a detailed listing of assets, for which the Philadelphia Code provides no authorization. PA St. 3 at 19:5-7. It requires that a customer provide an explanation for why an adult household member may have no income, which explanation is not relevant to the determination of household income for purposes of TAP eligibility. PA St. 1 at 20:10-18. Similarly, the TAP application requires customers to acknowledge several responsibilities which are not authorized under the Philadelphia Code provisions regarding TAP. PA St. 3 at 19:16-18. As Mr. Colton states, the provisions of the Philadelphia Code governing TAP explicitly acknowledge that a customer shall be enrolled upon completing an application that provides proof of residency and financial or Special Hardship. PA St. 3 at 18:15-18; Phila. Code §§19-1605(2)(d), (3)(g).

During technical hearings, PWD confirmed that, unlike the optional provision of Social Security Numbers, every other aspect of the TAP application had to be completed in order for a

customer to enroll. 5/11 Tr. at 41:16-23. In other words, a customer with zero income, who fails to provide a listing of assets, will not become a TAP customer. A customer who fails to explicitly acknowledge the requirements PWD lists in the application, whether due to oversight or disagreement, will not become a TAP customer. A customer who refuses to provide, or can't provide, an explanation for why an adult household member lacks income, will not become a TAP customer.

5. Recommended TAP Application Improvements

Each unnecessary and unauthorized step in the TAP application process presents a risk that some customers will be unsuccessful in enrolling. The addition of complexity to the TAP application that is neither necessary nor warranted to determine whether a customer is eligible for TAP, appears to run afoul of the specific standards promulgated by City Council. For purposes of the Rate Board's determination, the issue to be considered is whether access to TAP rates is unreasonably impeded and whether, due to the imposition of unwarranted requirements, PWD's practices create administrative complications that create unnecessary cost. As Mr. Colton summarizes:

First, it has been repeatedly demonstrated in the world of public benefits that the more complicated an application, the lower the rate at which eligible households will seek to enroll in a public benefit program. Second, the more complicated the application, the more complex the administrative review of the application. We have found PWD taking two, three, four or more months simply to make a status determination of applications (with a status determination including not only approval or disapproval, but also a finding of whether an application is "complete"). This is evidence unto itself that the application may be too complex. Third, the complexity of the application lends itself to having more applications deemed to be "incomplete."

PA St. 3 at 26:11-19.

On the basis of the extraordinary administrative delay associated with the current TAP administrative process, as discussed above, the Public Advocate submits that the Board should

reach a determination that PWD's demands for extensive information, beyond what is required by the Philadelphia Code, are unreasonable and unnecessary. . The Rate Board, having established TAP rates, should address, in clear and certain terms, that PWD's administrative practices must not impede access to the approved TAP rates. The Public Advocate recommends that the Rate Board endorse the use by PWD of a streamlined application form, similar to that utilized by PECO Energy Company for its Customer Assistance Program, as attached to Mr. Colton's testimony. PA St. 3, Appendix C.

C. TAP Outreach Improvements

The Public Advocate acknowledges that implementing a new program, like TAP, takes significant effort, much of it directed to outreach and community education. Based on Mr. Colton's analysis, PWD can make improvements, to ensure the broad availability of TAP rates to low-income Philadelphians. Unfortunately, certain of the efforts PWD has focused on, have not, according to analysis of application and enrollment data, borne sufficient fruit.

As Mr. Colton explains, PWD's mass mailing approach has not been effective:

Through March 1, 2018, PWD had generated 30,845 applications, of which 17,646 (57%) were generated by and for the Department's June and November mass mailings. (PA-III-2). Those mass mailings, however, were proportionately ineffective in generating applications actually submitted. Despite the heavy reliance on mass mailings, only 6,216 of the applications that were actually submitted were generated through PWD's mass mailings. Only one-in-three (35%) of the TAP applications generated through PWD's mass mailings resulted in a TAP application actually being submitted.

In contrast, the applications generated through means other than mass mailings were much more effective. Through March 1, 2018, PWD had generated 13,199 TAP applications through means other than its mass mailings. Of those, 9,113 applications had been submitted to PWD. Nearly 70% ($9,113 / 13,199 = 0.6904$) of the applications generated through means other than mass mailings, in other words, actually resulted in applications being submitted. (PA-III-2).

PA St. 3 at 46:18-47:9.

Based on these observations, Mr. Colton recommends that PWD make several improvements in outreach, designed to assist in reaching customers who should be enrolled in TAP. Primarily, Mr. Colton emphasizes the need to utilize community-based organizations (CBOs), integrating application and enrollment through those agencies that serve “hard to reach” customers. Although PWD submits, correctly, that it has formed partnerships and provided training and materials regarding TAP to community organizations and other groups (PWD St. 4R at 10:1-5), these activities fall short of Mr. Colton’s recommendations. Indeed, it is far different to collaborate and seek assistance from community organizations than it is to enlist those organizations to reach out to eligible customers, equipping them with the tools and resources to actually enroll TAP customers. The research cited by Mr. Colton verifies the significance of the latter, and the creation of an “outreach mantra” for reaching hard to reach customers in their communities, through a boots on the ground approach. PA St. 3 at 49:10-13. Organizations employing trusted messengers, and reaching customers directly, in-person, are the most successful in serving low-income constituents in need. PA St. 3 at 50:22-53:22.

PWD contends that its community partners have been assisting customers with applying for TAP, and that this demonstrates that PWD is in fact adequately utilizing CBOs. PWD St. 4R at 10:8-10. However, PWD acknowledges that none of these organizations can actually enroll customers, nor can they independently generate applications for customers. Indeed, TAP applications are only available in hard copy, by mail, or via electronic access through a website portal that requires the customer’s “water access code” (which appears on the customer’s bill). 5/11 Tr. at 53:20-54:16. These applications, generated by PWD, include individualized barcodes for tracking and processing purposes. 5/11 Tr. at 86:1-5. Because of these features,

chosen by PWD, “blank” applications, in the broadest sense of the term, are simply not available to customers or community organizations serving them.

PWD contends that it must limit access to applications in this way, for tracking purposes mandated by the Philadelphia Code. No such mandate exists. Under the Philadelphia Code provisions that established TAP, PWD is not required to track applications received by customers, but only applications submitted to PWD. TR-12; Phila. Code §19-1605(7).

Additionally, provisions of the Philadelphia Code requiring that applications be available electronically (which predate TAP and were not implemented for PWD’s predecessor program, WRAP), do not restrict PWD from providing fully blank (lacking barcode) applications, or otherwise empowering CBOs to generate applications without accessing PWD online systems.⁵³

TR -12.

The Public Advocate appreciates that PWD has utilized its systems to ensure that those capable of online access and desiring to receive applications through direct contact with PWD will receive service upon requesting applications. In the Public Advocate’s view, however, this need not limit the availability of applications through other means, including by permitting CBOs to utilize blank applications, without barcode designations. Indeed, if the goal is to reach those customers who need TAP, the availability of blank applications would be an important step in the right direction.⁵⁴

Mr. Colton also contends that the use of community based organizations would assist PWD in meeting the needs of limited English proficient (LEP) customers. According to his

⁵³ To the extent PWD has attributed costs of complying with the electronic access provisions of the Philadelphia Code to implementation of TAP, it has unreasonably inflated program costs since the electronic application applies to multiple programs and would have been required independently of TAP.

⁵⁴ The provision of blank applications is clearly not barred by the provisions of the Philadelphia Code providing for electronic availability of applications. Those provisions mandate that electronic options be available, but not exclusive. Phila. Code §21-2401(1).

analysis, the needs of LEP customers are not being adequately met under current operations. PWD data shows that only 56 non-English applications have been approved. 5/11 Tr. at 65:4-11. PWD avers that perhaps this can be explained by the use of English applications by LEP customers, presumably utilizing the assistance of others who are sufficiently proficient in English to complete the applications. See 5/11 Tr. at 59:13-22. However, to the extent LEP individuals received assistance in submitting English applications, PWD should be more concerned, not less, given the ramifications of potential errors and/or misstatements that may arise from an LEP customer not fully understanding or providing the correct information in response to PWD's complicated application. See 5/11 Tr. at 59:23-60:4.

On the basis of this review, Mr. Colton makes the following recommendations, which the Board should approve in its determination in this proceeding:

- PWD should comply with the clear language of the Philadelphia Code requiring it to utilize determinations of income and/or residency made for purposes of OOPA agreements. Mr. Colton recommends this be accomplished through an information sharing agreement between the City Departments, to the extent necessary.
- PWD should utilize information from its sibling municipal utility, PGW, to identify eligible customers for TAP, because PGW's customer assistance program utilizes the same income eligibility threshold and requires occupancy for approval.
- PWD should engage CBOs to conduct TAP outreach and intake. As part of this process, PWD should set aside administrative funding for these groups, in order that they have the resources to employ a boots on the ground approach, to identify

and enroll customers in-person, where they are, and without technological limitations. Blank applications should be made available, in those languages identified by the CBOs based on language access needs of their communities, for use in enrolling TAP customers.

XIII. IMPLEMENTATION OF TAP ARREAREAGE FORGIVENESS

PWD is legally required to make arrearage forgiveness available for TAP customers. Phila. Code 19-1605(3)(h.2). Both the Water and Revenue Commissioners made an explicit commitment to evaluate the issue of arrearage forgiveness *prior to this 2018 Rate Case*. See PA St. 3 at 36:21-37:2. But PWD has not proposed to satisfy its legal obligations to provide arrearage forgiveness to TAP customers, notwithstanding the clear programmatic and operational benefits to PWD of doing so.

As discussed in Section XIV below concerning the development of a TAP Rider, the Public Advocate has proposed rate-based recovery of TAP customers' arrearages to satisfy PWD's legal obligations and provide the program benefits that will contribute to the success of the TAP program. The Board, having the unambiguous authority to "fix and regulate" rates and charges, is authorized to direct the implementation of this aspect of PWD's TAP Rider. Indeed, doing so is no different from approving any adjustment to revenues or expenses under consideration in this 2018 Rate Case. As set forth in the Public Advocate's Supplemental response to Transcript Request 2, Mr. Colton has estimated the cost-recovery of arrearage forgiveness for FY 2019, FY 2020 and FY 2021, indicating the revenues associated with this aspect of the TAP Rider. Additionally, as Mr. Colton testifies, "the average pre-existing arrears brought into TAP (exceeding \$3,500) easily falls within" the range of indebtedness that is two or more years old. PA St. 3 at 64:6-7. Recognizing that both PWD and the Public Advocate assume that the collection factor for debts of that age is estimated at 1.56% during the rate

period, the incremental and ongoing forgiveness of arrears will increase PWD's overall collection factor as a result of the elimination of those debts which, pursuant to the Philadelphia Code, TAP customers cannot be required to pay. These debts are included in the 98.44% (100% - 1.56%) of indebtedness that is more than two years old and which will not be repaid, but can be removed from the collection factor through implementation of arrearage forgiveness. Indeed, failing to eliminate those arrearages will continue as a drag on PWD's collection factor while arrearage forgiveness would positively affect the collection factor.

As currently in place, PWD provides only pretextual arrearage forgiveness. PWD regulations provide that accumulated penalty charges are forgiven after 24 months of TAP participation. Full forgiveness of principal is not available until after completing 15 years of TAP participation. As Mr. Colton testifies, poverty is not a permanent condition. PA St. 3 at 38:19-20. It is unreasonable to assume that low-income families will both remain low-income and maintain their living conditions for a full 15 years. This is particularly true when capital to assist in home repairs or financing is off limits due to the continued presence of water liens. 5/11 Tr. at 27:9-17; PA St. 3 at 39, n. 21. Indeed, low income households are disproportionately mobile, for a variety of reasons, including deteriorating housing. See, e.g., PA St. 3 at 39:7-9, n. 21. The extent and amount of arrears among TAP customers are significant, and verify the substantial impediment they can present for low-income families (See PA St. 3, Sch. RDC-2):

- Between 95-98% of TAP enrollees had some arrears.
- More than half of TAP enrollees entered the program with \$1,000 or more in arrears.
- 35% of TAP enrollees had more than \$2,500 in arrears.
- 20% or more of TAP enrollees had more than \$5,000 in arrears.
- PWD already has more TAP customers with balances in excess of \$10,000 than PGW.

5/10 Tr. at 31:16-34:22.

Yet instead of fulfilling the promise that arrearage forgiveness be “made available,” PWD has imposed preconditions on forgiveness that ensure that it will, in fact, never be available. PA St. 3 at 39:13-15.

PWD asserts in rebuttal that arrearage forgiveness is not authorized by current policy. PWD St. 4R at 9:1-7. PWD submits merely a willingness to explore the issue at some time in the future. PWD St. 5R at 8:20-9:3. But PWD policy cannot override, or excuse noncompliance with, the legal obligation to provide non-pretextual arrearage forgiveness. For purposes of this Brief, however, the issue presented to the Board pertains to the approval of a rate rider mechanism to recover the cost of arrearage forgiveness, and to obtain the system benefits associated with doing so. The Board need not reach the issue of how, in so doing, its determination would ultimately be enforced. Indeed, PWD’s witness recognizes that, to the extent a customer is not being billed at Board approved rates, that matter may be subject to enforcement via a separate appeal process. 5/11 Tr. at 19:11-18. The Public Advocate agrees that enforcement of the Board’s rate determination may be sought in another available forum. Notwithstanding this recognition, the Public Advocate submits that PWD’s noncompliance with a rate determination may be raised by the parties and considered by the Board in reviewing future rate proposals.

In order to satisfy its obligation to make earned forgiveness of arrears available to TAP customers, Mr. Colton contends that full forgiveness should be earned over a two-year period. PA St. 3 at 36:10-13; 40:1-3. This period is within a low income customer’s planning horizon, and enables them to see arrearages being forgiven, understand the meaningful relationship between payment and forgiveness, and incentivize regular payment. Operationally, removing bad debt associated with TAP customers’ arrears, which TAP customers cannot be required to

pay, improves PWD's financial performance, turning arrearage forgiveness into a "rate" that permits PWD to recognize cash payments instead of uncollectible debt. PA St. 3 at 40, n 23.

Mr. Colton recognizes that TAP customers, even when provided affordable bills, will suffer hardships that make it impossible to always pay in full. In order to achieve the goal of continued and consistent TAP payments, credits toward forgiveness should be granted when payments are made, rather than at the end of a period of 24-months of payments. PA St. 3 at 41:18-42:3. Furthermore, TAP participation cannot be discontinued due to nonpayment. PWD Reg. §206.4(a); 206.6. The Philadelphia Code expressly provides that TAP customers must be permitted to cure missed TAP payments, to serve the policy and programmatic goal of promoting access to and payment of affordable water bills. See, e.g., Phila Code. §19-1605(3)(f). The same rationale must be applied to arrearage, crediting TAP customers with arrearage to earn forgiveness for each payment, including catch-up or cure payments, in order to effectuate program purposes. PA St. 3 at 42:1-3.

XIV. TAP RIDER DESIGN

Throughout this 2018 Rate Case proceeding, the Public Advocate and PWD have engaged in multiple conversations and exchanges, with the goal of coming to mutual agreement, to the greatest extent possible, on the features and design of a Tiered Assistance Program rate rider (TAP Rider). As a result of these efforts, agreement has been reached regarding many of the significant aspects of a TAP Rider. As shown in the Joint Response to Transcript Request 22, the Public Advocate and PWD agree that:

- The TAP Rider will not recover for expenses associated with other low income programs, such as the Low Income Conservation Assistance Program (LICAP).
- The TAP Rider will be calculated based on both the TAP expenses and the amount of TAP revenue collected through the rider.

- The TAP Rider will be calculated on a “dollars per unit of consumption (MCF)” basis. In calculating the TAP rider in the annual reconciliation submission, based on the 12 month period prior to the effectiveness of the (adjusted) TAP rider:
 - PWD will utilize actual TAP revenues and expenses for the first 9-10 months, and annualized/projected revenues and expenses for the last 2-3 months.
 - PWD will “true up” prior TAP Rider calculations based on the difference between (i) annualized/projected revenues and expenses, and (ii) actual TAP revenues and expenses.
- The TAP Rider will not include provision for emergency adjustments based on financial exigencies.
- TAP over- and under-recovery shall be subject to an interest rate equal to the 52-week Treasury Bill rate as of the first day of the month preceding the month of the annual reconciliation submission.
- The TAP Rider will include an embedded lost revenue adjustment. As discussed below, PWD and the Public Advocate disagree about the calculation of the embedded lost revenue adjustment.

The Public Advocate supports each of these agreements regarding the design of the TAP Rider and submits that they should be approved by the Board in its determination in the 2016 Rate Proceeding.

As set forth more fully in each of the subsections below, however, there remain disagreements between the Public Advocate and PWD concerning significant other features of

the TAP Rider. For the reasons described below, the Public Advocate submits that the Board should approve its proposals and direct they be incorporated into the final TAP Rider.

A. Comparison of TAP Rider Proposals

In this proceeding, PWD proposed recovery of TAP expenses for FY 2019, FY 2020 and FY 2021 in the following amounts:

| FY 2019 | FY 2020 | FY 2021 |
|-------------|--------------|--------------|
| \$9,800,000 | \$13,700,000 | \$17,000,000 |

PWD maintains its position in calculating these amounts as the “lost revenue” for TAP discounts.⁵⁵ See PWD St. 9A, Sch. BV-E1, Table C-3. For purposes of comparing these amounts PWD proposes for recovery through the TAP Rider, to the amounts submitted by the Public Advocate, PWD’s estimates must be adjusted by PWD’s proposed collection factor of 96.54%. See Errata Sheets for PWD St. 5R, at 8:3-6. As shown below, PWD’s adjusted 12-month estimate of TAP costs are as follows:

| FY 2019 | FY 2020 | FY 2021 |
|-------------|--------------|--------------|
| \$9,460,920 | \$13,225,980 | \$16,411,800 |

In comparison, as shown in the Public Advocate’s Supplemental Response to Transcript Request 2,⁵⁶ the Public Advocate estimates the costs of its TAP Rider, on a 12 month basis, as follows:

⁵⁵ PWD reported different amounts in its calculations shown in TR-23(B) due to the application of its proposed collection factor, 96.54%, and the fact that the TAP Rider would be implemented/adjusted in September of each year, providing for 10 months of adjusted recovery. PWD’s estimates of lost revenue associated with TAP discounts have not been modified.

⁵⁶ For ease of comparison, the table below includes a column titled “PA Rider Total” which was not included in the Public Advocate’s Supplemental Response to TR-2.

| | TAP Discounts | | Arrears Forgiveness | | Allocation | | PA Rider |
|------|---------------|-------------|---------------------|-------------|-------------|--------------|--------------|
| | Water | Sewer | Water | Sewer | Water | Sewer | Total |
| 2019 | \$3,301,905 | \$5,214,295 | \$785,522 | \$1,240,478 | \$4,087,426 | \$6,454,774 | \$10,542,200 |
| 2020 | \$4,529,868 | \$7,375,432 | \$783,052 | \$1,274,948 | \$5,312,920 | \$8,650,380 | \$13,963,300 |
| 2021 | \$5,510,994 | \$9,262,006 | \$557,329 | \$936,671 | \$6,068,323 | \$10,198,677 | \$16,267,000 |

In both PWD and the Public Advocate’s proposals, implementation of the TAP Rider in September would modify the amount of revenues recovered through the TAP Rider. However, when calculated on a 12 month basis, for consistency, the Public Advocate’s TAP Rider would recover marginally more in FY 2019 and FY 2020, and marginally less in FY 2021. However, the Public Advocate’s proposal includes the recovery of costs associated with arrearage forgiveness in the TAP Rider.

B. Calculation of Embedded Lost Revenue Adjustments for TAP Discounts

PWD and the Public Advocate agree to the principle that the amount TAP bill discounts, if they were billed directly to low-income customers, would not be fully paid currently. However, PWD and the Public Advocate substantially disagree on the extent to which those dollars would be uncollectible from low-income customers in the absence of the TAP program. PWD argues that the only data available to calculate an uncollectible bill adjustment for low-income customers is the system-wide collection factor, and so submits that the embedded lost revenue adjustment for TAP discounts should be identical to its overall uncollectible rate, which it calculates to be the difference between 100% and its combined collection factor (96.54%). 5/10 Tr. at 52:9-18. Accordingly, PWD submits that the embedded lost revenue adjustment for TAP discounts is 3.46%. PWD’s proposed adjustment is wrong for several reasons.

Primarily, use of the system-wide collection factor assumes that the TAP discounts, if billed to low-income customers, would have been paid, on average, at the same rate and to the same extent as all bills issued to PWD non-stormwater only customers. This ignores the data from PWD that demonstrates that low-income customers are not capable of making payments in

the way statistically average customers can make payment. Indeed, if that were the case, TAP would be unnecessary. But, TAP was created in fundamental recognition of the fact that water debt and poverty are correlated and so are concentrated in low-income neighborhoods in Philadelphia.⁵⁷

The need for a different embedded lost revenue discount is demonstrated by PWD's own data. As shown in Public Advocate Hearing Exhibit 3, PWD's collections are not uniform among customer types or service types. Total payment percentages vary between residential and non-residential customers, and between water, sewer and stormwater charges. Indeed, on average, residential customers (including senior citizens) have slightly lower total payment percentages than non-residential customers. PA Hearing Ex. 3 at 5-6 of 35; 5/10 Tr. at 64:21-68:15. Low-income customers are, by definition, residential customers, whose difficulty making payment contributes to the lower residential payment percentages. Furthermore, PWD's accounts receivable aging reports demonstrate that different postal zones in Philadelphia have significantly different proportions and ages of water indebtedness, reflecting the obvious fact that collections are not even close to being geographically uniform among residential customers across Philadelphia. 5/10 Tr. at 54:4-59:24.

Furthermore, as discussed above, PWD's data demonstrates that the majority of TAP customers have substantial arrears, accumulated over months and years. PWD's assumption that the amount of charges that would otherwise be billed to these customers in the absence of TAP would be collected in the same fashion as PWD's system-wide average is demonstrably unreasonable. Indeed, unaffordable bills issued to low-income customers are significantly more likely to go unpaid and contribute to aged arrears, two years old or older, for which PWD's own

⁵⁷ See, e.g., Remarks of Councilwoman Maria Quiñones-Sánchez, Hearing of Finance Committee (April 9, 2015), at 17:9-18-7, available at <http://legislation.phila.gov/transcripts/Public%20Hearings/finance/2015/fi040915.pdf>

data demonstrates only 1.56% is collectible for ratemaking purposes. PWD's proposal disregards significant data, obtained by the Public Advocate from PWD, which demonstrates the inappropriateness of utilizing its system-wide collection factors to calculate the embedded lost revenue discount for TAP discounts.

The purpose of embedded lost revenue discounts is to recognize that the amount of discounts provided to low income customers is not the difference between billings and the discounted rate, but is the difference between the revenue and the discounted rates. PA St. 3 at 59. Typically, in the context of PUC-regulated utilities, the determination of an uncollectible rate for low income customers is made utilizing the write-off ratio for low income utility customers. See PA Hearing Ex. 2. PWD acknowledges that it has no data whatsoever regarding its own low-income uncollectible rate. 5/10 Tr. at 19:4-7. Accordingly, while PWD data verifies that a system-wide uncollectible rate would be inappropriate, PWD simply has not conducted a study to identify its low-income uncollectible rate. PWD's disregard for the verifiably different collectability of bills issued to low-income customers is unreasonable. As submitted by Mr. Colton, publicly available reports regarding the uncollectible rate of low-income electric and gas customers in PWD's service territory are available and serve as reasonable estimates for PWD's use. As set forth in his testimony, Mr. Colton calculates an assumption for PWD as the average of the uncollectible rate for Philadelphia's natural gas (PGW) and electric (PECO) utilities, at 13.1%. PA St. 3 at 62:1-19. This rate is conservative given the percentage of TAP customers having substantial arrears. 5/10 Tr. at 155:4-156:19. Mr. Colton's estimated uncollectible rate would have been even higher if he had excluded PECO, which has a larger service territory that includes wealthier suburban counties outside of Philadelphia and a lower uncollectible rate than PGW. 5/10 Tr. at 155:19-22.

For all of the foregoing reasons, the Public Advocate submits that the Board should approve a 13.1% embedded lost revenue adjustment for TAP discounts.

C. Calculation of TAP Rider Arrearage Forgiveness Recovery

As discussed above, the Board should include the cost-recovery of arrearage forgiveness required to be provided to TAP customers through the TAP rider. The rationale for implementing TAP arrearage forgiveness is discussed above in Section XIII. This section addresses the calculation of TAP arrearage forgiveness cost recovery. As calculated by Mr. Colton, the amount to be recovered through the TAP Rider should include the “Reconcilable TAP Arrearage Forgiveness Costs,” defined as:

The credits appearing on the TAP participant bills toward pre-existing arrearages (TAP arrearage forgiveness). Pre-existing arrears are those arrears appearing on the bill of a TAP participant in the month in which the TAP participant applies for TAP services net of a Low-Income Arrearage Embedded Lost Revenue Adjustment.

PA St. 3, Sch. RDC-3 at 114.

As the Board may be aware, pursuant to the Philadelphia Code, PWD is already required to determine the amount of arrears the customer owes and notify the customer of that amount in writing upon enrollment in TAP. See Phila. Code § 19-1605(4)(a). Accordingly, the determination of the gross amount of arrears subject to cost-recovery through the TAP Rider imposes no new requirement on PWD.

Upon determination of the amount of TAP arrears subject to the TAP Rider, Mr. Colton proposes that such amount be subject to forgiveness over a two year period. PA St. 1 at 40:1. However, as discussed in Mr. Colton’s testimony, a further adjustment must be made to determine the extent to which the arrears of low-income customers are uncollectible. Similar to the embedded lost revenue adjustment for TAP discounts, the extent to which low income customer arrears are recovered through the TAP Rider must be adjusted to reflect the anticipated

revenue loss that PWD recognizes by forgiving those arrears. That amount is significantly lower than the amount of the arrears, since low-income customer debts are aged arrears, which have a low probability of repayment.

To determine the embedded lost revenue adjustment for TAP customer arrears, Mr. Colton explains:

I begin with the percentage of arrears that PWD reports that it eventually collects (65%), meaning that 35% of PWD's arrears are not ever collected. (PA-ADV-6). I then use a low-income multiplier to account for the fact that the collectability of low-income arrearages is less than the collectability for residential accounts generally. Again using the Philadelphia average, and using a three year average to account for the longer-term nature of arrearages, I find the appropriate low-income multiplier to be 2.59x. The bad debt offset for arrears subject to forgiveness is thus 90.66%.

PA St. 3 at 63:12-64:2.

Because, again, PWD has not done any calculations of its own low-income uncollectible rate, the "multiplier" calculated by Mr. Colton is based on the information available for PECO and PGW. This multiplier is calculated as the ratio of the average rate of write offs for low income customers to the average rate of write off for all residential customers. See Attachment to PWD Discovery of Public Advocate I-10 (averaging PECO 3.97 and PGW 1.22 low-income multipliers).

Utilizing the same assumptions of participation levels PWD uses to project the TAP discounts for FY 2019 , FY 2020 and FY 2021 in this 2018 Rate Case, and the calculated average arrearage per participant based on PWD data, Mr. Colton estimates the amount of annual arrearage forgiveness expense to be recovered through the TAP Rider as approximately \$2 million for each of FY 2019 and 2020, and declining thereafter, as shown in the Public Advocate's Supplemental Response to Transcript Request 2. The Board should approve the

recovery, using Mr. Colton's methodology, of revenue loss associated with arrearage forgiveness through the TAP Rider.

D. Allocation of TAP Rider Based on Revenues

PWD proposes to allocate TAP cost recovery based on the proportion of its FY 2019 revenue requirements allocated to water and wastewater. PWD St. 5R at 9:5-13. The Public Advocate's proposal is to allocate TAP cost recovery to water and wastewater based on actual revenues billed to each service, respectively. See PA St. 3, Sch. RDC-2 at 114. For purposes of determining the actual revenues billed, the Public Advocate proposes PWD utilize the prior fiscal year billings.

The Rate Board should approve the Public Advocate's allocation proposal. The primary reason why PWD's allocation should be rejected is that TAP costs are not driven by the same factors that drive PWD's revenue requirements. As discussed at length above, PWD's revenue requirements are determined on the basis of projected revenues, relying upon 2016 usage data, and projected expenses, relying upon FY 2018's adjusted budget, with escalation factors. TAP costs are driven by entirely different factors, including the levels of enrollment, household income, TAP participant actual consumption, and TAP participant arrears forgiven. Because PWD's actual and more recent revenues from water and wastewater service for the prior fiscal year will be known at the time the TAP Rider is allocated, it is more suitable to use those known revenue amounts than to use the allocation of revenue requirements forecast in this proceeding.

E. Annual TAP Rider Reconciliation Process

The Board should require that PWD's annual TAP rider reconciliation process include participation by the Public Advocate, as well as the right to request more detailed review via complaint or other submission to the Board. PA St. 3, Sch. RDC-3 at 114. The TAP Rider framework, constituting the mechanism to recover TAP costs, is set for a decision by the Board

within the 120 day period of this 2018 Rate Case. But the subsequent annual adjustment of the TAP Rider operates to increase or decrease rates and charges. In effect, if the Board approves the TAP Rider in this case, the annual reconciliation process will effectuate an adjustment to rates and charges that has been authorized (but not approved) by the Board's 2018 Rate Case final decision. The majority of the framework for this TAP Rider has been agreed to, for purposes of presenting the framework to the Board, but neither party can fully predict with precision how the TAP Rider will function in operation.

It is appropriate that the TAP Rider's performance be subject to ongoing review. The Public Advocate submits that it is essential that the small user customer base, which comprises the overwhelming majority of PWD customers, have a designated representative, with sufficient resources to represent their interests in ensuring the fair operation of the TAP Rider. In the event the TAP Rider is operating contrary to the Board's purposes, or in such a way as to substantially increase or alter rates and charges, the 2018 Rate Case decision should make available a means to reopen the review of the TAP Rider, by complaint or other mechanism.

XV. TAP ADMINISTRATIVE COSTS

Mr. Colton observes that PWD has been operating TAP with administrative personnel costs that equal 21% of program benefits. PA St. 3 at 66:12-13. As Mr. Colton explains, the 22 TAP identified administrative personnel had an aggregate annual salary of \$827,643 as of July 1 2017, representing an administrative expense ratio in excess of 21%, relative to the \$3,900,000 in TAP benefits estimated to be provided for FY 2018. PA St. 3 at 66:9-13. This demonstrates the administrative over-staffing of TAP, which has not led to more enrollees, but to more duplication of effort due to PWD's two tier review process.

PWD confirms that this level of staffing resulted from an allocation of existing PWD employees to TAP administration. Remarkably, this transfer of employees directly contradicts

PWD's express representations in the 2016 proceeding that the administration of TAP would require *incremental* hiring of 22 new employees, to work alongside existing low-income staff, for which customer rates were increased in FY 2018. PA St. 3 at 67:1-68:13. Concerns about the extent to which PWD misrepresented staffing requirements in the last rate case aside, the level of administrative cost being incurred by PWD for TAP is unreasonable. The Public Advocate reviewed the most suitable performance indicator for these employees: the number of TAP applications reviewed. The results of that review, as shown by Mr. Colton, indicate that that, on average, each individual TAP administrative employee is actively reviewing eleven or fewer applications per day. In half the periods reviewed, each employee, on average, reviewed six or fewer applications per day – less than one per hour. PA St. 3 at 69:1 (Table).

To rectify the excessive administrative costs PWD is incurring for TAP, Mr. Colton recommends outsourcing TAP Administration and, regardless of outsourcing, limiting administrative expenses to a reasonable, 10% cost ceiling. PA St. 3 at 71:17-25. PWD appears to argue that outsourcing cannot be accomplished, due to requirements of its labor contracts. 5/11 Tr. at 122:11-123:14. PWD points to no provisions in these contracts which override: (1) the Board's obligations to ensure just and reasonable rates; and (2) the Board's power to reject or modify PWD's proposed rates to exclude expenses which are excessive and unnecessary. The Board may also recall that both PWD and the Public Advocate briefed the issues regarding PWD's union contracts in the 2016 Rate Case. The Public Advocate found no barrier to outsourcing based on its review of the applicable contracts. 2016 Rate Case, PA Brief at 102-104. PWD identified no specific provision of the contracts nor any legal provision that preclude outsourcing, instead submitting that it had not assessed the feasibility of outsourcing and would require the input of the City Solicitor on the issue. 2016 Rate Case, PWD Brief at 37, n. 36.

The Board should establish a limitation on PWD's rate recovery of TAP administrative expenses, not to exceed 10% of the aggregate program benefits provided. PA St. 3 at 71:17-20. The Department has implemented a two-tier system for reviewing TAP applications, which is unprecedented and unsupported in the field of utility assistance and means-tested low-income assistance programs. This duplicative process is certainly contributing to additional, and unnecessary, administrative expense, while also delaying customer access to essential utility assistance. The Board is expressly authorized to modify PWD's proposed rate assumptions, including by limiting its ability to recover unreasonable expenses. If PWD cannot operate within the Board's reasonably established TAP administrative expense ceilings set forth in its rate determination, PWD should outsource the process to entities that can do so. PWD has identified no clear barrier to outsourcing these functions.

XVI. UNFAIR AND DECEPTIVE SHUT OFF NOTICE PRACTICES

PWD has filed a Motion in Limine seeking to limit consideration of the Public Advocate's criticism regarding PWD shut off notice practices. Hearing Officer Brockway ordered that this Motion be addressed in parties' briefs. As discussed above, PWD's Motion in Limine should be denied on the basis that granting the motion would "gag the truth" by unfairly preventing PWD's evidence to be subject to rebuttal. PWD introduced testimony intending to demonstrate the reasonableness of its collection practices, and the Public Advocate's testimony is responsive thereto, addressing specifically PWD's unfair and deceptive shut off notice practices. Based on the following considerations (as well as the discussion above), the Board should deny the Motion in Limine and enter an order in this 2018 Rate Case: (1) finding that that PWD's shut off notice practices require reform, and (2) denying PWD's request to increase its miscellaneous charge for restoration of service after termination for non-payment. This specific rate request is supported by the Public Advocate's findings of PWD's unfair practices.

PWD has proposed to increase numerous miscellaneous charges over the period FY 2019 – FY 2021. Among these, PWD proposes to increase the restoration charge for customers who are discontinued for nonpayment from \$60, the current charge, to \$85 in FY 2019. PWD Ex. 3B, §6.4. PWD then proposes to increase this restoration charge from \$85 in FY 2019 to \$105 in FY 2020. PWD Ex. 3D, §6.4. This \$105 restoration charge would be maintained in FY 2021 under PWD’s proposal. PWD Ex. 3F, §6.4. Thus, PWD proposes a 75% increase in the charge associated with restoring service after non-payment shut off.

Mr. Colton demonstrates that PWD’s warnings that shut offs will occur, and that actions must be taken to avoid shut off, are simply “wolf-like”⁵⁸ threats in the majority of instances. PWD fails to disconnect service in 70% to more than 90% of the instances in which it issues a shut off notice. PWD cannot provide any data to show that the customers receiving these notices, and who are not shut off, make payments due to the threat of the shut off notice. PWD fails to demonstrate that these practices are effective for collecting on delinquent accounts. PA St. 3 at 106:6-107:11. Mr. Colton recommends⁵⁹ that PWD make the following specific changes to its notice practices:

- PWD’s notices should not state that customers must make payments immediately.
- PWD should cease threatening that shut off will occur by a specified date unless PWD has actually determined that absent payment by the customer shut off will occur.

In rebuttal testimony, PWD directly responds to Mr. Colton, asserting that its notices are not unfair or deceptive, but rather that Mr. Colton simply doesn’t understand PWD’s shut off

⁵⁸ See PA St. 3 at 103, n. 50. See generally, Aesop’s Fables, “The Boy Who Cried ‘Wolf’” (Viking Press, 1987).

⁵⁹ It should be noted that Mr. Colton’s recommendation is, in part, made in PWD’s best interests: to avoid further potential regulatory compliance issues resulting from PWD collection threats which are not intended to be acted upon. PA St. 3 at 104:12-13.

procedures. PWD St. 4R at 13-14. However, PWD confirms the precise factual basis on which Mr. Colton's criticism is based, explaining:

The pool of available shut off work orders received from WRB each day outnumber the amount of work orders PWD can complete in any given day. Each PWD Field Service Representative ("FSR") is assigned 30 shut off work orders to begin each day. The first shut off work order chosen is the shut off work order with the highest delinquent balance. The system then chooses the remaining 29 work orders by contiguity to the first work order. It is done this way to minimize the travel time between shut off work orders and to increase efficiency. PWD makes every attempt to restore the service to a property that was shut off the same day if a restore work order is created before 6:00 PM. If a restore work order is created after 6:00 PM it is scheduled for the first work order the following day. As restore work orders are received each day, it reduces the number of shut offs the FSR can complete. The performance standard for each FSR is 30 completed jobs each day. The 30 completed jobs are a combination of shut offs and restores. As the restore work orders increase each day the number of completed shut offs decrease.

PWD St 4R at 14:9-23.

Rather than rebutting Mr. Colton's position, PWD's statement acknowledges that, by design, PWD issues significantly more shut off notices than it is capable of acting upon – verifying that PWD's notice practices are indeed "wolf-like," threatening an event which even in the face of continued customer non-payments has a slim likelihood of occurring.

The fact is that, as a consequence of PWD practices, customers are receiving shut off notices that are not meaningfully timed to provide a meaningful warning of shut off. Customers may receive multiple shut off notices, none of which PWD has any intention of acting upon, and not have service terminated for many, many months, purely because they are not located in sufficient proximity to the highest delinquent balance which is chosen for shut off on a particular day. Again, PWD introduced testimony that specifically described its collection practices, with the purpose, ostensibly, of demonstrating to the Board that it provides reasonable service to customers in the process of seeking to collect unpaid bills. PWD opened the door to examination of this issue, and filed rebuttal testimony responsive to the Public Advocate's findings.

Mr. Colton correctly determined that PWD's shut off notice practices require substantial improvement in order to accomplish their intended purposes – informing customers of the actions they need to take upon receipt of the notice to avoid termination of service. Accordingly, the Public Advocate submits that the Board's 2018 Rate Case determination should specifically find that PWD's shut off notice practices have been shown to be unfair, deceptive and, most importantly, unreasonable.⁶⁰ PWD must curb its practice of delivering wolf-like shut off notices and focus its shut off efforts on those customers who it will actually shut off unless payment is received or other necessary actions are taken to avoid shut off. PWD can resubmit its request to increase the restoration charge in a future rate proceeding, based on the cost of service recalculated as of such time, and after presumably addressing those deficiencies with its practices that the Board finds require remediation.

As a result of PWD's deficient practices, the Public Advocate recommends that PWD's proposed increase in fees to restore service after non-payment shut-off be denied. As PWD explained, it lacked sufficient information to explain how its current \$60 restoration fee was calculated: "Based upon discussions with PWD staff the charges were based on a review of estimated costs associated with each service at the time of implementation; however, a complete record of all calculations used in developing the current fees is not available." PA-ADV-47(c). Notwithstanding that PWD could not determine how its existing fee was calculated, PWD acknowledged that its proposed fee increase would not have a material impact on PWD finances. Indeed, "the Water Department believes that impacts from proposed miscellaneous fee updates

⁶⁰ Although, as discussed above, in making a determination about PWD practices, the Board need not also be able to independently enforce those determinations. In this instance, however, the Board's determination is specifically tied to a rate recommendation, which provides PWD the financial incentive to improve and directly aligns with the Board's authority to assess PWD's practices for purposes of future rate relief.

will be minimal.” PA-ADV-47(d). The Public Advocate submits that PWD’s request to increase its miscellaneous restoration fee for non-payment shut off should be denied.

XVII. CONCLUSION

For all of the foregoing reasons, the Public Advocate asserts that the Board should enter an order denying PWD’s rate request, and reflecting the recommendations of the Public Advocate as set forth herein.

Respectfully Submitted,

Robert W. Ballenger
Joline R. Price
Philip A. Bertocci
Josie B.H. Pickens

Community Legal Services, Inc.
For the Public Advocate

APPENDIX A

Public Advocate
Table C-1, C-8
FY2019-FY2021

See TR-23(B)

TABLE C-1: PROJECTED REVENUE AND REVENUE REQUIREMENTS
(in thousands of dollars)

| Line No. | Description | Fiscal Year Ending June 30, | | | | | | |
|-------------------------|---|-----------------------------|------------------|-----------|-----------|-----------|-----------|-----------|
| | | 2017 (a) | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| OPERATING REVENUE | | | | | | | | |
| 1 | Water Service - Existing Rates (f) | 272,715 | 282,477 | 281,914 | 279,853 | 277,582 | 275,456 | 273,353 |
| 2 | Wastewater Service - Existing Rates | 415,956 | 433,125 | 433,368 | 430,948 | 428,002 | 425,121 | 422,278 |
| 3 | Total Service Revenue - Existing Rates | 688,671 | 715,602 | 715,282 | 710,801 | 705,584 | 700,577 | 695,631 |
| | Additional Service Revenue Required (b) | | | | | | | |
| | Percent Increase | Year | Months Effective | | | | | |
| 4 | FY 2019 | 1.32% | 10 | | 7,884 | 9,461 | 9,461 | 9,461 |
| 5 | FY 2020 | 0.52% | 10 | | | 3,138 | 3,765 | 3,765 |
| 6 | FY 2021 | 0.44% | 10 | | | | 2,655 | 3,186 |
| 7 | FY 2022 | 0.00% | 10 | | | | | - |
| 8 | FY 2023 | 4.12% | 10 | | | | | 24,456 |
| 9 | Total Additional Service Revenue Required | - | - | 7,884 | 12,598 | 15,881 | 16,412 | 40,868 |
| 10 | Total Water & Wastewater Service Revenue | 688,671 | 715,602 | 723,166 | 723,399 | 721,465 | 716,989 | 736,499 |
| | Other Income (c) | | | | | | | |
| 11 | Other Operating Revenue (d) | 32,287 | 39,647 | 16,526 | 16,949 | 10,614 | 10,536 | 10,459 |
| 12 | Debt Reserve Fund Interest Income | - | - | - | - | - | - | - |
| 13 | Operating Fund Interest Income | 392 | 415 | 422 | 395 | 365 | 279 | 242 |
| 14 | Rate Stabilization Interest Income | 733 | 702 | 749 | 843 | 868 | 785 | 574 |
| 15 | Total Revenues | 722,083 | 756,366 | 740,863 | 741,585 | 733,312 | 728,589 | 747,773 |
| OPERATING EXPENSES | | | | | | | | |
| 16 | Total Operating Expenses | (455,742) | (463,159) | (470,668) | (483,017) | (494,397) | (519,982) | (534,421) |
| NET REVENUES | | | | | | | | |
| 17 | Transfer From/(To) Rate Stabilization Fund | 4,563 | 12,200 | (36,723) | (12,872) | (149) | 47,000 | 70,300 |
| 18 | NET REVENUES AFTER OPERATIONS | 270,904 | 305,407 | 233,472 | 245,696 | 238,766 | 255,607 | 283,652 |
| DEBT SERVICE | | | | | | | | |
| | Senior Debt Service | | | | | | | |
| | Revenue Bonds | | | | | | | |
| 19 | Outstanding Bonds | (193,841) | (185,756) | (133,964) | (123,040) | (115,891) | (109,229) | (105,309) |
| 20 | Pennvest Parity Bonds | (11,816) | (11,500) | (11,682) | (11,636) | (11,636) | (11,636) | (11,636) |
| 21 | Projected Future Bonds | - | (22,770) | (48,870) | (62,562) | (66,245) | (89,782) | (119,399) |
| 22 | Total Senior Debt Service | (205,657) | (220,026) | (194,516) | (197,238) | (193,771) | (210,647) | (236,344) |
| 23 | TOTAL SENIOR DEBT SERVICE COVERAGE (L18/L22) | 1.32 x | 1.38 x | 1.20 x | 1.24 x | 1.23 x | 1.21 x | 1.20 x |
| 24 | Subordinate Debt Service | - | - | - | - | - | - | - |
| 25 | Transfer to Escrow | (11,000) | (19,000) | - | (3,467) | - | - | - |
| 26 | Total Debt Service on Bonds | (216,657) | (239,026) | (194,516) | (200,706) | (193,771) | (210,647) | (236,344) |
| 27 | CAPITAL ACCOUNT DEPOSIT | (22,302) | (23,061) | (23,845) | (24,655) | (25,494) | (26,360) | (27,257) |
| 28 | TOTAL COVERAGE (L18/(L22+L24+L27)) | 1.18 x | 1.25 x | 1.06 x | 1.10 x | 1.08 x | 1.07 x | 1.07 x |
| RESIDUAL FUND | | | | | | | | |
| 29 | Beginning of Year Balance | 15,189 | 18,895 | 22,790 | 15,069 | 15,058 | 15,063 | 15,016 |
| 30 | Interest Income | 61 | 75 | 68 | 54 | 54 | 54 | 54 |
| | Plus: | | | | | | | |
| 31 | End of Year Revenue Fund Balance | 31,945 | 43,320 | 15,111 | 20,335 | 19,501 | 18,599 | 20,051 |
| 32 | Deposit for Transfer to City General Fund (e) | 1,866 | 756 | 722 | 716 | 709 | 746 | 817 |
| | Less: | | | | | | | |
| 33 | Transfer to Construction Fund | (28,300) | (39,500) | (22,900) | (20,400) | (19,550) | (18,700) | (20,100) |
| 34 | Transfer to City General Fund | (1,866) | (756) | (722) | (716) | (709) | (746) | (817) |
| 35 | Transfer to Debt Service Reserve Fund | - | - | - | - | - | - | - |
| 36 | End of Year Balance | 18,895 | 22,790 | 15,069 | 15,058 | 15,063 | 15,016 | 15,021 |
| RATE STABILIZATION FUND | | | | | | | | |
| 37 | Beginning of Year Balance | 205,761 | 201,198 | 188,998 | 225,721 | 238,593 | 238,742 | 191,742 |
| 38 | Deposit From/(To) Revenue Fund | (4,563) | (12,200) | 36,723 | 12,872 | 149 | (47,000) | (70,300) |
| 39 | End of Year Balance | 201,198 | 188,998 | 225,721 | 238,593 | 238,742 | 191,742 | 121,442 |

(a) FY 2017 is projected and subject to change.

(b) Includes TAP Surcharge Revenue. The TAP Surcharge Revenue reflects billings adjusted for collections.

(c) Includes other operating and nonoperating income such as interest income on funds and accounts transferable to the Revenue Fund.

(d) Other Operating Revenue includes Debt Service Reserve Fund Release in FY 2017 and FY 2018 and projected contra revenue credits for Affordability Program Discounts in (also referred to as Tap Loss) FY 2018 to FY 2023. Tap Loss in FY 2019 to FY 2023 is adjusted for collections.

(e) Transfer of interest earnings from the Bond Reserve Account to the Residual Fund as shown in Line 32 to satisfy the requirements for the transfer to the City General Fund shown on Line 34.

(f) Reflects recovery of public fire protection costs via a General Fund contribution.

TABLE C-8: PROJECTED FLOW OF FUNDS - CAPITAL IMPROVEMENTS FUND
(in thousands of dollars)

| Line No. | Description | Fiscal Year Ending June 30, | | | | | | |
|------------------------------|--------------------------------------|-----------------------------|----------|---------|---------|---------|---------|---------|
| | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Disposition of Bond Proceeds | | | | | | | | |
| 1 | Proceeds From Sale of Bonds | 313,651 | - | 170,000 | 250,000 | 285,000 | 360,000 | 365,000 |
| | Transfers: | | | | | | | |
| 2 | Debt Reserve Fund (a) | 11,888 | - | - | - | - | 20,573 | 18,733 |
| 3 | Cost of Bond Issuance (b) | 1,762 | - | 952 | 1,400 | 1,596 | 2,016 | 2,044 |
| 4 | Construction Fund (c) | 300,000 | - | 169,048 | 248,600 | 283,404 | 337,411 | 344,223 |
| 5 | Total Issue | 313,651 | - | 170,000 | 250,000 | 285,000 | 360,000 | 365,000 |
| Construction Fund | | | | | | | | |
| 6 | Beginning Balance | 283,140 | 392,111 | 186,932 | 126,094 | 134,357 | 168,349 | 175,514 |
| 7 | Transfer From Bond Proceeds | 300,000 | - | 169,048 | 248,600 | 283,404 | 337,411 | 344,223 |
| 8 | Capital Account Deposit | 29,458 | 23,061 | 23,845 | 24,655 | 25,494 | 26,360 | 27,257 |
| 9 | Penn Vest Loan | - | - | - | - | - | - | - |
| 10 | Transfer from Residual Fund | 28,300 | 39,500 | 22,900 | 20,400 | 19,550 | 18,700 | 20,100 |
| 11 | Interest Income on Construction Fund | 1,213 | 1,040 | 562 | 468 | 544 | 618 | 639 |
| 12 | Total Available | 642,111 | 455,712 | 403,287 | 420,217 | 463,349 | 551,438 | 567,733 |
| 13 | Net Cash Financing Required | 250,000 | 268,780 | 277,193 | 285,860 | 295,000 | 375,924 | 387,540 |
| 14 | Ending Balance | 392,111 | 186,932 | 126,094 | 134,357 | 168,349 | 175,514 | 180,193 |
| Debt Reserve Fund | | | | | | | | |
| 15 | Beginning Balance | 218,617 | 219,505 | 200,505 | 200,505 | 197,038 | 197,038 | 217,610 |
| 16 | Transfer From Bond Proceeds | 11,888 | - | - | - | - | 20,573 | 18,733 |
| 17 | Debt Service Reserve Release | (11,000) | (19,000) | - | (3,467) | - | - | - |
| 18 | Ending Balance | 219,505 | 200,505 | 200,505 | 197,038 | 197,038 | 217,610 | 236,344 |
| 19 | Interest Income on Debt Reserve Fund | 1,866 | 756 | 722 | 716 | 709 | 746 | 817 |

(a) Amount of Debt Reserve Fund estimated based on outstanding and proposed debt service payments.

(b) Cost of bonds issuance assumed at 0.56 percent of issue amount. FY 2017 based on actual issuance costs.

(c) Deposits equal proceeds from sale of bonds less transfers to Debt Reserve Fund and Costs of Issuance.

APPENDIX B

Public Advocate Revenue Requirement Adjustments

See TR-17

PHILADELPHIA WATER DEPARTMENT
Summary of the Effect on the Public Advocate's Adjustments on the Revenue Requirement

| | | Fiscal Years Ending June 30, | | | | | | | | |
|----------|--|------------------------------|-----------|----------------------------|-----------------|-----------|----------------------------|-----------------|-----------|----------------------------|
| | | 2019 | | | 2020 | | | 2021 | | |
| Line No. | Description | Expense | Revenues | Revenue Requirement Effect | Expense | Revenues | Revenue Requirement Effect | Expense | Revenues | Revenue Requirement Effect |
| 1 | SMIP/GARP | \$ (10,000,000) | \$ 18,000 | \$ (10,018,000) | \$ (10,000,000) | \$ 18,000 | \$ (10,018,000) | \$ (10,000,000) | \$ 18,000 | \$ (10,018,000) |
| 2 | Additional Employees ^{1/} | (51,000) | - | (51,000) | (104,000) | - | (104,000) | (152,000) | - | (152,000) |
| 3 | Collection Factors ^{2/} | - | 3,909,000 | (3,909,000) | - | 4,031,000 | (4,031,000) | - | 4,179,000 | (4,179,000) |
| 4 | Power Costs | - | - | - | - | - | - | (505,000) | 1,000 | (506,000) |
| 5 | Gas Costs | - | - | - | - | - | - | (159,000) | - | (159,000) |
| 6 | Other 200 Escalation ^{1/} | (1,491,000) | 3,000 | (1,494,000) | (3,061,000) | 6,000 | (3,067,000) | (4,748,000) | 9,000 | (4,757,000) |
| 7 | Chemicals | (1,180,000) | 2,000 | (1,182,000) | (1,894,000) | 3,000 | (1,897,000) | (2,122,000) | 4,000 | (2,126,000) |
| 8 | Transfers | (33) | - | (33) | (68) | - | (68) | (137,000) | - | (137,000) |
| 9 | Debt Interest Rate ^{1/} | (534,000) | 1,000 | (535,000) | (1,640,000) | 1,402,000 | (3,042,000) | (3,361,000) | 6,000 | (3,367,000) |
| 10 | Debt Issuance Costs | TBD | - | TBD | TBD | - | TBD | TBD | - | TBD |
| 11 | Capital Program Actual to Budget Ratio | 76% | - | 76% | 76% | - | 76% | 76% | - | 76% |
| 12 | Capital Account Deposit | 1% | - | 1% | 1% | - | 1% | 1% | - | 1% |
| 13 | Rate Case | (1,884,107) | - | (1,884,107) | (1,884,107) | - | (1,884,107) | (1,884,107) | - | (1,884,107) |
| 14 | Capacity to Pay | (1,493,250) | - | (1,493,250) | (1,493,250) | - | (1,493,250) | (1,493,250) | - | (1,493,250) |
| 15 | Implementaion of TAP/WRAP | (733,333) | - | (733,333) | (733,333) | - | (733,333) | (733,333) | - | (733,333) |
| Total | | | | \$ (21,299,723) | | | \$ (26,269,758) | | | \$ (29,511,690) |

Notes:

1/ When preparing this response it was discovered that there were cells that contained formula errors.

2/ Reflects the collection factors presented in Hearing Exhibit 7, page 56.

APPENDIX C

Public Advocate Summary List of Issues For Board Determination

Ratemaking Methodology

- *Projections:* PWD's rate model is based on three fully forecasted future test years. O&M assumptions are based on its Fiscal Year 2018 operating budget, adjusted based on spend factors and expense escalations. Revenue requirements under current rates are forecast based on 2016 usage and volumes and 2018 rates. See Brief of the Public Advocate at III.A.
- *Bond Ordinance:* PWD must satisfy the requirements of the Amended and Restated General Water and Wastewater Revenue Bond Ordinance of 1989 (General Bond Ordinance), as well as the Bond Covenant with AGM. See Brief of the Public Advocate at III.B.
- *Floor and Ceiling for Rates and Charges:* The Philadelphia Code establishes a floor and ceiling. As to the floor, the Board is not obligated to approve rates that cover each and every projected expense at all times – rather, the Board is required to ensure that rates and charges are sufficient to cover operating expenses, debt service, rate covenant and sinking fund reserve requirements, and proportionate charges for other City department charges, based on the Board's judgment of what PWD should spend, in the context of existing reserves. As to the ceiling, the Board is authorized to take into account expected revenue and expense increases and decreases. See Brief of the Public Advocate at III.C.
- *Financial Stability:* The Board is required to thoroughly review PWD's Financial Stability Plan. The Board may, and should, deviate from PWD's Financial Stability Plan in setting rates. See Brief of the Public Advocate at III.D and VIII.

Legal Standards

- The Board may only approve rates that satisfy the Constitutionally-based standard of "just and reasonable" rates, as determined through a careful weighing of the interests of customers in affordable rates against the financial needs of the utility. Public Advocate v. Philadelphia Gas Commission, 674 A.2d 1056, 1061 (Pa. 1996); Phila. Code § 13-101(4)(d). Brief of the Public Advocate at IV.A.
- In determining whether rates are just and reasonable, the Board may consider the quality and scope of customer service provided by PWD. Brief of the Public Advocate at IV.A.
- PWD must show that each element underlying its rate increase request is justified by substantial and legally credible evidence. Brief of the Public Advocate at IV.A.
- The Board must ensure the due process rights of participants before it. See Brief of the Public Advocate at IV.B.
 - By the plain language of the Philadelphia Code establishing an independent rate making body, the Board's determinations are appealable.
 - City Council provided that the Board's determinations are appealable, by law, after the Commonwealth Court's decision in Public Advocate v. Brunwasser.

- The Pennsylvania Constitution recognizes that rights of appeal may be provided by law.
- The Brunwasser case applied only to rates determined by PWD, prior to the establishment of the Board.
- The Board should not permit the City Treasurer to vote on any aspects of this rate proceeding, as doing so would compromise the integrity of the Board, demonstrating clear appearance of bias, and possible actual bias, which is impermissible in this 2018 Rate Case.
- The Philadelphia Code requires that rates and charges be developed in accordance with sound utility rate making practices, consistent with current industry standards. See Brief of the Public Advocate at IV.C.
 - “Known and measurable” is the applicable standard, which requires all ratemaking claims to be based upon known, measurable and reasonable expenses. Office of Consumer Advocate v. City of Lancaster – Sewer Fund, 100 Pa. PUC 174 (2005); W. Corssmit (Ed.), Water Rates, Fees, and the Legal Environment, AWWA, 2nd Ed., 18.
 - The AWWA M1 manual recognizes that the determination of customer rates requires that estimated expenditures satisfy a threshold level of reasonableness, demonstrating certainty that they will, in fact, occur.
 - In Pennsylvania, the “known and measurable” standard applies to any utility that sets rates on a cash basis, including municipally owned utilities.

Scope of Authority

- Administrative Agencies have express powers conferred by statute, and any powers implicitly necessary to accomplish its express mandate. Our Lady of Victory Catholic Church v. Department of Human Services, 153 A.3d 1124, 1130 (Pa.Comm. 2016). See Brief of the Public Advocate at V.
- Philadelphia City Council conferred upon the Board the power to “fix and regulate rates and charges for supplying water.” See Brief of the Public Advocate at V.
- The Board’s power to regulate rates and charges is distinct from its power to fix rates and charges. See Brief of the Public Advocate at V.
- By requiring the Rate Board to regulate rates and charges, City Council intended that the board have the authority to bring order, method, and uniformity to rates and charges – meaning the Board has the power not only to set rates, but to exercise further authority to make administrative determinations to the extent necessary to accomplish the Board’s express purposes and ensure that Board-established rates are actually implemented and available to customers. See Brief of the Public Advocate at V.
- In making a determination about PWD practices, the Board need not also be able to independently enforce those determinations, as those matters can be subject to

enforcement via a separate appeal process, or raised as an issue for the Board's consideration in reviewing future rate proposals. See Brief of the Public Advocate at XIII and XVI.

Motion in Limine

- PWD introduced evidence and testimony concerning customer service and customer issues, including the outreach undertaken for TAP and the role of WRB in billing, accounting, collections, and administration of customer assistance programs. See Brief of the Public Advocate at VI; PWD St. 5; PWD St. 7.
 - Other parties are entitled to examine the reasonableness and efficiency of those practices and processes identified by PWD in its rate request.
 - City Council expressly required that the Board conduct rate cases in an open and transparent manner.
- The Rate Board can consider quality of service in approving – or denying – a rate increase request. Nat'l Utilities, Inc. v. Pa. PUC, 709 A.2d 972, 979 (Pa. Cmwlth. 1998). See Brief of the Public Advocate at VI.
- In considering rate increase requests, the Board must take into account the very tangible, lasting, and personal impact that higher rates and charges have on Philadelphia families. See Brief of the Public Advocate at VI.
- TAP establishes an income-based rate for enrolled participants, and the recommendations presented in Roger Colton's testimony on behalf of the Public Advocate relate directly to the administration of the TAP Rate and the legal requirement that TAP rates be made available to eligible customers on reasonable terms and conditions. See Brief of the Public Advocate at VI.

Public Advocate Recommendations

1) Limit Consideration to a Two-Year Rate Period

- PWD projections beyond two years become exceedingly unreliable and should not be utilized for ratemaking.

2) PWD Financial Stability Plan Assumptions are Unreasonable and Should Not be Used in Setting Rates.

- \$100 Million is an appropriate *minimum* level for combined Rate Stabilization and Residual Fund reserves.
- The *minimum* target for “paygo” capital should be set at \$45 million with the Capital Account Deposit maintained at 1%.
- The Board cannot mandate that PWD achieve Debt Service Coverage targets in excess of legally-mandated requirements and need not target higher levels for ratemaking purposes.

3) Public Fire Protection Costs Should Not be Included in Retail Rates.

- Shifting financial responsibility for public fire protection to rate payers is unwarranted and unauthorized by law.
- Neither public policy nor industry practice justify charging PWD customers for public fire protection, which is a public good, and not a service to ratepayers.

4) Adjustments to the Revenue Requirement

- Exclude increases for SMIP and GARP from required revenues for the purposes of setting rates and charges. PWD may target discretionary revenues toward expenditures for SMIP and GARP.
- Adopt a collection factor of 97.12%, based on PWD performance using the same methodology as in the 2016 Rate Case, which places appropriate emphasis on more recent collection experience.
- Reject PWD’s proposed expense escalation for Power and Gas costs for FY 2021 as unsupported by the evidence presented.
- For both Class 200 Services and Class 800 Transfers, assume a 1.98% expense escalation factor, based on blended average historical expense escalation.
- Normalize nonrecurring expenses, including Rate Case Expenses and Implementation of TAP Costs, so as to avoid duplication in rates.
- Interest rate assumptions for 2017 and 2018 bond issues should be adjusted to 5% to reflect the debt service schedules provided by PWD.

- For FY 2019, 2020 and 2021, Interest Rate assumptions should be 5.25%.
- *Approve PWD and Public Advocate agreed upon adjustments:*
 - Actual to budget factors should be applied to Additional Staffing Operating Labor Expense
 - Projected debt issuance costs should be set at .56% to reflect historical cost
 - Eliminate \$1,493,250 that had been designated for Capacity to Pay Energy Cost for each year of the rate period, as agreed to by PWD

5) Adjustments to Rate Design

- Require PWD to determine proposed separate water usage rates for each customer class.
- Maintain current usage block rates for 0 to 2 Mcf, and recover any increase in water service rates through a proportional increase to PWD's remaining usage block rates.
- Approve use of the class extra-capacity factors developed by the Public Advocate to revise the Class Cost of Service study that is used to establish rates in this proceeding.
- Approve use of a maximum day ratio of 1.3 which is reflective of the highest maximum day to average day ratio experienced during the last 5 years.

6) Improve TAP Administration

- Set forth in the Board's determination that PWD should implement a retroactive bill adjustment, as necessary, to provide customers the benefits of TAP discounts that would have been received had PWD approved applications within a reasonable period.
- Set forth in the Board's determination that PWD should make the following changes to the TAP Application:
 - Clarify that social security numbers are not required
 - Remove any time limits on the application
 - Inform applicants that PWD must accept determination of income and/or residency made by the City's Owner Occupied Payment Agreement (OOPA) program within the prior twelve months.
 - Remove requirements for a detailed list of assets for customers who report zero income
 - Remove required acknowledgments of responsibilities not authorized under the Philadelphia Code
 - Develop a simple, streamlined application form to maximize participation and application rates

- Set forth in the Board's determination that PWD should implement the following improvements for TAP Outreach:
 - Utilize information from PGW to identify customers eligible for TAP
 - Engage Community Based Organizations (CBOs) to conduct TAP outreach and intake
 - Make blank applications available, in languages identified by the CBOs based on language access needs of their communities, for use in enrolling TAP customers
 - Utilize income and residency determinations made for purposes of OOPA, if necessary using an information sharing agreement between City Departments

7) TAP Arrearage Forgiveness (Recovered Through the TAP Rider)

- The Board should recognize in its rate determination that PWD is legally required to implement non-pretextual TAP Arrearage Forgiveness.
- The Board should include, for purposes of calculating the applicable component of the TAP Rider, that Arrearage Forgiveness should be available over a 24 month period, with credits applied for each full payment.

8) TAP Rider Design Elements

- *Approve PWD and Public Advocate agreed upon TAP Rider features:*
 - Recover only for expenses associated with the TAP program
 - Calculate the rider based on both TAP expenses and the amount of TAP revenue collected through the rider
 - Calculate the rider on a dollars per unit of consumption basis
 - Do not include provision for emergency adjustment based on financial exigencies
 - Over and under recovery shall be subject to an interest rate equal to the 52-week Treasury Bill rate as of the first day of the month preceding the month of the annual reconciliation submission
 - Include some embedded lost revenue adjustment
- Approve a 13.1% embedded lost revenue adjustment for TAP discounts.
- Include in the TAP Rider recovery for Arrearage Forgiveness (Public Advocate estimates recovery of approximately \$2 million for each of FY 2019 and FY 2020).
- Allocate TAP cost recovery based on known revenues, rather than revenue requirement.
- Require PWD's annual TAP rider reconciliation process to include third party review by the Public Advocate and other interested parties, as well as the right to request more detailed review by complaint or other submission to the Board.

9) Limit Recovery of TAP Administrative Costs

- Establish a limitation on administrative expenses that can be recovered for TAP administration to no more than 10% of the aggregate program benefits provided.

10) Deny Proposed Increase to Miscellaneous Charge for Restoration of Service and Determine that PWD Shutoff Notice Practices Must Be Reformed

- Make a determination that PWD's shut off notice practices have been shown to be unfair, deceptive, and unreasonable.
- Deny PWD's request to increase its miscellaneous charge for restoration of service after termination for payment, until such time as PWD reforms its shut off notice practices.

APPENDIX D

City Council Bill No. 130251
(as introduced)



City of Philadelphia

City Council
Chief Clerk's Office
402 City Hall
Philadelphia, PA 19107

BILL NO. 130251

Introduced April 4, 2013

**Councilmember Jones
for
Council President Clarke**

**Referred to the
Committee on Law and Government**

AN ORDINANCE

Amending Chapter 13-100 of The Philadelphia Code, entitled "Water Rates," and amending Chapter 13-200 of The Philadelphia Code, entitled "Sewer Rates," by providing for an independent rate-making body and processes and procedures for fixing and regulating rates and charges, all under certain terms and conditions.

THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:

SECTION 1. Chapter 13-100 of The Philadelphia Code, entitled "Water Rates," is hereby amended to read as follows:

CHAPTER 13-100. WATER, *SEWER AND STORM WATER* RATES

§13-101. [Standards]. *Fixing and Regulating Rates and Charges.*

(1) Councilmanic Examination. At least once in every four years Council shall make or cause to be made an independent examination of the current operations and Capital Programming and Budgeting of the Water Department, and in connection therewith employ qualified consultants to advise the Council directly with respect to:

(a) The formulated policy as prescribed by the Water Department for its capital program and capital budget and sinking fund requirements.

(b) The economic soundness of operational methods, universal meter operations, bill collecting and accounts receivable procedures, inventory control and similar factors.

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

[(2)](3) [Standards for Rates and Charges] *Independent Rate-making Body.* Pursuant to Section 5-801 of the Charter, [the Water Department] *an independent rate-making body* shall fix and regulate rates and charges for supplying water, sewer and storm water service for accounts and properties located in the City of Philadelphia, in accordance with the standards established in this Section 13-100 without further authorization of Council. [, in accordance with the following standards]:

(a) *The independent rate-making body shall be known as the Philadelphia Water, Sewer and Storm Water Rate Board (the “Board”).*

(b) *The Board shall consist of five (5) members appointed by the Mayor who shall serve upon confirmation by Council. In order that members with experience shall serve on a continuous basis, there shall be five (5) classes of members. The first members shall serve from the date of incorporation to a date of termination set forth below. Future appointments to the Board shall be made by class for a term of five (5) years:*

| <i>Members</i> | <i>Class</i> | <i>Date of Termination</i> |
|----------------|--------------|----------------------------|
| <i>1</i> | <i>A</i> | <i>July 1, 2014</i> |
| <i>1</i> | <i>B</i> | <i>July 1, 2015</i> |
| <i>1</i> | <i>C</i> | <i>July 1, 2016</i> |
| <i>1</i> | <i>D</i> | <i>July 1, 2017</i> |
| <i>1</i> | <i>E</i> | <i>July 1, 2018</i> |

The Mayor may remove any Board member for cause, including conflicts of interest and neglect of duty. Board members replaced for any reason shall be appointed by the Mayor and confirmed by Council and serve for the remaining term of the member who was replaced.

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(c) *The Board members shall be residents of the City and shall have a minimum of five (5) years professional experience in one or more of the following fields: public or business administration, finance, utilities, engineering and water resources management. At least one member shall have experience as a consumer advocate in utility rate cases and one member shall be a commercial and/or industrial ratepayer with knowledge and experience related to stormwater management and rates.*

(d) *The Board members shall not be compensated for their services, but shall be entitled to reasonable expenses consistent with their duties.*

(e) *The Board shall establish open and transparent processes and procedures for public input and comment on proposed water rates and charges. The Water Department shall promulgate regulations incorporating the Board's processes and procedures.*

(f) *Prior to fixing and regulating rates, the Board shall conduct public hearings. However, if the Board has failed to act on proposed rates and charges in a timely manner, the Water Department may request approval from the Board to establish rates and charges on a temporary or emergency basis pending a final determination by the Board.*

[(2)](4) Standards for Rates and Charges.

(a) Financial Standards.

(i) The rates and charges shall yield to the City at least an amount equal to operating expenses *and debt service*, [including interest and sinking fund charges] on all obligations of the City in respect of the water, *sewer, storm water* systems and, in respect of water [and] *sewer and storm water* revenue obligations of the City, such additional amounts as shall be required to comply with any rate covenant and sinking fund reserve requirements approved by ordinance of Council in connection with the authorization or issuance of water [and], *sewer and storm water* revenue bonds, and proportionate charges for all services performed for the Water Department by all officers, departments, boards or commissions of the City.

[(b) The rates and charges shall yield not more than the total appropriation from the Water Fund to the Water Department and to all other departments, boards or commissions, plus a reasonable sum to cover unforeseeable or unusual expenses, reasonably anticipated cost increases or diminutions in expected revenue, less the cost of supplying water to City facilities and fire systems and, in addition, such

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amounts as, together with additional amounts charged in respect of the City's sewer system, shall be required to comply with any rate covenant and sinking fund reserve requirements approved by ordinance of Council in connection with the authorization or issuance of water and sewer revenue bonds. Such rates and charges may provide for sufficient revenue to stabilize them over a reasonable number of years.]

(ii) *Rates and charges shall be fixed to provide a minimum of 100% of funding for operating expenses, other City fund charges and debt service from current revenues with reasonable sums to cover unforeseeable or unusual expenses, reasonably anticipated cost increases or diminutions in expected revenue.*

(iii) *Rates and charges shall be fixed to provide a minimum of 20% of capital expenditures from revenue sources excluding grants and bond proceeds. Commencing in City fiscal year 2017 the minimum percentage shall be 25%.*

(iv) *Rates and charges shall be fixed to maintain cash, working capital and unrestricted reserve funds at levels to provide a minimum of 120 days of anticipated operating, debt service and capital expenditures. In addition, such fund levels shall be set to meet or exceed all legal requirements and provide adequate assurance to ratepayers, investors and others that the existing quality of services and financial ratings will be maintained.*

(v) *Rates and charges may be fixed to stabilize customer costs over a reasonable number of years and include anticipated changes in operating and capital costs, including personnel cost changes and other cost inflation. Reserve funds may be utilized to stabilize rates and charges to the extent not prohibited by law, bond covenants or related obligations, provided that 100% of funding for operating expenses, other City fund charges and debt service are from current revenues.*

(vi) *In fixing rates and charges the Board shall recognize the importance of financial stability to customers, consider the Water Department's Financial Stability Plan and evaluate the impact of the Board-approved rates and charges on planned improvements, operating expenses, debt service coverage, financial reserves, credit ratings and future rates and charges.*

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

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(viii) *Whenever the Water Department has proposed changes to the rates and charges, the Board, having acted in accordance with this Section 13-101, shall issue a written report incorporating the information used by the Board in reaching a decision to approve, modify or reject the proposed rates and charges. The Board shall approve the proposed rates and charges unless the Board finds that the Water Department has proposed rates and charges that are inequitable or have not been reasonably supported by the information provided to the Board by all participants in the rate setting process. If the Board has rejected or modified the proposed rates and charges, the Board's report shall identify the impacts of the approved rates and charges on planned improvements, operating expenses, debt service coverage requirements, reserve fund levels and future rates and charges.*

(ix) *The decision to approve, modify or reject the proposed rates shall be made in a timely manner, but no later than 90 days from the filing of notice of any proposed change in rates and charges as established in this Section.*

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

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

[(e)](d) Special rates and charges, to be designated as “charity rates and charges”, shall be established for public and private schools, institutions of purely public charity, and places used for actual religious worship.

[(f)](e) Special rates and charges, to be designated as “public housing rates and charges” shall be established for property of the Philadelphia Housing Authority and shall be set so that the Philadelphia Housing Authority receives a five percent (5%) reduction off of the Water Department's service and quantity charges.

(5) *Sewer Charge Where City Water Not Used. For properties which use other than City supplied water, the charge for sewage disposal service shall be based upon the quantity of water discharged into the sewer system. A meter or other measuring device satisfactory to the Water Department shall be installed by the consumer and the charge for such service shall be comparable to that charged for sewage disposal service for City water having a meter of equal size.*

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(6) *Sewer Charge Where City Water Not Discharged Into Sewage Disposal System.* Where commercial and industrial properties which use City water do not discharge all or part of such water into the sewage disposal system of the City, the quantity of such water may be excluded in determining the proper sewage service charge, provided, the minimum sewage service charge, as established by regulation of the Water Department, is not reduced thereby. To determine the amount of such exclusion, the consumer shall install a meter or measuring device satisfactory to the Water Department; provided, that if, in the opinion of the Water Department, it is not feasible to install a meter or measuring device, some other satisfactory method of measuring may be designated by the Water Department.

[(3)](7) Notice of Proposed Changes. The Water Department shall give written notice to Council *and the Board* at least 30 days in advance of the filing of notice of any proposed change in rates or charges or of any proposed revision in service rates, and shall submit therewith financial, engineering and other data upon which the proposed water, sewer and storm water rates and charges are based. Proposed revisions of rates to be made within 90 days prior to the enactment of the next annual operating budget shall be submitted to Council forthwith.

(8) *Report of the Board on Proposed Changes.* The decision by the Board to approve, modify or reject proposed rates and charges shall be made in a timely manner, but no later than 90 days from the filing of notice of any proposed change in rates and charges as established in this Section. The Board's Rate Report shall be filed with the Department of Records. If the Board does not act on proposed rates and charges in a timely manner, the Water Department may request approval from the Board to establish rates and charges on a temporary basis pending a final determination by the Board.

(9) *Appeals of Board's Rate Report.* Any party to the proceedings of the Board affected by the Rate Report may appeal to the Court of Common Pleas in Philadelphia. Appeals shall be made within thirty (30) days of the filing of the Board's Rate Report with the Department of Records.

[(4)](10) Annual Report. Water rates and charges shall be reviewed by the Water Department at least once a year, and a report thereof shall be submitted to Council *and the Board*.

SECTION 2. Chapter 13-200 of The Philadelphia Code, entitled "Sewer Rates," is hereby deleted in its entirety and will be marked as *Reserved*.

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SECTION 3. Effective Date. This Ordinance shall take effect immediately upon final passage.

Explanation:

[Brackets] indicate matter deleted.

Italics indicate new matter added.

City of Philadelphia

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