

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

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| Re Application of the Philadelphia Water Department for Increased Water, Wastewater and Stormwater Rates and Related Charges | Fiscal Years 2017-2018 |
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**BRIEF SUBMITTED ON BEHALF OF
PHILADELPHIA WATER DEPARTMENT**

Hearing Officer Nancy Brockway, Presiding

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I. INTRODUCTORY STATEMENT

The Philadelphia Water Department (the “Department” or “PWD”) requests the approval of the Philadelphia Water, Sewer and Stormwater Rate Board (“Rate Board”) of its proposed changes in rates and charges for water and wastewater service. The Department has submitted a comprehensive rate filing documenting the need for an overall increase in water and wastewater revenue requirements of \$34.735 million in FY 2017 and \$70.906 million in FY 2018. This level of revenue requirements necessitates overall annual increases in revenues from existing levels of approximately 5.42% in FY 2017 and 5.42% in FY 2018. PWD Statement 9A (Exhibit BV-E1 – Table C-1).

As the Rate Board is aware, the Department last filed for rate relief in 2012 (for the period FY 2013-2015). Since that time, PWD has incurred unavoidable increases in operating costs in several areas, including renewal and replacement of aging infrastructure, regulatory compliance, employee wages, healthcare costs and pension costs. The Department also did not seek to increase rates in FY 2016 as projected in the last rate case. Rather, it will opt to draw down the Rate Stabilization Fund (“RSF”). PWD will again draw down the RSF (by \$58 million) to mitigate the level of rate increased required for the FY 2017 and FY 2018 Rate Period. However, it cannot afford to delay the implementation of new rates any longer.¹

It should be noted that the over-riding purpose of the requested rate relief is to allow the Department to continue to provide safe, reliable service to its customers, consistent with its mission to purvey high quality drinking water, provide a reliable water supply, and sustain and enhance the region’s watersheds and quality of life by managing wastewater and stormwater effectively.² The proposed rate increase is designed to accomplish this in three ways.

¹ PWD will further withdraw some \$58 million from the RSF during the Rate Period to mitigate the impact of this rate increase request. See, PWD Statement 2 at 2.

² See, PWD Statement 1 at 2.

First, in accordance with the Philadelphia Home Rule Charter (“Charter”),³ the Philadelphia Code and the Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended (“1989 General Ordinance”),⁴ the increase will allow the Department to generate revenues sufficient to pay its operating expenses, debt service and meet applicable bond covenants.

Second, the proposed rate increase will allow the Department to maintain its financial integrity and its ability to access capital at reasonable cost. The Department must have ready access to capital as its water and wastewater systems require extensive capital investment (e.g., investment in mains and facilities utilized in the conveyance and treatment of water and wastewater for the benefit of Department customers). It is critical that the Department continue to maintain prudent financial policies as this will contribute to lower capital costs and will minimize the need for large rate increases over time.

Third, the rate filing provides for the establishment of rates premised upon cost causation (i.e., establishing a reasonable system of charges based upon cost of service). The Department’s proposal to allocate costs fairly and to offer assistance programs to vulnerable customers over the Rate Period is designed to accomplish this objective.

A. Just and Reasonable Rates.

The Public Advocate once again raised the issue of appropriate ratemaking conventions for a municipally regulated utility. The experts proffered by the Advocate prefer a PUC ratemaking methodology applicable to investor owned utilities.⁵ Municipal ratemaking is different, however, and the use of operating budgets and projections over a reasonable period of years is the norm. That does not mean that the end result is at odds with the “just and reasonable” standard – it is just a different (and reasonable) way to set rates.

³ First Class City Home Rule Act, 53 P.S. 13101.

⁴ Restated General Water and Wastewater Revenue Bond Ordinance of 1989 (Ordinance of City Council, approved June 24, 1993 – Bill No. 544), as amended.

⁵ See, PA Statement 1 at 7-10.

As the Rate Board is aware, the just and reasonable ratemaking standard requires that rates charged to customers be fair, reasonable and sufficient to permit the utility to sustain its operations, maintain its financial integrity and attract capital at favorable interest rates. *See, Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944). This standard is usually applied in association with accrual accounting methods (commonly used by PUC regulated utilities), but it also has applicability here.

In the instant context, however, the Department is required to establish rates based upon the legally enacted (modified accrual) basis of accounting. This accounting method is primarily based upon actual receipts or cash (rather than accrued revenues) and is required by the 1989 General Ordinance.⁶ Tr. 148:12-14 (4/5/16). Use of the legally enacted basis of accounting in the rate process is not (in and of itself) at odds with the just and reasonable standard. Rates can be fairly set using a variety of accounting methods (including the modified accrual method). The test is whether this accounting method (or any other) is fairly and appropriately applied.⁷ In the instant context, the FY 2016 Operating Budget (developed using the legally enacted basis of accounting) is the initial point of departure for determining revenue requirements for the Rate Period. PWD Statement 9A at 25. As discussed in this brief, revenue levels are vetted by City Council⁸ and the Pennsylvania Intergovernmental Cooperation Authority

⁶ It is noteworthy that the “legally enacted” or “modified accrual” basis of accounting has been described in this record as “conservative.” PA Statement 2 at 13-15. If that means that, by use of this method, rates must be established so as to actually realize sufficient receipts to pay operating expenses and debt service – this is a correct characterization of this accounting method. Equally important is the fact that the modified accrual basis of accounting is the legally required accounting method for this venue. *See*, PWD Statement 2, Exhibit ML-7 (2014 PWD Financial Statements).

⁷ The Department’s cash requirements are determined within the framework of the legally enacted basis of accounting and, in the first instance, are reviewed by Philadelphia City Council which has authorized expenditures associated with the Water Fund for FY 2016. This is the base year from which the revenue requirement is determined, subject to adjustment. In addition to the aforesaid City Council and PICA approvals, Black & Veatch and the Department have undertaken an analysis of historical actual and budgeted expenses for each of the classes of expenses (including personal services, purchased services, materials and supplies, equipment, and interdepartmental charges) to make sure that the budgeted level of expenses included in the rate filing is reasonably applied in the test period (taking into account union contracts, current and prospective personnel levels, escalating chemical expenses, etc.)

⁸ The fact that the City Charter requires a balanced budget (one where revenues and expenses are equal), as determined by City Council, is one clear indication that the revenues and revenue requirements determined in this case should be reasonably aligned with Water Fund appropriations approved by Council (FY 2016 operating budget) as projected over a reasonable period of years. This is the general framework of the rate process within which we are engaged.

("PICA") in the determination of appropriation levels utilized by Black & Veatch in formulating proposed rates.

In addition to the above requirements, the Department's rates and charges must annually recover net revenues sufficient to yield at least 1.20 times the senior Debt Service Requirements (as such term is defined in the 1989 General Ordinance). The Department's covenants also require that its rates and charges must annually recover net revenues sufficient to yield 1.00 times on various required annual deposits and total debt service requirements, as specified in Section 5.01 of the 1989 General Ordinance. In addition, the Department's rates and charges must be sufficient to yield Net Revenues (excluding any transfer from the Rate Stabilization Fund) in each fiscal year to pay 90% of senior Debt Service Requirements payable in such fiscal year, regardless of other amounts that may be available to the City to pay debt service. PWD Statement 2 at 7.

Another integral part of establishing just and reasonable rates involves consideration of what authorized revenue levels are required for the Department and City to continue to maintain prudent financial policies and avoid potential negative effects on their financial position and credit ratings. There are several factors that municipal water and wastewater system consider in establishing rates such as coverage ratios, liquidity / days cash on hand and debt ratios.

The Department's capital costs are driven by needed infrastructure investments which are long term in nature and are typically funded through a combination of external debt (tax exempt bonds) and internally generated funds (coverage). Coverage is the Department's only alternative to issuing debt as a means of funding infrastructure improvements. As demonstrated in the record, the Department is highly leveraged and must prudently plan to reduce its leverage and debt costs over time, i.e., by funding necessary capital improvements with internally generated funds (Coverage) in lieu of increased debt.⁹

⁹ The most fundamental principle in utility regulation is that operating revenues should be sufficient to produce earnings upon invested capital which maintains the integrity of that capital and permits the attraction of additional capital necessary for continued service operations. This principle was recognized early in the development of rate regulation by the United States Supreme Court in *Bluefield Waterworks and Improvement Company v. Public Service Commission*, 262 U.S. 679 (1923) and

Thus, coverage provides financial stability and is available to reduce the amount of borrowed funds needed for capital investments. Tr. 121:16–127:2 (4/5/16).

In addition to coverage, the Department must be mindful of its liquidity as this is the amount of financial resources the Department can access in order to deal with near-term cash flow needs, as impacted by volatility in expenses or disruption in revenues. The most common liquidity measure is Days Cash on Hand which is roughly the number of days of operating expense a utility could afford to pay if there were a complete disruption of revenue flow. See, Tr. 144:15-153:17 (2/22/16); PWD Exhibit 2 (Financial Stability Plan) at 34.

Most municipal utility financial policies include liquidity targets similar to the Departments target as established in the Financial Stability Plan. The targets often specify which funds can be drawn upon to meet liquidity needs as also detailed in the Financial Stability Plan. The Department historically had adequate Days Cash on Hand relative to its ratings, 298 days as of fiscal year-end 2015 and 243 days as of projected year-end FY 2016. PWD Exhibit 2 at 15. However, the Department has taken action during the current rate proceeding to further reduce the days cash on hand metric to 217 days FY 2017 and 175 days FY 2018. *Id.* at 25; Tr. 131:23-33:13 (4/6/16). This is materially lower than most of our peer utilities and the medians as detailed in sector reports of rating agencies. PWD Exhibit 2 at 34 and 36; Tr. At 32:23-33:13, 72:20-73:9, 144:15-153:17 and 156:19-24 (2/22/16). Any further deterioration beyond projected levels will present rating challenges as peers maintain greater days cash on hand as portrayed in the above referenced median reports. Tr. 117:15-118:11, 130:20-131:13 and 132:22-133:9 (4/6/16).

The Department is reasonably concerned that rates be set so that it can maintain its credit ratings, because necessary funding for the vast majority of expenditures for the Department's capital program is

Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944). The Supreme Court established in *Hope* that operating revenues should be sufficient to produce earnings to allow the utility to attract capital.

This principle has more recently been reaffirmed by both the United States and Pennsylvania Supreme Courts. The United States Supreme Court, following the *Hope* decision, stated that one of the elements always relevant in utility revenue determination is the return to be received by the utility given the risks involved in the enterprise. *Duquesne Light Company v. Barasch*, 488 U.S. 299, 314 (1989). The Pennsylvania Supreme Court has also reaffirmed this principle in its holding in *Pennsylvania Electric Company v. Pennsylvania Public Utility Commission*, 509 Pa. 324, 502 A.2d 130 (1985).

derived through the issuance of debt. As more fully described below, the Department's six-year Capital Improvement Program (\$1.784 billion) is a critical element of its operations as the water and wastewater systems require continuous repairs and replacements for (a) the water conveyance and wastewater/stormwater collector facilities over 130 square miles (City service area); and (b) treatment plants and other facilities serving water and wastewater customers. PWD Statement 3 at 2.

Access to the capital markets on favorable terms is therefore a central issue in this case – and is very much a part of setting just and reasonable rates. The Department's credit ratings must be preserved to fund its capital expenditures at least cost to customers. The rating agencies have recently affirmed the Department's "A" category bond ratings but, in so doing, have emphasized that the rating and outlook are premised upon the expectation that the Rate Board will implement sufficient new rates to enable the City to (at a minimum) comply with its covenants under the 1989 General Bond Ordinance. PWD Statement 2, Exhibit ML-2. The rating agencies have offered their guidance as to what must be done to preserve the Department's creditworthiness. As stated by Moody's Investors Service in its ratings report dated, March 19, 2015:

The stable outlook reflects the City's willingness to continue investing in the system, increasing user rates annually, and maintaining ample operating liquidity. The city's ability to maintain adequate coverage levels will be a key factor in its rating going forward.

PWD Statement 2, Exhibit ML-2. Likewise, Fitch Ratings, in affirming its "A+" rating and stated that a negative rating action could be triggered by "difficulty in achieving rate relief" under a new ratemaking board. *Id.* The importance of sufficient new rates is obviously critical to maintaining current favorable credit ratings.

B. Prospective Nature of Ratemaking.

The record surely confirms that there are divergent views as to the appropriate determination of revenue requirements and the appropriate time horizon to be utilized for rates. In assessing the various arguments raised in this proceeding, however, it should not be forgotten that ratemaking is, by its nature, prospective and relies upon the reasonable projections of future revenues and revenue requirements.

Moreover, municipal ratemaking has its own unique characteristics in its utilization of multiple test periods, budgetary support for revenue requirements, cash based accounting, among other considerations.

The guiding principles for municipal ratemaking (water and wastewater utilities) are set forth in two manuals: the American Water Works Association's "Principles of Water Rates, Fees, and Charges Manual of Water Supply Practices M1" is the industry standard. For wastewater systems, Water Environmental Federation's "Financing and Charges for Wastewater Systems" M27 Manual is the industry standard. These manuals provide generally accepted industry guidelines for the Cost of Service allocation processes. As explained below, Black & Veatch has applied these industry standard principles and guidelines in the cost of service study. See, PWD Statement 9A at 17.

These industry manuals confirm that, as a general proposition, government owned utilities are free to set their own policies with regard to appropriate test periods. This is not the case for investor owned utilities which are subject to particular legislative and regulatory policies of the local Public Utility Commission. Government owned utilities typically select a future test year in recognition of budgetary requirements, bond indentures and set rates for a reasonable future period. In municipal ratemaking, revenue requirements and coverages are generally derived from projections premised upon historical data which is used to estimate revenues needed for a reasonable period of years.

Municipal regulatory commissions today commonly use fully projected test periods. By use of the proposed time horizon in this proceeding (FY 2017-2018), the Department would like to set rates so that (a) future filings will occur no more frequently than at two (or three) year intervals; (b) greater financial stability can be achieved; and (c) water and wastewater customers can plan their budgets with greater certainty. None of the foregoing can be accomplished, however, without the use of reasonable projections of future revenues and expenses. In the instant case, FY 2017 will begin at or about the implementation date for new rates; and planning will start soon for FY 2018. The point is that none of the projected expenditures before the Rate Board is so far out in the future. As explained below, planning for FY 2018 with regard to operating, budgetary and rate requirements is timely, practical and wholly

realistic. It should also be noted that rates have been established in this jurisdiction since 1993 using multiple test periods. Since that time (twenty three years ago), the Department has returned for rate relief on just five occasions.¹⁰

C. End Result Is Controlling.

The proof of the reasonableness of rates is the end result, not the accounting practice or methodology employed. The Department's rates are reasonably determined from FY 2016 budget data adjusted by budget and growth factors. Revenue requirements are determined with use of the most complete information available. The critical consideration is that there is a real basis for use of growth and budget factors to calibrate the test period revenues to a level the operators of the utility can attest are necessary to sustain utility operations for Rate Period. Whether the projected expenditure is for personnel costs, fringe benefits, chemical expenses, indemnities, inter-departmental charges or debt service, the Department is trying to accurately track expense levels and recover operating revenues it will need for FY 2017-2018.

Historical spending (even when utilizing a three year average) does not always realistically reflect prospective expense levels. For example, if the utility is aware that it is at historically low personnel levels or costs without recent wage increases, it would be unfair to base rates on an historic average. Ratemaking should not be wholly theoretical. There should be some reality test. The Department believes that rates can be more reasonably set with informed judgment and reasonable budget estimates than with blind adherence to historical averages or the application of a rigid method or formula that does not take into account recent or changed circumstances.

In truth, just and reasonable rates can be set in any number of ways. The test is whether the underlying revenue requirement reasonably reflects future costs; and, most importantly, that the end result

¹⁰ The Department has been successful in meeting and extending the period projected for rates to remain in effect.

is a reasonable one.¹¹ *PA Public Utility Commission v. Pennsylvania Gas & Water Co. (Water Division)*, 492 Pa. 326, 424 A.2d 1213 (1980).

II. STATEMENT OF THE PROCEEDINGS.

Pursuant to the Rate Board's regulations, on January 8, 2016, the Department notified City Council and the Rate Board of its intent to file proposed changes in rates for water and wastewater service to become effective July 1, 2016, or as soon thereafter as procedural requirements permit the enactment of new rates by regulation ("Initial Notice").¹²

On February 8, 2016, PWD filed the Formal Notice of its application for rate relief with the Rate Board and the Department of Records, including the following proposed schedules of rates and charges (also sometimes referred to as proposed regulations), submitted pursuant to Sections 8-407 and 5-801 of the Philadelphia Home Rule Charter ("Charter").

Proposed Philadelphia Water Department Regulations

- 300.0 Rates and Charges Definitions
- 302.0 Water Charges
- 303.0 Sewer Charges
- 304.0 Stormwater Management Service Charges
- 305.0 Billing for Water, Sewer and Stormwater Service
- 306.0 Miscellaneous Water Charges
- 307.0 Miscellaneous Sewer Charges
- 308.0 Miscellaneous Stormwater Management Charges
- 309.0 Fire Service Connections.

¹¹ Just and reasonable rates are arrived at through balancing competing ratepayer and investor interests. In the instant context, however, the ratepayer is the citizen/owner of the enterprise which makes no profit. So even with a conservative determination of the revenue requirement and rates in accordance with the Charter, Philadelphia Code and bond covenants, all revenues are employed for the benefit of the ratepayer/citizen owner and sustain necessary utility operations or fall to the Rate Stabilization Fund to be used to defray future revenue increases. Simply put, all revenues earned stay within the Department for use in offsetting future revenue requirements and enhancing the compliance with covenants prescribed by the 1989 General Ordinance.

¹² The Departments provided the Public Advocate with a document containing the assumptions for this rate proceeding on December 8, 2015, and convened a teleconference to discuss those assumptions with the Public Advocate and its experts on December 11, 2015. PWD Exhibit 5 is the assumptions document provided to the Public Advocate on December 8, 2015. The revised assumptions documents with revisions made based on the teleconference is included in PWD Statement 9B and marked as Ref#BV-S1. The teleconference satisfied a provision in a joint stipulation from the 2012 rate proceeding stating that the Department would convene a workshop before proposing permanent new rates projecting revenue over a multi-year rate period. Tr. 175:19-180:13 (4/5/16) and PA Hearing Exhibit 2 at 5 of 15.

Also, included with its Formal Notice, the Department submitted pertinent engineering, financial and rate data as well as the prepared testimony of PWD witnesses and its consultants Black & Veatch, Raftelis Financial Consultants and Public Financial Management. A full listing of PWD statements and exhibits included in the initial rate filing is set forth in Appendix A.

The Rate Board appointed Nancy Brockway, Esquire (“Hearing Officer”) to preside over the rate hearings and to prepare a report to the Board summarizing the hearing record. The Rate Board also appointed Community Legal Services to serve as Public Advocate (sometimes referred to as the “Advocate”) in the rate hearings.

In addition to the Public Advocate, the Philadelphia Large Users Group (“PLUG”), Penn Future/Next Great City (“Penn Future”), Community Lawyering Clinic (“CLC”), Tenant Union Representative Network (“TURN”), PECO/Exelon (“PECO”) and the Neighborhood Gardens Trust were participants in this proceeding.

Six public input hearings and six technical hearings were held in connection with this rate case¹³ and a transcript of some 1,436 pages was compiled.

The Department also presented a full roster of witnesses which included Debra McCarty, Melissa LaBuda, Steven Furtek, David Katz, Erin Williams, Joanne Dahme, James Palladino, Michelle Bethel, Mark Harvey, together with witnesses from Black & Veatch (Ann Bui, Prabha Kumar and David Jagt), Raftelis Financial Consultants (Jon Davis, Henrietta Locklear and Bart Kreps), Public Financial Management (Katherine Clupper) and Ballard Spahr (Valarie Allen).¹⁴ Expert witnesses proffered by the parties in the technical hearings included Lafayette Morgan, Roger Colton, Jerome Mierzwa, Robert Rosenthal, David Russell and Randolph Haines.

¹³ Public input hearings were held in West Philadelphia (White Rock Baptist Church), Oxford Circle (Philadelphia Protestant Home), North Philadelphia (YMCA North Philadelphia), Roxborough (Roxborough Memorial Hospital) and Center City (Free Library and City Council) during the period February 23, 24, March 1, 2, 3 and April 7, 2016. Technical hearings were held on April 5, 6, 7, 11, 12 and 13, 2016 at 1515 Arch Street, 18th Floor, Philadelphia, Pennsylvania. All hearings were open to the public and were advertised consistent with Rate Board Regulations and the Hearing Officer’s directives.

¹⁴ Valarie Allen, Esquire presented rebuttal testimony in this proceeding concerning the requirements of the 1989 General Ordinance (hereinafter defined). Ms. Allen serves as the Department’s bond counsel and has represented PWD since the 2003.

III. GOVERNING LEGAL STANDARD

Section 5-800 of the Charter conveys authority to the Department to operate the water and wastewater utilities. In addition, Section 5-801 of the Charter authorizes the regulation of rates and charges for utility services. In November, 2012, Philadelphia voters approved an amendment to the Charter to allow City Council to establish, by ordinance (the “Rate Ordinance”), an independent ratemaking board responsible for fixing and regulating rates and charges for water, sanitary sewer and stormwater services. The Rate Ordinance was enacted effective January 20, 2014 and provided for the creation of the Rate Board.

It should be noted that the Charter still mandates that standards pursuant to which rates and charges are fixed shall be such as to yield to the City at least an amount equal to operating expenses and interest and sinking fund charges on any debt incurred or about to be incurred for water supply, sewage and sewage disposal services. In computing operating expenses, proportionate charges for all services performed for the Department by all departments, boards or commissions of the City are also included.

The City Council standards referenced above are set forth in the Philadelphia Code, Section 13-101 which prescribes the following standards for the determination of water, sewer and stormwater rates and charges:

Standards for Rates and Charges. (a) 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 general obligations of the City in respect of the water, sewer, stormwater systems and, in respect of Water and Wastewater Revenue Bonds, such additional amounts as shall be required to comply with the Rate Covenant and the Debt Reserve Requirement, 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, reasonable 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 to the City’s sewer system, shall be required to comply with the Rate Covenant and Debt

Reserve Requirement in connection with the issuance of Water and Wastewater Revenue Bonds. Such rates and charges may provide for sufficient revenue to stabilize them over a reasonable number of years.

(i) In fixing rates and charges, the Board shall recognize the importance of the financial stability to customers and fully consider the Water Department's Financial Stability Plan (defined herein). In addition, the Board shall determine the extent to which current revenues should fund capital expenditures and minimum levels of reserves to be maintained during the rate period. When determining such levels of current funding of capital expenditures and minimum levels of reserves, the Board shall consider all relevant information presented including, but not limited to, peer utility practices, best management practices and projected on customer rates. The Board shall set forth any such determinations in a written report.

(ii) 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 stormwater rates.

(iii) Whenever the Water Department has proposed changes to the rates and charges, the Board, 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.

(iv) The decision to approve, modify or reject the proposed rates shall be made in a timely manner, but no later than 120 days from the filing of notice of any proposed change in rates and charges.

(c) The rates and charges shall be equitably apportioned among the various classes of consumers and shall be just, reasonable and non-discriminatory as to the same class of customers.

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

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

The Rate Ordinance also requires the Department to develop a comprehensive plan ("Financial Plan"), pursuant to which the Department shall forecast capital and operating costs and expenses and corresponding revenue requirements. In this plan, the Department is required to identify the strengths and challenges to its overall financial status including the utility's credit ratings planned and actual debt

service coverage, capital and operating reserves and utility service benchmarks. The Department is also required to compare itself with similar agencies in peer cities in the United States. The Department must file a Financial Stability Plan with City Council every four years and updated prior to proposing revisions in rates and charges. See, Section 13-101, Philadelphia Code.

As alluded to above, the Department must collect sufficient revenues to meet its rate covenants prescribed by the 1989 General Ordinance which require that the Department's annual net revenues be at least 120 percent of its senior Debt Service Requirements. The Department must also comply with additional rate covenant requirements with respect to the payment of deposits in various accounts and debt service. Also, the Department must establish rates and charges sufficient to yield net revenues (excluding amounts transferred from the Rate Stabilization Fund to the Revenue Account) at least equal to 90 percent of the Department's senior debt service requirements ("Insurance Covenant"). See, PWD Statement 2 at 7.

Taken together, the governing legal standards constrain the Department to fix and regulate rates so as to conservatively meet operating requirements and obligations as required under the terms set forth in (i) the City's Restated General Water and Wastewater Revenue Bond Ordinance of 1989, as amended and supplemented (the "Ordinance"); (ii) certain agreements of the City (approved by City ordinance) with the Fiscal Agent for the benefit of Assured Guaranty Municipal Corp. ("AGM"), which insures the scheduled payment of principal of and interest on certain of the City's outstanding Water and Wastewater Revenue Bonds (the "Revenue Bonds"); and (iii) Section 13-101(4) of the Philadelphia Code, as amended (the "City Code"), including by Ordinance #130251-A approved by the Mayor on June 20, 2014 (the "Water Rate Board Ordinance"). The Department's rate filing is designed to specifically comply with all of the above legal requirements.

IV. DESCRIPTION OF THE UTILITIES.

The Department operates the water and wastewater systems serving the City of Philadelphia providing integrated water, sanitary sewer and stormwater management services. In addition, the

Department has ten wholesale wastewater customers and one wholesale water customer. . The Departments assetsinclude the following major operating facilities: (a) three water treatment plants with the capacity to treat in excess of 500 million gallons per day (“MGD”) of water from the Delaware and Schuylkill Rivers; (b) three wastewater treatment plants with the capacity to process in excess of 500 MGD of wastewater; and (c) a privately managed centralized biosolids handling facility that annually processes and distributes up to 6,570 dry tons of biosolids captured during the wastewater treatment process. *Id.* at 2-3. In addition, the Department also maintains approximately 3,176 miles of water mains; 3,716 miles of sewers (including 1,855 miles of combined sewers, 762 miles of sanitary sewers, 737 miles of stormwater conduits and 362 miles of force mains, inlets and vent pipes), 71,962 stormwater inlets, 25,364 fire hydrants, multiple finished water storage facilities and over 30 pumping stations. In support of its services, the Department also operates a sophisticated testing laboratory and a range of technical and administrative support services. PWD Statement 1 at 2.

It should be noted that much of the conveyance and collection system serving the above described water and wastewater systems are old and perennially in need of repair and upgrades. The water treatment and water pollution control plants are also in constant need of refurbishing and improvement. All of the foregoing are the focus of the Department’s Capital Improvement Program (“CIP”) – the debt service associated with which is an element of this rate filing. This program is a critical part of the planned expenditures necessary to run the water and wastewater systems. The CIP is approved by Philadelphia City Council for a six year duration and includes improvements for the water and wastewater treatment plants, water and wastewater conveyance systems and collector system, among other areas. PWD Statement 3 at 2. Maintaining Department infrastructure so as to provide reliable service for customers and to fulfill the Department’s mission as a caretaker of the environment, is at the core of this

rate increase request. No party has questioned the propriety of planned capital expenditures which are supported by rates (debt service payments and direct capital contributions).¹⁵

V. COST OF SERVICE RATEMAKING METHODOLOGY.

A. PWD Cost of Service Study.

The Department engaged Black & Veatch (“B&V”) in this proceeding to undertake a comprehensive water, sanitary sewer and stormwater rate study which consisted of the following principal elements:

- (a) Projection of revenue under existing rates and the projection of revenue requirements for the water and wastewater utilities;
- (b) Allocation of costs of service for water, sanitary sewer and stormwater service to the wholesale and retail customer types; and
- (c) Design of water, sanitary sewer and stormwater retail rates which recognize the costs of service.

The methodology employed by B&V in its rate study follows industry best practices and is consistent with that utilized in prior rate proceedings. PWD Statement 9A at 9.

The projection of revenues and revenue requirements examined in the rate study encompasses the period FY 2016-2021. Rates applicable to FY 2016 are the same as FY 2015 rates, as these rates were authorized as the final year of new rates approved in the last proceeding. There was no rate increase requested in FY 2016. The pertinent cost of service determination, detailed allocation of costs of service and rate design are all in connection with revenues and revenue requirements for the period FY 2017-2018 (“Rate Period”). Schedules of water, sanitary sewer and stormwater charges for retail service are developed based upon the results of the cost of service study for the Rate Period. *Id.* at 9-11.

¹⁵ The Department’s outstanding bond indebtedness as of the end of FY 2014 was \$1.851 billion, as documented in PWD audited financial statements. PWD Exhibit 4 (SI-31 – FY 2014 PWD Financial Statements at 59). The debt service on this outstanding debt constitutes a component of the requested revenue requirement and must be timely paid to maintain the Department’s credit rating.

B. Projection of Revenues and Revenue Requirements

For the water and wastewater utilities combined, the revenue requirement projections for the initial test year (FY 2017) and the following year (FY 2018), for which rates are being proposed, indicate the need for an overall increase in water and wastewater revenue requirements of approximately \$105 million during the Rate Period. The cumulative overall increase in revenues from the combined water and wastewater utilities over the two-year period, relative to FY 2016, is approximately 11.1%. PWD Statement 9A, Table C-1 (Exhibit BV-E1) presents a summary of the series of revenue adjustments projected for the combined water and wastewater utilities for the study period (FY 2016-2021). PWD Statement 9A at 20; See, Appendix B hereto.

VI. REVENUE AND REVENUE REQUIREMENT PROJECTIONS.

As a part of the above described rate study, Black & Veatch presented a six year study period (FY 2016-2021), so that PWD could reasonably assess rate impacts and revenue requirements during the Rate Period (FY 2017-2018) and beyond. PWD Statement 9A at 10. Consistent with industry best practices, a 5-6 year timeframe is utilized as a reasonable forecast period for future revenue needs, thereby assisting management, policymakers and the public to plan for potential problems and avoid surprise when future changes in rates are needed. AWWA Rate Manual at 10.

As the Rate Board is aware, PWD revenue and revenue requirements projections are constrained by budget authorization levels ordained by City Council and approved by the Pennsylvania Intergovernmental Cooperation Authority (“PICA”) as a part of the Five Year Plan. The Department has provided explanations for its proposed revenue requirements as depicted in PWD Hearing Exhibit 4 and described in its rebuttal testimony. Budget detail, the PWD Rate Model and literally hundreds of pages of accompanying workpapers have also been supplied to the parties. See, PA-EXE-74; Response to TR-5.

Despite contrary arguments advanced by the Public Advocate, the Department has sufficiently documented its projected revenues and revenue requirements to allow the determination of the reasonableness and propriety of proposed rates in this proceeding. *Id.*; PWD Hearing Exhibit 4

(Summary of Documentation Provided). Moreover, the PWD Rate Model was provided to the Advocate's consultants with literally hundreds of pages of workpapers and electronic files fully documenting the rate filing and the various assumptions underpinning projected revenues and revenue requirements

As the Rate Board is aware, the vast majority of PWD operating expenses are non-discretionary in nature as same are (a) required by negotiated labor agreements (wages, pensions, benefits for our unionized personnel); (b) needed for operating costs associated with the maintenance of our water and wastewater facilities; (c) driven by debt service related to our expansive Capital Improvement Program; (d) determined by escalating regulatory requirements tied to the Consent Order and Agreement and numerous other environmental requirements; and (e) mandated to provide necessary new and ongoing customer assistance programs. There should be no debate that the majority of revenue requirements associated with the foregoing are not only needed to sustain the utility, but legally required. See discussion, *infra*.

No one can reasonably suggest that the operation of the water and wastewater utilities is cost free. Every year there are incremental costs driven by all of the above requirements which must be funded in a reasonable and sustainable manner. This would be particularly true with significant new assistance programs that are planned for FY 2018.

The Department's application for rate relief seeks to balance customer and utility interests by (a) minimizing financial/operating costs generally; and (b) drawing down the Rate Stabilization Fund by \$58.0 million during FY 2017-2018. See, PWD Statement 2 at 4. The Department's Financial Plan also seeks to avoid precipitous future rate increases (rate shock) that would result in FY 2019, if rate relief is not authorized for FY 2017-2018.

VII. AGREED UPON ADJUSTMENTS SHOULD BE ACCEPTED.

The Department has agreed to reduce proposed revenue requirements in the aggregate amount of \$886,000 as a result of the adjustments depicted in the table below. See, TR-15.

Agreed-Upon Adjustments

| | FY 2017 | FY 2018 |
|--|----------------|----------------|
| <i>Removal of AMI</i> – Reduction in revenue requirements related to AMI O&M costs | Not applicable | \$ (431,000) |
| <i>Removal of Power Escalation Factor</i> – Reduction in revenue requirements for power costs. | Not applicable | (562,000) |
| Reduction in O&M Costs | Not applicable | (993,000) |
| Impact on Liquidated Encumbrances due to the O&M Adjustments | Not applicable | 107,000 |
| Total Reduction in Revenue Requirements | Not applicable | \$ (886,000) |

In addition to the foregoing, the recommendation of PLUG witness, Randolph Haines (suggesting the designation of a single contact for large Commercial and Industrial customers) is also acceptable to the Department and should be accepted¹⁶

VIII. ADDITIONAL ADJUSTMENTS ARE UNWARRANTED.

A. Rate Model.

The Public Advocate's primary position is that the B&V Rate Model is flawed and should not be relied upon in this proceeding. In support of its position, the Advocate proffers the testimony of Lafayette Morgan. PA Statement 1 at 5-6. Mr. Morgan's central thesis is that PWD's financial forecasts have historically over-stated the utility's revenue requirements and understated its expenses – and that this pattern would likely continue. He opines, based on his assessment of the rate model, that no rate increase was warranted in FY 2017. *Id.* at 3-5. Mr. Morgan also claims that operating conditions in FY 2018 are so far out in the future that an estimate for a potential rate increase in that year would be purely speculative. *Id.* at 3-5. In the context of this opinion, Mr. Morgan emphasizes that the Department was not on the brink of financial distress. *Id.* at 10-11.

¹⁶ The Philadelphia Large Users Group proffered the testimony of Randolph Haines (PLUG Statement 1) which was unassailed in this record.

1. Schedules LKM 1-3.

In support of his testimony, Mr. Morgan provides three schedules (Schedules LKM-1 through LKM-3) which purportedly represented the output of the B&V rate model (with revised assumptions provided by the Advocate). Mr. Morgan actually provides two iterations of each schedule, so we will address each one in turn. PA Statement 1, Schedules LKM-1 through LKM-3 (original filing), PA Hearing Exhibit 3 at 2-4 (Errata Sheet); and his Response to TR-5 (revised rate model).

In the first iteration, the Advocate's witness provided the above referenced schedules with his prepared written testimony – and same were rife with errors. As pointed out in the Department's rebuttal testimony, these schedules did not present the output of the rate model, but were data entries from an external file made independent of the LKM revised model. Tr.28-29 (4/6/16); PWD Hearing Exhibit Most glaringly, Schedule LKM-1 (as originally filed) showed a senior debt service coverage default in FY 2018 (1.18x coverage).¹⁷ The schedules also showed numerous inconsistencies with the witness' stated position with regard to revenue projections (Schedule LKM-1, line 4), FY 2017 proposed revenue increases (Schedule LKM-2, line 5), total senior debt service on bonds (Schedule LKM-3, line 32), the end-of-year revenue fund balance (Schedule LKM-1, line 40) and construction fund transfers (Schedule LKM-1, line 43). See, Tr. 13-17 (4/6/16). It should be noted that the Advocate provided an errata sheet with revised schedules (tracking the subject areas identified in the rebuttal outline) to purportedly correct the errors identified above on April 5, 2016. PA Hearing Exhibit 3 at 2-4.

In this second iteration of Schedules LKM 1-3, Mr. Morgan, however, still fails to present an accurate cash flow analysis. That is, in these revised schedules some of the inconsistencies between his schedules and testimony were addressed with regard to revenue projections (Schedule LKM-1, line 4), revenue increases (Schedules LKM-2, line 5) and the end-of-year revenue fund balance (Schedule LKM-1, line 40). However, the total senior debt service coverage still showed a default in FY 2018 (1.19x

¹⁷ See, Schedule LKM-1 (line 32) and Tr. 44:9-45:6 (4/6/16). PWD rebuttal witness Valarie Allen spoke to the gravity of a covenant default, indicating the appropriate analyses of the sufficiency of rates to meet 1989 General Ordinance requirements. Tr. 42:14-48:21(4/6/16).

coverage) (Schedule LKM-1, line 26) and other adjustments were inconsistent with his stated position (i.e., construction fund transfer supporting pay-go financing (LKM-1, line 37) and debt service coverage for FY 2017 above the minimum requirement (LKM-1, line 32). It bears emphasis that there continued to be a disconnection and lack of alignment between his schedules and the rate model (as revised) and his narrative testimony.

Finally, in the third instance, in an attempt to present Mr. Morgan's final analysis, the Advocate provided complete workpapers from the LKM revised model. These workpapers, however, only confirm the existence of continuing errors. This time it is absolutely clear that (a) Schedules LKM-1 through 3 were not generated by the LKM revised model; (b) Schedules LKM-1 through 3 were from a totally external file independent of the LKM revised model; (c) there is no connection between the results of the LKM revised model (which he supposedly ran with the Public Advocate's assumptions) and his recommendations.

Looking at Table C-1 from the LKM revised model, a number of things become obvious. First, Mr. Morgan did not use the model to support his narrative testimony or to even generate his Schedules LKM-1 through 3 which he references in his testimony. Second, the LKM revised model failed to remove the incremental revenues associated with the Department's proposed FY 2017 and 2018 revenue increases from his operating results (even though he shows it as removed on Schedule LKM-1(revised)). The above clearly indicates that the data shown on his schedules is derived from an external file rather than the LKM revised model. This leads the Department to the conclusion that Mr. Morgan did not seem to understand the B&V rate model and did not apply the LKM revised model in making his recommendations.

Mr. Morgan's errors and inconsistencies can be categorized as follows:

Original Testimony and Schedules – Mr. Morgan's Schedules LKM 1-3 show a covenant default, over-stated year-end Residual Fund balance, overstated year-end Revenue Fund balance, increased revenues proposed by PWD (inconsistent with his position), transfers to Construction Fund supporting

pay-go (inconsistent with his position) and numerous other errors related to interest income, net revenues after operating expenses which, in combination, indicate that he did not perform a cash flow analysis consistent with the positions he advanced in the case.

Revised Testimony and Schedules – Mr. Morgan’s revised Schedules LKM 1-3 show that he corrected the inputs to his schedules on most issues, but still indicated a default in FY 2018 (1.19x coverage on senior debt). Transfers to the Rate Stabilization Fund were unchanged, however (inconsistent with his stated position), and proposed transfers from the Residual Fund to the Construction Fund were also changed (again inconsistent with his stated position).

Response to TR-5 – Mr. Morgan finally presented his Table C-1 (reflecting his application of the model) which indicated that all of the errors and inconsistencies in his original Schedules LKM 1-3 were unchanged. This is the basis for the Department’s conclusion that Mr. Morgan did not apply the model correctly and did not seem to understand it. See, Tr. 13-32 (4/6/16); PWD Hearing Exhibit 3.

Despite all of the foregoing, however, Mr. Morgan maligns the B&V rate model (indicating that it is flawed), as if he understood it. The Department maintains that Mr. Morgan has no credibility to make this contention. In the first instance he offers no real analysis to support his conclusions – indicating he had no way to definitively determine what happened in the past. See, PA Statement 1 at 13. But that does not stop him from making an unsupported recommendation that the rate increase should be denied in its entirety. *Id.* at 15.

In fairness, Mr. Morgan makes a series of concessions which offer perspective on how much weight to give his testimony. Tr. 8-10 (4/7/16). That is, Mr. Morgan concedes that he relies on hearsay (input from former witness Michael Bleiweis) to reach his conclusions with regard to prior proceedings in which he played no part. Tr. at 10:11-11:3 (4/7/16). He also indicates that he had not previously participated in proceedings involving a municipally regulated utility previously.¹⁸ Tr. 8-9 (4/7/16). Mr.

¹⁸ Mr. Morgan indicated that he had participated in two Rhode Island cases involving PUC regulated municipal utilities. Tr. 9 (4/7/16).

Morgan further states, at one point in the record, that in preparing his testimony he had not referred to the AWWA Rate Manual, which is the industry accepted guidelines for the projection of revenues and revenue requirements for municipal utilities (relying instead on his own experience). Tr. at 9:9-10:13(4/7/16). He further concedes that he had no experience related to the preparation of a financial plan for a municipal utility; and had not participated in bond transactions related to municipal utilities. Tr. at 9:8-15 (4/7/16).

In view of the numerous errors identified above in various iterations of his original testimony and Schedules LKM 1-3, his revised Schedules LKM 1-3 and the LKM revised rate model itself – it is absolutely clear that his over-reaching conclusion that the rate increase should be denied in its entirety is without sufficient foundation. PWD Hearing Exhibit 3 offers additional confirmation of the errors and inconsistencies associated with the Advocate’s failed attempt to accurately apply the B&V rate model.

Based upon all of the foregoing, the Advocate’s recommendation should be soundly rejected.

B. Additional Adjustments.

The Advocate offers various other adjustments to projected revenues and revenue requirements described below, as a “fall-back” position, assuming its rate model arguments are unpersuasive. PA Statement 1 at 6. The Advocate’s global bases for this fall-back position are that (a) all additional revenue requirements are unsupported; (b) same are based upon planned expenditures that are not yet approved in the City’s budget process; and (c) the additional revenue requirements overstate the cost of service for the utility (redundant recovery).¹⁹ See, PA Statement 1 at 36-37.

¹⁹ It is noteworthy that PWD Hearing Exhibit 4 summarizes supporting documentation provided to the parties during discovery. In addition, PA-EXE-74 (B&V Rate Model) was provided to the Advocate with all workpapers associated with each adjustment in the rate filing. Further, PWD provided budget documentation depicting the planned expenditures as presented in the budget. The Rate Board should be aware that the budget hearings for the Department have been completed and that an approved budget is expected shortly.

With regard to potential redundant recovery (presumably associated with additional revenue requirements and escalation factors used in the rate filing), Mr. Morgan only offered one example (related to phosphoric acid expenses). PA Statement 1 at 37. However, the expense cited by the Advocate’s witness represented a change in the secondary treatment system to ensure good performance in meeting PaDEP permit requirements, rather than a redundant recovery of chemical expense. See, PWD Hearing Exhibit 4 at 2 (Operations). It appears that the Advocate recognizes its error, as it did not include this adjustment in its Summary of Adjustments.

The Advocate's specific adjustments relate to the following (a) liquidated encumbrances; (b) revenue growth rate; (c) payroll spend factors; (d) billing adjustment factor; (e) WRAP; (f) SMIP/GARP; (g) combined sewer outfall reimbursement; (h) additional staffing; (i) engineering expenses (mark-out of water and sewer infrastructure); (j) escalation factors; (k) contributions/indemnities spend factor; (l) bond interest rate; and (m) inter-departmental charges – all of which are unwarranted based upon the record presented. See, Public Advocate Summary of Revenue Requirement, Rate and Programmatic Adjustments, dated April 22, 2016 ("PA Summary of Adjustments"). PWD maintains that the Public Advocate is wrong on all counts and addresses each of its proposed adjustments in the Department's Proposed Findings of Fact which are attached hereto incorporated herein by reference.

IX. THE DEPARTMENT'S AFFORDABLE RATES PROGRAM RECOMMENDATION SHOULD BE ACCEPTED

A. Structure and Operation

1. Summary of the Position of the Departments

As part of this rate proceeding, the Water Department and Revenue Department (the "Departments") have provided the Rate Board with proposed bill discount program for low-income customers under a new Income-Based Water Rate Assistance Program (IWRAP) and estimated the costs and lost revenues associated with the program, as proposed. The Departments proposal is authorized by and consistent with the IWRAP Ordinance (Bill No. 140607AA, as amended)(hereinafter referred to as the "IWRAP Ordinance") which was enacted on December 1, 2015. The IWRAP Ordinance authorizes the Board to decide the number of low-income tiers in the program, provided that the number of tiers is no fewer than three, and the affordability goals for each tier. The Departments' proposal is consistent with both the IWRAP Ordinance and other relevant standards for such customer assistance programs. It is reasonable and should be adopted by the Board for purposes of this proceeding. The arguments of the Public Advocate that the Departments' approach is unreasonable and not legally authorized are without support in the record and should be rejected.

2. Requirements of the IWRAP Ordinance

The IWRAP Ordinance amends Title 19 of the Philadelphia Code (Chapter 19-1605) to provide for the establishment of an affordable rates program and to authorize special installment payment agreements under certain terms and conditions. *See* Philadelphia Code, §19-1605(3). By its terms, the IWRAP Ordinance grants the Departments the legal authority to establish and implement IWRAP as either a rate discount program **or** other bill calculation method based on each Customer's actual income.

Section 3(a), in relevant part, states:

Monthly IWRAP bills shall be affordable for low-income households, based on a percentage of the household's income and a schedule of different percentage rates for (i) households with income up to fifty percent (50%) of FPL, (ii) households with income from fifty percent (50%) to (100%) of FPL, and (iii) households with income from one hundred percent (100%) to one hundred fifty percent (150%) of FPL, and shall be charged in lieu of the Department's service, usage, and stormwater charges. **That goal shall be achieved through a discount on generally-applicable residential rates or other bill calculation mechanism based upon each Customer's actual income and, if practicable, historical usage, in a manner consistent with applicable federal law.** The percentage of income limitations to be imposed at each level by the first sentence shall be determined by the Water, Sewer and Storm Water Rate Board, which also shall have discretion to establish more, but not fewer, Low-Income tiers.

The IWRAP Ordinance assigns most of the responsibilities for developing and implementing the IWRAP program to the Departments. Section 6 of the IWRAP Ordinance directs the Revenue Department (referred to in the IWRAP Ordinance as the "Department") to promulgate the rules and regulations necessary to implement the program. *See* Philadelphia Code, §19-1605(6). Section 3(m) of the IWRAP Ordinance further directs the Revenue and Water Departments to promulgate standards governing stay, postponement, and holds of pending enforcement actions or service terminations for Customers enrolled in or eligible to enroll in the program. *See* Philadelphia Code, §19-1605(3)(m).

Under Section 3(a) of the IWRAP Ordinance, the Board is given the discretion to establish more tiers than proposed by the Departments and is required to establish percentage of income affordability goals for monthly IWRAP bills at each tier. The Ordinance does not establish a broader role for the Board such as selection of the type of program. *See* Philadelphia Code, §19-1605(3)(a).

3. Other Legal Standards

The Pennsylvania Public Utility Commission (PUC) has developed a policy statement for customer assistance programs offered by PUC-regulated public utilities to low income, payment troubled customers. See 52 Pa. Code §§ 69.261 – 69.267. While the rates and charges of the Philadelphia Water Department are regulated by the Board rather than the PUC, and while the PUC policy statement focuses on electric and gas bills rather than water bills, the policy statement addresses some of the program design issues that were the subject of testimony before the Board in this rate proceeding.

To limit program costs, Section 69.265(3) recommends that utilities include control features such as minimum payment terms and annual maximum customer assistance program credits. Eligibility criteria are addressed in Section 69.265(4), which states that a utility should verify a new applicant's status as a ratepayer and that the applicant's household income is at or below 150% of federal poverty income guidelines. Section 69.265(6)(i) allows, but does not require, outreach to be conducted by non-profit community based organizations. Section 69.265(6)(viii) further recommends that utilities require customers to reapply through an annual reapplication process that reestablishes a participant's eligibility for program benefits.

4. The Departments' Proposal Complies with the IWRAP Ordinance and is Consistent with Other Relevant Legal Standards

The Departments have chosen to achieve the affordability goals through a rate discount program. This type of program complies with the IWRAP Ordinance in that it provides for achieving affordability goals through "a discount on generally-applicable residential rates," as authorized by Section 3(a) of the IWRAP Ordinance. The Departments' proposal contains the three income tiers specifically mentioned in Section 3(a) of the IWRAP Ordinance and proposes affordability goals for each tier based on a percentage of household income. It includes a schedule of different percentage discounts for customers in each tier based on applying the affordability goal to the median customer in each tier. It also takes into consideration customers that have lower or higher bills based on their historical usage, if practicable, as

required by Section 3(a) of the IWRAP Ordinance. Tr. at 66:19-24 and 140:19-141:11 (4/12/16) and at 127:21-128:9 (4/13/16).

Mr. Colton's assertion that the discount program proposed by the Departments conflicts with Section 3(a) of the IWRAP Ordinance because the discount is not based on each customer's actual income is incorrect. Section 3(a) specifies that the program achieve affordability goals through either a discount on generally-applicable residential rates or other bill calculation mechanism based upon each customer's actual income. Nothing in Section 3(a) suggests that the IWRAP Ordinance is intended to prohibit a standard discount rate for each income tier and historical usage level. None of the provisions of the Statutory Construction Act support Mr. Colton's interpretation of Section 3(a), which essentially would remove the word "or" from the standard established by the IWRAP Ordinance for achieving affordability goals.²⁰

In addition, Section 13-101(4) of The Philadelphia Code requires the Board to develop rates and charges in accordance with current industry standards for water, wastewater and storm water rates, including the American Water Works Association (AWWA) Principles of Rates, Fees and Charges Manual (M-1). The AWWA Manual refers to both discounts on the full bill and percentage of income programs as industry accepted water rate affordability programs.²¹

5. The Departments' IWRAP Program Design is Reasonable

a. Proposed Percentage of Income Thresholds

The Departments request that the Board approve their proposed percentage of income thresholds for each of the three income tiers described in Section 3(a) of the IWRAP Ordinance. The proposed thresholds are: 2% for customers with household income up to 50% of the Federal Poverty Level (FPL); 3% for customers with household income from 50% to 100% of FPL; and 4% for customers with

²⁰ See, 1 Pa.C.S. 1922 and *Holland v. Marcy*, 883 A.2d 449 (Pa. 2005) (in construing a statute, every word must be given meaning and no word may be considered mere surplusage). Rules of statutory construction are applicable to ordinances. *Cooley v. East Norriton Tp.*, 466 A.2d 765 (Pa. Cmwlth. 1983).

²¹ See AWWA Manual M-1, 6th Edition at 191-192.

household income from 100% to 150% of FPL. Tr. at 6:16-20 (4/12/16) and 38:3-17; PA Hearing Exhibit 5 at page 1 of 12. Mr. Davis testified that these thresholds would provide meaningful assistance to low income customers. PWD Statement 8 (J. Davis) at 3; Tr. at 28:11-14 (4/12/16). Mr. Colton proposed different thresholds for each of the three income tiers. PA Statement 3 at 29. His recommendation, however, is not derived from a current industry standard, and he failed to offer a sufficient reason for the Board to adopt his recommendations rather than those proposed by the Departments.²² Accordingly, the Board should adopt the percentage of income thresholds proposed by the Departments.

b. Number of Income Tiers

Section 3(a) of the IWRAP Ordinance allows the Board to establish additional income tiers. Mr. Colton recommended that the program include six instead of three income tiers if a tiered rate discount program is selected. PA Statement 3 at 26:15-27:17. As Mr. Davis explained, however, additional tiers would add complexity, and thus increase the costs of program implementation and administration, and would not significantly increase the benefit to customers, since many of the customers in the lowest tier would still receive a minimum bill and many of the customers at the highest tier with low usage would receive no discount. Tr. at 66:67:13 and 68:22-70:20 (4/12/16). Therefore, the Board should not establish additional low-income tiers.

c. Implementation Challenges

Avoiding unreasonable implementation challenges was one of the three factors that the Departments considered essential for the success of the proposed program. PWD Statement 8 (J. Davis) at 3. Mr. Colton agreed that getting customers enrolled in the program was a key factor in successful implementation of a new affordable rates program. Tr. at 11:5-23 (4/13/16).

²² Mr. Colton cites standard in a publication of the United Nations Development Program, but failed to establish that the referenced publication is a current industry standard for purposes of Section 13-101 of the Philadelphia Code.

Both Departments believe they can successfully implement the proposed tiered discount program, particularly since it is similar to the discount program they already have in place for eligible senior citizens. They have significant concerns, however, about their ability to successfully implement a program based on a percentage of income. Tr. at 127:21-129:9 and 138:19-139:4 (4/13/16). The Rate Board should consider this factor and the related testimony in weighing the conflicting positions of the Public Advocate and the Departments on the type of program that is most likely to be implemented successfully.

d. Cost Control Features

The Departments' proposed program design includes a minimum bill of twelve dollars per month for current utility service as a control feature to limit program costs. This feature of the program is consistent with the PUC's policy on customer assistance program design elements, which recommends a minimum payment for a non-heating account of at least \$12 - \$15 a month. See 52 Pa. Code § 69.265(3)(i)(B). The minimum bill would override the discount if the customer's discount fell below the minimum bill level. PWD Statement 8 (J. Davis) at 6; Tr. at 38:19-39:4 (4/12/16). None of the Participants opposed the minimum bill proposal. Mr. Colton agreed with the minimum bill as proposed by the Departments. Tr. at 56:21-57:1 (4/13/16).

Various other cost control features were discussed during the technical hearings in this proceeding. Mr. Davis noted that capping the program so that applications would no longer be accepted after program costs reach a certain limit would be one option, but added that the Departments have not had a sufficient opportunity to evaluate this concept fully. Tr. at 42:9-16 (4/13/16). Mr. Colton mentioned establishing a maximum bill credit available to each customer as another commonly accepted way to contain program costs, but believed that the IWRAP Ordinance could be read as not permitting a maximum credit ceiling. Tr. at 22:14-24:11 and 102:24-103:9 (4/12/16). Depending upon the Board's determination on rates and charges, the Department may have to consider the necessity of adding additional cost control features to the proposed program.

e. Pre-Program Arrears

The Departments' proposal provides sufficient bill discounts to allow IWRAP bills to include a minimum payment toward pre-IWRAP arrears, while still resulting in a total bill that will achieve the proposed affordability targets for most enrolled low-income customers. This proposal assumes a minimum charge toward pre-IWRAP arrears of \$5 per month for customers with household income at or below 100% of FPL and \$25 per month for customers with household income from 100% to 150% of FPL. See PA Hearing Exhibit 5, page 1 of 12, and Tr. at 109:24-110:0 (4/13/16).

Contrary to Mr. Colton's testimony, the inclusion of a minimum payment toward pre-IWRAP arrears on bills issued to IWRAP customers is not barred by Subsection 3(h) of the IWRAP Ordinance. This section, titled "Total bill," states: "Low-income customers who are enrolled in IWRAP shall be required to make no *additional* payment in respect to any pre-IWRAP arrears to *maintain service*" (emphasis added). While to date there has been no bill redesign in preparation for the issuance of IWRAP bills, the current bill design for residential customers includes charges for both current service, usage and stormwater charges, as well as any payment due under a payment agreement. See TR-14 and sample bill attached to TR-14 and PA-EXE-85. Therefore, it is reasonable to assume that IWRAP bills will have a similar bill design and will include charges for payments due for current utility service and for payments due under payment agreements for pre-IWRAP arrears.

As indicated by the title of Subsection 3(h)("Total bill"),²³ this provision of the IWRAP Ordinance should be interpreted to mean that low-income customers will receive a single bill for the payment due under a payment agreement for pre-IWRAP arrears and the payment due for current utility service. The reference to "no additional payment" in this provision is consistent with the Water Department's current regulations, which provide that the City will waive the normal penalty for late payment during the course of a payment agreement plan established for a low-income customer. See,

²³ Titles may be considered in construing the meaning of a statute or ordinance. See, 1 Pa.C.S. 1924.

PWD Regulation 100.9(o)(4).²⁴ Moreover, the reference to maintaining service in this provision indicates that the bill is directed toward specifying customer responsibilities and avoiding shut off of service. Regulations concerning shut off of service are in Chapter 1 of the Water Department's regulations, titled Customer Rights and Obligations, and do not fall within the jurisdiction of the Board to "fix and regulate rates and charges."²⁵

Accordingly, the Rate Board should reject the Public Advocate's interpretation of the total bill provision in Section 3(h) and implement IWRAP discount as shown in the following table submitted to the Board with the rate filing:

Rate Discount by Income Tier and Usage Levels

| Income Tier | Usage Level | Usage Level Bounds | Discount Percentage | Minimum Bill²⁶ |
|-------------------------|--------------------|---------------------------|----------------------------|----------------------------------|
| Tier 1: 0-50% of FPL | Low | 0 to 2 Ccf | 91% | \$12.00 |
| | Medium | 2+ to 8 Ccf | 95% | \$12.00 |
| | High | 8+ and above Ccf | 97% | \$12.00 |
| Tier 2: 51-100% of FPL | Low | 0 to 2 Ccf | 20% | \$12.00 |
| | Medium | 2+ to 8 Ccf | 57% | \$12.00 |
| | High | 8+ and above Ccf | 75% | \$12.00 |
| Tier 3: 101-150% of FPL | Low | 0 to 2 Ccf | 0% | \$12.00 |
| | Medium | 2+ to 8 Ccf | 25% | \$12.00 |
| | High | 8+ and above Ccf | 56% | \$12.00 |

However, if the Board chooses not to do so, it should direct the Departments to recalculate the proposed discounts without including the proposed minimum charge for pre-IWRAP arrears.

²⁴ Available at <http://www.phila.gov/water/wu/ratesregulationsresp/Pages/Regulations.aspx>

²⁵ See the Philadelphia Home Rule Charter at Section 5-801 and the Philadelphia Code at Section 13-101(3).

²⁶ The proposed rates and charges submitted to the Board as PWD Exhibit 3 of this rate filing state that the WRB may exempt IWRAP customers from the minimum payment upon a finding of special hardship. See, PWD Exhibit 3 at 16.

e. Arrearage Forgiveness

The rate filing with the Board does not address arrearage forgiveness because the provisions of the IWRAP Ordinance regarding arrearage forgiveness will be addressed in regulations to be developed and promulgated after the Board's decision in this rate proceeding. Sections 3(h.2) and 6 of the IWRAP Ordinance require the Revenue Department to promulgate those regulations. Until new regulations are adopted, the costs of any arrearage forgiveness program will be unknown. Therefore, any costs for arrearage forgiveness have not been included in the costs of the proposed program. Tr. at 34:17-35:5, 58:17-59:1 and 144:7-18 (4/12/16).

B. Cost Recovery

1. Summary of the Position of the Departments

The Departments' cost and lost revenue projections for IWRAP are reasonable and use well-considered estimates of future lost revenues and expenses during the rate period. The Departments believe that the most appropriate cost recovery mechanism for the IWRAP at this time is through base rates rather than through a reconcilable rider. All of the arguments to the contrary should be rejected.

2. Cost of IWRAP Discount

The Departments project that IWRAP once implemented will result in approximately \$16.3 million per year of lost revenue. As explained by Mr. Davis, this projection is associated with an 80% confidence interval, and includes adjustments for upfront startup costs (\$1.1 million), ongoing program administration cost (\$2.8 million annually) and savings from eliminating certain City grants (\$2.7 million annually).²⁷ The projection of \$16.3 million of lost revenue is reasonable and supported by the testimony and other substantial evidence in the record. See PWD Statement 8 (J. Davis) at 4-5; Tr. at 6:16- 22:24, 35:19-37:5, 44:10-45:13, 49:4-58:12, TR-9, 66:9-18, 142:21-143:16 (4/12/16).

²⁷ On an annual basis, the ongoing costs of approximately \$2.8 million per year for program administration will be partially offset by the elimination of approximately \$2.7 million per year associated with certain City grants. See PWD Statement 8 (J. Davis) at 4-5, Tr. at 142:21-143:9 (4/12/16).

Mr. Davis developed his estimates by first quantifying the number of households by income tiers using census data, which provide household income stratification data within the City of Philadelphia, and then estimating the number of households with water accounts by using the U.S. Census Bureau's American Community Survey (AMS) Public Use Microdata Samples (PUMS) files, which provide more in depth responses for a representative sample of City households. He used this data to estimate the number of City households (approximately 580,000 total households) and residential water customers (approximately 427,000 total customers) by income tier. PWD Statement 8 (J. Davis) at 4, Table 1; TR-9; Tr. at 48:20-53:4 (4/12/16). Then he developed a range of subscription rates for each income tier based on actual subscription levels reported by the Philadelphia Gas Works (PGW) for residential gas customers in the same three income tiers and a Monte Carlo simulation which set variable profiles for the subscription rates within each tier.²⁸ The simulation involved running multiple trials and plotting the lost revenue forecast for each trial with variable subscription rates to determine the range of potential lost revenue impacts. The projected lost revenue of \$16.3 million corresponds to a level that met 80% of the forecast outcomes in the simulations. PWD Statement 8 (J. Davis) at 4-5; TR-9; Tr. at 8:18-9:4, 16:3-11, 35:19-58:12 (4/12/16).

In developing recommendations for the structure of the program and estimating the subscription rates and associated lost revenue and costs, the Departments made conservative and well-considered estimates. Rigorous and conservative development of program costs is essential to the success of the program so as not to overburden City ratepayers or be detrimental to the stability of the utility. PWD Statement 8 (J. Davis) at 3. As Mr. Colton noted, the program by its nature transfers certain charges for utility service from the bills of participating customers to the bills of the non-participating customers. PA Statement 3 at 54-56. Bond covenants restrict the ability to cover program costs with transfers from the Rate Stabilization Fund, and cautioned that subscription rates to the new program that significantly

²⁸ The subscription rates provided by PGW were 50% for Tier 1 (0-50% FPL), 84% for Tier 2 (50-100% FPL) and 36% for Tier 3 (100-150% FPL). Tr. at 16:3-11 (4/12/16); and PA Hearing Exhibit 5 at page 12.

exceeded estimates could produce revenue reductions that result in a default of these covenants.²⁹ See PWD Statement 8 (J. Davis) at 6. The 80% confidence interval was selected as an appropriate confidence interval to safely manage that risk. Tr. at 44:22-45:9 (4/12/16).

Even if the program costs are projected using a 50% confidence interval instead of the more conservative 80% confidence interval, and assuming subscription rates equivalent to those experienced by PGW for its low-income customer assistance program, lost revenue would be approximately \$13.6 to \$13.7 million annually, \$4 million more than Mr. Colton's projections. Tr. at 15:21-22:24 (4/12/16); and PA Hearing Exhibit 5 at page 1 of 12. If subscription ever reached one hundred percent, lost revenue would be approximately \$22.8 million annually, or approximately \$6.5 million per year more than the \$16.3 million per year projected by Mr. Davis. Tr. at 44:10-45:9 (4/12/16) and PA Hearing Exhibit 5 at page 1 of 12.

Given these considerations and the requirements of the bond covenants, it is reasonable to project lost revenues using the Monte Carlo method employed by Mr. Davis with conservative assumptions. Tr. at 139:17-140:15 (4/13/16).

Mr. Colton's testimony that it is only necessary to include \$13.002 million in base rates for operation and administration of the program, or net program costs of \$9.002 million after his elimination of \$4 million in costs for existing programs, is flawed. Mr. Colton failed to explain why using the Monte Carlo method employed by Mr. Davis based on the PGW subscription levels and an 80% confidence interval is unreasonable given the considerations discussed by Mr. Davis and summarized above. For reasons discussed below with respect to administrative and startup costs, his argument that the startup costs and ongoing program administration cost should be eliminated from the base rates should be

²⁹ A failure to comply with any provision of its revenue bonds or with any Bond Covenant (a "Covenant Default") constitutes an event of default as defined under the 1989 General Ordinance. In the event of a Covenant Default, a bondholder of any of the Department's revenue bonds will be entitled to all of the remedies provided under the First Class City Revenue Bond Act (the "Act"). Upon such event, the holders of 25% in aggregate principal amount of the affected series of the Department's revenue bonds may appoint a trustee to represent such bondholders to exercise remedies. Such trustee may, and upon the written request of the holders of 25% in aggregate principal amount of such revenue bonds must, sue the City at law or in equity to enforce the rights of the aforesaid bondholders. See PWD Statement 2 at 7-8.

rejected. In addition, his conclusion is based on a faulty assumption that all of the costs for existing low-income programs would disappear because all such programs would be subsumed by IWRAP. PA Statement 3 at 30. To the contrary, the Departments expect to continue to incur costs for certain low-income programs even once IWRAP is established. Tr. at 90:5-17, 142:21-143:16 (4/12/16). As Mr. Davis also testified, comparing the Departments' estimate of approximately \$16 million per year of lost revenue associated with an 80% confidence interval, with Mr. Colton's estimate of \$9 million for net program cost without a similar confidence interval, is not an apples to apples comparison.³⁰ Tr. at 141:19-142:12 (4/13/16).

3. Program Participation Rate

In calculating the program cost, both Mr. Davis and Mr. Colton estimated a program participation figure of approximately 31,000 to 32,000 low-income customers. PA-Statement 3 at 30; PWD Statement 8 (J. Davis) at 4, Table 1; TR-9, Step 2; Tr. at 47:11-48:12, 56:16-57:2 and 66:9-18 (4/12/16) and 43:5-13 (4/13/16). None of the Participants argued that this estimate was unreasonable.

4. Administrative Costs

As noted above, Mr. Davis estimated an ongoing program administration cost of \$2.8 million per year. PWD Statement 8 (J. Davis) at 3. This estimate is based on a "bottoms-up" approach for determining the total amount of costs and number of employees necessary to implement a new low-income rate and payment plan program that works well immediately upon its initiation. In developing his estimate, he accounted for continuation of the current staff of nine employees responsible for implementing the current low-income programs, 2.5 new positions for information technology (IT) support to keep the billing system in optimal working condition (new IT positions), and 22 new employees who would be responsible for implementing the new program (new non-IT positions). PWD

³⁰ Another reason that the comparison is not apples to apples is that Mr. Davis included ongoing annual administration costs in the cost of service for base rates, while Mr. Colton suggested that only internal and not external administrative costs should be included in base rates. Tr. at 27:13-28:10 and 121:11-20 (4/13/16).

Statement 8 (J. Davis) at 3-4; PA Statement3, R. Colton at 33, n.26; Response to PA-RDC-51; Tr. 141:12-142:20 (4/12/16) and at 129:10-131:10 (4/13/16).

Mr. Colton criticized the \$2.8 million estimate for annual administrative cost and proposed that total administrative costs currently used for the existing Water Revenue Assistance Program (WRAP) plus any new administrative costs for IWRAP be limited to 10% of program benefits, or approximately \$900,000 a year. PA Statement 3 at 33 and 42. As Mr. Davis testified, however, Mr. Colton's approach for funding administrative costs should be rejected because it would materially underfund program administration and adversely affect the ultimate success of the program. Tr. 131:2-10 (4/13/16).

It is reasonable to continue budgeting for the nine current employees who handle the existing customer assistance program. These employees have duties related to a grant program, the senior citizen discount, and customer service intake. Tr. 89:19-90:23 (4/12/16). The Departments expect some level of funding for existing low-income programs to continue after IWRAP is implemented, and nothing in the record suggests otherwise.³¹ Tr. 142:21-143:16 (4/12/16). The Public Advocate and the Departments agree that the senior discount will continue along with IWRAP as an alternative program for income-eligible senior citizens, as some customers would receive more affordable bills under the senior citizen discount than under IWRAP.³² PWD Statement 4 at 7; Tr. 123:12-19 (4/12/16) and 57:2-17 (4/13/16).

Nothing in the record supports Mr. Colton's speculation that all of the current low-income programs subsumed by IWRAP. See PA Statement3, R. Colton at 38; Tr. at 44:16-46:12, 52:16-53:6 (4/13/16). As Ms. Bethel explained, many customers with existing long-term payment agreements may

³¹ The IWRAP Ordinance does not suggest otherwise. To the contrary, it requires the Revenue Department to determine whether a customer would receive a more affordable bill under another available payment agreement or rate discount prior to enrolling a customer in IWRAP and to provide the customer with the more affordable payment agreement or rate discount in lieu of IWRAP if applicable. See Philadelphia Code, §19-1605(3)(c).

³² The Senior Citizen Discount is established by Philadelphia Code, Section 19-1902, which provides that the Water Commissioner is authorized to establish a reduction in charge for water and sewer services, for any eligible senior citizen age 65 or older in the amount of 25% of the service charges and quantity charges to his or her primary residence. The discount is subject to a household income limitation of \$31,500 per year. See, Philadelphia Code, Chapter 19-1900 and Regulation 305.2(b) in PWD Exhibits 3 and 3A.

choose to remain in their current agreements, and not all customers with current extended payment agreements will qualify for IWRAP. Tr. 121:14-123:9 and 128:9-129:4 (4/12/16).

It also is reasonable to budget for an additional 22 employees to administer the new program given the projected number of applicants and program participants. As Mr. Davis explained, currently about 10,000 customers are in the existing WRAP, including customers with household incomes both under and over 150% FPL. The estimate of 31,000 to 32,000 IWRAP customers would triple the amount of work for implementing IWRAP as compared to the existing WRAP. Tr. at 129:10-131:10 (4/13/16). While some efficiencies may result by accepting determinations of income and residency made within the prior twelve months pursuant to the City's Real Estate Tax Regulations,³³ those efficiencies will be limited to customers who pay real estate taxes and will not extend to tenant or occupant customers.³⁴

Moreover, an enrollment process involving submission and approval of a completed application will still be necessary to verify a new applicant's status as a customer or rate payer, as required by Section 3(i)(1) of the IWRAP Ordinance and as recommended by the PUC policy for customer assistance programs. *See* Philadelphia Code, §19-1605(3)(i)(.1)³⁵ and 52 Pa. Code §69.265(4). In addition, Mr. Colton acknowledged that clearly communicating customer responsibilities under the program is a key factor to successful implementation of any affordable rates program. Tr. at 11:5-23 (4/13/16). Similarly, the PUC policy for customer service programs recommends that a utility inform the participant of the consequences of defaulting from the program. 52 Pa. Code §69.265(7)(i). Therefore, the enrollment process will need to be adequately staffed so as to ensure that applicants are informed of their responsibilities for continued enrollment and of the consequences of default.

³³ Section 3(i)(2) of the IWRAP Ordinance states that the Department will accept determinations of income and/or residency made within the prior twelve months under Section 19-1305 of the Philadelphia Code. *See* Philadelphia Codes, Section 19-1605(3)(i)(.2).

³⁴ PWD Regulation 100.2 allows eligible tenant occupants to become customers.

³⁵ This section states: A Customer shall be enrolled in IWRAP upon approval of a completed application on or with which the applicant shall be required to provide proof that he or she (i) is a resident at the property in question; and (ii) qualifies for IWRAP because of financial or Special Hardship. The Department shall design an appropriate application and shall set appropriate standards for what constitutes proof of those of criteria. Requirements for proof of criteria other than ownership should be consistent with those under Philadelphia Code Section 19-1305.

Mr. Colton mentions outsourcing enrollment and transitioning to a paperless application as other measures that would reduce administrative costs. Contrary to Mr. Colton's testimony, the PUC policy recommends, but does not require, outsourcing. It also qualifies this recommendation by stating that a utility should use outsourcing in the operation of the program "if feasible." *See* 52 Pa Code §69.265(6); and PA Statement 3 at 40-41. There is insufficient information in the record to conclude that outsourcing of intake and verification or transitioning to a paperless application process is feasible for the City at this time.³⁶ Accordingly, Mr. Colton's comparison of the administrative costs for the program as proposed to the costs of low-income program of other utilities that have mature and fully-developed programs and that use outsourcing or paperless application processes is misplaced. Tr. at 141:12-142:20 (4/12/16).

Finally, Mr. Colton failed to provide an adequate explanation for elimination of the proposed 2.5 new IT positions. As discussed above, the notion that the new IT position are unnecessary because all current low-income programs will disappear or because intake will be outsourced is unwarranted and contrary to evidence in the record. After the billing system is redesigned and tested with a new billing program for IWRAP customers, ongoing IT support will be necessary to maintain the billing system in optimal working condition and to facilitate the process of billing customers and applying payments. PWD Statement 8 (J. Davis) at 3. The suggestion that ongoing IT support and new IT positions are unnecessary should be rejected.

5. Start-up Costs

The Departments project incurring start-up costs at approximately \$1.1 million per year for the first two years. Upfront IT costs are estimated to involve five person years of effort and are necessary to design, test and implement the new program within the current billing system, PWD Statement 8 (J. Davis) at 3.

³⁶ An evaluation of the feasibility of outsourcing intake and verification would require the Departments to obtain an opinion from the City Solicitor on ability to outsource City employee functions under the labor law and the collective bargain agreement, and transition to a paperless application is beyond the current ability of the Departments. Tr. at 91:1-93:7, 118:1-120:7 and 124:13-125:22 (4/12/16).

Mr. Colton testified that the Department should be allowed to include startup costs in rates to the extent those costs are not otherwise subject to collection, but claimed that those costs were already embedded in rates and could be absorbed from collection of normal charges during the ramp-up period prior to full participation. PA Statement 3 at 42-47. He suggests that because IWRAP will replace one of the existing low-income programs, and because a prior management audit refers to a variety of IT projects related to the existing program, that the IT projects related to the existing program would be sufficient to allow for the implementation of the IWRAP.

As discussed above, Mr. Colton's recommendation is flawed because it fails to recognize that IWRAP will not completely replace all existing low-income customer assistance programs. In addition, the IWRAP has many details that are yet to be determined and its structure is so different from the existing low-income assistance program that it cannot be built upon the existing systems and data to a meaningful extent. Accordingly, the Departments must implement the new program from scratch.

The management audit to which Mr. Colton refers took place before the IWRAP Ordinance authorizing IWRAP was enacted. The bulk of the activities associated with the management audit occurred between March 2014 and September 2015. PWD Statement 8 (Locklear) at 2. Given the timing of the management audit in relation to the enactment of the IWRAP Ordinance and the differences between the current low-income customer assistance program and IWRAP, there is no reasonable basis for concluding that the management audit's recommendations have any implications for implementing the IWRAP during the two-year rate period. Tr. 139:5-16 (4/13/16).

Accordingly, the notion that the Departments need not incur additional front-end IT costs for this new program should be rejected.

6. IWRAP Cost Offsets

Mr. Colton contends that the Board should make certain adjustments in the projected program costs analysis related to lost revenues. PA Statement 3 at 47-59. To support his contention, he first claims that the program will result in higher collections because a portion of the cost of service previously

billed to some low-income, payment troubled customers will be billed to higher-income customers with better payment histories, resulting in better collection rates and double-recovery of embedded lost revenue. *Id.* at 48-53. He also claims that any increased collection of revenue should be reflected as an offset to the cost of the program. *Id.* at 55. With respect to arrearages, he contends that embedded lost revenue is higher for arrearage forgiveness and that allowing recovery of claims for arrearage forgiveness costs could result in a double-recovery of these costs. *Id.* at 51-52 and 56-57.

Mr. Davis testified that changes to the collection rates resulting from the new program would result in *de minimus* changes to the blended collection factor. Therefore, the cost of service study need not consider impacts to collection rates. PWD Statement 8 (J. Davis) at 4. He addressed Mr. Colton's concerns by explaining that under the City's accounting practices the discount for low-income customers would be booked as a contra-revenue, which always corresponds to a collection factor of 100 percent for accounting and ratemaking purposes. Tr. 133:24-134:16 (4/13/16).

The claim that the Departments' proposal will result in double recovery of embedded lost revenues is not supported by any actual data of collection rates from Water Department customers. It is undisputed that there is no actual data comparing collection rates for the Water Department's low-income customers or potential IWRAP customers to other customers. Tr. at 143:18-144:7 (4/12/16); PA Statement 3 at 48-51. Moreover, the Board need not consider double recovery or embedded revenue issues given the City's accounting practices and the fact that costs for arrearage forgiveness were not included in the estimate of program costs. Tr. at 144:8-18 (4/12/16). Therefore, there is no reason for the Board to make additional adjustment to address this issue.

Neither Mr. Davis nor Mr. Colton made any adjustments to reflect decreased credit and collection expenses attributable to IWRAP. As Mr. Colton asserted, even though the program will improve payment patterns only insofar as it reduces bill amounts, the overall level of credit and collection expenses expenditures can reasonably be expected to remain constant. As a result, no adjustment is necessary. PA Statement 3 at 58-59.

7. IWRAP Rider

The Departments submit that recovery of the cost of the IWRAP program through base rates is the most appropriate method at this time given the requirements of the Water Department's bond covenants and the standards for rates and charges in Section 13-101 of the Philadelphia Code. Mr. Colton disagrees with the Departments' proposal and instead proposes that the Departments recover the incremental costs of the program through a reconcilable surcharge or rider, rather than through base rates. PA Statement 3 at 59-62.

The rider concept is of concern owing to the bond covenants. As Mr. Davis testified, modest revenue shortfalls due to oversubscription to the program may be covered by transfers from the Rate Stabilization Fund. However, the bond and insurance covenants limit the ability of the Water Department to make large transfers to cover operations. Therefore, subscription rates to the new program that significantly exceed estimates could produce revenue reductions that cannot be covered by transfers and could result in a covenant default. PWD Statement 8 (J. Davis) at 6. This risk is of particular concern in this two-year rate period given the uncertainties associated with implementing a substantial new customer assistance program.³⁷

A rider that is reconcilable annually raises the risk of having to transfer funds from the Rate Stabilization Fund in one year but not being able to recover the funds in the following year. The fundamental issue with an annually reconcilable rider is whether the Water Department will be able to manage additional withdrawals from the Rate Stabilization Fund in a given fiscal year without triggering default of the 90 Percent Rule³⁸ in the insurance covenant, taking into consideration the delay in collection of funds to the following year under the rider and the fact that the compliance with the

³⁷ Among other things, it is unclear how the rider formula proposed by Mr. Colton would be applied in the initial year of the program (FY 2018) since there would be no net over collection or under collection from the prior year at that time.

³⁸ The City's bond insurance policies contain an insurance covenant which requires the City to establish rates sufficient to produce net revenues (excluding amounts transferred from the Rate Stabilization Fund into the Revenue Fund for a given year) equal to at least 90% of debt service requirements (as defined by the 1989 General Ordinance). The rate covenants and the insurance covenant are collectively referred to as the "Bond Covenants." PWD Statement 2 at 7.

covenant is determined retrospectively. Tr. at 39:12-42:8 (4/12/16); *see also* Tr. at 45:7-46:5 (4/6/16)(regarding retrospective testing for compliance).

Reconciliation quarterly or semiannually would present other challenges given the present billing system. Programming new rates into the present billing system requires approximately 30 to 45 days before bills can be issued with the new rates. Thus, there would be a considerable lag time between the results of any reconciliation audit and the first day on which new bills can be issued after reconciliation. This could result in higher rates in the later months of the reconciliation period given the need to compress the revenue requirement into shorter time periods. Tr. at 134:17-138:17, 139:17-140:10 (4/13/16).

The discussion by Mr. Colton of the PUC in the CAP cost recovery order, upon which he relies to support the rider concept, is based on provisions in Pennsylvania's Electricity Competition Act and Natural Gas Competition Act. These statutes grant gas and electric utilities the right to "fully recover" their costs incurred in providing universal service costs. PA Statement 3 at 59-62.³⁹ They do not apply to PUC-regulated water utilities, the Philadelphia Rate Board or the Philadelphia Water Department.

In determining the most appropriate cost recovery mechanism for the costs of this new program, the Board is bound by Section 13-101(4)(a) of the Philadelphia Code, which provides as follows:

Financial Standards. 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.

This provision in the Philadelphia Code is particularly relevant because it emphasizes the requirement that the Board consider the rate covenants in establishing rates and charges.

³⁹ PA Statement 3 cites: Customer Assistance Programs: Funding Levels and Cost Recovery Mechanism, Docket M-00051923, Final Investigatory Order (October 19, 2006), 2006 WL 6610966 (Pa.PUC). The PUC's Final Investigatory Order cites 66 Pa.C.S. §2203(6) (standards for restructuring of natural gas utility industry) and §2804(8) and (9)(standards for restructuring of electric industry). *See* Final Investigatory Order at 13.

8. Allocation

The Departments propose that the revenue reductions associated with this new program be recovered from all retail rate classes and customers. This approach complies with federal regulations issued by the United States Environmental Protection Agency (EPA) regarding allocation of costs of low-income rate programs offered by water utilities that have received federal grants to assist in construction of wastewater treatment facilities, which require allocation to all user classes.⁴⁰ Other key factors supporting this approach include: (i) the approval of this approach in prior rate proceedings for the Water Department's other discount programs such as the senior citizen discount; (ii) the administrative complexity associated with any potential change in the billing system; and (iii) the potential wide range of positive benefits to all customer classes. See PWD Statement 9A, B&V at 97. Mr. Colton did not oppose such an allocation and noted that PGW also allocates the costs of its program to all of its customers. Tr. at 118:18-119:1 (4/13/16).

X. CUSTOMER SERVICE RECOMMENDATIONS SHOULD BE REJECTED AS OUTSIDE THE RATE BOARD'S JURISDICTION.

In the written testimonies filed prior to the technical hearings, some witnesses asked the Board to direct the Departments to take certain actions to address customer service issues. In addition, Mr. Colton asks that the Board order certain changes in the IWRAP program, and Penn Future and its expert, Mr. Russell, recommended that the Water Department modify a customer assistance program known as Enhanced CAP.

On March 31, 2016, the Hearing Officer directed Participants with an interest in these recommendations (for, against, or otherwise) to include in their summaries to be filed May 2, 2016 their

⁴⁰ The EPA regulations provide in pertinent part as follows: The costs of any user charge reductions afforded a low income residential class must be proportionately absorbed by all other user classes. The total revenue for operation and maintenance (including equipment replacement) of the facilities must not be reduced as a result of establishing a low income residential user class. See 40 C.F.R. §35.2140(i)(3) See also Ordinances of the City of Philadelphia approved September 21, 1976 (1976 Ordinance Book, pages 776-777) and September 16, 1977 (1977 Ordinance Book, page 1243-1244) for ordinances authorizing the Water Commissioner to execute grant agreements on behalf of the City of Philadelphia with EPA for grants to assist in the construction of wastewater treatment works.

legal argument as to whether and to what extent the Board has authority to order such relief, and indicated that the Board would ask the Law Department for advice on these questions, and the interpretation of the Board's organic ordinance. Solely to ensure there is a record that would support an affirmative decision on the requested relief, in the event it is decided that the Board does have some jurisdiction in these areas, the hearings proceeded on the assumption that the Board does has the authority. However, the Hearing Officer clarified that the the use of the assumption during hearings should in no way be taken as an indication of the Board's determination of this jurisdictional issue.

In addition, the Response of Community Lawyering Clinic (CLC) to PWD's Objections to Interrogatories, submitted on April 14, 2016, claimed that courts have upheld the concept that the PUC may deny a rate increase if there is sufficient evidence of inadequate service. CLC cites *National Utils. v. Pennsylvania PUC*, 709 A.2d 972, 973 (Pa. Comwlth. Ct. 1998), which in turn cites *D.C. Transit Sys. Inc. v. Washington Metro Area Transit Comm'n.*, 466 F.2d 394, 421 (D.C. Cir. 1972).

The Board's authority and the scope and breadth of iys jurisdiction is governed by Section 5-801 of the Charter and Section 13-101(8) of the Philadelphia Code. Section 5-801 of the Charter authorized City Council to establish the Board as an independent rate-making bodty responsible for "fixing and regulation rates and charge for water and sewer service. Section 13-101(3) of the Philadelphia Codes provides that Board 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." Section 13-101(8) of the Philadelphia Code clarifies that in response to a rate filing the Board must decide whether to "approve, modify or reject proposed rates and charges." Nothing in either the Charter or the code vests the Board with the power or authority to take the actions requested by various Participants to address customer service issues.

The issue in the *National Utilities* case, cited by CLC, was whether the PUC's denial or a rate increased based on inadequate service violated due process and the takings clause under the Firth and Fourteenth Amendment to the United States Constitution. No such constitutional issues are at issue with

respect to the Board's authority or jurisdiction. Moreover, Pennsylvania's Public Utility Code provides the PUC with explicit authority to deny a rate increase based on inadequate service. Section 526(a) provides:

The commission may reject, in whole or in part, a public utility's request to increase its rates where the commission concludes, after hearing, that the service rendered by the public utility is inadequate in that it fails to meet quantity or quality for the type of service provided.

Section 1501 provides in relevant part:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission.

See 66 Pa.C.S. §§ 526(a) and 1501. Neither the Charter nor the Philadelphia Code has a similar or equivalent provision.

Similarly, the precise issue in the *D.C. Transit* case was whether the Washington Metropolitan Area Transit Commission exceeded the limits of due process when it made a fare raise contingent upon steps calculated to rectify serious deficiencies in the service furnished to bus riders. The power of the Transit Commission to take the action it took was not at issue in that case because the Compact creating the Transit Commission provided it with ample authority to do so.

For the reasons stated above, the recommendations of other participants on customer service issues and customer assistance programs should be rejected as outside the Rate Board's jurisdiction.

XI. CONCLUSION

For all of the reasons stated in this Brief and the Proposed Findings of Fact and Conclusions of Law (which are attached and incorporated herein by reference), the Department and Water Revenue Bureau request that the proposed application for rate relief be granted subject to the modifications set forth herein.

Respectfully submitted,

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