PUBLIC ADVOCATE STATEMENT NO. 2

BEFORE THE

PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

IN THE MATTER OF THE PHILADELPHIA WATER DEPARTMENT'S PROPOSED CHANGE IN WATER, WASTEWATER AND STORMWATER RATES AND RELATED CHANGES	)))))	FISCAL YEARS 2026-2027

DIRECT TESTIMONY

OF

JEROME D. MIERZWA

ON BEHALF OF THE PUBLIC ADVOCATE

April 29, 2025

EXETER
ASSOCIATES, INC.
10480 Little Patuxent Parkway, Suite 300
Columbia, Maryland 21044

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Direct Testimony of Jerome D. Mierzwa

I. INTRODUCTION

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Jerome D. Mierzwa. I am a principal and President of Exeter Associates, Inc. ("Exeter"). My business address is 10480 Little Patuxent Parkway, Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-related consulting services.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of Science Degree in Marketing.[1] In 1985, I received a Master's Degree in Business Administration with a concentration in finance, also from Canisius College. In July 1986, I joined National Fuel Gas Distribution Corporation ("NFG Distribution") as a Management Trainee in the Research and Statistical Services Department ("RSS"). I was promoted to Supervisor RSS in January 1987. While employed with NFG Distribution, I conducted various financial and statistical analyses related to the

[1] Effective August 1, 2023, Canisius College became Canisius University.

Company's market research activity and state regulatory affairs. In April 1987, as part of a corporate reorganization, I was transferred to National Fuel Gas Supply Corporation's ("NFG Supply") rate department where my responsibilities included utility cost of service and rate design analysis, expense and revenue requirement forecasting and activities related to federal regulation. I was also responsible for preparing NFG Supply's Federal Energy Regulatory Commission ("FERC") Purchase Gas Adjustment ("PGA") filings and developing interstate pipeline and spot market supply gas price projections. These forecasts were utilized for internal planning purposes as well as in NFG Distribution's annual state purchased gas cost regulatory proceedings.

In April 1990, I accepted a position as a Utility Analyst with Exeter. In December 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996, I became a principal of Exeter. Since joining Exeter, my assignments have included water, wastewater, and natural gas utility class cost of service and rate design analysis, evaluating the gas purchasing practices and policies of natural gas utilities, sales and rate forecasting, performance-based incentive regulation, revenue requirement analysis, the unbundling of utility services, and the evaluation of customer choice natural gas transportation programs.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?

A. Yes. I have provided testimony on approximately 500 occasions in proceedings before the FERC, utility regulatory commissions in Arkansas, Connecticut, Delaware, Georgia, Illinois, Indiana, Louisiana, Maine, Massachusetts, Montana, Nevada, New Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas,

Utah, and Virginia, as well as before the Philadelphia Water, Sewer and Storm Water Rate Board ("Board").

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Exeter was retained by Community Legal Services serving as the Public Advocate to assist it in the evaluation of the general rate proceeding commenced by the Philadelphia Water Department ("PWD"). In this testimony, I present my findings and recommendations on behalf of the Public Advocate regarding the class cost of service ("CCOS") studies and rate design recommendations presented by PWD for water, wastewater, and stormwater service. My colleague, Mr. Lafayette K. Morgan, Jr., presents the Public Advocate's findings regarding the overall revenue increase, if any, to which PWD is entitled for its water, wastewater, and stormwater operations for its Rate Period (Fiscal Years ("FYs") 2026 through 2027).

Q. PLEASE IDENTIFY THE FY 2026 AND FY 2027 TIME PERIODS FOR WHICH PWD IS PROPOSING RATES IN THIS PROCEEDING.

A. In this rate proceeding, the PWD is proposing rates for FY 2026 which is the 12-month period ending June 20, 2026, and for FY 2027 which is the 12-month period ending June 20, 2027. Different cost of service rates are proposed for each FY based on PWD's forecasted revenue requirements for each FY. In this proceeding, FY 2026 is also referred to as "Test Year-1" and FY 2027 is also referred to "Test Year-2".

Q. HAVE YOU PREVIOUSLY PRESENTED TESTIMONY IN PWD PROCEEDINGS?

A. Yes. I previously submitted testimony on behalf of the Public Advocate in the 2008 proceeding in which PWD's rates for FYs 2009-2012 were established, the 2016 proceeding in which PWD's rates for FYs 2017-2018 were established, the 2018 proceeding in which PWD's rates for FYs 2019-2021 were established, the 2021

proceeding in which PWD's rates for FYs 2022-2023 were established, and the 2023 proceeding in which PWD's rates for FYs 2024-2025 were established.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS CONCERNING PWD'S CCOS STUDIES AND RATE DESIGN PROPOSALS IN THIS PROCEEDING.

A. My findings and recommendations concerning PWD's CCOS studies and rate design proposals in this proceeding are as follows:

- While the PWD's water CCOS study is generally reasonable, the customer class maximum day and maximum hour extra capacity factors reflected in that study should be revised to reflect the results of PWD's recently completed customer demand study which utilized data from PWD's recently deployed Advanced Metering Infrastructure ("AMI") project. This demand study is subsequently referred to herein as the "AMI Demand Study". In my testimony, I present a revised water CCOS utilizing the AMI Demand Study extra capacity factors. This revised CCOS study should be utilized to establish water rates in this proceeding, and in my testimony, I present a proposed distribution of the revenue increases authorized by the Board in this proceeding consistent with my revised water CCOS study.

- The PWD's wastewater CCOS study appears reasonable. I am proposing no changes to this CCOS study. If increases in wastewater rates are authorized by the Board in this proceeding which are less than the PWD's requested increases, I recommend the rates initially proposed by PWD be proportionately scaled back to achieve the revenue increases authorized in this proceeding.

- The PWD's stormwater CCOS study also appears reasonable. I am proposing no changes to this CCOS study. If increases in stormwater rates are authorized by the Board which are less than the PWD's requested increases, I recommend that the rates initially proposed by PWD be proportionally scaled back to achieve the increases authorized in this proceeding.

- In the 2023 rate proceeding, I recommended several changes to PWD's stormwater rate design. First, I recommended that all customers share in the Stormwater Management Incentive Program ("SMIP") and Greened Acre Retrofit Program Grants ("GARP") (collectively "SMIP/GARP Program") billing credits which were currently assigned to those customers that participated in the SMIP/GARP Program. I also recommended that PWD modify its current Residential stormwater rate design to provide for charges based on building type when the necessary upgrades to its billing system were completed. Finally, I recommended that PWD evaluate whether a rate discount

should be provided to Residential customers that agree to have PWD install a rain barrel on their property.

In the 2023 rate proceeding, in its Rate Determination, the Board noted that there were on-going discussions between PWD and the various stakeholders concerning the stormwater rate design changes I had proposed. The Board directed PWD to continue those discussions, to report on those discussions, and to be prepared to present and respond to specific proposals in its next general rate proceeding.

In this proceeding, PWD has not fulfilled the requirement of the 2023 Rate Determination to present and report on the Residential stormwater rate design and credits that I proposed. PWD must be required to do so. Accordingly, I recommend that the Board's final determination require PWD to present, within 90 days of the final determination, the following:

- One or more stormwater rate design alternatives that would reflect the sharing of SMIP/GARP credits across all customer categories. PWD's alternatives should identify rate impacts based on customer class;

- One or more Residential stormwater rate designs that provide different monthly bill amounts based on property size and/or property type. PWD's presentation should explain the basis for the different bill amounts and the manner in which they are calculated; and

- One or more Residential rain barrel credit alternatives that recognize that Residential rain barrels reduce the impact of heavy rainfall on PWD's stormwater conveyance system, together with a detailed description of any application/recertification requirements PWD would want to implement to ensure the ongoing effectiveness of rain barrels.

Following PWD's submission, the Board should permit participants in this proceeding to respond. Based on PWD's submission, and the participants' responses, it would be appropriate for the Board to consider whether to require a Special Rate Proceeding. The Board's final determination should reserve the right to require the commencement of such a Special Rate Proceeding.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. Following this introductory section, my testimony is divided into two additional sections. The first section addresses PWD's water CCOS study and rate design proposals. In the final section, I address PWD's wastewater and stormwater CCOS studies and rate design proposals.

II. WATER CLASS COST OF SERVICE STUDY AND RATE DESIGN

Q. WHAT IS THE OBJECTIVE OF A CLASS COST OF SERVICE STUDY?

A. A CCOS study is conducted to assist a utility or commission in determining the level of costs properly recoverable from each of the various classes to which the utility provides service. Allocation of recoverable costs to each class of service is generally based on cost causation principles.

Q. HOW MANY WATER CCOS STUDIES DID PWD PRESENT IN THIS PROCEEDING?

A. PWD presented one water CCOS studies in this proceeding based on its forecasted revenue requirements for FY 2026, or Test Year-1.

Q. WHAT ARE THE PRIMARY CCOS STUDY METHODOLOGIES UTILIZED FOR WATER UTILITIES?

A. The two most commonly used and widely recognized methods of allocating costs to customer classes for water utilities are the base-extra capacity method and the commodity-demand method. Both of these methods are set forth in the American Water Works Association's ("AWWA") *Principles of Water Rates, Fees and Charges, Manual of Water Supply Practices* ("AWWA M1 Manual").

Q. PLEASE SUMMARIZE EACH OF THESE METHODS.

A. Under the base-extra capacity method, investment and costs are generally first assigned to utility functional cost centers which include: source of supply, pumping, storage,

treatment, distribution, customer, and general administration. These functional costs are then allocated into four primary cost categories: base or average capacity, extra capacity, customer, and direct fire protection. Customer costs are commonly further divided between meter- and service-related, and account- or bill-related costs. Extra capacity costs may also be divided between maximum day and maximum hour costs. Once investment and costs are classified to these primary cost categories, they are then allocated to customer classes. Base costs are allocated according to average water use, and extra capacity costs are allocated on the basis of the excess of peak demands over average demands. Meter- and service-related customer costs are allocated on the basis of relative meter and service investment or a proxy thereof. Account-related customer costs are allocated in proportion to the number of customers or the number of bills. The water CCOS presented by the PWD in this proceeding utilizes the base-extra capacity methodology.

The commodity-demand method follows the same general procedures. However, usage-related costs are classified as commodity and demand-related rather than as base and extra capacity related. Commodity-related costs are allocated to customer classes on the basis of total water use (which is equivalent to average demand), and demand-related costs are allocated on the basis of each class's contribution to peak demand rather than on the basis of class demands in excess of average use.

Q. PLEASE DESCRIBE IN GREATER DETAIL THE FOUR PRIMARY COST CATEGORIES AND HOW THEY ARE ALLOCATED TO THE VARIOUS CUSTOMER CLASSES UNDER THE BASE-EXTRA CAPACITY METHOD.

A. **Base Costs** are costs that tend to vary with the quantity of water used, plus costs associated with supplying, treating, pumping and distributing water to customers under average load conditions. Base costs were generally allocated to customer classes on the basis of average daily usage in PWD's CCOS study.

Extra Capacity Costs are costs associated with meeting usage requirements in excess of average day usage. This includes operating and capital costs for additional plant and system capacity beyond that required for average day usage. Extra capacity costs in PWD's CCOS study have been subdivided into costs necessary to meet maximum day extra demand and maximum hour extra demand. These extra capacity costs were allocated to customer classes on the basis of each class's maximum day and maximum hour usage in excess of average day and average hour usage, respectively.

Customer Costs are costs associated with serving customers regardless of their usage or demand characteristics. Customer costs include the operating costs related to meters and services, meter reading costs, and billing and collecting costs. Customer costs were allocated on the basis of the capital cost of meters and services and the number of customer bills.

Fire Protection Costs are costs associated with providing the facilities necessary to meet the potential peak demand of fire protection service. In PWD's study, fire protection costs have been subdivided into the costs associated with meeting Public Fire Protection and Private Fire Protection demands. The extra capacity costs assigned to fire protection were allocated to Public and Private Fire Protection on the basis of the total relative demands of hydrants and fire service lines.

Q. PLEASE IDENTIFY THE CUSTOMER CLASSES PWD HAS INCLUDED IN ITS WATER CCOS STUDY.

A. PWD has separately identified the cost of serving twelve (12) retail customer classes: Residential, Senior Citizens, Commercial, Industrial, Public Utilities, Public Housing Authority, Charities & Schools, Hospitals & Universities, Hand Billed, Scheduled (Flat Rate), Public Fire Protection, and Private Fire Protection. Collectively, I subsequently refer to PWD's non-fire protection service retail customer classes as its general retail customer class. The cost of serving PWD's wholesale customer, Aqua Pennsylvania, has also been separately identified.

Q. PLEASE DESCRIBE IN GREATER DETAIL PWD'S ASSIGNMENT OF SYSTEM-WIDE INVESTMENT AND COSTS TO UTILITY FUNCTIONAL COST CENTERS AND THE ALLOCATION OF THESE COSTS TO COST CATEGORIES.

A. As shown in Schedule BV-2, Tables 4-5 through 4-7 of PWD's water CCOS study, plant investment costs, depreciation expense, and operations and maintenance ("O&M") expenses have been assigned to four functional cost centers:

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

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

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

Customer costs, such as meters and services, and direct fire protection costs, such as hydrants, are directly assigned to their respective cost category. Remaining costs are allocated to the base, maximum day, and maximum hour cost categories based on the degree to which they are associated with meeting those service requirements. Cost that meet base (average day) service requirements are allocated 100 percent to base category. Costs that meet maximum day service requirements are allocated between the base (72 percent) and the maximum day (28 percent) cost categories. Costs that meet maximum hour service requirements are allocated to the base (48 percent), maximum day (14 percent), and maximum hour (38 percent) cost categories.

Q. PLEASE ELABORATE ON HOW THE MAXIMUM DAY AND HOUR PERCENTAGES FOR THE SYSTEM-WIDE ALLOCATION OF COSTS WERE DETERMINED.

A. For FYs 2015 through 2024, PWD determined the ratio of the maximum day of water usage to average day water usage. The highest maximum day to average day water usage ratio experienced during this period was 1.39, which occurred in FY 2018. Based on this ratio, PWD allocated 72 percent of maximum day costs to the base category (1.00/1.39) and 28 percent to the maximum hour category (0.39/1.39).

With respect to the maximum hour service cost percentages, for FYs 2015 through 2024, PWD determined the ratio of the maximum hour of water usage to average hour water usage for each fiscal year. The highest maximum hour to average hour water usage ratio experienced during this period was 2.09, which occurred in FY 2021. Based on this ratio, PWD allocated 48 percent of maximum hour costs to the base category (1.00/2.09). The remaining 52 percent of maximum hour costs were allocated to the maximum day and maximum hour cost categories based on the relative

contribution of maximum day and maximum hour demands to total extra capacity demands of 1.09 (2.09 – 1.00).

Q. PLEASE DESCRIBE THE ALLOCATION OF SYSTEM-WIDE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY COSTS TO CUSTOMER CLASS UNDER THE BASE EXTRA CAPACITY METHOD AS SET FORTH IN THE AWWA M1 MANUAL.

A. Under the base-extra capacity method, system-wide maximum day and maximum hour extra capacity costs are allocated to customer class based on the excess of each class's non-coincident maximum day and maximum hour demands over average day and maximum day demands, respectively. As an example, as shown on Schedule BV-2, Table 4-4, the average day water usage of Residential customers was determined to be 7,910 Mcf, and the maximum day usage of Residential customers was determined to be 181 percent of average day usage, or 14,320 Mcf.[2] Thus, the maximum day extra capacity usage of Residential customers in PWD's water CCOS study is 6,410 Mcf (14,320 Mcf maximum day usage less 7,910 Mcf average day usage). Maximum day extra capacity costs are allocated to the Residential class based on the Residential class's proportionate share of total system maximum day extra capacity usage.

With respect to the allocation of maximum hour extra capacity costs, as also shown on Schedule BV-2, Table 4-4, PWD determined that the maximum hour usage (on a 24-hour basis) of the Residential class was 314 percent of average day usage, or 24,840 Mcf. Thus, the maximum hour extra capacity usage of Residential customers in PWD's water CCOS study is 10,520 Mcf above maximum day usage (24,840 Mcf maximum hour usage less 14,320 Mcf maximum day usage). Maximum hour extra

[2] The method used by PWD to determine the maximum day and maximum hour usage of the various customer classes in its CCOS study is discussed later in this section of my testimony.

capacity costs are allocated to the Residential class based on the Residential class's proportionate share of total system maximum hour extra capacity usage.

Q. THE BASE-EXTRA CAPACITY METHOD UTILIZES NON-COINCIDENT PEAK DEMANDS TO ALLOCATE EXTRA CAPACITY COSTS TO THE VARIOUS CUSTOMER CLASS. IS THIS SIMPLY THE DEMANDS OF EACH CUSTOMER CLASSIFICATION AT THE TIME OF SYSTEM PEAK DAY AND PEAK HOUR DEMANDS?

A. No. Non-coincident peak demands represent the maximum demands of the individual customer classifications regardless of when those demands occur. Thus, the sum of each customer class's non-coincident demands will exceed the system coincident peak demand. The ratio obtained by dividing non-coincident demands by coincident demands is referred to as the system diversity ratio in the AWWA M1 Manual.

Q. WHY ARE NON-COINCIDENT DEMANDS UTILIZED UNDER THE BASE-EXTRA CAPACITY METHOD?

A. The basis for using non-coincident maximum day and maximum hour demands is set forth in the AWWA M1 Manual:

> It is important that the reader understand the rationale of using the non-coincident demands in distributing the functionally allocated costs to each class. The rationale for supporting the use of non-coincident peaking factors is that the benefits of diversity in customer class consumption patterns should accrue to all classes in proportion to their use of the system, and not be allocated primarily to a particular class that happens to peak at a time different from other users of the system. The concept is illustrated through the following example: Assume that a utility was going to build a *separate system* (source of supply, treatment, pumping, transmission and distribution, etc.) for *each of the customer classes* served by the utility. These separate water systems would need to be sized to meet the base, maximum-

day extra capacity, and maximum-hour extra capacity demands related to each class. The sum of those systems would compose the overall water system, and the costs associated with each of the individual systems would be allocable to each class (based on their respective non-coincidental demands that were the basis for sizing the individual components of the system).

Assume that a concept is developed that efficiencies, economies of scale, and reduction in the overall size of the "system" could be achieved if the system is an integrated, diversified system. With this concept in mind, recognizing the diversities of demands of the various classes and using the coincidental demands of all classes to size the plant, a smaller system could be built. Total fixed capital costs and most operation and maintenance expenses, except perhaps for power and chemical costs, would be reduced in sizing the overall system facilities on the basis of the coincidental demands of all the classes of customers.

The question at hand is, considering that there is a smaller, more efficient, and less costly system, how should the cost savings of that system be allocated among the individual customer classes? One appropriate manner to allocate these costs, and have each customer class share equitably in the overall cost savings, is to allocate the total new, smaller system costs on the basis of the non-coincidental demands of each customer class. In this manner, all classes share proportionately in the economies of scale and cost savings of this smaller, integrated, and diverse system.

[AWWA M1 Manual, Appendix A, pages 374 - 375, 7th Edition (2017).]

Q. HOW DID THE COMPANY DEVELOP THE MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY FACTORS FOR THE VARIOUS GENERAL RETAIL CUSTOMER CLASS REFLECTED IN ITS WATER CCOS STUDY?

A. In PWD's 2023 proceeding in which rates for FYs 2024-2025 were established, several parties including the Public Advocate challenged the maximum day and maximum hour extra capacity factors used by PWD in its water CCOS study because the factors inappropriately utilized data dating back to FY 2012. In the 2023 proceeding the Board directed PWD to perform a study of customer extra capacity usage factors prior to its next rate proceeding and to incorporate the results of this study into the COSS filed by PWD in its next rate proceeding to ensure that the COSS was reflective of PWD's current operating characteristics.[3] In response to this directive PWD engaged Black & Veatch Management Consulting LLC ("Black & Veatch Management") to conduct the AMI Demand Study to determine the appropriate maximum day and maximum hour extra capacity factors for each customer class. The AMI Demand Study is presented as Schedule BV-4: WP-1.

However, rather than directly including the extra capacity factors determined by the AMI Demand Study in the CCOS study filed by PWD in this proceeding, as discussed in PWD Statement 7, page 49, PWD is proposing to phase-in the AMI Demand Study capacity factors in its COSS study. More specifically, for FY 2026, PWD is proposing moving 25% of the way towards the new extra capacity factors as determined by the AMI Demand Study, and for FY 2027, PWD is proposing to move 50% of the way towards the AMI Demand Study factors. PWD is proposing to phase-in adoption of the AMI Demand Study factors due to the significant impact the new factors would have on the cost-of-service of the various customer classes. A comparison of the various customer class extra capacity factors utilized to set rates in the 2023 rate proceeding and the factors determined by the AMI Demand Study is presented in Schedule BV-4: WP-2, Table 1.

[3] See 2023 General Rate Proceeding Rate Determination dated June 21, 2023 at 38.

Q. DID YOU ASSESS THE IMPACT OF UTILIZING THE EXTRA CAPACITY FACTORS DETERMINED BY THE AMI DEMAND STUDY ON THE RESULTS OF PWD'S CCOS STUDY?

A. Yes. A comparison of the results of the CCOS study prepared by PWD for FY 2026 utilizing a 25% phase-in of AMI Demand Study factors with a CCOS that utilizes the factors determined by the AMI Demand Study with no phase-in is presented in Table 1. As shown in Table 1, the CCOS study that utilizes the AMI Demand Study factors reduces the cost-of-service of the Residential, Senior Citizens, Housing Authority, and Hand Billed customer classes. The total reduction to the cost-of-service for these four customer classes is $25,662,000.

Table 1. Comparison of PWD Filed and Public Advocate Revised Class Cost of Service Study Results

Customer Class	PWD (1)	Public Advocate (2)	Difference (3) = (2) - (1)	Percent (4) = (3) / (1)
General Service				
Residential	$227,262,000	$204,780,000	($22,482,000)	-9.9%
Senior Citizens	7,314,000	6,713,000	(601,000)	-8.2%
Commercial	107,728,000	112,129,000	4,401,000	4.1%
Industrial	4,234,000	5,430,000	1,196,000	28.2%
Public Utilities	934,000	1,757,000	823,000	88.1%
Subtotal:	$347,472,000	$330,809,000	($16,663,000)	-4.8%
Other Services				
Housing Authority	$8,829,000	$8,142,000	($687,000)	-7.8%
Charities & Schools	7,025,000	9,530,000	2,505,000	35.7%
Hospitals & University	5,026,000	6,490,000	1,464,000	29.1%
Hand Billed	19,237,000	17,345,000	(1,892,000)	-9.8%
Subtotal:	$40,117,000	$41,507,000	$1,390,000	3.5%
Fire Protection Service				
Private Fire Protection	$6,694,000	$10,372,000	$3,678,000	54.9%
Public Fire Protection	10,786,000	21,236,000	10,450,000	96.9%
Subtotal:	$17,480,000	$31,608,000	$14,128,000	80.8%
Wholesale	$5,180,000	$6,323,000	$1,143,000	22.1%
Total:	**$410,249,000**	**$410,249,000**	**$0**	**0.0%**

[1]Adjusted cost of service reflects the recovery of discounts.

Q. DO YOU AGREE WITH PWD'S PROPOSAL TO PHASE-IN THE AMI DEMAND STUDY FACTORS IN ITS CCOS STUDY?

A. No. The demand factors utilized in PWD's CCOS study which include a 25% phase-in of the results of the AMI Demand Study are reflected in Schedule BV-4: WP-2, Table 4. As previously explained, the demand factors determined by the AMI Demand Study are reflected in Schedule BV-4: WP-2, Table 1. A comparison of the demand factors included in PWD's CCOS study and the demand factors determined by the AMI Demand Study is presented in Table 2, below. As indicated in Table 2, the demand factors included in PWD's CCOS study are not reflective of the actual current

maximum day and maximum hour usage characteristics of the customer classes served by PWD. Therefore, PWD's CCOS study does not reasonably reflect the cost of serving the various customers classes served by PWD. I understand PWD's desire to mitigate the significant impact of adopting the AMI Demand Study factors in this proceeding. However, mitigation of the impact should be accomplished through the class revenue allocation and rate design process. It should not be accomplished by distorting the results of PWD's CCOS study.

Table 2. Comparison of Demand Factors Utilized in PWD's Cost-of- Service Study and the Demand Factors Determined by the AMI Demand Study

	Cost of Service Study		AMI Demand Study	
Customer Class	**Maximum Day**	**Maximum Hour**	**Maximum Day**	**Maximum Hour**
Residential	181	314	122	174
Senior Citizens	181	315	123	180
Commercial	168	243	133	178
Industrial	154	205	135	218
Public Utilities	169	251	197	404
Housing Authority	173	276	122	166
Charities & Schools	173	273	152	281
Hospitals & University	177	232	166	227
Hand Billed	163	239	113	146

Q. WHAT ARE SOME OF THE PRINCIPLES OF A SOUND REVENUE ALLOCATION AND RATE DESIGN?

A. A sound revenue allocation and rate design should:

- Utilize class cost of service study results as a guide;
- Provide stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers or the utility (gradualism);
- Yield the total revenue requirement;
- Provide for simplicity, certainty, convenience of payment, understandability, public acceptability and feasibility of application; and

- Reflect fairness in the apportionment of the total cost of service among the various customer classes.[4]

Q. HOW MUCH OF AN INCREASE IN ITS TOTAL WATER REVENUES DOES PWD CLAIM IS APPROPRIATE FOR FY 2026 AND HOW MUCH OF AN INCREASE IS PWD PROPOSING FOR FY 2026?

A. As shown on Schedule BV-2: Table 4-11, PWD claims its water revenue requirement, or cost-of-service, for FY 2026 (Test Year-1) is $410,249,000. As shown on Schedule BV-2: Table 3-13, water service revenues at existing rates for FY 2026 are projected to be $365,313,000. This indicates that a revenue increase of $44,936,000 is necessary for FY 2026. In this proceeding, PWD is proposing to adopt rates in FY 2026 that would be sufficient to recover its FY 2026 revenue requirement of $410,249,000. For the FY 2026 rates proposed by PWD to recover a revenue requirement of $410,249,000, new rates would need to go into effect July 1, 2025. In this proceeding, PWD is not proposing to begin assessing its proposed FY 2026 rates to customers until September 1, 2025. Therefore, the revenues recovered by PWD for FY 2026 will be less than the FY 2026 revenue requirement of $410,249,000. As indicated on Schedule BV-2: Table 3-13, the rates that PWD proposes to become effective September 1, 2025, will recover additional revenues of $36,623,000, or in total revenues of $401,937,000 in FY 2026. This is $8,312,000 less than PWD's claimed revenue requirement or cost-of-service of $410,249,000 for FY 2026, and would provide for the recovery of 98% of PWD's claimed cost-of-service for FY 2026.

Q. WHAT IS YOUR PROPOSAL WITH RESPECT TO THE DISTRIBUTION OF THE REVENUE INCREASE AWARDED BY THE BOARD FOR FY 2026 IN THIS PROCEEDING?

[4] *Principles of Public Utility Rates*, Second Edition, James C. Bonbright, Albert L. Danielsen, David R. Kamerschen; Public Utility Reports, Inc., 1988, pages 383-384.

A. PWD's proposed revenue distribution is generally based on the results of its CCOS study, which attempts to minimize the significant impact of adopting the AMI Demand Factors by phasing-in the use of those demand factors. That is, the CCOS study attempts to provide gradualism, one of the principles of a sound revenue allocation. However, as previously explained, PWD's CCOS study is not based on the current load characteristics of PWD's various customer class and, therefore, does not reasonably reflect the cost-of-serving each of PWD's customer classes. Therefore, to better reflect the cost-of-service of each customer class and to provide for gradualism, I recommend the following for the revenue distribution and rates to be adopted for FY 2026.

As previously discussed, the FY 2026 CCOS study prepared by PWD is based on a total cost-of-service of $410,249,000. PWD does not anticipate putting the rates approved in this proceeding in effect until September 1, 2025 and, therefore, the total revenues PWD projects to receive in FY 2026 under its proposed rates are $401,937,000, or 98% of the projected FY 2026 cost-of-service. As also previously discussed, a CCOS study that utilizes the AMI Demand Factors reduces the cost-of-service of the Residential, Senior Citizens, Housing Authority, and Hand Billed customer classes by $25,662,000. Adjusting this reduction by 98% to reflect FY 2026 revenues at proposed rates indicates that the FY 2026 revenue reduction for these four classes should be $25,045,360. To provide for additional movement toward cost-of-service rates in this proceeding and to maintain gradualism, I recommend that 50% of the revenue reduction indicated by my CCOS study that utilizes the AMI Demand Factors be assigned to these four classes and be reflected in determining the rates that will go into effect September 1, 2025. The reduction should be recovered by proportionately increasing the rates of the remaining customer classes. A comparison

of the PWD's proposed revenue distribution for FY 2026 and my proposed revenue distribution is presented in Table 3.

Table 3. Comparison of PWD and Public Advocate Revenue Distributions

	Existing Rates (1)	Proposed Rates (2)	Increase (3)	Percent Increase (4)
PHILADELPHIA WATER DEPARTMENT				
General Service				
Residential	$203,528,000	$222,416,000	$18,888,000	9.3%
Senior Citizens	6,564,000	7,172,000	608,000	9.3%
Commercial	97,538,000	106,396,000	8,858,000	9.1%
Industrial	4,086,000	4,455,000	369,000	9.0%
Public Utilities	817,000	895,000	78,000	9.5%
Subtotal:	$312,534,000	$341,334,000	$28,801,000	9.2%
Other Services				
Housing Authority	$7,774,000	$8,461,000	$687,000	8.8%
Charities & Schools	6,159,000	6,730,000	571,000	9.3%
Hospitals & University	5,191,000	5,656,000	465,000	9.0%
Hand Billed	15,535,000	16,867,000	1,332,000	8.6%
Scheduled (Flat Rate)	1,000	1,000	0	0.0%
Subtotal:	$34,660,000	$37,714,000	$3,055,000	8.8%
Fire Protection Service				
Private Fire	$5,495,000	$6,470,000	$975,000	17.7%
Public Fire	8,248,000	10,363,000	2,115,000	25.6%
Subtotal:	$13,743,000	$16,833,000	$3,090,000	22.5%
Wholesale	$4,376,000	$4,980,000	$604,000	13.8%
Total:	**$365,313,000**	**$400,862,000**	**$35,549,000**	**9.7%**
PUBLIC ADVOCATE				
General Service				
Residential	$203,528,000	$214,498,887	$10,970,887	5.4%
Senior Citizens	6,564,000	6,857,279	293,279	4.5%
Commercial	97,538,000	112,071,381	14,533,381	14.9%
Industrial	4,086,000	4,691,421	605,421	14.8%
Public Utilities	817,000	944,975	127,975	15.7%
Subtotal:	$312,533,000	$339,063,943	$26,530,943	8.5%
Other Services				
Housing Authority	$7,774,000	$8,109,246	$335,246	4.3%
Charities & Schools	6,159,000	7,095,844	936,844	15.2%
Hospitals & University	5,191,000	5,953,929	762,929	14.7%
Hand Billed	15,535,000	16,458,268	923,268	5.9%
Scheduled (Flat Rate)	1,000	1,000	0	0.0%
Subtotal:	$34,660,000	$37,617,286	$2,958,286	8.5%
Fire Protection Service				
Private Fire	$5,495,000	$7,094,689	$1,599,689	29.1%
Public Fire	8,248,000	11,718,095	3,470,095	42.1%
Subtotal:	$13,743,000	$18,812,784	$5,069,784	36.9%
Wholesale	$4,376,000	$5,366,987	$990,987	22.6%
Total:	**$365,313,000**	**$400,862,000**	**$35,549,000**	**9.7%**

Q. PLEASE DESCRIBE TABLE 3 IN ADDITIONAL DETAIL.

A. The top half of Table 3 reflects the projected revenues PWD expects to receive for FY 2026 under existing rates (Column 1), the revenues PWD expects to receive for FY 2026 under rate increases it is proposing to put in effect September 1, 2025, (Column 2), the resulting increase in revenues generated by the proposed rates, (Column 3), and the percentage increase in revenues generated by the proposed rates (Column 4). The bottom half of Total 3 reflects the same information for the revenue distribution I am proposing which is based on the cost of service for each class using the AMI Demand Factors.

Q. HOW SHOULD YOUR PROPOSED REVENUE DISTRIBUTION FOR FY 2026 BE ADJUSTED TO REFLECT THE REVENUE REQUIREMENT ACTUALLY APPROVED BY THE BOARD FOR FY 2026?

A. I recommend that my proposed revenue distribution for each customers class be proportionately adjusted to reflect the difference between the FY 2026 revenue requirement authorized by the Board in this proceeding and PWD's claimed FY 2026 revenue requirement of $410,249,000.

Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO THE REVENUE DISTRIBUTION AND RATE DESIGN FOR FY 2027?

A. I recommend that the revenue distribution and rate design approved for FY 2026 be proportionately adjusted to reflect the increase in PWD's revenue requirement approved by the Board for FY 2027.

Q. DO YOU HAVE AN ALTERNATIVE REVENUE DISTRIBUTION AND RATE DESIGN RECOMMENDATION FOR FY 2026 IN THE EVENT THAT THE BOARD DOES NOT ACCEPT YOUR PROPOSAL?

A. Yes. As previously explained, the rates proposed by PWD for FY 2026 are designed to recover a revenue requirement increase of $44,936,000. If the Board determines that this revenue requirement increase is appropriate for FY 2026, I recommend that the revenue distribution and rate design proposed by PWD for FY 2026 be adopted. However, such a determination is very unlikely in this proceeding. To the extent that the Board reduces PWD's requested increase of $44,936,000 for FY 2026, I alternatively recommend that the revenue requirement reduction be proportionally assigned to reduce the rates of the customer classes whose cost-of-service is reduced from that indicated by PWD's CCOS study in the CCOS I presented earlier in my testimony which utilized the demand factors determined by the AMI Demand Factor study. These reductions were previously identified in Table 1. These reductions are summarized in Table 4 which also identifies the proportionate share of the reduction to be assigned to each class.

Table 4. Cost-of-Service Study Reductions to be Utilized to Assign Board Determined Revenue Reductions

Customer Class	Cost of Service Reduction[1]	Proportionate Share
Residential	22,482,000	87.6%
Senior Citizens	601,000	2.3%
Housing Authority	687,000	2.7%
Hand Billed	1,892,000	7.4%
Total:	**25,662,000**	**100.0%**

[1]Per Table 1.

Q. WHAT IS YOUR ALTERNATIVE PROPOSAL WITH RESPECT TO THE REVENUE DISTRIBUTION AND RATE DESIGN FOR THE REVENUE INCREASE AWARDED BY THE BOARD FOR FY 2027 IN THIS PROCEEDING?

A. I recommend that the increase approved by the Board for FY 2027 be proportionately assigned to each customer class based on the alternative revenue requirement and rate recommendation I have proposed for FY 2026. Based on the revenues and revenue requirements presented in Schedule BV-2: Table 3-13, PWD's request increase for FY 2027 is $27,726,000. If PWD is awarded 100% of its requested increase for FY 2026, I estimate that PWD's requested increase for FY 2027 would be approximately 7.0%. The actual increase awarded by the Board for FY 2027 will likely be less than 7.0%.

III. WASTEWATER & STORMWATER COST OF SERVICE AND RATE DESIGN

Q. PLEASE SUMMARIZE THE WASTEWATER CCOS STUDY FILED BY PWD IN THIS PROCEEDING.

A. Much like for water service, PWD has prepared a class cost of service study for wastewater service using projected FY 2026 costs as the starting point. In its study, PWD determines the average unit cost of providing each of the functional components of service. These functions include: annual volumes; capacity costs separated into those related to collection system demands, pumping demands, and treatment demands; suspended solids and BOD loadings; and customer costs separated into meter related and bill related. Next, costs are distributed to customer classes in proportion to each class's ratio of its units of service by function to the sum of the units of service by function for all customer classes. Initially, costs are apportioned between PWD's 11 wholesale contract customers and its retail customers. The costs allocated to retail customers are then apportioned between sanitary sewer service and stormwater service as subsequently discussed in more detail. Finally, rates are designed to recover the allocated costs.

Q. PLEASE SUMMARIZE THE RATE DESIGN FOR SANITARY SEWER SERVICE.

A. PWD's proposed sanitary sewer rate design consists of a series of flat monthly charges that increase as a function of meter size, and a uniform, non-varying quantity charge based on water usage. Surcharges apply for high strength wastewater that requires additional treatment costs to be incurred. The proposed rates for wastewater service reflect the CCOS study results after accounting for the fact that senior citizens, charities and schools receive a 25 percent discount, the Philadelphia Housing Authority receives a 5 percent discount and TAP participants receive income-based bills.

Q. YOU NOTED EARLIER THAT RETAIL COSTS ARE APPORTIONED BETWEEN SANITARY WASTEWATER SERVICE AND STORMWATER SERVICE. PLEASE EXPLAIN.

A. Because the wastewater system is comprised of both combined and separate sanitary and storm sewers, wastewater system costs are separated between sanitary sewer and stormwater costs based on the volumes, demands, loadings and revenues associated with each type of service. This is done to allow stormwater costs to be recovered separately from sanitary sewer service costs using parcel-based charges.

Q. HAS PWD PROPOSED ANY SIGNIFICANT CHANGES AS TO HOW COSTS ARE APPORTIONED BETWEEN SANITARY WASTEWATER SERVICE AND STORMWATER SERVICE IN THIS PROCEEDING?

A. No.

Q. DO YOU HAVE ANY CONCERNS WITH THE PWD'S WASTEWATER CCOS STUDY APPORTIONMENT OF COSTS BETWEEN SANITARY WASTEWATER SERVICE AND STORMWATER SERVICE, OR PWD'S PROPOSED RATE DESIGN FOR SERVICE?

A. No I do not. PWD's wastewater CCOS study and the apportionment of costs between wastewater service and stormwater service and the proposed wastewater rate design appears reasonable.

Q. PLEASE EXPLAIN HOW STORMWATER COSTS ARE RECOVERED FROM THE VARIOUS GENERAL RETAIL CUSTOMER CLASSES.

A. In this proceeding, PWD is proposing to retain its parcel-based stormwater rate design methodology under which stormwater costs other than billing and collection costs are allocated and recovered based on a combination of gross and impervious area ("GA" and "IA"). More specifically, 80 percent of total stormwater-related costs (excluding customer billing and collection costs) is assigned to IA and 20 percent is assigned to GA. These assigned costs are then allocated to Residential and non-Residential customers based on the GA and IA of each class, with the GA and IA of non-Residential customers adjusted to reflect certain credits. Under this approach, the actual GA and IA rates designed by PWD are the same for Residential and non-Residential customers. The amounts allocated to Residential customers are recovered through a uniform monthly charge that is the same for each Residential customer. Billing and collection costs are collected through a uniform charge per Residential account.

The GA and IA costs allocated to non-Residential customers are recovered through monthly GA and IA charges that are individually calculated for each parcel based on the applicable (non-Residential) GA and IA rates and the parcel's specific GA and IA square footage billing determinants. Non-Residential customers are also assessed a monthly billing and collection charge.

Q. IN PWD'S 2023 RATE PROCEEDING, DID YOU PROPOSE ANY CHANGES TO PWD'S STORMWATER COST ANALYSIS OR THE RATES PROPOSED BY THE PWD?

A. Yes. In the 2023 rate proceeding I proposed to modify PWD's proposed stormwater rates to provide for a more equitable sharing of the costs associated with the PWD's SMIP/GARP Program. I also recommended that PWD modify its current Residential stormwater rate design to provide for charges based on building type when the necessary upgrades to its billing system were completed. Finally, I recommended that PWD evaluate whether a rate discount should be provided to Residential customers that agree to have PWD install a rain barrel on their property.

Q. WHAT IS THE SMIP/GARP PROGRAM?

A. The SMIP/GARP Program offers grant funding to non-Residential customers for the design and construction of projects to reduce stormwater runoff on a property. Grant funding is not determined based on the ability of a customer to afford the project, but is based on whether the project provides a system-wide stormwater reduction benefit. The PWD determines which projects are eligible for grants. Once a project is completed, the customer is eligible to receive GA and IA billing determinant credits (reductions) which reduce their stormwater charges. In the 2023 proceeding I noted that SMIP/GARP Program costs for FY 2024 which primarily reflected the costs of the grants provided, were estimated to be $20 million, and that approximately 60 percent of SMIP/GARP Program costs were recovered from stormwater customers and the remaining 40 percent was recovered from wastewater customers.

Q. WHAT WAS YOUR CONCERN WITH PWD'S RECOVERY APPROACH FOR SMIP/GARP PROGRAM COSTS FROM STORMWATER CUSTOMERS?

A. Under the existing approach, all stormwater customers were responsible for funding SMIP/GARP Program costs. However, only customers that actually participated in the SMIP/GARP Program received the financial benefits of the program (i.e., reduced

stormwater charges). Although Residential customers were responsible for a substantial share of SMIP/GARP Program costs, Residential customers were not eligible to participate in the SMIP/GARP Program. Since all customers were responsible for funding the SMIP/GARP Program, all customers should share in the financial benefits.

Q. WHAT DID YOU RECOMMEND IN THE 2023 RATE PROCEEDING?

A. In the 2023 rate proceeding, PWD's current and proposed GA and IA rates were based on GA and IA square footage determinants fully adjusted for all GA and IA credits. To provide for a more equitable sharing of the financial benefits of the SMIP/GARP Program, I recommended that the GA and IA rates established in the 2023 proceeding be based on an average of the rates developed based on the current rate design and the rates which would result if no GA and IA credits were reflected in the design of rates. I also noted that the Public Advocate was willing to consider other alternative stormwater service rate designs which would provide for a more equitable sharing of the financial benefits of the SMIP/GARP Program.

Q. PLEASE EXPLAIN THE RECOMMENDATION YOU PRESENTED IN THE 2023 RATE PROCEEDING CONCERNING THE DESIGN OF PWD'S RESIDENTIAL STORMWATER CHARGES.

A. In the 2021 and 2023 rate proceedings, I noted that all Residential customers were currently assessed the same charge for stormwater service based on the average GA and IA of all Residential parcels. In its 2021 rate proceeding, PWD proposed a Residential GA charge based on 2,110 sf. and the IA charge based on 1,200 sf. In my testimony in the 2021 rate proceeding, I noted that almost 60 percent of Philadelphians live in rowhomes, 70 percent of all housing units in Philadelphia are rowhomes,[5] and

[5] https://www.phillymag.com/property/201509/21/this-chart-proves-philadelphia-is-the-king-of-the-king-of-the-rowhome/.

that many rowhomes have lots with a width of 14-15 feet.[6] My review of existing rowhomes listed for sale indicated a typical parcel size of 0.02 acres, or 871 sf. (acre = 43,560 sf. x 0.02). The parcel size of a rowhouse would correspond to the GA of that parcel. The 871 sf. was significantly less than the average of 2,110 sf. PWD proposed to utilize to develop the GA component of the Residential stormwater charge. It was also less than the 1,200 sf. PWD was proposing to utilize to develop the IA component of the Residential stormwater charge. Based on these findings, it appeared that the stormwater charges for rowhomes may be significantly overstated. Therefore, in the 2021 proceeding, I recommended that the PWD evaluate adopting a separate stormwater charge for rowhomes and present its findings in its next rate proceeding.

In the 2021 proceeding, PWD agreed to develop a proposal to evaluate tiered Residential stormwater rate structures to reflect the range of Residential property sizes. In several presentations made in the fall of 2022, PWD presented the option of establishing stormwater rates based on Residential building type. The Residential building types included in PWD's presentation were Apartments, Row Houses, Singles, and Twins. Establishing Residential stormwater rates based on building type reasonably addressed the concerns I expressed in the 2021 proceeding, and would provide for Residential stormwater rates that were more consistent with the cost of providing stormwater service. In the 2023 proceeding, I recommend that PWD modify its current Residential stormwater rate design to provide for charges based on building type. To implement this rate design modification, it was my understanding that upgrades to PWD's current billing software would be required. It was also my understanding that updates to PWD's current billing software were presently on-going.

[6] https://brotherlyloveproperties.com/new-construction-homes-philadelphia/.

Therefore, in the 2023 proceeding, I recommended that PWD pursue this rate design change after the necessary upgrades to its billing system were completed.

Q. PLEASE EXPLAIN THE RECOMMENDATION YOU PRESENTED IN THE 2023 RATE PROCEEDING THAT PWD EVALUATE WHETHER A RATE DISCOUNT SHOULD BE PROVIDED TO RESIDENTIAL CUSTOMERS THAT AGREE TO HAVE PWD INSTALL A RAIN BARREL ON THEIR PROPERTY.

A. In the 2023 proceeding, I noted that to reduce stormwater flows during precipitation events and reduce sewer overflows during these events, PWD currently offered to install rain barrels on Residential properties at no cost to the property owner. At that time, rain barrels had only been installed on less than 1% of Residential properties. I recommended that PWD evaluate whether also providing a rate discount to Residential customers that install rain barrels would be a cost-effective means to reduce stormwater overflows. As one example, the Town of Ferguson, Pennsylvania, currently provided customers that install a rain barrel a 20% rate discount.

Q. DID THE BOARD ACCEPT THE STORMWATER RATE DESIGN RECOMMENDATIONS YOU PRESENTED IN THE 2023 RATE PROCEEDING?

A. Not directly. However, in the 2023 rate proceeding, in its Rate Determination, the Board noted that there were on-going discussions between PWD and various stakeholders concerning the stormwater rate design changes I had proposed. The Board directed PWD to continue those discussions, and to be prepared to present and respond to specific proposals in it next general rate proceeding. In this proceeding, I asked the Department to supply its presentation and response to my recommendations in the last rate proceeding, as set forth in the Board's 2023 Rate Determination.

Q. PLEASE COMMENT ON THE DEPARTMENT'S PRESENTATION AND RESPONSE REGARDING SMIP/GARP BILLING CREDITS.

A. Regarding the Board's directive to present and respond regarding my proposal that PWD permit all customers to share in SMIP/GARP billing credits, the Department acknowledges that such credits are not currently shared, and provides an explanation of the purposes of SMIP/GARP project funding. The Department fails to provide an actual response and presentation regarding the proposal, however, simply concluding that "The Water Department is continuing to evaluate restructured options for Residential customers."

Q. PLEASE COMMENT ON THE DEPARTMENT'S PRESENTATION AND RESPONSE REGARDING THE DESIGN OF PWD'S RESIDENTIAL STORMWATER CHARGES.

A. Regarding the Board's directive to present and respond regarding my proposal that PWD implement Residential stormwater rates based on property type, the Department refers back to its witness testimony describing future consideration of credit program updates, including potential credits for Residential rain barrels, and the overall adaptation of its Green City Clean Waters ("GCCW") program.

Q. PLEASE COMMENT ON THE DEPARTMENT'S PRESENTATION AND RESPONSE REGARDING POTENTIAL RATE DISCOUNTS FOR CUSTOMERS HAVING RESIDENTIAL RAIN BARRELS.

A. Regarding the Board's directive to present and respond regarding my proposal that PWD implement stormwater credits for Residential customers using rain barrels to manage stormwater, PWD again refers to its testimony describing future consideration of credit program updates.

Q. DO YOU BELIEVE THE DEPARTMENT HAS ADEQUATELY RESPONDED TO THE BOARD'S DIRECTIVES IN THE 2023 RATE DETERMINATION?

A. No, I do not believe the Department has presented and responded to the proposals made in my testimony, as required by the 2023 Rate Determination. In fact, the Department specifically states that it "has not arrived at a preferred or recommended approach to update the Residential stormwater rate structure," stating that it requires additional time and deliberate discussions before bringing a recommendation to the Rate Board.

Q. WHAT EXPLANATION DOES THE DEPARTMENT PROVIDE FOR ITS FAILURE TO PRESENT AND RESPOND TO THE BOARD'S 2023 RATE DETERMINATION DIRECTIVES?

A. The Department does not provide any explanation for why it has not prepared adequate responses to the recommendations I made in the 2023 Rate Proceeding, for which the Board required PWD to undertake further efforts. Although PWD claims it needs stakeholder input, it provides no indication that it has sought such input or that the absence of such input would impede it from advancing rate design and credit alternatives in this proceeding.

Q. DO PWD'S CLAIMS REGARDING BILLING SYSTEM CHANGES AND DATA INTEGRATION JUSTIFY DELAYING CHANGES TO THE STORMWATER RATE DESIGN AND CREDIT STRUCTURES?

A. To the extent billing system changes and data integration with other City departments are necessary to implement revised rates and charges, the Board could justifiably find that delaying the effectiveness of those changes is prudent. But that is beside the point. PWD was directed to present and respond in this proceeding in order to enable the Board to assess its position regarding rate design and credit changes. The potential

timeline and implementation challenges of those changes is a secondary matter, and does not justify PWD's failure.

Q. WHAT DO YOU RECOMMEND?

A. PWD has not fulfilled the requirement of the 2023 Rate Determination to present and report on the Residential stormwater rate design and credits I proposed. PWD must be required to do so. Accordingly, I recommend that the Board's final determination require PWD to present, within 90 days of the final determination, the following:

- One or more stormwater rate design alternatives that would reflect the sharing of SMIP/GARP credits across all customer categories. PWD's alternatives should identify rate impacts based on customer class;
- One or more Residential stormwater rate designs that provide different monthly bill amounts based on property size and/or property type. PWD's presentation should explain the basis for the different bill amounts and the manner in which they are calculated; and
- One or more Residential rain barrel credit alternatives that recognize that Residential rain barrels reduce the impact of heavy rainfall on PWD's stormwater conveyance system, together with a detailed description of any application/recertification requirements PWD would want to implement to ensure the ongoing effectiveness of rain barrels.

Following PWD's submission, the Board should permit participants in this proceeding to respond. Based on PWD's submission, and the participants' responses, it would be appropriate for the Board to consider whether to require a Special Rate Proceeding. The Board's final determination should reserve the right to require the commencement of such a Special Rate Proceeding.

Q. DOES THIS COMPLETE YOUR TESTIMONY?

A. Yes, it does.