

PUBLIC ADVOCATE STATEMENT NO. 3

BEFORE THE  
PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

In the Matter of the Philadelphia Water  
Department's Proposed Change in Water,  
Wastewater, and Stormwater Rates and  
Related Charges

\*  
\* Fiscal Years 2024 – 2025  
\* Rates and Charges to Become Effective  
\* September 1, 2023 and September 1, 2024  
\*

Direct Testimony  
Of  
Roger D. Colton  
On Behalf Of  
The Philadelphia Public Advocate

April 12, 2023

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1 **Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE RECORD.**

2 A. My name is Roger Colton. My business address is 34 Warwick Road, Belmont, MA  
3 02478.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am a principal in the firm of Fisher Sheehan & Colton, Public Finance and General  
6 Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to  
7 a variety of federal and state agencies, consumer organizations and public utilities on rate  
8 and customer service issues involving water/sewer, natural gas and electric utilities.

9 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

10 A. I am testifying on behalf of the Philadelphia Public Advocate.

11 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

12 A. I work primarily on low-income utility issues. This involves regulatory work on rate and  
13 customer service issues, as well as research into low-income usage, payment patterns,  
14 and affordability programs. At present, I am working on various projects in the states of  
15 Maryland, Pennsylvania, Tennessee, Kentucky, Ohio, Michigan, Missouri and Kansas.  
16 My clients include state agencies (e.g., Pennsylvania Office of Consumer Advocate,  
17 Maryland Office of People's Counsel, Illinois Office of Attorney General), federal  
18 agencies (e.g., the U.S. Department of Health and Human Services), community-based  
19 organizations (e.g., National Housing Trust, Natural Resources Defense Council, Sierra  
20 Club), and private utilities (e.g., Toledo Water, Entergy Services, Xcel Energy d/b/a  
21 Public Service of Colorado). In addition to state-specific and utility-specific work, I

1 engage in national work throughout the United States. For example, in 2020, I  
2 represented a coalition of major national consumer organizations to comment on the  
3 Environmental Protection Agency's proposed framework by which to judge community  
4 financial capability. I have a continuing project with the Natural Resources Defense  
5 Council working to develop a tool by which to assess the financial impact of differing  
6 types of low-income bill assistance. In 2020, I completed a study of water affordability  
7 in twelve U.S. cities for the London-based newspaper, The Guardian. In 2021, I authored  
8 a Water Affordability Plan for the City of Toledo (OH) under contract with the City. I  
9 continue to be of counsel to the National Coalition for Legislation on Affordable Water  
10 (NCLA-Water). A brief description of my professional background is provided in  
11 Appendix A.

12 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

13 A. After receiving my undergraduate degree in 1975 (Iowa State University), I obtained  
14 further training in both law and economics. I received my law degree in 1981 (University  
15 of Florida). I received my Master's Degree (regulatory economics) from the MacGregor  
16 School in 1993.

17 **Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY**  
18 **ISSUES?**

19 A. Yes. I have published three books and more than 80 articles in scholarly and trade  
20 journals, primarily on low-income utility and housing issues. I have published an equal  
21 number of technical reports for various clients on energy, water, telecommunications and

1 other associated low-income utility issues. A summary of my publications is included in  
2 Appendix A.

3 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY**  
4 **COMMISSIONS?**

5 A. Yes. I have testified in each Philadelphia Water Department general rate case since at  
6 least 2005, including the last four general rate cases before the Philadelphia Water, Sewer  
7 and Storm Water Rate Board (hereafter, “Board” or “Water Board”). In addition, I have  
8 testified before the Pennsylvania Public Utility Commission (“PUC” or “Commission”)  
9 on dozens of occasions, most recently including rate cases involving Pittsburgh Water  
10 and Sewer Authority (PWSA) and Pennsylvania American Water Company (PAWC)  
11 regarding utility issues affecting low-income customers and customer service. I have  
12 also testified in more than 320 regulatory proceedings in 43 states and various Canadian  
13 provinces on a wide range of utility issues. A list of the jurisdictions in which I have  
14 testified is listed in Appendix A.

15 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR DIRECT TESTIMONY.**

16 A. The purpose of my Direct Testimony is to review the following issues with respect to  
17 PWD rates and its low-income assistance program as follows:

- 18 ➤ To review the affordability implications of PWD’s proposed rate hike;
- 19 ➤ To review the enrollment in the PWD’s Tiered Assistance Program (TAP)  
20 along with how the under-enrollment in TAP affects rates which PWD seeks  
21 to have approved in this proceeding;
- 22 ➤ To review PWD’s performance on low-income and credit and collection  
23 issues and to assess how PWD might be further accountable for its under-

1 performance which increases the rates which PWD seeks to have approved in  
2 this proceeding;

3 ➤ To review the unreasonable and unlawful implementation to date of the  
4 forgiveness requirements of pre-TAP arrears as required by City ordinance  
5 and PWD regulations;

6 ➤ To review the reasonableness of the ratemaking treatment of non-cost-based  
7 late payment charges and to suggest reasonable earmarks;

8 ➤ To review PWD’s compliance with TAP arrearage forgiveness requirements  
9 set forth in City ordinance and PWD regulations as they relate to PWD lien  
10 policies;

11 ➤ To review PWD’s compliance with TAP arrearage forgiveness requirements  
12 set forth in City ordinance and PWD regulations as they relate to PWD’s  
13 sequestration practices; and

14 ➤ To review whether PWD reasonably complied with the terms of the  
15 Settlement of the 2021 PWD rate proceeding.

16 **Q. CAN YOU SUMMARIZE THE RECOMMENDATIONS YOU MAKE IN YOUR**  
17 **DIRECT TESTIMONY?**

18 A. Yes. Based on the data and discussion in my testimony below, I recommend as follows:

19 ➤ PWD should file, within 60 days of the Final Rate Determination in this  
20 proceeding, a detailed report of the steps that it has taken to: (1) enter into a data-  
21 sharing agreement with the appropriate City officials to allow the automatic  
22 enrollment of OOPA Tier 4 and Tier 5 customers into TAP; (2) enter into a data-  
23 sharing agreement with the appropriate City officials to allow for the use of IDEA  
24 data to automatically enroll customers meeting income and residency  
25 requirements into TAP; (3) enter into a data-sharing agreement with the  
26 appropriate City officials to allow for the automatic cross-enrollment of PGW  
27 CRP customers into TAP; and (4) enter into a data-sharing agreement with the  
28 Commonwealth providing for a cross-enrollment of LIHWAP recipients into  
29 TAP.

30 ➤ PWD, within 180 days of a Final Rate Determination in this proceeding, should  
31 implement a text-based system of reminding TAP participants of the need to  
32 recertify as well as a text-based system for allowing customers to submit  
33 necessary recertification documents. I further recommend that PWD submit to

1 the Rate Board monthly reports which documents: (1) its progress on  
2 implementing these text-based systems; (2) the number of customer reminders  
3 provided through this system; and (3) the number of recertifications which are  
4 received through this system.

5 ➤ An estimated increase in PWD revenue should be used to reduce PWD's request  
6 for rate relief in this proceeding, attributable to the improved collectability of  
7 TAP billings of \$3,988,498. An estimated increase in PWD revenue attributable  
8 to the improved collectability of TAP Rider revenue of \$4,926,821 should also be  
9 used to reduce the revenues needed to be included in the rate increase which PWD  
10 seeks in this proceeding.

11 ➤ PWD and the Public Advocate have proposed a settlement of the TAP-R for FY  
12 2024 that reflects the participation rate I utilize above. Accordingly, both  
13 elements of the adjustment I recommend should be adopted for FY24. Since I do  
14 not have an agreed-upon participation rate for FY25, I further recommend that the  
15 adjustment be continued through that Fiscal Year as well.

16 ➤ In addition to identifying the specific data that PWD should be required to track  
17 on a monthly basis,<sup>1</sup> by the end of calendar year 2023, data should be reported by  
18 zip code to allow PWD (as well as the Rate Board and other stakeholders) to  
19 review the reasonableness of its customer service and collection performance.  
20 Monthly zip code data that should be reported includes the following:

- 21 ➤ The dollars of billed revenue to residential customers;
- 22 ➤ The dollars of receipts actually collected from residential customers;
- 23 ➤ The number of bills rendered to residential customers;
- 24 ➤ The number of payments received by or on behalf of residential customers;
- 25 ➤ The mean and median residential customer bill;
- 26 ➤ The aggregate dollars of residential arrears;
- 27 ➤ The number of residential accounts in arrears.
- 28 ➤ The percentage of residential accounts in arrears;

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<sup>1</sup> While I refer to reporting of monthly data, that does not mean that such data needs to be reported or filed monthly. Data can be reported on an annual basis so long as the reported data includes monthly information.



- 1           ➤ The average residential arrears of residential accounts in arrears;
- 2           ➤ The number of residential accounts with a \$0 balance by month;
- 3           ➤ The number of shutoff notices issued to residential accounts;
- 4           ➤ The average arrears on residential accounts to whom a shutoff notice was  
5           issued;
- 6           ➤ The number of residential nonpayment disconnections;
- 7           ➤ The average arrears on residential accounts disconnected for nonpayment;
- 8           ➤ The aggregate dollars of arrears on disconnected residential accounts;
- 9           ➤ The number of residential reconnections after a nonpayment disconnection;
- 10          ➤ The number of residential accounts in arrears more than 30 days not on  
11          agreement;
- 12          ➤ The dollars of residential arrears (older than 30 days) not on agreement;
- 13          ➤ The average arrears of accounts in arrears (more than 30 days) not on  
14          agreement;
- 15          ➤ The number of residential accounts in arrears (more than 30 days) on  
16          agreement;
- 17          ➤ The dollars of residential arrears (older than 30 days) on agreement; or
- 18          ➤ The average arrears of accounts in arrears more than 30 days on agreement.
- 19          ➤ PWD should provide the Rate Board an account-specific accounting of TAP  
20          participants by month starting on July 1, 2022 and ending June 30, 2023 that  
21          reports for each account: (1) the total dollars of pre-program arrears existing on  
22          each TAP account in each month; (2) the total dollars for current service  
23          appearing on bills for each account beginning with July 2022 and continuing until  
24          the accounting is complete; (3) the total dollars paid on behalf of that account  
25          beginning with July 2022 and continuing until the accounting is complete; (4) the  
26          total dollars of arrearage forgiveness that have been credited to the account  
27          beginning in July 2022 and continuing until the accounting is complete. To the  
28          extent that this accounting reveals arrearage forgiveness that had been earned, but  
29          had not been granted, that arrearage forgiveness should be retroactively credited

1 to the customer's account irrespective of whether the customer remains a TAP  
2 participant.

3 ➤ PWD should provide the Rate Board an account-specific accounting of TAP  
4 participants by month starting on July 1, 2022 and continuing through June 30,  
5 2023 that reports for each account: (1) the total number of TAP participants in  
6 each month that had, at some point in the period September 2020 through June  
7 2022, been a TAP participant;<sup>2</sup> (2) the total dollars of pre-program arrears existing  
8 on that account as of July 2022; (2) the total dollars for current service appearing  
9 on bills for each account beginning with September 2020 and continuing until  
10 July 1, 2022; (3) the total dollars paid on behalf of that account beginning with  
11 September 1, 2020 and continuing until July 1, 2022; and (4) the total dollars of  
12 arrearage forgiveness that were credited to the account beginning in the month in  
13 which the customer re-enrolled in TAP. To the extent that this accounting reveals  
14 arrearage forgiveness that had been earned pursuant to the City's regulations, but  
15 had not been granted, that arrearage forgiveness should be retroactively credited  
16 to the customer's account irrespective of whether the customer remains a TAP  
17 participant.

18 ➤ PWD should provide ratable retroactive arrearage forgiveness to all future new  
19 TAP enrollees who were prior TAP participants bringing preprogram arrears into  
20 the program, and who made payments during the period September 2020 through  
21 June 2022. In so doing, PWD would simply be complying with the City's  
22 regulation providing that "as of July 1, 2022, all Customers maintaining  
23 enrollment in TAP will receive a one-time lump sum forgiveness of Pre-TAP  
24 arrears, in an amount calculated by multiplying the amount of the Customer's Pre-  
25 TAP arrears by 1/24 and then by the number of full monthly payments of TAP  
26 Bills issued on or after September 1, 2020." (PWD regulations, section 206.7(c)).

27 ➤ PWD should refund, either as a bill credit or as a cash payment to the customer, at  
28 the customer's discretion, all dollars of payments made by the customer toward  
29 pre-program arrearages that should, under the regulation, have been ratably,  
30 retroactively, forgiven. The value of the refunds should be escalated from the  
31 date the forgiveness should have been provided in the first instance to the date on  
32 which it is provided at a rate equal to the short-term borrowing of unsecured  
33 residential credit.

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<sup>2</sup> PWD concedes that it can track applications that are received from customers who had previously been enrolled in TAP. (PA-I-7).

- 1 ➤ For the period July 2022 to present, PWD should provide an account-specific  
2 auditing of occupant TAP participants. This auditing should include: (1) the total  
3 dollars of arrears on the occupant’s property existing at the time the occupant  
4 became a TAP participant; (2) the total dollars of arrears that were included on the  
5 occupant’s TAP account as a “pre-TAP arrears” subject to forgiveness; and (3)  
6 the proportion of pre-TAP arrears that have been forgiven to date. To the extent  
7 that the dollars of arrears on the occupant’s property are less than the dollars of  
8 arrears deemed to be “pre-TAP arrears” subject to forgiveness, the amount of pre-  
9 TAP arrears should be adjusted to include the larger amount and the customer’s  
10 account should be retroactively credited with the dollars of arrears based on that  
11 larger amount.
- 12 ➤ A portion of PWD’s late payment charges should be earmarked for the programs I  
13 explain below. In adopting an earmark in this fashion, PWD will be devoting the  
14 late payment charge revenue to the purposes for which the charges were intended.  
15 By funding the programs I identify below, rather than simply being allocated as  
16 “Other Operating Revenue” to all customer classes, the late payment charges will  
17 be put to work to help accelerate payments, reduce arrears, reduce bad debt, and  
18 thus reduce total costs to all PWD customers. In addition, by funding the  
19 programs I identify below, PWD will be returning those dollars to benefit the  
20 customer base that is most likely to have paid those charges with which to begin.
- 21 ➤ Within 90 days after issuance of a Final Rate Determination in this proceeding,  
22 PWD should submit a two year inflation-adjusted LICAP budget, supported by  
23 documentation from PWD’s LICAP contractor, for FY24, FY25 and FY26. This  
24 inflation-adjusted budget should be funded through PWD’s late payment charge  
25 revenue. An *additional* LICAP budget should be directed to the number of TAP  
26 participants which exceeds the number of participants as of July 1, 2023.
- 27 ➤ PWD should earmark a portion of late payment charge revenues to fund a water  
28 conservation component to the Low-Income Usage Reduction Program (LIURP)  
29 jobs completed by its natural gas and electric sister utilities.
- 30 ➤ PWD should earmark a portion of the non-cost-based late payment revenue it  
31 generates each year to fund a pilot low-income interior plumbing repair program.  
32 The program I recommend below mirrors the low-income leak repair program  
33 recently approved by the Pennsylvania PUC for the Pittsburgh Water and Sewer  
34 Authority (PWSA), another major municipal water utility serving low-income  
35 communities in Pennsylvania.

- 1           ➤ PWD should earmark no less than \$3.0 million a year from late payment charge  
2 revenues to use as additional financial support provided to UESF.<sup>3</sup> In conjunction  
3 with that increased budget, I recommend that the earmarked funds be allowed for  
4 arrearage balances exceeding \$500. Grants made using these funds should be  
5 permitted irrespective of the customer’s shutoff status; should be permitted for  
6 customers with income not to exceed 250% of Poverty; and should be permitted  
7 for non-customer tenants who can demonstrate that they are required to pay their  
8 water bills.
- 9           ➤ PWD should adopt a low-income “lien blocker” for TAP participants. Moreover,  
10 PWD should declare that pre-program arrearages that have been frozen pursuant  
11 to TAP, and made eligible for forgiveness, are not claims that are “due” to the  
12 City and are not considered “unpaid” so long as the customer remains a  
13 participant in TAP.
- 14          ➤ \$564,975 (6,176 x \$91.45) in PWD expenses associated with TAP lien fees  
15 should be disallowed in this proceeding.
- 16          ➤ PWD should retain an outside auditor to review all low-income households that  
17 have been TAP participants at some point on and after July 1, 2022. That auditor  
18 should review each TAP participant who was a homeowner or occupant at the  
19 time the participant enrolled in TAP. For each of those customers, the auditor  
20 should determine, and report to the Rate Board, with a public disclosure of the  
21 report, every instance in which an owner or occupant did *not* have “the sum of *all*  
22 *unpaid service, usage, and stormwater charges at the property*, calculated at the  
23 time of first enrollment in TAP. . .” transferred to and/or recognized as pre-TAP  
24 arrears subject to forgiveness. The audit should identify the dollar amount of pre-  
25 TAP arrears that the TAP participant was required to pay in violation of City  
26 ordinance and regulations. Finally, the auditor should determine, on a case-by-  
27 case basis, the amount of pre-TAP arrears that were not forgiven pursuant to City  
28 regulations. In addition to currently active customers, PWD should make diligent  
29 efforts to locate households who PWD unlawfully charged rates, and/or  
30 unlawfully denied forgiveness, but who do not remain active PWD customers.  
31 The process of auditing the dollars which PWD either unlawfully charged, and/or  
32 unlawfully failed to forgive, should be borne by PWD, and should not be charged  
33 to ratepayers.

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<sup>3</sup> The \$3.0 million, in other words, would be incremental to the matching grants that PWD currently provides.

- 1           ➤ PWD should file, within 60 days after a Final Rate Determination in this  
2           proceeding a Customer Education and Outreach Plan with the Rate Board. This  
3           Plan should include the following elements:
- 4           ➤ An identifications, by Census Tract, of neighborhoods with high penetrations  
5           of Poverty having disproportionately low penetrations of TAP participants;
- 6           ➤ An identification, by Census Tract, of neighborhoods with high penetrations  
7           of low-income Black TAP nonparticipants;
- 8           ➤ An outreach plan identifying the means by which PWD will engage  
9           *grassroots* outreach for new first-time TAP enrollment in the neighborhoods  
10          identified in the first two sections;
- 11          ➤ An outreach plan directed toward making specific contact within an identified  
12          time-certain among: (1) Black community leaders, and (2) Black grassroots  
13          community organizations, for purposes of promoting new first-time TAP  
14          enrollment;
- 15          ➤ The outreach plans submitted in response to the two directives presented  
16          above shall include: (1) the name(s) of the PWD staffperson(s) (or newly  
17          created positions) charged with implementing those plans; (2) the financial  
18          and other resources to be devoted to implementing the plans; (3) the timeline  
19          in which the plan will be implemented; (4) measurable outcome metrics by  
20          which the success of the plan will be measured; and (5) the process by which  
21          actual outcomes will be compared to these measurable outcomes for purposes  
22          of targeting those processes that are in most need of improvement, setting  
23          realistic improvement goals, and selecting an appropriate process  
24          improvement technique.

25          The development and implementation of the Customer Education and Outreach Plan  
26          described above should be funded through late payment charges as described in my  
27          testimony above.

28          **Part 1. The Impact of PWD’s Proposed Rate Hike on Low-Income Customers.**

29          **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
30          **TESTIMONY.**

31          A. In this section of my testimony, I document the impacts which PWD’s proposed rate hike  
32          will have on low-income customers. These impacts largely reflect the unaffordability of

1 water (and sewer and stormwater)<sup>4</sup> service to PWD’s low-income customers. In my  
2 discussion below, I will first document the extent of water unaffordability in  
3 Philadelphia. I will next consider the collections impacts of that unaffordability. I will  
4 finally consider the non-utility impacts on households arising from the unaffordability of  
5 water.

6 **Q. WHAT RATE INCREASES ARE PWD CUSTOMERS FACING GIVEN THE**  
7 **HIKES REQUESTED BY PWD IN THE CURRENT PROCEEDING?**

8 A. At a usage of 450 cubic feet (4.5 ccf) of water per month, PWD rates will increase from  
9 the present bill of \$69.31 per month to a proposed bill of \$83.92 per month in September  
10 2024. The combined rate increase would be 21.1% by September 2024.<sup>5</sup>

11 **A. The Breadth and Depth of Water Unaffordability in Philadelphia.**

12 **Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN THE DEPTH AND**  
13 **BREADTH OF UNAFFORDABILITY?**

14 A. The “breadth” of unaffordability refers to the dispersion of unaffordability through the  
15 City of Philadelphia. Unaffordability, for example, is “broader” if 25 of PWD’s zip  
16 codes have unaffordable burdens than if 15 of PWD’s zip codes do. In contrast, the  
17 “depth” of unaffordability measures by how much a bill is unaffordable. A bill which  
18 represents a burden of 15% of household income, for example, has a deeper  
19 unaffordability than a bill which represents a burden of 6% of household income. In both

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<sup>4</sup> Throughout my testimony, I will refer to these combined services as “water” service unless I explicitly note to the contrary or the context clearly indicates to the contrary.

<sup>5</sup> PWD Exhibit 2, at 1.

1 instances, the bill is unaffordable. However, the 15% burden represents a deeper  
2 unaffordable burden.

3 **Q. HOW HAVE YOU CONSIDERED THE AFFORDABILITY IMPACTS OF**  
4 **THESE PROPOSED RATE INCREASES?**

5 A. I examine the affordability impacts of PWD’s proposed rate hike by looking at low-  
6 income households on a zip code basis. PWD provided the distribution of residential  
7 water customers by zip code. (PA-1-33). Using Census data for Zip Code Tabulation  
8 Areas (ZCTA)<sup>6</sup> on the distribution of Poverty, I distributed PWD’s residential customers  
9 by three Poverty ranges (0 – 50%, 50 – 100%, 100 - 150%) across its service territory.  
10 Using the average bill provided by PWD (at 4.5 ccf),<sup>7</sup> I then calculated water burdens at  
11 the mid-range of each Poverty range.<sup>8</sup> This calculation, mirrors the process dictated by  
12 the Pennsylvania Public Utility Commission (PUC) for estimating the number of low-  
13 income customers for regulated gas, electric, and water/sewer utilities. Using this  
14 methodology, I estimated the number of residential customers by Poverty range and bill

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<sup>6</sup> ZCTAs are nearly, but not quite, identical to Zip Codes. ZCTAs are used by the U.S. Census Bureau, while Zip Codes are creatures of the U.S. Postal Service. According to the U.S. Census Bureau: “ZIP Code Tabulation Areas (ZCTAs) are generalized areal representations of United States Postal Service (USPS) ZIP Code service areas. The USPS ZIP Codes identify the individual post office or metropolitan area delivery station associated with mailing addresses. USPS ZIP Codes are not areal features but a collection of mail delivery routes. The term ZCTA was created to differentiate between this entity and true USPS ZIP Codes.” For a generalized discussion of the differences between Zip Codes and ZCTA, *See* U.S. Census Bureau, *ZIP Code Tabulation Areas*, <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/zctas.html> (last visited March 31, 2023).

<sup>7</sup> Using this average bill at a consumption of 4.5 MCF understates the affordability problems faced by low-income PWD customers. According to PWD, average consumption for TAP customers is 7.35 CCF. According to PWD, the typical water bill at 0.45 MCF at proposed rates would be \$27.47 in FY23, \$32.91 in FY24, and \$35.40 in FY25. In contrast, the typical water bill at 0.7 MCF would be \$39.96 in FY23, \$48.25 in FY24, and \$52.05 in FY25. (PA-I-48).

<sup>8</sup> There is one exception. My experience counsels that using the mid-point for 0 – 50% of Poverty sets an income unreasonably low. Accordingly, my “mid-point” for that Poverty range is set at 40%.

1           burden. In calculating the PWD bill affordability, I use “bill burdens.” Bill burdens are a  
 2           simple ratio, with the annual bill placed in the numerator and the household income (by  
 3           zip code and Poverty range) placed in the denominator. The data is set forth in the Table  
 4           below. For example, a household with an average annual bill of \$832 (\$69.31/month x 12  
 5           months) and an annual income of \$10,000 would have a water burden of 8.3% ( $\$832 /$   
 6            $\$10,000 = 0.0832$ ).

Table 1. Estimated PWD Customers by Poverty Range	
Poverty Range	Estimated PWD Residential Customers
0 – 50%	56,110
50 – 100%	60,991
100 – 150%	52,499
Total <150%	169,600

8   **Q.    HAVE YOU HAD OCCASION TO CONSIDER THE DEPTH OF**  
 9   **UNAFFORDABILITY IN EACH RANGE OF POVERTY?**

10   A.    Yes.    The data is set forth in Schedules RDC-1-1 (0 – 50% FPL), RDC-1-2 (50 – 100%  
 11   FPL), and RDC-1-3 (100 – 150% FPL). As can be seen, the bulk of PWD customers  
 12   with income less than 50% of Poverty have burdens that fall between 9% and 11% of  
 13   income.<sup>9</sup> By 2024, given PWD’s proposed rate hikes, those burdens will increase so that  
 14   the bulk of customers in this income range have burdens between 12% and 14% of  
 15   income. For customers with income between 50% and 100% of Poverty, nearly all  
 16   customers have burdens (at average usage) between 5% and 6% of income. By 2024,

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<sup>9</sup> Note the nuance in my conclusion. My conclusion is *not* that “x” number of PWD customers live with particular burdens. Rather, my conclusion is that “x” number of customers live in zip codes in which, given average consumption and average income, bills represent an unaffordable burden.



1 those burdens will fall between 6% and 8% of income. For customers with income  
2 between 100% and 150% of Poverty, burdens are generally between 3% and 4% of  
3 income at present and at the proposed 2023 rates. However, by 2024, half of these  
4 customers will have burdens between 4% and 5% of income.

5 **Q. HAVE YOU HAD OCCASION TO CONSIDER THE BREADTH OF**  
6 **UNAFFORDABILITY IN EACH RANGE OF POVERTY?**

7 A. Yes. Again, the data is set forth in Schedules RDC-1-1 (0 – 50% FPL), RDC-1-2 (50 –  
8 100% FPL), and RDC-1-3 (100 - 150% FPL), The data shows how unaffordability is  
9 spreading ever wider in Philadelphia given PWD’s requested rate hikes. Consider that:

- 10 ➤ For customers with income at 0% – 50% of Poverty, two (2) zip codes have  
11 burdens exceeding 13% at current rates, but 20 zip codes would have burdens  
12 exceeding 13% given PWD’s requested 2024 rates.
- 13 ➤ For customers with income at 50% to 100% of Poverty, while seven (7) zip  
14 codes have burdens exceeding 6% at current rates, 47 zip codes would have  
15 burdens exceeding 6% given PWD’s requested 2024 rates.
- 16 ➤ For customers with income at 100% to 150% of Poverty, while three (3) zip  
17 codes have burdens exceeding 4% at current rates, 27 zip codes would have  
18 burdens exceeding 4% given PWD’s requested 2024 rates.

19 It is clear that PWD’s requested rate hikes is not only driving unaffordability deeper in  
20 Philadelphia, it is spreading unaffordability more broadly throughout the City as well.

21 **B. The Collections Impacts of Water Unaffordability in Philadelphia.**

22 **Q. HAVE YOU HAD AN OPPORTUNITY EXAMINE THE COLLECTIONS**  
23 **IMPACT OF UNAFFORDABLE PWD BILLS?**

1 A. Yes. PWD provided not only the dollar amounts billed to various categories of  
2 customers, but also the dollar amounts actually collected from different categories of  
3 customers. (PA-1-15). For purposes here, in order to consider as much data as possible,  
4 I look at the percentage of bills that have been collected within the first twelve months  
5 after the bills have been rendered. I examine two different categories of customers: (1)  
6 TAP participants (who have bills capped at an affordable percentage of income); and (2)  
7 “TAP customers outside of TAP enrollment.” PWD defines the “TAP customers outside  
8 of TAP enrollment” as being “bills that are issued to customers that have participated in  
9 TAP before or after the bill. They are not TAP bills nor do they have associated TAP  
10 discounts.” (PA-1-15). I examine the time period of Fiscal Year 2019 through Fiscal  
11 Year 2022. The data shows that when bills are unaffordable (TAP Customers Outside of  
12 TAP Enrollment), the amount of bill actually collected was substantially less than when  
13 bills are affordable (TAP participants). Setting aside FY22, the collection rate from TAP  
14 participants in the first 12 months after billing ranged from 50% to 60% greater than the  
15 collection rate for TAP Customers Outside of TAP Enrollment during that same time  
16 period. Thus, while the increased collections may not offset the cost of providing the  
17 TAP discount in its entirety, the increased collections does have the effect of reducing the  
18 cost of providing the discount.

Table 2. Amount of Bills Collected by 12-Months After Billing

		Total Payments <0 Months	Total Payments 1 – 12 Months	Total Payments 0 – 12 Months	Delta
FY22	TAP	1.12%	71.38%	72.50%	38.21%
FY22	TAP Customers Outside of TAP Enrollment	0.58%	33.71%	34.29%	
FY21	TAP	0.62%	71.85%	72.47%	26.34%
FY21	TAP Customers Outside of TAP Enrollment	0.58%	45.55%	46.13%	

1           The Table below shows similar data, but expands the collection to the entire amount  
2           collected after PWD has issued the bills. While one Fiscal Year is not comparable to  
3           another Fiscal Year due to the difference in collection time periods (e.g., FY21 has  
4           collections through 24 months while FY22 only has collections through 12 months), it is  
5           still possible to compare the TAP collections to the collections for TAP Customers  
6           Outside of TAP Enrollment within each year. Nonetheless, it is possible to see that TAP  
7           collections were more than two times higher in FY22; and ranged from 26% (FY19) to  
8           34% (FY21) higher than the corresponding collections for “TAP Customers Outside of  
9           TAP Enrollment.

Table 3. Amount of Bills Collected Subsequent to Billing (All Months) <sup>10</sup>			
		Total Collected	Delta
FY22	TAP	72.50%	38.20%
FY22	TAP Customers Outside of TAP Enrollment	34.30%	
FY21	TAP	83.83%	21.19%
FY21	TAP Customers Outside of TAP Enrollment	62.64%	

1 The improved collectability of bills when low-income bills are made affordable is quite  
 2 clear in this data. Both in the short-term (12 months or less) and in the longer-term (total  
 3 collection period subsequent to billing), the collections rate is 25% to 35% higher for  
 4 TAP recipients than for TAP Customers Outside of TAP Enrollment.<sup>11</sup>

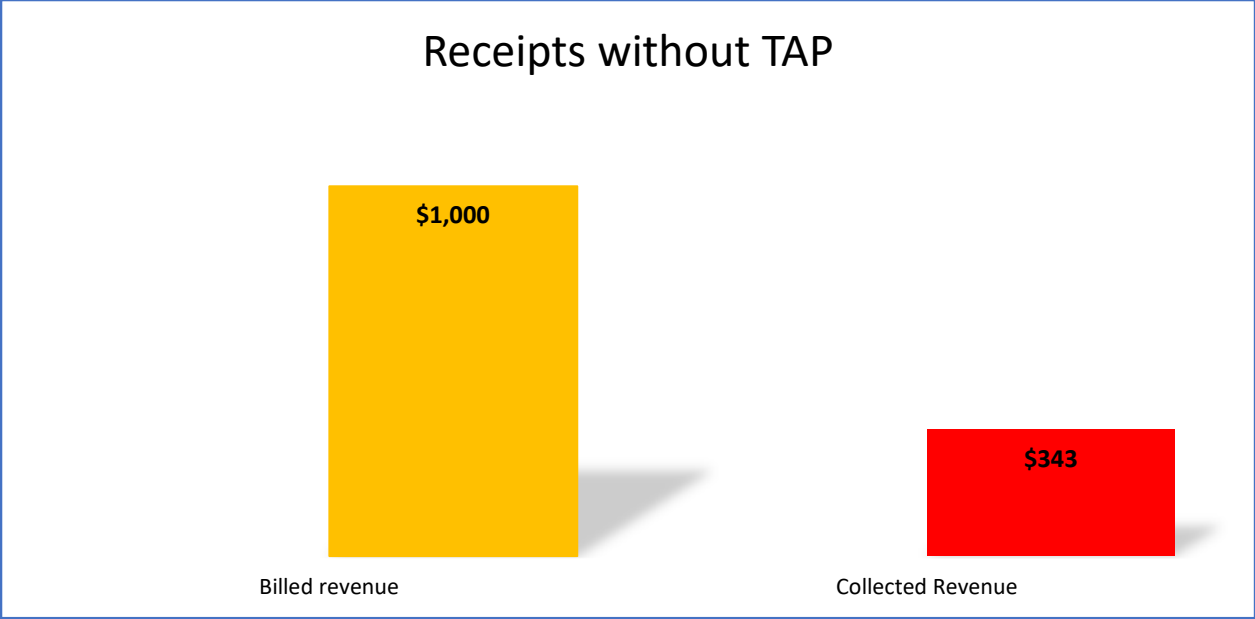
5 **Q. CAN YOU VISUALLY ILLUSTRATE THIS IMPACT?**

6 A. Yes. Let’s assume hypothetically that we have one customer who enrolls in TAP. The  
 7 customer has a pre-TAP annual bill of \$800. Given the 2022 one year collectability for  
 8 low-income customers not enrolled in TAP, PWD bills this customer \$1,000 and collects  
 9 \$343 ( $\$1,000 \times 0.3430 = \$343$ ). In this situation, the remaining \$657 is included in base  
 10 rates given that base rates are established based on the dollars of receipts collected, not on  
 11 the dollars of bills rendered.

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<sup>10</sup> Note that different fiscal years have differing collection periods. This occurs simply because of the time lapse since billing. Accordingly, FY19 has collections through 48 months; FY20 has collections through 36 months; FY21 has collections through 24 months; and FY22 has collections through 12 months.

<sup>11</sup> The collectability is considered at the population basis, not for individual customers. Accordingly, the composition of which TAP and non-TAP customers comprise the populations need not be considered.



1

2

When the customer enrolls in TAP, the bill at standard rates would remain at \$1,000.

3

However, the responsibility for paying that \$1,000 is allocated between different

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ratepayers. Of the \$1,000, \$400 is billed to the TAP participant with the remaining \$600

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billed to other customers through the TAP Rider. Given the difference in collections

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rates, however, the reduction in actual receipts is *much* less than the amount of the TAP

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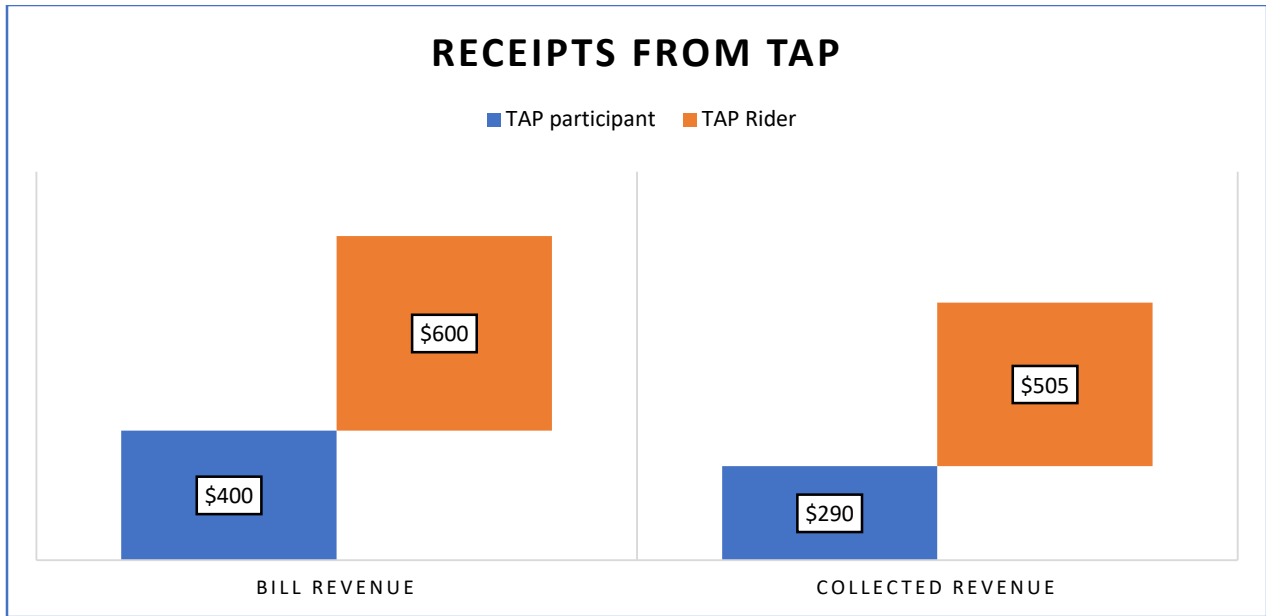
discount. As is evident in the illustration below, While TAP participants are provided a

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\$600 discount off of their hypothetical \$1,000 bill, PWD collects \$795 given the

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improved collections rate for the two components of the bill.



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Overall, as the two illustrations demonstrate, while PWD provides TAP customers with a \$600 discount, PWD ends up collecting \$795 from the \$1,000 in bills given the TAP program, rather than collecting the \$343 it would have collected without the TAP program.

6

7

8

9

This result relates only to the receipts which PWD derives from its billing. It does not address the ratemaking treatment to be accorded the difference in revenue stream (other than it assumes that the TAP discounts are charged to other ratepayers in the form of the TAP Rider).

10

**C. The Non-Utility Implications of Water Unaffordability in Philadelphia.**

11

**Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.**

12

13

A. In this section of my testimony, I explain why continuing access to safe and affordable water service is essential to an adequate quality of life in Philadelphia today. Water

14

1 service in today’s world is an essential human need. Water is needed not only for  
2 drinking, but also for cooking and sewer needs.<sup>12</sup> A 2022 White Paper by the U.S. Water  
3 Alliance states that “for every community in our country, the availability of safe drinking  
4 water and wastewater services is a precondition for public health and prosperity.”<sup>13</sup> The  
5 relationship between race and the loss of this essential service seems increasingly  
6 difficult to deny.<sup>14</sup>

7 **Q. PLEASE IDENTIFY THE RELATIONSHIP BETWEEN ACCESS TO**  
8 **AFFORDABLE WATER AND PUBLIC HEALTH.**

9 A. A recent study published in the American Journal of Preventative Medicine concluded  
10 that “[w]ater shutoffs pose a real threat to human health because the lack of adequate  
11 sanitation can cause diseases to spread and allow people to become sick.”<sup>15</sup> A 2010 report  
12 for the Water Research Foundation (the research arm of the American Water Works  
13 Association), which I co-authored, concluded that “[a] final consideration of importance  
14 to water utilities is the relationship of payment problems to health issues. . . Potential

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<sup>12</sup> See generally, Turning Off the Tap: Massachusetts’ Looking Water Affordability Crisis; see also, Read et al. (2021). Water Service Affordability in Michigan: A Statewide Assessment, Water Center, University of Michigan.

<sup>13</sup> Hara, Willette and Simonson (2022). Making Water a Public Good: The Bigger Picture of Water Affordability, at 1, US Water Alliance.

<sup>14</sup> See generally, Massachusetts Advisory Committee to the U.S. Commission on Civil Rights (December 2020); see also, Foltz-Diaz et al. (2014). The Color of Water: A Report on the Human Right to Water in the City of Boston, Massachusetts Global Action: Boston (MA) (water shutoffs in Boston may have a disproportionate impact on communities of color, even when controlling for income and other variables).

<sup>15</sup> Zhang et al (2021). Water Shutoff Moratoria Lowered COVID-19 Infection and Death Across U.S. States, 2021 American Journal of Preventative Medicine.

1 impacts relate to many of the same public health endpoints targeted by Safe Drinking  
2 Water Act standards such as effects on children and the unborn.”<sup>16</sup>

3 **Q. ARE THERE PARTICULARLY VULNERABLE HOUSEHOLDS?**

4 A. Yes. Water is vital to maintaining hygiene and health. The lack of water has particularly  
5 negative impacts on children, the elderly, women, and persons suffering from an illness  
6 or chronic health concern. As one recent study noted,

7 Dehydration can create threatening chemical imbalances for elderly people.  
8 Women who are menstruating need water to properly cleanse themselves, and  
9 mothers who are nursing need water to maintain their milk supply and their  
10 health. Some people with chronic illness need clean water in order to run and  
11 wash personal medical equipment.<sup>17</sup>

12 **Q. ARE THERE HEALTH ISSUES BEYOND THE ISSUES YOU IDENTIFIED**  
13 **ABOVE?**

14 A. Yes. The loss of water not only presents physical health problems, but also threats to  
15 emotional well-being. Georgetown Law’s “fact-finding” report documented that “people  
16 often experience a profound sense of shame surrounding the disconnection of their water  
17 and their inability to pay.”<sup>18</sup>

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<sup>16</sup> Cromwell, et al. (2010). Best Practices in Customer Payment Assistance Programs, at xxii, Water Research Foundation: Washington D.C. (hereafter “Best Practices”).

<sup>17</sup> Jones and Moulton (2016). The Invisible Crisis: Water Unaffordability in the United States, at 11, Unitarian Universalist Service Committee, Cambridge: MA; *see also*, Bipartisan Policy Center (September 2017). Safeguarding Water Affordability, at 7.

<sup>18</sup> Georgetown Law Human Rights Institute Fact-Finding Practicum (April 2013). “Tapped Out: Threats to the Human Right to Water in the United States,” at 35, Georgetown Law School: Georgetown (VA).



1 The fundamental need for affordable water is recognized not only by laws relating to the  
2 protection of children, but also by laws relating to the habitability of homes. In twenty-  
3 one states, a parent’s inability to provide running water in the home can be considered  
4 “child neglect.”<sup>19</sup> The lack of running water and sanitation is generally considered by  
5 public health inspectors to make a home uninhabitable.<sup>20</sup>

6 **Q. DOES THE LACK OF AFFORDABILITY MANIFEST ITSELF ONLY IN**  
7 **TERMS OF THE LOSS OF WATER SERVICE DUE TO NONPAYMENT?**

8 A. No. The inability to afford water service does not merely manifest itself in the  
9 nonpayment of water bills (and the possible loss of service appertaining thereto). The  
10 paid-but-unaffordable bill is a common phenomenon. Even when people pay their water  
11 bills, the unaffordability of service may force customers to make extraordinary trade-offs.  
12 For example, the 2021 Water Affordability Plan I recently authored for Toledo (OH)  
13 found that customers who paid their bills on time often resorted to measures such as  
14 borrowing money, reducing spending on other life essentials, or foregoing necessary  
15 home or auto repairs in order to have sufficient money to make those payments.<sup>21</sup> The  
16 School for Environment and Sustainability at the University of Michigan concurred. In a  
17 2021 study,<sup>22</sup> a University of Michigan research team undertook a study on low-income  
18 experiences in Wayne, Oakland, and Macomb Counties. Of the 413 households who

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<sup>19</sup> *Id.*, at 34.

<sup>20</sup> *Id.*, at 32 – 33.

<sup>21</sup> Colton (October 2021). Water Affordability Plan: City of Toledo (OH), at 71–90, prepared for the City of Toledo, Department of Public Utilities, Toledo Consumer Protection and Water Affordability Task Force.

<sup>22</sup> School for Environment and Sustainability, University of Michigan (2021). Household Water Security in Metropolitan Detroit: Measuring the Affordability Gap.

1 participated, 74 had had their water shutoff in the past two years (18%). In addition, the  
2 study found that 84% of residents reported cutting back on monthly expenses in order to  
3 pay their water bills, including 38% cutting back on medicines; 47% reducing medical or  
4 dental care; 63% cutting back on the purchase of fresh produce; 82% cutting back on the  
5 purchase of clothing; and 60% reducing their purchase of school supplies.<sup>23</sup>

6 Moreover, the unaffordability of water tends to be self-reinforcing. Unaffordable water  
7 bills, for example, tend to make it less likely that low-income customers will be able to  
8 afford plumbing repairs to fix leaks that might further increase usage (and consequently,  
9 bills).<sup>24</sup>

10 **Q. WHAT DO YOU CONCLUDE?**

11 A. Water cannot be viewed as just another commodity sold by a public agency, with access  
12 denied when customers find the cost to be unaffordable. PWD should acknowledge this  
13 “connection between affordability and public health as another compelling reason to go  
14 beyond normal commercial collections practices and help meet higher community goals  
15 in this area of service.”<sup>25</sup> The WRF report found that “[w]ater utilities must remain  
16 mindful that public health is their core business and there is as much health impact at

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<sup>23</sup> Id., at 2.

<sup>24</sup> Levine (2019). Promoting Affordability of Public Water and Sewer Service for Low-Income Households in New Jersey: Policy Options, at 9, prepared for Jersey Water works Asset Management and Finance Committee.

<sup>25</sup> Best Practices, supra, at xxii.

1 stake in the manner in which they obtain revenue from low-income households as there is  
2 in treating the water to high standards.”<sup>26</sup>

3 **D. Why TAP Does Not Adequately Protect Low-Income PWD Customers.**

4 **Q. PLEASE EXPLAIN WHY THE ADOPTION OF TAP DOES NOT ADEQUATELY**  
5 **PROTECT PWD CUSTOMERS FROM UNAFFORDABLE BILLS.**

6 A. PWD’s adoption of TAP provides substantial protection to those low-income PWD  
7 customers who participate in TAP. As of the most recent month of data, however, TAP  
8 has a relatively low rate of participation. In January 2023, PWD reported having 15,032  
9 TAP participants, and reported issuing 15,177 TAP bills. (PA-1-56). In contrast, PWD  
10 has an estimated 170,000 customers with income at or below 150% of the Federal  
11 Poverty Level. In short, while TAP provides important protections to low-income  
12 customers, TAP serves only 9% of customers with income below 150% of FPL.<sup>27</sup>

13 In February 2022, PWD reported in its TAP Rider filing (RFC-4) that it expected to  
14 substantially ramp up TAP participation. According to the PWD filing:

15 It should be noted that the City of Philadelphia is working with the  
16 Commonwealth of Pennsylvania to devise a process to expedite the eligibility  
17 determination for TAP. More specifically, starting in July 2022, PWD  
18 anticipates enrolling PWD customers into TAP who have been deemed  
19 eligible for the Commonwealth administered Low-Income Household Water  
20 Assistance Program’s (LIHWAP) through a reciprocal eligibility  
21 determination, rather than direct application by the customer. This is referred

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<sup>26</sup> Best Practices, supra, at 29.

<sup>27</sup> While some portion of TAP applicants would receive more affordable bills by remaining off of TAP, that number is consistently small. During June through September 2022, for example, 4,272 applicants were approved for TAP, while 2,859 were not. Of those who were not, 671 (9.4% of the total) were enrolled in a “more affordable alternative.”

1 to as “automatic enrollment”, colloquially. For purposes of projecting TAP  
2 enrollment for the Next Rate Period, Raftelis has projected 12,500 LIHWAP  
3 participants being added to TAP by December 2022. As reflected in this  
4 TAP-R filing, the automatic enrollment of LIHWAP customers into TAP  
5 ramps up over consecutive months, from July to November 2022, with  
6 increasingly more new customers added each month.

7 (2022 TAP Rider Reconciliation, at RFC-4). That ramp-up never occurred. As shown in  
8 the Table below, the actual TAP participation for July through December 2022 was  
9 substantially less than that which PWD reported. This failure to increase TAP  
10 participation occurred notwithstanding the fact that 7,640 PWD customers received  
11 LIHWAP grants. (PA-II-27).<sup>28</sup>

Table 4. TAP Participation (July 2022 – January 2023)  
(PA-1-56)

	No. TAP Participants
July 2022	10,915
August 2022	12,043
September 2022	13,113
October 2022	13,748
November 2022	14,288
December 2022	14,684
January 2023	15,032

12 The rates charged through the TAP Rider, as approved based on PWD’s projections, were  
13 based on a projected *average monthly number* of TAP participants for the next rate period  
14 (September 2022 to August 2023) of 24,199. As of January 2023, PWD was 10,000  
15 participants short of achieving that projected *average* monthly enrollment.

<sup>28</sup> Not all LIHWAP recipient would necessarily be income eligible to participate in TAP.

1 In short, while TAP provides important affordability protections, given the  
2 implementation of TAP by PWD, the program will not protect PWD's low-income  
3 customer population from the harms of the rate hikes requested in this proceeding.

4 **Q. IS THERE A GEOGRAPHIC FAILURE OF PWD TO ENROLL LOW-INCOME**  
5 **CUSTOMERS IN TAP?**

6 A. Yes. PWD provided the number of customers, along with the number of TAP  
7 participants (including TAP-only and TAP combined with the Senior Discount) by zip  
8 code. I matched that zip code data to Census data for 48 zip codes.<sup>29</sup> I then examined the  
9 TAP participation in the ten zip codes with the highest population, and the highest  
10 percentage, of customers with income at or below 150% of FPL. Of the five zip codes  
11 with the largest *population* having incomes below 150% of Poverty (19134, 19139,  
12 19120, 19140, 19132) (identified as those below the waved line in the Table below),  
13 there were an estimated 47,231 customers who have income at or below 150% FPL, and  
14 have a total of 4,161 TAP participants.

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<sup>29</sup> There were five zip codes which PWD reported as comprising, in part, its service territory which did not have matching Census data.

Zip Code	No. Customers <150% FPL	No. TAP Participants <sup>30</sup>	Pct Customers <150% FPL	Pct of Customers <150% TAP Participants
19122	2,962	134	46.7%	4.5%
19104	5,085	247	54.8%	4.9%
19121	6,551	369	49.9%	5.6%
19141	4,186	420	44.5%	10.0%
19133	5,481	483	54.1%	8.8%
19139	6,590	634	44.0%	9.6%
19134	11,528	753	51.2%	6.5%
19132	8,833	801	48.3%	9.1%
19120	9,443	972	45.8%	10.3%
19140	10,837	1,001	53.3%	9.2%

1 As the Table above shows in the ten zip codes with the highest *percentage* of customers  
2 that are income-eligible for TAP, PWD fails to enroll 96.1% of the estimated number of  
3 income-eligible customers. In the ten zip codes with the highest *population* of customers  
4 that are income-eligible for TAP, PWD fails to enroll nearly 92% of the income-eligible  
5 customers.

6 **Q. WHAT DO YOU CONCLUDE?**

7 A. I will further address the operational and ratemaking implications of PWD’s failure to  
8 enroll a reasonable number of TAP participants in my testimony below. For purposes  
9 here, I conclude simply that TAP does not present a reasonable protection for PWD’s  
10 low-income customer base against the harms that are associated with the rate hikes that  
11 PWD seeks in this proceeding.

<sup>30</sup> Includes TAP only and TAP plus Senior Citizen Discount.

1 **Part 2. Unreasonably Low TAP Enrollment Costs PWD Revenue.**

2 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
3 **TESTIMONY.**

4 A. In this section of my testimony, I review TAP participation to determine whether PWD is  
5 reasonably enrolling and maintaining the enrollment of low-income customers in its TAP.  
6 To the extent that TAP is under-enrolled, I review the reasonable mechanisms by which  
7 TAP enrollment can be increased. Finally, I review the ratemaking implications of  
8 increasing the enrollment, and maintenance of enrollment, of TAP participants.

9 **A. TAP Enrollment is Unreasonably Low.**

10 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR CONCLUSION THAT TAP**  
11 **PARTICIPATION IS UNREASONABLY LOW.**

12 A. The participation rate in TAP represents an unreasonably low percentage of the estimated  
13 number of low-income customers served by PWD. Based on U.S. Census data, and on  
14 the number of residential customers served by PWD in each zip code comprising its  
15 service territory, PWD serves roughly 170,000 customers with income at or below 150%  
16 of the Poverty Level. In contrast, as of January 2023, the last month for which PWD  
17 provided data, PWD had 15,032 active TAP participants. (PA-I-56). PWD, in other  
18 words, is serving fewer than nine percent (9%) of its low-income customers through  
19 TAP.

20 Not only does PWD under-serve its low-income population as a whole, but it also  
21 underserves its lowest income population (those with income at or below 50% of  
22 Poverty) in particular. While 26% of PWD's income-eligible (i.e., below 150% FPL)  
23 customer base, in fact, have income less than 50% of Poverty, only 19% of its approved

1 TAP applications between July 2017 and February 2023 have had income in that Poverty  
2 range. (PA-I-25-E5\_2022). In contrast, while 28% of PWD’s income-eligible customer  
3 base would have income between 50% and 100% of Poverty, more than 50% of the  
4 approved TAP applications have had income in that Poverty range. (Id.)

5 PWD’s data shows, further, the extent that it has failed to retain the enrollment of TAP  
6 participants once their applications have been approved. According to PWD, between  
7 July 1, 2017 and February 20, 2023, PWD enrolled 52,794 TAP participants. (Id.) As  
8 stated immediately above, however, as of January 2023, PWD had only 15,032 active  
9 TAP participants, less than 30% of the total population which it has enrolled. PWD, in  
10 other words, has “lost” the enrollment of more than seven-of-ten low-income customers  
11 which it enrolled in the first instance.

12 Some parts of Philadelphia are virtually unserved by TAP. There are six Philadelphia zip  
13 codes that have fewer than 10 TAP participants, with a total of 11 TAP participants in  
14 those zip codes. Those zip codes have an estimated 1,203 customers with income less  
15 than 150% of Poverty. There are eight Philadelphia zip codes with fewer than 20 TAP  
16 participants (29 total for the eight zip codes), even though those zip codes have nearly  
17 1,400 customers with income at or below 150% of FPL.

18 **Q. DOES PWD HAVE A DIFFICULT TIME ENROLLING TAP PARTICIPANTS?**

19 A. Yes. PWD continues to have a difficult time enrolling TAP participants. An  
20 extraordinary number of TAP applications are denied each month for a failure to provide  
21 “complete” income or residence information. The number denied for incomplete  
22 information is highly disproportionate to the number of applicants whose applications are



1 denied for a failure to meet the income or residence requirements. The data for the most  
 2 recent twelve months available is set forth in the Table below.

Table 6. Enrollment Denials by Selected Reasons for Denial (Incomplete Income/Residence Information, Failure to Meet Income/Residence Requirements (March 2022 – February 2023))					
Month	Total Denied	Reason for Denial			
		Missing or Invalid Income/Residence Documentation	Failed to Meet Income <i>and</i> Residence	Failed to Meet Income	Failed to Meet Residence
Mar 2022	979	895	0	27	15
Apr 2022	962	898	0	21	13
May 2022	587	531	0	15	16
Jun 2022	190	114	0	21	9
Jul 2022	441	329	0	39	35
Aug 2022	724	451	2	54	62
Sept 2022	679	489	1	47	57
Oct 2022	474	362	0	23	21
Nov 2022	297	221	0	24	21
Dec 2022	269	192	0	19	23
Jan 2023	222	156	2	18	13
Feb 2023	194	140	1	14	12
Total	6,018	4,778 (79%)	6	322	297

3 As can be seen in the Table above, 80% of the TAP applications that were denied were  
 4 *not* denied because customers were found to be ineligible. They were instead denied  
 5 because the applicants failed, in the opinion of PWD, to provide complete or “valid”  
 6 documentation of their income or residence. There were *eight* times *more* applicants who  
 7 were denied for a failure to provide complete or “valid” documentation than were denied  
 8 for failing to meet the income and/or residence requirements.

1 **B. PWD Has Reasonable Mechanisms to Increase TAP Enrollment**

2 **Q. PLEASE EXPLAIN THE TWO BASIC APPROACHES BY WHICH PWD**  
3 **COULD INCREASE ITS TOTAL TAP PARTICIPATION RATE.**

4 A. PWD has available two basic approaches by which it can increase its total TAP  
5 participation rate. On the one hand, PWD can increase new enrollment in TAP. On the  
6 other hand, PWD can increase the extent to which current TAP participants are retained  
7 in the program rather than being removed due to a failure to recertify.

8 **Q. WHY IS THIS AN ISSUE TO BE ADDRESSED IN A RATE PROCEEDING?**

9 A. It is fundamental utility law that a utility, however regulated, has an obligation to offer its  
10 customers the most favorable rate available. The discussion I present in this section of  
11 my testimony falls four-square within the dictates of that fundamental utility obligation.

12 **Q. DOES PWD HAVE REASONABLE PROCESSES BY WHICH TO IMPROVE**  
13 **TAP ENROLLMENT?**

14 A. Yes. The following reasonable steps are available to PWD by which to improve the  
15 enrollment of low-income customers into TAP:

16 First, PWD should enter into an inter-agency agreement by which to cross-enroll  
17 income-eligible households who are currently participating in the City of Philadelphia's  
18 Owner Occupied Payment Agreement (OOPA) program. This recommendation goes  
19 beyond the action that is required pursuant to Section 19-1605(3)(I)(2) of the City Code.  
20 That provision requires PWD simply to accept the determination of income and/or  
21 residence made for OOPA for purposes of establishing income and/or residence for TAP.  
22 I recommend that PWD work with the City to cross-enroll income-eligible households in

1 TAP. This does not occur at present. According to PWD, only 73 TAP participants were  
2 enrolled having had their income and/or residence established by reference to OOPA in  
3 2021. In 2022, only 139 TAP participants were enrolled given reference to OOPA. (PA-  
4 I-1). When asked, however, for a breakdown of TAP enrollment by the platform used for  
5 enrollment, weekly reports on applications and enrollments from July 1, 2017 through  
6 February 21, 2023 identified not one TAP participant who had entered the program  
7 through cross-enrollment with OOPA. This lack of cross-enrollment occurs despite the  
8 fact that the Department of Revenue, in administering OOPA, must have both household  
9 income (defined as the income of all household members) and household size in order to  
10 administer the OOPA “tiers.” (See, 2020 Annual Report on Owner-Occupied Payment  
11 Agreement (OOPA),” at 4). In 2020, The Department of Revenue approved 7,909 OOPA  
12 agreements (2020 OOPA Report, at 7).<sup>31</sup> The City’s Department of Revenue reported  
13 that, in 2020, it entered into OOPA agreements with 8,260 “Tier 4” households (income  
14 at or below 30% of the Area Median Income) and 1,736 “Tier 5” households (income at  
15 or below 15% of Area Median Income. The Table below compares the maximum  
16 income for OOPA Tier 4 and OOPA Tier 5 to 150% of the Federal Poverty Level for  
17 households with from one to three household members. The data demonstrates that the  
18 maximum income eligibility for Tier 4 and Tier 5 would qualify OOPA participants for  
19 TAP.

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<sup>31</sup> The administrative differences in income determination have not been considered substantial in other circumstances. For example, as with TAP, the Customer Assistance Programs (CAPs) implemented by Pennsylvania’s energy utilities exclude the income of minor children, while some of the federal programs upon which CAP eligibility is determined do not.

Table 7. OOPA Maximum Tier 4 and Tier 5 Income Eligibility Compared to 150% of Poverty (Maximum TAP Income Eligibility)<sup>32</sup>

	1	2	3
Tier 5 Highest (monthly)	\$846	\$967	\$1,088
Tier 4 Highest (monthly)	\$1,692	\$1,933	\$2,175
2020 150% FPL (annual)	\$19,140	\$25,860	\$32,580
2020 150% FPL (Monthly)	\$1,595	\$2,155	\$2,715

1 The Department of Revenue has experience in auto-enrolling households in other City  
 2 programs. For example, it reported that beginning in January 2020, when a household  
 3 was enrolled in OOPA, that household would be automatically enrolled in the Homestead  
 4 Exemption as well.

5 Second, PWD should work to cross-enroll PWD customers using data from the City’s  
 6 Office of Integrated Data for Evidence and Action (IDEA) within the Managing  
 7 Director’s Office. PWD uses IDEA “to engage in data-matching of its customers with  
 8 other City administrative data to confirm participation in other assistance programs,  
 9 thereby identifying these customers as a low-income and/or vulnerable customer for  
 10 purposes of shutoff exemption.” (PA-I-88). As of June 2022, nearly a year ago, “when  
 11 the City first completed its identification of residential customers as low-income or of a  
 12 vulnerable population to protect service termination due to nonpayment (sic), there were  
 13 107,119 customers protected.” (PA-I-85). PWD should exercise the same or similar  
 14 “data-matching” through IDEA to identify and enroll its low-income customers as TAP  
 15 participants.

<sup>32</sup> Since the most recent OOPA data available references 2020 incomes, those incomes are compared to 2020 FPL incomes.

1 Third, PWD should work to cross-enroll PWD customers into TAP who have already  
2 been enrolled in the utility affordability program offered by the Philadelphia Gas Works,  
3 PWD's sister municipal utility. Entering into a data-matching agreement with PGW  
4 would be unlike entering into a data-matching agreement with a private utility. Both  
5 PWD and PGW are entities of the same municipal government. PGW is required to  
6 report the participation rate in its Customer Responsibility Program (CRP) each year to  
7 the Pennsylvania PUC. According to the PUC, PGW had enrolled 54,040 CRP  
8 participants in 2019; 55,497 CRP participants in 2020; and 53,466 CRP participants in  
9 2021.<sup>33</sup>

10 Maximum CRP income eligibility is set at 150% of Poverty Level. CRP participants  
11 would thus be income-eligible for TAP. Moreover, accepting PGW's determination of  
12 residence for CRP for purposes of TAP does not differ from PWD's acceptance of other  
13 similar determinations. When asked what it did when it received a LIHWAP grant and  
14 the customer's name did not match the name of the LIHWAP recipient, PWD responded  
15 that:

16 If a LIHWAP recipient name associate with a property did not match the  
17 customer name for that water account, WRB assumed the recipient to be a  
18 tenant or occupant and applied the grant to the water customer's account for  
19 that property regardless of the names not matching. WRB relied on the  
20 Commonwealth's confirmation that the grant recipient had provided  
21 sufficient proof of residency at that address.

22 (PA-VI-19) (emphasis added). Treating PGW data in the same fashion as PWD treats  
23 LIHWAP data operates on the same principle.

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<sup>33</sup> Pennsylvania PUC, Bureau of Consumer Services, Universal Service Programs and Collections Performance, 2021, at 60 (available at <https://www.puc.pa.gov/filing-resources/reports/universal-service-reports/>).

1 Fourth, PWD should finalize its data-sharing agreement with the Commonwealth to allow  
2 TAP enrollment through an “automatic enrollment” process. In the 2022 TAP Rider  
3 proceeding, PWD told the Rate Board:

4 It should be noted that the City of Philadelphia is working with the  
5 Commonwealth of Pennsylvania to devise a process to expedite the eligibility  
6 determination for TAP. More specifically, starting in July 2022, PWD  
7 anticipates enrolling PWD customers into TAP who have been deemed  
8 eligible for the Commonwealth administered Low-Income Household Water  
9 Assistance Program’s (LIHWAP) through a reciprocal eligibility  
10 determination, rather than direct application by the customer. This is referred  
11 to as “automatic enrollment”, colloquially. For purposes of projecting TAP  
12 enrollment for the Next Rate Period, Raftelis has projected 12,500 LIHWAP  
13 participants being added to TAP by December 2022.

14 (TAP Enrollment Assumptions, February 23, 2022) (emphasis added). To date, that  
15 process “to expedite eligibility. . .through a reciprocal eligibility determination, rather  
16 than direct application by the customer” has not occurred. Indeed, in its 2023 TAP Rider  
17 filing with the Board, PWD estimated an average monthly TAP participation rate of only  
18 17,289. (2023 TAP-R Reconciliation Assumptions, January 17, 2023). PWD, in other  
19 words, projects a FY2024 monthly TAP participation that exceeds its January 2023  
20 participation by only 2,257 customers (17,289 minus January TAP participation reported  
21 in PA-1-56).

22 **Q. WILL TAKING THESE ACTIONS RESOLVE ALL BARRIERS TO**  
23 **ENROLLMENT IN TAP?**

24 A. No, clearly not. In particular, the cross-enrollment I recommend above will not  
25 automatically allow tenants and occupants to become PWD customers so as to qualify for  
26 TAP. However, and it is a big however, the data above demonstrates that a substantial  
27 majority of applicants who are denied enrollment in TAP are denied enrollment because

1 of “incomplete” income and/or residency information. The cross-enrollment, while not  
2 resolving all affordability issues given the issues with tenants and occupants, will present  
3 important tools to resolve those issues involving incomplete information.

4 **Q. WHAT DO YOU RECOMMEND?**

5 A. I recognize that PWD and the Public Advocate have agreed to propose a settlement  
6 regarding the TAP-R for FY 2024, based on modest increased enrollment in TAP  
7 between now and September 2023. However, because increased enrollment in TAP  
8 would yield additional revenues to PWD in the short-term, as I illustrate above and  
9 discuss in more detail below, followed by increased collections of TAP discounts through  
10 the TAP-R rider, I recommend specific concerted actions to increase TAP enrollment.  
11 Taking these actions will minimize future rates to be charged to PWD customers.  
12 Accordingly, I recommend that PWD file, within 60 days of the Final Rate Determination  
13 in this proceeding, a detailed report of the steps that it has taken to: (1) enter into a data-  
14 sharing agreement with the appropriate City officials to allow the automatic enrollment of  
15 OOPA Tier 4 and Tier 5 customers into TAP; (2) enter into a data-sharing agreement  
16 with the appropriate City officials to allow for the use of IDEA data to automatically  
17 enroll customers meeting income and residency requirements into TAP; (3) enter into a  
18 data-sharing agreement with the appropriate City officials to allow for the automatic  
19 cross-enrollment of PGW CRP customers into TAP; and (4) enter into a data-sharing  
20 agreement with the Commonwealth providing for a cross-enrollment of LIHWAP  
21 recipients into TAP.

22 The report should identify the City officials contacted, along with the date of the contact  
23 and the substance of the discussion; a timeline for future implementation; and a detailed

1 description of the operational barriers, if any, to the implementation. In the past, PWD  
2 has filed reports such as what PWD filed with respect to meeting with Black community  
3 leaders and Black grassroots community members” (i.e., ““PWD is *currently planning*  
4 community meetings, summits and other gatherings, including meetings with Black  
5 community leaders and black (sic) grassroots community members.”) This would be  
6 insufficient in this context.

7 **Q. DOES PWD ENGAGE IN REASONABLE PROCESSES BY WHICH TO**  
8 **DECREASE THE NUMBER OF TAP PARTICIPANTS WHO ARE REMOVED**  
9 **FROM THE PROGRAM DUE TO A FAILURE TO RECERTIFY?**

10 A. PWD can reasonably reduce the number of TAP participants who are removed from the  
11 program due to a failure to respond to the need to recertify. In reaching this conclusion, I  
12 am not referring to the failure to recertify because of an incomplete or erroneous  
13 recertification application. I instead refer to those active TAP participants who fail to  
14 respond to the need to recertify.

15 I understand that PWD has sought to address the problem of non-responsiveness in some  
16 fashion by extending the period of enrollment prior to the need to recertify from one year  
17 to three years. However, as I discuss in more detail below, PWD has stopped reporting  
18 data on the number of customers who are removed from TAP due to a failure to recertify.  
19 In the one month which PWD reported data after restarting recertifications in September  
20 2021, PWD reported that “2,408 customers have been removed from TAP for failure to  
21 recertify since the recertification process restarted.” (February Report, at 10, filed March  
22 18, 2022). Moreover, in each report filed from April through September 2022, PWD  
23 reported that “the total number of TAP participants has decreased for a variety of reasons,



1 which include. . .failure to submit their recertification application within the timeframe. .  
2 .” PWD’s monthly reports, however, provided no data on program turnover (“program  
3 churn”) attributable to a failure to recertify. While the TAP reports to the Mayor have  
4 historically provided annual data, the 2022 Report to the Mayor has not yet been filed.

5 In order to decrease the rate of TAP removal, PWD should make recertification available  
6 through a text-based process. This process should include both text-based reminders and  
7 the ability to submit recertifications via a text-based process. At this time, PWD states, it  
8 “does not offer a text-based process for customer assistance program applications or  
9 recertifications including the submission of documents.” (PA-1-32; see also, PA-1-35).  
10 Moreover, PWD notes that “at this time, text messages are not used to remind customers  
11 of the need to recertify for customer assistance programs.” (PA-I-31).

12 PWD fails to use these forms of electronic communications despite the fact that it knows  
13 its customers are increasingly relying on electronic forms of contact between the  
14 customer and the utility. The Table below, for example, shows the percentage of the  
15 numbers of payments and the percentage of dollars of payments received by PWD for  
16 FY2019 to the present inclusive. The trend of customers preferring to make payments  
17 via electronic means (ECK) rather than through the mail is evident. While electronic bill  
18 payments have more than tripled through this fiscal year, the percentage of payments  
19 made by mail (both in dollar terms and in numbers of payments) has decreased by more  
20 than 30%. The use of a web portal through which to make payments has also seen a  
21 noticeable, even if lesser, decrease in recent years.

Table 8. Percent Residential Payments by Selected Payment Types <sup>34</sup> (FY19 – FY23 (YTD))					
	FY19	FY20	FY21	FY22	FY23 (thru Dec. 2022)
Numbers of Payments (PA-1-70)					
ECK	8.16%	11.45%	19.42%	25.10%	29.13%
WEB	9.46%	8.97%	8.36%	8.38%	8.65%
REMITPRO	0.01%	29.15%	27.12%	22.43%	19.84%
-----					
Dollars of Payments (PAI-71)					
ECK	8.24%	11.29%	17.97%	23.43%	26.22%
WEB	12.16%	11.20%	10.38%	9.66%	10.03%
REMITPRO	32.60%	30.24%	29.10%	24.32%	22.14%

1           Despite this clear customer preference, PWD continues to require low-income customers  
2           to rely upon old approaches in recertifying to continue their participation in TAP. Not  
3           only does PWD not make available current technology (e.g., text-based messaging) to  
4           reminder customers of the need to recertify, it does not allow customers to use text-based  
5           messaging to engage in their recertification. While I do not suggest that there is a “text-  
6           based payment” platform, the lesson to be learned from the above data is the increasing  
7           use of technology by customers to engage with PWD. Making similar technology  
8           solutions available to TAP participants available to other customers would help decrease  
9           the extent to which TAP participants are removed from the program due to a failure to  
10          recertify.

11   **Q.     WHAT DO YOU RECOMMEND?**

---

<sup>34</sup> ECK = “Electronic Check payment via City's web-based payment portal including but not limited to the Mobile App .” WEB = “Payment via the City's web-based payment portal, including but not limited to the Mobile App, includes credit/debit card and prepaid EBT card payments but cannot be broken down into those categories.” REMITPRO =” Mailed-in checks and money orders” (PA-I-70).

1 A. I recommend that PWD, within 180 days of a Final Rate Determination in this  
2 proceeding, implement a text-based system of reminding TAP participants of the need to  
3 recertify as well as a text-based system for allowing customers to submit necessary  
4 recertification documents. I further recommend that PWD submit to the Rate Board  
5 monthly reports which document: (1) its progress on implementing these text-based  
6 systems; (2) the number of customer reminders provided through this system; and (3) the  
7 number of recertifications which are received through this system.

8 **C. Estimating the Lost Revenue from Unreasonably Low TAP Enrollment.**

9 **Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?**

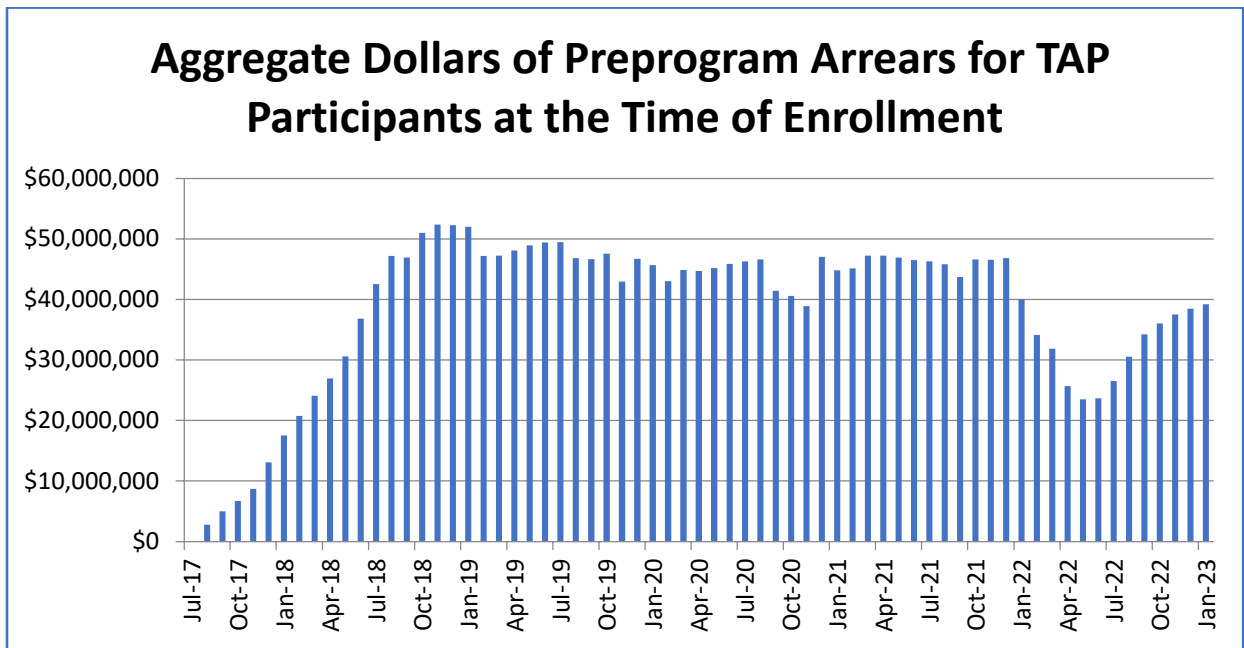
10 A. In this section of my testimony, I document the additional revenue that PWD will collect  
11 as a result of the operation of TAP, and which PWD has not taken into consideration in  
12 asking for the rate hikes it seeks in this proceeding. The additional revenue comes  
13 through two TAP impacts: (1) the difference in payment performance between TAP  
14 participants and low-income non-participants will generate an incremental stream of  
15 revenue to PWD; and (2) the difference in payment performance between TAP  
16 participants and the customer base paying the TAP Rider will generate an incremental  
17 stream of revenue to PWD. I will examine these two incremental streams of revenue  
18 separately below.

19 **1. TAP Improves Low-Income Payment Performance.**

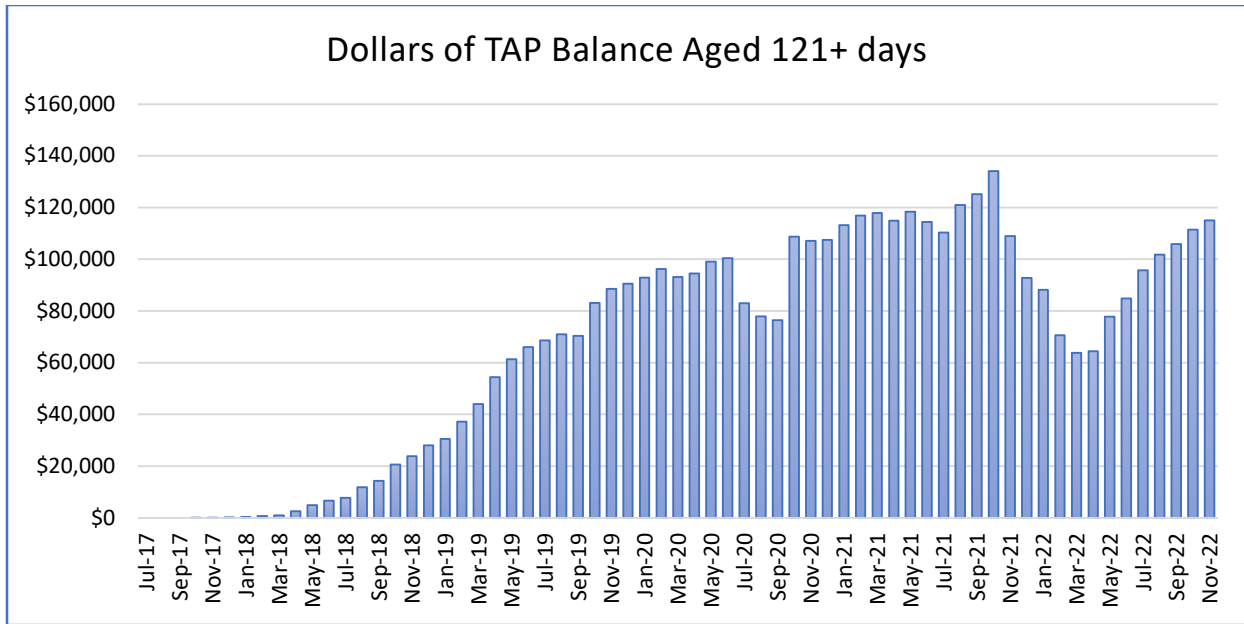
20 **Q. HAVE YOU HAD THE OPPORTUNITY TO REVIEW PAYMENT PATTERNS**  
21 **OF TAP PARTICIPANTS?**

22 A. Yes. TAP participation yields a substantial improvement in payment patterns compared  
23 to payment performance prior to entering TAP, according to data provided by PWD. The

1 Chart below provides insights into the payment performance of TAP participants before  
2 they enter the program. The Chart documents the dollars of pre-program arrears of TAP  
3 participants at the time they enrolled in the program. As can be seen, after the initial  
4 program ramp-up in the early months, the average pre-program arrears brought into the  
5 program consistently ranged between \$40 and \$50 million. This level of arrears provides  
6 a baseline against which TAP participant payment performance can be compared.

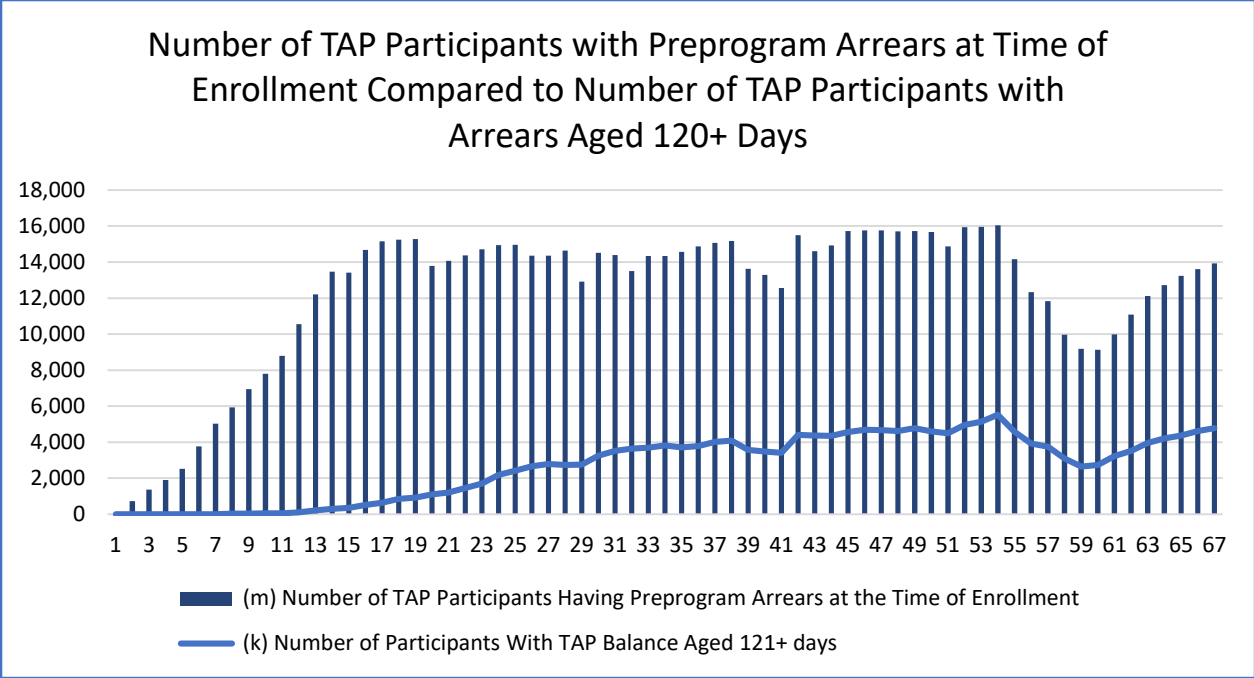


7  
8 The first comparison is of the aggregate dollars of arrears that are aged more than 120  
9 days. The Chart below shows that compared to the level of pre-program arrears brought  
10 into the program, even by January 2023, after nearly 67 months of operation, the  
11 aggregate arrears aged more than four months old (120 days) is substantially less than  
12 \$150,000. The age range of 120+ days is the oldest range reported by PWD for TAP  
13 participants.



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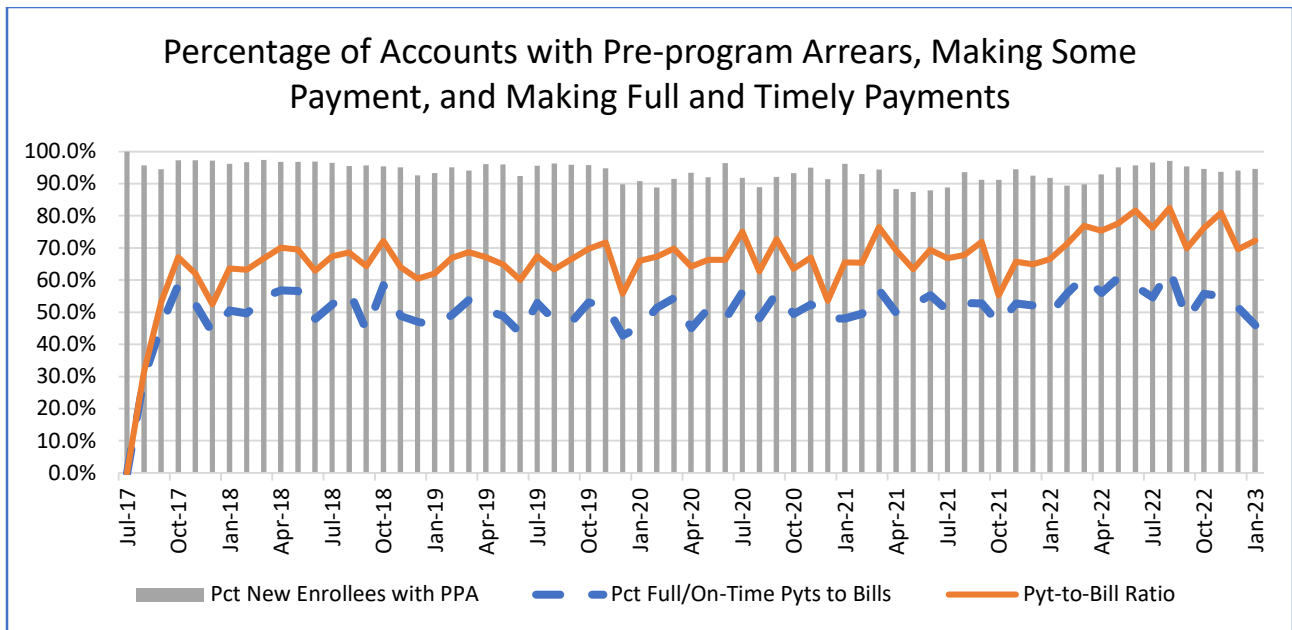
A similar comparison can be made looking at the number of accounts in arrears rather than looking at the dollars of arrears. The Chart below compares the number of accounts bringing pre-program arrears into TAP at the time of enrollment to the number of accounts having an arrears of more than 120 days old in each month. The bars represent the number of accounts bringing pre-program arrears into TAP, while the line represents the number of accounts with arrears agreed greater than 120 days old. The improved payment performance is evident, with the number of TAP participants carrying long-term arrears a small fraction of the number of TAP participants carrying arrears when they entered the program.



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In fact, the Chart below presents three sets of data which allows me to compare the ratio of the number of customers entering TAP with a pre-program arrears to the total number of TAP bills rendered each month, to two payment metrics.

- First, the bars represent the percentage of TAP participants who entered the program as of that month bringing a pre-program arrearage into the program. These bars shows that nearly 100% of all new TAP enrollees enter TAP with a pre-program arrears (i.e., having not made complete payments toward their bills prior to entering TAP).
- Second, the solid line represents the percentage of TAP participants who made a full and complete payment each month. These customers, even though almost universally having *not* made complete payments prior to entering TAP, are making full and complete payments once they enroll in TAP.
- Third, the dashed line presents the percentage of TAP participants receiving a bill who made *some* payment in response to their bill even if that payment was not a full and complete payment. The percentage of TAP participants making some payment substantially exceeds the percentage making a full and timely payment. The percentage making some payment each month ranges from 70% to more than 80%, while the percentage making full and complete payments ranges from 50% to 60% each month. Clearly, a large percentage of TAP participants make payments that are less than full and timely payments each month.



1

2

Keeping low-income customers making payments, even in those instances when they cannot make a full and timely payment, is one goal of an affordability program. If a customer receives a bill for \$100 in Month 1, but can only pay \$70, PWD wants the customer to make that \$70 payment. When the bill in Month 2 is then rendered, it is easier for the low-income customer to complete the Month 1 payment than it would have been had no payment been made at all.

7

8

However one examines the data presented in the Chart above, participation in TAP can be seen to substantially improve the bill payment patterns and practices of low-income PWD customers, whether in terms of full and timely.

10

11

**2. PWD Receives Increased Receipts from TAP Participants Relative to Low-Income TAP Non-Participants.**

12

13

**Q. UPON WHAT DO YOU BASE YOUR CONCLUSION THAT TAP INCREASES THE COLLECTION OF REVENUE?**

14

1 A. In order to understand increases in the collection of revenue attributable to TAP, it is  
2 necessary to understand the two components of a low-income customer bill. When a  
3 low-income customer enrolls in TAP, that customer's bill is essentially divided into two  
4 parts. The first part remains a bill that is rendered to the low-income customer in the  
5 form of a TAP bill. The second part is no longer rendered to the low-income customer  
6 but is instead recognized as a TAP Credit and, as such, is billed to all other ratepayers  
7 through the TAP Rider. If an illustrative low-income non-participant has a \$100 bill, for  
8 example, when that customer enrolls in TAP, \$40 may be continued to be billed to the  
9 customer as a TAP bill, with the remaining \$60 recognized as a TAP Credit and billed to  
10 all other customers through the TAP Rider. The \$100 remains the same. That \$100 is  
11 simply collected in different ways. When a low-income customer enrolls in TAP, both  
12 parts of that bill will result in increased collections by PWD.

13 **Q. PLEASE FIRST ADDRESS THE PORTION OF THE BILL THAT REMAINS**  
14 **REVENUE BILLED TO THE LOW-INCOME CUSTOMER.**

15 A. From a ratemaking perspective, PWD revenue that is billed to low-income customers is  
16 estimated to be translated into receipts at the collection rate of low-income customers.  
17 When those customers become TAP participants, however, that collection rate, as  
18 discussed in detail above, substantially improves. Rather than collecting low-income  
19 bills at the TAP non-participant rate, in fact, PWD will collect bills at the TAP participant  
20 rate. The difference is substantial. TAP bills are collected at a far higher rate than non-  
21 TAP bills.



Table 9. Collectability of Bills from TAP Participants and from Low-Income TAP Nonparticipants

Fiscal Year	Customer Class	Total 12-Mo Payments (All)	Delta
FY22	TAP participants	72.50%	38.20%
FY22	TAP customers outside TAP enrollment <sup>35</sup>	34.30%	

2 The difference identified in the Table above represents the difference in the collectability  
3 of bills to TAP participants and the collectability of bills to low-income TAP non-  
4 participants. PWD does not incorporate this difference into its projection of revenue.

5 **3. PWD Receives Increased Revenue through the TAP Rider**  
6 **Relative to Payments by TAP Participants.**

7 **Q. IS THERE A SECOND WAY IN WHICH TAP INCREASES REVENUE**  
8 **COLLECTED BY PWD?**

9 A. Yes. Again as I demonstrated earlier in my testimony, increased revenue also flows to  
10 PWD from the treatment of TAP credits. The TAP credits are those dollars that are not  
11 billed to TAP participants, but are instead billed to all other ratepayers through the TAP  
12 Rider. The ratemaking treatment of increasing TAP participation is that the TAP credits  
13 will be booked as “contra-revenues” and the recovery of those revenues through the TAP  
14 Rider will be booked as revenues. If they had remained in low-income bills at standard  
15 rates, however, the dollars that result in the contra-revenues would have been collected at  
16 the low-income non-participant collectability rate (i.e., customers had remained TAP

<sup>35</sup> PA-1-15.

1 non-participants). When those low-income customers become TAP participants, a  
 2 portion of their bills are transferred to other ratepayers through the TAP Rider, and are  
 3 thus collected at the collectability rate for customers as a whole.

Table 10. Collectability from TAP Non-participants and from PWD customers as a whole			
Fiscal Year	Customer Class	Total 12-Mo Payments (All)	Delta
FY22	Non-SWO collected <sup>36</sup>	84.13%	49.83%
FY22	TAP customers outside TAP enrollment <sup>37</sup>	34.30%	

4 PWD data shows that PWD collects a higher percentage of revenues billed to customers  
 5 as a whole than it collects from its low-income TAP non-participants.

6 **Q. IS MAKING THIS ADJUSTMENT CONSISTENT WITH PRIOR WATER RATE**  
 7 **BOARD PRECEDENT?**

8 A. Yes. In holding that PWD was not entitled to separately collect its arrearage forgiveness  
 9 through the TAP Rider in the 2021 Rate Determination, the Rate Board recognized the  
 10 relationship between PWD’s collectability factors and the revenue requirement which  
 11 underlies PWD’s request for increased rates. In calculating the receipts that will be  
 12 collected from ratepayers, PWD examines historic data, which includes only the receipts  
 13 from low-income customers at the collection rate for low-income customers. (2021 Rate  
 14 Determination, at 51, June 16, 2021). When those receipts increase because a customer

<sup>36</sup> RFC-7.

<sup>37</sup> PA-1-15.

1 enrolls in TAP, PWD has not correspondingly increased the collection factor to reflect  
2 that increase (and thus to decrease the increased rates it needs to seek in this proceeding).  
3 Likewise, in calculating the receipts which underlie its request for increased rates in this  
4 proceeding, PWD does not take into consideration the increased collectability it derives  
5 by moving bills collected from low-income customers to bills collected from all  
6 customers through the TAP Rider. (Id.) A *portion* of low-income bills is included in the  
7 collectability factors used to project future revenues, but that portion is *only* a portion.  
8 For both of the reasons explained above, when a customer enrolls in TAP, the portion of  
9 bills that becomes collectable becomes higher. That increase has not been taken into  
10 consideration. The adjustment recommended above should accordingly be adopted to  
11 avoid overstating the need for increased revenue through increased rates as requested in  
12 this proceeding.

13 **Q. WHAT REVENUE ADJUSTMENT DO YOU RECOMMEND BE ADOPTED FOR**  
14 **A REASONABLE TAP ENROLLMENT FIGURE?**

15 A. Determining the revenue adjustment that is warranted in this proceeding requires a  
16 calculation. That calculation is as follows:

- 17 ➤ Average monthly water bills for a usage of 0.7 MCF are projected to be  
18 \$48.25 in FY24. (PA-I-48)
- 19 ➤ Average monthly sewer and storm water bills for a usage of 0.7 MCF are  
20 projected to be \$54.55 (\$19.04 storm water plus \$35.51 sewer). (PA-I-48)
- 21 ➤ Total monthly bills would thus be \$102.80 (\$48.25 + \$54.55).
- 22 ➤ In the recent proposed Settlement of the TAP-R proceeding, the agreed upon  
23 estimated TAP participation rate for FY24 was 16,479.
- 24 ➤ Total standard monthly bills to the estimated number of TAP participants in  
25 FY24 would thus be \$20,328,494 (16,479 x \$102.80).

- 1           ➤ Average annual TAP credits per TAP participant are \$600. The total CAP  
2           credit given the agreed-upon TAP participation rate will be \$9,887,400 (\$600  
3           x 16,479).
- 4           ➤ The total CAP billing is thus \$10,441,094.

5           Given these input data, I recommend an estimated increase in PWD revenue attributable  
6           to the improved collectability of TAP billings of \$3,988,498. I recommend an estimated  
7           increase in PWD revenue attributable to the improved collectability of TAP Rider  
8           revenue of \$4,926,821. Both of these sums of increased revenue will reduce the revenues  
9           needed to be included in the rate increase which PWD seeks in this proceeding.

10          PWD and the Public Advocate have proposed a settlement of the TAP-R for FY 2024  
11          that reflects the participation rate I utilize above. Accordingly, both elements of the  
12          adjustment I recommend should be adopted for FY24. Since I do not have an agreed-  
13          upon participation rate for FY2025, I further recommend that the adjustment be  
14          continued through that Fiscal Year as well.

15          **Part 3. PWD Should Routinely Measure and Report its Low-Income Payment**  
16          **Performance.**

17          **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
18          **TESTIMONY.**

19          A. In this section of my testimony, I explain certain reporting requirements that the Rate  
20          Board should impose upon PWD as a reasonable and prudent means of controlling costs  
21          that PWD seeks to impose on ratepayers. This section of my testimony outlines those  
22          reasonable reporting requirements that a prudent utility would take to control the costs  
23          which it incurs and seeks to include in rates.

1 The metrics that I recommend be measured and reported below focus on measuring  
2 “outcomes,” distinguished from measuring “activities.” An “activity” is defined as the  
3 work performed that directly produces products or services. The “outcome” of a program  
4 is the accomplishment of program objectives attributable to program outputs.

5 Performance measurement has been growing now for nearly 30 years in both public and  
6 private programs. Perhaps the best-known application is the federal Government  
7 Performance and Results Act of 1993. GPRA was designed to address the same  
8 conceptual issues that PWD must address for its low-income programs and credit and  
9 collections performance: to grapple with how to best improve effectiveness and service  
10 quality while limiting costs. It shifts the focus from program activities to program results.

11 According to GPRA, “[t]he key concepts of this performance-based management are the  
12 need to define clear agency missions, set results-oriented goals, measure progress toward  
13 achievement of those goals, and use performance information to help make decisions and  
14 strengthen accountability.”<sup>38</sup> Utilities face the same sort of problems in measuring  
15 efficiency as do federal agencies. As James Hinchman, Acting Comptroller General  
16 observed when GPRA was first enacted, “[m]any agencies have a difficult time moving  
17 from measuring program activities to establishing results-oriented goals and performance  
18 measures.”<sup>39</sup>

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<sup>38</sup> Hinchman (June 1997). *Managing for Results: The Statutory Framework for Improving Federal Management and Effectiveness*, at 1, GAO /T-GGD/AIMD-97-144, available at <https://www.govinfo.gov/content/pkg/GAOREPORTS-T-GGD-AIMD-97-144/pdf/GAOREPORTS-T-GGD-AIMD-97-144.pdf> (last accessed June 15, 2022).

<sup>39</sup> *Id.*, at 1.

1 The implementation of the federal Government Performance and Results Act (GPRA)  
2 was explained as follows:

3 Even the best performance information is of limited value if it is not used to  
4 identify performance gaps, set improvement goals, and improve results. .  
5 .[S]uccessful organizations recognize that it is not enough just to measure  
6 outcomes. . .By analyzing the gap between where they are and where they  
7 need to be to achieve desired outcomes, management can target those  
8 processes that are in most need of improvement, set realistic improvement  
9 goals, and select an appropriate process improvement technique.<sup>40</sup>

10  
11 PWD simply cannot address how it would “analyze the gap between where they  
12 are and where they need to be” if nobody is responsible. And, if no-one is  
13 responsible, no-one can be held accountable. If no-one is accountable, it is not  
14 possible for either PWD, or any other municipal policymaker, to “target those  
15 processes that are most in need of improvement,” to “set realistic improvement  
16 goals,” or to “select an appropriate process improvement technique.” Without the  
17 measurement and reporting of outcomes metrics, it can always be “someone else”  
18 that must do better.

19 In short, in my discussion below, I will focus *not* on measuring what PWD is or is  
20 not *doing*. I will instead focus on what PWD is or is not *accomplishing*.

21 **A. The Extent to which PWD Fails to Track Important Metrics.**

22 **Q. DOES PWD FAIL TO MEASURE AND TRACK IMPORTANT METRICS?**

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<sup>40</sup> Johnny C. Finch (Assistant Comptroller General) and Christopher Hoenig (Director, Information Resource Management/Policies and Issues). (June 20, 1995). *Managing for Results: Critical Actions for Measuring Performance*, at 9, testimony before the U.S. House Subcommittee on Government Management, Information and Technology, Committee on Government Reform and Oversight.

1 A. PWD fails to track important metrics that are critical both to its control of costs  
2 associated with nonpayment and to its success in promoting participation in its low-  
3 income affordability programs. Most of these metrics are most effective if and when  
4 collected on a geographically disaggregated basis.

5 For example, PWD claims to not have routine periodic reporting on basic billing and  
6 payment data. When asked to provide reports, by zip code, of the dollars of billed  
7 revenue and the dollars of payments received from customers (i.e., receipts), PWD said it  
8 could not. (PA-I-34(A) – (B)). When asked to provide, by zip code, the number of bills  
9 rendered and the number of payments received, PWD said it could not. (PA-I-34(D) –  
10 (E)). PWD said that it does not track the average bill for residential accounts by month  
11 (PA-I-45(A)).

12 PWD claims to not have routine periodic reporting on basic information regarding  
13 payment difficulties. When asked to provide, by zip code, the dollars of arrears and the  
14 number of accounts in arrears, PWD said it could not. (PA-I-34(C), 34(G)). Conversely,  
15 nor could PWD provide information, by zip code, of the number of accounts with a \$0  
16 balance by month. (PA-I-34(F)).

17 Moreover, PWD fails to track fundamental billing and payment data, even if *not*  
18 disaggregated by zip code. For example, PWD said that it does not track, by month, the  
19 total dollars of residential arrears (PA-I-45(D)), the percentage of residential accounts  
20 having arrears (PA-I-45(F)), the average arrears of residential accounts in arrears (PA-I-  
21 45(B), or the average bill of residential accounts in arrears (PA-I-45(C)).

1 PWD claims to not have routine periodic reporting on basic information regarding its  
2 collection actions. When asked to provide, by zip code, data on the number of shutoff  
3 notices issued, the number of nonpayment shutoffs actually performed, and the number of  
4 reconnections made after a nonpayment shutoff, PWD said that it did not have such  
5 information. (PA-I-34(H), 34(J), and 34(L)).

6 PWD does not track information on how the collection activities which it pursues are  
7 related to the size of customer arrears. While it tracks the number of shutoff notices and  
8 the number of nonpayment shutoffs by month in the aggregate (but not on a  
9 geographically disaggregated basis) (PA-I-40(A), 40(C)), it does not track the average  
10 arrears of residential accounts receiving a shutoff notice (PA-I-40(B)), or the average  
11 arrears of residential accounts that have been subject to an involuntary shutoff for  
12 nonpayment. (PA-I-40(D), PA-I-45(G)). Not only does PWD not track the average  
13 dollars of arrears at the time of a shutoff (PA-II-46(A)), neither does it track the  
14 aggregate dollars of arrears on shutoff accounts. (PA-II-46(E)).

15 While PWD cites the availability of various payment agreements as evidence of its  
16 continuing response to nonpayment (PWD St. 5, at 4 – 5), it does not track any  
17 information about the extent to which those payment plans are or are not being used.

18 Consider that PWD routinely does not track information on:

- 19 ➤ The number of residential accounts in arrears more than 30 days not on agreement;
- 20 ➤ The dollars of residential arrears (older than 30 days) not on agreement;
- 21 ➤ The average arrears of accounts in arrears (more than 30 days) not on agreement;
- 22 ➤ The number of residential accounts in arrears (more than 30 days) on agreement;
- 23 ➤ The dollars of residential arrears (older than 30 days) on agreement; or



1           ➤ The average arrears of accounts in arrears more than 30 days on agreement.  
2           (PA-II-36(A) – 36(F)).

3   **Q.    WHAT DO YOU CONCLUDE?**

4    A.    PWD is failing to take those actions which a reasonably prudent utility would take in  
5           order to control its costs. For example, while PWD does not “anticipate” any cost  
6           savings from its increase in the threshold of nonpayment disconnections to \$1,000, it  
7           could provide no empirical basis for the existence (or not) of such savings. (PA-VI-24).  
8           Nor could it make any projections of the dollar impact on collections by implementing  
9           this increased threshold. (PA-VI-25). Even though it increased its shutoff threshold to  
10          \$1,000, it does not have information on the number of accounts that have account  
11          balances of \$1,000 or more. (PA-VI-26(A)). It does not track the number of accounts  
12          that have account balances greater than \$1,000 (thus qualifying for a nonpayment  
13          shutoff) that do not get disconnected. (PA-VI-27(B)). It does not have information on the  
14          number of accounts with account balances exceeding \$1,000 that were reconnected after  
15          a nonpayment disconnection (PA-VI-29), let alone what the account balances were at the  
16          time of reconnection. (PA-VI-30(A) – 30(B)).

17          I agree with the World Bank’s blog when it states, “as the management guru Peter  
18          Drucker famously said, ‘If you can't measure it, you can't manage it.’ If you don’t  
19          measure, then how do you know how you are doing? How do you know if you are doing  
20          well? Or poorly?”<sup>41</sup>

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<sup>41</sup> Patrinos (December 1, 2014). You Can’t Manage What You Don’t Measure, World Bank, Education for Global Development, available at <https://blogs.worldbank.org/education/you-can-t-manage-what-you-don-t-measure>

1                   **B. The Reasonable Data Tracking PWD Should be Required to Employ.**

2   **Q.   WHAT DATA TRACKING DO YOU RECOMMEND THE RATE BOARD**  
3           **REQUIRE PWD COLLECT AND PUBLISH?**

4   A.   In addition to identifying the specific data that PWD should be required to track on a  
5           monthly basis,<sup>42</sup> by the end of calendar year 2023, data should be reported by zip code to  
6           allow PWD (the Rate Board and other stakeholders) to review the reasonableness of its  
7           customer service and collection performance. Monthly zip code data that should be  
8           reported includes the following:

- 9                   ➤ The dollars of billed revenue to residential customers;
- 10                  ➤ The dollars of receipts actually collected from residential customers;
- 11                  ➤ The number of bills rendered to residential customers;
- 12                  ➤ The number of payments received by or on behalf of residential customers;
- 13                  ➤ The mean and median residential customer bill;
- 14                  ➤ The aggregate dollars of residential arrears;
- 15                  ➤ The number of residential accounts in arrears.
- 16                  ➤ The percentage of residential accounts in arrears;
- 17                  ➤ The average residential arrears of residential accounts in arrears;
- 18                  ➤ The number of residential accounts with a \$0 balance by month;
- 19                  ➤ The number of shutoff notices issued to residential accounts;
- 20                  ➤ The average arrears on residential accounts to whom a shutoff notice was  
21                    issued;
- 22                  ➤ The number of residential nonpayment disconnections;

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<sup>42</sup> While I refer to reporting of monthly data, that does not mean that such data needs to be reported or filed monthly. Data can be reported on an annual basis so long as the reported data includes monthly information.

- 1           ➤ The average arrears on residential accounts disconnected for nonpayment;
- 2           ➤ The aggregate dollars of arrears on disconnected residential accounts;
- 3           ➤ The number of residential reconnections after a nonpayment disconnection;
- 4           ➤ The number of residential accounts in arrears more than 30 days not on
- 5           agreement;
- 6           ➤ The dollars of residential arrears (older than 30 days) not on agreement;
- 7           ➤ The average arrears of accounts in arrears (more than 30 days) not on agreement;
- 8           ➤ The number of residential accounts in arrears (more than 30 days) on agreement;
- 9           ➤ The dollars of residential arrears (older than 30 days) on agreement; or
- 10          ➤ The average arrears of accounts in arrears more than 30 days on agreement.

11           The collection and reporting of such monthly data by zip code would be neither difficult nor  
12           onerous. Moreover, collecting and reporting such information would improve PWD  
13           performance on controlling customer service and collection costs and, accordingly, would  
14           redound to the benefit of all PWD ratepayers.

15           **Part 4. The Arrearage Forgiveness Provisions of TAP Have been Unreasonably and**  
16           **Unlawfully Implemented**

17           **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
18           **TESTIMONY.**

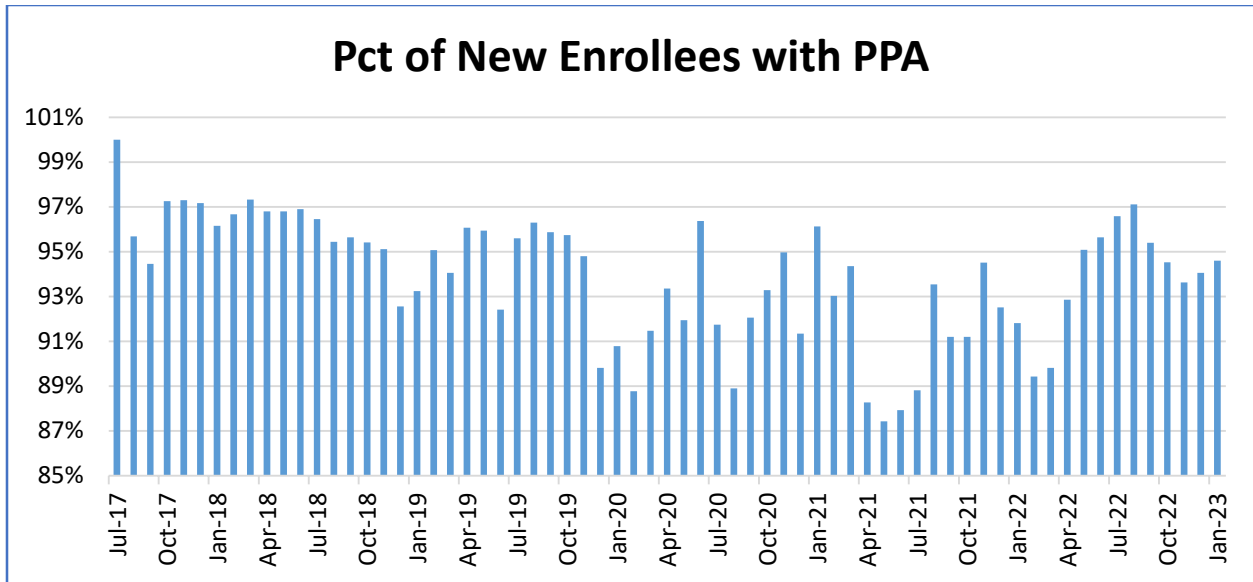
19           A. In this section of my testimony, I review PWD’s compliance with the Settlement of  
20           PWD’s 2021 rate proceeding with respect to the forgiveness of “principal” (as contrasted  
21           to “penalties”) pre-program arrearages. In the 2021 PWD general rate case, the final Rate  
22           Determination found that there were “serious questions [raised] about the manner in  
23           which PWD discharges its responsibility to provide arrearage forgiveness. . .” (2021  
24           Rate Determination, at 51). While PWD has resolved some of those questions, it not only

1 failed to resolve all questions, but it completely failed to comply with the 2021  
2 Settlement provisions, and the Rate Determination’s directions regarding monthly  
3 reporting to allow the Rate Board to review the resolution of those questions in the future.  
4 Accordingly, not only should the Rate Board provide more specific directions to PWD to  
5 provide future reporting on arrearage forgiveness, it should also direct PWD to provide  
6 the relief requested below.

7 **A. Retroactive Ratable Principal Arrearage Forgiveness.**

8 **Q. PLEASE EXPLAIN THE FIRST ISSUE YOU HAVE IDENTIFIED WITH PWD’S**  
9 **TAP ARREARAGE FORGIVENESS FOR “PRINCIPAL.”**

10 A. According to the new regulations adopted by the City on May 31, 2022 regarding  
11 “ratable” arrearage forgiveness, PWD provided for a new “ratable” arrearage forgiveness  
12 for the “principal” that was incorporated into TAP participant pre-program arrears.  
13 According to PWD data, this forgiveness would apply to nearly all TAP participants. As  
14 the Chart below shows, in every month since the first implementation of TAP in July  
15 2017, consistently more than 90% of customers newly enrolling in TAP brought pre-  
16 program arrearages into the program.



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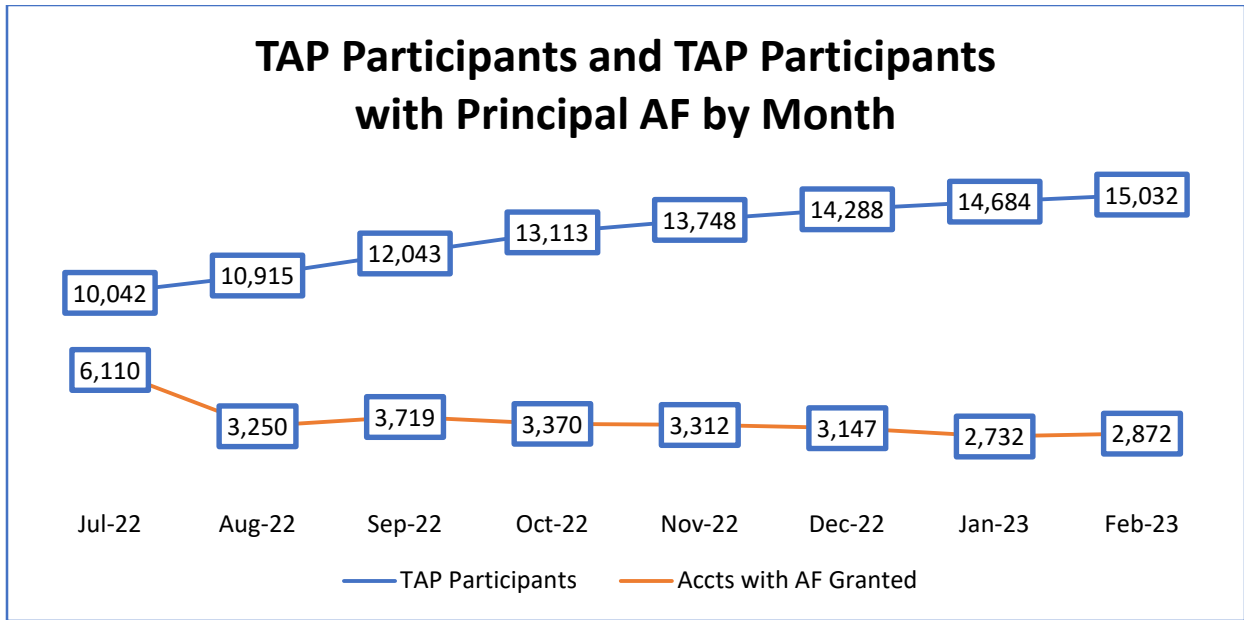
The new TAP regulations provided that retroactive arrearage forgiveness would be granted. The new regulation stated that:

As of July 1, 2022, all Customers maintaining enrollment in TAP will receive a one-time lump sum forgiveness of Pre-TAP arrears, in an amount calculated by multiplying the amount of the Customer’s Pre- TAP arrears by 1/24 and then by the number of full monthly payments of TAP Bills issued on or after September 1, 2020.

(PWD Regulations, Section 206.7(c)). In fact, the retroactive arrearage forgiveness<sup>43</sup> was first provided to a limited number of customers (n=41) in June 2022, with a more complete roll-out in July 2022. Nonetheless, it would appear that retroactive forgiveness was not provided to all those who may have qualified. The Chart below shows, by month from July 2022 through January 2023, the number of customers receiving principal arrearage forgiveness. In July 2022, of the 10,042 current TAP participants, 6,110 had principal arrearage forgiveness granted.

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<sup>43</sup> References to “arrearage forgiveness” will be, unless explicitly noted to the contrary, references to the forgiveness of “principal.”



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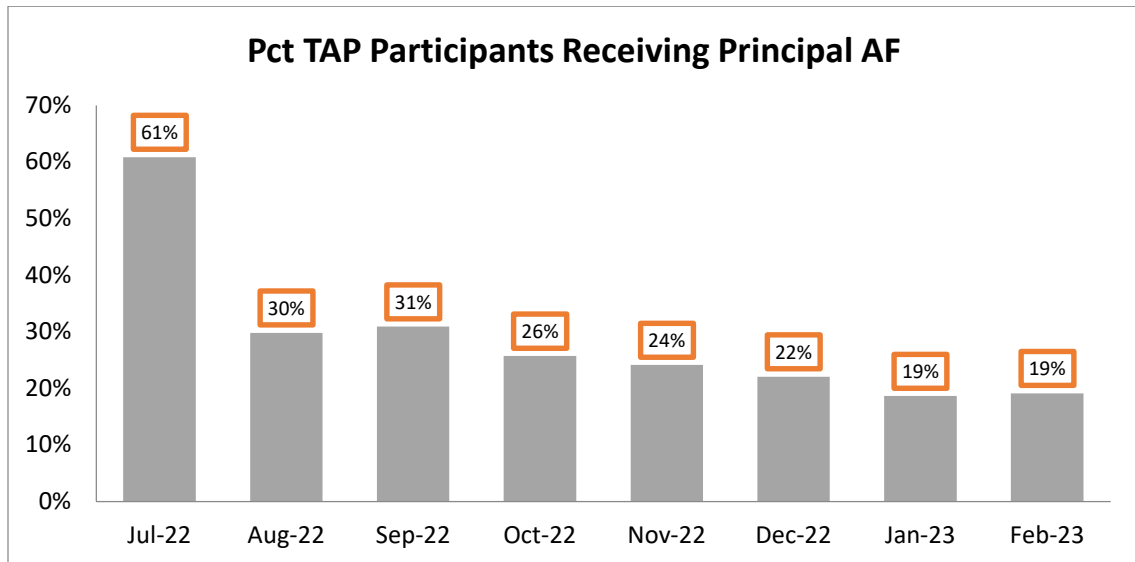
2

The Chart below translates those numbers into percentages. As can be seen, In July 2022, roughly 60% of TAP participants received arrearage forgiveness. After that first month of full implementation, the extent to which PWD provides arrearage forgiveness falls to between 19% and 31%.

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The proportion of TAP participants receiving arrearage forgiveness can be seen to be unreasonably low from two different perspectives. In reviewing arrearage forgiveness, it

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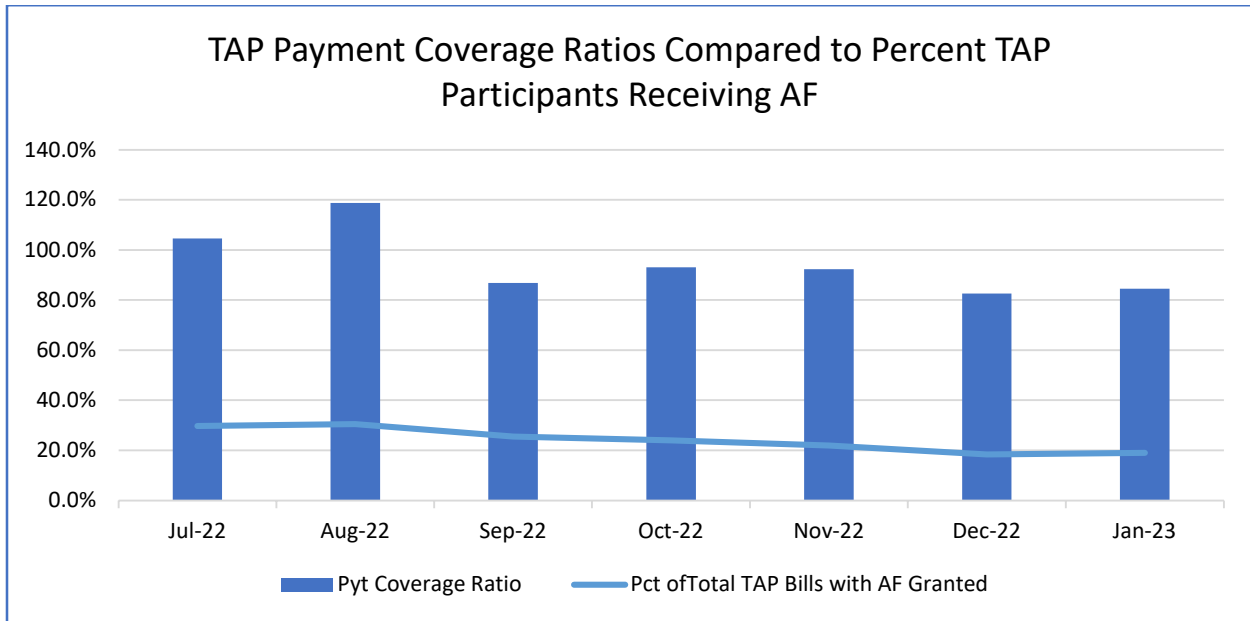
1 is important to remember that the regulation ultimately adopted does not require that  
2 payments be both full and on-time, but rather need only be complete. The regulation  
3 itself states that

4 If the Customer fails to make a full TAP Bill payment, the Customer will not  
5 receive forgiveness for that month; however, the Customer will remain  
6 eligible for forgiveness of Pre-TAP arrears the next time that the Customer  
7 makes a full TAP Bill payment. The Customer may recover any missed  
8 months of forgiveness by paying full TAP Bill amounts for those missed  
9 months.

10 (Regulation, 206.7(e), emphasis added). The City specifically modified this regulation to  
11 ensure that a customer would not be required to bring his/her/their bill completely current  
12 in order to receive forgiveness. The Statement accompanying the new Regulations,  
13 signed by Revenue Commissioner Frank Breslin and Water Commissioner Randy  
14 Hayman, stated that “the Commissioners agree that subsection (e) should be revised to  
15 further clarify that if a TAP customer misses a payment, their monthly forgiveness is on  
16 hold only until another full TAP Bill is paid, not until the customer catches up completely  
17 if they have fallen multiple payments behind.” (emphasis added).

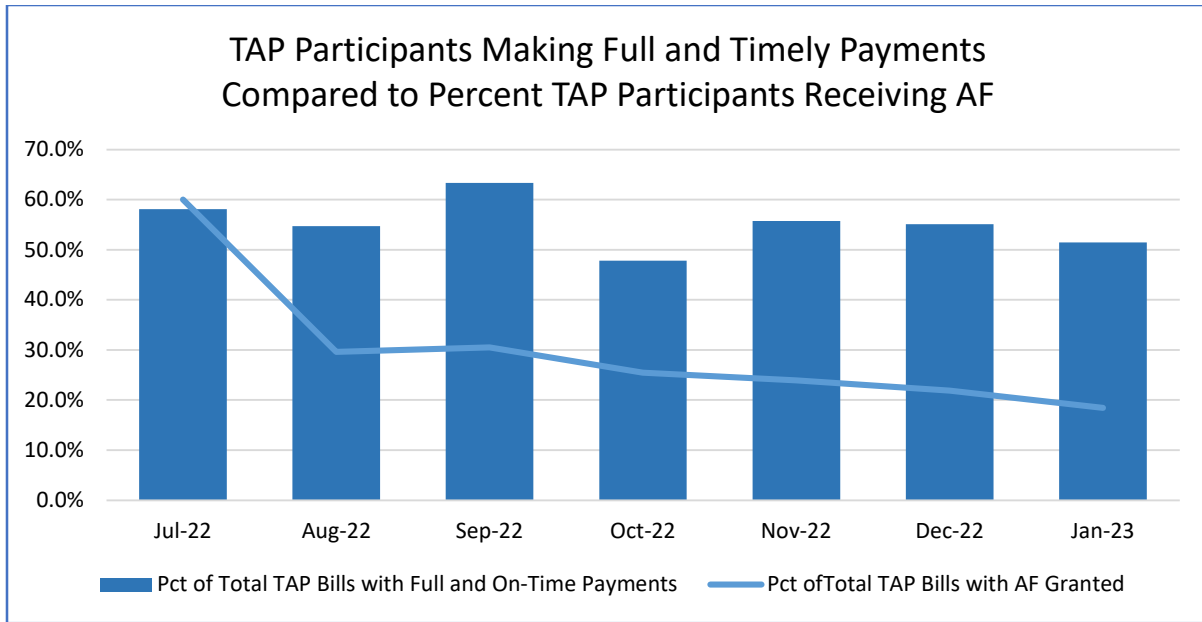
18 The data does not support a conclusion that TAP participants are being provided  
19 forgiveness for each “full TAP Bill” that is paid. Two different lines of analysis lead to  
20 this conclusion. First, the Chart below presents the “payment coverage ratio” for TAP  
21 participants for each month compared to the percentage of TAP participants receiving  
22 arrearage forgiveness. The “payment coverage ratio” is a simple ratio. It places TAP  
23 payments in the numerator and TAP bills in the denominator. It would not be possible to  
24 (1) have nearly 100% of TAP participants bringing pre-program arrears into TAP; (2)

1 have TAP participants routinely paying between 80% and 100% of their TAP bill each  
2 month, and (3) have less than 25% of those participants qualify for arrearage forgiveness.



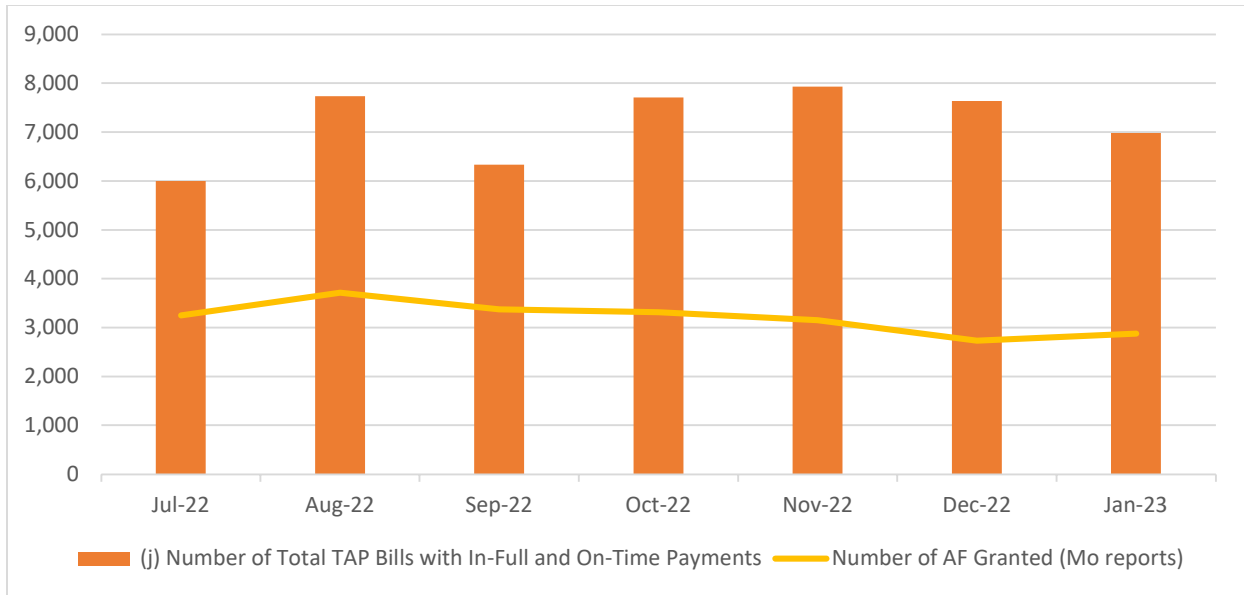
3  
4 Second, the Chart below takes the consideration of data one-step further. The chart  
5 presents the percentage of TAP participants who pay their bill on a full *and timely* basis  
6 each month compared to the percentage of TAP recipients who were granted arrearage  
7 forgiveness. Particularly given that the regulations specifically provide that it is not  
8 necessary for a TAP participant to make a “timely” payment in order to qualify for  
9 arrearage forgiveness, it simply would not be possible for between 50% and 60% of all  
10 TAP participants to be making full and timely payments each month, while having fewer  
11 than half that percentage qualify for arrearage forgiveness.





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The final Chart converts the percentages presented above to numbers. Two observations from this Chart support the conclusion that PWD is not granting arrearage forgiveness to the extent directed by the City’s regulations governing arrearage forgiveness. First, the number of TAP accounts receiving arrearage forgiveness is half the number of TAP accounts making full and timely payments. Again, particularly given that full payments need not necessarily be “timely” in order to qualify the account for ratable forgiveness, those numbers are inconsistent. Second, the Chart reveals that as the number of accounts making full and timely payments increases from September to October to November 2022, the number of accounts receiving arrearage forgiveness is decreasing in the same months. This data, too, demonstrates that accounts that qualify for arrearage forgiveness are not receiving it.



1

2 **Q. IS IT NOT POSSIBLE THAT ACCOUNTS MAKING FULL AND TIMELY**  
 3 **PAYMENTS, OR ACCOUNTS THAT HAD HIGH PAYMENT COVERAGE**  
 4 **RATIOS, DID NOT HAVE PRE-PROGRAM ARREARS?**

5 A. No. As demonstrated by the data above, nearly 100% of the accounts that enrolled in  
 6 TAP brought pre-program arrears into the program. A lack of pre-program arrears that  
 7 might be subject to forgiveness cannot explain the discrepancies that I have identified  
 8 above.

9 **Q. WHAT DO YOU RECOMMEND?**

10 A. The forgiveness of preprogram arrears is a critically important element of the TAP  
 11 program. To the extent that TAP customers who are making full TAP payments are not  
 12 being granted forgiveness as they complete their full payments, irrespective of whether  
 13 those payments are timely, they are being denied rate benefits to which they are entitled  
 14 under both City ordinance and City regulations. I recommend that PWD provide the Rate  
 15 Board an account-specific accounting of TAP participants by month starting on July 1,  
 16 2022 and ending June 30, 2023 that reports for each account: (1) the total dollars of pre-

1 program arrears existing on each TAP account in each month; (2) the total dollars for  
2 current service appearing on bills for each account beginning with July 2022 and  
3 continuing until the accounting is complete; (3) the total dollars paid on behalf of that  
4 account beginning with July 2022 and continuing until the accounting is complete; (4) the  
5 total dollars of arrearage forgiveness that have been credited to the account beginning in  
6 July 2022 and continuing until the accounting is complete. To the extent that this  
7 accounting reveals arrearage forgiveness that had been earned, but had not been granted,  
8 that arrearage forgiveness should be retroactively credited to the customer's account  
9 irrespective of whether the customer remains a TAP participant.

10 **Q. WHAT IS THE SECOND POPULATION OF CUSTOMERS WHO SHOULD**  
11 **RECEIVE RETROACTIVE ARREARAGE FORGIVENESS?**

12 A. As I discuss above, PWD adopted ratable arrearage forgiveness for customers who are  
13 TAP participants on and after July 1, 2022. More specifically, the PWD regulation  
14 provides that "As of July 1, 2022, all Customers maintaining enrollment in TAP will  
15 receive a one-time lump sum forgiveness of Pre-TAP arrears, in an amount calculated by  
16 multiplying the amount of the Customer's Pre-TAP arrears by 1/24 and then by the  
17 number of full monthly payments of TAP Bills issued on or after September 1, 2020."  
18 (PWD regulations, section 206.7(c)).

19  
20 PWD does not appear to have provided the arrearage forgiveness contemplated by this  
21 regulation to an important segment of the TAP participant population. PWD initiated a  
22 new element to its arrearage forgiveness program in August 2021 referred to as "TAP

1 Pause.” In its monthly TAP Settlement Report (filed September 21, 2021), PWD defined  
2 TAP Pause as follows:

3 **TAP Pause:** A change to the forgiveness process whereby a customer’s 24-  
4 month progress towards arrearage forgiveness is “paused,” rather than lost, if  
5 they leave TAP for any reason, and the customer can resume their progress  
6 upon returning to TAP, rather than starting over.

7 (Monthly Report to the Rate Board as Required by the FY2022-2023 Rate Determination  
8 [hereafter, Monthly Settlement Report], at 5). PWD asserted that “Under the new ‘TAP  
9 Pause’ feature, customers do not lose their progress towards arrearage forgiveness if they  
10 leave the program for any reason and then return. Instead, if a customer re-enters TAP  
11 after leaving for a period of time, their count of paid bills toward earned forgiveness will  
12 pick back up from where they left off, with the amount of forgivable pre-TAP arrearage  
13 fixed at the time of their first enrollment in TAP. (Id., at 5 – 6).

14 Pursuant to the clear language of the regulation adopted by PWD, customers who were  
15 removed from TAP due to a failure to recertify before July 2022, but who subsequently  
16 re-entered TAP under the TAP Pause program, should have received “a one-time lump  
17 sum forgiveness of Pre-TAP arrears, in an amount calculated by multiplying the amount  
18 of the Customer's Pre-TAP arrears by 1/24 and then by the number of full monthly  
19 payments of TAP Bills issued on or after September 1, 2020.” Only in that fashion will  
20 these customers, as provided by the regulation, “pick back up where they left off, with the  
21 amount of forgivable pre-TAP arrearage fixed at the time of their first enrollment in  
22 TAP.”

23 The number of TAP participants potentially adversely affected by a failure to offer this  
24 retroactive forgiveness as provided by the PWD regulation is substantial. The Monthly

1 Settlement Report, published April 20, 2022, reported (at page 1) that “On February 8,  
2 2022, the Revenue and Water Departments jointly filed Amendments to Section 206.1  
3 and Section 206.7 of the Philadelphia Water Department Regulations to be effective July  
4 1, 2022.” The history of TAP removals for a failure to recertify before and after that  
5 publication is provided in the Table below. As can be seen, in the four months after the  
6 ratable forgiveness regulations were first published, PWD removed 4,743 TAP  
7 participants for failing to recertify. In the four months before the ratable forgiveness  
8 regulations were published, PWD had removed 2,452 TAP participants (with 2,004 of  
9 those, [82%] removed in January 2022). In the six months subsequent to when the  
10 ratable forgiveness regulations became effective, PWD removed only 26 TAP  
11 participants due to a failure to recertify.

Table 11. TAP Removal for Failure to Recertify  
(November 2021 – January 2023) (PA-1-76)

	No. Removed for Failure to Recertify
November 2021	2
December 2021	380
January 2022	2,004
February 2022	66
March 2022 <sup>44</sup>	1,738
April 2022	1,532
May 2022	1,348
June 2022	125
July 2022 <sup>45</sup>	15
August 2022	0
September 2022	1
October 2022	3
November 2022	2
December 2022	5

1 As the Table above shows, of the 7,195 TAP participants who were removed from TAP  
 2 in the eight months prior to implementation of the new arrearage forgiveness policy, two-  
 3 thirds of them (4,743) were removed in the four months prior to implementation of the  
 4 new policy.

5 **Q. DO YOU HAVE DATA COMPARING THE NUMBER OF TAP PARTICIPANTS**  
 6 **EACH MONTH WHO HAD PRE-EXISTING ARREARS SUBJECT TO**  
 7 **FORGIVENESS AS COMPARED TO THE NUMBER OF TAP PARTICIPANTS**

<sup>44</sup> First month subsequent to publishing ratable forgiveness regulations.

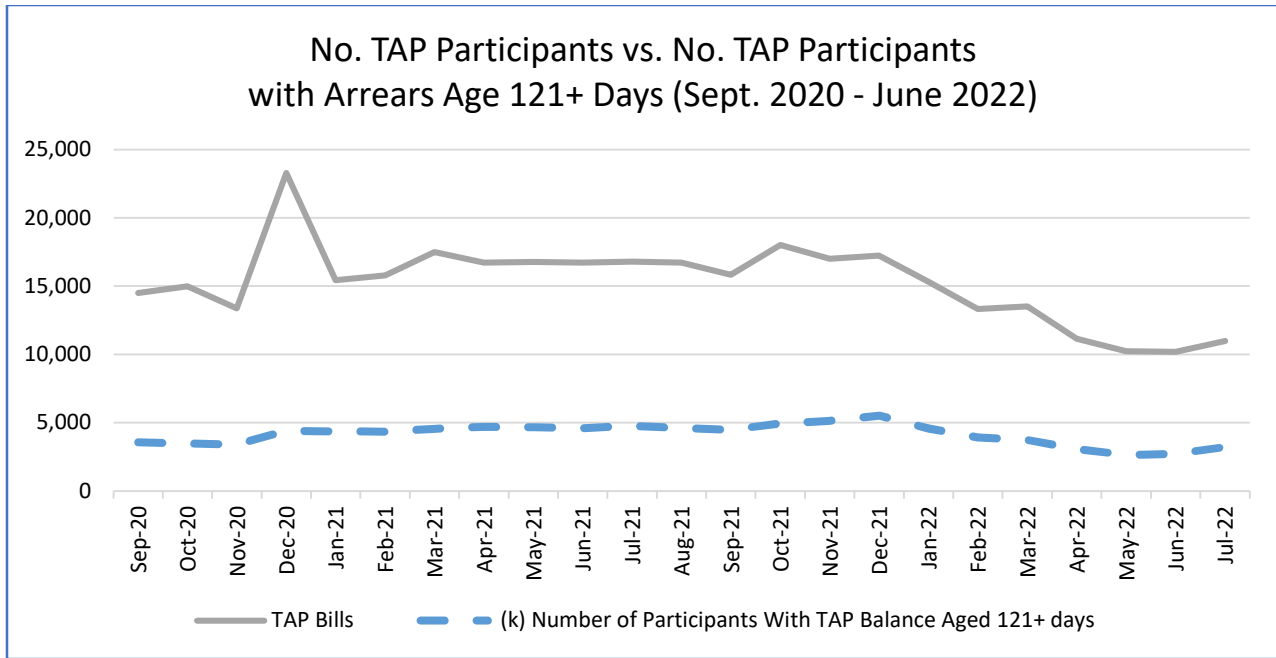
<sup>45</sup> Month in which ratable forgiveness regulations became effective.

1           **EACH MONTH WHO ACTUALLY RECEIVED ARREARAGE FORGIVENESS**  
2           **(AND THE DOLLARS ASSOCIATED WITH EACH)?**

3    A.    No. When PWD was asked to provide the number of TAP participants with arrears  
4           subject to forgiveness (PA-1-26(j)), the number of participants receiving arrearage  
5           forgiveness (PA-1-26(k)), and the dollars of arrearages forgiven (PA-1-26(l)), PWD did  
6           not provide that data.

7    **Q.    IS THERE DATA INDICATING THE EXTENT TO WHICH TAP**  
8           **PARTICIPANTS PAID THEIR BILLS BETWEEN SEPTEMBER 2020 AND**  
9           **JULY 2022?**

10   A.    Yes. I examine the data from three different perspectives. First, the Chart below  
11           demonstrates that even TAP participants who may have missed a payment here and there  
12           tended to routinely make those payments up. The Chart below compares, for the time  
13           period September 2020 through June 2022 (the time period for which retroactive arrears  
14           would be provided), the number of TAP participants in each given month to the number  
15           of TAP participants in each given month that had an arrearage aged 120 days (four  
16           months) or older. Consistently, the number of TAP participants with substantially aged  
17           arrears were fewer than one-third of the total number of TAP participants. If a substantial  
18           number of TAP participants were consistently missing payments, and never curing those  
19           missed payments with subsequent payments, the number of participants with arrears older  
20           than 120 days would grow bigger and bigger.



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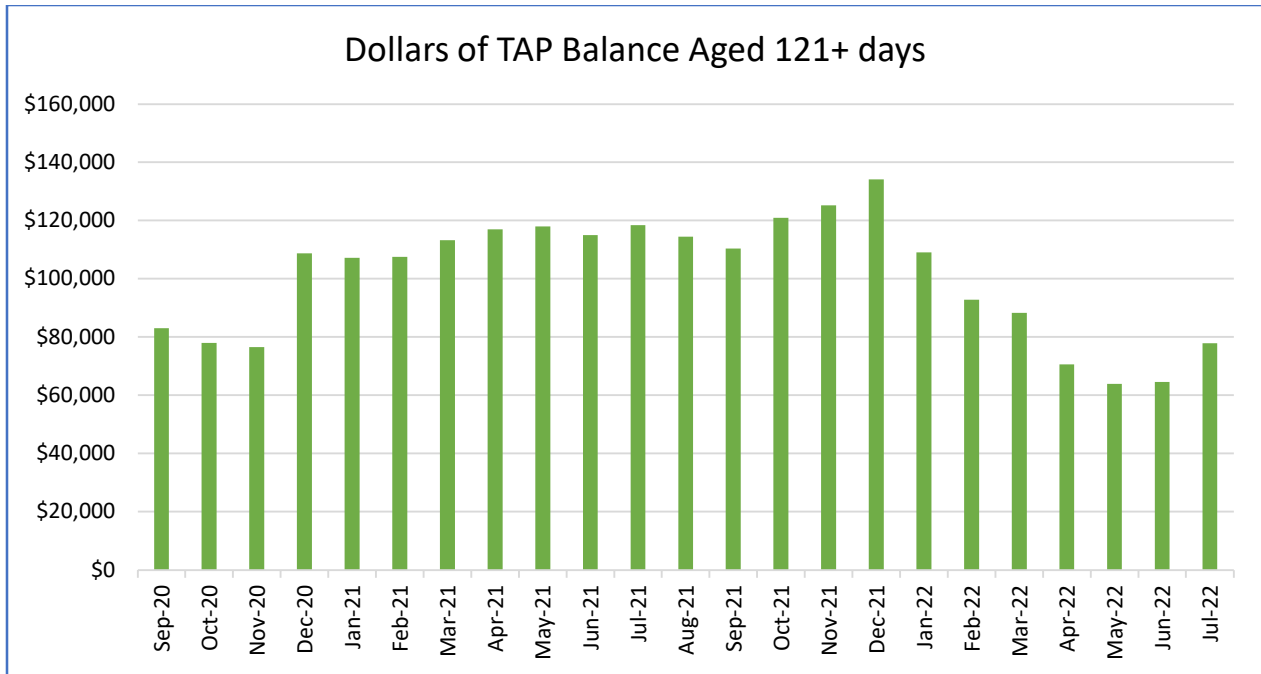
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A similar conclusion flows from looking at the dollars of aged arrears. The Chart below shows that just as the number of TAP accounts with arrears aged more than 120 days did not increase during the period September 2020 through June 2022, neither did the dollar amount of TAP arrears aged more than 120 days increase. If customers were not retiring their arrears by making payments to cure their arrears, the dollar amount of aged arrears would see a consistent increase. Even with the decrease of TAP participants beginning in January 2022, if TAP participants were not consistently retiring their older arrears, there would be a disparity between the number of TAP accounts and the dollars of arrears aged 120+ days. That growth in arrears simply did not occur in the time period for which retroactive forgiveness was to be provided “in an amount calculated by multiplying the amount of the Customer’s Pre-TAP arrears by 1/24 and then by the number of full monthly payments of TAP Bills issued on or after September 1, 2020.”





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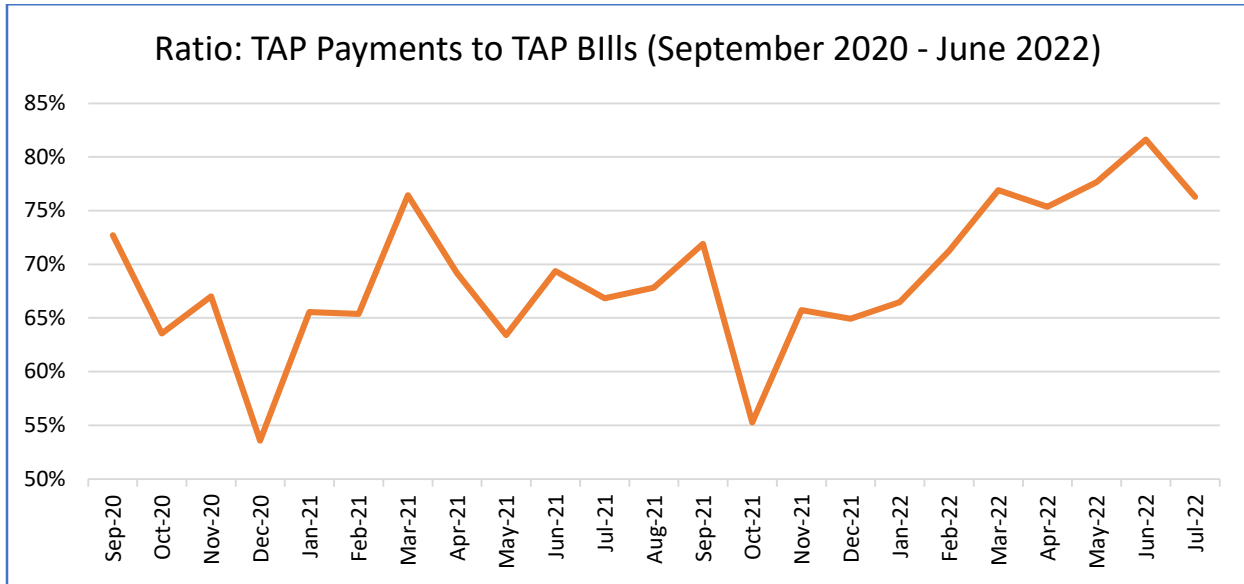
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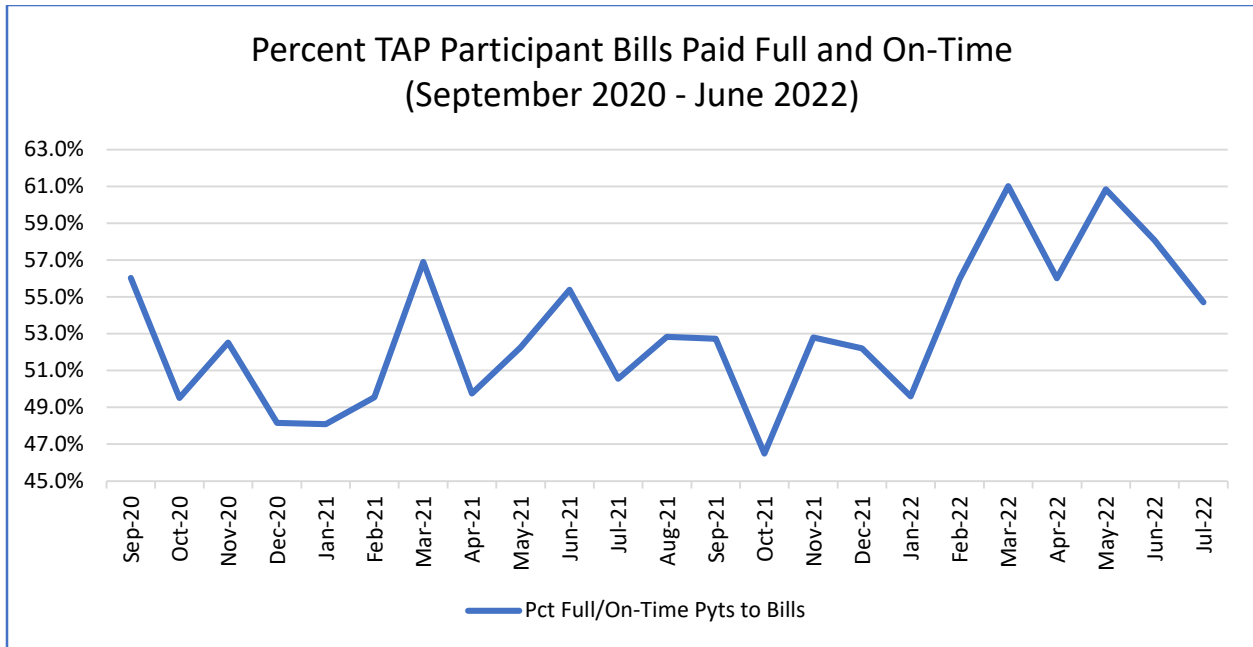
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The second perspective I have considered involves data on the number of payments that TAP participants made between September 2020 and June 2022. Remembering that not only do the Regulations provide that payments need not be timely, and that as full payments are completed, a pro rata portion of arrearage forgiveness is earned, the fact that the substantial majority of TAP participants continued to make at least “some” payment each month, particularly combined with the data above on the lack of older arrears, would support a finding that TAP customers continued to earn arrearage forgiveness. The data shows that TAP participants consistently made 65 or more payments for every 100 TAP bills that were received. In fact, in the four-month period leading up to the grant of retroactive arrearage forgiveness (March 2022 – June 2022), TAP participants who presumably were most likely to be enrolled in TAP as of July 1, 2022, made between 75% and more than 80% of their payments. Each additional payment, of course, particularly when viewed in light of the lack of growth of older

1 arrears, is more likely to complete a prior “full payment” and thus should have earned the  
2 TAP participant a pro rata forgiveness of the participant’s pre-program arrears.



4 Third, and finally, the Chart below supports the conclusion that TAP participants were  
5 not simply making “some” payment toward their TAP bills, but were making full and on-  
6 time payments toward their TAP bills. Particularly during the period of February 2022  
7 through June 2022 (representing those TAP participants who were most likely to have  
8 still been TAP participants as of July 1, 2022), between 55% and 65% of participants  
9 were making payments that were both “full” and “timely.”



1

2 Remember, again, that, a TAP payment under the new regulation need not have been  
 3 “timely” in order for participants to have been granted arrearage forgiveness “in an  
 4 amount calculated by multiplying the amount of the Customer’s Pre-TAP arrears by 1/24  
 5 and then by the number of full monthly payments of TAP Bills issued on or after  
 6 September 1, 2020.”

7 **Q. IS THERE DATA THAT WOULD INDICATE THAT PWD IS NOT GRANTING**  
 8 **ARREARAGE RETROACTIVE FORGIVENESS FOR THE TIME PERIOD**  
 9 **SEPTEMBER 2020 THROUGH JULY 2022 AS CUSTOMERS RE-ENROLL IN**  
 10 **TAP?**

11 A. Yes. The Table below presents the amount of principal arrearage forgiveness by month  
 12 for the months of July 2022 through January 2023 (as reported in the monthly Settlement  
 13 Reports). The Table then compares these dollar amounts to the arrearages of new TAP  
 14 enrollees who had previously participated in TAP and had arrearage forgiveness. The

1 data shows that, whether or not PWD granted retroactive arrearage forgiveness to  
2 customers who were TAP participants on July 1, 2022, it does not appear that PWD has  
3 been granting retroactive arrearage forgiveness to prior TAP participants who re-enroll in  
4 TAP “as of” (i.e., on or after) July 1, 2022. Consider that it is possible to determine the  
5 number of new TAP enrollees in any given month who are prior TAP participants with  
6 arrearage forgiveness. I then compare a hypothetical forgiveness of 50% of those arrears  
7 to the total arrears that were forgiven in the month. Remember, that beginning July 1,  
8 2022, the arrears for prior TAP participants who re-enroll in TAP are to receive a  
9 retroactive arrearage forgiveness equal to “a one-time lump sum forgiveness of Pre-TAP  
10 arrears, in an amount calculated by multiplying the amount of the Customer’s Pre- TAP  
11 arrears by 1/24 and then by the number of full monthly payments of TAP Bills issued on  
12 or after September 1, 2020.” Remember, further, that in the time period July 2022 to the  
13 present, as I documented above, between 50% and 60% of TAP participants made full  
14 and timely payments of their TAP bills from September 2020 through June 2022.  
15 Remember, further, that the regulation does not require TAP payments made during that  
16 period to have been “timely” in order to generate an arrearage forgiveness credit. Given  
17 those observations, consider that:

- 18 ➤ Even if the pro rata share of arrearage forgiveness is only 50% of the  
19 preprogram arrears on TAP participant bills when they re-enroll had PWD  
20 granted this forgiveness, it would have exceeded the total forgiveness granted  
21 by PWD in the period July 2022 through January 2023. It is thus possible to  
22 conclude that PWD did not grant forgiveness to these prior TAP participants.
- 23 ➤ If PWD’s grant of ratable retroactive arrearage forgiveness to prior TAP  
24 participants reflected their payment coverage ratio in the period September  
25 2020 through June 2022, a percentage that is reflected in the regulatory  
26 language (forgiveness based on “the number of full monthly payments of TAP

Bills issued on or after September 1, 2020”), the amount of forgiveness for prior TAP participants would be not simply in excess of the *total* arrears actually forgiven subsequent to July 2022, but would be *substantially* in excess of that total arrears.

- The failure to grant ratable retroactive arrearage forgiveness to prior TAP participants who re-enroll in TAP and made payments in the time period of September 2020 to June 2022 would be a significant dollar figure.
- As more and more months elapse beyond July 2022, the number of prior TAP participants who are re-enrolling in TAP, and who would be entitled to ratable retroactive arrearage forgiveness for the full payments they made between September 2020 and June 2022, is declining, along with the dollar amount of forgiveness that would be granted.

Month	\$ Forgiven in Month	\$ PPA of 1st Time Enrollees	Agg \$ of PPA of All New Enrollees	\$ of PPA for Prior TAP Participants	50% PPA of Prior TAP Participants
Jul-2022	\$655,978	\$1,080,726	\$3,604,662	\$2,523,936	\$1,261,968
Aug-2022	\$1,204,311	\$1,599,702	\$4,745,837	\$3,146,135	\$1,573,068
Sep-2022	\$1,006,652	\$1,080,972	\$2,637,464	\$1,556,492	\$778,246
Oct-2022	\$1,060,800	\$641,301	\$1,431,727	\$790,426	\$395,213
Nov-2022	\$849,484	\$580,165	\$1,149,356	\$569,191	\$284,596
Dec-2022	\$715,705	\$380,588	\$920,646	\$540,058	\$270,029
Jan-2023	\$650,739	\$354,596	\$851,575	\$496,979	\$248,490

**Q. WHAT DO YOU RECOMMEND?**

A. I recommend that PWD provide the Rate Board an account-specific accounting of TAP participants by month starting on July 1, 2022 and continuing through June 30, 2023 that reports for each account: (1) the total number of TAP participants in each month that had, at some point in the period September 2020 through June 2022, been a TAP participant;<sup>46</sup>

<sup>46</sup> PWD concedes that it can track applications that are received from customers who had previously been enrolled in TAP. (PA-I-7).

1 (2) the total dollars of pre-program arrears existing on that account as of July 2022; (2)  
2 the total dollars for current service appearing on bills for each account beginning with  
3 September 2020 and continuing until July 1, 2022; (3) the total dollars paid on behalf of  
4 that account beginning with September 1, 2020 and continuing until July 1, 2022; and (4)  
5 the total dollars of arrearage forgiveness that were credited to the account beginning in  
6 the month in which the customer re-enrolled in TAP. To the extent that this accounting  
7 reveals arrearage forgiveness that had been earned pursuant to the City's regulations, but  
8 had not been granted, that arrearage forgiveness should be retroactively credited to the  
9 customer's account irrespective of whether the customer remains a TAP participant.

10 In addition, PWD should provide ratable retroactive arrearage forgiveness to all future  
11 new TAP enrollees who were prior TAP participants bringing preprogram arrears into the  
12 program, and who made payments during the period September 2020 through June 2022.

13 In so doing, PWD would simply be complying with the City's regulation providing that  
14 "as of July 1, 2022, all Customers maintaining enrollment in TAP will receive a one-time  
15 lump sum forgiveness of Pre-TAP arrears, in an amount calculated by multiplying the  
16 amount of the Customer's Pre-TAP arrears by 1/24 and then by the number of full  
17 monthly payments of TAP Bills issued on or after September 1, 2020." (PWD  
18 regulations, section 206.7(c)).

19 Finally, PWD should refund, either as a bill credit or as a cash payment to the customer,  
20 at the customer's discretion, all dollars of payments made by the customer toward pre-  
21 program arrearages that should, under the regulation, have been ratably, retroactively,  
22 forgiven. The value of the refunds should be escalated from the date the forgiveness

1 should have been provided in the first instance to the date on which it is provided at a rate  
2 equal to the short-term borrowing of unsecured residential credit.

3 **B. Forgiveness of the Pre-Program Arrears of TAP Participant “Occupants.”**

4 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
5 **TESTIMONY.**

6 A. In this section of my testimony, I examine how PWD is denying occupants the full range  
7 of arrearage forgiveness credits to which they are entitled under City regulations  
8 governing PWD’s TAP. The City’s regulations provide that “After July 1, 2022, a  
9 Customer maintaining enrollment in TAP will earn forgiveness upon making each full  
10 monthly payment of the TAP Bill, calculated by dividing the amount of the Customer’s  
11 Pre- TAP arrears by twenty-four (24).” (Regulations, Section 206.7(d)). The Regulations  
12 go on to define a “pre-TAP arrears,” providing that:

13 For owners *and occupants*, the sum of *all unpaid service, usage, and*  
14 *stormwater charges at the property*, calculated at the time of first enrollment  
15 in TAP; or, for tenants, the sum of all unpaid service, usage, and stormwater  
16 charges at the property accruing during the period the tenant has been  
17 responsible to pay for water service pursuant to the terms of their lease,  
18 calculated at the time of first enrollment in TAP.

19 (Id., at Section 206.6(m)). (emphasis added). It is important to note that the City  
20 Regulations specifically provide for “occupants” that pre-TAP arrears explicitly include  
21 *all* unpaid service, usage and stormwater charges *at the property*. In fact, the Regulation  
22 specifically contrasts the treatment of occupants to the treatment of tenants. For tenants,  
23 pre-TAP arrears include only those charges at the property “during the period the tenant  
24 has been responsible to pay for water service pursuant to the terms of their lease.” No  
25 such requirement of needing to show that occupants were “responsible to pay for water

1 service” in order to have an unpaid charge at the property be considered “pre-TAP  
2 arrears” applies to occupants.

3 **Q. HOW DOES PWD IMPEDE THE COMPLETE FORGIVENESS OF ARREARS**  
4 **TO WHICH OCCUPANTS ARE ENTITLED UNDER THE CITY**  
5 **REGULATIONS?**

6 A. PWD does not engage in any specific inquiry for a TAP applicant who is neither an  
7 owner nor a tenant, but rather is an occupant. According to PWD, “Homeowners,  
8 tenants, and occupants can apply for TAP using the same application as long as they are  
9 the water customer of record. The review and treatment of all applications is the same.”  
10 (PA-I-6). Moreover, when asked to provide a report including the number of occupants  
11 who were approved for TAP, PWD could not do so. (PA-I-5). PWD appears to collapse  
12 “tenants” and “occupants” into the same reporting category. (Id.). PWD also could not  
13 provide a report of new TAP enrollees who were occupants having a pre-existing arrears.  
14 (PA-I-7(I)).

15 Moreover, when an occupant enrolls in TAP, PWD’s current practice is that all arrears  
16 associated with the property are not automatically transferred to the pre-TAP arrears of  
17 the TAP participant. Instead, the occupant who becomes a TAP participant must know of  
18 the regulation requiring the inclusion of all pre-TAP arrears in the arrears subject to  
19 forgiveness and must make a specific request to have all arrears associated with the  
20 property transferred to the occupant’s account.

21 The problem with not tracking TAP participants (or TAP applicants) by occupant status  
22 is that tenants and occupants are to be treated differently pursuant to the City’s TAP



1 regulations. For occupants, pre-TAP arrears are defined to include all unpaid water bills  
2 at the property. There is no requirement under the regulation for the occupant TAP  
3 participant to request that some arrears be included (with other arrears being excluded) in  
4 pre-TAP arrears subject to forgiveness. For tenants, the TAP applicant must establish the  
5 date on which the tenant became responsible for paying the water bill. Potentially, only a  
6 limited portion of the pre-existing arrears (i.e., those arrears that were incurred after that  
7 date) will be subject to forgiveness as a “pre-TAP arrears.”

8 **Q. WHAT DO YOU RECOMMEND?**

9 A. For the period July 2022 to present, PWD should provide an account-specific auditing of  
10 occupant TAP participants. This auditing should include: (1) the total dollars of arrears  
11 on the occupant’s property existing at the time the occupant became a TAP participant;  
12 (2) the total dollars of arrears that were included on the occupant’s TAP account as a  
13 “pre-TAP arrears” subject to forgiveness; and (3) the proportion of pre-TAP arrears that  
14 have been forgiven to date. To the extent that the dollars of arrears on the occupant’s  
15 property are more than the dollars of arrears deemed to be “pre-TAP arrears” subject to  
16 forgiveness, the amount of pre-TAP arrears should be adjusted to include the larger  
17 amount and the customer’s account should be retroactively credited with the dollars of  
18 arrears based on that larger amount.

19

1 **Part 5. PWD Should Utilize its Late Payment Charge Revenue**  
2 **for the Purposes for which it was Collected.**

3 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
4 **TESTIMONY.**

5 A. In this section of my testimony, I explain why PWD should devote the revenue it collects  
6 through late payment charges to the purpose for which those charges are collected in the  
7 first instance. PWD imposes a “penalty” for unpaid water charges (hereafter, “late  
8 payment charge”). PWD could provide no cost basis for the late payment charge.  
9 Instead, PWD cites a municipal ordinance for its authority to impose such a charge. (PA-  
10 I-38, citing Philadelphia Code, Section 19-1606(2)). Not only does the late payment  
11 charge lack a cost basis, in addition, PWD has no basis upon which to conclude that its  
12 late payment charge serves as an incentive to pay, either for residential customers as a  
13 whole or for low-income customers. (PA-I-52). PWD has no basis to conclude that  
14 imposing its late payment charge reduces residential bad debt (PA-I-53(c)). Nor does it  
15 have any basis to conclude that imposing its late payment charge reduces residential  
16 arrears. (PA-I-54(c)).

17 Despite its lack of functionality, either to recover identified costs, or to serve as an  
18 incentive to pay, or as a mechanism to control bad debt or arrears, from June 2021  
19 through December 2022, PWD charged a total of \$22,308,948 in late payment charges to  
20 2,911,371 accounts.<sup>47</sup> On average, each month, PWD imposes \$1,174,155 in late  
21 payment charges to 153,230 customers. (PA-I-49). In the 12-months July 2021 through  
22 June 2022, PWD imposed \$13,738,767 in late payment charges. Moreover, the amount

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<sup>47</sup> Presumably, some accounts would appear in this count more than once based upon a failure to make timely payments in more than one month.

1 of late payment charges has been increasing on a year-over-year basis. While PWD  
2 imposed \$6,252,491 in late payment charges from July 2021 through December 2021, it  
3 imposed \$7,527,489 in late payment charges for the corresponding six month period of  
4 July through December 2022, an increase of 20%.

5 Billing \$22.3 million in revenue from a charge that is neither cost-based, nor which  
6 serves any identified functionality, is a tremendous burden to impose on PWD customers.

7 **Q. WHAT DO YOU RECOMMEND?**

8 A. I recommend that a portion of PWD’s late payment charges be earmarked for the  
9 programs I explain below. In adopting an earmark in this fashion, PWD will be devoting  
10 the late payment charge revenue to the purposes for which the charges were intended. By  
11 funding the programs I identify below, rather than simply being allocated as “Other  
12 Operating Revenue” to all customer classes, the late payment charges will be put to work  
13 to help accelerate payments, reduce arrears, reduce bad debt, and thus reduce total costs  
14 to all PWD customers.

15 In addition, by funding the programs I identify below, PWD will be returning those  
16 dollars to benefit the customer base that is most likely to have paid those charges with  
17 which to begin.

18 **Q. UPON WHAT DO YOU BASE YOUR CONCLUSION THAT EARMARKING A**  
19 **PORTION OF THE LATE PAYMENT CHARGE REVENUE WOULD RETURN**  
20 **THOSE DOLLARS TO THE CUSTOMERS WHO PAID THEM IN THE FIRST**  
21 **INSTANCE?**

1 A. There is little question in Philadelphia that nonpayment of bills is associated with lower  
2 incomes (and thus higher bills as a percentage of income). PWD does not track basic  
3 information that would allow the utility to determine a precise relationship between  
4 income and payment difficulties. For example, it does not track by zip code (or other  
5 geographic identifier) the bills rendered to, or payments received from, residential  
6 customers. It does not track either the dollar level or age of arrearages by zip code. It  
7 does not track either the number of disconnect notices or the number of actual  
8 disconnections by zip code.

9 Nonetheless, it is possible to track the concentration of Poverty in the PWD service  
10 territory. Using the zip codes provided by PWD (PA-1-33), I identified the 13 zip codes  
11 with the highest concentration of households with income at or below 150% of Poverty;  
12 the 13 zip codes with the lower First Quintile Income; and the 13 zip codes with the  
13 highest PWD water burdens. I then compared those zip codes with the number of TAP  
14 participants (PA-I-33) in those zip codes. I found that the areas within the PWD service  
15 territory with the highest concentrations of poverty (as measured by these three metrics I  
16 just identified) had the lowest TAP participation rates. Accordingly, the low-income  
17 customers in these high poverty neighborhoods are not protected from being charged  
18 PWD's non-cost-based late payment charge.

19 **A. PWD Should Expand its Water Conservation Program.**

20 **Q. PLEASE EXPLAIN THE FIRST EARMARK YOU RECOMMEND FROM**  
21 **PWD'S LATE PAYMENT CHARGE?**

22 A. I recommend that PWD expand its water conservation program to specifically direct  
23 water conservation investments to low-income customers. In this sense, "low-income"

1 can be defined in the same terms as it is defined for PWD’s TAP initiative. PWD reports  
2 the following historic and future water conservation budgets funded through rates.

3 ➤ FY21: \$700,000

4 ➤ FY22: \$700,000

5 ➤ FY23: \$750,000

6 ➤ FY24: \$750,000

7 ➤ FY25: \$750,000

8 ➤ FY26: \$750,000

9 (PA-II-6). While PWD states that its future budgets are “outside of inflationary  
10 adjustments” (Id.), PWD has not historically made “inflationary adjustments” to its low-  
11 income water conservation program (LICAP) budget. (PA-II-6). According to PWD:

12 The LICAP contractor has experienced increases in the cost of direct  
13 installation materials and subcontractor work. The LICAP contractor  
14 continues to honor the original contract \$300 per audit fee and \$4250 in  
15 administrative costs per month, absorbing the increased costs of materials and  
16 labor.\* \* \*Inflation has not impacted the number of jobs completed the past  
17 year because the contractor did not pass these costs on to the Water  
18 Department. It is unknown how inflation will impact the number of jobs  
19 completed in the next two years.\* \* \*As we evaluate the costs the LICAP  
20 program, we anticipate increased audit fees or different fee structure to cover  
21 increased costs associated with inflation. This is likely to require an increase  
22 in the budget.

23 (PA-II-7). My first recommendation, therefore, is that within 90 days after issuance of a  
24 Final Rate Determination in this proceeding, PWD submit a two year inflation-adjusted  
25 LICAP budget, supported by documentation from PWD’s LICAP contractor, for FY24,  
26 FY25 and FY26. This inflation-adjusted budget should be funded through PWD’s late  
27 payment charge revenue.

1 In addition to inflation, PWD notes further that “In addition, efforts to increase TAP  
2 participation may result in additional audits depending on how many customers are  
3 enrolled.” (Id.) Directing LICAP investments to new TAP enrollees not only benefits the  
4 customer in whom the investment has been made, but it also benefits PWD as a whole by  
5 reducing TAP credits. Every dollar of bill reduction to a TAP participant generated by a  
6 LICAP investment would be a dollar of reduced TAP credit to be collected through the  
7 TAP Rider. Accordingly, my second recommendation is that an additional LICAP  
8 budget should be directed to the number of TAP participants which exceeds the number  
9 of participants as of July 1, 2023, up to a maximum of 2,000 additional participants. At  
10 the existing LICAP fee of \$300 per job, this would require a budget of \$600,000.

11 Finally, I recommend that PWD earmark a portion of late payment charge revenues to  
12 fund a water conservation component to the Low-Income Usage Reduction Program  
13 (LIURP) jobs completed by its natural gas and electric sister utilities. PECO (electric)  
14 has projected its 2022 LIURP production to deliver usage reduction services to 2,624  
15 low-income households. Of these, I conservatively estimate that 2,000 would be in  
16 Philadelphia. PGW has projected its 2022 LIURP program to deliver usage reduction  
17 services to 1,765 households. Given that PECO and PGW would have undertaken the  
18 process of outreach and intake for each of these jobs, PWD should provide the PECO and  
19 PGW LIURP contractors with the same \$300 fee (adjusted for inflation as per my first  
20 recommendation) that it provides its own LICAP contractor. (PA-II-7). Prior to  
21 adjusting the fee for inflation (as recommend above), providing a funding to add a water

1 conservation component to these 3,765 LIURP jobs would require an earmark of  
2 \$1,129,500.<sup>48</sup>

3 **Q. ARE THERE OTHER REASONS THAT JUSTIFY PWD EXPANDING ITS**  
4 **LICAP BUDGET?**

5 A. Given PWD's current proposed LICAP annual budget of \$750,000, PWD would serve a  
6 tiny fraction of its low-income customers. PWD reports providing an administrative  
7 budget of \$4,250 per month to its LICAP contractor (PA-II-7), which is annualized to an  
8 administrative budget of \$51,000 per year. Subtracting that administrative budget from  
9 the total budget leaves \$699,000 for LICAP investments. At a cost per audit of \$300  
10 (PA-II-7), PWD can serve only 2,330 low-income households per year. With an  
11 estimated 170,000 customers with income at or below 150% of Poverty Level, it would  
12 take PWD more than 70 years to treat all of its low-income customers. That, however,  
13 assumes that no-one would need to be re-treated within that 70-year period.

14 The delivery of appropriately designed, targeted, and funded investments in low-income  
15 water conservation measures not only yield affordability benefits to the participating  
16 customer, but also deliver a broad range of improvement in a utility's ability-to-collect.  
17 This is particularly true given the fact, as I establish above, that TAP usage (0.735 MCF)  
18 is estimated to considerably exceed typical residential usage (0.45 MCF). Accordingly,  
19 low-income conservation investments should be pursued by PWD as an important  
20 business tool in controlling system-wide utility costs that would otherwise be included in  
21 rates to customers. Cost reductions commonly associated with low-income conservation

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<sup>48</sup> Presumably, when these households are treated with water conservation investments, they could be enrolled in TAP at the same time.

1 investments include savings such as reduced bad debt, reduced working capital, and  
2 reduced credit and collection expenses.

3 As we know with respect to PWD (if for no other reason than the nearly universal entry  
4 of new TAP enrollees having pre-TAP arrears), substantial numbers of low-income  
5 households either skip payments or make less than their full utility bill in any given  
6 month because they lack the household resources to make such payments. As a result,  
7 PWD would incur working capital costs it would not have incurred had low-income bills  
8 been paid. Second, as a result of these actions, PWD responds by engaging in collection  
9 activity that frequently leads to the threatened or actual disconnection of service. The  
10 failure to pay, and the utility collection activity which results from that failure to pay, is  
11 clearly related to low-income status.

12 The existence of direct financial benefits to utilities arising from conservation programs  
13 targeted specifically to low-income households has been recognized for over 35 years.

14 The presence of such avoided costs in the energy industry was first postulated in 1987.

15 That analysis stated that targeted electric efficiency programs had advantages that went  
16 beyond the traditional energy and capacity savings associated with energy efficiency  
17 measures:

18 The cost-effective reduction of system costs is relevant and important in  
19 every part of the business operations of the utility, not simply to the power  
20 supply function. Accordingly, a utility should be concerned with the problem  
21 of nonpayment, overdue payment, and partial payment of utility bills. Bad  
22 debt arises when ratepayers demand power from the system and then do not  
23 pay for it on a timely basis . . . . [A] new conservation program [can be  
24 proposed] that is justified on an avoided cost basis. The proposal rejects the  
25 historical view that avoided costs include only an energy and a capacity  
26 component. Instead, it introduces the notion of avoided bad debt. As long as



1 the energy efficiency program costs less than the bad debt it will avoid, the  
2 program is cost-justified.<sup>49</sup>

3 In this 1987 article, “bad debt” is defined to include all aspects of costs associated with  
4 payment troubles. The term includes not only written-off accounts, but credit and  
5 collection expenses, working capital expenses, and a host of other expenses related to  
6 nonpayment. Since that time, the existence and importance of such expanded avoided  
7 costs has become generally-accepted. Analysts have repeatedly confirmed that low-  
8 income conservation generates benefits beyond the traditional savings in production  
9 costs.

10 Working capital is a particularly important expense reduction to consider in assessing the  
11 impact of LICAP. Working capital expense is driven by two factors: (1) the *level* of  
12 arrears; and (2) the *age* of arrears. For example: (1) An arrearage of \$1,500 generates a  
13 greater working capital expense than an arrearage of \$500. (2) An arrearage that is 120  
14 days old generates a greater working capital expense than an arrearage that is 60 days old.  
15 Accordingly, working capital reductions are important to consider for several reasons.

- 16 ➤ First, working capital reductions arise even if arrearages are not eliminated  
17 entirely. If a low-income customer carries an arrearage of \$100 rather than \$300,  
18 there is a working capital reduction, all else equal.
- 19 ➤ Second, working capital reductions occur if bill payment is accelerated, even if  
20 the *total* dollars of payment over time is the same. A low-income customer with a  
21 90-day arrears results in a lower working capital expense than a low-income  
22 customer with a 30-day arrears, all else equal.

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<sup>49</sup> Colton and Sheehan (1987). “A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs,” 21 *Clearinghouse Review* 135, 139.

1 The fact that PWD is a cash-flow utility does not detract from the conclusion that it will  
2 experience a working capital expense associated with nonpayment. That is an expense  
3 that can be controlled.

4 **B. PWD Should Implement a Pilot Internal Plumbing Repair Program.**

5 **Q. WHAT IS YOUR SECOND RECOMMENDATION FOR AN EARMARK OF**  
6 **LATE PAYMENT CHARGE REVENUE?**

7 A. In this section of my testimony, I recommend that PWD earmark a portion of the non-  
8 cost-based late payment revenue it generates each year to fund a pilot low-income  
9 interior plumbing repair program. The program I recommend below mirrors the low-  
10 income leak repair program recently approved by the Pennsylvania PUC for the  
11 Pittsburgh Water and Sewer Authority (PWSA), another major municipal water utility  
12 serving low-income communities in Pennsylvania. I recommend a late payment charge  
13 earmark of \$2.2 million per year for the next three years.

14 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

15 A. A pilot low-income plumbing repair program funded through earmarked late payment  
16 charges would help advance the purpose for which those late payment charges were  
17 charged in the first instance. Addressing high water consumption occurring as a result of  
18 the need for interior plumbing repairs for eligible residential low income customers who  
19 cannot afford the cost of such repairs benefits those customers by lowering their overall  
20 cost of water service. It also benefits all of PWD's ratepayers by reducing the amount of  
21 uncollectible costs that result from high consumption that is not within the customer's  
22 financial ability to address. By repairing interior plumbing experiencing or causing leaks,  
23 the goal of water conservation is also furthered.

1 Customers are responsible for the costs of repairing interior plumbing repairs. To do so,  
2 they must hire and pay for a registered plumber to perform the necessary repairs. The  
3 costs of these interior plumbing repairs can be well beyond the financial resources that  
4 low-income customers have available to cover them. Moreover, even if there are  
5 plumbing companies in the Philadelphia area that might on occasion perform pro bono  
6 work for religious organizations, low income customers, and the elderly, low income  
7 customers may not have the time and resources available to identify these companies.

8 **Q. WHAT DO YOU RECOMMEND?**

9 A. I recommend that the most effective and efficient way forward is to determine eligibility  
10 in line with that of TAP and extended payment agreements (at or below 250% of  
11 Poverty). Through these existing low-income programs, PWD already has systems in  
12 place to identify customers who meet this income eligibility threshold. Accordingly,  
13 PWD would not need to create new or different systems to identify eligibility for the Pilot  
14 Program. Moreover, by targeting investments to TAP participants, every dollar of  
15 reduced bill would be a dollar savings to all other ratepayers since bill reductions would  
16 reduce the dollar amount of TAP credits. Targeting investments to customers with  
17 extended payment plans would enhance the ability of these customers to successfully  
18 complete their agreements.

19 I further recommend that PWD mirror the approach of PWSA by targeting customers  
20 with high use. According to PWD, average TAP consumption is 0.735 MCF (roughly  
21 5,500 gallons per month), considerably higher than the average residential use of 0.45  
22 MCF. I thus recommend targeting the pilot program to low-income customers with usage  
23 at or exceeding 7.35 CCF (or 5,500 gallons). If experience through the pilot program

1 reveals that this consumption is generating too many or too few potential participants, the  
2 threshold can be adjusted during the operation of the program.

3 No cost internal plumbing repair services will be offered to an eligible property at an  
4 initial not-to-exceed cost. The specific repair services to be offered will be based on the  
5 needs of the property as may be implemented within the initial not-to-exceed cost. Those  
6 repairs that will have the most significant impact on reducing usage will be prioritized. If  
7 a determination is made by the contractor that additional repairs beyond the initial not-to-  
8 exceed cost repairs could be beneficial, that information will be documented by the  
9 contractor and provided to PWD staff. It will then be further evaluated to determine  
10 whether or not the additional work would be beneficial based on a consideration of (1)  
11 the level of the daily high consumption, (2) the estimated dollar amount of damage  
12 caused to the customer's property by the leak; (3) the amount of outstanding unpaid  
13 charges for the property, (4) the anticipated effect of the proposed repairs on reducing the  
14 high consumption, resulting in significant bill savings and usage reductions for the  
15 customer, and (5) the number of other properties eligible for services from the remaining  
16 budget such that if other properties are known to be eligible for one-time assistance.

17 All work will be performed by licensed plumbing contractors. If, upon the date set for the  
18 initial repair work, the contractor identifies an urgent need that the contractor can address  
19 at that time, but which exceeds the scope of the initial not-to-exceed budget, the  
20 contractor will be directed to contact the PWD team. Additional repair work may be  
21 authorized at the discretion of PWD based upon consideration of the guidelines identified  
22 above.

1 Eligible properties may receive a repair of a leak on exposed plumbing and installation  
2 of: (1) two faucet aerators, (2) one low flow showerhead; and (3) one low flow toilet  
3 replacement. The proposed not to exceed cost of these three services is \$2,500. PWD's  
4 contractor will have the flexibility, based on the needs of the specific property, to  
5 determine which of these services or any combination thereof would best address the  
6 high consumption and may implement them so long as the cost to implement is within the  
7 not-to-exceed initial cost.

8 **Q. PLEASE EXPLAIN THE EVALUATION AND REPORTING THAT YOU**  
9 **RECOMMEND?**

10 A. I recommend that the Pilot Program operate for a three year period. A three year pilot  
11 period is a reasonable balance of the projected costs of the new program and time to  
12 evaluate whether or not the program is cost efficient and is providing measurable results.  
13 PWD's evaluation of the Pilot Program will focus on the number of participants who  
14 receive service, how the customer's usage changed after receiving services, and how long  
15 any such benefits in conservation were maintained. PWD should also keep track of the  
16 costs of the measures implemented to evaluate whether the costs of the Pilot Program  
17 were reasonable given the results of the program. PWD should also track and identify the  
18 number of eligible properties which did not receive services as a result of the lack of  
19 agreement by the property owner.

20 PWD should file the result of its evaluation with the Rate Board no later than six months  
21 subsequent to the end of the pilot period. The evaluation should include PWD's  
22 recommendation as to whether or not to continue the pilot and, if so, any changes that are  
23 recommended for the future.

1 **Q. PLEASE EXPLAIN UPON WHAT YOU BASE YOUR BUDGET**  
2 **RECOMMENDATION.**

3 A. My recommended budget projections are based on the identification of 750 customers a  
4 year who would benefit from this program. The recommended late payment charge  
5 earmark then leaves PWD with a budget for administrative costs (e.g., incremental  
6 internal staff, external contractor administration, outreach and education, education) of an  
7 additional 15% of the total installation budget ( $\$2,500/\text{job} \times 750 \text{ participants} =$   
8  $\$1,875,000 \times 1.15 \text{ for administration} = \$2,156,250$ ).

9 **Q. WHAT DO YOU CONCLUDE?**

10 A. The Pilot Program I recommend above presents a reasonable way to address the need for  
11 internal plumbing repairs and conservation for low income customers who would not  
12 otherwise be in a position to address such issues. The program recognizes that customers  
13 who are at or below 250% of the FPL likely lack the financial ability to pay for such  
14 internal plumbing repairs. So long as these leaks remain unaddressed, they increase costs  
15 for the affected customer as well as for all other ratepayers, in addition to needlessly  
16 wasting water in contravention of the goal of conservation. For the low income customer,  
17 his or her bill will be higher as a result of the imposition of consumption charges based  
18 on usage. For the non-low income customer, their costs are also higher both in terms of  
19 shouldering a larger burden of the uncollected costs incurred when the low income  
20 customer cannot pay the increased costs and paying the increased overall system costs  
21 that occur from the waste of water.

22 The Pilot Program is directed toward TAP participants with high consumption. The  
23 causes of the high consumption for these customers include issues that the Pilot Program

1 will address: i.e., exposed pipe leaks and/or leaking plumbing fixtures. By proactively  
2 repairing leaks for these eligible customers as soon as they are identified, PWD can limit  
3 the costs incurred to provide wasted service, which benefits the program participant and  
4 all other ratepayers. If PWD does not receive payment from these customers for the high  
5 consumption amounts billed, then the uncollectible expense costs to all ratepayers would  
6 likely increase. For TAP participants in particular, every dollar of reduced bill results in a  
7 dollar of reduced TAP credit that will need to be passed through to other ratepayers  
8 through the TAP Rider. Finally, PWD also incurs operational costs to deliver the water  
9 that is billed and unbilled. If leaks such as those discussed herein are permitted to  
10 continue unabated, then PWD incurs unnecessary costs increase by providing the  
11 unneeded water service.

12 In consideration of all these factors, and given that the revenue stream devoted to funding  
13 the pilot is an earmark from a non-cost-based fee imposed on customers in need with  
14 which to begin, the Pilot Program is a reasonable way to assist eligible customers  
15 regarding the unnecessary costs and expense that is created by unrepaired leaks for those  
16 who are least able to afford the costs of the repair and to reduce some of the costs to other  
17 ratepayers associated with high consumption.

18 **Q. DOES THIS PROPOSED PILOT PROGRAM DUPLICATE THE SERVICES**  
19 **WHICH PWD PROVIDES THROUGH LICAP?**

20 A. No. LICAP is a low-income conservation program which provides a limited set of  
21 conservation measures to low-income customers. LICAP operates with a budget of \$300  
22 per job. (PA-II-7(A)). The budget is insufficient to provide the internal plumbing repairs  
23 of the nature and magnitude contemplated by this proposed Pilot Program. Moreover, the

1 LICAP budget does not vary based on the measures installed. Rather, “PWD is billed for  
2 each appointment rather than by conservation measures installed.” (PA-II-7(E)).

3 **C. PWD Should Expand its Support for UESF.**

4 **Q. WHAT IS YOUR FINAL RECOMMENDATION FOR AN EARMARK OF LATE**  
5 **PAYMENT CHARGE REVENUE?**

6 A. PWD provides matching grants for emergency hardship grants provided through the  
7 Utility Emergency Services Fund (UESF). There are, however, important limitations on  
8 this program. First, the combined payments of UESF, PWD and the customer must “zero  
9 out the subject utility bill.” (PWD St. 5, at 8). Second, the UESF grant to PWD is limited  
10 by a budget of \$300,000 each year. (Schedule BC-1, Table C-3, Projected Receipts Under  
11 Existing Rates; see also, Exhibit BV-2, Table 1-5, “Projected Miscellaneous and Contra  
12 Revenues” [projecting “UESF Grants” of \$0.3 million / year for 2023 through 2028]).

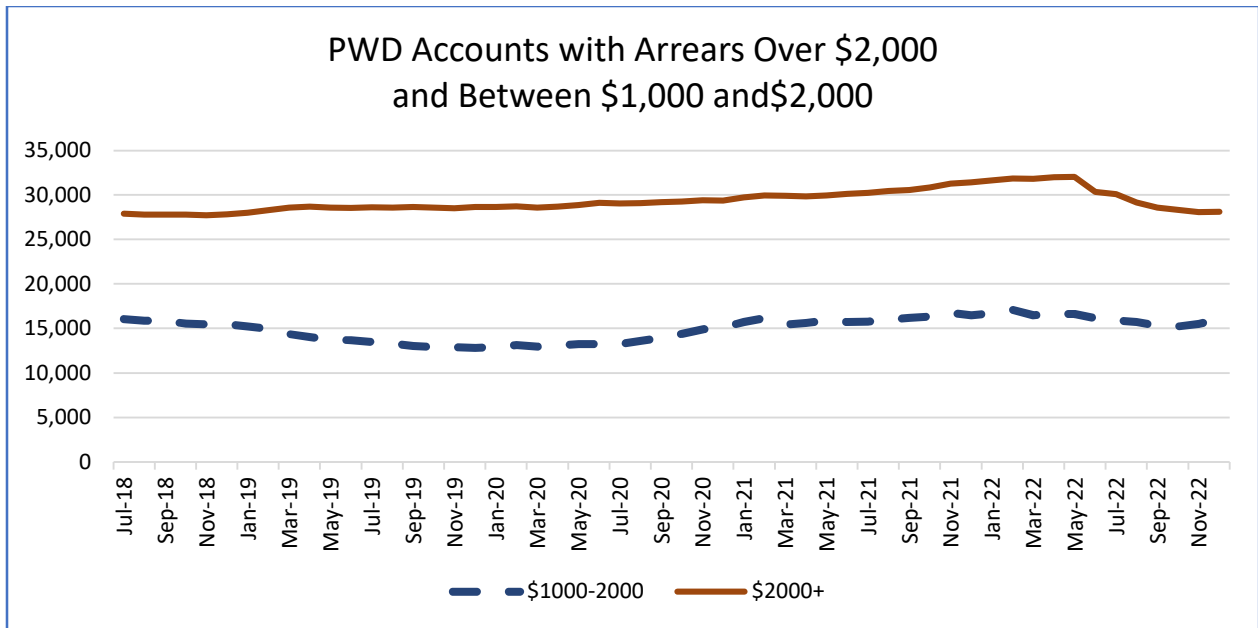
13 The UESF grants, along with the PWD matching credits, while helpful, do not come  
14 close to meeting the needs of PWD customers in arrears. The Chart below supports three  
15 important observations. First, there are a substantial number of PWD customers with  
16 arrears of \$1,000 or more. From January 2021 onwards, consistently more than 15,000  
17 customers each month have had arrears between \$1,000 and \$2,000. An *additional*  
18 30,000+ customers have had arrears greater than \$2,000.

19 Second, despite a slight downtick since May 2022, the number of customers with arrears  
20 greater than \$2,000 has consistently grown since July 2019. The number with arrears  
21 between \$1,000 and \$2,000 has seen a steady growth since October 2019. The growth in



1 UESF grants, along with the matching PWD credits, has not kept up with this growth in  
2 PWD arrears.

3 Third, no matter how the UESF budget of \$300,000 for PWD grants is divided, when  
4 PWD consistently experiences 45,000 (or more) customers with arrears exceeding  
5 \$1,000, the UESF funding can be seen to be grossly inadequate to serve the need.



6  
7 **Q. WHY IS THE \$1,000 THRESHOLD IMPORTANT TO YOUR ANALYSIS?**

8 A. The \$1,000 threshold has become even more important to PWD customers. UESF grants  
9 are provided to “individuals and families who are at risk of utility terminations or who  
10 experience terminations.” (PWD St. 5, at 7 – 8). PWD has increased the minimum  
11 account balance for which it will disconnect service for nonpayment to \$1,000. In  
12 addition, PWD will not impose a lien for balances of less than \$1,000. Nonetheless,  
13 through UESF grants (plus PWD matching credits), a customer must completely retire an  
14 arrearage balance in order to receive the grant. The grant may not simply reduce the  
15 account balance to less than the actionable amount.

1 **Q. IS THERE OTHER DATA THAT SHOWS THE INADEQUACY OF THE**  
2 **EXISTING MATCHING GRANTS BUDGET?**

3 A. Yes. While PWD does not track the average arrears of low-income customers in  
4 particular, and does not track the arrears of customers whose service has been  
5 disconnected for nonpayment, it is possible to gain some insights into low-income arrears  
6 by examining the distribution of arrears at the time low-income customers enroll in TAP.  
7 The Table below shows the distribution of account balances at the time of TAP  
8 enrollment for the cumulative time period July 1, 2017 (the date on which TAP was first  
9 implemented) through February 18, 2023 (the most recent data available).

	less than or equal to 50%	above 50% and less than or equal to 100%	above 100% and less than or equal to 150%	above 150%
Arrears <\$1,000	4,682	11,218	6,293	227
Arrears >1,000+	4,965	13,317	8,027	1,062
Total arrears >\$0	9,647	24,535	14,320	1,289
Pct arrears >\$1,000	51.5%	54.3%	56.1%	82.4%

10 The Table shows that over that period of more than five and one half years, more than  
11 50% of the accounts enrolling in TAP had arrearage balances at the time of enrollment of  
12 more than \$1,000. Over that time period, 27,371 of the 49,791 customers who enrolled in  
13 TAP had account balances in excess of \$1,000.

14 **Q. WHAT DO YOU CONCLUDE?**

1 A. Despite the need for emergency hardship grants to help prevent the disconnection of  
2 service to PWD customers substantially in arrears, PWD had neither increased its  
3 matching grants for UESF funds nor proposed to increase its UESF budget. Indeed,  
4 given the combined policies: (1) that UESF recipients must zero out their balances to  
5 receive a grant, (2) that UESF grants are provided only to customers who have had  
6 service disconnected or who are in danger of disconnection, and (3) that PWD will not  
7 disconnect customers with balances of less than \$1,000, the limited matching grant  
8 budget requires a higher and higher customer payment in order to receive a UESF grant  
9 (and matching credit) with which to begin. PWD's limited UESF matching grant budget  
10 is making it increasingly difficult, not easier, for PWD customers to receive the combined  
11 grant/matching credit, and thus to avoid the service disconnection.

12 **Q. WHAT DO YOU RECOMMEND?**

13 A. I recommend that PWD earmark no less than \$3.0 million a year from late payment  
14 charge revenues to use as additional financial support provided to UESF.<sup>50</sup> In  
15 conjunction with that increased budget, I recommend that the earmarked funds be  
16 allowed for arrearage balances exceeding \$500. Grants made using these funds should be  
17 permitted irrespective of the customer's shutoff status; should be permitted for customers  
18 with income not to exceed 250% of Poverty; and should be permitted for non-customers  
19 (such as tenants) who can demonstrate that they are required to pay their water bills.<sup>51</sup>

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<sup>50</sup> The \$3.0 million, in other words, would be incremental to the matching grants that PWD currently provides.

<sup>51</sup> I understand that PWD cannot dictate UESF internal policies on which customers will be provided grants. However, PWD may place conditions on the use of the additional funding provided through the earmarked late payment charge revenue.

1 **Part 6. PWD’s Lien Policy and TAP Arrearage Forgiveness.**

2 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
3 **TESTIMONY.**

4 A. In this section of my testimony, I explain how PWD works to frustrate, and in many  
5 instances totally impede, the right of TAP participants to receive forgiveness of pre-  
6 program arrears granted by the IWRAP legislation unanimously approved by the City  
7 Council. The City Council legislation does not authorize PWD to take actions outside the  
8 context of TAP which will prevent TAP participants from earning forgiveness of their  
9 pre-program arrearages. In addition, I explain how actions of PWD resulting in the  
10 imposition of a lien processing fee are an unreasonable service activity by PWD which  
11 conflicts with the directives of the IWRAP legislation adopted by City Council directing  
12 PWD to implement TAP to promote affordability.

13 **Q. WHAT IS THE OVERALL RECOMMENDATION OF THIS SECTION OF**  
14 **YOUR TESTIMONY?**

15 A. PWD should adopt a low-income “lien blocker” for TAP participants. Moreover, PWD  
16 should declare that pre-program arrearages that have been frozen pursuant to TAP, and  
17 made eligible for forgiveness, are not claims that are “due” to the City and are not  
18 considered “unpaid” so long as the customer remains a participant in TAP. Pursuant to  
19 the Philadelphia IWRAP legislation unanimously adopted by the Philadelphia City  
20 Council, “Earned forgiveness of arrearages shall be available under such terms and  
21 conditions as are adopted by regulation.” Pursuant to this legislation, the implementing  
22 PWD regulation states that with respect to principal forgiveness:

23 If a Customer maintains enrollment in TAP, the Customer will obtain  
24 forgiveness of outstanding arrears under the following conditions:

1  
2 (a) \* \* \*.

3  
4 (b) \* \* \*.

5  
6 (c) As of July 1, 2022, all Customers maintaining enrollment in TAP will  
7 receive a one-time lump sum forgiveness of Pre-TAP arrears, in an amount  
8 calculated by multiplying the amount of the Customer's Pre- TAP arrears by  
9 1/24 and then by the number of full monthly payments of TAP Bills issued  
10 on or after September 1, 2020.

11  
12 (d) After July 1, 2022, a Customer maintaining enrollment in TAP will earn  
13 forgiveness upon making each full monthly payment of the TAP Bill,  
14 calculated by dividing the amount of the Customer's Pre- TAP arrears by  
15 twenty-four (24). The credit for the forgiven debt will be applied to the  
16 Customer's account on or after the date of each full payment of the  
17 Customer's TAP Bill during such period of enrollment.

18 (City Regulations, Section 206.7) (emphasis added). There is no exception in the  
19 Regulations for pre-TAP arrears that PWD chooses to seek to enforce through the lien  
20 process. A customer who is enrolled in TAP "will earn forgiveness" under specified  
21 circumstances. Those circumstances are defined in the Regulations ("upon making each full  
22 month payment of the TAP Bill"). Thus, under the City Council's legislation, the customer  
23 is entitled to that complete forgiveness when those circumstances are met ("Earned  
24 forgiveness of arrearages shall be available under such terms and conditions as are  
25 adopted by regulation").

26 For this provision of arrearage forgiveness issue, while PWD is authorized to promulgate  
27 regulations to implement an arrearage forgiveness program, PWD actions are thus  
28 constrained by the language of the ordinance directing that arrearage forgiveness be  
29 "available." To the extent that the PWD actions make arrearage forgiveness unavailable,  
30 those actions are unauthorized by, and in conflict with, the City's ordinance creating  
31 TAP.

1 **Q. IS THERE ANY OTHER WAY IN WHICH PWD’S LIEN POLICY TOWARD**  
2 **TAP PARTICIPANTS VIOLATES PHILADELPHIA’S CITY ORDINANCES?**

3 A. Yes. Philadelphia’s IWRAP legislation, creating TAP, unambiguously provides in  
4 relevant part that “Low-income customers who are enrolled in IWRAP shall be required  
5 to make no additional payment in respect to any pre-IWRAP arrears to maintain service.”  
6 (Section 19.605(3)(h)). (emphasis added).

7 Moreover, that legislation provides in relevant part that “The Department and the Water  
8 Department shall also promulgate standards regarding circumstances under which  
9 pending enforcement actions shall be discontinued after a customer enters into IWRAP.”  
10 (Section 19.605(3)(m)). That legislation provides for no exception for the perfection of  
11 liens for pre-existing arrears.

12 Neither of these sections of the IWRAP legislation provides an exemption for PWD  
13 perfecting liens for pre-existing arrears on TAP participants or for continuing to enforce  
14 liens that were imposed on pre-TAP arrears before a customer enrolled in TAP.

15 **Q. DOES PWD RECOGNIZE THE STATUS OF PRE-TAP ARREARS WHEN A LOW-**  
16 **INCOME CUSTOMER ENROLLS IN TAP?**

17 A. No. According to PWD, its lien policy is as follows:

18 When a customer enrolls in TAP, any existing liens for unpaid bills remain  
19 on the property until the underlying amount is paid or the underlying amount  
20 is forgiven pursuant to the customer’s earned forgiveness while in TAP.

21 When the debt secured by the lien is paid, the lien is marked satisfied with  
22 the court. If the debt secured by the lien is forgiven, the lien is marked  
23 vacated with the court.

1 (PA-VI-11) (emphasis added). In fact, it has long been PWD policy to make no  
2 distinctions between “TAP debt” and “pre-TAP debt” for lien purposes. Susan Crosby,  
3 deputy commissioner for Water Revenue, for example, has previously acknowledged that  
4 PWD does not distinguish between pre-TAP or in-program arrears when placing a lien on  
5 a property. PWD’s testimony regarding its lien policy does not demonstrate compliance  
6 with the city ordinance. PWD witness Crosby testified that:

7 the WRB does not collect payments against municipal liens from bills that  
8 have been forgiven. The amount due on a filed lien is always calculated  
9 based on current data in the WRB’s billing system. *If an amount is forgiven*  
10 *by the WRB*, that forgiveness is recorded in the WRB’s system. When all the  
11 debt from unpaid bills under a lien is paid or forgiven, the lien is removed  
12 from the property.

13 (PWD Statement 5, at 7) (emphasis added). The issue I raise with respect to liens does  
14 not relate to pre-TAP arrears that have already been forgiven. The issue I raise relates to  
15 the debt that a customer is entitled to have forgiven once the statutory and regulatory pre-  
16 conditions for such forgiveness have been met.

17 **Q. IS THERE AN IMMEDIATE AND DIRECT HARM TO TAP PARTICIPANTS**  
18 **FROM IMPOSING A LIEN ON TAP PARTICIPANT ACCOUNTS ASSOCIATED**  
19 **WITH PRE-TAP ARREARS?**

20 A. Yes. There are immediate and direct harms to TAP participants that arise from imposing  
21 a lien on a TAP account associated with pre-TAP arrears. The harms are as discussed  
22 below.

23 The first harm is that TAP participants are denied the protections specifically provided in  
24 Philadelphia’s IWRAP ordinance. The City Council could hardly have been clearer in its

1 language: “Low-income customers who are enrolled in IWRAP shall be required to make  
2 no additional payment in respect to any pre-IWRAP arrears to maintain service.”

3 (Section 19.605(3)(h)). (emphasis added). This ordinance is directly violated by PWD’s  
4 liens on pre-TAP arrears. In contravention to this directive, when PWD imposes a lien,  
5 customers are charged a fee of \$91.45 for filing a lien on pre-TAP arrears. (PA-I-38).

6 Second, charging a TAP participant a lien fee of \$91.45 creates a number of problems for  
7 TAP participants. Adding the Lien Filing Fee to a TAP participant’s bill is a substantial  
8 addition to the bill.<sup>52</sup> In the last twelve months for which PWD could provide data, the  
9 average TAP bill was as set forth in the Table below. This additional bill is important in  
10 that when customer payments are made, those payments are applied to retire lien fees  
11 before they are applied to any other customer obligation. The TAP participant is thus  
12 harmed in two ways. First, for a TAP participant to make a complete payment, therefore,  
13 and earn forgiveness for any arrears, the participant would be required to make a payment  
14 in excess of \$120 rather than a payment of \$31. Second, when the TAP participant’s  
15 payment is diverted from paying bills for current service to instead pay the lien fee, that  
16 participant is provided a forgiveness of arrears for only one month, rather than for the  
17 four months they otherwise would have been provided for a payment of \$120. The TAP  
18 participant, in other words, is denied three months of forgiveness of pre-TAP arrears that  
19 they otherwise would have received.

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<sup>52</sup> PWD identified the lien fee as a “residential customer service fee” when requested to identify all such fees imposed on customers. (PA-I-38).



Table 14. Lien Fee compared to Average Monthly TAP Bill  
 (February 2022 through January 2023) (most recent twelve months available)

Month	Avg TAP Bill (PA-I-56)	Lien Fee	Additional Bill
Feb-22	\$31.47	\$91.45	2.9
Mar-22	\$31.57	\$91.45	2.9
Apr-22	\$31.86	\$91.45	2.9
May-22	\$31.82	\$91.45	2.9
Jun-22	\$31.85	\$91.45	2.9
Jul-22	\$32.24	\$91.45	2.8
Aug-22	\$32.36	\$91.45	2.8
Sep-22	\$33.16	\$91.45	2.8
Oct-22	\$33.32	\$91.45	2.7
Nov-22	\$33.29	\$91.45	2.7
Dec-22	\$33.42	\$91.45	2.7
Jan-23	\$33.76	\$91.45	2.7

1 Third, imposing the lien fee drives a customer’s bill to a substantially higher percentage  
 2 of income in violation of the city ordinance creating TAP. The bill as a percentage of  
 3 income, rather than being limited to the percentage of income burdens approved by the  
 4 Rate Board, is substantially higher than that prescribed for a TAP participant. In making  
 5 this observation, it is again important to remember that Lien Filing Fees are imposed not  
 6 because of in-program arrearages, but rather because of the existence of pre-existing  
 7 arrears. As previously noted, 95% or more of TAP participants enter TAP with a pre-  
 8 existing arrearage.

9 In sum, there are a multitude of problems that arise when PWD places a lien on a TAP  
 10 participant’s pre-existing arrearage that the City of Philadelphia has deemed to be subject  
 11 to forgiveness. Most immediately, contrary to the Philadelphia IWRAP legislation, a

1 TAP participant can be forced to pay an arrearage even though the City Council has said  
 2 that “Low-income customers who are enrolled in IWRAP shall be required to make no  
 3 additional payment in respect to any pre-IWRAP arrears to maintain service.” (Section  
 4 19.605(3)(h)). (emphasis added). Moreover, the TAP participant can be forced to pay an  
 5 arrearage through an enforcement action taking the form of a lien even though the City  
 6 Council has legislated that “The Department and the Water Department shall also  
 7 promulgate standards regarding circumstances under which pending enforcement actions  
 8 shall be discontinued after a customer enters into IWRAP.” (Section 19.605(3)(m)).

9 **Q. IS PWD’S PRACTICE OF IMPOSING LIENS ON PRE-TAP ARREARAGES**  
 10 **WIDESPREAD?**

11 A. Yes. The data in the Table below presents both: (1) the number of TAP accounts with  
 12 pre-TAP arrears subject to forgiveness that are subject to liens; and (2) the dollars of pre-  
 13 TAP arrears that have been made subject to a lien.

Table 15. TAP Accounts with Pre-TAP Arrears Subject to Liens and Dollar Value of Pre-TAP Arrears Subject to Liens (PA-VI-10)		
	06/30/22	02/28/23
b. The number of TAP participants with a pre-program arrearage balance which balance is subject to future forgiveness and which balance had been made subject to a lien;	4,086	5,132
c. The dollars of TAP pre-program arrearage balances which balances are subject to future forgiveness and which balances have been made subject to a lien	\$10,666,456.26	\$15,313,758.74

14 **Q. WHAT DO YOU RECOMMEND?**

15 A. I recommend that PWD comply with the IWRAP municipal legislation. Pending  
 16 enforcement actions against customers who subsequently enroll in TAP shall be

1 discontinued. Moreover, TAP participants “shall be required to make no additional  
2 payment in respect to any pre-IWRAP arrears to maintain service.”

3 **Q. DO YOU HAVE AN ADDITIONAL RECOMMENDATION?**

4 A. Yes. The lien fee is a fee imposed by the judicial system on PWD when a lien is filed  
5 against a TAP participant. It is PWD’s choice to pass that dollar amount on to customers  
6 by including it on a TAP participant’s bill. Given that the City’s legislation provides that  
7 “pending enforcement actions shall be discontinued after a customer enters into IWRAP,”  
8 incurring the lien fee involves an unreasonable action by PWD. PWD should not be  
9 allowed to include that lien fee in rates to be charged to customers. As of June 30, 2022,  
10 PWD had imposed liens on 40.8% of TAP participants (4,086 / 10,042). As of February  
11 28, 2023, PWD had imposed liens on 34.1% of TAP participants (5,132 / 15,032).<sup>53</sup>  
12 Using the lien fee of \$91.45 identified by PWD, applying the average percentage of TAP  
13 participants on whom PWD has imposed liens (given the data PWD provided when  
14 asked) (37.5%), and using the expected FY2024 TAP participation rate agreed upon by  
15 PWD and the Public Advocate in the TAP-R settlement (16,479), reinstating the TAP  
16 hold on liens would affect 6,176 TAP participants. I recommend that \$564,795 (6,176 x  
17 \$91.45) in PWD expenses associated with TAP lien fees be disallowed in FY 2024 and  
18 FY 2025.

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<sup>53</sup> The last data PWD provided on the number of TAP participants was for January 2023. Accordingly, the 5,132 reflects January, not February, 2023 TAP participation.

1 **Part 7. PWD’s Sequestration Policies Unreasonably and**  
2 **Unlawfully Harm Low-Income Customers.**

3 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
4 **TESTIMONY.**

5 A. In this section of my testimony, I address whether PWD is engaging in sequestration  
6 actions that do not comply with City regulations. My concern is raised by the Public  
7 Hearing testimony of Roxane Crowley (Public Hearing, 03-22-23, 3:00, Tr. at 25 – 27).  
8 Ms. Crowley is an attorney in the Consumer Housing Unit at Philadelphia Legal  
9 Assistance. As such, she represents low-income Philadelphia homeowners. A large part  
10 of her work throughout her career has been representing such homeowners. The “Save  
11 Your Home” hotline operated by PLA responds to “thousands and thousands of calls  
12 every year.” (Tr. 26). Ms. Crowley testified that:

13 What we're seeing happening is water sequestration cases being filed against  
14 these properties and homeowners who are in properties that are not  
15 generating, they're not being rented, they're not businesses. They're simple  
16 homeowners.

17  
18 I have a client who is a dad of an eight-year-old, and these water  
19 sequestration cases are being filed against them. Once filed, the clients are  
20 unable to get out of sequestration, even if they attend an informal hearing.  
21 They're told that the property is going to stay in sequestration until they reach  
22 some kind of payment arrangement.

23  
24 We have another client who went through sequestration before she came and  
25 contacted Philadelphia Legal Assistance, low-income homeowner, she was  
26 required to put 6,000 down to prevent the house -- from sequestration from  
27 proceeding and then entered a monthly payment agreement of several  
28 hundred dollars a month. Because of those payments, we are now having to  
29 represent her in a mortgage foreclosure action because she did not have the  
30 money to pay her mortgage.  
31

1 The problem is, is that when these sequestration cases are filed, the TAP  
2 regulations aren't applied. Clients have -- we've advised clients to call the  
3 Water Department and ask to have their pre-TAP arrears transferred to their -  
4 - what is usually an occupant account, and the Water Department says they  
5 cannot do that. I've attended informal hearings and have been advised by  
6 counsel for the law department to try to work it out with the Water Revenue  
7 Bureau, and I still have not had success doing that.

8 (Tr., at 25 – 26). The circumstances that Ms. Crowley identifies represent a clear  
9 violation of City Regulations. The City Regulations unambiguously provide that, with  
10 respect to an “occupant”—Ms. Crowley states that PLA’s problems are “usually an  
11 occupant account”—“pre-TAP arrears” are defined to be “the sum of all unpaid service,  
12 usage, and stormwater charges at the property, calculated at the time of first enrollment  
13 in TAP. . .” (City Regulations, at Section 206.6(m)). (emphasis added). The pre-TAP  
14 arrears are subject to forgiveness in equal 24-month installments, one installment of  
15 forgiveness in response to each “full” payment. Those arrears are not subject to  
16 collection. They are not subject to “payment plans.” Whether or not the pre-TAP arrears  
17 will be subject to forgiveness is not a discretionary decision to be left to Water  
18 Department (or Revenue Department or Law Department) staff.

19 Indeed, the City’s legislation creating TAP (called IWRAP in the legislation) explicitly  
20 provides that: “Low-income customers who are enrolled in IWRAP shall be required to  
21 make no additional payment in respect to any pre-IWRAP arrears to maintain service.”  
22 (Section 19.605(3)(h)) (emphasis added). Moreover, that legislation provides in relevant  
23 part that “The Department and the Water Department shall also promulgate standards  
24 regarding circumstances under which pending enforcement actions shall be discontinued  
25 after a customer enters into IWRAP.” (Section 19.605(3)(m)) (emphasis added). The

1 actions that Ms. Crowley identifies are thus not only in violation of the City’s regulations,  
2 but they are also in violation of the City ordinances as well.

3 PWD asserts that “when an application for an occupant account is approved, the owner’s  
4 outstanding balance is automatically transferred into the new occupant account. . .” (PA-  
5 XI-1). PWD further asserts that “when an occupant account is approved, all previous  
6 debt accrued on the owner’s account is transferred to the occupant account as principal  
7 debt. Once approved for TAP, this debt is then treated as protected pre-TAP arrears while  
8 the customer remains on TAP.” (PA-XI-3). Moreover, PWD makes the unqualified  
9 assertion that in the years 2020 through 2023 (YTD), “there were no petitions filed  
10 against properties owned by TAP customers.” (PA-VI-14(D)).

11 Those PWD responses, however, are belied by the personal experiences reported by Ms.  
12 Crowley (on behalf of clients). Moreover, the question is not simply whether a  
13 sequestration petition was filed against a property owned by a TAP customer, but also  
14 whether the sequestration process was continued after a customer began TAP  
15 participation. PWD does not routinely review sequestered properties to determine if they  
16 have become TAP participants; nor does PWD review TAP applications to determine  
17 whether they involve sequestered properties. (PA-VI-14(E)).

18 The circumstances identified by Ms. Crowley represent violations in at least the  
19 following two respects:

- 20 ➤ If a property is not generating revenue –as Ms. Crowley testified, her client’s  
21 properties “are not generating, they’re not being rented, they’re not  
22 businesses. They’re simple homeowners”—it is not subject to a sequestration  
23 proceeding.

1           ➤ Moreover, once a sequestration proceeding has been filed, a pre-TAP debt  
2 subject to forgiveness would not be subject to a sequestration proceeding. It is  
3 a serious violation of City ordinance and City regulations when low-income  
4 “occupants” TAP participants “call the Water Department and ask to have  
5 their pre-TAP arrears transferred to their -- what is usually an occupant  
6 account, and the Water Department says they cannot do that.” It is an equally  
7 serious violation when the City’s Law Department knowingly proceeds with a  
8 sequestration proceeding against an arrears known to be a pre-TAP arrears,  
9 with the Law Department advising the occupant to “try to work it out with the  
10 Water Revenue Bureau. . .”

11 **Q.     WHAT DO YOU RECOMMEND?**

12 A.     I recommend that the Rate Board direct PWD to retain an outside auditor to review all  
13 low-income households that have been TAP participants at some point on and after July  
14 1, 2022. That auditor should review each TAP participant who was a homeowner or  
15 occupant at the time the participant enrolled in TAP. For each of those customers, the  
16 auditor should determine, and report to the Rate Board, with a public disclosure of the  
17 report, every instance in which an owner or occupant did *not* have “the sum of all unpaid  
18 service, usage, and stormwater charges at the property, calculated at the time of first  
19 enrollment in TAP. . .” transferred to and/or recognized as pre-TAP arrears subject to  
20 forgiveness. The audit should identify the dollar amount of pre-TAP arrears that the TAP  
21 participant was required to pay in violation of City ordinance and regulations. Finally,  
22 the auditor should determine, on a case-by-case basis, the amount of pre-TAP arrears that  
23 were not forgiven pursuant to City regulations. In addition to currently active customers,  
24 PWD should make diligent efforts to locate households who PWD unlawfully charged  
25 rates, and/or unlawfully denied forgiveness, but who do not remain active PWD  
26 customers.

1 The process of auditing the dollars which PWD either unlawfully charged, and/or  
2 unlawfully failed to forgive, should be borne by PWD, and should not be charged to  
3 ratepayers.

4 **Part 8. Compliance with the 2021 Settlement Agreement.**

5 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**  
6 **TESTIMONY.**

7 A. The Settlement of PWD’s 2021 general rate case included multiple agreements that were  
8 designed to improve the manner in which PWD implements its TAP initiative. These  
9 agreements were reflected in reporting requirements that were imposed on PWD by the  
10 Final Rate Determination rendered by the Water Board. PWD failed to comply with two  
11 of the more critical elements of the Settlement that were incorporated into the Rate  
12 Determination.

13 **Q. PLEASE EXPLAIN PWD’S FIRST NONCOMPLIANCE?**

14 A. The 2021 Rate Determination adopted the Settlement Agreement by specific reference  
15 thereto (“Based on the record produced in this proceeding and in accordance with the  
16 discussions, findings and resolutions discussed above, we therefore: . . .(5) approve  
17 without modification the Joint Petition for Partial Settlement”) (2021 Rate Determination,  
18 at 53) (emphasis added). Moreover, the 2021 Rate Determination adopted the Hearing  
19 Officer’s Report by specific reference (“Based on the record produced in this proceeding  
20 and in accordance with the discussions, findings and resolution discussed above, we  
21 therefore. . . (4) adopt the Hearing Officer Report issued by Hearing Officer Chestnut on  
22 May 18, 2021, consistent with this Rate Determination”). The Rate Determination  
23 included explicit requirements that were intended to supplement, not to supplant, the



1 Settlement and Hearing Officer Report. For example, while the Rate Determination  
2 acknowledged the terms of the Settlement requiring Quarterly Reports on certain issues  
3 (see, e.g., Final Rate Determination, at 14, 45), it did not specifically direct that such  
4 Reports be filed. Nonetheless, PWD *did* file such Quarterly Reports.

5 In its monthly reporting purportedly made pursuant to the 2021 Rate Determination,  
6 PWD concedes that it has an obligation to report on “program turnover.” PWD defined  
7 “program turnover” to be synonymous with “churn,” and further defined the term to  
8 mean, among other things, a “reduction in TAP participation due to failure to meet  
9 income or residency guidelines, missing or invalid documentation, [or] *failure to*  
10 *recertify*. . .”

11 **Q. DOES PWD PROVIDE DATA ON THE REDUCTION IN TAP PARTICIPATION**  
12 **DUE TO A FAILURE TO RECERTIFY IN ITS MONTHLY REPORTS?**

13 A. No. The February Monthly Settlement Report, filed on March 20, 2023, indicates that it  
14 represents the 19<sup>th</sup> monthly report. While the section of the report is labelled “efforts to  
15 reduce TAP denials *and program turnover*,” (emphasis added), those monthly filings  
16 present information *only* on the reasons for “denial” of applications for new or continuing  
17 participation in TAP. No information on “program turnover” (or “program churn,”  
18 defined by PWD to be interchangeable terms) is presented.

19 In the September 2021 report, filed on October 15, 2021, PWD noted that “TAP  
20 recertifications were restarted in September.” (September Settlement Report, at 9). In the  
21 October 2021 report, filed on November 16, 2021, PWD reported that “[T]he  
22 recertification process is now underway, which can lead to customers being removed

1 from the program, either for failure to recertify or as denials for cause, in the future.”  
2 Through January 2022, no TAP participants were removed from the program due to a  
3 failure to recertify. However, in the February 2022 report, filed March 18, 2022, PWD  
4 reported that “2,408 customers have been removed from TAP for failure to recertify since  
5 the recertification process restarted.” (February Report, at 10).<sup>54</sup> In the March 2022  
6 report (filed April 20, 2022), PWD reported that “since December 2021, the total number  
7 of TAP participants has decreased for a variety of reasons, which include. . .failure to  
8 submit their recertification application within the timeframe. . .” (March Report, at 10).  
9 That statement was then repeated verbatim in each report through the August 2022  
10 Report (filed on September 21, 2022), at which point it was removed completely. The  
11 statement that “TAP recertifications were restarted in September 2021” remained in each  
12 monthly report. After the February 2022 report, in other words, the monthly PWD  
13 reports provided no data on program turnover (“program churn”) attributable to a failure  
14 to recertify. There is no data or information from which a review of the monthly report  
15 can derive insights into the extent to which there has been program turnover in TAP.

16 **Q. WHAT IS THE SECOND ELEMENT OF NONCOMPLIANCE WITH**  
17 **MONTHLY REPORTING REQUIREMENTS?**

18 A. Associated with the failure to provide information on TAP program turnover (“program  
19 churn”), PWD also failed to provide any data in any of its monthly reports regarding the  
20 extent to which TAP participants left pre-TAP arrears on the table without forgiveness  
21 because the participants were removed from the program due to a failure to recertify. The

---

<sup>54</sup> It is not clear what this report meant when it referred to “since the recertification process restarted” rather than referring to “this month.” All prior months had reported that no TAP participants had been removed due to a failure to recertify since the recertifications restarted.

1 data reported by PWD included information regarding: (1) the pre-TAP arrears that was  
2 associated with new first-time TAP enrollees; and (2) the pre-TAP arrears that were  
3 forgiven, in each month. The reports were, however, devoid of information on the  
4 amount of pre-TAP arrears that were not forgiven from an account due to the TAP  
5 participant's failure to recertify.

6 **Q. IS THERE A THIRD ELEMENT OF NONCOMPLIANCE WITH MONTHLY**  
7 **REPORTING REQUIREMENTS?**

8 A. Yes. The Joint Petition for Settlement provided in relevant part that "PWD will provide  
9 quarterly reports to the Rate Board with regard to its progress as to the subject areas  
10 identified in this Section C." (Joint Petition, Section C(5), para. 5). That Settlement,  
11 which was approved "without modification" by the Rate Board included the following  
12 "subject areas" in its "Section C":

- 13 a. "[G]reater outreach in the Black community in concert with community  
14 organizations." (Section C(1)(b)).
- 15 b. PWD's commitment to "organize and participate in community meetings,  
16 summits, or other gatherings" (Section C(1)(b)).
- 17 c. PWD's commitment to "organize and participate in . . . meetings with Black  
18 community leaders and Black grassroots community members to discuss what  
19 aspects of processes related to TAP application, enrollment, and recertification  
20 can be improved upon." (Section C(1)(b)).

21 The reports filed by PWD each month had a specific section devoted to "quarterly  
22 updates." Those "quarterly updates" each included a section devoted to "customer  
23 service and policy issues," including "TAP Outreach/Participation." In its first report  
24 (filed September 21, 2021), PWD reported that "PWD is currently planning community  
25 meetings, summits and other gatherings, including meetings with Black community

1 leaders and black (sic) grassroots community members.” (see, e.g., report filed September  
2 21, 2021, at 10) (emphasis added). That statement was repeated verbatim in each report  
3 through, and including, the July 2022 report (submitted on August 15, 2022). Starting  
4 with the August 2022 report (filed September 21, 2022), that statement was removed  
5 from the PWD reports. No further reference (through the February 2023 report) was  
6 made to plans to have “community meetings, summits and other gatherings, including  
7 meetings with Black community leaders and Black grassroots community members” has  
8 been made by PWD.

9 Even more importantly, while PWD referenced its “current[] planning” for 13 straight  
10 months, it never once referenced any *actual* “community meetings, summits and other  
11 gatherings, including meetings with Black community leaders and Black grassroots  
12 community members” that had been implemented or held. In short, PWD completely  
13 failed to address the need to engage the African-American community, whether through  
14 its leadership or at a grassroots level, to address TAP enrollment and re-enrollment needs.

15 **Q. WHAT DO YOU RECOMMEND?**

16 A. Based on PWD’s failure to comply with its periodic reporting requirements since the  
17 2021 Rate Determination, I recommend that PWD file, within 60 days after a Final Rate  
18 Determination in this proceeding a Customer Education and Outreach Plan with the Rate  
19 Board. This Plan should include the following elements:

- 20 ➤ An identifications, by Census Tract, of neighborhoods with high penetrations  
21 of Poverty having disproportionately low penetrations of TAP participants;
- 22 ➤ An identification, by Census Tract, of neighborhoods with high penetrations  
23 of low-income Black TAP nonparticipants;

- 1                   ➤ An outreach plan identifying the means by which PWD will engage  
2                   grassroots outreach for new first-time TAP enrollment in the neighborhoods  
3                   identified in the first two sections;
- 4                   ➤ An outreach plan directed toward making specific contact within an identified  
5                   time-certain among: (1) Black community leaders, and (2) Black grassroots  
6                   community organizations, for purposes of promoting new first-time TAP  
7                   enrollment;
- 8                   ➤ The outreach plans submitted in response to the two directives presented  
9                   above shall include: (1) the name(s) of the PWD staffperson(s) (or newly  
10                  created positions) charged with implementing those plans; (2) the financial  
11                  and other resources to be devoted to implementing the plans; (3) the timeline  
12                  in which the plan will be implemented; (4) measurable outcome metrics by  
13                  which the success of the plan will be measured; and (5) the process by which  
14                  actual outcomes will be compared to these measurable outcomes for purposes  
15                  of targeting those processes that are in most need of improvement, setting  
16                  realistic improvement goals, and selecting an appropriate process  
17                  improvement technique.

18                  The development and implementation of the Customer Education and Outreach Plan  
19                  described above should be funded through late payment charges as described in my  
20                  testimony above.

21   **Q.        DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22    A.        Yes, it does.

## **COLTON SCHEDULES**

Schedule RDC-1-1								
Affordability Impacts of PWD Requested Rate Hikes								
(0% – 50% Federal Poverty Level)								
Current Rate			Proposed 2023 Rates			Proposed 2024 Rates		
Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip codes
9% - 10%	12,803	10	10% - 11%	9,601	6	11% - 12%	12,803	10
10% - 11%	34,995	28	11% - 12%	29,535	22	12% - 13%	26,333	18
11% - 12%	7,845	9	12% - 13%	15,768	13	13% - 14%	15,768	13
12% - 13%	405	2	13% - 14%	1,039	4	14% - 15%	1,039	4
13% - 14%	62	2	14% - 15%	147	2	15% - 16%	147	2
14%+	0	0	15% - 16%	20	1	16% - 17%	20	1
<b>Total</b>	<b>56,110</b>	<b>48</b>	<b>Total</b>	<b>56,110</b>	<b>48</b>	<b>Total</b>	<b>56,110</b>	<b>48</b>

Schedule RDC-1-2								
Affordability Impacts of PWD Requested Rate Hikes								
(50% - 100% Federal Poverty Level)								
Current Rate			Proposed 2023 Rates			Proposed 2024 Rates		
Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip Codes
4% - 5%	466	1	5% - 6%	16,225	10	5% -6%	466	1
5% - 6%	59,782	40	6% - 7%	44,467	33	6% - 7%	47,936	29
6% - 7%	718	5	7% - 8%	294	4	7% - 8%	12,485	15
7% - 8%	25	2	8% - 9%	5	1	8% - 9%	104	3
<b>Total</b>	<b>60,991</b>	<b>48</b>	<b>Total</b>	<b>60,991</b>	<b>48</b>	<b>Total</b>	<b>60,991</b>	<b>48</b>



Schedule RDC-1-3								
Affordability Impacts of PWD Requested Rate Hikes								
(100% – 150% Federal Poverty Level)								
Current Rate			Proposed 2023 Rates			Proposed 2024 Rates		
Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip Codes	Bill Burden	No. Customers	Zip Codes
2% - 3%	557	1	3% - 4%	51,742	41	3% - 4%	26,308	21
3% - 4%	51,838	44	4% - 5%	757	7	4% - 5%	26,173	25
4%+	104	3	5%+	0	0	5% - 6%	18	2
Total	52,499	48	Total	52,499	48	Total	52,499	48

## **COLTON APPENDICES**

## **Appendix A: Colton Vitae**

**Roger Colton  
Fisher, Sheehan & Colton  
Public Finance and General Economics  
Belmont, MA**

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### **EDUCATION:**

J.D. (Order of the Coif), University of Florida (1981)

M.A. (Regulatory Economics), McGregor School, Antioch University (1993)

B.A. Iowa State University (1975) (journalism, political science, speech)

### **PROFESSIONAL EXPERIENCE:**

**Fisher, Sheehan and Colton, Public Finance and General Economics:** 1985 – present.

As a co-founder of this economics consulting partnership, Colton provides services in a variety of areas, including: regulatory economics, poverty law and economics, public benefits, fair housing, community development, energy efficiency, utility law and economics (energy, telecommunications, water/sewer), government budgeting, and planning and zoning.

Colton has testified in state and federal courts in the United States and Canada, as well as before regulatory and legislative bodies in more than forty (40) states. He is particularly noted for creative program design and implementation within tight budget constraints.

### **PROFESSIONAL AFFILIATIONS:**

Past Chair: Belmont Zoning By-law Review Working Committee (climate change)

Member: Board of Directors, Massachusetts Rivers Alliance

Columnist: Belmont Citizen-Herald

Producer: Belmont Media Center: BMC Podcast Network

Host: Belmont Media Center: Belmont Journal

Member: Belmont Town Meeting

Vice-chair: Belmont Light General Manager Screening Committee

Past Chair: Belmont Goes Solar

Coordinator: BelmontBudget.org (Belmont's Community Budget Forum)

Coordinator: Belmont Affordable Shelter Fund (BASF)

Past Chair: Belmont Solar Initiative Oversight Committee

Past Member: City of Detroit Blue Ribbon Panel on Water Affordability  
Past Chair: Belmont Energy Committee  
Member: Massachusetts Municipal Energy Group (Mass Municipal Association)  
Past Chair: Housing Work Group, Belmont (MA) Comprehensive Planning Process  
Past Chair: Board of Directors, Belmont Housing Trust, Inc.  
Past Chair: Waverley Square Fire Station Re-use Study Committee (Belmont MA)  
Past Member: Belmont (MA) Energy and Facilities Work Group  
Past Member: Belmont (MA) Uplands Advisory Committee  
Past Member: Advisory Board: Fair Housing Center of Greater Boston.  
Past Chair: Fair Housing Committee, Town of Belmont (MA)  
Past Member: Aggregation Advisory Committee, New York State Energy Research and Development Authority.  
Past Member: Board of Directors, Vermont Energy Investment Corporation.  
Past Member: Board of Directors, National Fuel Funds Network  
Past Member: Board of Directors, Affordable Comfort, Inc.  
Past Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.  
Past Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.  
Past Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*  
Past Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.  
Past Member: National Advisory Board: Energy Financing Alternatives for Subsidized Housing, New York State Energy Research and Development Authority.

### **PROFESSIONAL ASSOCIATIONS:**

National Association of Housing and Redevelopment Officials (NAHRO)  
National Society of Newspaper Columnists (NSNC)  
Association for Enterprise Opportunity (AEO)  
Iowa State Bar Association  
Energy Bar Association  
Association for Institutional Thought (AFIT)  
Association for Evolutionary Economics (AEE)  
Society for the Study of Social Problems (SSSO)  
Association for Social Economics

### **BOOKS**

Colton, *et al.*, *Access to Utility Service*, National Consumer Law Center: Boston (4<sup>th</sup> edition 2008).

Colton, *et al.*, *Tenants' Rights to Utility Service*, National Consumer Law Center: Boston (1994).

Colton, *The Regulation of Rural Electric Cooperatives*, National Consumer Law Center: Boston (1992).

#### **BOOK CHAPTERS**

Colton (2018). The equities of efficiency: distributing energy usage reduction dollars, Chapter in *Energy Justice: US and International Perspectives* (Edited by Raya Salter, Carmen Gonzalez and Elizabeth Ann Kronk Warner), Edward Elgar Publishing (London, England).

#### **JOURNAL PUBLICATIONS**

65 publications in industry and academic journals, primarily involving utility regulation and affordable housing. (list available upon request)

#### **TECHNICAL REPORTS**

200 technical reports for public-sector and private-sector clients (list available upon request)

**JURISDICTIONS IN WHICH EXPERT WITNESS PROVIDED**

- |                             |                           |                           |
|-----------------------------|---------------------------|---------------------------|
| 1. Maine                    | 17. Tennessee             | 33. Montana               |
| 2. New Hampshire            | 18. Kentucky              | 34. Colorado              |
| 3. Vermont                  | 19. Ohio                  | 35. New Mexico            |
| 4. Massachusetts            | 20. Indiana               | 36. Arizona               |
| 5. Rhode Island             | 21. Michigan              | 37. Utah                  |
| 6. Connecticut              | 22. Wisconsin             | 38. Idaho                 |
| 7. New Jersey               | 23. Illinois              | 39. Nevada                |
| 8. Maryland                 | 24. Minnesota             | 40. Washington            |
| 9. Pennsylvania             | 25. Iowa                  | 41. Oregon                |
| 10. Washington D.C.         | 26. Missouri              | 42. California            |
| 11. Virginia                | 27. Kansas                | 43. Hawaii                |
| 12. North Carolina          | 28. Louisiana             | <b>Canadian Provinces</b> |
| 13. South Carolina          | 29. Arkansas              | 1. Nova Scotia            |
| 14. Florida (Federal Court) | 30. Texas (Federal Court) | 2. Ontario                |
| 15. Alabama                 | 31. South Dakota          | 3. Manitoba               |
| 16. Mississippi             | 32. North Dakota          | 4. British Columbia       |