

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

**In Re: Philadelphia Water Department's
Annual Adjustment of Tiered Assistance
Program Rate Rider Surcharge Rates**)
)
) **2025 Tiered Assistance Program**
) **Rate Rider Surcharge Rates**
)

**DIRECT TESTIMONY
OF
LAFAYETTE K. MORGAN, JR.**

**ON BEHALF OF
THE PUBLIC ADVOCATE**

April 21, 2025

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1 **I. INTRODUCTION**

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

3 A. My name is Lafayette K. Morgan Jr. My business address is 10480 Little Patuxent
4 Parkway, Suite 300, Columbia, Maryland, 21044. I am a Public Utilities Consultant
5 working with Exeter Associates, Inc. (“Exeter”). Exeter is a consulting firm specializing
6 in issues pertaining to public utilities.

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
8 **QUALIFICATIONS.**

9 A. I received a Master of Business Administration degree from The George Washington
10 University, with a concentration in Finance. I also have a Bachelor of Business
11 Administration degree with a concentration in Accounting from North Carolina Central
12 University. I was previously a Certified Public Accountant licensed in the state of North
13 Carolina.

14 **Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL**
15 **EXPERIENCE?**

16 A. From May 1984 until June 1990, I was employed by the North Carolina Utilities
17 Commission - Public Staff in Raleigh, North Carolina. I was responsible for analyzing
18 testimony, exhibits, and other data presented by parties before the North Carolina Utilities
19 Commission. I had the additional responsibility of performing the examination of books
20 and records of utilities involved in rate proceedings and summarizing the results into
21 testimony and exhibits for presentation before that Commission. I was also involved in
22 numerous special projects, including participating in compliance and prudence audits of
23 a major utility and conducting research on several issues affecting natural gas and electric
24 utilities.

1 From June 1990 until July 1993, I was employed by Potomac Electric Power
2 Company (Pepco) in Washington, D.C. At Pepco, I was involved in the preparation of the
3 cost of service, rate base and ratemaking adjustments supporting the company's requests
4 for revenue increases in the State of Maryland and the District of Columbia.

5 From July 1993 through 2010, I was employed by Exeter Associates as a Senior
6 Regulatory Analyst. During that period, I was involved in the analysis of the operations of
7 public utilities, with emphasis on utility rate regulation. I reviewed and analyzed utility
8 rate filings, focusing primarily on revenue requirements determinations. This work
9 involved natural gas, water, electric, and telephone companies.

10 In 2010, I left Exeter Associates to focus on start-up activities for other ongoing
11 business interests. In late 2014, I returned to Exeter Associates and resumed work in a
12 similar capacity as I did prior to my hiatus.

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

15 A. Yes. I have previously presented testimony and affidavits on numerous occasions before
16 the Colorado Public Utilities Commission, the Georgia Public Service Commission, the
17 Illinois Commerce Commission, the Kansas Corporation Commission, the Kentucky
18 Public Service Commission, the Louisiana Public Service Commission, the Maine Public
19 Utilities Commission, the Maryland Public Service Commission, the Massachusetts
20 Department of Public Utilities, the North Carolina Utilities Commission, the Public
21 Utilities Commission of Ohio, the Corporation Commission of Oklahoma, the
22 Pennsylvania Public Utility Commission, the Philadelphia Gas Commission, the
23 Philadelphia Water, Sewer and Storm Water Rate Board, the Public Utilities Commission
24 of Rhode Island, the Public Service Commission of South Carolina, the Public Utility
25 Commission of Texas, the Vermont Public Service Board, the Virginia Corporation

1 Commission, the West Virginia Public Service Commission, the Wyoming Public Service
2 Commission, and the Federal Energy Regulatory Commission (“FERC”). My résumé is
3 attached hereto as Appendix A.

4 **Q. ON WHOSE BEHALF ARE YOU APPEARING?**

5 A. I am presenting testimony on behalf of the Public Advocate.

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
7 **PROCEEDING?**

8 A. Exeter Associates has been retained by the Public Advocate to assist in the evaluation of
9 the Formal Notice of Proposed Changes in Rates and Charges – Annual Adjustment of
10 Tiered Assistance Program Rate Rider Surcharge Rates (“TAP-R”) submitted by
11 Philadelphia Water Department (“PWD” or “the Department”). For purposes of my
12 testimony, “PWD” and “Department” also refer to the Water Revenue Bureau. In this
13 testimony, I present my findings on behalf of the Public Advocate regarding the
14 appropriate adjustment to the TAP-R that PWD is requesting for its water and wastewater
15 operations for the rate period beginning September 1, 2025.

16 **Q. PLEASE EXPLAIN HOW YOUR TESTIMONY IS ORGANIZED.**

17 A. First, I provide a summary of the rate relief PWD requests and a brief statement of my
18 conclusions. Next, I discuss my review of certain projections and assumptions included
19 in PWD’s filing, from a more technical perspective, where I identify specific changes that
20 should be made. Finally, I discuss the Public Advocate’s recommendation for the TAP-R
21 rates effective September 1, 2025.

22 **Q. HOW DID YOU ANALYZE AND REVIEW THE COMPANY’S FILING?**

23 A. I have reviewed PWD’s filing and related supporting documentation and have reviewed
24 PWD’s responses to the Public Advocate’s data requests.

1 **Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR**
2 **TESTIMONY?**

3 A. Yes. I have prepared Schedules LKM-TAP-1 through LKM-TAP-6. These schedules
4 were presented using the same format as presented by PWD. This makes it easy to
5 compare the Public Advocate’s position to PWD’s position.

6 **II. SUMMARY AND RECOMMENDATIONS**

7 **Q. PLEASE SUMMARIZE PWD’S TAP RATE ADJUSTMENT FILING.**

8 A. On February 18, 2025, the Department submitted its Advance Notice of Proposed
9 Changes in Rates and Charges for the Annual Adjustment of Tiered Assistance Program
10 Rate Rider Surcharge Rates to the Philadelphia Water, Sewer and Storm Water Rate
11 Board (“Rate Board”). On March 31, 2025, the Department filed its Formal Notice of
12 Proposed Changes in the TAP-R Rates. If approved, the proposed rates will take effect on
13 September 1, 2025.

14 In its filing, PWD is proposing a Water TAP-R rate of \$3.87 per thousand cubic
15 feet (MCF) of water usage and a Sewer TAP-R rate of \$5.67 per thousand cubic feet (MCF)
16 of sewer billed volume. In comparison, the current Water TAP-R rate is \$3.08 per MCF
17 and current Sewer TAP-R rate is \$4.40 per MCF. The proposed TAP-R rate for water is an
18 increase of \$ 0.79 per MCF and the proposed Sewer TAP-R rate reflects an increase of
19 \$1.27 per MCF over the current Sewer TAP-R rate.

20 The increases in the water and sewer TAP-R rates are caused by changes in the
21 values of the assumptions used in the TAP-R formula. The key assumptions used by PWD
22 for the TAP-R rate that becomes effective on September 1, 2025 include:

- 23 ○ Number of TAP Participants – 60,827 monthly TAP Participants
- 24 ○ TAP Billing Loss Amount – \$54.62 per TAP Participant, based on the total TAP
25 Billing Loss for the Next Rate Period of approximately \$39.9 million

- Non-TAP Billed Volumes - Monthly average volumes for December 2023 through November 2024 of 4,454,681 hundred cubic feet (ccf) for water and 4,200,116 ccf for sewer.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A. Based upon my review of PWD’s filing, I am recommending a Water TAP-R rate of \$2.93 per thousand cubic feet (MCF) of water usage and a Sewer TAP-R rate of \$4.30 per thousand cubic feet (MCF). The Public Advocate recommended rates reflect a decrease of \$0.15 per thousand cubic feet (MCF) from the current Water TAP-R rate and a decrease of \$0.10 per thousand cubic feet (MCF) from the current Sewer TAP-R rate.

Philadelphia Water Department Summary Public Advocate Proposed 2025 TAP-R Surcharge Rates			
Description	Total Amount	Water Amount	Wastewater Amount
C = Projected TAP Billing Loss	\$ 31,779,486	\$ 13,347,384	\$ 18,432,102
E = Experienced & Estimated Net Over/Under Collection	\$ (5,472,556)	\$ (2,282,294)	\$ (3,190,263)
I = Interest on Experienced & Estimated Net Over/Under Collection	\$ (121,242)	\$ (50,873)	\$ (70,369)
Net Recoverable Costs: (C) - (E + I)	\$ 37,373,285	\$ 15,680,551	\$ 21,692,734
S = Projected Non-TAP Sales for Next Rate Period (MCF)		<u>5,345,617</u>	<u>5,040,140</u>
Public Advocate Recommended TAP-R Surcharge/MCF		\$ 2.93	\$ 4.30
PWD Proposed TAP-R Surcharge/MCF		<u>\$ 3.87</u>	<u>\$ 5.67</u>
Public Advocate Recommended Decrease/MCF		<u>\$ (0.94)</u>	<u>\$ (1.37)</u>

These are the rates that result after reflecting the changes to PWD’s calculations that I am recommending. I will discuss the changes in more detail later in this testimony.

III. PWD’S REQUESTED INCREASE IN TAP RATES

Q. GIVEN THAT THERE IS A DIFFERENCE IN THE AMOUNT YOU ARE RECOMMENDING FOR THE TAP-R RATES AS COMPARED TO PWD, PLEASE EXPLAIN HOW YOU DERIVED YOUR RECOMMENDED TAP-R RATES.

1 A. After reviewing the supporting documentation for the proposed TAP-R rates, I concluded
2 that the calculations are generally consistent with the approach used in previous TAP-R
3 filings. However, the primary areas of my concern relate to the Department’s projection
4 of the number of participants for the upcoming TAP-R rate period and its calculation of
5 the average discount provided to TAP participants.

6 As I will explain more fully later in this testimony, the Department has not
7 adequately supported its projections of the number of TAP-R participants for the rate
8 period that begins on September 1, 2025. Therefore, I find no basis on which to recommend
9 that PWD’s projected number of participants, and the corresponding increase in TAP-R
10 rates, be authorized by the Board. I also disagree with the Department’s use of the three
11 month period, from September 2024 to November 2024, to calculate the Average Monthly
12 Discount which is also used to determine the annual TAP-R rates.

13 The number of participants has a direct impact on the Projected TAP Billing Loss
14 and is one of the components used to determine the annual TAP-R rate. Since I disagree
15 with PWD’s projection of the number of participants, I have made an alternative
16 calculation of the number of participants. I have also revised the Average Monthly
17 Discount which is also used in the TAP-R formula.

18 **Q. WHAT IS THE TAP-R RECONCILIATION EQUATION?**

19 A. The TAP-R Reconciliation equation is:

$$\text{TAP-R} = \frac{(\text{C})-(\text{E}+\text{D})}{\text{S}}$$

20
21 The factors in the equation are explained on PDF Page 3 of 91 of PWD’s filing, but I will
22 provide a very brief explanation here. The “C-Factor” is a calculation of the projected
23 monthly number of TAP Participants for the Next Period multiplied by the average
24 discount per TAP Participant. The “E-Factor” is a calculation of the Adjusted Actual TAP

1 Discounts minus the Estimated Non-TAP TAP-R Revenues Experienced. The “I-Factor”
2 is a monthly calculation of the cumulative E-Factor multiplied by the Interest Rate. The
3 “S-Factor” is the projected Non-TAP customer sales volumes for the Next Rate Period. My
4 recommended TAP-R rate is primarily the result of changes I made to the C-Factor. As I
5 explained, the C-Factor is the projected monthly number of TAP Participants for the Next
6 Period multiplied by the average discount per TAP Participant. This amount is the same as
7 the total TAP discount.

8 **Q. PLEASE EXPLAIN WHY YOU HAVE DISAGREED WITH THE NUMBER**
9 **OF PARTICIPANTS PWD CALCULATED FOR THE RATE PERIOD**
10 **BEGINNING SEPTEMBER 1, 2025.**

11 A. The rate year number of participants is based on the number of participants as of
12 September 1, 2025. To derive the September 1, 2025 participants, PWD begins with the
13 actual number of participants as of November 2024 and escalates or decreases the amount
14 of participants in each successive month by factors ranging from 5% to -5%. Below is a
15 listing of the months and the factors applied.

- 16 ○ December 2024 ... 5.0%
- 17 ○ January 2025 1.0%
- 18 ○ February 2025 ... - 5.0% (negative)
- 19 ○ March 2025 5.0%
- 20 ○ April 2025 1.0%
- 21 ○ May 2025 1.0%
- 22 ○ June 2025 - 4.0% (negative)
- 23 ○ July 2025 4.0%
- 24 ○ August 2025 1.0%
- 25 ○ September 2025 .. -1.0% (negative)

26 PWD was asked to provide the supporting calculations and a detailed explanation for each
27 of these monthly increases or decreases in a discovery request which is reproduced in

1 Attachment B. In its response, PWD referred to Schedule RFC-3 for detail supporting the
2 increase in TAP participation. PWD also stated in the response that:

3 “Baseline projections for changes in TAP participation are developed
4 using recent enrollment trends and expected enrollment figures for
5 prequalified candidates from PWD’s partnership with the City’s Office
6 of Integrated Data for Evidence and Action (IDEA). These projections
7 are then adjusted to reflect variations in month-to-month participation
8 experienced historically, which is driven primarily by the number of
9 City-observed business days in each month. TAP bills are only issued on
10 City-observed business days. As a result, months with more business
11 days tend to result in higher TAP participant counts, while months with
12 fewer business days tend to result in lower TAP participant counts.”¹

13 I reviewed Schedule RFC-3 and there was no discernable trend that was similar to the trend
14 I extracted from PWD’s workpapers and outlined above. Moreover, I have not been able
15 to verify PWD’s statement that “months with fewer business days tend to result in lower
16 TAP participant counts” based upon the data.² Again, the Public Advocate’s discovery
17 question asked for supporting calculations and a detailed explanation for each month,
18 December 2024 through September 2025. The Excel version of Schedule RFC-3 shows
19 each month’s percentage increase or decrease has been manually typed or entered in
20 without any underlying formulae or calculation. If, in fact, PWD’s projections are
21 supported by workpapers or other supporting documents, PWD has chosen not to provide
22 them in response to Public Advocate discovery.

¹ Response to PA-TAP 1-1.

² April has less days than December, January and March, yet, in PWD’s data, April has more participants. Even when the month to month growth is reviewed, PWD’s claim is not consistent. April and June have the same number of days, for April there is a projected growth of 1%, while June has a negative 4% change in participants. Similarly, July and August have the same number of days. July reflects a 4% growth in participants, while August shows only a 1% growth in participants.

1 **Q. PLEASE EXPLAIN HOW YOU CALCULATED THE NUMBER OF**
2 **PARTICIPANTS FOR THE RATE PERIOD BEGINNING SEPTEMBER 1,**
3 **2025.**

4 A. I calculated the number of participants based upon the average growth in the number of
5 participants from May 2024 through November 2024. This results in a -0.08% projection
6 rate.

7 **Q. WHY HAVE YOU USED THE MAY 2024 THROUGH NOVEMBER 2024**
8 **PERIOD FOR THE PROJECTED CHANGE IN THE NUMBER OF**
9 **PARTICIPANTS?**

10 A. In PWD’s filing in the 2024 TAP-R Rate proceeding, PWD explained that there would be
11 a significant increase in the number of TAP-R participants. In that proceeding, PWD
12 projected an increase in TAP-R enrollment of approximately 34,000 new TAP participants
13 between February 2024 through May 2024. The enrollment of 34,000 new TAP
14 participants was the result of a collaboration of PWD and the City’s Office of Integrated
15 Data for Evidence and Action (“IDEA”). PWD noted, in that proceeding, that:

16 Please note at this point, for purposes of the annual TAP-R adjustment
17 filing, projections assume 2,250 new participants in February, 6,000 new
18 participants in March, and then 12,000 new participants month until the
19 full set has been enrolled and is actively receiving TAP bills and
20 discounts. Participation is modeled to be steady state after the enrollment
21 of the IDEA pre-qualified customer list. Projections over the Next Rate
22 Period also remained flat.³

23 Below is an extract from Schedule RFC-3 of the current TAP-R filing. There, the
24 data shows a sharp drop off in the in the number of new participants after April 2024. The
25 drop off in actual new participants after May 2024 is consistent with the 2024 TAP-R

³ February 28, 2024 Advance Notice of Proposed Changes in Rates and Charges Annual Adjustment of TAP-R, Preliminary Proposed TAP-R Reconciliation Statement, *Overview of 2024 TAP-R Filing*.

1 filing. It is also the reason why I believe it would be inappropriate to capture any change
 2 in the number of participants for the period before May 2024.

AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
Actual			Reconciled Period	Actual			Most Recent Period			
Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
2.05%	28.63%	75.21%	16.05%	0.78%	-5.93%	7.68%	0.47%	1.17%	1.55%	-6.24%
Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024
21,854	28,110	49,252	57,155	57,602	54,185	58,344	58,618	59,305	60,225	56,464
Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024
\$ 1,329,360.84	\$ 1,501,646.95	\$ 1,981,875.69	\$ 2,094,176.78	\$ 2,369,075.05	\$ 2,351,694.42	\$ 2,540,192.99	\$ 2,735,884.80	\$ 3,197,292.01	\$ 3,410,473.89	\$ 3,004,596.49
Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024
159,196	191,298	295,659	326,158	364,303	351,988	379,010	401,513	422,248	411,732	360,612
Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024	Nov 2024
159,148	191,224	295,463	325,874	364,001	351,660	378,585	401,093	421,902	411,356	360,271

3
 4 **Q. ARE YOU RECOMMENDING ANOTHER ADJUSTMENT TO PWD’S**
 5 **SEPTEMBER 1, 2025 TAP-R RATES?**

6 A. Yes. I have determined that PWD’s average monthly discount is overstated. In its filing
 7 PWD calculated the average monthly discount based upon the 3-month period September
 8 to November 2024. It is not readily apparent why PWD has used only a 3-month period.
 9 In past TAP-R proceedings, PWD has utilized a significantly longer period of time to
 10 calculate the average discount. For example, in the 2023 TAP-R proceeding, PWD’s
 11 Advance Notice utilized an eleven-month period, from January 2022 through November
 12 2022, to calculate the average discount. Similarly, in the 2024 TAP-R proceeding, PWD’s
 13 Advance Notice utilized a twelve-month period, from January 2023 through December
 14 2023, to calculate the average discount. As a matter of consistency, I believe it is more
 15 appropriate to use a longer period of time to calculate the average monthly discount than
 16 the 3-month period proposed by PWD in this proceeding. I recommend using the most
 17 recent twelve months of actual data to calculate the average discount.

18 **IV. OTHER ISSUES**

19 **Q. WHAT OTHER ISSUES DO WANT TO RAISE AT THIS TIME?**

20 A. There are two additional issues. First, in response to the Public Advocate’s discovery,
 21 PWD indicates that the collection factors and the water/wastewater cost allocations were
 22 based on the 2023 rate case determination. I recommend that whatever determinations are

1 made in the current general rate case with respect to the collection factors and
2 water/wastewater cost allocations be reflected in the TAP-R rate determination. Second,
3 in response to Public Advocate discovery issued on April 3, PWD has indicated that
4 participant, discount, and consumption data for December 2024 through March 2025 will
5 not be provided until after the due date of my testimony.⁴ I reserve the right to update and
6 modify my recommendations following the review of PWD's actual TAP data for the
7 months of December 2024 through March 2025.

8 **V. CONCLUSION**

9 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION.**

10 A. Based upon the foregoing discussion, I recommend the Board reduce PWD's requested
11 Water TAP-R rate from \$3.87 to \$2.93/MCF and reduce the requested Sewer TAP-R rate
12 from \$5.67/MCF to \$4.30/MCF.

13 **Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

14 A. Yes, it does.

⁴ Response to PA-TAP-1-2.

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

In Re: Philadelphia Water Department's)
Annual Adjustment of Tiered Assistance) **2024 Tiered Assistance Program**
Program Rate Rider Surcharge Rates) **Rate Rider Surcharge Rates**
)

**SCHEDULES ACCOMPANYING THE
DIRECT TESTIMONY**

OF

LAFAYETTE K. MORGAN, JR.

ON BEHALF OF

THE PUBLIC ADVOCATE

**Philadelphia Water Department
 Calculation of TAP Rider Rates Effective September 01, 2025**

		TOTAL	Water	Wastewater
		Amount	Amount	Amount
(1)	C = Projected TAP Billing Loss	\$ 31,779,486	\$ 13,347,384	\$ 18,432,102
(2)	E = Experienced & Estimated Net Over/Under Collection	\$ (5,472,556)	\$ (2,282,294)	\$ (3,190,263)
(3)	I = Interest on Experienced & Estimated Net Over/Under Collection	\$ (121,242)	\$ (50,873)	\$ (70,369)
(4)	Net Recoverable Costs: (C) - (E + I)	\$ 37,373,285	\$ 15,680,551	\$ 21,692,734
(5)	S = Projected Non-TAP Sales for Next Rate Period (MCF)		5,345,617	5,040,140
(6)	TAP-R Surcharge: (4)/(5)		\$ 2.93 /MCF	\$ 4.30 /MCF

Philadelphia Water Department
Projected TAP Lost Revenue (C-Factor) for Next Rate Period

Period	September 01, 2025 through August 31, 2026	<u>Total</u>	<u>Water</u>	<u>Wastewater</u>
			42%	58%
(1)	Projected TAP Billing Loss	\$ 31,779,486	\$ 13,347,384	\$ 18,432,102

**Philadelphia Water Department
Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period**

Billing Period	Total Actual TAP Discounts (Credits) (1)	Billed TAP Water Sales (Mcf) (2)	Total TAP-R Billed to TAP Participants 3.08 (3) = (2) * \$ 3.080/Mcf	Adjusted Actual TAP Discounts (Credits) 0.9699 (4) = [(1) - (3)] * 0.9699	Billed Non-TAP Water Sales (Mcf) (5)	TAP-R Billed Non-Tap Water Sales 3.08 (6) = (5) * \$ 3.080/Mcf	Estimated TAP-R Revenues Experienced 0.9699 (7) = (6) * 0.9699	Over/(Under) Collection (8) = (7) - (4) Prior E & I Factor Adjustment
Sep-24	\$ 1,342,863	42,225	\$ 130,052	\$ 1,176,305	491,267	\$ 1,513,101	\$ 1,467,557	\$ 291,252
Oct-24	\$ 1,432,399	41,173	\$ 126,813	\$ 1,266,288	461,578	\$ 1,421,659	\$ 1,378,867	\$ 112,579
Nov-24	\$ 1,261,931	36,061	\$ 111,068	\$ 1,116,222	437,840	\$ 1,348,549	\$ 1,307,958	\$ 191,736
Dec-24	\$ 1,176,716	38,711	\$ 119,229	\$ 1,025,656	445,468	\$ 1,372,042	\$ 1,330,744	\$ 305,087
Jan-25	\$ 1,188,483	39,098	\$ 120,421	\$ 1,035,913	445,468	\$ 1,372,042	\$ 1,330,744	\$ 294,830
Feb-25	\$ 1,129,059	37,143	\$ 114,400	\$ 984,118	445,468	\$ 1,372,042	\$ 1,330,744	\$ 346,626
Mar-25	\$ 1,185,512	39,000	\$ 120,120	\$ 1,033,323	445,468	\$ 1,372,042	\$ 1,330,744	\$ 297,420
Apr-25	\$ 1,197,367	39,390	\$ 121,322	\$ 1,043,656	445,468	\$ 1,372,042	\$ 1,330,744	\$ 287,088
May-25	\$ 1,209,340	39,784	\$ 122,535	\$ 1,054,093	445,468	\$ 1,372,042	\$ 1,330,744	\$ 276,651
Jun-25	\$ 1,160,967	38,193	\$ 117,633	\$ 1,011,929	445,468	\$ 1,372,042	\$ 1,330,744	\$ 318,814
Jul-25	\$ 1,207,406	39,720	\$ 122,339	\$ 1,052,406	445,468	\$ 1,372,042	\$ 1,330,744	\$ 278,338
Aug-25	\$ 1,219,480	40,118	\$ 123,562	\$ 1,062,930	445,468	\$ 1,372,042	\$ 1,330,744	\$ 267,813
Total	\$ 14,711,520	470,616	\$ 1,449,494	\$ 12,862,839	5,399,897	\$ 16,631,687	\$ 16,131,073	\$ (1,921,388)
Adjustment for Prior Estimates								\$ (360,906)
Total E-Factor Recovery								\$ (2,282,294)

**Philadelphia Water Department
Table 3-WW - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period**

Billing Period	Total Actual TAP Discounts (Credits) (1)	Billed Sewer Volume TAP Participants (Mcf) (2)	Total TAP-R Billed to TAP Participants 4.4 (3) = (2) * \$ 4.400/Mcf	Adjusted Actual TAP Discounts (Credits) 0.9699 (4) = [(1) - (3)] * 0.9699	Billed Non-TAP Sewer Volume (Mcf) (5)	TAP-R Billed Non-Tap Water Sales 4.4 (6) = (5) * \$ 4.400/Mcf	Estimated TAP-R Revenues Experienced 0.9699 (7) = (6) * 0.9699	Over/(Under) Collection (8) = (7) - (4) Prior E & I Factor Adjustment
Sep-24	\$ 1,854,429	42,190	\$ 185,637	\$ 1,618,562	461,364	\$ 2,030,000	\$ 1,968,897	\$ 350,335
Oct-24	\$ 1,978,075	41,136	\$ 180,997	\$ 1,742,986	434,072	\$ 1,909,916	\$ 1,852,428	\$ 109,442
Nov-24	\$ 1,742,666	36,027	\$ 158,519	\$ 1,536,464	414,279	\$ 1,822,826	\$ 1,767,959	\$ 231,495
Dec-24	\$ 1,624,988	38,711	\$ 170,327	\$ 1,410,876	420,012	\$ 1,848,051	\$ 1,792,425	\$ 381,549
Jan-25	\$ 1,641,238	39,098	\$ 172,031	\$ 1,424,984	420,012	\$ 1,848,051	\$ 1,792,425	\$ 367,441
Feb-25	\$ 1,559,176	37,143	\$ 163,429	\$ 1,353,735	420,012	\$ 1,848,051	\$ 1,792,425	\$ 438,689
Mar-25	\$ 1,637,135	39,000	\$ 171,601	\$ 1,421,422	420,012	\$ 1,848,051	\$ 1,792,425	\$ 371,003
Apr-25	\$ 1,653,507	39,390	\$ 173,317	\$ 1,435,636	420,012	\$ 1,848,051	\$ 1,792,425	\$ 356,789
May-25	\$ 1,670,042	39,784	\$ 175,050	\$ 1,449,992	420,012	\$ 1,848,051	\$ 1,792,425	\$ 342,432
Jun-25	\$ 1,603,240	38,193	\$ 168,048	\$ 1,391,993	420,012	\$ 1,848,051	\$ 1,792,425	\$ 400,432
Jul-25	\$ 1,667,370	39,720	\$ 174,770	\$ 1,447,672	420,012	\$ 1,848,051	\$ 1,792,425	\$ 344,752
Aug-25	\$ 1,684,043	40,118	\$ 176,517	\$ 1,462,150	420,012	\$ 1,848,051	\$ 1,792,425	\$ 330,275
Total	\$ 20,315,909	470,509	\$ 2,070,243	\$ 17,696,472	5,089,819	\$ 22,395,201	\$ 21,721,105	\$ (2,688,572)
Adjustment for Prior Estimates								\$ (501,691)
Total E-Factor Recovery								\$ (3,190,263)

Philadelphia Water Department
Prior Reconciliation Adjustment - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period

Billing Period	Total Actual TAP Discounts (Credits) (1)	Billed TAP Water Sales (Mcf) (2)	Total TAP-R Billed to TAP Participants 0.15 (3) = (2) * \$ 0.150/Mcf	Adjusted Actual TAP Discounts (Credits) 0.9699 (4) = [(1) - (3)] * 0.9699	Billed Non-TAP Water Sales (Mcf) (5)	TAP-R Billed Non-Tap Water Sales (6) = (5) * \$ 0.150/Mcf	Estimated TAP-R Revenues Experienced 0.9699 (7) = (6) * 0.9699	Over/(Under) Collection (8) = (7) - (4)	Original Estimates	Adjustment
									Over/(Under) Collection (9)	Delta (10) = (8) - (9)
Prior E & I Factor Adjustments								\$ 3,134,517		
Sep-23	\$ 519,366	15,848	\$ 2,377	\$ 501,427	523,650	\$ 78,548	\$ 76,183	\$ (425,244)	\$ (0)	
Oct-23	\$ 501,703	14,421	\$ 2,163	\$ 484,504	441,095	\$ 66,164	\$ 64,173	\$ (420,331)	\$ 0	
Nov-23	\$ 532,517	15,244	\$ 2,287	\$ 514,270	443,823	\$ 66,573	\$ 64,570	\$ (449,700)	\$ 0	
Dec-23	\$ 540,734	15,420	\$ 2,313	\$ 522,214	442,897	\$ 66,435	\$ 64,435	\$ (457,779)	\$ (0)	
Jan-24	\$ 561,600	16,008	\$ 2,401	\$ 542,367	454,930	\$ 68,239	\$ 66,185	\$ (476,182)	\$ 0	
Feb-24	\$ 640,224	19,370	\$ 2,905	\$ 618,135	436,223	\$ 65,433	\$ 63,464	\$ (554,671)	\$ 0	
Mar-24	\$ 848,599	30,047	\$ 4,507	\$ 818,685	404,940	\$ 60,741	\$ 58,913	\$ (759,772)	\$ (0)	
Apr-24	\$ 879,554	32,616	\$ 4,892	\$ 848,335	394,963	\$ 59,244	\$ 57,461	\$ (790,874)	\$ 50,591	
May-24	\$ 995,012	36,430	\$ 5,465	\$ 959,761	438,784	\$ 65,818	\$ 63,836	\$ (895,925)	\$ (54,460)	
Jun-24	\$ 987,712	35,199	\$ 5,280	\$ 952,860	436,439	\$ 65,466	\$ 63,495	\$ (889,365)	\$ (47,901)	
Jul-24	\$ 1,066,881	37,901	\$ 5,685	\$ 1,029,254	495,114	\$ 74,267	\$ 72,032	\$ (957,222)	\$ (115,758)	
Aug-24	\$ 1,149,072	40,151	\$ 6,023	\$ 1,108,643	507,271	\$ 76,091	\$ 73,800	\$ (1,034,843)	\$ (193,378)	
Total	\$ 9,222,971	308,654	\$ 46,298	\$ 8,900,455	5,420,129	\$ 813,019	\$ 788,547	\$ (4,977,391)	\$ (4,616,485)	\$ (360,906)

Total	\$ (4,977,391)	\$ (4,616,485)	\$ (360,906)
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Philadelphia Water Department
Table 3-WW-A - Prior Reconciliation Adjustment - Experienced & Estimated Net Over/(Under) Collection (E-Factor) for Most Recent Period

Billing Period	Total Actual TAP Discounts (Credits) (1)	Billed Sewer Volume TAP Participants (Mcf) (2)	Total TAP-R Billed to TAP Participants 0.24 (3) = (2) * \$ 0.240/Mcf	Adjusted Actual TAP Discounts (Credits) 0.9699 (4) = [(1) - (3)] * 0.9699	Billed Non-TAP Sewer Volume (Mcf) (5)	TAP-R Billed Non-Tap Water Sales (6) = (5) * \$ 0.240/Mcf	Estimated TAP-R Revenues Experienced 0.9699 (7) = (6) * 0.9699	Over/(Under) Collection (8) = (7) - (4)	Original Estimates	Adjustment
									Over/(Under) Collection (9)	Delta (10) = (8) - (9)
Prior E & I Factor Adjustments								\$ 4,689,002		
Sep-23	\$ 717,219	15,844	\$ 3,802	\$ 691,943	492,841	\$ 118,282	\$ 114,722	\$ (577,221)	\$ 0	
Oct-23	\$ 692,828	14,414	\$ 3,459	\$ 668,618	420,550	\$ 100,932	\$ 97,894	\$ (570,724)	\$ 0	
Nov-23	\$ 735,380	15,239	\$ 3,657	\$ 709,698	422,652	\$ 101,437	\$ 98,384	\$ (611,314)	\$ 0	
Dec-23	\$ 746,727	15,415	\$ 3,700	\$ 720,663	423,419	\$ 101,621	\$ 98,562	\$ (622,100)	\$ (0)	
Jan-24	\$ 775,543	16,003	\$ 3,841	\$ 748,474	423,003	\$ 101,521	\$ 98,465	\$ (650,009)	\$ (0)	
Feb-24	\$ 884,118	19,362	\$ 4,647	\$ 852,999	417,931	\$ 100,303	\$ 97,284	\$ (755,715)	\$ (0)	
Mar-24	\$ 1,171,875	30,027	\$ 7,207	\$ 1,129,612	385,257	\$ 92,462	\$ 89,679	\$ (1,039,933)	\$ (0)	
Apr-24	\$ 1,214,623	32,587	\$ 7,821	\$ 1,170,477	374,616	\$ 89,908	\$ 87,202	\$ (1,083,275)	\$ 68,757	
May-24	\$ 1,374,064	36,400	\$ 8,736	\$ 1,324,231	413,472	\$ 99,233	\$ 96,246	\$ (1,227,985)	\$ (75,953)	
Jun-24	\$ 1,363,983	35,166	\$ 8,440	\$ 1,314,741	410,489	\$ 98,517	\$ 95,552	\$ (1,219,189)	\$ (67,157)	
Jul-24	\$ 1,473,312	37,859	\$ 9,086	\$ 1,420,153	464,443	\$ 111,466	\$ 108,111	\$ (1,312,042)	\$ (160,010)	
Aug-24	\$ 1,586,813	40,109	\$ 9,626	\$ 1,529,714	474,078	\$ 113,779	\$ 110,354	\$ (1,419,359)	\$ (267,327)	
Total	\$ 12,736,484	308,426	\$ 74,022	\$ 12,281,322	5,122,752	\$ 1,229,461	\$ 1,192,454	\$ (6,399,866)	\$ (5,898,175)	\$ (501,691)

Total	\$ (6,399,866)	\$ (5,898,175)	\$ (501,691)
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Philadelphia Water Department
Table 4 - W - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period

Billing Period	Difference in Collection Water Portion From Table 3-W (1)	Billed Non-TAP Water Sales (Mcf) From Table 3-W (2)	Anticipated E+I Recovery Water Portion -0.969426281 (3) = (2) * \$ -0.969/Mcf	Remaining E+I Recovery Water Portion (4) = (3) + (1)	Cumulative Over/(Under) Collection Relative to Revenue Requirements Water Portion (5)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (6) = (5) * [4.17% / 12]
Sep-24	\$ 291,252	\$ 491,267	\$ (476,246.87)	-184995.2533	\$ (184,995.25)	\$ (642.86)
Oct-24	\$ 112,579	\$ 461,578	\$ (447,465.36)	-334886.1942	\$ (519,881.45)	\$ (1,806.59)
Nov-24	\$ 191,736	\$ 437,840	\$ (424,454.03)	-232717.9181	\$ (752,599.37)	\$ (2,615.28)
Dec-24	\$ 305,087	\$ 445,468	\$ (431,848.47)	-126761.3063	\$ (879,360.67)	\$ (3,055.78)
Jan-25	\$ 294,830	\$ 445,468	\$ (431,848.47)	-137018.1513	\$ (1,016,378.82)	\$ (3,531.92)
Feb-25	\$ 346,626	\$ 445,468	\$ (431,848.47)	-85222.44183	\$ (1,101,601.27)	\$ (3,828.06)
Mar-25	\$ 297,420	\$ 445,468	\$ (431,848.47)	-134428.3173	\$ (1,236,029.58)	\$ (4,295.20)
Apr-25	\$ 287,088	\$ 445,468	\$ (431,848.47)	-144760.7752	\$ (1,380,790.36)	\$ (4,798.25)
May-25	\$ 276,651	\$ 445,468	\$ (431,848.47)	-155197.547	\$ (1,535,987.90)	\$ (5,337.56)
Jun-25	\$ 318,814	\$ 445,468	\$ (431,848.47)	-113034.4244	\$ (1,649,022.33)	\$ (5,730.35)
Jul-25	\$ 278,338	\$ 445,468	\$ (431,848.47)	-153510.9445	\$ (1,802,533.27)	\$ (6,263.80)
Aug-25	\$ 267,813	\$ 445,468	\$ (431,848.47)	-164035.3829	\$ (1,966,568.66)	\$ (6,833.83)
Total						\$ (48,739)
Adjustment for Prior Estimates						\$ (2,134)
Total I-Factor Recovery						\$ (50,873)

Philadelphia Water Department
Table 4 - WW - Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period

Billing Period	Difference in Collection Sewer Portion From Table 3-WW (1)	Billed Non-TAP Sewer Volume (Mcf) From Table 3-WW (2)	Anticipated E+I Recovery Sewer Portion -1.323840728 (3) = (2) * \$ -1.324/Mcf	Remaining E+I Recovery Sewer Portion (4) = (3) + (1)	Cumulative Over/(Under) Collection Relative to Revenue Requirements Sewer Portion (5)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (6) = (5) * [4.17% / 12]
Sep-24	\$ 350,335	\$ 461,364	\$ (610,772.11)	-260436.8248	\$ (260,436.82)	\$ (905.02)
Oct-24	\$ 109,442	\$ 434,072	\$ (574,641.99)	-465200.278	\$ (725,637.10)	\$ (2,521.59)
Nov-24	\$ 231,495	\$ 414,279	\$ (548,439.06)	-316944.2585	\$ (1,042,581.36)	\$ (3,622.97)
Dec-24	\$ 381,549	\$ 420,012	\$ (556,028.51)	-174479.9215	\$ (1,217,061.28)	\$ (4,229.29)
Jan-25	\$ 367,441	\$ 420,012	\$ (556,028.51)	-188587.9742	\$ (1,405,649.26)	\$ (4,884.63)
Feb-25	\$ 438,689	\$ 420,012	\$ (556,028.51)	-117339.2044	\$ (1,522,988.46)	\$ (5,292.38)
Mar-25	\$ 371,003	\$ 420,012	\$ (556,028.51)	-185025.4387	\$ (1,708,013.90)	\$ (5,935.35)
Apr-25	\$ 356,789	\$ 420,012	\$ (556,028.51)	-199239.6644	\$ (1,907,253.56)	\$ (6,627.71)
May-25	\$ 342,432	\$ 420,012	\$ (556,028.51)	-213596.1874	\$ (2,120,849.75)	\$ (7,369.95)
Jun-25	\$ 400,432	\$ 420,012	\$ (556,028.51)	-155596.4938	\$ (2,276,446.25)	\$ (7,910.65)
Jul-25	\$ 344,752	\$ 420,012	\$ (556,028.51)	-211276.1221	\$ (2,487,722.37)	\$ (8,644.84)
Aug-25	\$ 330,275	\$ 420,012	\$ (556,028.51)	-225753.5237	\$ (2,713,475.89)	\$ (9,429.33)
Total						\$ (67,374)
Adjustment for Prior Estimates						\$ (2,995)
Total I-Factor Recovery						\$ (70,369)

**Philadelphia Water Department
Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period**

Billing Period	Prior Reconciliation Period with Updated Actuals			Original Estimates	Adjustment
	Difference in Collection Water Portion From Table 3-W-A (1)	Cumulative Over/(Under) Collection Water Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (3) = (2) * [4.80% / 12]	Estimated Monthly Interest Owed/ (Interest to be Recouped) Water Portion (4)	Cumulative Over/(Under) Collection Water Portion (5) = (3) - (4)
Sep-23	\$ (425,244)	\$ (425,244)	\$ (1,700.98)	\$ (1,700.97)	\$ (0.00)
Oct-23	\$ (420,331)	\$ (845,575)	\$ (3,382.30)	\$ (3,382.30)	\$ (0.00)
Nov-23	\$ (449,700)	\$ (1,295,275)	\$ (5,181.10)	\$ (5,181.10)	\$ 0.00
Dec-23	\$ (457,779)	\$ (1,753,055)	\$ (7,012.22)	\$ (7,012.22)	\$ (0.00)
Jan-24	\$ (476,182)	\$ (2,229,236)	\$ (8,916.94)	\$ (8,916.95)	\$ 0.00
Feb-24	\$ (554,671)	\$ (2,783,907)	\$ (11,135.63)	\$ (11,135.63)	\$ 0.00
Mar-24	\$ (759,772)	\$ (3,543,680)	\$ (14,174.72)	\$ (14,174.72)	\$ 0.00
Apr-24	\$ (790,874)	\$ (4,334,553)	\$ (17,338.21)	\$ (17,540.58)	\$ 202.37
May-24	\$ (895,925)	\$ (5,230,478)	\$ (20,921.91)	\$ (20,906.44)	\$ (15.48)
Jun-24	\$ (889,365)	\$ (6,119,843)	\$ (24,479.37)	\$ (24,272.29)	\$ (207.08)
Jul-24	\$ (957,222)	\$ (7,077,065)	\$ (28,308.26)	\$ (27,638.15)	\$ (670.11)
Aug-24	\$ (1,034,843)	\$ (8,111,908)	\$ (32,447.63)	\$ (31,004.01)	\$ (1,443.62)
Total			\$ (174,999)	\$ (172,865)	\$ (2,134)
Total			\$ (174,999)	\$ (172,865)	\$ (2,134)

**Philadelphia Water Department
Interest on Experienced & Estimated Net Over/(Under) Collection (I-Factor) for Most Recent Period**

Billing Period	Prior Reconciliation Period with Updated Actuals			Original Estimates	Adjustment
	Difference in Collection Sewer Portion From Table 3-WW-A (1)	Cumulative Over/(Under) Collection Sewer Portion (2)	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (3) = (2) * [4.80% / 12]	Estimated Monthly Interest Owed/ (Interest to be Recouped) Sewer Portion (4)	Delta Prior Period Estimates (5) = (3) - (4)
Sep-23	\$ (577,221)	\$ (577,221)	\$ (2,308.89)	\$ (2,308.89)	\$ 0.00
Oct-23	\$ (570,724)	\$ (1,147,946)	\$ (4,591.78)	\$ (4,591.79)	\$ 0.00
Nov-23	\$ (611,314)	\$ (1,759,260)	\$ (7,037.04)	\$ (7,037.04)	\$ 0.00
Dec-23	\$ (622,100)	\$ (2,381,360)	\$ (9,525.44)	\$ (9,525.44)	\$ 0.00
Jan-24	\$ (650,009)	\$ (3,031,369)	\$ (12,125.48)	\$ (12,125.48)	\$ 0.00
Feb-24	\$ (755,715)	\$ (3,787,084)	\$ (15,148.34)	\$ (15,148.34)	\$ 0.00
Mar-24	\$ (1,039,933)	\$ (4,827,017)	\$ (19,308.07)	\$ (19,308.07)	\$ 0.00
Apr-24	\$ (1,083,275)	\$ (5,910,292)	\$ (23,641.17)	\$ (23,916.20)	\$ 275.03
May-24	\$ (1,227,985)	\$ (7,138,277)	\$ (28,553.11)	\$ (28,524.32)	\$ (28.78)
Jun-24	\$ (1,219,189)	\$ (8,357,466)	\$ (33,429.87)	\$ (33,132.45)	\$ (297.41)
Jul-24	\$ (1,312,042)	\$ (9,669,508)	\$ (38,678.03)	\$ (37,740.58)	\$ (937.45)
Aug-24	\$ (1,419,359)	\$ (11,088,868)	\$ (44,355.47)	\$ (42,348.71)	\$ (2,006.76)
Total			\$ (238,703)	\$ (235,707)	\$ (2,995)
Total			\$ (238,703)	\$ (235,707)	\$ (2,995)

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

In Re: Philadelphia Water Department's)
Annual Adjustment of Tiered Assistance) **2024 Tiered Assistance Program**
Program Rate Rider Surcharge Rates) **Rate Rider Surcharge Rates**
)

APPENDIX A

RESUME OF

LAFAYETTE K. MORGAN, JR.

LAFAYETTE K. MORGAN, JR.

Mr. Morgan is an independent regulatory consultant focusing in the area of the analysis of the operations of public utilities with particular emphasis on rate regulation. He has reviewed and analyzed utility rate filings, focusing primarily on revenue requirements determination, accounting and regulatory policy and cost recovery mechanisms. This work has included natural gas, water, electric, and telephone utilities.

Education and Qualifications

B.B.A. (Accounting) – North Carolina Central University, 1983

M.B.A. (Finance) – The George Washington University, 1993

C.P.A. – Licensed in the State of North Carolina (Inactive status)

Previous Employment

1993-2010 Senior Regulatory Analyst
 Exeter Associates, Inc.
 Columbia, MD

1990-1993 Senior Financial Analyst
 Potomac Electric Power Company
 Washington, D.C.

1984-1990 Staff Accountant
 North Carolina Utilities Commission – Public Staff
 Raleigh, NC

Professional Experience

As a Staff Accountant with the North Carolina Utilities Commission – Public Staff, Mr. Morgan was responsible for analyzing testimony, exhibits, and other data presented by parties before the Commission. In addition, he performed examinations of the books and records of utilities involved in rate proceedings and summarized the results into testimony and exhibits for presentation before the Commission. Mr. Morgan also participated in several policy proceedings and audits involving regulated utilities.

As a Senior Financial Analyst with Potomac Electric Power Company, Mr. Morgan was a lead analyst and was involved in the preparation of the cost of service, rate base, and ratemaking adjustments supporting the Company's request for revenue increases in its retail jurisdictions.

As a Senior Regulatory Analyst with Exeter Associates, Inc., Mr. Morgan has been involved in the analysis of the operations of public utilities with particular emphasis on rate regulation. He has reviewed and analyzed utility rate filings, focusing primarily on revenue requirements determination, accounting and regulatory policy and cost recovery mechanisms. This work included natural gas, water, electric, and telephone utilities.

Kings Grant Water Company (North Carolina Utilities Commission, Docket No. W-250, Sub 5), 1984. Presented testimony on rate base, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

Northwood Water Company (North Carolina Utilities Commission, Docket No. W-690, Sub 1), 1985. Presented testimony on rate base, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

Emerald Village Water System (North Carolina Utilities Commission, Docket No. W-184, Sub 3), 1985. Presented testimony on rate base, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

General Telephone Company of the South (North Carolina Utilities Commission, Docket No. P-19, Sub 207), July 1986. Presented testimony on the level of cash working capital allowance on behalf of the North Carolina Utilities Commission – Public Staff.

Heins Telephone Company (North Carolina Utilities Commission, Docket No. P-26, Sub 93), November 1986. Presented testimony on rate base, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

Carolina Power and Light Company (North Carolina Utilities Commission, Docket No. E-2, Sub 537), March 1988. Presented testimony on rate base, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

Public Service Company of North Carolina, Inc. (North Carolina Utilities Commission, Docket No. G-5, Sub 246), August 1989. Presented testimony on rate base, cash working capital allowance, cost of service, and revenue and expense adjustments on behalf of the North Carolina Utilities Commission – Public Staff.

Conestoga Telephone and Telegraph Company (Pennsylvania Public Utility Commission, Docket No. I-00920015), September 1993. Presented testimony on cost of service on behalf of the Pennsylvania Office of Consumer Advocate.

Louisiana Power and Light Company (Louisiana Public Service Commission, Docket No. U-20925), February 1995. Presented testimony on rate base and working capital issues on behalf of the Louisiana Public Service Commission Staff.

South Central Bell Telephone Company – Louisiana (Louisiana Public Service Commission, Docket No. U-17949, Subdocket E), June 1995. Presented testimony on rate base and working capital issues on behalf of the Louisiana Public Service Commission Staff.

Apollo Gas Company (Pennsylvania Public Utility Commission, Docket No. R-00953378), August 1995. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Carnegie Natural Gas Company (Pennsylvania Public Utility Commission, Docket No. R-00953379), August 1995. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Tennessee Gas Pipeline Company (Federal Energy Regulatory Commission, Docket No. RP95-112), September 1995. Presented testimony rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Virginia-American Water Company (Virginia State Corporation Commission, Case No. PUE-950003), March 1996. Presented testimony on rate base and cost of service issues on behalf of the City of Alexandria.

GTE North, Inc. Interconnection Arbitration (Pennsylvania Public Utility Commission, Docket No. A-310125F0002), September 1996. Presented testimony on the determination of the appropriate resale discount on behalf of the Pennsylvania Office of Consumer Advocate.

United Cities Gas Company (Georgia Public Service Commission, Docket No. 6691-U), October 1996. Presented testimony on rate base and cost of service issues on behalf of the Office of Governor, Consumer Utility Counsel Division.

GTE North, Inc. (Pennsylvania Public Utility Commission, Docket Nos. R-00963666 and R-00963666C001), February 1997. Presented testimony on the determination of the appropriate resale discount on behalf of the Pennsylvania Office of Consumer Advocate.

Consumers Maine Water Company (Maine Public Utilities Commission, Docket No. 96-739), May 1997. Presented testimony on rate base, cost of service, and rate of return issues on behalf of the Maine Office of the Public Advocate.

Pennsylvania-American Water Company (Pennsylvania Public Utility Commission, Docket No. R-00973944), July 1997. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Pennsylvania-American Water Company – Wastewater Operations (Pennsylvania Public Utility Commission, Docket No. R-00973973), July 1997. Presented testimony on rate base, cost of service, depreciation, and rate design issues on behalf of the Pennsylvania Office of Consumer Advocate.

Jackson Purchase Electric Cooperative Corporation (Kentucky Public Service Commission, Case No. 97-224), December 1997. Presented testimony on rate base and cost of service issues on behalf of the Kentucky Office of the Attorney General.

Henderson Union Electric Cooperative Corporation (Kentucky Public Service Commission, Case No. 97-220), January 1998. Presented testimony on the return of patronage capital on behalf of the Kentucky Office of the Attorney General.

Green River Electric Corporation (Kentucky Public Service Commission, Case No. 97-219), January 1998. Presented testimony on the return of patronage capital on behalf of the Kentucky Office of the Attorney General.

Western Kentucky Gas Company (Kentucky Public Service Commission, Case No. 99-070), November 1999. Presented testimony on rate base and cost of service issues on behalf of the Kentucky Office of the Attorney General.

American Broadband, Inc. (Rhode Island Public Utilities Commission, Docket No. 2000-C-3), June 2000. Presented report and testimony on the Company's financing plan on behalf of the Rhode Island Division of Public Utilities and Carriers.

PPL Utilities (Pennsylvania Public Utility Commission, Docket No. R-00005277), October 2000. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

T.W. Phillips Oil and Gas Company (Pennsylvania Public Utility Commission, Docket No. R-00005459), October 2000. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Pike County Light & Power Company (Pennsylvania Public Utility Commission, Docket No. P-00011872), May 2001. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Vermont Gas Systems, Inc. (Vermont Public Service Board, Docket No. 6495), June 2001. Presented testimony on rate base and cost of service issues on behalf of the Vermont Public Service Department.

Community Service Telephone Company (Maine Public Utilities Commission, Docket No. 2001-249), July 2001. Presented joint testimony on rate base and cost of service issues on behalf of the Maine Office of the Public Advocate.

West Virginia-American Water Company (Public Service Commission of West Virginia, Docket No. 01-0326-W-42-T), August 2001. Presented testimony on rate base and cost of service issues on behalf of the Consumer Advocate Division.

Philadelphia Suburban Water Company (Pennsylvania Public Utility Commission, Docket No. R-00016750) February 2002. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Illinois-American Water Company (Illinois Commerce Commission, Docket No. 02-0690) January 2003. Presented testimony on cost of service issues on behalf of Citizens Utility Board.

Pennsylvania-American Water Company (Pennsylvania Public Utility Commission, Docket No. R-00027983), February 2003. Presented testimony addressing surcharge mechanism to recover security costs on behalf of the Pennsylvania Office of Consumer Advocate.

FairPoint New England Telephone Companies (Maine Public Utilities Commission, Docket Nos. 2002-747, 2003-34, 2003-35, 2003-36, and 2003-37), June 2003. Presented testimony on rate base and cost of service issues on behalf of the Maine Office of the Public Advocate.

Pennsylvania-American Water Company (Pennsylvania Public Utility Commission, Docket No. R-00038304), August 2003. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

PPL Electric Utilities Corporation (Pennsylvania Public Utility Commission, Docket No. R-00049255), June 2004. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Entergy Louisiana, Inc. (Louisiana Public Service Commission, Docket No. U-20925 RRF 2004), August 2004. Presented testimony on rate base and cost of service issues on behalf of the Louisiana Public Service Commission Staff.

Vectren Energy Delivery of Indiana (Indiana Utility Regulatory Commission, Cause No. 42598), September 2004. Presented testimony on O&M expense issues on behalf of the Indiana Office of Utility Consumer Counselor.

National Fuel Gas Distribution Corporation (Pennsylvania Public Utility Commission, Docket No. R-00049656), December 2004. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Block Island Power Company (Rhode Island Public Utilities Commission, Docket No. 3655), April 2005. Presented testimony on cash working capital on behalf of the Rhode Island Division of Public Utilities & Carriers.

Verizon New England, Inc. (Maine Public Utilities Commission, Docket No. 2005-155), September 2005. Presented joint testimony with Thomas S. Catlin on rate base and cost of service issues on behalf of the Maine Office of the Public Advocate.

T.W. Phillips Oil and Gas Company (Pennsylvania Public Utility Commission, Docket No. R-00051178), May 2006. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Duquesne Light Company (Pennsylvania Public Utility Commission, Docket No. R-00061346), July 2006. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

National Fuel Gas Distribution Company (Pennsylvania Public Utility Commission, Docket No. R-00061493), September 2006. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Southern Indiana Gas & Electric Co. (Indiana Utility Regulatory Commission, Cause No. 43112), January 2007. Presented testimony on rate base and cost of service issues on behalf of the Indiana Office of Utility Consumer Counsel.

PPL Electric Utilities (Pennsylvania Public Utility Commission, Docket No. R-00072155), July 2007. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Aqua Pennsylvania, Inc. (Pennsylvania Public Utility Commission, Docket No. R-00072711), February 2008. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Equitable Gas Company (Pennsylvania Public Utility Commission, Docket No. R-2008-2029325), October 2008. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

The Narragansett Bay Commission (Rhode Island Public Utilities Commission, Docket No. 4026), April 2009. Presented testimony on rate base and cost of service issues on behalf of the Rhode Island Division of Public Utilities and Carriers.

Maryland-American Water Company (Maryland Public Service Commission, Case No. 9187), July 2009. Presented testimony on rate base and cost of service issues on behalf of the Maryland Office of People's Counsel.

Monongahela Power Company & The Potomac Edison Company, both d/b/a Allegheny Power Company (West Virginia Public Service Commission, Case No. 09-1352-E-42T), February 2010. Presented testimony on rate base and cost of service issues on behalf of the West Virginia Consumer Advocate Division.

PPL Electric Utilities (Pennsylvania Public Utility Commission, Docket No. R-2010-2161694), June 2010. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Pawtucket Water Supply Board (Rhode Island Public Utilities Commission, Docket No. 4550), June 2015. Presented testimony on revenue requirements issues on behalf of the Rhode Island Division of Public Utilities and Carriers.

Columbia Gas of Pennsylvania (Pennsylvania Public Utility Commission, Docket No. R-2015-2468056), June 2015. Presented testimony on rate base and cost of service issues on behalf of the Pennsylvania Office of Consumer Advocate.

Indianapolis Power and Light Company (Indiana Utility Regulatory Commission, Cause No. 44576/44602), July 2015. Presented testimony on revenue requirements issues on behalf of the Indiana Office of Utility Consumer Counselor.

Public Service Company of Oklahoma (Corporation Commission of Oklahoma, Cause No. PUD 201500208), October 2015. Presented testimony on revenue requirements and environmental compliance rider issues on behalf of the United States Department of Defense and the Federal Executive Agencies.

Northern Indiana Public Service Company (Indiana Utility Regulatory Commission, Cause No. 44688), January 2016. Presented testimony on the company's electric division operating revenues, operating expenses and income taxes issues on behalf of the Indiana Office of Utility Consumer Counselor.

Philadelphia Water Department (Philadelphia Water, Sewer And Storm Water Rate Board, FY2017-2018 Rate Proceeding), March 2016. Presented testimony on revenue requirements issues on behalf of the Public Advocate.

Columbia Gas of Maryland (Public Service Commission of Maryland, Case No. 9417), June 2016. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Chesapeake Utilities Corporation (Delaware Public Service Commission, PSC Docket No. 15-1734), August 2016. Presented testimony on rate base and cost of service issues on behalf of the Staff of the Delaware Public Service Commission.

Kent County Water Authority (Public Service Commission of Rhode Island, Docket No. 4611), September 2016. Presented testimony on rate base and cost of service issues on behalf of the Division of Public Utilities and Carriers.

Northern Utilities, Inc. (Maine Public Utilities Commission, Docket No. 2017-00065), August 2017. Assisted the Maine Office of Public Advocate (OPA) with Northern Utilities application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements, the utility's request to renew and modify its alternative rate plan, and its Targeted Infrastructure Replacement Adjustment.

Indiana Michigan Power Company (Indiana Utility Regulatory Commission, Cause No. 44967), November 2017. Presented testimony on rate base, operating revenues and operating expenses issues on behalf of the Indiana Office of Utility Consumer Counselor.

Emera Maine (Maine Public Utilities Commission, Docket No. 2017-00198), December 2017. Assisted the Maine Office of Public Advocate (OPA) with Emera Maine's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements, the utility's request to reflect the changes brought about by the Tax Change and Jobs Act of 2017.

UGI-Electric (Pennsylvania Public Utility Commission, Docket No. R-2017-2640058), April 2018. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with UGI-Electric's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OCA, on accounting issues including test year revenue requirements, the utility's request to reflect the changes brought about by the Tax Change and Jobs Act of 2017.

Philadelphia Water Department (Philadelphia Water, Sewer And Storm Water Rate Board, FY2019-2020 Rate Proceeding), April 2018. Presented testimony on revenue requirements and the Department's three-year rate plan issues on behalf of the Public Advocate.

Westar Energy, Inc. (Westar Energy) and Kansas Gas and Electric Company (KGE), (Kansas State Corporation Commission, Docket No. 18-WSEE-328-RTS), May 2018. Presented testimony on revenue requirements on behalf on behalf of the Federal Executive Agencies.

Duquesne Light Company (Pennsylvania Public Utility Commission, Docket No. R-2018-3000124), June 2018. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with UGI-Electric's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements, the utility's request to reflect the changes brought about by the Tax Change and Jobs Act of 2017.

Bangor Natural Gas Company (Maine Public Utilities Commission, Docket No. 2018-00007), June 2018. Assisted the Maine Office of Public Advocate (OPA) Presented testimony, on behalf of the OPA, on the changes brought about by the Tax Change and Jobs Act of 2017.

SUEZ Water Pennsylvania, Inc. (Pennsylvania Public Utility Commission, R-2018-3000834), July 2018. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with SUEZ Water's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including Rate Base, Operating Income, Inclusion of Costs Related to Expansion Territories and the utility's request to reflect the changes brought about by the Tax Change and Jobs Act of 2017.

Woonsocket Water Division (Public Service Commission of Rhode Island, Docket No. 4879), January 2019. Presented testimony on cost of service issues on behalf of the Division of Public Utilities and Carriers.

Central Maine Power Company (Maine Public Utilities Commission, Docket No. 2018-00194), January 2019. Assisted the Maine Office of Public Advocate (OPA) with Central Maine Power's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements, the utility's request to reflect the changes brought about by the Tax Change and Jobs Act of 2017.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, 2019 Tiered Assistance Program Rate Rider Surcharge Rates Proceeding), May 2019. Presented

testimony regarding the appropriate adjustments to the 2019 TAP-R determination. Presented testimony on behalf of the Public Advocate.

Newport Water Department (Public Service Commission of Rhode Island, Docket No. 4933), July 2019. Presented testimony on cost of service issues on behalf of the Division of Public Utilities and Carriers.

UGI-Gas (Pennsylvania Public Utility Commission, Docket No. R-2018-3006814), April 2019. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with UGI-Gas' application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OCA, on accounting issues including Rate Base and Net Operating Income.

Columbia Gas of Maryland (Public Service Commission of Maryland, Case No. 9609), August 2019. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Public Service Company of Colorado (Colorado Public Utility Commission, Proceeding No. 19AL-0268E), September 2019. Mr. Morgan provided testimony, on behalf of the Department of Energy and the Federal Executive Agencies, on accounting issues including test year revenue requirements, Rate Base and Net Operating Income.

Northern Utilities, Inc. (Maine Public Utilities Commission, Docket No. 2019-00092), September 2019. Assisted the Maine Office of Public Advocate (OPA) with Northern Utilities application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements and the utility's request to institute a Capital Investment Recovery Mechanism.

Citizens' Electric Company of Lewisburg (Pennsylvania Public Utility Commission, Docket No. R-2019-3008212), October 2019. Provided testimony on Plant in Service, Construction Work in Progress, Materials and Supplies, Customer Deposits, Depreciation Expense, Growth Factor, and The Tax Cuts and Jobs Act. Mr. Morgan provided testimony, on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

Valley Energy, Inc. (Pennsylvania Public Utility Commission, Docket No. R-2019-3008209), October 2019. Provided testimony on Plant in Service, Construction Work in Progress, Materials and Supplies, Customer Deposits, Depreciation Expense, Growth Factor, and The Tax Cuts and Jobs Act. Mr. Morgan provided testimony, on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

Wellsboro Electric Company (Pennsylvania Public Utility Commission, Docket No. R-2019-3008208), October 2019. Provided testimony on Plant in Service, Construction Work in Progress, Materials and Supplies, Customer Deposits, Depreciation Expense, Growth Factor, and The Tax Cuts and Jobs Act. Mr. Morgan provided testimony, on behalf of the Pennsylvania Office of Consumer Advocate (OCA).

Blue Granite Water Company (Public Service Commission of South Carolina, (Docket No. 2019-290-WS), January 2020. Assisted the South Carolina Department of Consumer Affairs. Presented testimony on accounting policy issues including test year revenue requirements.

UGI-Gas (Pennsylvania Public Utility Commission, Docket No. R-2019-3015162), May 2020. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with UGI-Gas' application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OCA, on accounting issues including Rate Base and Net Operating Income.

Columbia Gas of Maryland (Public Service Commission of Maryland, Case No. 9644), July 2020. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

PECO Energy Company - Gas Division (Pennsylvania Public Utility Commission, Docket No. R-2020-3018929), December 2020. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with PECO-Gas' application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OCA, on accounting issues including Rate Base and Net Operating Income.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, Fiscal Years 2022 - 2023 Rates Proceeding), March 2021. Presented testimony on revenue requirements and the Department's three-year rate plan issues on behalf of the Public Advocate.

Versant Maine (Maine Public Utilities Commission, Docket No. 2020-00316), April 2021. Assisted the Maine Office of Public Advocate (OPA) with Versant's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Maine Water Company (Maine Public Utilities Commission, Docket No. 2021-00053), April 2021. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's Request for Approval of Rate Increase and Rate Smoothing Mechanism Pertaining to The Maine Water Company Biddeford & Saco Division. Mr. Morgan provided testimony, on the authorization of the Rate Smoothing Mechanism.

UGI-Electric (Pennsylvania Public Utility Commission, Docket No. R-2021-3023618), May 2021. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with UGI-Electric's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OCA, on accounting issues including Rate Base and Net Operating Income.

Bangor Natural Gas Company (Maine Public Utilities Commission, Docket No. 2021-00024), June 2021. Assisted the Maine Office of Public Advocate (OPA) with Bangor Natural Gas' application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2021 - 2022 Operating Budget Proceeding), June 2021. Presented testimony on the reasonableness of the Fiscal Year 2022 Operating Budget on behalf of the Public Advocate.

Duquesne Light Company (Pennsylvania Public Utility Commission, Docket No. R-2021-3024750), June 2021. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with Duquesne Light Company's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements.

Columbia Gas of Maryland (Public Service Commission of Maryland, Case No. 9664), July 2021. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Palmetto Wastewater Reclamation, Inc. (Public Service Commission of South Carolina, (Docket No. 2021-153-S), September 2021. Assisted the South Carolina Department of Consumer Affairs. Presented testimony on accounting policy issues including test year revenue requirements.

Maine Water Company (Maine Public Utilities Commission, Docket No. 2021-00289), November 2021. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

City of Lancaster – Water Department (Pennsylvania Public Utility Commission, Docket No. R-2021-3026682), December 2021. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with the City of Lancaster – Water Department's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements.

Maryland Water Service (Public Service Commission of Maryland, Case No. 9671), January 2022. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Commonwealth Edison Company (Illinois Commerce Commission, ICC Docket No. 21-0607 & ICC Docket No. 21-0739 (consolidated)), February 2022. Provided testimony related to the review and evaluation of the rate effects of Commonwealth Edison's misconduct admitted in the Deferred Prosecution Agreement between the United States Attorney for the Northern District of Illinois and Commonwealth Edison. Provided testimony on behalf of the Office of the Illinois Attorney General, the City of Chicago, and the Citizens Utility Board.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2022 - 2023 Capital Budget Proceeding), February 2022. Presented testimony proposing several adjustments to Philadelphia Gas Works' Fiscal Year 2023 Capital Budget on behalf of the Public Advocate.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, 2022 Tiered Assistance Program Rate Rider Surcharge Rates Proceeding), March 2022. Presented testimony regarding the appropriate adjustments to the 2022 TAP-R determination. Presented testimony on behalf of the Public Advocate.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, Fiscal Years 2023 Special Rate Proceeding), April 2022. Presented testimony that demonstrated Philadelphia Water Department's outperformance and proposed a sharing of the utility's outperformance earnings. Presented testimony on behalf of the Public Advocate.

Maine Water Company-Camden& Rockland Division (Maine Public Utilities Commission, Docket No. 2022-00056), June 2022. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Maine Water Company-Freeport Division (Maine Public Utilities Commission, Docket No. 2022-00057), June 2022. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Maine Water Company-Millinocket Division (Maine Public Utilities Commission, Docket No. 2022-00058), June 2022. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Maine Water Company-Oakland Division (Maine Public Utilities Commission, Docket No. 2022-00059), June 2022. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Columbia Gas of Pennsylvania (Pennsylvania Public Utility Commission, Docket No. R-2022-3031211), June 2022. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with Columbia Gas of Pennsylvania's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2022 - 2023 Operating Budget Proceeding), June 2022. Presented testimony on the reasonableness of the Fiscal Year 2023 Operating Budget on behalf of the Public Advocate.

Columbia Gas of Maryland (Public Service Commission of Maryland, Case No. 9680), July 2022. Presented joint testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Oncor Electric Delivery Company (Public Utility Commission of Texas, PUC Docket No. 53601), August 2022. Presented joint testimony on rate base and cost of service issues on behalf of the Department of Defense and Federal Executive Agencies.

Cheyenne Light, Fuel and Power Company d/b/a Black Hills Energy (Wyoming Public Service Commission, Docket No. 20003-214-ER-22), November 2022. Presented testimony, on behalf of Microsoft Corporation, on rate base and cost of service issues.

Central Maine Power Company (Maine Public Utilities Commission, Docket No. 2022-00152), December 2022. Assisted the Maine Office of Public Advocate (OPA) with Central Maine Power's application for an increase in rates. Provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements and the company's request for a multi-year rate plan.

National Fuel Gas Distribution Corporation (Pennsylvania Public Utility Commission, Docket No. R-2022-3035730), January 2023. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with National Fuel Gas Distribution Corporation's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2022 - 2023 Capital Budget Proceeding), February 2023. Presented testimony proposing several adjustments to Philadelphia Gas Works' Fiscal Year 2024 Capital Budget on behalf of the Public Advocate.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, 2023 Tiered Assistance Program Rate Rider Surcharge Rates Proceeding), March 2023. Presented testimony regarding the appropriate adjustments to the 2023 TAP-R determination. Presented testimony on behalf of the Public Advocate.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, Fiscal Years 2024 - 2025 Rates Proceeding), April 2023. Presented testimony on behalf of the Public Advocate on revenue requirements and issues relating to the Department's proposed two-year rate plan.

Dayton Power and Light Company d/b/a AES Ohio (The Public Utilities Commission of Ohio, Case No. 22-900-EL-SSO), April 2023. Presented testimony addressing the recovery of deferred costs and regulatory assets as part of AES Ohio's Application for Approval of Its Electric Security Plan on behalf of the Office of the Ohio Consumers' Counsel.

Maine Water Company- Biddeford & Saco Division (Maine Public Utilities Commission, Docket No. 2023-00065), June 2023. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Provided testimony, on behalf of the OPA, on accounting issues and test year revenue requirements.

Potomac Edison Company (Public Service Commission of Maryland, Case No. 9695), June 2023. Presented testimony on rate base, cost of service and accounting issues on behalf of the Office of People's Counsel.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2023 - 2024 Operating Budget Proceeding), June 2023. Presented testimony identifying issues and recommendations to be considered in approving the Fiscal Year 2024 Operating Budget on behalf of the Public Advocate.

Northern Utilities, Inc. (Maine Public Utilities Commission, Docket No. 2023-00051), July 2023. Assisted the Maine Office of Public Advocate (OPA) with Northern Utilities application for an increase in rates. Provided testimony, on behalf of the OPA, on accounting issues and test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2024 Capital Budget Amendment), August 2023. Presented testimony as to the appropriateness of Philadelphia Gas Works' amendments to the Fiscal Year 2024 Capital Budget on behalf of the Public Advocate.

Evergy Kansas Central, Inc. (Kansas State Corporation Commission, Docket No. 23-EKCE-775-RTS), August 2023. Assisted the U.S. Department of Defense and the Federal Executive Agencies with Evergy Kansas Central, Inc. application for an increase in rates. Provided testimony on accounting issues including test year revenue requirements.

American Transmission Systems, Inc., Mid-Atlantic Interstate Transmission, LLC and Trans-Allegheny Interstate Line Company (Pennsylvania Public Utility Commission, Docket Nos. A-2023-3040481, A-2023-3040482, A-2023-3040483, G-2023-3040484 and G-2023-3040485), August 2023. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with investigation of Joint Applicants application to sell additional equity stake in FirstEnergy Transmission LLC to North American Transmission Company II, L.P. Provided testimony, on behalf of the OCA, identifying issues and recommendations to be considered by the Commission in approving the transaction.

Fitchburg Gas and Electric Light Company d/b/a Unitil (Electric and Gas Divisions) (Massachusetts Department of Public Utilities, Docket Nos. D.P.U. 23-80 & 23-81), December 2023. Assisted the Massachusetts Office of Attorney General (AGO) with Fitchburg Gas and Electric Light Company's application for an increase in rates. Provided testimony, on behalf of the OPA, on accounting issues and test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2024 - 2025 Capital Budget Proceeding), February 2024. Presented testimony proposing several adjustments to Philadelphia Gas Works' Fiscal Year 2024 Capital Budget on behalf of the Public Advocate.

Pawtucket Water Supply Board (Rhode Island Public Utilities Commission, Docket No. 23-30-WW), March 2024. Presented testimony on revenue requirements issues on behalf of the Rhode Island Division of Public Utilities and Carriers.

Massachusetts Electric Company and Nantucket Electric Company, d/b/a National Grid (Massachusetts Department of Public Utilities, Docket Nos. D.P.U. 23-150), March 2024. Assisted the Massachusetts Office of Attorney General (AGO) with National Grid's application for an increase in rates. Provided testimony, on behalf of the OPA, on accounting issues and test year revenue requirements.

Philadelphia Water Department (Philadelphia Water, Sewer and Storm Water Rate Board, 2024-Tiered Assistance Program Rate Rider Surcharge Rates Proceeding), April 2024. Presented testimony regarding the appropriate adjustments to the 2024 TAP-R determination. Presented testimony on behalf of the Public Advocate.

Pennsylvania-American Water Company, Manwalamink Water Company and Manwalamink Sewer Company (Pennsylvania Public Utility Commission, Docket Nos. A-2023-3044418, A-2023-3044419, A-2023-3044421, A-2023-3044422), May 2024. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with investigation of Pennsylvania-American application to acquire Manwalamink Water Company and Manwalamink Sewer Company. Provided testimony, on behalf of the OCA, identifying issues and recommendations to be considered by the Commission in approving the transaction.

Veolia Water Pennsylvania, Inc. (Pennsylvania Public Utility Commission, Docket Nos. R-2024-3045192 and R-2024-3045193, May 2024. Assisted the Pennsylvania Office of Consumer Advocate (OCA) with Veolia Water Pennsylvania's application for an increase in rates. Presented testimony, on behalf of the OCA, on accounting issues including test year revenue requirements.

Dominion Energy South Carolina, Inc. (South Carolina Public Service Commission, Docket No. 2024-34-E), June 2024. Assisted the U.S. Department of Defense and the Federal Executive Agencies with Dominion Energy South Carolina, Inc.'s application for an increase in rates. Provided testimony on accounting issues including test year revenue requirements.

Versant Maine (Maine Public Utilities Commission, Docket No. 2023-00336), June 2024. Assisted the Maine Office of Public Advocate (OPA) with Versant's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Maryland Water Service (Public Service Commission of Maryland, Case No. 9729), June 2024. Presented testimony on rate base and cost of service issues on behalf of the Office of People's Counsel.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2024 - 2025 Operating Budget Proceeding), June 2024. Presented testimony identifying issues and recommendations to be considered in approving the Fiscal Year 2025 Operating Budget on behalf of the Public Advocate.

Elizabethtown Gas Company (New Jersey Board of Public Utilities, BPU Docket No. GR24020158), June-August 2024. Assisted the Division of Rate Counsel with the investigation and litigation of Elizabethtown Gas Company's application for an increase in rates. Mr. Morgan investigated the Company's claimed revenue requirement and assisted the Division of Rate Counsel on accounting issues and participated in the settlement negotiations leading to the case resolution.

City of Newport Utilities Department Water Division (Rhode Island Public Utilities Commission, Docket No. 24-30-WW), October 2024. Presented testimony on revenue requirements issues on behalf of the Rhode Island Division of Public Utilities and Carriers.

Maine Water Company-Camden & Rockland Division (Maine Public Utilities Commission, Docket No. 2024-00291), January 2025. Assisted the Maine Office of Public Advocate (OPA) with Maine Water Company's application for an increase in rates. Mr. Morgan provided testimony, on behalf of the OPA, on accounting issues including test year revenue requirements.

Philadelphia Gas Works (Philadelphia Gas Commission, Fiscal Year 2025 - 2026 Capital Budget Proceeding), February 2025. Presented testimony proposing several adjustments to Philadelphia Gas Works' Fiscal Year 2026 Capital Budget on behalf of the Public Advocate.

Special Projects

Developed a Uniform System of Accounts and Financial Data Collection Template for five countries participating in the National Association of Regulatory Utility Commissioners (NARUC)/East Africa Regional Energy Regulatory Partnership. Also conducted training seminars and participated as a panel member addressing issues in the utility industry from the perspective of the regulator. This work was conducted by NARUC) and the United States Agency for International Development (USAID).

Other Projects

Texas Gas Transmission Corporation (Federal Energy Regulatory Commission, Docket No. RP93-106). Technical analysis and participation in settlement negotiations on cost of service, invested capital, and revenue deficiency on behalf of the Indiana Office of Utility Consumer Counselor.

Natural Gas Pipeline Company of America (Federal Energy Regulatory Commission, Docket No. RP93-36). Technical analysis and participation in settlement negotiations on cost of

service, invested capital, and revenue deficiency on behalf of the Indiana Office of Utility Consumer Counselor.

Texas Gas Transmission Company (Federal Energy Regulatory Commission, Docket No. RP94-423). Technical analysis and participation in settlement negotiations on cost of service, invested capital, and revenue deficiency on behalf of the Indiana Office of Utility Consumer Counselor.

Lafourche Telephone Company (Louisiana Public Service Commission, Docket No. U-21181). Analysis and investigation of earnings and appropriate rate of return on behalf of the Louisiana Public Service Commission Staff.

Natural Gas Pipeline Company of America (Federal Energy Regulatory Commission, Docket No. RP95-326). Technical analysis and participation in settlement negotiations on cost of service, invested capital, and revenue deficiency on behalf of the Indiana Office of Utility Consumer Counselor.

Pymatuning Independent Telephone Company (Pennsylvania Public Utility Commission, Docket No. R-00953502). Technical analysis and development of settlement position in the Company's rate case on behalf of the Pennsylvania Office of Consumer Advocate.

Illinois Bell Telephone Company (Illinois Commerce Commission, Docket No. 96-0172). Technical analysis of the Company's annual rate filing pursuant to its Price Cap Plan on behalf of Citizens Utility Board.

Illinois Bell Telephone Company (Illinois Commerce Commission, Docket No. 97-0157). Technical analysis of the Company's annual rate filing pursuant to its Price Cap Plan on behalf of Citizens Utility Board.

TDS Telecom (Pennsylvania Public Utility Commission, Docket Nos. R-00973892 and R-00973893). Technical analysis regarding rate base, cost of service, rate design, and rate of return, and assistance in settlement negotiations in the Company's rate case and alternative regulatory filing on behalf of the Pennsylvania Office of Consumer Advocate.

Appalachian Power Company (Virginia State Corporation Commission, Case No. PUE 960301). Technical analysis regarding rate base and cost of service and assistance in settlement negotiations in the Company's rate case and alternative regulatory filing on behalf of the Virginia Office of the Attorney General.

Central Maine Power Company (Maine Public Utilities Commission, Docket No. 97-580). Technical analysis regarding attrition and accounting issues in the Company's Transmission and Distribution unbundling proceeding on behalf of the Maine Public Utilities Commission Staff.

Illinois Bell Telephone Company (Illinois Commerce Commission, Docket No. 98-0259).
Technical Analysis of the Company's annual rate filing pursuant to its Price Cap Plan on behalf of Citizens Utility Board.

Maine Public Service Company (Maine Public Utilities Commission, Docket No. 98-577).
Technical analysis regarding attrition and accounting issues in the Company's Transmission and Distribution unbundling proceeding on behalf of the Maine Public Utilities Commission Staff.

Bangor Hydro-Electric Company (Maine Public Utilities Commission, Docket No. 97-596).
Technical analysis regarding attrition and accounting issues in the Company's Transmission and Distribution unbundling proceeding on behalf of the Maine Public Utilities Commission Staff.

TDS Telecom (Maine Public Utilities Commission, Docket Nos. 98-894, 98-895, 98-904, 98-906, 98-911, and 98-912). Technical analysis regarding accounting issues and access rate changes on behalf of the Maine Office of the Public Advocate.

Mid-Maine Telecom (Maine Public Utilities Commission, Docket No. 2000-810). Technical analysis regarding accounting issues and access rate changes on behalf of the Maine Office of the Public Advocate.

Unitel, Inc. (Maine Public Utilities Commission, Docket No. 2000-813). Technical analysis regarding accounting issues and access rate changes on behalf of the Maine Office of the Public Advocate.

Hydraulics International, Inc. (Armed Services Board of Contract Appeals, ASBCA No. 51285).
Technical analysis and support relating to the Economic Adjustment Clause claim on behalf of the Air Force Materiel Command.

Tidewater Telecom and Lincolnville Telephone Company (Maine Public Utilities Commission, Docket Nos. 2002-100 and 2002-99). Technical analysis regarding accounting issues and access rate changes on behalf of the Maine Office of the Public Advocate.

TDS Telecom (Vermont Public Service Board, Docket No. 6576). Technical analysis regarding rate base, cost of service, and depreciation expense on behalf of the Vermont Department of Public Service.

CenterPoint Energy-Entex (Louisiana Public Service Commission, Docket No. U-26720, Subdocket A). Technical analysis regarding rate base and cost of service on behalf of the Louisiana Public Service Commission Staff.

CenterPoint Energy-Arkla (Louisiana Public Service Commission, Docket No. U-27676).
Technical analysis regarding rate base and cost of service on behalf of the Louisiana Public Service Commission Staff.

Provided technical analysis and support on behalf of the Louisiana Public Service Commission Staff relating to CLECO Power LLC Rate Stabilization Plan.

Provided technical analysis and support on behalf of the Louisiana Public Service Commission Staff relating to CLECO Power LLC post-Katrina power purchases.

Provided technical analysis and support on behalf of the Louisiana Public Service Commission Staff relating to Entergy Louisiana LLC recovery of storm damage costs.

Westar Energy, Inc. (Westar Energy) and Kansas Gas and Electric Company (KGE), (Kansas State Corporation Commission, Docket No. 17-WSEE-147-RTS). Technical analysis regarding rate base and cost of service on behalf of the Federal Executive Agencies.

Westar Energy, Inc. (Westar Energy) and Kansas Gas and Electric Company (KGE), (Kansas State Corporation Commission, Docket No. 17-WSEE-147-RTS). Technical analysis regarding rate base and cost of service on behalf of the Federal Executive Agencies.

- PA-TAP 1-1** REFERENCE SCHEDULE RFC-3, TAP-R_PROJECTIONS TAB. PLEASE PROVIDE THE SUPPORTING CALCULATIONS (IN EXCEL FORMAT WITH FORMULAE INTACT) AND A DETAILED EXPLANATION OF THE BASIS FOR:
- A. THE 5% PROJECTED INCREASE IN TAP PARTICIPATION IN DECEMBER 2024.
 - B. THE 1% PROJECTED INCREASE IN TAP PARTICIPATION IN JANUARY 2025.
 - C. THE 5% PROJECTED DECREASE IN TAP PARTICIPATION IN FEBRUARY 2025.
 - D. THE 5% PROJECTED INCREASE IN TAP PARTICIPATION IN MARCH 2025.
 - E. THE 1% PROJECTED INCREASE IN TAP PARTICIPATION IN APRIL 2025.
 - F. THE 1% PROJECTED INCREASE IN TAP PARTICIPATION IN MAY 2025.
 - G. THE 4% PROJECTED DECREASE IN TAP PARTICIPATION IN JUNE 2025.
 - H. THE 4% PROJECTED INCREASE IN TAP PARTICIPATION IN JULY 2025.
 - I. THE 1% PROJECTED INCREASE IN TAP PARTICIPATION IN AUGUST 2025.
 - J. THE 1% PROJECTED DECREASE IN TAP PARTICIPATION IN SEPTEMBER 2025.

RESPONSE:

TAP “participants” are defined as customers who receive a TAP bill in a given month. Please refer to Schedule RFC-1 for a more detailed definition of “TAP Participants.” Also, refer to Schedule RFC-3 for detail supporting the increase in TAP participation.

Baseline projections for changes in TAP participation are developed using recent enrollment trends and expected enrollment figures for prequalified candidates from PWD's partnership with the City's Office of Integrated Data for Evidence and Action (IDEA). These projections are then adjusted to reflect variations in month-to-month participation experienced historically, which is driven primarily by the number of City-observed business days in each month. TAP bills are only issued on City-observed business days. As a result, months with more business days tend to result in higher TAP participant counts, while months with fewer business days tend to result in lower TAP participant counts.

RESPONSE PROVIDED BY: Raftelis Financial Consultants, Inc.