



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
COMMONWEALTH KEYSTONE BUILDING
400 NORTH STREET, HARRISBURG, PA 17120

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

February 19, 2026

Via Electronic Filing

Matthew L. Homsher, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v.
City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
I&E Pre-Served Testimony, Exhibits, and Verifications

Dear Secretary Homsher:

Enclosed for electronic filing please find the Bureau of Investigation and Enforcement's Pre-Served Testimony, Exhibits, and Verifications in the above-captioned proceeding. The following documents were admitted into the record via Administrative Law Judge Erin L. Gannon's Interim Order Granting Motion for Admission into the Record and Adopting Joint Stipulation for Admission of Evidence that was issued on February 9, 2026:

Getachew Bedasa

I&E Statement No. 1
I&E Exhibit No. 1
I&E Statement No. 1-SR
Verification

D.C. Patel

I&E Statement No. 2
I&E Exhibit No. 2
I&E Statement No. 2-SR
Verification

Eryan Sakaya

I&E Statement No. 3
I&E Exhibit No. 3
I&E Statement No. 3-SR
Verification

Christine Wilson

I&E Statement No. 4-R
I&E Exhibit No. 4-R
Verification

Copies of this letter are being served on parties per the attached Certificate of Service. Should you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Scott B. Granger".

Scott B. Granger
Senior Prosecutor
Bureau of Investigation and Enforcement
PA Attorney ID No. 63641
(717) 425-7593
sgranger@pa.gov

SBG/ac
Enclosures

cc: Administrative Law Judge Erin L. Gannon (*CL&COS only – via email*)
Per Certificate of Service (*CL&COS only – via email*)

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2025-3057237
	:	
City of Lancaster – Bureau of Water	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Letter Regarding Pre-Served Testimony, Exhibits, and Verifications** dated February 19, 2026, in the manner and upon the persons listed below:

Served via Electronic Mail Only

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I&E Statement No. 1
Witness: Getachew Bedasa

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER– BUREAU OF WATER

Docket No. R-2025-3057237

Direct Testimony

of

Getachew Bedasa

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

CASH WORKING CAPITAL

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1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Getachew Bedasa, and my business address is Pennsylvania Public
4 Utility Commission, 400 North Street, Harrisburg, PA 17120.

5

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

7 A. I am employed by the Pennsylvania Public Utility Commission (Commission or
8 PUC) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility
9 Financial Analyst.

10

11 **Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT BACKGROUND?**

12 A. My education and employment background is summarized in the attached
13 Appendix A.

14

15 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.**

16 A. I&E is responsible for representing the public interest in rate and other
17 proceedings before the Commission. I&E's analysis in this proceeding is based on
18 its responsibility to represent the public interest. This responsibility requires
19 balancing the interests of ratepayers, the regulated utility, and the regulated
20 community as a whole.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my direct testimony is to review the base rate filing of the City of
3 Lancaster – Bureau of Water (Water Fund) and recommend adjustments to the
4 Water Fund’s claims for operating and maintenance (O&M) expenses and cash
5 working capital for the fully projected future test year (FPFTY) ending March 31,
6 2027. It should be noted that my recommended adjustments are for customers
7 outside the city limits (PUC jurisdictional customers) and expenses allocated to
8 these customers only.

9

10 **Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?**

11 A. Yes. I&E Exhibit No. 1 contains schedules that support my direct testimony.

12

13 **Q. PLEASE SUMMARIZE THE WATER FUND’S REQUESTED REVENUE**
14 **INCREASE.**

15 A. The Water Fund’s base rate case was filed on September 30, 2025,¹ with a
16 requested increase of \$7,005,217 to claimed present rate revenues of \$23,232,683
17 for customers who reside outside the City of Lancaster, resulting in a PUC
18 jurisdictional overall revenue requirement of \$30,237,900 for the FPFTY.²

¹ Supplement No. 49 to Tariff Water - PA PUC No. 6 - City of Lancaster, p. 1.

² Water Fund Exhibit GRH-1, Schedule 1, p. 3.

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED ADJUSTMENTS.**

2 A. The following table summarizes my recommended adjustments:

	Water Fund Jurisdictional Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses:			
Meter Shop Salaries	\$430,082	\$338,068	(\$92,014)
Medical Insurance Expense	\$1,958,972	\$1,909,296	(\$49,676)
Dental Insurance Expense	\$38,654	\$37,673	(\$981)
Overtime Expense	\$242,836	\$229,075	(\$13,761)
Payroll Tax Expense	\$359,174	\$350,936	(\$8,238)
Susquehanna Power Electric	\$824,497	\$535,388	(\$289,109)
Conestoga Power Electric	\$628,715	\$408,257	(\$220,458)
Postage Expense	\$191,793	\$140,142	(\$51,651)
Telephone Expense	\$134,039	\$107,447	(\$26,592)
Admin. Indirect Costs	\$803,880	\$0	(\$803,880)
Rate Case Expense	179,333	\$107,600	(\$71,733)
Total O&M Adjustments			(\$1,628,093)
Rate Base:			
Cash Working Capital	\$1,559,260	\$1,331,173	(\$228,087)
Total Rate Base Adjustments			(\$228,087)

3

4

5 **I&E OVERALL RECOMMENDED REVENUE REQUIREMENT**

6 **Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT?**

7 A. I&E's total recommended revenue requirement is \$26,086,562. This
8 recommended revenue requirement represents an increase of \$2,853,879 to present
9 rate revenues of \$23,232,683. This total recommended allowance incorporates my
10 adjustments made in this direct testimony to O&M expenses and cash working
11 capital, and those recommended adjustments made in the testimony of I&E

witnesses Dusyant Patel³ and Esyan Sakaya.⁴

A calculation of I&E’s recommended revenue requirement is shown below:

City of Lancaster Water (Outside-City) R-2025-3057237		TABLE I INCOME SUMMARY			
INVESTIGATION & ENFORCEMENT					
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	23,232,683	0	23,232,683	2,853,879	26,086,562
Deductions:					
O&M Expenses	12,545,807	-1,816,461	10,729,346	0	10,729,346
Depreciation	4,395,191	0	4,395,191		4,395,191
Taxes, Other	0	-8,238	-8,238	0	-8,238
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	0	0	0	0
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	16,940,998	-1,824,699	15,116,299	0	15,116,299
Income Available	6,291,685	1,824,699	8,116,384	2,853,879	10,970,263
Rate Base	190,353,958	-228,087	190,125,871	0	190,125,871
Rate of Return	3.31%		4.27%		5.77%

METER SHOP - SALARIES

Q. WHAT IS THE WATER FUND’S CLAIM FOR METER SHOP SALARIES EXPENSE?

A. The Water Fund’s expense claim for Meter Shop salaries is \$607,632.⁵ The jurisdictional claim is \$430,082 (\$607,632 x 0.7078) based on Allocation Factor

³ I&E Statement No. 2.
⁴ I&E Statement No. 3.
⁵ Water Fund Exhibit GRH-1, Schedule 3, p. 4.

1 No. 13 of 0.7078 (0.3691 + 0.2206 + 0.0398 + 0.0254 + 0.0138 + 0.0154 +
2 0.0327).⁶

3

4 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S METER SHOP**
5 **SALARIES EXPENSE CLAIM?**

6 A. The Water Fund adjusted its total system March 31, 2025 actual expense of
7 \$427,088 for Adjustment E-1 to reflect pro forma labor expense at wage rates
8 effective January 1, 2025 and the total number of employees, and Adjustment E-11
9 to reflect pro forma labor expense at wages rates effective January 1, 2027 and the
10 total number of employees to arrive at a FPFTY claim on \$607,632.⁷ The Water
11 Fund indicated that it intended to hire two Plumbing Technicians for an annual
12 salary of \$65,000 each and two Chief Operators at \$75,000 each, although the
13 Plumbing Technician positions were not approved for 2026.⁸

14

15 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

16 A. No.

17

18 **Q. WHAT IS YOUR RECOMMENDATION FOR METER SHOP SALARIES**
19 **EXPENSE?**

20 A. I recommend a jurisdictional allowance of \$338,068 or a reduction of \$92,014

⁶ Water Fund Exhibit GRH-2, Schedule E, p. 30.

⁷ Water Fund Exhibit GRH-1, Schedule 3, p. 4 and Schedule 6, pp. 1 and 6.

⁸ I&E Exhibit No. 1, Schedule 1, p. 1.

1 (\$430,082 - \$338,068) to the Water Fund's claim.

2

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

4 A. I recommend removal of the two Plumbing Technicians' salaries as the positions
5 were not approved to fill.⁹ Therefore, I recommend a total system allowance of
6 \$477,632, or a reduction of \$130,000 to the total system (\$607,632 - \$130,000)
7 which results in I&E recommended jurisdictional claim of \$338,068 ($\$477,632 \times$
8 0.7078) after multiplying the total system allowance of \$477,632 by the Water
9 Fund's allocation factor 0.7078 as noted above.¹⁰

10

11 **MEDICAL INSURANCE EXPENSE**

12 **Q. WHAT IS THE WATER FUND'S CLAIM FOR MEDICAL INSURANCE**
13 **EXPENSE?**

14 A. The Water Fund's expense claim for Medical Insurance Expense is \$2,711,380.¹¹
15 The jurisdictional claim is \$1,958,972 ($\$2,711,380 \times 0.7225$) based on Allocation
16 Factor No. 14 of 0.7225 ($0.3498 + 0.2442 + 0.0455 + 0.0292 + 0.0158 + 0.0119 +$
17 0.0261).¹²

⁹ I&E Exhibit No. 1, Schedule 1, p. 1.

¹⁰ Water Fund Exhibit GRH-2, Schedule E, p. 19.

¹¹ Water Fund Exhibit GRH-1, Schedule 3, p. 4.

¹² Water Fund Exhibit GRH-2, Schedule E, p. 31.

1 **Q. WHAT IS THE BASIS FOR THE WATER FUND'S MEDICAL**
2 **INSURANCE EXPENSE CLAIM?**

3 A. The Water Fund's total system claim of \$2,711,380 for Medical Insurance
4 Expense is based on the March 31, 2025 actual amount as adjusted by \$133,035
5 for Adjustment E-5 to reflect the pro form expense.¹³

6
7 **Q. DO YOU AGREE WITH THE WATER FUND'S CLAIM?**

8 A. No.

9
10 **Q. WHAT IS YOUR RECOMMENDATION FOR MEDICAL INSURANCE**
11 **EXPENSE?**

12 A. I recommend a jurisdictional allowance of \$1,909,296 or a reduction of \$49,676
13 (\$1,958,972 - \$1,909,296) to the Water Fund's claim. My recommendation is
14 based on a total system allowance of \$2,642,624, or a reduction of \$68,756 to the
15 total system claim (\$2,711,380 - \$68,756) which produces a recommended
16 jurisdictional allowance of \$1,909,296 after multiplying the recommended total
17 system allowance of \$2,642,624 ($\$2,642,624 \times 0.7225$) by the allocation factor of
18 0.7225 as noted above.

¹³ Water Fund Exhibit GRH-1, Schedule 3, p. 4 and Schedule 6, p. 3.

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

2 A. Consistent with my recommended adjustment to Meter Shop Salaries above, I am
3 recommending a corresponding adjustment to Medical Insurance Expense by
4 dividing the total medical claim amount of \$2,711,380 by employee headcount of
5 78.87 (5.92 + 18.00 + 18.00 + 22.25 + 7.00 + 2.20 + 5.50)¹⁴ to determine the per
6 employee expense and multiplied the result by the number of removed (two)
7 Plumbing Technicians positions. Thus, $(2,711,380 \div 78.87) \times 2 = \$68,756$ is my
8 recommended adjustment to Medical Insurance Expense.

9

10 **DENTAL INSURANCE EXPENSE**

11 **Q. WHAT IS THE WATER FUND'S CLAIM FOR DENTAL INSURANCE**
12 **EXPENSE?**

13 A. The Water Fund's claim for Dental Insurance Expense is \$53,500.¹⁵ The
14 jurisdictional claim is \$38,654 ($\$53,500 \times 0.7225$) based on Allocation Factor No.
15 14 of 0.7225 (0.3498 + 0.2442 + 0.0455 + 0.0292 + 0.0158 + 0.0119 + 0.0261).¹⁶

16

17 **Q. WHAT IS THE BASIS FOR THE WATER FUND'S DENTAL INSURANCE**
18 **EXPENSE CLAIM?**

19 A. The Water Fund's claim of \$53,500 for Dental Insurance Expense is based on the
20 HTY actual amount of \$41,493 adjusted by the Adjustment E-5 of \$12,007 to

¹⁴ I&E Exhibit No. 1, Schedule 2.

¹⁵ Water Fund Exhibit GRH-1, Schedule 3, p. 4.

¹⁶ Water Fund Exhibit GRH-2, Schedule E, p. 31.

1 reflect the pro forma expense amount.¹⁷

2
3 **Q. DO YOU AGREE WITH THE WATER FUND'S CLAIM?**

4 A. No.

5
6 **Q. WHAT IS YOUR RECOMMENDATION FOR DENTAL INSURANCE**
7 **EXPENSE?**

8 A. I recommend a jurisdictional allowance of \$37,673 or a reduction of \$981
9 (\$38,654 - \$37,673) to the Water Fund's claim. My recommended total system
10 allowance of \$52,143, or a reduction of \$1,357 to the total system claim (\$53,500 -
11 \$1,357) results in a recommended jurisdictional allowance of \$37,673 ($\$52,143 \times$
12 0.7225) after multiplying the recommended total system allowance of \$52,143 by
13 the allocation factor 0.7225 .¹⁸

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

16 A. Consistent with the Meter Shop Salaries recommendation above, I am
17 recommending a corresponding adjustment to Dental Insurance Expense by
18 dividing the total-system Dental Expense claim of \$53,500 by the total employee
19 headcount of 78.87 ¹⁹ to determine the per employee expense and multiplying the
20 result by the number of removed (two) Plumbing Technicians positions. Thus,

¹⁷ Water Fund Exhibit GRH-1, Schedule 3, p. 4 and Schedule 6, p. 3.

¹⁸ Water Fund Exhibit GRH-2, Schedule E, p. 31.

¹⁹ I&E Exhibit No. 1, Schedule 2.

1 (53,500 ÷ 78.87) x 2 = \$1,357 is my recommended adjustment to the total-system
2 Dental Insurance Expense claim of \$53,500. This recommended adjustment
3 addresses the fact that the Water Fund stated these positions were not approved to
4 be filled.²⁰

5
6 **OVERTIME EXPENSE**

7 **Q. WHAT IS THE WATER FUND'S CLAIM FOR OVERTIME EXPENSE?**

8 A. The Water Fund's claim for all categories of Overtime Expense adds up to
9 \$336,105.²¹ The jurisdictional claim is \$242,836, ($\$336,105 \times 0.7225$) based on
10 the Allocation Factor No. 14 of 0.7225 ($0.3498 + 0.2442 + 0.0455 + 0.0292 +$
11 $0.0158 + 0.0119 + 0.0261$).²²

12
13 **Q. WHAT IS THE BASIS FOR THE WATER FUND'S OVERTIME CLAIM?**

14 A. The Water Fund's total FPFTY claim of \$336,105 ($\$206,753 + \$66,064 + \$4,325$
15 $+ \$52,512 + \$2,010 + \$3 + \$4,438$)²³ for overtime expense is based on adjustments
16 made to the HTY and FPFTY to each line. The adjustments (Adjustments E-2 and
17 E-12) were made to reflect a three-year average adjusted for wage increases.²⁴

²⁰ I&E Exhibit No. 1, Schedule 1, p. 1.

²¹ Water Fund Exhibit GRH-1, Schedule 3.

²² Water Fund Exhibit GRH-2, Schedule E, p. 31.

²³ Water Fund Exhibit GRH-1, Schedule 3.

²⁴ Water Fund Exhibit GRH-1, Schedule 6, pp. 1 and 6.

1 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

2 A. No.

3

4 **Q. WHAT IS YOUR RECOMMENDATION FOR OVERTIME EXPENSE?**

5 A. I recommend a jurisdictional allowance of \$229,075 or a reduction of \$13,761
6 (\$242,836 - \$229,075) to the Water Fund’s claim. My recommended total system
7 allowance of \$317,059, or a reduction of \$19,046 to the total system (\$336,105 -
8 \$19,046) results in I&E recommended jurisdictional claim of \$229,075 ($\$317,059$
9 $\times 0.7225$) by multiplying the recommended total system allowance of \$317,059 by
10 the allocation factor of 0.7225.²⁵

11

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

13 A. My recommendation utilizes the historic three-year average provided by the Water
14 Fund in response to I&E-RE-15-D²⁶ to smooth the fluctuations in the historic
15 years’ expenses. In the Water Fund’s response to I&E-RE-15-D, the historic
16 overtime expense amounts are provided for the three most recent historic years of
17 2023, 2024, and 2025 by the line item. I summarize the Water Fund’s claim and
18 the three historic averages in the following table.

²⁵ Water Fund Exhibit GRH-2, Schedule E, p. 31.

²⁶ I&E Exhibit No. 1, Schedule 3.

	Claims Per Exhibit <u>GHR-1, Sch. 3</u>	<u>Three-year Average</u> ²⁷
Susquehanna Treatment Plant	\$206,753	\$194,884
Conestoga Treatment Plant	\$66,064	\$62,272
Laboratory	\$4,325	\$4,325
Transmission & Distribution	\$52,512	\$49,497
Meter Shop	\$2,010	\$1,895
Administration	\$3	\$3
Grounds Maintenance	<u>\$4,438</u>	<u>\$4,183</u>
Total Overtime	<u>\$336,105</u>	<u>\$317,059</u>

1

2

Accordingly, I recommend an allowance of \$317,059 or a reduction of \$19,046 to

3

the Water Fund's total system claim of \$336,105. Then the recommended total

4

system allowance is multiplied by the Water Fund's allocation factor to determine

5

my recommended jurisdictional allowance of \$229,075 ($\$317,059 \times 0.7225$).

6

7 **PAYROLL TAX EXPENSE**

8 **Q. WHAT IS THE WATER FUND'S CLAIM FOR PAYROLL TAX**

9 **EXPENSE?**

10 A. The Water Fund's claim for Payroll Tax Expense is \$497,127.²⁸ The jurisdictional

11 claim is \$359,174 ($\$497,127 \times 0.7225$) based on Allocation Factor No. 14 of

12 0.7225 ($0.3498 + 0.2442 + 0.0455 + 0.0292 + 0.0158 + 0.0119 + 0.0261$).²⁹

²⁷ I&E Exhibit No. 1, Schedule 3.

²⁸ Water Fund Exhibit GRH-1, Schedule 3, p. 4.

²⁹ Water Fund Exhibit GRH-2, Schedule E, p. 31.

1 **Q. WHAT IS THE BASIS FOR THE WATER FUND'S PAYROLL TAX**
2 **EXPENSE CLAIM?**

3 A. The Water Fund's claim of \$497,127 for Payroll Tax Expense is based on
4 Adjustments E-1 and E-11³⁰ made to the HTY and FPFTY by \$23,222 and
5 \$48,822³¹ respectively to reflect social security tax related to newly added
6 positions and pay increases.

7
8 **Q. DO YOU AGREE WITH THE WATER FUND'S CLAIM?**

9 A. No.

10

11 **Q. WHAT IS YOUR RECOMMENDATION FOR PAYROLL TAX EXPENSE?**

12 A. I recommend a jurisdictional allowance of \$350,936 or a reduction of \$8,238
13 (\$359,174 - \$350,936). My recommended total system allowance of \$485,725, or
14 reduction of \$11,402 to the total system claim (\$497,127 - \$11,402) results in
15 jurisdictional allowance of \$350,936 (\$485,725 x 0.7225) by multiplying the
16 recommended total system allowance of \$485,725 by the allocation factor
17 0.7225.³²

³⁰ Water Fund Exhibit GRH-1, Schedule 6, pp. 1 and 6.

³¹ Water Fund Exhibit GRH-1, Schedule 3, p. 4.

³² Water Fund Exhibit GRH-2, Schedule E, p. 31.

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

2 A. Consistent with the salaries and overtime expenses adjustment above, I am
3 recommending a corresponding adjustment to Payroll Tax Expense by summing
4 the adjustments to the total system expenses of \$130,000 for Meter Shop Salaries
5 and \$19,046 for Overtime Expense and multiplying the sum by FICA rate (7.65%)
6 to determine my recommended Payroll Tax Expense adjustment of \$11,402
7 (\$130,000 + \$19,046) x 0.0765). After adjusting total system claim to \$485,725
8 (\$497,127-\$11,402), I multiplied the difference by the allocation factor (\$485,725
9 x 0.7225) to arrive at a jurisdictional recommendation of \$350,936.

10

11 **SUSQUEHANNA TREATMENT PLANT - POWER ELECTRIC**

12 **Q. WHAT IS THE WATER FUND'S CLAIM FOR SUSQUEHANNA POWER**
13 **ELECTRIC EXPENSE?**

14 A. The Water Fund 's total system claim for Susquehanna Power Electric Expense is
15 \$1,109,537.³³ The jurisdictional claim is \$824,497 (\$1,109,537 x 0.7431) based
16 on Allocation Factor No. 1 of 0.7431 (0.2788 + 0.3141 + 0.0685 + 0.0508 +
17 0.0258 + 0.0012 + 0.0039).³⁴

³³ Water Fund Exhibit GRH-1, Schedule 3, p. 1.

³⁴ Water Fund Exhibit GRH-2, Schedule E, p. 1.

1 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S SUSQUEHANNA**
2 **POWER ELECTRIC EXPENSE CLAIM?**

3 A. The Water Fund’s total system claim of \$1,109,537 for Susquehanna Power
4 Electric Expense is based on Adjustment E-10 made to the HTY of \$389,058 for
5 new contracted electricity rates.³⁵

6
7 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

8 A. No.

9
10 **Q. WHAT IS YOUR RECOMMENDATION FOR SUSQUEHANNA POWER**
11 **ELECTRIC EXPENSE?**

12 A. I recommend a jurisdictional allowance of \$535,388 or a reduction of \$289,109
13 (\$824,497 - \$535,388) to the Water Fund’s claim. My recommended total system
14 allowance of \$720,479, or a reduction of \$389,058 to the total system claim
15 (\$1,109,537 - \$389,058) results in a recommended jurisdictional allowance of
16 \$535,388 ($\$720,479 \times 0.7431$) by multiplying the total system allowance of
17 \$720,479 by the allocation factor 0.7431.³⁶

18
19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. The Water Fund adjusted its HTY Susquehanna Power Electric Expense amount

³⁵ Water Fund Exhibit GRH-1, Schedule 3, p. 1 and Schedule 6, p. 5.

³⁶ Water Fund Exhibit GRH-2, Schedule E, p. 1.

1 by \$389,058³⁷ to determine its FPPTY claim. However, in response to I&E-RE-
2 23-D³⁸ and its attachments,³⁹ the Water Fund did not provide the requested source
3 documentation used to determine Adjustment E-10.⁴⁰ The only information
4 provided was a price per kWh, which is not enough information to support the
5 claim. Because the Water Fund did not provide information to support the
6 reasonableness of its claim, OCA issued an additional interrogatory (OCA-17-1).
7 In response to this follow-up question for such supporting information, the Water
8 Fund again referred to its previous responses rather than providing sufficient
9 documentation.⁴¹ Therefore, in the absence of support for the higher claim, I
10 recommend a total system allowance equal to the actual HTY expense of
11 \$720,479. Then the recommended total system balance of \$720,479 is multiplied
12 by the allocation factor 0.7431 to reach at the jurisdictional allowance of \$535,388
13 (\$720,479 x 0.7431).

14
15 **CONESTOGA TREATMENT PLANT - POWER ELECTRIC**

16 **Q. WHAT IS THE WATER FUND'S CLAIM FOR CONESTOGA POWER**
17 **ELECTRIC EXPENSE?**

18 **A.** The Water Fund 's total system claim for Conestoga Power Electric Expense is

³⁷ Water Fund Exhibit GRH-1, Schedule 3, p. 1 and Schedule 6, p. 5.

³⁸ I&E Exhibit No. 1, Schedule 4.

³⁹ I&E Exhibit No. 1, Schedule 5.

⁴⁰ Water Fund Exhibit GRH-1, Schedule 6, p. 5.

⁴¹ I&E Exhibit No. 1, Schedule 6.

1 \$846,071.⁴² The jurisdictional claim is \$628,715 ($\$846,071 \times 0.7431$) based on
2 Allocation Factor No. 1 of 0.7431 ($0.2788 + 0.3141 + 0.0685 + 0.0508 + 0.0258 +$
3 $0.0012 + 0.0039$).⁴³

4
5 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S CONESTOGA POWER**
6 **ELECTRIC EXPENSE CLAIM?**

7 A. The Water Fund’s total system claim of \$846,071 for Conestoga Power Electric
8 Expense is based on Adjustment E-10 made to the HTY of \$296,674 for new
9 contracted electricity rates.⁴⁴

10
11 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

12 A. No.

13
14 **Q. WHAT IS YOUR RECOMMENDATION FOR CONESTOGA POWER**
15 **ELECTRIC EXPENSE?**

16 A. I recommend a jurisdictional allowance of \$408,257 or a reduction of \$220,458
17 (\$628,715 - \$408,257) to the Water Fund’s claim. My recommended total system
18 allowance of \$549,397, or a reduction of \$296,674 to the total system claim
19 (\$846,071 - \$296,674) results in a recommended jurisdictional allowance of

⁴² Water Fund Exhibit GRH-1, Schedule 3, p. 2.

⁴³ Water Fund Exhibit GRH-2, Schedule E, p. 1.

⁴⁴ Water Fund Exhibit GRH-1, Schedule 3, p. 2 and Schedule 6, p. 5.

1 \$408,257 ($\$549,397 \times 0.7431$) by multiplying the recommended total system
2 allowance of \$549,397 by the allocation factor 0.7431.⁴⁵

3
4 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

5 A. The Water Fund adjusted its HTY Conestoga Power Electric Expense amount by
6 \$296,674⁴⁶ to determine its FPFTY claim. However, in response to I&E-RE-23-
7 D⁴⁷ and its attachments,⁴⁸ the Water Fund did not provide the requested source
8 documentation used to determine Adjustment E-10.⁴⁹ Because the Water Fund did
9 not provide information to support the reasonableness of its claim, OCA issued an
10 additional interrogatory (OCA-17-1). In response to this follow-up question for
11 such supporting information, the Water Fund again referred to its previous
12 responses rather than providing sufficient documentation.⁵⁰ Therefore, in the
13 absence of support for the higher claim, I recommend a total system allowance
14 equal to the actual HTY expense of \$549,397. Then the recommended total
15 system balance of \$549,397 is multiplied by the allocation factor 0.7431 to reach at
16 the jurisdictional allowance of \$408,257 ($\$549,397 \times 0.7431$).

⁴⁵ Water Fund Exhibit GRH-2, Schedule E, p. 1.

⁴⁶ Water Fund Exhibit GRH-1, Schedule 3, p. 2 and Schedule 6, p. 5.

⁴⁷ I&E Exhibit No. 1, Schedule 4.

⁴⁸ I&E Exhibit No. 1, Schedule 5.

⁴⁹ Water Fund Exhibit GRH-1, Schedule 6, p. 5.

⁵⁰ I&E Exhibit No. 1, Schedule 6.

1 **ADMINISTRATION – POSTAGE EXPENSE**

2 **Q. WHAT IS THE WATER FUND’S CLAIM FOR ADMINISTRATION**
3 **POSTAGE EXPENSE?**

4 A. The Water Fund’s claim for Administration – Postage Expense is \$267,568.⁵¹ The
5 jurisdictional claim is \$191,793 ($\$267,568 \times 0.7168$) based on the Allocation
6 Factor No. 13 of 0.7168 ($0.3691 + 0.2206 + 0.0398 + 0.0254 + 0.0138 + 0.0154 +$
7 0.0327).⁵²

8
9 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S ADMINISTRATION –**
10 **POSTAGE EXPENSE CLAIM?**

11 A. The Water Fund carried forward the HTY Administration – Postage Expense
12 amount for the FPFTY claim.⁵³

13
14 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

15 A. No.

16
17 **Q. WHAT IS YOUR RECOMMENDATION FOR ADMINISTRATION –**
18 **POSTAGE EXPENSE?**

19 A. I recommend a jurisdictional allowance of \$140,142 or a reduction of \$51,651
20 ($\$191,793 - \$140,142$) to the Water Fund’s claim. My recommended total system

⁵¹ Water Fund Exhibit GRH-1, Schedule 3, p. 5.
⁵² Water Fund Exhibit CEH-1, Schedule E, p. 30.
⁵³ Water Fund Exhibit GRH-1, Schedule 3, p. 5.

1 allowance of \$195,511, or a reduction of \$72,057 to the total system (\$267,568 -
2 \$195,511) results in jurisdictional allowance of \$140,142 by multiplying the
3 recommended total system allowance of \$195,511 ($\$195,511 \times 0.7168$) by the
4 allocation factor 0.7168.⁵⁴

5
6 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

7 A. There is no convincing explanation that supports the drastic increase in this
8 expense as something that will be ongoing at that level for the FPFTY. My
9 recommendation utilizes a historic three-year average to allow for an increase
10 associated with recent increased mailings but to address the likelihood that they
11 may not continue at the 2025 level. In response to the Attachment to I&E-RE-2-
12 D, the historic Administration – Postage Expense amounts are provided for the
13 three most recent historic years of 2023, 2024, and 2025 (\$157,923; \$161,041; and
14 \$267,568).⁵⁵ The total system three-year historic average of \$195,511 [$(\$157,923$
15 $+ \$161,041 + \$267,568) \div 3$], is then multiplied by the Water Fund’s allocation
16 factor to determine my recommended jurisdictional allowance of \$140,142
17 ($\$195,511 \times 0.7168$).

⁵⁴ Water Fund Exhibit GRH-2, Schedule E, p. 30.

⁵⁵ I&E Exhibit No. 1, Schedule 7, p. 4, ln. 155.

1 **ADMINISTRATION – TELEPHONE EXPENSE**

2 **Q. WHAT IS THE WATER FUND’S CLAIM FOR ADMINISTRATION**
3 **TELEPHONE EXPENSE?**

4 A. The Water Fund’s claim for Administration – Telephone Expense is \$186,997.⁵⁶
5 The jurisdictional claim is \$134,039 (\$186,997 x 0.7168) based on Allocation
6 Factor No. 13 of 0.7168 (0.3691 + 0.2206 + 0.0398 + 0.0254 + 0.0138 + 0.0154 +
7 0.0327).⁵⁷

8
9 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S ADMINISTRATION –**
10 **TELEPHONE EXPENSE CLAIM?**

11 A. The Water Fund carried forward the HTY Administration – Telephone Expense
12 amount for the FPFTY claim.⁵⁸

13
14 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

15 A. No.

16
17 **Q. WHAT IS YOUR RECOMMENDATION FOR ADMINISTRATION –**
18 **POSTAGE EXPENSE?**

19 A. I recommend a jurisdictional allowance of \$107,447 or a reduction of \$26,592
20 (\$134,039 - \$107,447) to the Water Fund’s claim. My recommended a total

⁵⁶ Water Fund Exhibit GRH-1, Schedule 3, p. 5.
⁵⁷ Water Fund Exhibit GRH-2, Schedule E, p. 30.
⁵⁸ Water Fund Exhibit GRH-1, Schedule 3, p. 5.

1 system allowance of \$149,899, or a reduction of \$37,098 to the total system
2 (\$186,997 - \$149,899) produces a jurisdictional allowance of \$107,447 (\$149,899
3 x 0.7168) when multiplying the recommended total system allowance of \$149,899
4 by the allocation factor 0.7168.⁵⁹

5
6 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

7 A. My recommendation utilizes a historic three-year average to smooth the changes
8 in the historic years' expense. In response to I&E-RE-2-D and its attachment, the
9 historic Administration – Telephone Expense amounts are provided for the three
10 most recent historic years of 2023, 2024, and 2025 (\$118,282; \$144,417;
11 \$186,997).⁶⁰ The total system historic three-year average of \$149,899
12 $[(\$118,282 + \$144,417 + \$186,997) \div 3]$, is multiplied by the Water Fund's
13 allocation factor to determine my recommended jurisdictional allowance,
14 \$107,447 ($\$149,899 \times 0.7168$). This three-year average is appropriate because the
15 Water Fund has not supported a continuously increasing expense, and it has the
16 ability to shop around for competitive rates from other telephone service
17 providers.

⁵⁹ Water Fund Exhibit GRH-2, Schedule E, p. 30.

⁶⁰ I&E Exhibit No. 1, Schedule 7, p. 4, ln. 157.

1 **ADMINISTRATION – INDIRECT COSTS**

2 **Q. WHAT IS THE WATER FUND’S CLAIM FOR ADMINISTRATION -**
3 **INDIRECT COSTS?**

4 A. The Water Fund’s claim for Administration - Indirect Costs is \$1,121,485.⁶¹
5 The jurisdictional claim is \$803,880 ($\$1,121,485 \times 0.7168$) based on Allocation
6 Factor No. 13 of 0.7168 ($0.3691 + 0.2206 + 0.0398 + 0.0254 + 0.0138 + 0.0154 +$
7 0.0327).⁶²

8
9 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S CLAIM?**

10 A. The Water Fund carried forward the HTY Administration - Indirect Costs amount
11 for the FPFTY claim.⁶³

12
13 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

14 A. No.

15
16 **Q. WHAT IS YOUR RECOMMENDATION FOR ADMINISTRATION -**
17 **INDIRECT COSTS?**

18 A. I recommend a jurisdictional allowance of \$0, or a reduction of \$803,880 to the
19 Water Fund’s jurisdictional claim for Administration Indirect Costs because of the
20 lack of response to my request for a detailed breakdown.

⁶¹ Water Fund Exhibit GRH-1, Schedule 3, p. 5.
⁶² Water Fund Exhibit GRH-2, Schedule E, p. 30.
⁶³ Water Fund Exhibit GRH-1, Schedule 3, p. 5.

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

2 A. In response to I&E-RE-12-D, which requests a detailed breakdown of the
3 Administrative Indirect Costs, the requested detailed breakdown was not provided
4 in the referenced attachments to OCA-7-8⁶⁴ and I&E-RE-12-D.⁶⁵ Therefore, in the
5 absence of any support for the claim, I recommend the entire disallowance of
6 \$1,121,485 total system claim, and as a result, the jurisdictional claim of \$803,880
7 that was calculated using the allocation factor 0.7168.

8
9 **RATE CASE EXPENSE**

10 **Q. DESCRIBE THE NATURE AND TYPES OF EXPENDITURES**
11 **TYPICALLY ALLOWED AS PART OF A REGULATED UTILITY'S**
12 **OVERALL RATE CASE EXPENSE.**

13 A. The nature and types of individual expenditures that comprise a utility's allowable
14 claim for rate case expense are those directly incurred to compile, present, and
15 defend a utility's request for a base rate increase before the Commission. The
16 actual expenditures and estimated costs typically found in an allowable rate case
17 expense claim include legal fees for outside counsel, fees to outside consultants,
18 and the cost of printing, document assembly, and postage.

⁶⁴ I&E Exhibit No. 1, Schedule 8.

⁶⁵ I&E Exhibit No. 1, Schedule 9.

1 **Q. HOW HAS THE COMMISSION TRADITIONALLY TREATED RATE**
2 **CASE EXPENSE FOR RATEMAKING PURPOSES?**

3 A. The Commission has historically stated that it considers prudently incurred rate
4 case expense as an ongoing expense, occurring at irregular intervals, related to the
5 rendering of utility service. Thus, it is necessary to normalize rate case expense
6 for ratemaking purposes. The Commission has also cited the importance of
7 considering the involved utility's history regarding the frequency of rate case
8 filings as an essential element in determining the normalized level of rate case
9 expense for ratemaking purposes.

10

11 **Q. HOW IS THE FREQUENCY OF RATE CASE FILINGS DETERMINED?**

12 A. The frequency is determined by calculating the average number of months
13 between the filing dates of a utility's previous base rate cases.

14

15 **Q. WHAT IS THE WATER FUND'S CLAIM FOR RATE CASE EXPENSE IN**
16 **THIS PROCEEDING?**

17 A. The Water Fund's total claim for rate case is \$538,000, which the Water Fund
18 normalized over three years resulting in an annual claim of \$179,333 ($\$538,000 \div$
19 3 years).⁶⁶ The total claim for rate case expense is allocated solely to
20 jurisdictional customers based on the cost of service study.

⁶⁶ Water Fund Exhibit GRH-1, Schedule 6, p. 4.

1 **Q. WHAT IS THE BASIS FOR THE WATER FUND’S THREE-YEAR**
2 **NORMALIZATION PERIOD?**

3 A. In response to I&E-RE-19-D, the Water Fund asserts that rate case expense
4 should be spread over a period of years that does not penalize the Water Fund for
5 delaying the filing of a rate case due to costs, requirements from the previous case,
6 and limited resources.⁶⁷ In his direct testimony, the Water Fund witness Gregory
7 Herbert indicated that “[e]stimated rate case expenses are based on a fully litigated
8 case and include legal fees, professional consulting fees for revenue requirement,
9 rate base, rate of return, and rate design exhibits, supporting data and testimony as
10 well as customer notice expenses.⁶⁸

11
12 **Q. DO YOU AGREE WITH THE WATER FUND’S CLAIM?**

13 A. No.

14
15 **Q. WHAT IS YOUR RECOMMENDATION FOR RATE CASE EXPENSE?**

16 A. I recommend the Water Fund’s rate case expense be normalized over a period of
17 60 months resulting in an annual allowance of \$107,600 [(\$538,000 ÷ 60 months)
18 x 12] or a reduction of \$71,733 (\$179,333 - \$107,600) to the Water Fund’s annual
19 rate case expense claim.

⁶⁷ I&E Exhibit No. 1, Schedule 10.

⁶⁸ Water Fund Statement No. 4, p. 7.

1 **Q. WHAT IS THE BASIS OF YOUR RECOMMENDATION?**

2 A. The Water Fund’s historic filing frequency does not support a three-year
3 normalization period for rate case expense. In contrast to the Water Fund’s
4 claimed three-year period, I recommend a 60-month normalization period. The
5 normalization period of 60-months is a reasonable interval given the Water Fund’s
6 actual base rate filing history over the most recent four base rate cases. Based on
7 the following data, the Water Fund has an average historic base rate case filing
8 frequency of every 60 months.⁶⁹

Docket No.	Date Filed	Filing Interval
R-2025-3057237	September 30, 2025	48 months
R-2021-3026682	September 30, 2021	88 months
R-2014-2418872	June 6, 2014	45 months
R-2010-2179103	August 27, 2010	

9
10 Using the Company’s four most recent base rate case filing dates, the average
11 interval is 60 months $[(48 + 88 + 45 \text{ months}) \div 3 \text{ intervals}]$. The Water Fund’s
12 requested three-year recovery period is unsupported. Thus, a three-year period
13 should be rejected as it would result in an unreasonable increase in rates. A 60-
14 month normalization period is more appropriate because it moderates the impact
15 of the longer historic filing frequency. Moreover, the recommended 60-month
16 normalization period is consistent with the Commission’s emphasis on the

⁶⁹ I&E Exhibit No. 1, Schedule 11.

1 importance of considering the utility's history of rate case filings when
2 determining the normalization period of rate case expenses.

3
4 **Q. ARE THERE ANY COMMISSION DECISIONS THAT SUPPORT YOUR**
5 **RECOMMENDATION FOR A RATE CASE FILING INTERVAL BASED**
6 **ON HISTORIC FILING FREQUENCY?**

7 A. Yes. The following six cases resulted in the Commission using each company's
8 historic average filing frequency.

9 First, in a base rate case filed by Emporium Water Company, the
10 Commission adopted I&E's recommended historic filing frequency including
11 I&E's recommended five-year normalization period based on a historic average
12 filing frequency that was rounded down from 64 months.⁷⁰

13 Second, in a base rate case filed by the City of DuBois, the Commission
14 agreed with I&E's recommendation to use an historic filing frequency and adopted
15 I&E's recommended 64-month normalization period which matched the actual
16 historic filing frequency.⁷¹

⁷⁰ *PA PUC v. Emporium Water Company*, Docket No. R-2014-2402324, Opinion and Order, p. 50 (Order Entered January 28, 2015).

⁷¹ *PA PUC v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, Opinion and Order, pp. 65-66 (Order Entered March 28, 2017) and *PA PUC v. City of DuBois - Bureau of Water*, Docket No. R-2016-2554150, Opinion and Order, p. 13 (Order Entered May 18, 2017).

1 Third, in a base rate case filed by Columbia Gas of Pennsylvania, Inc., the
2 Commission held that the normalization period should align with the historic data
3 rather than the company's intent to file its next base rate case.⁷²

4 Fourth, in a base rate case filed by PECO Energy Company - Gas Division
5 (PECO), the Commission granted I&E's recommended five-year normalization
6 period rather than PECO's claim based on a three-year period because the
7 Commission determined a normalization period based on actual historic filing
8 frequency is more reliable than future speculation.⁷³

9 Fifth, in a base rate case filed by Philadelphia Gas Works (PGW), the
10 Commission agreed with I&E's recommended 53-month normalization period
11 over PGW's claim based on a three-year period, granting a normalization period
12 based on actual historic filing frequency rather than PGW's future intention to file
13 a rate case.⁷⁴

14 Finally, in the most recent base rate case filed by the Columbia Water
15 Company, the Commission held that the normalization period should align with
16 the historic filing frequency rather than that company's intent to file its next rate
17 case, and that the intent to file a base rate case does not justify deviating from the
18 Commission's practice of relying on historic filing frequency.⁷⁵

⁷² *PA PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835, Opinion and Order, pp. 78-79 (Order Entered February 19, 2021).

⁷³ *PA PUC v. PECO Energy Company (Gas Division)*, Docket No. R-2020-3018929, Opinion and Order, p. 119 (Order Entered June 22, 2021).

⁷⁴ *PA PUC v. Philadelphia Gas Works*, Docket No. R-2023-3037933, Opinion and Order, pp. 65-66 (Order Entered November 9, 2023).

⁷⁵ *PA PUC v. Columbia Water Company*, Docket No. R-2023-3040258, Opinion and Order, p. 34 (Order Entered January 18, 2024).

1 **CASH WORKING CAPITAL**

2 **Q. WHAT IS A CASH WORKING CAPITAL (CWC) ALLOWANCE FOR**
3 **RATEMAKING PURPOSES?**

4 A. CWC represents the funds required to pay operating expenses prior to the receipt
5 of customer revenues.

6
7 **Q. WHAT IS THE WATER FUND’S CWC CLAIM?**

8 A. The Water Fund’s FPFTY CWC claim for total system customers is \$2,156,056.⁷⁶
9 The jurisdictional claim is \$1,559,260 ($\$2,156,056 \times 0.7232$) based on Allocation
10 Factor No. 21 of 0.7232 ($0.3472 + 0.2439 + 0.0467 + 0.0313 + 0.0166 + 0.0119 +$
11 0.0256).⁷⁷

12
13 **Q. HOW DID THE WATER FUND CALCULATE ITS CWC CLAIM?**

14 A. The Water Fund used the rule-of-thumb method, also known as the one-eighth
15 method. The Water Fund calculated its CWC claim by multiplying its FPFTY
16 total system operating and maintenance expenses, \$17,248,449, by 1/8 to
17 determine the total system CWC requirement of \$2,156,056 [$\$17,248,449 \times$
18 $(1/8)$].⁷⁸

⁷⁶ Water Fund Exhibit GRH-1, Schedule 4.

⁷⁷ Water Fund Exhibit GRH-2, Schedule E, p. 36.

⁷⁸ Water Fund Statement No. 4, p. 9.

1 **Q. DO YOU ACCEPT THE WATER FUND'S USE OF THE 1/8TH METHOD IN**
2 **THIS PROCEEDING?**

3 A. Yes.

4

5 **Q. DO YOU AGREE WITH THE WATER FUND'S CLAIM?**

6 A. No.

7

8 **Q. WHAT IS YOUR RECOMMENDATION FOR CWC?**

9 A. I recommend an allowance of \$1,331,173, or a reduction of \$228,087 (\$1,559,260
10 - \$1,331,173) to The Water Fund's jurisdictional CWC.

11

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

13 A. My recommended adjustment to CWC is to recognize the expense adjustments
14 recommended in my direct testimony and the direct testimony of I&E witness
15 Esyan Sakaya⁷⁹ for those expenses included in the CWC computation. The
16 adjustments are as follows:

⁷⁹ I&E Statement No. 3.

O&M Expenses	Adjustment
Meter Shop Salaries	(\$92,014)
Medical Insurance Expense	(\$49,676)
Dental Insurance Expense	(\$981)
Overtime Expense	(\$13,761)
Payroll Tax Expense	(\$8,238)
Susquehanna Power Electric	(\$289,109)
Conestoga Power Electric	(\$220,458)
Postage Expense	(\$51,651)
Telephone Expense	(\$26,592)
Admin. Indirect Costs	(\$803,880)
Rate Case Expense	(\$71,733)
UFW-Electric/Chemicals	(\$196,606)
Total O&M Adjustments	(\$1,824,699)

1

2

The sum of my O&M adjustments reduces the Water Fund’s jurisdictional CWC claim by \$228,087 ($\$1,824,699 \div 8$), resulting in a recommended jurisdictional CWC allowance of \$1,331,173 ($\$1,559,260 - \$228,087$).

5

6

Q. DOES YOUR RECOMMENDED ALLOWANCE REPRESENT A FINAL RECOMMENDED ALLOWANCE FOR CWC?

7

8

A. No. All adjustments to the jurisdictional claims for revenues, expenses, taxes, and rate base must be consistently brought together in the ALJ’s Recommended Decision and again in the Commission’s Final Order. This process, which is known as iteration, effectively prevents the determination of a precise calculation until such time as all adjustments have been made to the Water Fund’s claim.

9

10

11

12

13

14

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

15

A. Yes.

Getachew H. Bedasa
Professional and Educational Background

Work Experience:

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania

October 2024 to Present:

Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement

- Assist in the preparation of data requests and interrogatories for prosecutory staff and analysis of operating and maintenance expenses for regulated utilities.

BD Schenker, Inc., Carlisle, Pennsylvania

October 2016 to March 2024:

Electronics Devices Screening Specialist

- Processed electronics devices in customer-facing line using different types of software to identify issues of the devices and recommend solutions.

GIMP General Trading Pvt Ltd Co., Addis Ababa, Ethiopia

February 2013 to June 2015:

Owner and Managing Director

- Developed a successful business strategy for roasted coffee to enter domestic market and maintained a steady positive bottom line except for the initial year.
- Prepared business operation standards and procedures for human resources and financial management of the company.

UNICEF Ethiopia, Asosa, Ethiopia

August 2011 to January 2013:

Education in Emergency Consultant/Coordinator (for three regional states)

- Coordinated logistics and technical support in provision of learning spaces for Sudanese refugee children, Internally Displaced Peoples (IDPs), and host communities.
- Created framework for possible collaboration between UNICEF and World Vision Ethiopia (WVE) by identifying the areas of collaboration, the expected result/outputs and key activities/interventions.
- Assisted in planning Education in Emergency supplies.

Education:

Degrees:

- MBA, Unity University, Ethiopia, September 2009 (evaluated by World Education Service equivalent to U.S. master's degree in business administration)
- MA in Biblical and Theological Studies, Ethiopian Graduate School of Theology, June 2002
- BA in Management and Public Administration (Public Administration), Addis Ababa University, July 1989 (evaluated by World Education Service equivalent to U.S. bachelor's degree)

Getachew H. Bedasa
Professional and Educational Background

Education (continued):

Utility-Related Trainings:

- Institute of Public Utilities, Michigan State University, IPU Accounting and Ratemaking Course, September 9-11, 2025
- PA Public Utility Commission Bureau of Audits, Introduction to Industries 101, January 15, 2025
- National Association of Regulatory Utility Commission, How to Read and Analyze a Rate Case 2025, January 7-9, 2025
- Bureau of Investigation and Enforcement, Cost Allocation and Rate Design, December 19, 2024
- Bureau of Investigation and Enforcement, Rates and Revenue, December 18, 2024
- National Association of Regulatory Utility Commission, The Basics of Utility Accounting and Ratemaking, December 3-5, 2024

Other Trainings:

- Microsoft Excel for Office 365 Part 1, PROTECH Training, January 2025
- Microsoft Excel for Office 365 Part 1, PROTECH Training, February 2025
- Microsoft Word for Office 365 Part 1, PROTECH Training, February 2025
- Bookkeeping Basics, Intuit/Coursera, June 2024
- Assets in Accounting, Intuit/Coursera, July 2024
- Liability and Equity in Accounting, Intuit/Coursera, July 2024
- Financial Statement in Accounting, Intuit/Coursera, July 2024
- QuickBooks Pro 2020, Matrix Learning, CareerLink, May 2024
- Path to Project Management, Lebanon Valley College, December 20, 2016
- Excel 2013 GCFLearnFree.org®, December 28, 2015
- Word 2013, GCFLearnFree.org®, January 11, 2016
- PowerPoint 2013, GCFLearnFree.org®, January 28, 2016

Testimony Submitted:

- Docket No. R-2025-3053499 – Columbia Gas of Pennsylvania, Inc.
- Docket No. R-2025-3052359 – Pike County Light and Power Company (Electric)

Worked on the Following Cases – Testimony Not Required:

- Docket No. R-2025-3054868 – PECO Energy Company - Gas (1307(f))

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Exhibit to Accompany

The

Direct Testimony

of

Getachew Bedasa

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES CASH

WORKING CAPITAL

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-14-D

Reference Lancaster Exhibit GRH-1, Schedule 6, p. 1 concerning salaries and wages shown on Adjustment E-1:

- A. Provide the number of employees, by operating function, by year for the fiscal years ended March 31, 2023, March 31, 2024, and March 31, 2025, and year-to-date through the most recent month available for the fiscal year ending March 31, 2026.
- B. Identify the vacant positions by month in the Water Department from April 1, 2022 through the most recent month available.
- C. Identify the current vacant positions and provide a copy of the posting of the vacancies, to include salary range information.
- D. For each of the vacancies identified in response to Part B above, state whether the vacancy is a newly created position or not; and
 1. If not, provide the date the position became vacant; and
 2. If so, provide the reason for creating the position along with the date it was approved to fill.

RESPONSE:

- A. Please see Attachment I&E-RE-14-D for the staffing schedules by calendar year for 2023, 2024, 2025, and 2026.
- B. From April 1, 2022 through the end of the HTY, the City did not have any vacant positions. However, the City budgeted for and intends to hire two Chief Operators—one for each treatment plant—and two Plumbing Technicians for the Meter Shop in 2026. The annual salary for each Chief Operator is \$75,000, and for each Plumbing Technician is \$65,000.

Since the filing on September 30, 2025, the various City Funds have been seeking approval for their 2026 budgets. The Water Fund will experience a deficit in 2025, and as a result the Plumbing Technician positions were not approved. The Water Fund still plans to hire the Chief Operators. However, the Plumbing Technicians will be removed from the Labor Expense Adjustment E-11 in rebuttal testimony.

- C. See the response to part B of this Request.
- D. The new positions described in part B of this Request are expected to be hired by the FPFTY. Therefore, those new position salaries were added to the FPFTY in Adjustment E-11.

**CITY OF LANCASTER
STAFFING SCHEDULE**

APPROPRIATION CODE		POSITION	BU	FT/PT	COUNT	SALARY
BUREAU OF WATER: ADMINISTRATION						
56289000	611000	DEP DIR ENGINEERING	2000	FT	0.05	7,615
56289000	611000	DEP DIRECTOR PW CONS	2000	FT	0.30	47,740
56289000	611000	DEP DIR UTILITIES	2000	FT	0.50	78,351
TOTAL 611000 EMPLOYEES					0.85	133,706
56289000	611500	PW ENGINEER	2000	FT	0.07	5,800
56289000	611500	SEN PROJ MGR UTILITY	2000	FT	1.00	105,930
56289000	611500	UTILITY ENGINEER	2000	FT	1.00	83,000
56289000	611500	WATER UTILITY TREATMENT MANAGER	2000	FT	1.00	104,375
56289000	611500	Water Programs Coordinator	2000	FT	1.00	56,650
56289000	611500	ADMINISTRATIVE ASSISTANT - UTILITIES	6000	FT	0.50	27,728
56289000	611500	MAINTENANCE PLANNER	2000	FT	0.50	43,500
56289000	611500	BONUS	6000			500
TOTAL 611500 EMPLOYEES					5.07	427,483
TOTAL EMPLOYEES					5.92	561,189

**CITY OF LANCASTER
STAFFING SCHEDULE**

APPROPRIATION CODE	POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: SUSQUEHANNA TREATMENT PLANT</u>					
56289100	611500 PLANT MAINT SUPERVIS	2000	FT	1.00	86,325
56289100	611500 WATER PLANT SUPERVIS	2000	FT	1.00	93,136
56289100	611500 CHIEF OPERATOR	2000	FT	1.00	75,000
56289100	611500 INSTRUMENT TECH	6000	FT	1.00	66,188
56289100	611500 PLANT MAINT MECHANIC	6000	FT	1.00	55,495
56289100	611500 PLANT MAINT MECH 3	6000	FT	1.00	68,290
56289100	611500 PLANT MAINT MECH 3	6000	FT	1.00	74,503
56289100	611500 PLANT MAINT MECH 3	6000	FT	1.00	71,012
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	66,415
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	68,987
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	66,884
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	66,660
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	23,888
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	69,876
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	66,864
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	72,671
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	66,275
56289100	611500 WATER PLANT OP 2	6000	FT	1.00	57,347
56289100	611500 BONUS	6000			15,000
TOTAL 611500 EMPLOYEES				18.00	1,230,816
TOTAL EMPLOYEES				18.00	1,230,816

**CITY OF LANCASTER
STAFFING SCHEDULE**

I&E Exhibit No. 1
Schedule 2 2026
Page 3 of 7

APPROPRIATION CODE	POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: CONESTOGA TREATMENT PLANT</u>					
56289200	611500 PLANT MAINT SUPERVIS	2000	FT	1.00	83,811
56289200	611500 WATER PLANT SUPERVIS	2000	FT	1.00	93,136
56289200	611500 CHIEF OPERATOR	2000	FT	1.00	75,000
56289200	611500 LABORER (change to Plant Maint worker)	6000	FT	1.00	49,912
56289200	611500 INSTRUMENT TECH	6000	FT	1.00	70,324
56289200	611500 PLANT MAINT MECHANIC	6000	FT	1.00	53,749
56289200	611500 PLANT MAINT MECH 3	6000	FT	1.00	77,667
56289200	611500 PLANT MAINT MECH 3	6000	FT	1.00	71,012
56289200	611500 PLANT MAINT MECH 1	6000	FT	1.00	53,749
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	57,347
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	69,877
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	66,800
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	59,107
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	59,566
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	60,631
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	69,302
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	56,750
56289200	611500 WATER PLANT OP 2	6000	FT	1.00	57,672
56289200	611500 BONUS	6000			15,000
TOTAL 611500 EMPLOYEES				18.00	1,200,412
TOTAL EMPLOYEES				18.00	1,200,412

**CITY OF LANCASTER
STAFFING SCHEDULE**

I&E Exhibit No. 1
Schedule 2 2026
Page 4 of 7

APPROPRIATION CODE	POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: TRANSMISSION & DISTRIBUTIONS</u>					
56289400	611500 MGR WATER DISTRIBUTION	2000	FT	1.00	98,345
56289400	611500 PRKS MTN AND CON. SU	2000	FT	0.50	34,804
56289400	611500 LABOR SUPERVISOR 1	2000	FT	1.00	70,490
56289400	611500 LABOR SUPERVISOR 1	2000	FT	1.00	80,241
56289400	611500 LABOR SUPERVISOR 2	2000	FT	1.00	87,691
56289400	611500 CONSTRUCTION FOREMAN	2000	FT	1.00	68,959
56289400	611500 PW CONSTRUCTION SUPE	2000	FT	0.75	74,588
56289400	611500 PIPELAYER	6000	FT	1.00	62,057
56289400	611500 LABORER	600	FT	1.00	46,517
56289400	611500 MAINTENANCE WORKER	6000	FT	1.00	49,213
56289400	611500 MAINTENANCE WORKER	6000	FT	1.00	58,393
56289400	611500 MAINTENANCE WORKER	6000	FT	1.00	49,213
56289400	611500 MAINTENANCE WORKER	6000	FT	1.00	58,393
56289400	611500 UTILITY LOCATOR	6000	FT	1.00	65,800
56289400	611500 UTILITY LOCATOR	6000	FT	1.00	68,432
56289400	611500 EO 1	6000	FT	1.00	56,070
56289400	611500 EO 1	6000	FT	1.00	60,609
56289400	611500 EO 1	6000	FT	1.00	62,796
56289400	611500 EO 1	6000	FT	1.00	56,070
56289400	611500 EO 1	6000	FT	1.00	51,149
56289400	611500 EO 1	6000	FT	1.00	50,930
56289400	611500 EO 2	6000	FT	1.00	54,627
56289400	611500 EO 2	6000	FT	1.00	67,424
56289400	611500 BONUS	6000			14,000
TOTAL 611500 EMPLOYEES				22.25	1,446,809
TOTAL EMPLOYEES				22.25	1,446,809

**CITY OF LANCASTER
STAFFING SCHEDULE**

I&E Exhibit No. 1
Schedule 2 2026
Page 5 of 7

APPROPRIATION CODE	POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: METER SHOP</u>					
56289500	611500 WATER METER SUPER	2000	FT	1.00	71,028
56289500	611500 WATER SERVICE CLERK	6000	FT	1.00	62,946
56289500	611500 WATER METER TECH	6000	FT	1.00	57,544
56289500	611500 WATER METER TECH	6000	FT	1.00	56,670
56289500	611500 WATER METER TECH	6000	FT	1.00	56,476
56289500	611500 WATER METER TECH	6000	FT	1.00	56,670
56289500	611500 WATER ACCNT ANALYST	6000	FT	1.00	62,949
56289500	611500 BONUS	6000			6,000
TOTAL 611500 EMPLOYEES				7.00	430,283
TOTAL EMPLOYEES				7.00	430,283

**CITY OF LANCASTER
STAFFING SCHEDULE**

I&E Exhibit No. 1
Schedule 2 2026
Page 6 of 7

APPROPRIATION CODE		POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: GROUND MAINTENANCE</u>						
56289600	611500	LABOR SUPERVISOR 1	2000	FT	0.20	15,768
56289600	611500	UTILITY OPERATOR	6000	FT	0.40	21,796
56289600	611500	UTILITY OPERATOR	6000	FT	0.40	24,556
56289600	611500	LABORER	6000	FT	0.40	18,254
56289600	611500	LABORER	6000	FT	0.40	18,254
56289600	611500	LABORER	6000	FT	0.40	18,254
56289600	611500	BONUS	6000			2,000
TOTAL 611500 EMPLOYEES					2.20	118,882
TOTAL EMPLOYEES					2.20	118,882

**CITY OF LANCASTER
STAFFING SCHEDULE**

I&E Exhibit No. 1
Schedule 2 2026
Page 7 of 7

APPROPRIATION CODE	POSITION	BU	FT/PT	COUNT	SALARY
<u>BUREAU OF WATER: LABORATORY</u>					
56289800	611500 UTILITIES LABORATORY AND COMPLIANCE M	2000	FT	0.50	55,088
56289800	611500 WATER QUALITY ANALYS	2000	FT	1.00	63,845
56289800	611500 WATER QUALITY ANALYS	2000	FT	1.00	76,915
56289800	611500 WATER QUALITY ANALYS	2000	FT	1.00	61,098
56289800	611500 WATER LAB TECH 1	6000	FT	1.00	68,432
56289800	611500 WTR PLT OP 1	6000	FT	1.00	68,772
56289800	611500 BONUS	6000			2,000
TOTAL 611500 EMPLOYEES				5.50	396,150
TOTAL EMPLOYEES				5.50	396,150

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-15-D Reference Lancaster Exhibit GRH-1, Schedule 6, p. 1, Adjustment E-2 concerning overtime expense. Provide overtime hours data and overtime pay by year for the fiscal years ended March 31, 2023, March 31, 2024, and March 31, 2025, by the accounts shown in Adjustment E-2.

RESPONSE: See Attachment I&E-RE-15-D, which includes the overtime hours and pay by department for the years ended December 31, 2023, 2024 and 2025. The City only tracks the overtime hours and pay on a calendar year basis. Therefore the chart below was used to develop the 3-year average for Adjustment E-2.

Department	12/31/23	03/31/24	03/31/25	3-Yr Avg
SUSQUEHANNA TREATMENT PLANT	\$193,947	\$184,462	189,215	\$194,884
CONESTOGA TREATMENT PLANT	\$61,554	\$63,428	56,391	\$62,272
LABORATORY	\$3,664	\$8,934	\$0	\$4,325
TRANSMISSION/DISTRIBUTION	\$34,705	\$33,776	\$75,687	\$49,497
METER SHOP	\$2,268	\$2,292	\$960	\$1,895
ADMINISTRATION	\$5	\$5	\$0	\$3
GROUNDS MAINTENANCE	\$3,983	\$4,389	\$3,811	\$4,183

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-23-D Reference Lancaster Exhibit GRH-1, Schedule 6, p.5, Adjustment E-10 concerning power expense:

- A. Provide all source documentation used to determine the power expense of \$1,109,537 for Susquehanna.
- B. Provide historic yearly amounts for Susquehanna power expense for fiscal years ended March 31, 2023 and March 31, 2025, and confirm that the amount of \$720,479 represents the fiscal year ended March 31, 2025. If not, provide the March 31, 2025 amount.
- C. Provide all source documentation used to determine the power expense of \$846,071 for Conestoga.
- D. Provide historic yearly amounts for Conestoga power expense for fiscal years ended March 31, 2023 and March 31, 2025, and confirm that the amount of \$549,397 represents the fiscal year ended March 31, 2025. If not, provide the March 31, 2025 amount.

RESPONSE:

- A. Please see Attachment I&E-RE-23-D for documentation of the increase to power expense of 54%.
- B. Yes, the \$720,479 represents the HTY ended March 31, 2025 power expense for the Susquehanna Plant. Please see the response to I&E-RE-2 for booked historical expenses.
- C. See the response to Part A of the Request.
- D. Yes, the \$549,397 represents the HTY ended March 31, 2025 power expense for the Conestoga Plant. Please see the response to I&E-RE-2 for booked historical expenses.

Retail Electricity Purchasing

// City of Lancaster



Start Date
December 2025



Annual Volume
40,170,000 kWh

	Terms			Fixed Pricing (\$/kWh) w/o
	Period	Months	RECs	GRT Total
	Dec '25 - Dec '26	12	100%	\$0.08379
	Dec '25 - Dec '27	24	100%	\$0.08351
	Dec '25 - Dec '28	36	100%	\$0.08256
	Dec '25 - Dec '26	12	100%	\$0.08436
	Dec '25 - Dec '27	24	100%	\$0.08399
	Dec '25 - Dec '28	36	100%	\$0.08318
	Dec '25 - Dec '26	12	100%	\$0.08507
	Dec '25 - Dec '27	24	100%	\$0.08463
	Dec '25 - Dec '28	36	100%	\$0.08359
	Dec '25 - Dec '26	12	100%	\$0.08454
	Dec '25 - Dec '27	24	100%	\$0.08616
	Dec '25 - Dec '28	36	100%	\$0.08684
	Dec '25 - Dec '26	12	100%	\$0.08648
	Dec '25 - Dec '27	24	100%	\$0.08633
	Dec '25 - Dec '28	36	100%	\$0.08621
	Dec '25 - Dec '26	12	100%	\$0.09038
	Dec '25 - Dec '27	24	100%	\$0.09041
	Dec '25 - Dec '28	36	100%	\$0.08950

I&E Exhibit No. 1
Schedule 5
Page 2 of 2



Campbell, Tina <TICampbell@cityoflanasterpa.gov>

To: Herbert, Gregory R.; Volkay, Hilditch, Christine M; Handwerker, Barry; Metzler, Matt
Cc: Patel, Kruti B.; Busch, Michelle; Bingaman, Mallori L.; Schultz, Courtney L.; Spanos, John J.

You replied to this message on 9/10/2025 8:41 AM.



Reply Reply All Forward

Tue 9/9/2025 4:30 PM

[EXTERNAL EMAIL]: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Greg,

We are likely going with the highlighted amount in the attachment (we may do the three year term which won't be much change. but we are still confirming the contract terms for that.) It is about a 54% increase from last year.

Tina Campbell (she/her) | Director of Administrative Services
Administrative Services
120 N. Duke Street, Lancaster, PA 17602
Mobile - (717) 693-3566
ticampbell@cityoflanasterpa.gov | cityoflanasterpa.gov



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CITY OF LANCASTER - BUREAU OF WATER
DOCKET NO. R-2025-3057237
Office of Consumer Advocate Data Request
Set 17

Responsible Witness: Gregory Herbert

OCA-17-1. Refer to TUS-R-12 Attachment, "SCH 6 – Exp adj" tab. Please provide source documents and the supporting calculations showing the derivation of the .54 factor used in the calculation of the Power Expense adjustment.

RESPONSE: Please see the responses to OCA-8-28 and I&E-RE-23.

CITY OF LANCASTER - WATER FUND

STATEMENT OF PRO FORMA OPERATING EXPENSES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025 AND MARCH 31, 2027

Pursuant To Subsection 53.53 Exhibit D III (2) of Tariff Regulations

Line No.	Account	Account Title	Per Books, 12 Months Ended 31-Dec-23 (3)	Per Books, 12 Months Ended 31-Mar-24 (3)	Per Books, 12 Months Ended 31-Mar-25 (3)	Historic Test Year Pro Forma Adjustments		Pro Forma, 31-Mar-25 (6)	Fully Projected Future Test Year Pro Forma Adjustments		Pro Forma, 31-Mar-27 (9)
						Appen. B (4)	Amount (5)		Appen. B (7)	Amount (8)	
1		OPERATION AND MAINTENANCE EXPENSES									
2											
3		WATER TREATMENT									
4											
5		SUSQUEHANNA TREATMENT PLANT									
6	601.3	SALARIED PERSONNEL	1,090,257	1,100,496	\$ 1,179,928	E-1	\$ (31,443)	\$ 1,148,485	E-11	\$ 144,943	\$ 1,293,428
7	601.3	SALARY TEMPORARY	4,216	4,216	6,330			6,330			6,330
8	601.3	OVERTIME	193,947	184,462	189,215	E-2	5,669	194,884	E-12	11,868	206,753
9											
10		SUSQUEHANNA - SALARY/BENEFITS	1,288,420	1,289,175	1,375,473			1,349,699			1,506,510
11											
12	620.3	MAINTENANCE -BUILDING	39,476	67,864	60,492			60,492			60,492
13	620.3	MAINTENANCE-COMMUNIC.	5,295	5,295	4,820			4,820			4,820
14	620.3	MAINTENANCE-EQUIPMENT	234,997	229,981	212,422			212,422			212,422
15	620.3	MAINTENANCE-VEHICLES	6,533	6,720	16,601			16,601			16,601
16	610.3	WATER UTILITY EXPENSE	16,157	17,133	23,937			23,937			23,937
17		SLUDGE	91,020	96,782	72,670			72,670			72,670
18	615.3	POWER ELECTRIC	658,177	715,825	720,479	E-10	389,058	1,109,537			1,109,537
19	620.8	OPERATING SUPPLIES	11,323	12,452	15,149			15,149			15,149
20	618.3	CHEMICALS	713,047	848,886	699,500	E-3	(14,782)	684,718			684,718
21	616.3	GASOLINE	14,014	13,079	22,268			22,268			22,268
22	650.3	FUEL	51,020	44,579	52,586			52,586			52,586
23											
24		SUSQUEHANNA - OPERATING EXPENSES	1,841,058	2,058,596	1,900,921			2,275,198			2,275,198
25											
26	620.8	MINOR EQUIPMENT	9,674	10,124	14,937			14,937			14,937
27	650.3	VEHICLES	-9,228	2,200	9,724			9,724			9,724
28		CAPITAL OUTLAY	1,120	1,120	-			-			-
29											
30		SUSQUEHANNA-CAPITAL EXPENSE	1,567	13,444	24,661			24,661			24,661
31											
32		TOTAL SUSQUEHANNA	3,131,045	3,361,215	3,301,055			3,649,558			3,806,369
33											
34		CONESTOGA TREATMENT PLANT									
35	601.3	SALARIED PERSONNEL	971,668	940,166	910,129	E-1	169,487	1,079,616	E-11	140,749	1,220,365
36	601.3	SALARY TEMPORARY	4,344	4,344	6,522			6,522			6,522
37	601.3	OVERTIME	61,554	63,428	56,391	E-2	5,881	62,272	E-12	3,792	66,064
38											
39		CONESTOGA - SALARY/BENEFITS	1,037,567	1,007,939	973,042			1,148,409			1,292,950
40											
41	620.3	MAINTENANCE -BUILDING	126,810	127,222	158,997			158,997			158,997
42	620.3	MAINTENANCE-EQUIPMENT	198,763	222,774	284,075			284,075			284,075
43	620.3	MAINTENANCE-VEHICLES	18,281	18,386	22,530			22,530			22,530
44	636.3	SLUDGE	58,944	58,944	61,505			61,505			61,505
45	615.3	POWER ELECTRIC	457,986	518,407	549,397	E-10	296,674	846,071			846,071
46	620.3	OPERATING SUPPLIES	21,688	22,369	17,981			17,981			17,981
47	618.3	CHEMICALS	545,061	568,269	521,372	E-3	(99,465)	421,907			421,907
48	616.3	GASOLINE	15,749	15,245	33,033			33,033			33,033
49	650.3	HEATING OIL	51,539	44,125	65,811			65,811			65,811

CITY OF LANCASTER - WATER FUND

STATEMENT OF PRO FORMA OPERATING EXPENSES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025 AND MARCH 31, 2027

Pursuant To Subsection 53.53 Exhibit D III (2) of Tariff Regulations

Line No.	Account	Account Title	Per Books,	Per Books,	Per Books,	Historic Test Year		Pro Forma,	Fully Projected		Pro Forma,
			12 Months Ended 31-Dec-23	12 Months Ended 31-Mar-24	12 Months Ended 31-Mar-25	Pro Forma Adjustments			Future Test Year Pro Forma Adjustments		
	(1)	(2)	(3)	(3)	(3)	Appen. B	Amount	(6)	Appen. B	Amount	(9)
99	620.5	MINOR EQUIPMENT	19,743	7,573	1,072			1,072			1,072
100	620.5	HYDRANTS	85,280	101,650	(16,139)			(16,139)			(16,139)
101	650.5	VEHICLES	0	0	-			-			-
102	650.5	VEHICLE LEASE	-6,918	11,808	80,366			80,366			80,366
103		CAPITAL OUTLAY	100,000	127,829	10,542	E-8	68,915	79,457			79,457
104											
105		TRANS. & DISTR. - CAPITAL EXPENSE	198,105	248,860	75,841			144,755			144,755
106											
107		TOTAL TRANSMISSION & DISTRIBUTION	2,232,361	2,264,451	2,489,530			2,477,727			2,568,093
108											
109		METER SHOP									
110	601.5	SALARIED PERSONNEL	465,911	447,158	427,088	E-1	23,126	450,214	E-11	157,418	607,632
111	601.5	SALARIES - TEMPORARY	0	0	-	E-1	-	-			-
112	601.5	OVERTIME	2,268	2,292	960	E-2	935	1,895	E-12	115	2,010
113											
114		METER SHOP - SALARY/BENEFITS	468,179	449,450	428,048			452,109			609,643
115											
116	620.5	MAINT. METERS	55,578	74,651	(18,393)			(18,393)			(18,393)
117	620.5	MAINT. VEHICLES	12,157	13,941	5,678			5,678			5,678
118	650.5	GASOLINE	9,149	8,971	8,991			8,991			8,991
119											
120		METER SHOP - OPERATING EXPENSES	76,885	97,563	(3,725)			(3,725)			(3,725)
121											
122	620.5	METERS	70,114	65,755	42,965			42,965			42,965
123	650.5	VEHICLES	-	-	0			-			-
124	650.5	VEHICLES - LEASE PURCHASE	-17,880	-11,527	(150)			(150)			(150)
125											
126		METER SHOP - CAPITAL EXPENSE	52,233	54,228	42,815			42,815			42,815
127											
128		TOTAL METER SHOP	597,297	601,241	467,139			491,200			648,733
129											
130		ADMINISTRATION									
131	601.8	SALARY BUREAU CHIEF	209,521	208,820	211,540	E-1	9,658	221,198	E-11	13,471	234,669
132	601.8	SALARY PERSONNEL	707,239	716,967	590,710	E-1	-	590,710	E-11	35,974	626,684
133	601.8	OVERTIME	5	5	-	E-2	3	3			3
134	604.8	SICK LEAVE BONUS AND VESTED ABSENCES	51,644	51,644	59,281			59,281			59,281
135	604.8	OPEB ARC EXPENSE	434,444	546,726	416,904	E-9	83,096	500,000			500,000
136	604.8	OPEB GASB 75 EXPENSE	-140,353	-140,353	(1,395,444)	E-9	218,488	(1,176,957)			(1,176,957)
137	604.8	OPEB GASB 67 PENSION EXPENSE	-1,376,662	-1,376,662	(1,771,960)	E-9	1,087,738	(684,222)			(684,222)
138	604.8	EDUCATIONAL INCENTIVE	23,621	23,621	33,515			33,515			33,515
139	604.8	MEDICAL INSURANCE	2,100,000	2,208,500	2,578,345	E-5	133,035	2,711,380			2,711,380
140	604.8	DENTAL INSURANCE	53,012	50,582	41,493	E-5	12,007	53,500			53,500
141	604.8	PAYROLL TAXES	424,453	419,839	425,084	E-1	23,222	448,305	E-11	48,822	497,127
142	604.8	LIFE INSURANCE	11,461	10,285	13,861			13,861			13,861
143	604.8	PENSION CONTRIBUTION	506,921	505,226	466,551	E-9	5,468	472,019			472,019
144	604.8	UNEMPLOYMENT COMPENSATION	10,292	17,355	14,895			14,895			14,895
145	658.8	WORKERS COMP	90,721	53,437	101,031			101,031			101,031
146											
147		ADMINISTRATION - SALARY/BENEFITS	3,106,320	3,295,993	1,785,807			3,358,521			3,456,788

CITY OF LANCASTER - WATER FUND

STATEMENT OF PRO FORMA OPERATING EXPENSES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025 AND MARCH 31, 2027

Pursuant To Subsection 53.53 Exhibit D III (2) of Tariff Regulations

Line No.	Account	Account Title	Per Books,	Per Books,	Per Books,	Historic Test Year		Pro Forma,	Fully Projected		Pro Forma,
			12 Months Ended 31-Dec-23	12 Months Ended 31-Mar-24	12 Months Ended 31-Mar-25	Pro Forma Adjustments			Future Test Year Pro Forma Adjustments	31-Mar-27	
	(1)	(2)	(3)	(3)	(3)	Appen. B	Amount	(6)	Appen. B	Amount	(9)
197	642.8	RENTALS OF UNIFORMS	90	90	90			90			90
198	620.8	MAINTENANCE -BUILDING	0	0	6,889			6,889			6,889
199	620.8	MAINT. EQUIPMENT	2,000	2,000	2			2			2
200	650.8	MAINT. VEHICLES	5,430	5,151	6,395			6,395			6,395
201	620.8	OPERATING SUPPLIES	863	863	97			97			97
202	620.8	GASOLINE	5,913	6,062	5,757			5,757			5,757
203											
204		GROUNDS MAINT. - OPERATING EXPENSES	14,296	14,166	19,229			19,229			19,229
205											
206	620.8	MINOR EQUIPMENT	794	797	-			-			-
207	620.8	VEHICLE LEASE PURCHASE	0	0	3,384			3,384			3,384
208											
209		GROUNDS MAINT. - CAPITAL EXPENSE	794	797	3,384			3,384			3,384
210											
211		TOTAL GROUNDS MAINTENANCE	319,858	301,833	251,398			302,586			319,637
212											
213											
214		TOTAL OPERATING AND MAINTENANCE	<u>\$ 24,470,353</u>	<u>\$ 25,051,037</u>	<u>\$ 23,962,520</u>		<u>\$ (7,401,090)</u>	<u>\$ 16,561,430</u>		<u>\$ 687,019</u>	<u>\$ 17,248,449</u>

Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of the Office of Consumer Advocate
OCA Set 7 to the City of Lancaster

Responsible Witness: Gregory Herbert

OCA-7-8. Reference Schedule D of the cost of service study, page 4. Please provide a detailed breakdown of ADMIN INDIRECT COSTS OTHER, and provide a detailed description of the services received.

Response: Please see Attachment OCA-7-8 for excerpts of the City’s trial balances that make up the HTY of “Admin Indirect Costs Other.” These costs are related to the Water Fund’s shared costs of the City’s various administrative departments such as procurement/collections, accounting, human resources, and other administrative services.

I&E Exhibit No. 1
Schedule 8
Page 2 of 2

56289000 911000					
Indirect Costs		262,347.24			
4 2 GEN 04/01/24	W/S/T Admin - April	87,449.08	.00	87,449.08	
5 768 GEN 05/01/24	W/S/T Admin - May	87,449.08	.00	174,898.16	
6 2 GEN 06/01/24	W/S/T Admin - June	87,449.08	.00	262,347.24	
7 506 GEN 07/01/24	W/S/T Admin - July	87,449.08	.00	349,796.32	
8 2 GEN 08/01/24	W/S/T Admin - August	87,449.08	.00	437,245.40	
9 168 GEN 09/01/24	W/S/T Admin - September	87,449.08	.00	524,694.48	
10 2602 GEN 10/01/24	W/S/T Admin - October	87,449.08	.00	612,143.56	
11 6 GEN 11/01/24	W/S/T Admin - November	87,449.08	.00	699,592.64	
12 8 GEN 12/01/24	W/S/T Admin - December	87,449.12	.00	787,041.76	
56289000-911000		262,347.24	787,041.76	.00	787,041.76
56289000 913000					1,049,389.00
56289100-829000		.00	.00	.00	.00
56289000 911000					.00
Indirect Costs		.00			
1 1944 GEN 01/01/25	W/S/T Admin - January	111,481.08	.00	111,481.08	
2 2197 GEN 02/01/25	W/S/T Admin - February	111,481.08	.00	222,962.16	
3 2 GEN 03/01/25	W/S/T Admin - March	111,481.08	.00	334,443.24	
56289000-911000		.00	334,443.24	.00	334,443.24
56289000 913000					

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-12-D

Reference Lancaster Exhibit GRH-1, Schedule 3, p. 5 concerning Administration – Intergovernmental:

- A. Provide a breakdown of the Admin. Indirect Costs expense, \$1,121,485.
- B. Provide a similar breakdown for this account for fiscal years ended March 31, 2023 and March 31, 2024.

RESPONSE:

- A. Please see the response to OCA-7-8.
- B. Please see Attachment I&E-RE-12-D.

City of Lancaster, PA



ACCOUNT TRIAL BALANCE FOR FY22/JAN TO DEC
 FUND 0562

ACCOUNT	ACCOUNT NAME	BEG. BALANCE	DEBITS	CREDITS	NET CHANGE	END BALANCE
PER	JNL SRC EFF DATE REFERENCE					
56289000 911000						
Indirect Costs					.00	
4	732 GEN 04/01/22 April WST - April		67,916.67	.00		271,666.68
5	568 GEN 05/01/22 W/S/T Admin - May		67,916.67	.00		339,583.35
6	1878 GEN 06/01/22 W/S/T Admin - June		67,916.67	.00		407,500.02
7	983 GEN 07/01/22 W/S/T Admin - July		67,916.67	.00		475,416.69
7	983 GEN 07/01/22 W/S/T Admin - July		333,333.33	.00		808,750.02
8	1934 GEN 08/01/22 W/S/T Admin - August		67,916.67	.00		876,666.69
9	694 GEN 09/01/22 W/S/T Admin - September		67,916.67	.00		944,583.36
9	699 GEN 09/01/22 W/S/T Admin - July Correctio		.00	333,333.33		611,250.03

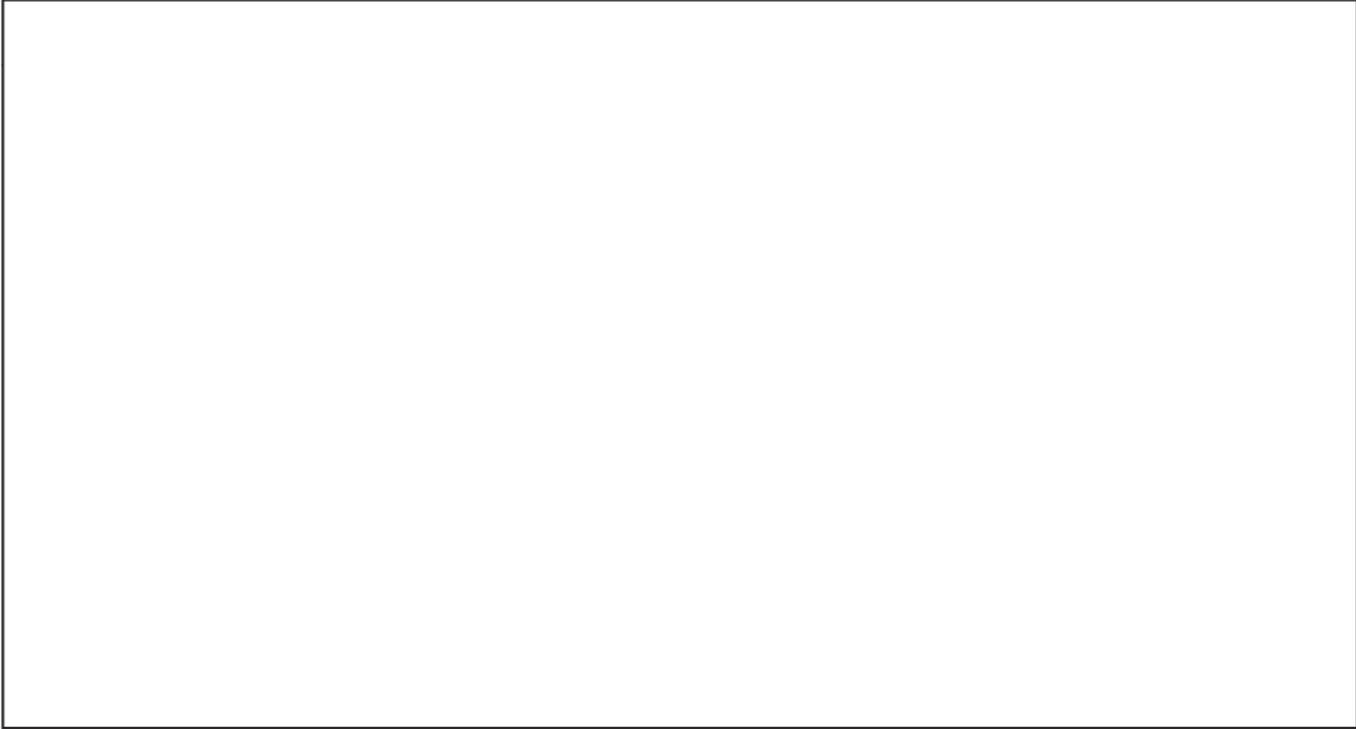
City of Lancaster, PA



ACCOUNT TRIAL BALANCE FOR FY22/JAN TO DEC

FUND 0562

ACCOUNT	ACCOUNT NAME				BEG. BALANCE	DEBITS	CREDITS	NET CHANGE	END BALANCE
PER	JNL	SRC	EFF DATE	REFERENCE					
10	1440	GEN	10/01/22	W/S/T Admin - October		67,916.67	.00	679,166.70	
11	797	GEN	11/01/22	W/S/T Admin - November		67,916.67	.00	747,083.37	
12	230	GEN	12/01/22	W/S/T Admin - December		67,916.67	.00	815,000.04	



City of Lancaster, PA



ACCOUNT TRIAL BALANCE FOR FY23/JAN TO EOY
 FUND 0562

ACCOUNT	ACCOUNT NAME	BEG. BALANCE	DEBITS	CREDITS	NET CHANGE	END BALANCE
PER	JNL SRC EFF DATE REFERENCE					
56289000 911000						
Indirect Costs .00						
1	1054 GEN 01/01/23 W/S/T Admin - January		86,311.92	.00	86,311.92	
2	1246 GEN 02/01/23 W/S/T Admin - February		86,311.92	.00	172,623.84	
3	682 GEN 03/01/23 W/S/T Admin - March		86,311.92	.00	258,935.76	

City of Lancaster, PA



ACCOUNT TRIAL BALANCE FOR FY23/APR TO EOY

FUND 0562

ACCOUNT	ACCOUNT NAME	BEG. BALANCE	DEBITS	CREDITS	NET CHANGE	END BALANCE
PER	JNL SRC EFF DATE REFERENCE					
56289000	911000					
	Indirect Costs	258,935.76				
4	1374 GEN 04/01/23 W/S/T Admin - April		86,311.92	.00	86,311.92	
5	114 GEN 05/01/23 W/S/T Admin - May		86,311.92	.00	172,623.84	
6	1112 GEN 06/01/23 W/S/T Admin - June		86,311.92	.00	258,935.76	
7	371 GEN 07/01/23 W/S/T Admin - July		86,311.92	.00	345,247.68	
8	109 GEN 08/01/23 W/S/T Admin - August		86,311.92	.00	431,559.60	
9	276 GEN 09/01/23 W/S/T Admin - September		86,311.92	.00	517,871.52	
10	1549 GEN 10/01/23 W/S/T Admin - October		86,311.92	.00	604,183.44	
11	359 GEN 11/01/23 W/S/T Admin - November		86,311.92	.00	690,495.36	
12	241 GEN 12/01/23 W/S/T Admin - December		86,311.88	.00	776,807.24	
56289000	911000	258,935.76	776,807.24	.00	776,807.24	1,035,743.00

City of Lancaster - Bureau of Water
 Docket No. R-2025-3057237

Attachment I&E-RE-12-D
 Page 4 of 5

City of Lancaster, PA



ACCOUNT TRIAL BALANCE FOR FY24/JAN TO MAR

FUND 0562

ACCOUNT	BEG. BALANCE	DEBITS	CREDITS	NET CHANGE	END BALANCE
ACCOUNT NAME					
PER JNL SRC EFF DATE REFERENCE					
[Empty table area]					

Indirect Costs	.00				
1 1323 GEN 01/01/24 W/S/T Admin - January		87,449.08	.00	87,449.08	
2 1527 GEN 02/01/24 W/S/T Admin - February		87,449.08	.00	174,898.16	
3 783 GEN 03/01/24 W/S/T Admin - March		87,449.08	.00	262,347.24	
56289000-911000	.00	262,347.24	.00	262,347.24	262,347.24
56289000 913400					

City of Lancaster - Bureau of Water
 Docket No. R-2025-3057237

Attachment I&E-RE-12-D
 Page 5 of 5

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-19-D

Reference Lancaster Exhibit GRH-1, Schedule 6, p. 4, Adjustment E-6 regarding rate case expense:

- A. Provide justification for the proposed three-year normalization period.
- B. Provide supporting documentation for each category of current rate case expense shown in Adjustment E-6 including invoices, statements, estimates from vendors, and/or internal workpapers.
- C. Confirm that no amount of rate case expense from the current or prior proceedings is included in rate base as unamortized rate case expense, and if so, identify the dollar amount and line item(s) where it is reflected on Lancaster Exhibit GRH-2, Schedule E, p. 34.

RESPONSE:

- A. The City views a normalization of rate case expense over several years as appropriate as the expense for a rate case is only incurred during the period of the actual rate case but the benefits of increased rates last more than one year. A three-year normalization period is reasonable as it acknowledges that rate case expense should be spread over a period of years, but also does not penalize the City for delaying a rate case due to costs, requirements from the previous case, and limited resources.
- B. Please see filing requirement Exhibit D-II-4 that includes all invoices that were available up to the filing date of September 30, 2025. Please see Attachment I&E-RE-19-D for the invoices available from October 1, 2025 to date related to rate case expense and the Gannett Fleming contract for this rate proceeding.
- C. Confirmed there is no rate case expense from the current or prior proceedings included in rate base as unamortized rate case expense.

BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Witness: Gregory Herbert

I&E-RE-20-D Reference Lancaster Exhibit GRH-1, Schedule 6, p. 4, Adjustment E-6 regarding rate case expense. Provide the following information for the last three base rate proceedings that the City of Lancaster-Water Department filed with the Commission.

RESPONSE:

Docket No. R-2010-2179103:

Filed: August 27, 2010

Proposed Rate Case Expense: \$481,334

Actual Rate Case Expense: \$661,182

Rate Case was fully litigated with the exception of certain settlement items.

Effective Date of Rate Increase: July 21, 2011

Docket No. R-2014-2418872:

Filed: June 6, 2014

Proposed Rate Case Expense: \$373,000

Actual Rate Case Expense: \$375,883

Case was settled.

Effective Date of Rate Increase: March 5, 2015

Docket No. R-2021-302:

Filed: September 30, 2021

Proposed Rate Case Expense: \$468,000

Actual Rate Case Expense: \$309,447

Case was settled.

Effective Date of Rate Increase: June 29, 2022

I&E Statement No. 2
Witness: D. C. Patel

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER - WATER FUND

Docket No. R-2025-3057237

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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1 **INTRODUCTION OF WITNESS**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6
7 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

8 A. I am employed by the Pennsylvania Public Utility Commission (Commission) in
9 the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial
10 Analyst.

11

12 **Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT BACKGROUND?**

13 A. An outline of my education and employment background is set forth in the
14 attached Appendix A.

15

16 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.**

17 A. I&E is responsible for representing the public interest in rate and other
18 proceedings before the Commission. I&E's analysis in this proceeding is based on
19 its responsibility to represent the public interest. This responsibility requires
20 balancing the interests of ratepayers, the utility company, and the regulated
21 community as a whole.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my direct testimony is to review the base rate filing of the City of
3 Lancaster, Bureau of Water (City or Water Fund), and make recommendations
4 regarding the City's rate of return, including capital structure, cost of long-term
5 debt, the cost of equity, and the overall fair rate of return for the fully projected
6 future test year (FPFTY) ending March 31, 2027.

7

8 **Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?**

9 A. Yes. I&E Exhibit No. 2 contains schedules that support my direct testimony.

10

11 **BACKGROUND**

12 **Q. WHAT IS THE GENERAL DEFINITION OF RATE OF RETURN IN THE**
13 **CONTEXT OF A RATE CASE?**

14 A. Rate of return is one of the components of the revenue requirement formula. Rate
15 of return is the amount of revenue an investment generates in the form of net
16 income. It is typically expressed as a percentage of the amount of an asset base at
17 a particular point in time, which in base rate proceedings, is the projected rate base
18 balance at the end of the test year.

1 **Q. WHAT IS THE REVENUE REQUIREMENT FORMULA?**

2 A. The revenue requirement formula used in base rate cases is as follows:

3
$$RR = E + D + T + (RB \times ROR)$$

4 Where:

5 RR = Revenue Requirement

6 E = Operating Expenses

7 D = Depreciation Expense

8 T = Taxes

9 RB = Rate Base

10 ROR = Overall Rate of Return

11 In the above formula, the rate of return is expressed as a percentage. The
12 calculation of that percentage is independent of the determination of the
13 appropriate rate base value for ratemaking purposes. As such, the appropriate total
14 dollar return is dependent upon the proper computation of the rate of return and
15 the proper valuation of a company's rate base.

16

17 **Q. WHAT CONSTITUTES A FAIR AND REASONABLE OVERALL RATE**
18 **OF RETURN?**

19 A. A fair and reasonable overall rate of return is one that will allow the utility an
20 opportunity to recover those costs prudently incurred by all classes of capital used
21 to finance the rate base during the prospective period in which its rates will be in
22 effect. The Commission has the authority to determine the fair revenue

1 requirement and rate of return, which the utility has the opportunity to earn, but
2 not guaranteed to earn.

3 The *Bluefield Water Works & Improvements Co. v. Public Service Comm.*
4 *of West Virginia*, 262 U.S. 679, 692-93 (1923), and the *Federal Power*
5 *Commission et al v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) cases set
6 forth the principles that are generally accepted by regulators throughout the
7 country as the appropriate criteria for measuring a fair rate of return:

- 8 1. A utility is entitled to a return similar to that being earned by other
9 enterprises with corresponding risks and uncertainties, but not as high as
10 those earned by highly profitable or speculative ventures.
- 11 2. A utility is entitled to a return level reasonably sufficient to assure
12 financial soundness.
- 13 3. A utility is entitled to a return sufficient to maintain and support its
14 credit and raise necessary capital.
- 15 4. A fair return can change (increase or decrease) along with economic
16 conditions and capital markets.

17
18 **Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS**
19 **TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.**

20 A. In base rate proceedings, the overall rate of return is traditionally calculated using
21 the weighted average cost of capital method. To calculate the weighted average
22 cost of capital, a company's capital structure must first be determined by

1 comparing the percentage of each capitalization component, which has financed
2 rate base, to total capital. Next, the effective cost rate of each capital structure
3 component must be determined. The historical component of the cost rate of debt
4 can be computed accurately, and any future debt issuances are based on estimates.
5 The cost rate of common equity is not fixed and is more difficult to measure.
6 Because of this difficulty, a proxy group is used as discussed later in this
7 testimony. Next, each capital structure component percentage is multiplied by its
8 corresponding effective cost rate to determine the weighted capital component cost
9 rate. The table in the “*I&E Position*” section below demonstrates the interaction
10 of each capital structure component and its corresponding effective cost rate.
11 Finally, the sum of the weighted cost rates produces the overall rate of return.
12 This overall rate of return is multiplied by the rate base to determine the return
13 portion of a company’s revenue requirement.

14
15 **CITY’S RATE OF RETURN CLAIM**

16 **Q. WHO IS THE CITY’S RATE OF RETURN WITNESS IN THIS**
17 **PROCEEDING?**

18 A. Harold Walker, III is the primary witness addressing the return topic. Throughout
19 his direct testimony,¹ Mr. Walker provides his analysis for the claimed capital
20 structure, long-term debt, and cost of common equity for the Water Fund.

¹ City Statement No. 1.

1 **Q. PLEASE SUMMARIZE MR. WALKER’S RECOMMENDATIONS FOR**
2 **THE WATER FUND’S RATE OF RETURN CLAIM FOR THE FPPTY.**

3 A. Mr. Walker makes two recommendations for the overall rate of return, with his
4 second recommendation being an alternative to the first. Specifically, his first
5 recommendation does not include a tax adjustment, while his alternative
6 recommendation does include a tax adjustment to the equity cost rate as shown in
7 the tables below:²

CITY OF LANCASTER - WATER FUND			
Summary of Cost of Capital (<u>Without Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.20%	1.97%
Common Equity	<u>53.00%</u>	10.90%	<u>5.78%</u>
Total	<u>100.00%</u>		<u>7.75%</u>

8

CITY OF LANCASTER - WATER FUND			
Summary of Cost of Capital (<u>With Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.20%	1.97%
Common Equity	<u>53.00%</u>	9.48%	<u>5.02%</u>
Total	<u>100.00%</u>		<u>6.99%</u>

9

² City Exhibit HW-1, Schedule 21.

1 **I&E POSITION**

2 **Q. PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATION**
3 **FOR THE CITY.**

A. As shown in the table below, my rate of return recommendation includes an implied tax rate adjustment for the Water Fund:³

I&E Recommendation CITY OF LANCASTER - WATER FUND Summary of Cost of Capital (With Tax Adjustment)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	57.13%	4.20%	2.40%
Common Equity	<u>42.87%</u>	7.86%	<u>3.37%</u>
Total	<u>100.00%</u>		<u>5.77%</u>

4
5 I discuss in further detail below at pages 37-40, why it is necessary to include an
6 implied tax rate adjustment within my recommended rate of return on equity for
7 tax-exempt interest payment to municipal bondholders.

8
9 **PROXY GROUP**

10 **Q. WHAT IS A PROXY GROUP AS USED IN BASE RATE CASES?**

11 A. A proxy group is a set of companies that have similar traits in comparison to the
12 subject utility. This group of companies acts as a benchmark for determining the
13 subject utility's rate of return in a base rate proceeding.

³ I&E Exhibit No. 2, Schedule 1.

1 **Q. WHAT ARE THE REASONS FOR USING A PROXY GROUP?**

2 A. A proxy group's cost of equity is used as a benchmark to satisfy the long-
3 established guideline of utility regulation that seeks to provide the subject utility
4 with the opportunity to earn a return similar to that of enterprises with
5 corresponding risks and uncertainties.

6 A proxy group is typically utilized since the use of data exclusively from
7 one company may be less reliable. The lower reliability occurs because the data
8 for one company may be subject to events that can cause short-term anomalies in
9 the marketplace. The rate of return on common equity for a single company could
10 become distorted in these circumstances and would therefore not be representative
11 of similarly situated companies. Thus, a proxy group has the effect of smoothing
12 out potential anomalies associated with a single company.

13

14 **Q. DID YOU REQUIRE THAT THE COMPANIES IN YOUR PROXY**
15 **GROUP EXCLUSIVELY PROVIDE WATER SERVICE?**

16 A. No. Few, if any, publicly held water-only companies exist because most water
17 companies diversified their businesses to include wastewater operations.

18 Accordingly, this type of criterion would produce an insufficient sample of
19 companies for my proxy group, adversely affecting the calculation of a fair rate of
20 return for the subject utility. Additionally, Value Line does not specifically cover
21 the water industry, excluding wastewater, as a standalone category. Therefore, my

1 proxy group selection begins with a search of the regulated water utility
2 companies covered by Value Line.

3
4 **Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR PROXY**
5 **GROUP?**

6 A. The criteria for my proxy group was designed to select companies that are
7 representative of the Water Fund. I applied the following criteria to Value Line's
8 Water Utility company group:

- 9 1. Fifty percent or more of the company's revenues must be generated
10 from the regulated water utility industry.
- 11 2. The company's stock must be publicly traded.
- 12 3. Investment information for the company must be available from more
13 than one source, which includes Value Line.
- 14 4. The company must not be currently involved in an announced material
15 merger or the target of an acquisition.
- 16 5. The company must have data for four consecutive years of historic
17 earnings.

1 **Q. WHAT CRITERIA DID MR. WALKER USE IN SELECTING HIS WATER**
2 **UTILITY PROXY GROUP COMPANIES?**

3 A. Mr. Walker implemented the following criteria to formulate his Comparable
4 Group or Water (Proxy) Group:⁴

- 5 1. All U.S. water utilities that are covered by several security analysts as
6 measured by the existence of several sources of published projected
7 five-year growth rates in earnings per share (EPS).
- 8 2. With a Standard Industrial Classification (SIC) of 4941 (i.e., Water
9 Supply Facilities and Infrastructure).
- 10 3. With a North American Industry Classification System (NAICS) of
11 221310 (i.e., Water Supply and Irrigation Systems).
- 12 4. Are not the announced subject of an acquisition.
- 13 5. Currently pay a common dividend and have not reduced their common
14 dividend within the past four years.
- 15 6. Have market value of common stock, the product of multiplying the
16 closing stock price by the number of common shares outstanding,
17 greater than \$500.0 million.
- 18 7. Have a total enterprise, the sum of market value of preferred stock and
19 total debt, greater than \$700.0 million.

⁴ City Statement No. 6, p. 10, line 23 through p. 11, line 11.

1 **Q. WHAT PROXY GROUP DID YOU USE IN YOUR ANALYSIS?**

2 A. I included the following four companies in my proxy group:

Company	Stock Ticker
American States Water Company	AWR
California Water Services Group	CWT
H2O America (formerly known as SJW Group)	HTO
Middlesex Water Company	MSEX

3

4

5 **Q. WHAT COMPANIES DID MR. WALKER USE IN HIS OR WATER**
6 **GROUP IN HIS ANALYSIS?**

7 A. Mr. Walker included the following six companies in his Water Group:⁵

Company	Stock Ticker
American States Water Company	AWR
American Water Works Company, Inc.	AWK
California Water Services Group	CWT
Essential Utilities, Inc.	WTRG
H2O America (formerly known as SJW Group)	HTO
Middlesex Water Company	MSEX

8

⁵ City Statement No. 6, p. 12, line 1, Table 1.

1 **Q. DO YOU AGREE WITH MR. WALKER'S WATER GROUP?**

2 A. Not entirely. While Mr. Walker's and my criteria vary to some degree, we
3 ultimately end up with the same four water distribution companies in our proxy
4 groups except he also includes American Water Works Company and Essential
5 Utilities, Inc. I do not include these two companies in my proxy group because
6 they do not meet with my fourth proxy group selection criterion concerning
7 involvement in an announced merger.

8 Most recently on October 27, 2025,⁶ American Water Works Company and
9 Essential Utilities, Inc. announced that each company's board of directors has
10 unanimously approved a definitive agreement to combine in an all-stock, tax-free
11 merger as a leading regulated U.S. water and wastewater public utility with a pro
12 forma market capitalization of approximately \$40 billion and a combined
13 enterprise value of approximately \$63 billion, based on closing stock prices as of
14 October 24, 2025. Mr. Walker included these two water utility companies in his
15 Water Group because he reviewed the proxy group data in July 2025, before the
16 merger announcement. Now, these two companies are not qualified to be included
17 in Mr. Walker's Water Group because it violates his fourth proxy group selection
18 criterion as listed above.

⁶ <https://www.businesswire.com/news/home/20251026992287/en/American-Water-and-Essential-Utilities-to-Merge-as-a-Leading-Regulated-U.S.-Water-and-Wastewater-Utility> (accessed on November 12, 2025).

1 **CAPITAL STRUCTURE**

2 **Q. WHAT IS A CAPITAL STRUCTURE?**

3 A. A capital structure represents how a firm has financed its rate base with different
4 sources of funds. The primary funding sources are long-term debt and common
5 equity. A capital structure may also include preferred stock and/or short-term
6 debt.

7

8 **Q. WHAT IS THE WATER FUND’S CLAIMED CAPITAL STRUCTURE?**

9 A. The Water Fund’s claimed FPFTY capital structure is summarized in the table
10 below:⁷

CITY OF LANCASTER - WATER FUND Projected Capital Structure as of March 31, 2027	
Type of Capital	Capitalization Ratio
Long-Term Debt	47.00%
Common Equity	<u>53.00%</u>
Total	<u>100.00%</u>

11

⁷ City Statement No. 6, p. 14, lines 5-14 and Exhibit HW-1, Schedule 1.

1 **Q. WHAT IS THE BASIS FOR THE CITY’S CLAIMED CAPITAL**
2 **STRUCTURE?**

3 A. Mr. Walker explains that the Water Fund does not raise its own capital; rather it is
4 essentially an operating fund of the City of Lancaster, and not a separate legal
5 entity. The Water Fund is accounted for as a separate department via an
6 Enterprise Fund. Therefore, he opines that the Water Fund has no managerial
7 control over its capital structure and is not able to obtain equity and debt financing
8 on its own in the open market.⁸ Considering this status, Mr. Walker has imputed a
9 hypothetical capital structure of 47% long-term debt and 53% common equity
10 based on his comparable Water Group capital structure analysis. He claims this
11 methodology is consistent with Title 66 Pa. C.S.A. § 1301(b).⁹ Primarily, he
12 relied on his Water Group’s average capital structure for the fiscal year ended
13 June 30, 2025, and the estimated average capital structure for the FY 2029, which
14 is more than two years after the FPFTY ending March 30, 2027.¹⁰

15
16 **Q. DO YOU ACCEPT THE CITY’S CLAIMED CAPITAL STRUCTURE?**

17 A. No. While I agree that a hypothetical capital structure is appropriate in this
18 proceeding, I recommend using a hypothetical capital structure of 57.13% long-
19 term debt and 42.87% common equity.

⁸ City Statement No. 6, p. 13, lines 12-17.

⁹ City Statement No. 6, p. 13, lines 20-22.

¹⁰ City Exhibit HW-1, Schedule 2, p. 1.

1 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDED HYPOTHETICAL**
2 **CAPITAL STRUCTURE?**

3 A. Municipalities are typically able to acquire debt at lower cost rates than publicly
4 traded utility companies. In large part, this is because a municipality can use its
5 taxing authority to ensure repayment of its debt, which reduces risk. The risk
6 reduction generally commands a lower interest rate on long-term debt.
7 Accordingly, the taxing authority that is unique to municipalities enables them to
8 tolerate more debt in their capital structure to finance rate base. Additionally, it is
9 inappropriate and unnecessary to pass larger proportions of more expensive equity
10 costs on to ratepayers, especially when the City or Water Fund does not issue
11 common stock and hence does not have equity investors.

12
13 **Q. IN THE DETERMINATION OF JUST AND REASONABLE RATES,**
14 **WHAT DIRECTIVES ARE PROVIDED WITH RESPECT TO**
15 **MUNICIPAL CAPITAL STRUCTURES BEING USED IN BASE RATE**
16 **CASES?**

17 A. Title 66, Section 1301(b), which is effective since December 21, 2017, states the
18 following:

19 In determining a just and reasonable rate furnished or rendered
20 by a municipal corporation or by the operating agencies of a
21 municipal corporation providing public utility water or
22 wastewater service beyond its corporate limits, the commission
23 shall employ an imputed capital structure of comparable public
24 utilities providing water or wastewater service.

1 **Q. HAS TITLE 66, SECTION 1301(b) INFLUENCED YOUR**
2 **RECOMMENDED CAPITAL STRUCTURE FOR THIS PROCEEDING AS**
3 **COMPARED TO I&E RECOMMENDATIONS IN HISTORICAL**
4 **MUNICIPAL BASE RATE PROCEEDINGS?**

5 A. Yes. I believe that a capital structure between 80% debt and 20% equity and 70%
6 debt and 30% equity is more appropriate for the Water Fund in this proceeding.
7 However, in recognition of Section 1301(b)'s requirement as cited above, I
8 recommend the Commission adopt a hypothetical capital structure made up of
9 57.13% long-term debt and 42.87% common equity. The equity ratio of 42.87%
10 matches the low end of the range of common equity ratio of my proxy group
11 capital structures.¹¹

12
13 **Q. WHY IS YOUR RECOMMENDED CAPITAL STRUCTURE BASED ON**
14 **THE LOW END OF THE RANGE FOR COMMON EQUITY OF YOUR**
15 **PROXY GROUP?**

16 A. My recommendation is designed to comply with Title 66, Section 1301(b), while
17 at the same time not inappropriately overburdening ratepayers. As stated above, if
18 the non-jurisdictional portion of the City requires increased funding, the
19 municipality has the ability to increase taxes to generate funds. Moreover,
20 municipally owned water/wastewater utilities differ from investor-owned utilities

¹¹ I&E Exhibit No. 2, Schedule 2.

1 in that they have no equity investors. Accordingly, they do not have the burden of
2 compensating investors with a competitive, market-based return on equity. As
3 such, it is inappropriate to pass along a large proportion of the higher equity cost
4 to the Water Fund's ratepayers. This difference in utility ownership more than
5 adequately supports use of the low-end of the range of the investor-owned water
6 utility proxy group's equity portion of the capital structure.

7
8 **COST OF LONG-TERM DEBT**

9 **Q. WHAT IS WATER FUND'S CLAIMED LONG-TERM DEBT COST**
10 **RATE?**

11 A. Mr. Walker recommends a 4.20% weighted average cost rate of long-term debt for
12 general obligation municipal bonds and a PENNVEST loan, which is based on the
13 Water Fund's projected long-term debt cost rate as of March 31, 2027. This
14 embedded debt cost rate reflects the Water Fund's contracted debts for a specific
15 period of time and at a specific cost that includes the coupon rate and debt
16 issuance expenses.¹²

17
18 **Q. WHAT IS YOUR RECOMMENDATION FOR THE WATER FUND'S**
19 **LONG-TERM DEBT COST RATE?**

20 A. I accept the Water Fund's claimed FPFTY long-term debt cost rate of 4.20%.

¹² City Statement No. 6, p. 16, lines 8-12 and Exhibit HW-1, Schedule 3.

1 **Q. WHY DO YOU ACCEPT THE WATER FUND’S CLAIMED COST RATE**
2 **OF LONG-TERM DEBT?**

3 A. The Water Fund’s claimed cost rate of long-term debt is reasonable, as it is
4 representative of the water industry. It falls within my proxy group’s implied
5 long-term debt cost range of 3.95% to 6.21% and is below the average of implied
6 long-term debt cost of 4.99%.¹³ Therefore, I accept the Water Fund’s weighted
7 cost rate of long-term debt to be used in determining an overall rate of return.
8

9 **COST OF COMMON EQUITY**

10 **COMMON METHODS**

11 **Q. WHAT METHODS ARE COMMONLY PRESENTED BY UTILITIES IN**
12 **DETERMINING THE COST OF COMMON EQUITY?**

13 A. Four methods commonly presented to estimate the cost of common equity are the
14 Discounted Cash Flow (DCF), the Capital Asset Pricing Model (CAPM), the Risk
15 Premium (RP) Method, and the Comparable Earnings (CE) Method.
16

17 **Q. WHAT IS THE THEORETICAL BASIS FOR THE DCF METHOD?**

18 A. The DCF method is the “dividend discount model” of financial theory, which
19 maintains that the value (price) of any security or commodity is the discounted
20 present value of all future cash flows. The DCF method assumes that investors

¹³ I&E Exhibit No. 2, Schedule 3.

1 evaluate stocks in the classical economic framework, which maintains that the
2 value of a financial asset is determined by its earning power, or its ability to
3 generate future cash flows. The DCF method is also considered a forward-looking
4 model to estimate the cost of common equity.

5
6 **Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?**

7 A. The CAPM describes the relationship between a stock's investment risk and its
8 market rate of return. It identifies the rate of return investors expect so that it is
9 comparable with returns of other stocks of similar risk. This method hypothesizes
10 that the investor-required return on a company's stock is equal to the return on a
11 "risk free" asset plus an equity premium reflecting the company's investment risk.
12 In the CAPM, two types of risk are associated with a stock: (1) firm-specific risk
13 (unsystematic risk); and (2) market risk (systematic risk), which is measured by a
14 firm's beta. The CAPM allows investors to receive a return only for bearing
15 systematic risk. Unsystematic risk is assumed to be diversified away, and
16 therefore, does not earn a return.

17
18 **Q. WHAT IS THE THEORETICAL BASIS FOR THE RP METHOD?**

19 A. The theoretical basis for the RP method is a simplified version of the CAPM. The
20 RP method's theory is that common stock is riskier than debt and, thus, investors
21 require a higher expected return on stocks than bonds. In the RP approach, the
22 cost of equity is made up of the cost of debt and a risk premium. While the

1 CAPM uses the market risk premium, it also directly measures the systematic risk
2 of the proxy group through the use of beta. The RP method does not measure the
3 specific risk of the company.
4

5 **Q. WHAT IS THE THEORETICAL BASIS FOR THE CE METHOD?**

6 A. The CE method utilizes the concept of opportunity cost. This means that investors
7 will likely dedicate their capital to the investment offering the highest return with
8 similar risk to alternative investments. Unlike the DCF, CAPM, and the RP
9 methods, the CE method is not market-based and relies upon historic accounting
10 data. Like the RP method, the CE method does not measure the specific risk of a
11 company. The most problematic issue with the CE method is determining what
12 constitutes comparable companies.
13

14 **I&E RECOMMENDED METHOD TO EMPLOY**

15 **Q. WHAT METHOD DO YOU RECOMMEND USING TO DETERMINE AN**
16 **APPROPRIATE COST OF COMMON EQUITY FOR THE CITY?**

17 A. I recommend using the DCF method as the primary method to determine the cost
18 of common equity. Additionally, I provide a CAPM analysis to be used as a
19 comparison, not as a check, to the DCF results. The DCF method has the most
20 wide-spread regulatory acceptance. While the Commission has more recently
21 based its return on equity (ROE) decisions on a combination of methods, I still

1 recommend primary reliance on the DCF method due to the shortcomings
2 associated with the CAPM method.

3
4 **Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE DCF IN YOUR**
5 **ANALYSIS.**

6 A. I have used the DCF as the primary method for several reasons. First, the DCF is
7 appealing to investors as it is based upon the concept that the receipt of dividends
8 in addition to the expected appreciation is the total return requirement determined
9 by the market.¹⁴ Second, the use of a growth rate and expected dividend yield are
10 also strengths of the DCF, as this recognizes the time value of money and is
11 forward-looking. Third, the use of the utility's own, or in this case, the proxy
12 group's stock prices and growth rates directly in the calculation also causes the
13 DCF to be industry and company specific. Finally, current inflationary and
14 economic trends are most certainly reflected in a stock's price, which is used in
15 determining the dividend yield, and by analysts who generate forecasted earnings
16 growth rates. Therefore, the DCF contains the most up-to-date projected
17 information of any model and is the superior method for determining the rate of
18 return for the current economic market because it measures the cost of equity
19 directly.

¹⁴ David C. Parcell, "The Cost of Capital - A Practitioner's Guide," 2020 Edition, p. 153.

1 **Q. PLEASE EXPLAIN WHY YOU ALSO CHOSE TO USE THE CAPM IN**
2 **YOUR ANALYSIS.**

3 A. I have included a CAPM analysis as a comparison because the CAPM and the
4 DCF include inputs that allow the results to be specific to the utility industry,
5 although the CAPM is far less responsive to changes in the industry than the DCF.
6 The CAPM is based on the performance of U.S. Treasury bonds and the
7 performance of the stock market as measured through the S&P 500 returns and is
8 company-specific only through the use of beta. Beta reflects a stock's volatility
9 relative to the overall market, thereby incorporating an industry-specific aspect to
10 the CAPM, but only as a measure of how reactive the industry is compared to the
11 market as a whole. Although changes in the utility industry are more likely to be
12 accurately reflected in the DCF, which uses the companies' actual prices,
13 dividends, and growth rates, I have included the results of my CAPM analysis
14 because changes in the market, whether as a whole or specific to the utility
15 industry, affect the outcome of each method in different ways. I have provided the
16 results of my CAPM analysis only as a comparison, and not as a check, as it has
17 several disadvantages and should not be given a comparable weight to the DCF.

18

19 **Q. EXPLAIN THE DISADVANTAGES OF THE CAPM.**

20 A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give
21 results that indicate to an investor what the equity cost rate should be if current
22 economic and regulatory conditions are the same as those present during the

1 historical period in which the risk premiums were determined. This is because
2 beta, which is the only company-specific variable in the CAPM model, measures
3 the *historical* volatility of a stock compared to the *historical* overall market return.
4 Reliance on historical values is especially problematic now given the recent events
5 that have impacted economic conditions. Although the CAPM and RP results can
6 be useful to investors in making rational buy and sell decisions within their
7 portfolios, the DCF method is the superior method for determining the rate of
8 return for the current economic market and measuring the forward-looking cost of
9 equity directly. The CAPM and the RP methods are less reliable indicators
10 because they measure the cost of equity indirectly and risk premiums vary
11 depending on the debt and equity being compared. Additionally, regulators can
12 never be certain that economic and regulatory conditions underlying the historical
13 period during which the risk premiums were calculated are the same today or will
14 be the same in the future.

15
16 **Q. IS THERE ANY ACADEMIC EVIDENCE THAT QUESTIONS THE**
17 **CREDIBILITY OF THE CAPM MODEL?**

18 A. Yes. An article, “Market Place; A Study Shakes Confidence in the Volatile-Stock
19 Theory,” which appeared in the *New York Times* on February 18, 1992,
20 summarized a CAPM study conducted by professors Eugene F. Fama and

1 Kenneth R. French.¹⁵ Their study examined the importance of beta and CAPM's
2 risk factor in explaining returns on common stock. In CAPM theory, a stock with
3 a higher beta should have a higher expected return. However, they found that the
4 model did not do well in predicting actual returns and suggested the use of more
5 elaborate multi-factor models.

6 A more recent article, "The Capital Asset Pricing Model: Theory and
7 Evidence," which appeared in the *Journal of Economic Perspectives*, states that
8 "the attraction of the CAPM is that it offers powerful and intuitively pleasing
9 predictions about how to measure risk and the relation between expected return
10 and risk. Unfortunately, the empirical record of the model is poor - poor enough
11 to invalidate the way it is used in applications."¹⁶ As a result, I conclude that the
12 CAPM's relevance to the investment decision making process does not carry over
13 into the regulatory rate setting process.

14
15 **Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE RP**
16 **METHOD FROM YOUR ANALYSIS.**

17 A. The RP method is excluded because it is a simplified version of the CAPM and is
18 subject to the same faults explained above. The RP method has a number of
19 underlying assumptions and the most critical one, as well as the most disputed

¹⁵ Berg, Eric N. "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory" *The New York Times*, 18 Feb 1992: *nytimes.com* Web. 23 Mar 2016.

¹⁶ Fama, Eugene F. and French, Kenneth R., "The Capital Asset Pricing Model: Theory and Evidence." *Journal of Economic Perspectives* (2004): Volume 18, Number 3, pp. 25-46.

1 one, is the assumption that the equity risk premium is constant over the time.¹⁷

2 Most importantly, unlike the CAPM, the RP method does not recognize or
3 measure the company-specific risk through beta.

4
5 **Q. EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE CE METHOD**
6 **IN YOUR ANALYSIS.**

7 A. The CE method is excluded because the choice of which companies are
8 comparable is highly subjective, and it is debatable whether historic accounting
9 values are representative of the future. Aside from its reliance on subjectivity and
10 historic values, the CE method's historical usage in this regulatory forum has been
11 minimal.

12
13 **Q. HAVE YOU IDENTIFIED ANY SPECIFIC PROBLEMS WITH THE**
14 **COMMISSION'S RECENT USE OF THE CAPM METHOD AS A FACTOR**
15 **IN ESTABLISHING A RETURN ON EQUITY?**

16 A. Yes. The Commission indicated in Aqua Pennsylvania, Inc.'s (Aqua) 2021 base
17 rate case order that its method "for determining Aqua's ROE shall utilize both
18 I&E's DCF and CAPM methodologies"¹⁸ and that "I&E's DCF and CAPM
19 produce a range of reasonableness for the ROE ...",¹⁹ which deviates from the

¹⁷ David C. Parcell, "The Cost of Capital - A Practitioner's Guide," 2020 Edition, pp. 167-168.

¹⁸ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 154 (Order Entered May 16, 2022).

¹⁹ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 178 (Order Entered May 16, 2022).

1 historical Commission practice of primarily relying on the DCF. Additionally, the
2 Commission's Columbia Water Company (Columbia Water) base rate case order
3 relied on the results of I&E's DCF and CAPM analyses for determining Columbia
4 Water's ROE.²⁰ In the recent Pennsylvania-American Water Company base rate
5 case, the Commission agreed with the ALJ's recommended ROE, which was based
6 on the average of I&E's DCF and CAPM analyses.²¹

7 In a report issued by Regulatory Research Associates, a group within S&P
8 Global Market Intelligence,²² Aqua's return on equity of 10.00% is stated as being
9 above the national average for water utility base rate cases and above the
10 Distribution System Improvement Charge (DSIC) authorized by the Commission
11 of 9.80%²³ for water and wastewater utilities based on a period ended March 31,
12 2022. The above referenced report also states that the average return on equity for
13 water utility base rate cases that have been completed during the first four months
14 of 2022 was 9.63% and for the twelve months ended April 30, 2022 was 9.53%,
15 which was well below the 10.00% return on equity authorized by the Commission
16 for Aqua. This demonstrates the unreasonable skewing of results associated with
17 using the CAPM as a ceiling for determining a utility's return on equity.

²⁰ *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, p. 105 (Order Entered January 18, 2024).

²¹ *Pa. PUC v. Pennsylvania-American Water Company*, Docket Nos. R-2023-30433189 & R-2023-3043190, p. 194 (Order Entered July 22, 2024).

²² Regulatory Research Associates, "Commission authorizes management performance bonus for Aqua Pennsylvania," *S&P Global Market Intelligence*, May 16, 2022. [CIQ Pro: RRA Regulatory Focus: Commission authorizes management performance bonus for Aqua Pennsylvania \(spglobal.com\)](https://www.spglobal.com/regulatory-focus/press-releases/2022/05/16/commission-authorizes-management-performance-bonus-for-aqua-pennsylvania) (accessed on November 12, 2025).

²³ PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2022, approved at Public Meeting on August 4, 2022 at Docket No. M-2022-3032561.

1 In the Columbia Water order, the Commission noted that I&E’s DCF and
2 CAPM produced a range of reasonableness for the ROE from 7.84% to 11.09%
3 and approved an ROE of 9.75% as reasonable and appropriate for that company,
4 which is based upon consideration of a variety of factors such as increasing
5 inflation leading to increases in interest rates and capital costs.²⁴ I respectfully
6 disagree with the Commission’s basis (current inflation and interest rates) for
7 determining Columbia Water’s ROE of 9.75%. I have presented and discussed
8 below the forecasted lower-level inflation rates, and the Federal Reserve’s
9 intention to cut interest rates in 2025-2026, which could impact inflation and debt
10 costs during 2026, when the City’s new rates will be in effect.

11 Additionally, as explained above, the CAPM should not be used as a
12 primary method, and it should only be used as a comparison to, not as a check of,
13 the DCF. Using the CAPM in this proceeding would result in an additional burden
14 to ratepayers during a time of increased cost of living. Therefore, I disagree with
15 providing the CAPM comparable weight to the DCF method.

17 **Q. PLEASE COMMENT ON CURRENT INFLATION AND INTEREST RATE**
18 **CONCERNS.**

19 A. First, I cannot dispute the current economic conditions with respect to increased
20 interest rates and government bond yields, however, it is important to note that all

²⁴ *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, pp.108-109 (Order Entered January 18, 2024).

1 companies, including regulated utilities, are impacted by higher interest rates.
2 Most recently, the Federal Reserve has made three interest rate cuts this year and
3 an additional rate cut is expected in 2026.²⁵

4 With respect to inflation rates, per the most recent monthly Blue Chip
5 Financial Forecasts (December 1, 2025),²⁶ the 2026 inflation rates by two
6 measures are forecasted to be in the range of 2.3% to 3.0% as shown in the table
7 below:

	Q4 2025	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027
Consumer Price Index	3.3%	3.0%	2.6%	2.5%	2.4%	2.4%
PCE Price Index	3.0%	2.9%	2.6%	2.4%	2.3%	2.3%

8
9 Potential future reductions in interest rates would have the effect of
10 reducing interest rate risks in the capital costs in 2026-2027, when the City's new
11 rates will be in effect. Lastly, it is important to note that unlike unregulated
12 companies, public utilities may file rate cases to address unforeseen increases to
13 expenses, increases in the costs of borrowing, and equity and/or revenue shortfalls
14 due to changes in market conditions.

²⁵ <https://www.msn.com/en-us/money/markets/federal-reserve-cuts-rates-again-signals-one-more-cut-next-year/ar-AA1S6aQd?ocid=winp2fptaskbarhoverent&cvid=6939c342a1a4412a98623eeddb90640&ei=15> (accessed on December 10, 2025).

²⁶ Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, p. 2.

1 **SUMMARY OF THE CITY’S RESULTS**

2 **Q. WHAT ARE THE RESULTS OF THE CITY’S COST OF EQUITY**
3 **ANALYSES?**

4 A. Mr. Walker employed the DCF, CAPM, and RP method in analyzing the Water
5 Fund’s cost of equity and recommends a cost of equity of 10.90%. Alternatively,
6 he recommends a cost of equity of 9.48%, should the Commission decide to adjust
7 his primary recommendation of 10.90% to reflect the maximum income tax status
8 of the investors of the Water Fund.²⁷

9

10 **I&E RECOMMENDATION**

11 **Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR**
12 **THE CITY?**

13 A. Based upon my analysis, I recommend a 7.86% cost of common equity with a tax
14 adjustment based on my DCF analysis results of 10.08%, which reflects a 22%
15 downward adjustment in consideration of the tax status of the City’s investors.

16

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

18 A. My recommendation is based on the use of the DCF method. As explained above,
19 I used my CAPM result only to present a comparison to my DCF results. My
20 DCF analysis uses the proxy group companies’ spot dividend yield, a 52-week

²⁷ City Statement No. 6, p. 62, lines 3-7 and Exhibit HW-1, Schedule 21.

1 dividend yield, and five-year earnings growth forecasts. In calculating the
2 dividend yield, I use the forecasted dividend, and with the five-year earnings
3 growth forecasts, the DCF result provides a forward-looking estimation for the
4 cost of equity that would be more appropriate and consistent with FPFTY
5 ratemaking.

6 **DISCOUNTED CASH FLOW**

7 **Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.**

8 **A.** My analysis employs the constant growth DCF model as portrayed in the
9 following formula:
10

$$11 \quad K = D_1/P_0 + g$$

12 Where:

13 K = Cost of equity

14 D_1 = Dividend expected during the year

15 P_0 = Current price of the stock

16 g = Expected growth rate

17 When a forecast of D_1 is not available, D_0 (the current dividend) must be
18 adjusted by one half of the expected growth rate to account for changes in the
19 dividend paid in period one. As forecasts for each company in my proxy group
20 were available from Value Line, no dividends were adjusted for the purpose of my
21 analysis.

1 **Q. PLEASE EXPLAIN HOW YOU DEVELOPED THE DIVIDEND YIELDS**
2 **USED IN YOUR DCF ANALYSIS.**

3 A. A representative dividend yield must be calculated over a time frame that avoids
4 the problems of both short-term anomalies and stale data series. For my DCF
5 analysis, the dividend yield calculation places equal emphasis on the most recent
6 spot and the 52-week average dividend yields.²⁸ The following table summarizes
7 my dividend yield computations for the proxy group:

I&E Proxy Group - Average Dividend Yields	
(a) Spot Dividend Yield	3.06%
(b) 52-week Average Dividend Yield	2.86%
(c) Average $((a + b) \div 2)$	2.96%

8

9

10 **Q. WHAT INFORMATION DID YOU RELY UPON TO DETERMINE YOUR**
11 **EXPECTED GROWTH RATE?**

12 A. I have used five-year projected growth rate estimates from independent and
13 reputed analyst groups, i.e., Value Line, S&P, and Zacks.

²⁸ I&E Exhibit No. 2, Schedule 4.

1 **Q. WHAT WERE THE RESULTS OF YOUR FORECASTED EARNINGS**
2 **GROWTH RATES?**

3 A. The expected average growth rates for my water proxy group ranged from 6.10%
4 to 9.02% with an overall average of 7.12%.²⁹

5
6 **Q. WHAT IS THE RESULT OF YOUR DCF ANALYSIS BASED ON YOUR**
7 **RECOMMENDED DIVIDEND YIELD AND GROWTH RATE?**

8 A. The results of my DCF analysis are calculated as follows:³⁰

$\begin{aligned} K &= D_1/P_0 + g \\ 10.08\% &= 2.96\% + 7.12\% \end{aligned}$
--

9

10

11 **CAPITAL ASSET PRICING MODEL**

12 **Q. PLEASE EXPLAIN YOUR CAPM ANALYSIS.**

13 A. My analysis employs the traditional CAPM as portrayed in the following formula:

14
$$K = R_f + \beta (R_m - R_f)$$

15 Where:

16 K = Cost of equity

17 R_f = Risk-free rate of return

18 R_m = Expected rate of return on the overall stock market

²⁹ I&E Exhibit No. 2, Schedule 5.

³⁰ I&E Exhibit No. 2, Schedule 6.

1 β = Beta measures the systematic risk of an asset

2 $R_m - R_f$ = Equity Risk Premium (ERP)

3

4 **Q. WHAT IS BETA AS EMPLOYED IN YOUR CAPM ANALYSIS?**

5 A. Beta is a measure of the systematic risk of a stock in relation to the rest of the
6 stock market. A stock's beta is estimated by calculating the linear regression of a
7 stock's return against the return on the overall stock market. The beta of a stock
8 with a price pattern identical to that of the overall stock market will equal one. A
9 stock with a price movement that is greater than the overall stock market will have
10 a beta that is greater than one and would be described as having more investment
11 risk than the market. Conversely, a stock with a price movement that is less than
12 the overall stock market will have a beta of less than one and would be described
13 as having less investment risk than the market.

14

15 **Q. HOW DID YOU DETERMINE YOUR BETA FOR YOUR CAPM**
16 **ANALYSIS?**

17 A. In estimating an equity cost rate for my proxy group companies, I used the average
18 of the betas for the proxy group companies as provided in the Value Line
19 Investment Survey. The average beta for my proxy group is 0.75.³¹

³¹ I&E Statement No. 2, Schedule 7.

1 **Q. WHAT RISK-FREE RATE OF RETURN HAVE YOU CHOSEN FOR**
2 **YOUR FORECASTED CAPM ANALYSIS?**

3 A. I have chosen to use the risk-free rate of return (R_f) from the projected yield on 10-
4 year Treasury Notes. The yield on the short-term T-Bill is a more theoretically
5 correct parameter to represent a risk-free rate of return; however, it can be
6 extremely volatile. The volatility of short-term T-Bills is directly influenced by
7 Federal Reserve policy. On the other hand, the 30-year Treasury Bond exhibits
8 more stability but is not risk-free. Long-term Treasury Bonds have substantial
9 maturity risk associated with market risk and the risk of unexpected inflation.
10 Long-term treasuries normally offer higher yields to compensate investors for
11 these risks. As a result, I chose to use the yield on the 10-year Treasury Note
12 because it mitigates the shortcomings of the other two alternatives.

13 Additionally, the Commission has historically agreed with I&E and
14 recognized the 10-year Treasury Note as the superior measure of the risk-free rate
15 of return.³²

16 The forecasted yield on the 10-year Treasury Note, as seen in Blue Chip
17 Financial Forecasts, is expected to be 4.10% from the fourth quarter of 2025
18 through the fourth quarter of 2026, and it is forecasted to be 4.20% from 2027-

³² *Pa. PUC v. UGI Utilities, Inc. - Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). See generally *Disposition of Capital Asset Pricing Model (CAPM)*, p. 99; *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 154 (Order entered May 16, 2022); *Pa. PUC v. Columbia Water Company*; Docket No. R-2023-3040258 (Order Entered January 18, 2024). See generally *Disposition of Cost of Common Equity*, pp. 107-108; *Pa. PUC v. Pennsylvania-American Water Company*; Docket Nos. R-2023-3043189 and R-2023-3043190 (Order Entered July 22, 2024). See generally *Disposition of Capital Asset Pricing Model (CAPM)*, pp. 171-172.

1 2031.³³ For my CAPM analysis, I used 4.12%, which is the average of all the
2 yield forecasts I observed.³⁴

3
4 **Q. HOW DID YOU DETERMINE THE RETURN ON THE OVERALL**
5 **STOCK MARKET EMPLOYED IN YOUR FORECASTED CAPM**
6 **ANALYSIS?**

7 A. To arrive at a representative expected return on the overall stock market, I
8 observed Value Line's universe of stocks and the S&P 500. Value Line expects its
9 universe of approximately 1700 stocks to have an average yearly return of 12.03%
10 over the next three to five years based on a forecasted dividend yield of 2.30% and
11 a yearly index appreciation of 45%.³⁵ The S&P 500 Index has an average return
12 of 12.34% over the past 100 years (1926-2025).³⁶ I have averaged these two
13 figures, which results in an estimated market return of 12.19%.³⁷

14
15 **Q. WHAT IS THE COST OF EQUITY RESULT FROM YOUR CAPM**
16 **ANALYSIS?**

17 A. The result of my analysis is as follows:³⁸

³³ Blue Chip Financial Forecasts, Vol. 44, No. 12, December 1, 2025, pp. 2 and 14.

³⁴ I&E Exhibit No. 2, Schedule 8.

³⁵ I&E Exhibit No. 2, Schedule 9.

³⁶ I&E Exhibit No. 2, Schedule 10.

³⁷ I&E Exhibit No. 2, Schedule 9.

³⁸ I&E Exhibit No. 2, Schedule 11.

$$\begin{array}{rccccccc} K & = & R_f & + & \beta(R_m - R_f) \\ 10.17\% & = & 4.12\% & + & 0.75 (12.19\% - 4.12\%) \end{array}$$

1

2

3 **Q. HAVE YOU PROVIDED AN ADDITIONAL CAPM ANALYSIS?**

4 A. Yes. I have provided an additional CAPM analysis using Kroll's (formerly Duff &
5 Phelps) recommended U.S. Equity Risk Premium (ERP) paired with the 20-year
6 U.S. Treasury yield. Kroll is a trusted and publicly available source that bases its
7 recommended ERP on current and forecasted economic and financial market
8 conditions.

9

10 **Q. WHAT IS KROLL'S CURRENT RECOMMENDED ERP?**

11 A. As of April 15, 2025, Kroll recommends an ERP of 5.50%.³⁹

12

13 **Q. WHAT IS THE CURRENT 20-YEAR U.S. TREASURY YIELD?**

14 A. As of December 1, 2025, the 20-Year U.S. Treasury yield was 4.72%.⁴⁰

15

³⁹ [Kroll Cost of Capital Inputs Updated to Reflect Heightened Uncertainty in Global Economy](#) (accessed on December 1, 2025).

⁴⁰ I&E Exhibit No. 2, Schedule 11.

1 **Q. WHAT IS THE COST OF EQUITY RESULT FROM YOUR CAPM**
2 **ANALYSIS USING KROLL’S RECOMMENDED ERP AND THE 20-YEAR**
3 **U.S. TREASURY YIELD?**

4 A. The result of my analysis using Kroll’s recommended ERP and the 20-Year U.S.
5 Treasury yield as risk-free rate are as follows:⁴¹

K	=	Rf	+	β(ERP)
8.85%	=	4.72%	+	0.75 (5.50%)

6
7
8
9

10 **Q. WHAT IS THE RESULT OF YOUR CAPM ANALYSIS BASED ON THE**
11 **AVERAGE OF USING A FORECASTED OVERALL MARKET RETURN**
12 **AND USING KROLL’S RECOMMENDED ERP?**

13 A. The average of my CAPM analyses is 9.51% ((10.17% + 8.85%) ÷ 2).⁴²

14 **Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING YOUR**
15 **CAPM ANALYSIS?**

16 A. Yes. As discussed earlier in my testimony, and as I&E has historically reasoned,
17 my recommended cost of equity is based upon my DCF analysis. My CAPM
18 analysis is only presented to the Commission as a comparison and not for
19 recommendation purposes as the inputs are highly subjective, and other than beta,
20 not company or industry specific.

⁴¹ I&E Exhibit No. 2, Schedule 11.

⁴² I&E Exhibit No. 2, Schedule 11.

1 **Q. IS IT NECESSARY OR APPROPRIATE TO APPLY THE CAPM WITH**
2 **SIMILAR WEIGHT TO THE DCF WHEN DETERMINING A SPECIFIC**
3 **RETURN ON EQUITY DUE TO RECENT INFLATIONARY TRENDS?**

4 A. No. My use of the DCF as a primary method in determining an appropriate return
5 on equity sufficiently takes inflationary trends into consideration. As mentioned
6 above, the DCF includes a spot stock price in the dividend yield calculation and
7 analysts who generate forecasted earnings growth almost certainly take inflation
8 into consideration as well, so it contains the most up-to-date projected information
9 of any model. In other words, the input of the DCF captures all known economic
10 factors, including inflation.

11
12 **Q. WHAT WOULD YOUR COST OF EQUITY RECOMMENDATION BE IF**
13 **THE COMMISSION DECIDES TO AVERAGE THE DCF AND**
14 **COMPOSITE CAPM ANALYSES RESULTS AS MOST RECENTLY**
15 **APPROVED IN THE 2025 COLUMBIA GAS RATE CASE?⁴³**

16 A. This would result in a cost of equity recommendation of 9.80% ((10.08% DCF +
17 9.51% Composite CAPM) ÷ 2 = 9.80%) before the tax adjustment for the Water
18 Fund. Notably, in the 2025 Columbia rate case, the Commission determined an
19 appropriate ROE using informed judgment based on I&E's DCF and CAPM
20 methodologies.⁴⁴

⁴³ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). See generally Rate of Return on Common Equity - Disposition, p. 234.

⁴⁴ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). See generally Rate of Return on Common Equity - Disposition, p. 226.

1 **Q. IN THAT SITUATION, WHAT WOULD THE COST OF EQUITY**
 2 **RECOMMENDATION BE AFTER THE IMPLIED INCOME TAX RATE**
 3 **ADJUSTMENT?**

4 A. As discussed below, in this situation, the cost of common equity should be
 5 adjusted by an implied income tax rate of 22.00%. This adjustment would reduce
 6 the cost of common equity from 9.80% to 7.64% ($9.80\% \times (1 - 22.00\%) =$
 7 7.64%)).

8
 9 **Q. BASED ON THE WATER FUND’S RATE BASE AND CAPITAL**
 10 **STRUCTURE CLAIMS, WHAT WOULD BE THE VALUE OR RATE**
 11 **IMPACT DUE TO DIFFERENCE IN THE TAX ADJUSTED ROE OF**
 12 **7.64% AND THE WATER FUND’S CLAIMED TAX ADJUSTED ROE OF**
 13 **9.48%?**

14 A. The example below illustrates the impact of an additional 1.84% ($9.48\% - 7.64\%$)
 15 tax adjusted ROE if the Commission would decide to average the DCF and
 16 composite CAPM results in the cost of equity when applied to the Water Fund’s
 17 total claimed rate base and capital structure:

Water Fund’s Claimed Hypothetical Common Equity Percentage of Capital Structure*	53.00%
Additional Cost of Equity	1.84%
Claimed Rate Base*	\$190,353,958
Impact to Ratepayers ($0.53 \times 0.0184 \times \$190,353,958$)	\$1,856,332

18 * City Exhibit GRH-1, Schedule 1, p. 3.

1 In this example, the 1.84% addition in the cost of equity would burden ratepayers
2 to fund an additional amount of \$1,856,332 annually to cover the increase of the
3 inflated rate of return, which is 26.50% of the Water Fund’s total revenue increase
4 request of \$7,005,217.⁴⁵

5
6 **IMPLIED TAX RATE ADJUSTMENT**

7 **Q. WHAT IS THE IMPLIED TAX RATE ADJUSTMENT?**

8 A. The implied tax rate adjustment recognizes that interest paid to municipal
9 bondholders is exempt from taxation while interest paid to corporate bondholders
10 is not exempt. Accordingly, a municipal bondholder requires less interest from
11 their bond to receive the same yield as that of a corporate bondholder. Therefore,
12 an adjustment is made to the cost of common equity based on the idea that an
13 investor would accept a lower return on a municipal bond due to the tax
14 exemption. Since neither Mr. Walker’s nor my proxy group contain any tax-
15 exempt municipalities, the calculated cost of equity for the proxy group is higher
16 to achieve the same yield as the City. Therefore, the proxy group’s cost of
17 common equity cannot be compared to the City without a downward tax
18 adjustment.

⁴⁵ City Exhibit Schedule 3, p. 1.

1 **Q. WHAT INCOME TAX RATE DID MR. WALKER APPLY TO HIS**
2 **RECOMMENDED ROE OF 10.90% FOR THIS PROCEEDING?**

3 A. Mr. Walker has chosen an implied income tax rate of 13.00%.⁴⁶ This tax
4 adjustment reduces his ROE recommendation from 10.90% to 9.48%.⁴⁷

5
6 **Q. WHAT IS THE BASIS FOR MR. WALKER'S IMPLIED INCOME TAX**
7 **RATE ADJUSTMENT?**

8 A. Mr. Walker compares bond yield average differences for Moody's A-Rated
9 Pennsylvania Municipal Utility Revenue Bonds and Pennsylvania Municipal
10 General Obligation Bonds with Corporate (Public) Utility Bonds using the E-
11 Trade bond resource center screener for the most recent period available at the
12 time of his analysis (August 2025) to come up with his tax adjustment.⁴⁸

13
14 **Q. WHAT IS YOUR RECOMMENDATION FOR THE IMPLIED INCOME**
15 **TAX RATE ADJUSTMENT?**

16 A. I recommend that the cost of common equity be adjusted by an income tax rate of
17 22.00%. This adjustment reduces my common equity recommendation from
18 10.08% to 7.86% [$10.08\% \times (1 - 22.00\%) = 7.86\%$].

⁴⁶ City Exhibit HW-1, Schedule 20.

⁴⁷ City Exhibit HW-1, Schedule 21.

⁴⁸ City Statement No. 6, p. 62, line 9 through p. 63, line 10 and City Exhibit HW-1, Schedule 20.

1 **Q. WHAT IS THE BASIS FOR YOUR ADJUSTMENT?**

2 A. I have compared Moody's A-Rated monthly Municipal Bond Yields to Moody's
3 A-Rated monthly Public Utility Bond Yields for the twelve-month period
4 November 2024 to October 2025. The implied tax rate for this period ranges
5 between 18.21% to 27.43%, with an average of 22.00%.⁴⁹

6
7 **Q. EXPLAIN THE DIFFERENCE BETWEEN MR. WALKER'S AND YOUR**
8 **RECOMMENDED TAX RATE ADJUSTMENT ANALYSES.**

9 A. I have employed Moody's A-Rated bond yield for my analysis, similar to Mr.
10 Walker's using A-Rated bonds. I compared the average bond yield difference
11 between Municipal bonds and Public Utility bonds for the twelve-month period
12 (November 2024 - October 2025) using the latest available Mergent Bond Record
13 (November 2025) data and calculated an implied tax rate of 22.00%.⁵⁰ The
14 differing results of our analyses for the implied tax rate are due to the timing and
15 sources of data used for Municipal Bonds and Public Utility Bonds..

16
17 **Q. PLEASE EXPLAIN WHY YOU HAVE EMPLOYED A-RATED BONDS IN**
18 **YOUR IMPLIED TAX ADJUSTMENT.**

19 A. I have employed A-Rated bonds because Moody's only offers three different
20 ratings categories (Aa, A, and Baa) for Public Utility Bonds. I believe it is

⁴⁹ I&E Exhibit No. 2, Schedule 12.

⁵⁰ I&E Exhibit No. 2, Schedule 12.

1 appropriate and logical to use the middle rating to avoid any bias. Additionally, in
2 this proceeding, the A rating matches the City’s “A3” rating, which is discussed
3 below.

4
5 **Q. EXPLAIN ANY CONCERNS YOU HAVE ABOUT MR. WALKER’S**
6 **IMPLIED TAX ADJUSTMENT CALCULATION.**

7 A. Mr. Walker states that the average bond/credit rating for his Comparable Proxy
8 Group has an “A” credit profile. The City is the sole provider of debt financing to
9 the Water Fund in the form of General Obligation (GO) bonds, and therefore, the
10 Water Fund does not have bonds rated. Currently, the City’s GO bonds have
11 Moody’s “A3” rating.⁵¹ Contrarily, he opines that there is a 92% chance that the
12 Water Fund’s credit profile would be below an “A” rating based on its small size
13 if it were a corporation.⁵² Since the City does not issue its own debt and we know
14 the official rating of the debt obligations, Mr. Walker’s speculation is
15 inappropriate and unnecessary.

⁵¹ City Statement No. 6, p. 24, lines 11-14.

⁵² City Statement No. 6, p. 27, lines 17-20.

1 **CRITIQUE OF MR. WALKER'S PROPOSED COST OF EQUITY**

2 **Q. DO YOU AGREE WITH MR. WALKER'S PROPOSED COST OF**
3 **EQUITY?**

4 A. No. I disagree with Mr. Walker's proposed cost of equity analysis for several
5 reasons. First, I disagree with the weights given to the results of Mr. Walker's
6 CAPM including the proposed size adjustment and the RP analyses in his
7 recommendation. Second, I disagree with his reliance on the 30-year Treasury
8 Bond for the risk-free rate used in his CAPM analysis. Third, I disagree with
9 applying a financial risk leverage adjustment of 0.60% to account for the
10 difference between the market value derived cost rates and book value cost rates
11 due to the difference in the Market to Book (M/B) Capitalization Ratio to his
12 market determined DCF, CAPM, and RP analysis results. The following table
13 summarizes Mr. Walker's ROE results relative to his proxy group:⁵³

	Analysis Results	Financial Risk Leverage Adjustment	Adjusted Results
DCF	9.30%	0.60%	9.90%
CAPM	11.60%	0.60%	12.20%
RP	10.60%	0.60%	11.20%
Claimed ROE based on the adjusted results before tax adjustment: 10.90%			

14

⁵³ City Statement No. 6, p. 61, lines 18-24 and p. 62, lines 1-4 and Exhibit HW-1, Schedule 19.

1 Finally, I disagree with Mr. Walker's ROE of 9.48% after applying an implied
2 income tax (13% rate) adjustment discussed above.

3
4 **WEIGHTS GIVEN TO THE CAPM AND RP METHODS**

5 **Q. DO YOU AGREE WITH MR. WALKER'S RELIANCE ON THE CAPM**
6 **AND RP MODELS?**

7 A. No. I am not opposed to providing the Commission the results of the CAPM for a
8 point of comparison to the results of the DCF calculation, however, I am opposed
9 to giving the CAPM and RP considerable weight. For the reasons discussed
10 above, including my reference to the Commission's orders, it is not appropriate to
11 give the CAPM and RP models similar weight to the DCF as Mr. Walker has done
12 in creating his recommended cost of equity of 10.90%.⁵⁴ As discussed above, the
13 CAPM measures the cost of equity indirectly and the inputs used are highly
14 subjective and easily manipulated. Since the RP is a simplified version of the
15 CAPM, it suffers these same flaws. In effect, Mr. Walker blends the RP approach
16 with the CAPM model to calculate the estimated market premium for the CAPM
17 and projected risk premium for the RP method using the Value Line, S&P Public
18 Utilities, and S&P 500 market return data.⁵⁵

19 In response to I&E-RR-19-D, Mr. Walker states that he has not conducted
20 an exhaustive study of all Commission orders where the Commission specifically

⁵⁴ City Statement No. 6, p. 61, lines 13-16 and Exhibit HW-1, Schedule 19.

⁵⁵ City Exhibit HW-1, Schedules 17 and 18.

1 relied upon an RP analysis to determine an appropriate cost of equity in a base rate
2 proceeding.⁵⁶ To my knowledge, the Commission did not specifically rely on or
3 recognize RP results in determining an appropriate cost of equity in a base rate
4 proceeding during the last ten years.

5
6 **Q. DO YOU AGREE WITH MR. WALKER'S CAPM AND RP ANALYSIS**
7 **RESULTS?**

8 A. No. As discussed above, I disagree with Mr. Walker's reliance on CAPM results
9 of 11.60%, which includes size adjustment of 0.60% and 12.20% (11.60% +
10 0.60%) including M/B ratio leverage adjustment of 0.60%.⁵⁷ Similarly, I also
11 disagree with the RP result of 11.20% (10.60% + 0.60%), which includes an M/B
12 ratio leverage adjustment of 0.60%.⁵⁸ Mr. Walker used the CAPM and RP results
13 with the DCF results of 9.90% in recommending a 10.90% ROE for the Water
14 Fund. I discuss the size adjustment to the CAPM, and the M/B ratio leverage
15 adjustment applied in the cost of equity analysis (DCF, CAPM, and RP) results in
16 subsequent sections below.

⁵⁶ I&E Exhibit No. 2, Schedule 13.

⁵⁷ City Exhibit HW-1, Schedule 17, p. 1 and Schedule 19.

⁵⁸ City Exhibit HW-1, Schedule 18, p. 1 and Schedule 19.

1 **SIZE ADJUSTMENT**

2 **Q. HOW DOES MR. WALKER PROPOSE SIZE AS A DETERMINANT OF**
3 **BUSINESS RISK?**

4 A. First, Mr. Walker states that the size difference between the Water Fund and his
5 Water Group companies is an indicator of business risk. Therefore, he opines that
6 a smaller company requires employment of proportionately less financial leverage
7 (i.e., debt and preferred capital) than a larger company to balance out investment
8 risk and if the investment risk is not balanced out, then a higher cost of capital is
9 required.⁵⁹ Second, he states that the loss of a large customer will impact a small
10 company much more than a large company because a large customer of a small
11 company usually accounts for a larger percentage of the small company's sales.⁶⁰
12 Thus, he concludes that a larger company with a more diverse customer base is
13 less susceptible to downturns associated with regional economic conditions than a
14 small company.⁶¹ Third, he discusses the impacts of diverse geographic
15 operations of large companies, the number of customers, and how the size of a
16 company can be a barrier to fluid access to capital markets and liquidity.⁶² Mr.
17 Walker also claims that S&P recognizes the importance that diversification and
18 size play in credit ratings.⁶³ Ultimately, he includes a 60 basis point size

⁵⁹ City Statement No. 6, p. 19, lines 12-19.

⁶⁰ City Statement No. 6, p. 20, lines 3-6.

⁶¹ City Statement No. 6, p. 20, lines 12-14.

⁶² City Statement No. 6, p. 21, lines 6-7.

⁶³ City Statement 6, p. 21, lines 1-5.

1 adjustment in his CAPM result of 11.20% to account for the Water Fund's small
2 size.⁶⁴

3
4 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER'S SMALL SIZE RISK**
5 **ANALYSIS?**

6 A. First, Mr. Walker's claim regarding the need for a higher equity capitalization
7 ratio (lesser financial leverage) to balance out investment risk is unsupported. It is
8 important to note that the Water Fund's claimed equity ratio of 53% is already
9 higher than the average equity capitalization ratio of my proxy group that would
10 provide the Water Fund a higher overall rate of return.⁶⁵ Second, the opinion that
11 the loss of a large customer would impact a small company much more than a
12 large company is unsupported because there is no evidence that the Water Fund
13 has lost a large (commercial or industrial) customer since 2023 and there is no
14 indication of any anticipated loss of a large customer in 2026 and the FPFTY⁶⁶ to
15 demonstrate a material impact on financial results. Third, as discussed in the Risk
16 Analysis section below, Mr. Walker acknowledges that on an overall basis the
17 Water Fund has similar investment risk as the Water Group. Considering all these
18 facts, Mr. Walker's claim for the Water Fund's smaller size risk concern is invalid
19 and unsupported.

⁶⁴ City Exhibit HW-1, Schedule 17, p. 1 and p. 4.

⁶⁵ I&E Exhibit No. 2, Schedule 2.

⁶⁶ I&E Exhibit No. 2, Schedule 14, p. 1 and City Filing Exhibit D II-9 (pdf p. 487-488).

1 Finally, in response to I&E-RR-18-D, Mr. Walker acknowledges that he
2 has not conducted an exhaustive study of all Commission orders where the
3 Commission has approved a small size premium adjustment in the CAPM analysis
4 to recognize a small size impact.⁶⁷ To my knowledge, the Commission did not
5 *specifically quantified* and approved a size adjustment in the CAPM analysis in a
6 base rate proceeding during the last ten years.

7
8 **Q. DO YOU HAVE ANY COMMENTS REGARDING THE S&P QUOTE**
9 **RELIED ON BY MR. WALKER?**

10 A. Yes. Mr. Walker is relying on Corporate Ratings Criteria in an attempt to show
11 size is a factor. However, as I discuss below, this is not a factor applicable to
12 utilities. Furthermore, as stated in paragraph 21 of S&P's *Key Credit Factors for*
13 *the Regulated Utilities Industry*,

14 The regulatory framework/regime's influence is of critical
15 importance when assessing regulated utilities' credit risk
16 because it defines the environment in which a utility operates
17 and has a significant bearing on a utility's financial
18 performance.⁶⁸

19 Additionally, an excerpt from the S&P 2008 Corporate Credit Rating
20 Criteria states,

21 It is relative-not absolute-size that is crucial in determining
22 market position, extent of diversification, and financial
23 flexibility. Small companies also can enjoy the competitive
24 advantages that accompany a dominant market position...In

⁶⁷ I&E Exhibit No. 2, Schedule 14, p. 2.

⁶⁸ Standard & Poor's RatingsDirect, *Key Credit Factors for the Regulated Utilities Industry*, S&P Global Market Intelligence, p. 4. November 19, 2013.

1 this sense, sheer mass is not important; demonstrable market
2 advantage is.⁶⁹
3

4 **Q. DO YOU HAVE ANY COMMENTS REGARDING MR. WALKER’S**
5 **RELIANCE ON OTHER FINANCIAL LITERATURE?**

6 A. Yes. While there is technical literature supporting adjustments relating to the size
7 of a company, this literature is not specific to the utility industry, or in this case,
8 municipal utilities. Simply put, the argument he relies upon does not translate to
9 the Water Fund.

10
11 **Q. IS THERE ANY ACADEMIC LITERATURE THAT SUPPORTS YOUR**
12 **STATEMENT THAT ANY BUSINESS RISK ADJUSTMENT FOR SIZE**
13 **DOES NOT APPLY TO UTILITY COMPANIES?**

14 A. Yes. In the article “Utility Stocks and the Size Effect: An Empirical Analysis,”
15 Dr. Annie Wong concludes,

16 The objective of this study is to examine if the size effect exists
17 in the utility industry. After controlling for equity values, there
18 is some weak evidence that firm size is a missing factor from
19 the CAPM for the industrial but not for utility stocks. This
20 implies that although the size phenomenon has been strongly
21 documented for the industrials, the findings suggest that there
22 is no need to adjust for the firm size in utility rate regulation.⁷⁰

⁶⁹ Standard & Poor’s RatingsDirect, *2008 Corporate Criteria: Analytical Methodology*, pp. 16-17. April 15, 2008.

⁷⁰ Dr. Annie Wong, “Utility Stocks and the Size Effect: An Empirical Analysis,” *Journal of Midwest Finance Association* (1993), pp. 95-101.

1 While this article is older, its assertion is still valid. Mr. Walker presents no
2 evidence to support application of a size adjustment for risk to a utility setting.
3 Absent any credible up-to-date support to refute Dr. Wong's findings, Mr.
4 Walker's size adjustment to his CAPM results should be rejected. The size
5 premium data based on market capitalization is not reliable because, for certain
6 periods, large-capitalization stocks outperform mid-capitalization stocks and vice
7 versa, and it is difficult to establish a sufficient correlation to prove that size is a
8 specific risk for utilities.

9 Additionally, and more importantly, the Commission has recently rejected
10 the application of a size adjustment to the CAPM cost of equity calculation where
11 it agreed that the cited literature is not specific to the utility industry.⁷¹
12

13 **Q. DO YOU AGREE WITH MR. WALKER'S SMALL SIZE RISK**
14 **ADJUSTMENT OF 0.60% REFLECTED IN THE CAPM RESULTS?**

15 A. No. I disagree with Mr. Walker's inappropriate and unwarranted adder for the
16 size risk adjustment of 0.60% for the Water Fund's small size in the CAPM
17 analysis result of 11.60%⁷² for the reasons discussed above.

⁷¹ *Pa. PUC v. UGI Utilities, Inc. - Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018).
See generally Disposition of Capital Asset Pricing Model (CAPM), p. 100.

⁷² City Exhibit HW-1, Schedule 17, p. 1.

1 **MARKET TO BOOK RATIO - LEVERAGE ADJUSTMENT**

2 **Q. WHAT IS FINANCIAL LEVERAGE?**

3 A. Financial leverage is the use of debt capital to supplement equity capital as a
4 source of funding. A firm with significantly more debt than equity is considered
5 to be highly leveraged.

6
7 **Q. WHAT IS A MARKET-TO-BOOK RATIO (M/B RATIO)?**

8 A. A M/B ratio is used to evaluate a public firm's equity value by comparing the
9 market value and book value of a company's equity. One way of doing this is to
10 divide the current market price per share of stock by the book value per share.
11 Briefly, M/B ratio is a comparison of a company's book or accounting value to its
12 market value as determined by the stock market through the company's market
13 capitalization.

14
15 **Q. WHAT DOES MR. WALKER CLAIM REGARDING THE IMPACT OF**
16 **THE M/B RATIO IN THIS PROCEEDING?**

17 A. Mr. Walker recommends that less weight be given to the DCF cost rate due to the
18 current market capitalization ratios and the impact that the M/B ratio has on the
19 DCF results.⁷³ He asserts that the traditional DCF derived cost rate for common
20 equity will continuously understate or overstate investors' return requirements as

⁷³ City Statement No. 6, p. 43, lines 7-9.

1 long as stock prices continually sell above book value ($M/B > 1$) or below book
2 value ($M/B < 1$).⁷⁴ He argues that since the Comparable Water Group's current
3 M/B value average is 197% (M/B ratio of 1.97 or $M/B > 1$), the DCF understates
4 the common equity cost rate because a DCF-derived market cost rate is applied to
5 a book value rate base while investors' returns are measured relative to the stock
6 price level or stock market value.⁷⁵ Therefore, he recommends that less weight be
7 given to the market value DCF cost rate unless the increased financial risk,
8 resulting from applying a market value cost rate to a book value capitalization, is
9 accounted for.⁷⁶

10
11 **Q. WHAT METHOD DOES MR. WALKER USE TO CALCULATE HIS**
12 **FINANCIAL RISK ADJUSTMENT FOR THE M/B RATIO DIFFERENCE?**

13 A. Mr. Walker uses two Hamada models, including the original Hamada formula and
14 its variant Harris-Pringle formula to account for the 14.8% change in the common
15 equity ratio that results from the difference in market value capitalization and book
16 value capitalization.⁷⁷

17 He then states that, hypothetically, if the Comparable Group's debt were
18 rated based on market value debt ratios, they would command an "Aaa" rating.

19 The Comparison Group currently has bonds rated "A" based upon their book value

⁷⁴ City Statement No. 6, p. 43, lines 15-18.

⁷⁵ City Statement No. 6, p. 46, lines 12-14 and 15-18.

⁷⁶ City Statement No. 6, p. 46, lines 18-21.

⁷⁷ City Statement No. 6, p. 49, lines 14-18 and Exhibit HW-1, Schedule 16, pp. 1-2.

1 debt ratios. The yield spread on a bond rated “Aaa” versus “A” rated bonds
2 averages about 45 basis points or 0.45% as shown in his Schedule 16, p. 3.⁷⁸

3
4 **Q. WHAT DOES MR. WALKER RECOMMEND FOR A FINANCIAL RISK**
5 **ADJUSTMENT TO HIS DCF, CAPM, AND RP RESULTS TO ACCOUNT**
6 **FOR THE IMPACT OF AN M/B RATIO ABOVE 1.0?**

7 A. Based on the application of the Hamada formula (0.77%) and Harris-Pringle
8 formula’s (0.66) end results average of 0.72% and the bond yield spread of 0.45%,
9 Mr. Walker recommends that the Water Group’s common equity cost rates should
10 be adjusted for the financial risk leverage upward by at least 0.60% $[(0.72\% +$
11 $0.45\%) \div 2]$ to account for the difference in the M/B ratio.⁷⁹

12 Accordingly, he adjusts his Water Group’s market cost of equity analysis
13 results as follows: (a) DCF results of 9.30% to 9.90% $(9.30\% + 0.60\%)$; (b)
14 CAPM results of 11.60% to 12.20% $(11.60\% + 0.60\%)$; and (c) RP results of
15 10.60% to 11.20% $(10.60\% + 0.60\%)$.⁸⁰

⁷⁸ City Statement No. 6, p. 51, line 26 and p. 52, lines 1-2.

⁷⁹ City Statement No. 6, p. 52, lines 3-6.

⁸⁰ City Exhibit HW-1, Schedule 19.

1 **Q. DOES AN M/B RATIO ABOVE ONE (>1.0) CAUSE THE COST OF**
2 **EQUITY RESULTS TO INCORRECTLY ESTIMATE THE INVESTOR-**
3 **REQUIRED RETURN ON EQUITY?**

4 A. No. Although there are differences between the book value and market value
5 capitalizations of water utilities, there is no need to consider any leverage
6 adjustments or adders to the *market determined* DCF, CAPM, and RP results in
7 this proceeding for the reasons discussed below.

8 First, the forecasted growth rates used in the DCF analysis are set by
9 analysts based on the companies' operating and financial performance and
10 economic conditions as well as what they expect the future could be for the stock.

11 Second, Mr. Walker points out that historically (for the last 26 years) the
12 M/B ratios for the S&P 500 stocks have ranged from 206% to 470%⁸¹ and S&P
13 500 stocks have generally sold at a higher multiple of book value than utility
14 stocks, however, both have tracked in similar directions.⁸² Considering this
15 statement, if the M/B ratio difference of a utility company is recognized or
16 evaluated for an investment decision, no rational investor would invest in a utility
17 stock that has been trading above book value for several years knowing that the
18 utility's market determined equity return rate is applied to the book value capital
19 structure ratio.

⁸¹ City Statement No. 6, p. 45, lines 19-20.

⁸² City Statement No. 6, p. 46, lines 1-2.

1 Third, in traditional ratemaking, utilities' rates are set by applying the
2 market determined cost of capital to the book value capital structure without any
3 adjustments.

4 Fourth, financial research analysts (who project the utility's growth rate)
5 and credit rating agencies consider this factor (M/B ratio impact) when performing
6 their financial analyses and projections.

7 Fifth, an M/B ratio of above 1.0 for utility stocks reflects their value in the
8 market and implies that investors expect future cash flows to be more valuable
9 than the historical accounting value of the company. Since the stock market is
10 impacted by several factors such as geo-political risks, regulatory policies, and
11 economic and financial market conditions, an M/B ratio could be less than 1.0
12 when the stock market is in a depression or when the company is experiencing
13 financial under-performance.

14 Finally, I reiterate that it is inappropriate to evaluate the market determined
15 cost of equity results with the utility's M/B ratio and apply a financial risk
16 leverage adjustment as an adder to inflate the market determined DCF, CAPM,
17 and RP results, which impacts the rates of ratepayers.

1 **Q. DO YOU HAVE ANY OTHER REASONS TO SUPPORT REJECTION OF**
2 **A FINANCIAL RISK ADJUSTMENT FOR THE M/B RATIO?**

3 A. Yes. First, Mr. Walker acknowledges that though it is possible to know the
4 direction of a financial risk adjustment on common equity cost rate, a specific
5 quantification of financial risk differences is very difficult. Further he states that
6 although the end result of a financial risk adjustment is very subjective and
7 specific quantification is very difficult, the direction of the adjustment is clearly
8 known.⁸³ Therefore, he relies on the general direction of a financial risk
9 adjustment to the common equity cost rate. Second, in response to I&E-RR-16-D,
10 Mr. Walker acknowledges that he has not conducted an exhaustive study of all
11 Commission orders that specifically relied on the impact that the M/B ratio has on
12 the DCF results and gave less weight to the DCF results in recommending an ROE
13 for any utilities for this specific reason in the last ten years.⁸⁴ Additionally, in
14 response to I&E-RR-17-D he acknowledges that he has not conducted an
15 exhaustive study of all Commission orders where the Commission has specifically
16 awarded a financial risk leverage adjustment to the DCF results or in the ROE to
17 recognize a difference in the M/B ratio impact in the last ten years.⁸⁵ Lastly, in
18 response to I&E-RR-18-D, Mr. Walker acknowledges that he has not conducted
19 an exhaustive study of all Commission orders that specifically approved a

⁸³ City Statement No. 6, p. 51, lines 20-24.

⁸⁴ I&E Exhibit No. 2, Schedule 15, p. 1.

⁸⁵ I&E Exhibit No. 2, Schedule 15, p. 2.

1 financial risk leverage adjustment to the CAPM results or to the ROE to recognize
2 an M/B ratio impact.⁸⁶

3
4 **Q. PLEASE EXPLAIN HOW RATING AGENCIES ASSESS FINANCIAL**
5 **RISK.**

6 A. Rating agencies assess financial risk based on a company's booked debt
7 obligations and the ability of its cash flow to cover the interest payments on those
8 obligations. The rating agencies use a company's financial statements for their
9 analysis, not market capital structure. The income statement reflects the financial
10 risk of a company because it represents the performance of the company over a
11 certain period. A change in the market value of the stock is not reflected in the
12 income statement nor is a change in market value capital structure reflected in the
13 book value capital structure unless treasury stock is purchased. It is a company's
14 financial statement that affects the market value of the stock, and therefore, the
15 financial statements and the book value capital structure are relied upon in an
16 analysis like what is done by rating agencies. Additionally, investors are aware of
17 the difference in the return on book value and market value of a stock while
18 making their prudent investment decisions.

⁸⁶ I&E Exhibit No. 2, Schedule 15, p. 3.

1 **Q. DO YOU HAVE ANY FURTHER COMMENTS REGARDING THE**
2 **CLAIMED LEVERAGE ADJUSTMENT?**

3 A. Yes. Yahoo! Finance (as an example) publishes the book value of debt and equity,
4 and the Value Line Investment Survey publishes book value capital structure
5 percentages (not the market value capital structure) for utilities, which
6 demonstrates that investors are aware of and have access to the book values of the
7 utilities. In addition, the concept of M/B ratios is widely known, and as such, it
8 can be assumed that investors will be aware of the difference between the book
9 and market value of a company. The efficient market hypothesis dictates that the
10 price of a security fully reflects available information and so the difference
11 between the market value and the book value is already reflected in the price, and
12 therefore, no risk adjustment is needed. Mr. Walker's financial risk adjustment
13 assumes that the difference between market and book values is not reflected in the
14 price of a stock and that investors rely on market value capital structures for
15 investment decisions. The availability of book value capital structures and M/B
16 ratios demonstrates that Mr. Walker's assumptions are not valid.

17
18 **Q. WHAT ARE THE MOST RECENT COMMISSION DECISIONS**
19 **REGARDING FIANCIAL RISK LEVERAGE ADJUSTMENTS?**

20 A. The following cases are the most recent instances where the Commission has
21 addressed the topic of a "leverage adjustment" in determining the cost of equity.
22 In these cases, this adjustment has been consistently rejected.

1 First, in *Pennsylvania Public Utility Commission v. Aqua Pennsylvania,*
2 *Inc.*, at Docket No. R-00072711 (Order Entered July 31, 2008), pp. 38-39, the
3 Commission rejected the ALJ’s recommendation for a leverage adjustment stating,
4 “[t]he fact that we have granted leverage adjustments in the past does not mean
5 that such adjustments are indicated in all cases.” In this case, the Commission
6 determined that there was no viable support for an upwards adjustment to
7 compensate for any perceived risk.

8 Second, in *Pennsylvania Public Utility Commission, et al v. City of*
9 *Lancaster – Bureau of Water*, at Docket No. R-2010-2179103 (Order Entered
10 July 14, 2011), p. 101, the Commission agreed with the I&E position and stated,
11 “any adjustment to the results of the market based DCF are unnecessary and will
12 harm ratepayers. Consistent with our determination in *Aqua 2008* there is no need
13 to add a leverage adjustment. . .”

14 Third, in *Pennsylvania Public Utility Commission, et al v. UGI Utilities,*
15 *Inc. – Electric Division*, at Docket No. R-2017-2640058 (Order Entered
16 October 25, 2018), pp. 93-94, the Commission agreed with the I&E position and
17 stated, “we conclude that an artificial adjustment in this proceeding is unnecessary
18 and contrary to the public interest. Accordingly, we decline to include a leverage
19 adjustment in our calculation of the DCF cost of equity.”

20 Fourth, in *Pennsylvania Public Utility Commission, et. al v. Columbia Gas*
21 *of Pennsylvania, Inc.*, at Docket R-2020-3018835 (Order Entered February 19,
22 2021), pp. 137-141, the Commission adopted the ALJ’s recommendation to use

1 I&E’s DCF methodology, which excluded Columbia’s application of a leverage
2 adjustment.

3 Fifth, in *Pennsylvania Public Utility Commission, et. al v. PECO Energy*
4 *Company – Gas Division*, at Docket R-2020-3018929 (Order Entered June 22,
5 2021, Public Version), pp. 172-173, the Commission adopted the ALJ’s
6 recommendation to use I&E’s DCF methodology, which excluded PECO’s
7 application of a leverage adjustment.

8 Finally, in the most recent case of *Pennsylvania Public Utility Commission,*
9 *et. al v. Aqua Pennsylvania, Inc.*, at Docket No. R-2021-3027385 (Order Entered
10 June 22, 2021), pp. 154-155, the Commission adopted the ALJ’s recommendation
11 to use I&E’s DCF methodology, which excluded Aqua’s application of a leverage
12 adjustment.

13
14 **Q. BASED ON THE COMPANY’S CLAIMED RATE BASE AND CAPITAL**
15 **STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 60 BASIS**
16 **POINTS (0.60%) TO THE COST OF EQUITY BASED ON A FINANCIAL**
17 **RISK LEVERAGE ADJUSTMENT FOR THE DIFFERENCE IN THE M/B**
18 **RATIO?**

19 A. The example below illustrates the impact of 60 additional basis points to the Water
20 Fund’s cost of equity if applied to the Water Fund’s FPFTY claimed rate base and
21 capital structure:

Water Fund Claimed Equity Percentage of Capital Structure	53.00%
M/B Ratio Financial Risk Leverage Adjustment/Adder in the Cost of Equity	0.60%
Claimed Rate Base *	\$190,353,958
Revenue Impact (0.53 x 0.0060 x \$190,353,958)	\$605,326

* City filing Schedule 1, p. 3.

In this example, an addition of 60 basis points (0.60%) to the cost of equity would burden ratepayers to fund an additional \$605,326 to cover the increased portion of the inflated rate of return.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION REGARDING THE FINACIAL RISK LEVERAGE ADJUSTMENT.

A. I recommend that the Commission reject the 60 basis point leverage adjustment to the cost of equity because it is invalid for the following reasons: (1) Commission precedent does not support its use in a base rate case; (2) true financial risk is a function of the amount of interest expense and capital structure information provided to investors through Value Line is that of book value, not market value; (3) information on the differences between the market and book value of a utility are known and are already reflected in the stock price; and (4) investors are aware that the market values of companies are above the book values yet they invest in the companies. Therefore, there is no need for an adjustment to account for a difference in M/B ratio whether it is greater or less than 1.00. Mr. Walker's

1 proposed adjustment serves only to manipulate the market-based DCF, CAPM,
2 and RP results, which would cause undue harm to ratepayers as illustrated above.

3
4 **RISK ANALYSIS**

5 **Q. DO YOU AGREE WITH MR. WALKER'S CONCLUSION THAT THE**
6 **WATER FUND IS OVERALL RISKIER THAN THE COMPANIES THAT**
7 **COMPRISE HIS COMPARABLE GROUP?**

8 A. No. While it is true that for outside customers, the Water Fund must obtain the
9 approval of the Commission before changing its rates, for inside-City (non-
10 jurisdictional) customers, the Water Fund does not need the approval of the
11 Commission and may change rates and/or raise taxes at the discretion of municipal
12 officials. Therefore, the Water Fund has more flexibility in its determination of
13 total system revenue than the companies that comprise of the Comparable Group,
14 but Mr. Walker's conclusion ignores that fact. Mr. Walker agrees that the Water
15 Fund and his Water Group companies have similar risks and are distinguishable.⁸⁷
16 Based on information summarized in Table 5, he concludes that overall the Water
17 Fund has similar investment risk as the Water Group.⁸⁸

⁸⁷ City Statement No. 6, p. 23, lines 2-3.

⁸⁸ City Statement No. 6, p. 30, lines 17-18.

1 **TAXES**

2 **Q. WHAT IS MR. WALKER’S CLAIM REGARDING DEFERRED INCOME**
3 **TAXES AND RISK?**

4 A. Mr. Walker claims that the deferred income taxes provide non-municipal utilities
5 an advantage in cash flow and that the Water Fund does not enjoy this benefit
6 associated with deferred income taxes. He claims that the current income taxes
7 included in the Water Group’s revenue requirement provide a margin or cushion
8 against an unanticipated drop in sales or increase in operating expenses while the
9 Water Fund does not have this type of margin of protection. Therefore, he claims
10 that the Water Fund faces much higher risk than non-municipal utilities.⁸⁹

11
12 **Q. DO YOU AGREE WITH MR. WALKER’S CLAIM REGARDING**
13 **DEFERRED INCOME TAXES?**

14 A. No. Mr. Walker testifies that the Water Fund is riskier because it lacks the income
15 tax benefits, which he describes as the ability of the utility to claim deferred taxes.
16 Mr. Walker ignores the fact that the Water Fund is not subject to income taxes,
17 and therefore, it has no need to defer income taxes because it does not have any
18 income tax liability by a statute exemption. The proxy group companies may
19 benefit from their ability to defer taxes, but the Water Fund is in a better position
20 by not being subject to income taxes in the first place.

⁸⁹ City Statement No. 6, p. 23, lines 15-20.

1 **BOND RATING**

2 **Q. HOW DOES MR. WALKER USE BOND RATINGS TO DETERMINE THE**
3 **WATER FUND’S BUSINESS RISK AND FINANCIAL RISK COMPARED**
4 **TO THE COMPARABLE WATER GROUP?**

5 A. Mr. Walker compares corporate credit ratings of the Comparable Group to his own
6 hypothetical bond rating of the Water Fund to determine the level of risk and
7 opines that there is a 92% chance that the Water Fund’s credit profile would be
8 below an “A” rating based on its small size, if it were a corporation. Additionally,
9 based solely upon the Water Fund’s size, he opines that the Water Fund’s credit
10 profile is lower than the Comparable Group’s profile.⁹⁰

11
12 **Q. DO YOU AGREE WITH MR. WALKER’S ASSERTION THAT THE**
13 **WATER FUND’S SIZE ALONE SUPPORTS A CREDIT PROFILE**
14 **BELOW “A”?**

15 A. No. Size is not the only factor upon which a corporation is rated. There are
16 various credit analysis categories underlying business and financial risk
17 assessments. S&P states in its discussion of corporate credit analysis categories,
18 “Note that we do not have any predetermined weights for these categories. The
19 significance of specific factors varies from situation to situation.”⁹¹ Accordingly,
20 relying upon one select criterion absent all others is inappropriate.

⁹⁰ City Statement No. 6, p. 27, lines 16-20.

⁹¹ <https://www.maalot.co.il/publications/MT20151105143706.pdf> : Standard & Poor’s RatingsDirect, 2008 *Corporate Criteria: Analytical Methodology*, p. 4. April 15, 2008 (accessed on November 12, 2025).

1 Mr. Walker’s speculation and hypothetical bond rating suggest that the
2 Water Fund’s equity is riskier and therefore demands a higher return than that of
3 the Comparable Group.

4 Finally, Moody’s states, “If municipalities were rated on the corporate
5 scale, Moody’s would likely assign “Aaa” ratings (highest quality with the lowest
6 risk) to the vast majority of general obligation debt issued by fiscally sound, large
7 municipal issuers.” Moody’s further states, “Moody’s expects that nearly all
8 performing municipal general obligation and essential service revenue bonds
9 would be rated “Aa3” or higher if rated on the corporate rating scale.”⁹²

10
11 **Q. DOES SCHEDULE 6 OF MR. WALKER’S EXHIBIT HW-1**
12 **DEMONSTRATE THAT SIZE IS NOT THE ONLY CRITERIA THAT**
13 **RATING AGENCIES DEPEND ON?**

14 A. Yes. The data summarized in Schedule 6 of Mr. Walker’s exhibit demonstrates
15 that size is not the only rating criteria relied upon. For example, his data illustrates
16 that Middlesex Water Company (MWC) is more than 29 times smaller⁹³ than
17 American Water Works Company Inc. (AWWC) in his Water Group. Both
18 companies, have the same “A” issuer credit rating from S&P, though MWC is the
19 smallest company in the Water Group. Notably, MWC has a lower beta as

⁹² <https://www.moodys.com/sites/products/DefaultResearch/2001700000407258.pdf> : *Special Comment*, Moody’s US Municipal Bond Rating Scale, p. 11, November 2002 (accessed on November 12, 2025).

⁹³ City Exhibit HW-1, Schedule 6, p. 1. Based upon “Recent Market Value” figures: ($\$27,360,623 \div \$929,659 = 29.43x$).

1 compared to AWWC, which indicates MWC has less systematic risk and
2 volatility. Additionally, S&P rated MWC “A” with high quality ranking.⁹⁴
3 Finally, it is important to note that S&P Public Utilities Group (Electric and Gas
4 companies) has an average BBB+ credit rating while the Water Group has an
5 average “A” rating from S&P.⁹⁵

6
7 **Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING BOND**
8 **RATINGS?**

9 A. Yes. Mr. Walker’s discussion of S&P’s corporate credit ratings criteria ignores
10 the differences between municipal utilities and investor-owned utilities.

11 Specifically, municipal utilities can raise rates, at least for their inside city (non-
12 jurisdictional) customers to account for any shortfalls in revenue and qualify for
13 favorable interest rates on long term borrowings from General Obligation bond
14 issues.

15
16 **Q. HOW DO THE MUNICIPAL UTILITIES DIFFER FROM INVESTOR-**
17 **OWNED UTILITIES?**

18 A. Municipalities report to their customers and the taxpayers within their jurisdiction
19 while an investor-owned utility reports to both its customers and to its investors or
20 owners. An investor-owned utility is expected to earn a return for its investors;

⁹⁴ City Exhibit HW-1, Schedule 6, p. 1.

⁹⁵ City Exhibit HW-1, Schedule 6, p. 1.

1 however, a municipality has no investors to earn a return for. Therefore, the
2 comparison of an investor-owned utility’s financials to those of a municipal utility
3 is not equal and appropriate.

4
5 **Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING MR.**
6 **WALKER’S BOND RATINGS ANALYSIS?**

7 A. Yes. Again, Mr. Walker points out that the Water Fund does not have bonds
8 rated, however, the City of Lancaster provides the debt financing, which has an
9 “A3” credit rating from Moody’s.⁹⁶ The “A3” rating represents an upper-medium
10 investment grade rating.

11 Finally, Moody’s latest March 11, 2025, Credit Opinion states,⁹⁷

12 The City of Lancaster, PA (A3 positive) is poised to strengthen
13 its historically challenged fiscal position in short order
14 following an increase in the city’s income tax rate. Even before
15 the income tax increase enacted late last year, Lancaster’s
16 financial position had been improving thanks to property tax
17 increases, organic growth in the income tax, and utility rate
18 increases - its available fund balance at the end of 2023 was
19 10.2% of revenue, up from 1.7% two years earlier, and the city
20 estimates that it ran a small surplus in 2024.

21 Further, Moody’s Credit Opinion states,⁹⁸

22 Lancaster’s local economy will continue to develop and remain
23 a strength relative to the A3 rating. Resident income is
24 increasing as higher-earning people move into the city, and the
25 market value of taxable property is up 40% over the past three
26 years as a result of higher home prices and ongoing
27 construction.

⁹⁶ City Statement No. 6, p. 24, lines 12-14.

⁹⁷ City Filing Exhibit D VII-18, Attachment, p. 1 (City filing pdf p. 1032).

⁹⁸ City Filing Exhibit D - VII-18, Attachment, p. 4 (City filing pdf p. 1035).

1 Moody’s assessment indicates that the tax authority of the City will be even
2 greater than today, coupled with a growing local economy and increasing wealth,
3 which Mr. Walker’s unfounded rating assessment fails to recognize.
4

5 **DEBT SERVICE COVERAGE RATIO (DSCR)**

6 **Q. PLEASE DEFINE DEBT SERVICE.**

7 A. Debt service is the annual amount of principal and interest due on outstanding
8 loans.
9

10 **Q. PLEASE DEFINE DEBT SERVICE COVERAGE.**

11 A. Debt service coverage is a ratio of annual funds available to cover annual debt
12 service divided by the annual debt service requirement (principal and interest).
13

14 **Q. HOW DOES MR. WALKER USE THE DEBT SERVICE COVERAGE**
15 **RATIO TO DETERMINE THE WATER FUND’S RISK COMPARED TO**
16 **THE COMPARABLE GROUP?**

17 A. Mr. Walker discusses debt service ratios and compares the Water Fund’s debt
18 service with the Comparable Group’s debt service,⁹⁹ and concludes that the Water
19 Fund has a higher investment risk than the Comparable Group. Based solely upon

⁹⁹ City Exhibit HW-1, Schedule 10.

1 the Water Fund's historic ratios, he opines that the Water Fund's credit profile is
2 lower than the Comparable Group companies.¹⁰⁰

3
4 **Q. DO YOU AGREE WITH MR. WALKER'S ASSESSMENT OF DSCRs?**

5 A. No. There are many financial differences between municipal providers like the
6 Water Fund and investor-owned corporations. A corporation operates on a for-
7 profit basis while a municipality does not. There are separate ratings criteria and
8 separate types of bonds for a corporation, a public utility, and a municipality
9 (general obligation bonds and revenue bonds), which demonstrate that the risk
10 differs by each type of entity. Additionally, it is important to recognize that,
11 unlike revenue bonds which are backed by specific revenue streams such as water
12 or sewer service fees, general obligation bonds are backed by the taxing authority
13 of the municipality, and command favorable acceptance in the capital market.
14 Thus, Mr. Walker's assessment of the Water Fund's DSCR, as with that of
15 Comparable Group companies' DSCR is without merit.

16
17 **Q. WHAT IS AN APPROPRIATE MEASURE OF DEBT SERVICE**
18 **COVERAGE?**

19 A. A combination of things can be used to determine an appropriate DSCR. Debt
20 covenants may require a different minimum level of DSCR by entity type that

¹⁰⁰ City Statement No. 6, p. 27, lines 13-14.

1 must be maintained. Additionally, rating agencies have guidelines as to what is
2 considered appropriate for water/sewer municipal utilities' DSCRs.

3
4 **Q. DOES THE WATER FUND OR THE CITY HAVE A COVENANT FOR**
5 **DEBT SERVICE COVERAGE?**

6 A. No. In response to I&E-RR-14-D, Mr. Walker states that the City is not required
7 to maintain a specific debt service coverage ratio when issuing general obligation
8 bonds.¹⁰¹ However, the Water Fund must meet all bond payments due, therefore,
9 the implied debt service coverage requirement is 1.0 times.

10
11 **Q. WHAT ARE THE CREDIT RATING AGENCY GUIDELINES FOR DEBT**
12 **SERVICE COVERAGE FOR A WATER/SEWER MUNICIPAL UTILITY?**

13 A. Moody's rating methodology and scorecard factors for U.S. cities and counties
14 (municipal authorities) does not specifically require a particular debt service
15 coverage ratio as a rating factor.¹⁰² The S&P article "U. S. Public Finance: Key
16 Water and Sewer Utility Credit Ratio Ranges" states that DSCR of less than 1.0
17 time is insufficient, 1.0 to 1.25 times is adequate, 1.26 to 1.50 times is good, and
18 greater than 1.50 times is strong.¹⁰³ Mr. Walker illustrates that the Water Fund has

¹⁰¹ City Exhibit HW-1, Schedule 21.

¹⁰² City Filing Exhibit D VII-18, Attachment, p. 8 (City filing pdf p. 1039).

¹⁰³ <https://www.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/5009263> (accessed on November 12, 2025).

1 improved the debt service ratio to 1.6 times in 2022 and 2023 from 0.8 in 2021
2 that falls in S&P's "strong" category.¹⁰⁴

3
4 **Q. DO YOU HAVE ANY CONCERNS REGARDING A DSCR FOR THE**
5 **WATER FUND?**

6 A. No. Since the Commission requires utilities to use the rate base rate of return
7 method, debt service coverage is not a basis or criteria for determining the revenue
8 requirement in this proceeding. The Water Fund has no debt service coverage
9 requirements in the form of bond covenants, aside from an implied 1.0x ratio to
10 ensure debt payments may be made. Since both principal and interest are included
11 as recoverable expenses, this ratio has been met.

12
13 **OVERALL RATE OF RETURN RECOMMENDATION**

14 **Q. WHAT ARE THE CITY'S CLAIMS FOR ROE AND OVERALL RATE OF**
15 **RETURN?**

16 A. The City is claiming a ROE of 10.90% or alternatively, 9.48% tax-adjusted ROE
17 and the overall rate of return of 7.75%, or alternatively, 6.99% tax-adjusted rate of
18 return if the Commission deems it appropriate to apply a tax adjustment to the cost
19 of equity.¹⁰⁵

¹⁰⁴ City Exhibit HW-1, Schedule 10, p. 6.

¹⁰⁵ City Exhibit HW-1, Schedule 21.

1 **Q. WHAT IS I&E'S RECOMMENDED OVERALL RATE OF RETURN?**

2 A. As demonstrated in I&E Exhibit No. 2, Schedule 1, I recommend tax adjusted
3 ROE of 7.86% based on my DCF analysis results of 10.08% and the overall rate of
4 return of 5.77%.

5

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

7 A. Yes.

D. C. PATEL

PROFESSIONAL EXPERIENCE AND EDUCATION

EXPERIENCE:

- Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
June 2015 to present
Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement
- Pennsylvania Insurance Department, Harrisburg, Pennsylvania
March 2013 - June 2015
Insurance Company Financial Analyst, Bureau of Company Licensing & Financial Analysis
- Pennsylvania Department of Revenue, Harrisburg, Pennsylvania
November 2010 - March 2013
Accounting Assistant, Bureau of Corporation Taxes (Accounting)
- Hersha Hospitality Management, Harrisburg, Pennsylvania
June 2007 - November 2010
Staff Accountant (Taxes), Accounting Department
- Corporate Experience-India
February 1987 - April 2007
Worked as Company Secretary for three different companies during this period, which were listed on the Stock Exchanges.

EDUCATION/CERTIFICATION:

- Gujarat State University, Ahmedabad, India:
 - Bachelor of Commerce (Major concentration: Accounting)
June 1980 - April 1983
 - Bachelor of Law
June 1983 - December 1988
- The Institute of Company Secretaries of India, New Delhi, India:
Post Graduate Professional Degree: Company Secretary
June 1983 - December 1985

RATE CASE TRAINING:

- Attended SURFA - 56th Financial Forum (ROR) in April 2025
- Attended SURFA - 54th Financial Forum (ROR) in April 2023
- Attended 37th Western NARUC Utility Rate School in May 2016

D. C. PATEL

PROFESSIONAL EXPERIENCE AND EDUCATION

WORKED ON THE FOLLOWING CASES (Testimony not required):

- R-2025-3053663 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2024-3049248 et al. City of Lock Haven - Water Department
- R-2024-3048767 - PECO Energy Co. - Gas Operations (1307(f))
- R-2024-3047014 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2022-3032167 - Columbia Gas of Pennsylvania, Inc. (Green Path Rider)
- R-2022-3031172 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2021-3024349 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2021-3023541 - National Fuel Gas Distribution Corporation (§ 1307(f))
- A-2020-3021460 - PA American Water Co.-Upper Pottsgrove-Wastewater (1329)
- A-2020-3020178 - PA American Water Co.-Valley Township-Wastewater (1329)
- A-2020-3019859 - PA American Water Co.-Valley Township-Water (1329)
- R-2020-3019661 - PECO Energy Co. - Gas Operations (1307(f))
- U-2020-3015258 - Pittsburgh Water and Sewer Authority
- R-2019-3008255 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2018-3001568 - PECO Energy Co. - Gas Operations (1307(f))
- R-2018-3000253 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2017-2631441 - Reynolds Water Co.
- A-2017-2629534 - PPL Electric Utilities (Restructuring Plan)
- R-2017-2602611 - PECO Energy Co. - Gas Operations (1307(f))
- R-2016-2567893 - Andreassi Gas Co.
- R-2016-2525128 - Columbia Water Co. - Marietta Division
- R-2015-2493905 - Sands, Inc.
- R-2015-2479962 - Corner Water Supply and Service Corporation
- R-2015-2479955 - Allied Utility Services, Inc.

SUBMITTED TESTIMONY IN THE FOLLOWING CASES:

- R-2025-3055010 et al. Pittsburgh Water and Sewer Authority
- R-2025-3053499 Columbia Gas of Pennsylvania, Inc.
- R-2025-3054393 Valley Energy, Inc.
- R-2025-3053112 Philadelphia Gas Works
- R-2024-3052359 Pike County Light and Power Company - Electric
- P-2024-3050549 Deer Haven, LLC. (529)
- R-2024-3050208 The Newtown Artesian Water Company
- R-2024-3047068 First Energy Pennsylvania Electric Company
- R-2024-3046931 PECO Energy Co. - Electric Operations

D. C. PATEL

PROFESSIONAL EXPERIENCE AND EDUCATION

- R-2024-3046519 Columbia Gas of Pennsylvania, Inc.
- R-2024-3045192 et al. Veolia Water Pennsylvania, Inc.
- R-2023-3042804 et al. Community Utilities of Pennsylvania, Inc.
- R-2023-3043189 et al. PA American Water Co.
- R-2023-3038630 Columbia Gas of Pennsylvania, Inc. (1307(f))
- R-2023-3037933 Philadelphia Gas Works
- R-2022-3037368 UGI Electric, Inc. - Electric Division
- A-2022-3034143 Aqua Pennsylvania, Inc. - Borough of Shenandoah (Water System) (1329)
- R-2022-3031672 and R-2022-3031673 - PA American Water Co.
- R-2022-3031211 - Columbia Gas of Pennsylvania, Inc.
- R-2021-3024773 et al. - Pittsburgh Water and Sewer Authority
- A-2021-3024058- PA American Water Co. - Borough of Brentwood (Wastewater System) - 1329
- A-2021-3024681 - PA American Water Co. - York City Sewer Authority/City of York (Wastewater System) (1329)
- R-2021-3024601 - PECO Energy Co. - Electric Operations
- A-2021-3024267 - Aqua Pennsylvania Wastewater, Inc. - Lower Makefield (WW) (1329)
- A-2020-3019634 - PA American Water Co. - Royersford Wastewater (1329)
- R-2020-3018993 - Columbia Gas Pennsylvania, Inc. (1307(f))
- R-2020-3018929 - PECO Energy Co. - Gas Operations
- R-2020-3017951 et al. - Pittsburgh Water and Sewer Authority
- A-2019-3008491 - Aqua Pennsylvania Wastewater, Inc.
- R-2019-3008212 - Citizens Electric Company of Lewisburg, PA
- R-2019-3008208 - Wellsboro Electric Company
- R-2018-3006814 - UGI Utilities, Inc. (Gas Division)
- R-2018-3002645 and 3002647 - Pittsburgh Water and Sewer Authority
- R-2018-3000834 - Suez Water Pennsylvania, Inc.
- R-2018-2647577 - Columbia Gas of Pennsylvania, Inc.
- M-2018-2640802 and M-2018-2640803 - Pittsburgh Water and Sewer Authority (Compliance Plan Stage 2)
- R-2017-2595853 - Pennsylvania American Water Co.
- R-2016-2580030 - UGI Penn Natural Gas, Inc.
- R-2016-2554150 - City of DuBois - Bureau of Water
- R-2016-2529660 - Columbia Gas of Pennsylvania, Inc.
- P-2016-2526627 - PPL Electric Utilities Corp. (DSP IV)

**I&E Exhibit No. 2
Witness: D. C. Patel**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER - WATER FUND

Docket No. R-2025-3057237

Exhibit to Accompany

the

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

I&E
Summary of Cost of Capital (With tax Adjustment)
City of Lancaster - Water Fund

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	57.13%	4.20%	2.40%
Common Equity	42.87%	7.86% (A)	3.37%
Total	<u>100.00%</u>		<u>5.77%</u>

(A) $ROE\ 10.08\% \times (1 - \text{Implied Tax Rate } 22.00\%) = 7.86\%$.

Proxy Group Capital Structure

	2024	2023	2022	2021	2020	Average
<u>American States Water Co</u>						
Long-term Debt	811.776	873.674	476.637	595.596	584.184	46.83%
Preferred Stock	-	-	-	-	-	0.00%
Common Equity	920.051	776.109	709.549	685.947	641.673	53.17%
	1,731.827	1,649.783	1,186.186	1,281.543	1,225.857	100.00%
<u>California Water Service Group</u>						
Long-term Debt	1,116.856	1,065.373	1,066.325	1,069.395	794.968	44.39%
Preferred Stock	-	-	-	-	-	0.00%
Common Equity	1,635.271	1,426.733	1,317.590	1,177.594	921.344	55.61%
	2,752.127	2,492.106	2,383.915	2,246.989	1,716.312	100.00%
<u>H2O America (fka SJW Group)</u>						
Long-term Debt	1,706.904	1,526.699	1,491.965	1,492.935	1,287.580	57.13%
Preferred Stock	-	-	-	-	-	0.00%
Common Equity	1,366.974	1,233.397	1,110.868	1,034.519	917.160	42.87%
	3,073.878	2,760.096	2,602.833	2,527.454	2,204.740	100.00%
<u>Middlesex Water Co</u>						
Long-term Debt	355.254	361.216	293.986	310.887	278.286	44.51%
Preferred Stock	1.635	2.084	2.084	2.084	2.084	0.33%
Common Equity	445.263	422.991	400.328	367.726	346.208	55.21%
	802.152	786.291	696.398	680.697	626.578	100.00%

Five-Year Average Capital Structure

Long-term Debt	48.21%	Maximum	57.13%	Minimum	44.39%
Preferred Stock	0.07%				
Common Equity	51.72%	Minimum	42.87%	Maximum	55.61%
	100.00%				

Source:

Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year
(data in millions)

Accessed on November 26, 2025

	2024		
	Interest Charges	Long-Term Debt	Debt Cost
American States Water Co	50.38	811.78	6.21%
California Water Service Group	60.70	\$ 1,116.86	5.43%
H2O America (fka SJW Group)	74.91	1,706.90	4.39%
Middlesex Water Co	14.02	\$ 355.25	3.95%
	Range:	Low	3.95%
		High	6.21%
		Average	<u>4.99%</u>

Source:

Compustat (S&P Global Market Intelligence - Data Management Solutions)
Yearly data updates typically provided late April of each year
(data in millions)
Accessed on November 26, 2025

Mergent Bond Record	
A-Rated Public Utility Bond Yields	
Month	Yield
November 2024	5.55%
December 2024	5.58%
January 2025	5.87%
February 2025	5.73%
March 2025	5.72%
April 2025	5.91%
May 2025	6.05%
June 2025	5.93%
July 2025	5.88%
August 2025	5.77%
September 2025	5.61%
October 2025	5.51%
Average	<u>5.76%</u>

Source:

Mergent Bond Record
November 2025

Dividend Yields of Four Company Proxy Group

Company	American States Water Co.	California Water Service Group	H2O America (fka SJW Group)	Middlesex Water Co.
<i>Symbol</i>	<i>AWR</i>	<i>CWT</i>	<i>HTO</i>	<i>MSEX</i>
Dividend	2.10	1.25	1.75	1.46
52-wk low	69.45	41.64	43.75	44.17
52-wk high	86.97	51.78	57.17	67.30
Spot Price	74.25	45.70	46.06	50.63
Spot Div Yield	2.83%	2.74%	3.80%	2.88%
52-wk Div Yield	2.69%	2.68%	3.47%	2.62%
Average	2.76%	2.71%	3.63%	2.75%

	Average
Spot Div Yield	3.06%
52-wk Div Yield	2.86%
Average	2.96%

Sources: Barrons November 26, 2025
Value Line October 3, 2025

Five-Year Growth Estimate Forecast for Proxy Group (Actual)

		S&P	Zacks	Value Line	Average
Company	Symbol	Source			
American States Water Co.	AWR	5.65%	5.65%	7.00%	6.10%
California Water Service Group	CWT	8.78%	8.78%	9.50%	9.02%
H2O America (fka SJW Group)	HTO	6.04%	6.55%	6.00%	6.20%
Middlesex Water Co.	MSEX	8.14%	5.86%	7.50%	7.17%
Average		7.15%	6.71%	7.50%	7.12%

Sources date:

November 26, 2025

(From Internet)

Expected Market Cost Rate of Equity
Using Data for the Proxy Group of Four Water Companies
5-Year Forecasted Growth Rates

	<u>Adjusted Dividend Yield</u> (1)	<u>Growth Rate</u> (2)	<u>Expected Return on Equity</u> (3=1+2)
(1) 52-Week Average Price	3.06%	7.12%	10.18%
(2) Spot Price	<u>2.86%</u>	<u>7.12%</u>	<u>9.98%</u>
(3) Average:	<u>2.96%</u>	<u>7.12%</u>	<u>10.08%</u>

Sources: Value Line October 3, 2025
 Barrons November 26, 2025

Beta for Four Company Proxy Group

<u>Company</u>	<u>Beta</u>
American States Water Co.	0.70
California Water Service Group	0.80
H2O America (fka SJW Group)	0.75
Middlesex Water Co.	0.75
Average beta for CAPM	0.75

Source:

Value Line
October 3, 2025

Risk-Free Rate <u>Treasury note - 10-yr Note</u>	<u>Yield</u>
4Q 2025	4.10
1Q 2026	4.10
2Q 2026	4.10
3Q 2026	4.10
4Q 2026	4.10
2027-2031	4.20
Average	<u><u>4.12</u></u>

Source:
Blue Chip
December 1, 2025

Required Rate of Return on Market as a Whole Forecasted

	<u>Dividend Yield</u>	+	<u>Growth Rate</u>	=	<u>Expected Market Return</u>
Value Line Estimate	2.30%		9.73%	(a)	12.03%
S&P 500 Historical Return					12.34%
Average Expected Market Return				=	<u><u>12.19%</u></u>

(a) $((1+45\%)^{.25}) - 1$ Value Line forecast for the 3 to 5 year index appreciation is 45%

Sources:

S&P 500 Historical Rate	1926-2025	12.34%
Value Line Dividend Yield	11/28/2025	2.30%
Value Line Appreciation Yield	11/28/2025	45.00%

S&P 500 Total Return

Year	Return	Year	Return
2025	17.81	1975	37.20
2024	25.02	1974	-26.47
2023	26.29	1973	-14.66
2022	-18.11	1972	18.98
2021	28.71	1971	14.31
2020	18.40	1970	4.01
2019	31.49	1969	-8.50
2018	-4.38	1968	11.06
2017	21.83	1967	23.98
2016	11.96	1966	-10.06
2015	1.38	1965	12.45
2014	13.69	1964	16.48
2013	32.39	1963	22.80
2012	16.00	1962	-8.73
2011	2.11	1961	26.89
2010	15.06	1960	0.47
2009	26.46	1959	11.96
2008	-37.00	1958	43.36
2007	5.49	1957	-10.78
2006	15.79	1956	6.56
2005	4.91	1955	31.56
2004	10.88	1954	52.62
2003	28.68	1953	-0.99
2002	-22.10	1952	18.37
2001	-11.89	1951	24.02
2000	-9.10	1950	31.71
1999	21.04	1949	18.79
1998	28.58	1948	5.50
1997	33.36	1947	5.71
1996	22.96	1946	-8.07
1995	37.58	1945	36.44
1994	1.32	1944	19.75
1993	10.08	1943	25.90
1992	7.62	1942	20.34
1991	30.47	1941	-11.59
1990	-3.10	1940	-9.78
1989	31.69	1939	-0.41
1988	16.61	1938	31.12
1987	5.25	1937	-35.03
1986	18.67	1936	33.92
1985	31.73	1935	47.67
1984	6.27	1934	-1.44
1983	22.56	1933	53.99
1982	21.55	1932	-8.19
1981	-4.91	1931	-43.34
1980	32.42	1930	-24.90
1979	18.44	1929	-8.42
1978	6.56	1928	43.61
1977	-7.18	1927	37.49
1976	23.84	1926	11.62
Average	12.34		

Source:

https://www.slickcharts.com/sp500/returns#google_vignette

Accessed on December 1, 2025

CAPM with Forecasted Return

Re Required return on individual equity security
Rf Risk-free rate (10-Year Treasury Yield)
Rm Required return on the market as a whole
Be Beta on individual equity security

Re = $Rf + Be(Rm - Rf)$

Rf = 4.12
Rm = 12.19
Be = 0.75
Re = 10.17

Sources: Value Line October 3, 2025
 Blue Chip December 1, 2025

CAPM Using Kroll ERP

Re Required return on individual equity security
Rf Risk-free rate (20-Year Treasury Spot Yield)
ERP Equity Risk Premium
Be Beta on individual equity security

Re = $Rf + Be(ERP)$

Rf = 4.72
ERP = 5.50
Be = 0.75
Re = 8.85

Sources: CNBC December 1, 2025
 Kroll ERP April 15, 2025
<https://www.cnbc.com/quotes/US20Y?msockid=24a6d51c6d2d6ff92087c3876c856ec4>

Average CAPM Result 9.51

**City of Lancaster - Water Fund
 Municipal tax Adjustment
 Moody's A-Rated Bonds**

Mergent Bond Record	Average Municipal Bond Yields	Average Public Utility Bond Yields	Implied Tax Rate
(A)	(B)	(C)	(D) = 1-[(B) ÷ (C)]
November 2024	4.22%	5.55%	23.96%
December 2024	4.08%	5.58%	26.88%
January 2025	4.26%	5.87%	27.43%
February 2025	4.35%	5.73%	24.08%
March 2025	4.43%	5.72%	22.55%
April 2025	4.77%	5.91%	19.29%
May 2025	4.74%	6.05%	21.65%
June 2025	4.85%	5.93%	18.21%
July 2025	4.78%	5.88%	18.71%
August 2025	4.71%	5.77%	18.37%
September 2025	4.48%	5.61%	20.14%
October 2025	4.26%	5.51%	22.69%
Average	4.49%	5.76%	22.00%

Source:
 Mergent Bond Record
 November 2025

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-19-D Reference City of Lancaster Statement No. 6, p. 61 concerning the Risk Premium (RP) results of 11.20% (10.60% + 0.60%) including the market to book ratio risk leverage adjustment. State whether Mr. Walker is aware of any instances where the Commission relied upon RP analysis with or without a risk leverage adjustment to determine an appropriate cost of equity in a base rate proceeding in the last ten years. If so, identify the applicable cases, including the docket numbers.

RESPONSE: Mr. Walker does not discuss the requested information in his testimony. Further, Mr. Walker has not conducted an exhaustive study of all Commission orders. Mr. Walker believes the Commission considers many factors, including interest rate levels in reaching their conclusion but cannot accurately cite each occurrence

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-10-D Reference City of Lancaster Statement No. 6, p. 20 concerning the size risk discussion. State whether the Water Fund anticipates losing any commercial or industrial customers between now and the end of the FPPTY. If so, provide the rationale and any publicly available information regarding the potential loss, such as scheduled plant closures, etc.

RESPONSE: The requested information was not discussed in Mr. Walker's testimony. Please see standard filing requirements Exhibit D II-9, Exhibit D II-11, and Exhibit D II-12.

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-18-D Reference City of Lancaster Statement No. 6, p. 55 and Schedule 17, p. 1 concerning the application of a size adjustment premium of 0.60% to the CAPM results of 11.60% resulting in a market value CAPM cost rate of 11.20%. State whether Mr. Walker is aware of any instances where the Commission has specifically approved a size adjustment premium to the CAPM results or in the ROE to recognize a small size impact or market to book ratio risk leverage adjustment in the last ten years. If so, identify the applicable cases, including the docket numbers.

RESPONSE: Mr. Walker did not determine a “a market value CAPM cost rate of 11.20%” in City of Lancaster Statement No. 6, at p. 55 nor on Schedule 17, at p. 1 as stated in this request. Mr. Walker has not conducted an exhaustive study of all Commission orders. Mr. Walker believes the Commission has cited size as one of the determinants/considerations of previously authorized ROEs but cannot accurately cite each occurrence.

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-16-D

Reference City of Lancaster Statement No. 6, p. 43, concerning Mr. Walker's recommendation to give less weight to the resultant market value DCF cost rate due to the market's current market capitalization ratios and the impact that the market-to-book ratio has on the DCF results. State whether Mr. Walker is aware of any instances where the Pennsylvania Public Utility Commission (Commission) has specifically relied on the impact that the market-to-book ratio has on the DCF results and gave less weight to the DCF results in recommending an ROE for any utilities for this specific reason in the last ten years. If so, identify the applicable cases, including the docket numbers.

RESPONSE:

Mr. Walker does not discuss the requested information in his testimony. Further, Mr. Walker has not conducted an exhaustive study of all Commission orders. Mr. Walker believes the Commission has authorized ROE's that have been different than underlying DCF results but cannot accurately depict the reasons for their differences nor cite each occurrence.

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-17-D Reference City of Lancaster Statement No. 6, pp. 44-52 concerning discussion on the financial risk difference due to the market capitalization ratio being different from book value capitalization ratio and recommending a financial risk leverage adjustment of 0.60% to the DCF result of 9.30% ($9.30\% + 0.60\% = 9.90\%$). State whether Mr. Walker is aware of any instances where the Commission has specifically awarded a financial risk leverage adjustment to the DCF results or in the ROE to recognize market to book ratio impact in the last ten years. If so, identify the applicable cases, including the docket numbers.

RESPONSE: Mr. Walker does not discuss the requested information in his testimony. Further, Mr. Walker has not conducted an exhaustive study of all Commission orders. Mr. Walker believes the Commission has authorized ROE's that have been different than underlying market value DCF results but cannot accurately depict the reasons for their differences (e.g., financial risk leverage adjustment) nor cite each occurrence.

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-18-D Reference City of Lancaster Statement No. 6, p. 55 and Schedule 17, p. 1 concerning the application of a size adjustment premium of 0.60% to the CAPM results of 11.60% resulting in a market value CAPM cost rate of 11.20%. State whether Mr. Walker is aware of any instances where the Commission has specifically approved a size adjustment premium to the CAPM results or in the ROE to recognize a small size impact or market to book ratio risk leverage adjustment in the last ten years. If so, identify the applicable cases, including the docket numbers.

RESPONSE: Mr. Walker did not determine a “a market value CAPM cost rate of 11.20%” in City of Lancaster Statement No. 6, at p. 55 nor on Schedule 17, at p. 1 as stated in this request. Mr. Walker has not conducted an exhaustive study of all Commission orders. Mr. Walker believes the Commission has cited size as one of the determinants/considerations of previously authorized ROEs but cannot accurately cite each occurrence.

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of The Bureau of Investigation and Enforcement
Set RR**

Witness: Harold Walker

I&E-RR-14-D Reference City of Lancaster Statement No. 6, pp. 29-30 concerning the debt service coverage ratio. Explain if the City of Lancaster is mandatorily required to maintain a specific debt service coverage ratio when issuing bonds for the Water Fund and provide supporting documentation.

RESPONSE: The City is not required to maintain a specific debt service coverage ratio when issuing general obligation bonds.

I&E Statement No. 3
Witness: Esyan A. Sakaya

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Direct Testimony

of

Esyan A. Sakaya

Bureau of Investigation and Enforcement

Concerning:

Rate Base
Plant and Reporting Requirements
Present Rate Revenue
Unaccounted For Water
Scale Back of Rates

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PRESENT RATE REVENUE 7

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SCALE BACK OF RATES 12

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Eryan A. Sakaya. My business address is Pennsylvania Public Utility
4 Commission, 400 North Street, Harrisburg, PA 17120.

5

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

7 A. I am employed by the Pennsylvania Public Utility Commission in the Bureau of
8 Investigation and Enforcement (“I&E”) as a Fixed Utility Valuation Engineer.

9

10 **Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT EXPERIENCE?**

11 A. An outline of my education and employment experience is attached as
12 Appendix A.

13

14 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.**

15 A. I&E is responsible for representing the public interest in rate and other
16 proceedings before the Commission. I&E’s analysis in this proceeding is based on
17 its responsibility to represent the public interest. This responsibility requires the
18 balancing of the interests of ratepayers, the utility, and the regulated community as
19 a whole.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my direct testimony is to evaluate City of Lancaster – Bureau of
3 Water’s (Water Fund) request for an annual increase in operating revenue of
4 \$7,005,217 from jurisdictional customers living outside the City of Lancaster
5 using a fully projected future test year (FPFTY) ending March 31, 2027.¹ My
6 direct testimony will address issues related to the rate base, plant in service,
7 depreciation expense, FPFTY reporting, present rate revenue, unaccounted for
8 water, and rate design.

9

10 **Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?**

11 A. Yes. I&E Exhibit No. 3 contains schedules that support my direct testimony.

12

13 **RATE BASE**

14 **Q. WHAT IS RATE BASE?**

15 A. Rate base, also known as measure of value, is the depreciated original cost of a
16 utility’s investment in plant that is in place to serve customers plus other additions
17 and deductions that the Commission deems necessary to keep the utility operating
18 and providing safe and reliable service to ratepayers.

¹ Water Fund Statement No. 3, p. 3.

1 **Q. HOW IS RATE BASE USED IN THE RATEMAKING FORMULA?**

2 A. Rate base is one part of the financial equation used by the Commission to
3 determine the appropriate revenue that a utility is granted in a rate proceeding.
4 The revenue determination allows the utility to meet its expense obligations and
5 gives it the opportunity to earn the rate of return established by the Commission in
6 a rate proceeding. The equation used to determine the proper revenue requirement
7 is:

$$\text{Revenue Requirement} = (\text{Rate Base} \times \text{Rate of Return}) + \text{Operating} \\ \text{Expenses} + \text{Depreciation Expense} + \text{Taxes}$$

10

11 **Q. HOW DOES THE WATER FUND CALCULATE ITS RATE BASE**
12 **CLAIM?**

13 A. The Water Fund's rate base claim calculation includes depreciated original cost
14 plant in service plus the additions of materials and supplies and cash working
15 capital as shown on Water Fund Exhibit GRH-1, Schedule 4. This schedule shows
16 the total system rate base amount, and the jurisdiction and non-jurisdictional
17 shares are reflected on Water Fund Exhibit GRH-2, Schedule E, p. 34.

18

19 **Q. HOW IS DEPRECIATED ORIGINAL COST PLANT IN SERVICE**
20 **CALCULATED?**

21 A. The depreciated original cost plant in service is determined by subtracting the
22 book reserve, which is the accumulation of all prior depreciation expense, and

1 other items such as salvage value from the original cost of the plant in service that
2 is projected to be used and useful in the public service. The depreciated original
3 cost of the plant in service is determined by taking a “snapshot” look at the
4 depreciated original cost value of used and useful utility plant expected to be in
5 service at the end of the FPFTY.

6
7 **Q. WHAT IS THE WATER FUND’S RATE BASE CLAIM FOR THE FPFTY?**

8 A. The Water Fund’s total system rate base claim in the FPFTY is \$258,372,631.²
9 The jurisdictional claim is \$190,353,958 (\$75,697,238 + \$64,354,745 +
10 \$12,106,986 + \$7,877,874 + \$4,297,967 + \$6,010,542 + \$20,008,606 +
11 \$20,008,606).³

12
13 **Q. DID THE WATER FUND INDICATE THAT IT WOULD HAVE**
14 **CHANGES TO ITS JURISDICTIONAL CLAIM FOR UTILITY PLANT?**

15 A. Yes. In response to TUS-R-15, the Water Fund indicated that it has an update to
16 its claim that will be reflected in rebuttal testimony.⁴ In this response, the
17 jurisdictional rate base claim is reflected as \$190,410,497 (\$75,691,501 +
18 \$64,365,056 + \$12,100,835 + \$7,877,879 + \$4,293,749 + \$4,333,785 +
19 \$21,747,692). The Water Fund indicated in that response that it would update this
20 claim in rebuttal, so I am not making the related adjustment here. However, I

² Water Fund Exhibit GRH-1, Schedule 1, p. 1.

³ Water Fund Exhibit GRH-2, Schedule E, p. 34.

⁴ I&E Exhibit No. 1, Schedule 1.

1 reserve the right to make recommended adjustments when changes are made by
2 the Water Fund in its rebuttal testimony.

3
4 **DEPRECIATION EXPENSE**

5 **Q. WHAT IS DEPRECIATION EXPENSE?**

6 A. Depreciation expense is an operating expense. It represents twelve months' worth
7 of the loss of service value of plant over the life of the plant, for the year portrayed
8 by the income statement.

9
10 **Q. WHAT IS THE WATER FUND'S CLAIM FOR FPFTY DEPRECIATION**
11 **EXPENSE**

12 A. The Water Fund's FPFTY claim for total system depreciation expense is
13 \$5,893,325 and the jurisdictional claim for depreciation expense is \$4,395,191.⁵

14
15 **Q. DID THE WATER FUND INDICATE THAT IT WOULD NEED TO**
16 **UPDATE ITS CLAIM FOR DEPRECIATION EXPENSE?**

17 A. Yes. In response to TUS-R-12, the Water Fund provided updated figures of
18 \$5,893,325 for total system and \$4,396,657 for the jurisdictional claim for
19 depreciation expense.⁶ The Water Fund indicated in that response that it would
20 update this claim in rebuttal, so I am not making the related adjustment here.

⁵ Water Fund Exhibit GRH-1, Schedule 1, p. 1 and p. 3.

⁶ I&E Exhibit No. 3, Schedule 2.

1 However, I reserve the right to make recommended adjustments when changes are
2 made by the Water Fund in its rebuttal testimony.

3
4 **PLANT AND REPORTING REQUIREMENTS**

5 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING PLANT**
6 **ADDITIONS THAT THE WATER FUND PROJECTS TO BE IN SERVICE**
7 **DURING THE FTY ENDING MARCH 31, 2026 AND THE FPFTY**
8 **ENDING MARCH 31, 2027?**

9 A. Yes. I recommend that the Water Fund be required to provide the Commission’s
10 Bureau of Investigation & Enforcement, the Office of the Consumer Advocate,
11 and the Office of Small Business Advocate with an update to Water Fund Exhibit
12 GRH-1, Schedule 4 no later than July 1, 2026 which should include actual capital
13 expenditures, plant additions, and retirements by month for the fiscal year ending
14 March 31, 2026 and an additional update for actuals for the fiscal year ending
15 March 31, 2027, no later than July 1, 2027.

16
17 **Q. WHY DO YOU RECOMMEND THAT THE WATER FUND BE**
18 **REQUIRED TO PROVIDE THESE UPDATES?**

19 A. Through use of an FPFTY, a utility is allowed to require ratepayers, in essence, to
20 pre-pay a return on a utility’s projected investment in future plant that is not in
21 place and providing service at the time the new rates take effect and are not
22 subject to any guarantee of being completed and placed into service. While the

1 FPFTY provides for such projections, there should be some timely verification of
2 the actual spending as it compares to the projections claimed in the rate filing.
3 Using an FPFTY has become common practice by Pennsylvania regulated
4 utilities, including the Water Fund, and the City agreed to provide such projections
5 as part of its previous base rate case where it made use of an FPFTY.
6

7 **PRESENT RATE REVENUE**

8 **Q. WHAT IS THE WATER FUND'S CLAIM FOR PRESENT RATE**
9 **REVENUE?**

10 A. The Water Fund is claiming FPFTY present rate revenue of \$34,781,457 for total
11 system and \$23,232,683 for jurisdictional customers.⁷
12

13 **Q. DID THE WATER FUND INDICATE THAT IT WOULD MAKE**
14 **CHANGES TO ITS PRESENT RATE REVENUES?**

15 A. Yes. The Water Fund indicated in response to TUS-R-13 that the total system
16 claim would be updated to \$34,781,458 and the jurisdictional claim would be
17 updated to \$23,149,651.⁸ The Water Fund indicated in that response that it would
18 update this claim in rebuttal, so I am not making the related adjustment here.
19 However, I reserve the right to make recommended adjustments when changes are
20 made by the Water Fund in its rebuttal testimony.

⁷ Water Fund Exhibit GRH-1, Schedule 1, p. 1 and p. 3.

⁸ I&E Exhibit No. 3, Schedule 2, p. 1 and p. 3.

1 **UNACCOUNTED-FOR WATER**

2 **Q. WHAT IS UNACCOUNTED-FOR WATER (UFW)?**

3 A. The Commission’s definition of UFW is as follows:

4 *PUC v. Total Environmental Solutions, Inc.*, Docket No. R-
5 00072493, et al., Opinion and Order entered July 30, 2008;
6 2008 Pa. PUC LEXIS 1227: Unaccounted-for-water is the
7 difference between the total system output and the amount of
8 metered water that is billed, plus an estimate used for fire
9 service, testing, main flushing and company use. Unaccounted-
10 for-water is commonly caused by under registration of meters,
11 system leaks, theft, and natural losses. Although the
12 Commission permits a reasonable amount of unaccounted-for-
13 water, its policy statement on water conservation cautions that
14 it has found levels above 20% to be excessive. 52 Pa Code
15 §65.20(4). *See also Pennsylvania Public Utility Commission v.*
16 *Dauphin Consolidated Water Supply Company*, 55 Pa. P.U.C.
17 202 (1981) (Unaccounted-for water is water that is acquired,
18 goes into the distribution plant and never reaches a customer
19 meter).
20

21 **Q. WHAT ARE THE CAUSES OF UFW?**

22 A. The primary causes of UFW are: (1) under registration of meters; (2) leaks in
23 mains, hydrants, and services; (3) theft of service; and (4) natural losses.
24

25 **Q. WHY IS IT IMPORTANT TO REDUCE UFW?**

26 A. A reduction in the amount of UFW reduces the expense incurred by a utility by
27 reducing the amount of water that needs to be pumped, treated, and sent out into
28 the distribution system. It also increases the amount of water available to
29 customers, especially during peak demand periods, and improves overall quality of
30 service.

1 **Q. WHAT PERCENTAGE OF UFW WAS REPORTED BY THE WATER**
2 **FUND IN IN FY 2022?**

3 A. The total amount of UFW in FY 2022 was 27.9% or (2,171,943,000 /
4 7,771,608,000 gallons).⁹ From a total send out 7,771,608,000 gallons in FY 2022,
5 the Water Fund was only able to bill customers for 5,598,865,000 gallons.

6
7 **Q. WHAT WAS THE WATER FUND'S PERCENTAGE OF UFW IN FY 2023?**

8 A. The total amount of UFW in FY 2023 was 28.5% or (2,173,073,000 /
9 7,613,524,000 gallons).¹⁰ From a total send out 7,613,524,000 gallons in FY
10 2023, the Water Fund was only able to bill customers for 5,439,651,000 gallons.

11
12 **Q. WHAT WAS THE UFW PERCENTAGE IN FY 2024?**

13 A. The total amount of UFW in FY 2024 was 29.4% or (22,271,481,000 /
14 7,722,273,000 gallons).¹¹ From a total send out 7,722,273,000 gallons in FY
15 2024, the Water Fund was only able to bill customers for 5,449,992,000 gallons.

16
17 **Q. WHAT IS THE WATER FUND'S OVERALL UFW LEVEL?**

18 A. The Water Fund provided the amounts of UFW for fiscal years 2022-2024 in its
19 filing shown on Water Fund Exhibit CVH-3, pp. 1-3. The average percentage of

⁹ Water Fund Exhibit D IX-6 Attachment, p. 1 and I&E Exhibit No. 3, Schedule 3, p. 1, Col. B, lines 1, 38 and 39.

¹⁰ Water Fund Exhibit D IX-6 Attachment, p. 2 and I&E Exhibit No. 3, Schedule 3, p. 2, Col. B, lines 1, 38 and 39.

¹¹ Water Fund Exhibit D IX-6 Attachment, p. 3 and I&E Exhibit No. 3, Schedule 3, p. 3, Col. B, lines 1, 38 and 39.

1 unaccounted-for water over these three years was 28.6%.¹² This 28.6% exceeds
2 the level considered by the Commission to be excessive. In summary, the Water
3 Fund has a three-year average of UFW that is above the 20% level.

4
5 **Q. HAS THE WATER FUND MADE ADJUSTMENTS TO THE PURCHASED**
6 **POWER AND CHEMICAL EXPENSE ATTRIBUTABLE TO EXCESS**
7 **UFW?**

8 A. No.

9
10 **Q. DO YOU RECOMMEND AN EXPENSE ADJUSTMENT TO REMOVE**
11 **THE COSTS RELATED TO THIS EXCESS UFW?**

12 A. Yes. I recommend that the Water Fund's claim for the above expenses be reduced
13 by \$196,606 (665,399,200 gallons x \$ 0.295470 per thousand gallons) as shown
14 on I&E Exhibit No. 3, Schedule 3, p. 5, Column E, line 9.

15
16 **Q. HOW DID YOU DETERMINE THE \$0.289070 PER THOUSAND**
17 **GALLONS COST TO PURCHASE OR PRODUCE WATER?**

18 A. The Water Fund incurs \$ 0.188693 per thousand gallons in purchased power
19 expense to produce water and \$ 0.106776 per thousand gallons for chemicals to
20 treat water.¹³ This results in a total incremental cost to produce and purchase

¹² I&E Exhibit No. 3, Schedule 3, p. 4, col. B, lines 1, 38, 39 and 42.

¹³ I&E Exhibit No. 3, Schedule 3, p. 5, Columns B-D, line 7.

1 water of \$ 0.295470 per thousand gallons. To determine these incremental costs
2 to produce or purchase water, I divided the total water production by each 2024
3 cost on a total Water Fund basis.¹⁴

4
5 **Q. SINCE YOUR UFW ADJUSTMENT ONLY APPLIES TO OUTSIDE**
6 **CUSTOMERS, HOW DID YOU CALCULATE THE EXPENSE**
7 **ALLOCATION PERCENTAGE AS APPLIED TO THOSE CUSTOMERS?**

8 A. I summed all of the outside allocation factors for Fact 1 and 1B on Water Fund
9 Exhibit GRH-2, Schedule E, p. 1 to arrive at 74.32% (0.2788 + 0.3141 + 0.0685 +
10 0.0508 + 0.0258 + 0.0012 + 0.0039).¹⁵

11
12 **Q. IS IT POSSIBLE FOR THE WATER FUND TO ELIMINATE THE**
13 **EFFECTS OF THIS EXPENSE ADJUSTMENT?**

14 A. Yes. The Water Fund can eliminate the impact of this adjustment by reducing its
15 level of unaccounted-for water below the level that the Commission considers
16 excessive. By doing so, the Water Fund would reduce its power and chemical
17 expenses.

¹⁴ I&E Exhibit No. 3, Schedule 3, p. 5, Column D, line 3.

¹⁵ I&E Exhibit No. 3, Schedule 3, p. 5, Cols B-D, line 4.

1 **SCALE BACK OF RATES**

2 **Q. WHAT IS A SCALE BACK OF RATES?**

3 A. If the Commission grants an increase of less than the amount the Water Fund is
4 requesting, the Water Fund’s proposed rates should be reduced, or scaled back, to
5 produce the revenue requirement allowed by the Commission.

6

7 **Q. DID THE WATER FUND PROVIDE ITS PREFERRED SCALE BACK**
8 **METHODOLOGY?**

9 A. Yes. In response to OCA-7-5, the Water Fund stated it would propose scaling
10 back the increases for the Residential, Commercial, Public and Industrial classes
11 by adjusting the customer charges and volumetric rates.¹⁶ Additionally, the Water
12 Fund would propose scaling back the increase to the Private Fire rates by adjusting
13 the service line and hydrant rates.

14

15 **Q. DO YOU DISAGREE WITH THE WATER FUND’S PROPOSAL?**

16 A. No, but I do have one clarification. Ultimately, the Water Fund is correct to adjust
17 the customer charges and volumetric rates for the Residential, Commercial, Public
18 and Industrial rate classes and the service line and hydrant rates for the Private
19 Fire rate class in any potential scale back proposal. However, it should be noted
20 that, prior to adjusting the rates, the appropriate allocation of revenue would first

¹⁶ I&E Exhibit No. 3, Schedule 4.

1 need to be determined. I recommend that this be done such that the increase for
2 each customer class is scaled back proportionally to the increase originally
3 proposed by the Water Fund.

4

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

6 A. Yes.

Esyau A. Sakaya

THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
400 North Street
HARRISBURG, PA 17120

EXPERIENCE:

12/2018-Present

Pennsylvania Public Utility Commission-Harrisburg, PA

Fixed Utility Valuation Engineer - Assist in engineering related studies related to valuation, depreciation, cost of service, quality of service as they apply to regulated utilities. Contribute in evaluating, contrasting and conducting performance analyses in distinctive sections of valuation engineering and rate structure involving valuation concepts, original cost, rate base, fixed capital costs, inventory processing, excess capacity, cost of service, and rate design. Provide expert testimony in rate related utility cases.

4/2018-12/2018

Pennsylvania Department of Transportation-Harrisburg, PA

Photogrammetry Technician I - Created three-dimensional mapping layouts of natural and man-made features from stereoscopic images on a computer workstation. Assisted in the field placement of ground based surveyed control-points prior to aerial photography acquisition. Provided field support in the use of laser scans for comprehensive digital surveying data. Operated global positioning satellite surveying equipment to obtain accurate geodetic coordinates of pre-established benchmarks.

8/2017-4/2018

Pennoni and Associates. Consulting Engineers-King of Prussia, PA

Construction Inspector – Provided quality assurance in the onsite material testing of concrete, soils, and asphalt. Read and interpreted construction drawings and specifications of materials and components. Completed daily reports regarding project progress to engineers, project managers/superintendents, contractors, and clients.

EDUCATION:

National Association of Regulatory Utility Commissioners, Clearwater, FL
Utility Rate School; Utility Rate Making Basics, October 2019

Society of Depreciation Professionals, Philadelphia, PA
Introduction to Depreciation; Depreciation Fundamentals, September 2019

Temple University, Philadelphia, PA
Bachelor of Science; Major in Engineering Technology, 2015

Community College of Philadelphia, Philadelphia, PA
Associate of Applied Science; Major in Construction Management Technology, 2011

EDUCATION (CONTINUED):

Island School of Building Arts, Gabriola Island, BC-Canada
Certificate Graduate: Heavy Timber Construction August 2002-November 2002

Solar Energy International, Carbondale, CO
Certificate Graduate: Basic and Advanced Photovoltaic Design, April 2002-May 2002

TESTIMONY SUBMITTED:

I have assisted and/or submitted testimony in the following proceedings:

NO. Case

1. UGI Gas Utilities - Gas Division, Docket No. R-2018-3006814
2. Newtown Artesian Water Company, Docket No. R-2018-3006904
3. Pittsburgh Wastewater, Docket No. M-2018-2640803
4. PAWC Purchase of Steelton, Docket No. A-2019-3006814
5. Philadelphia Gas Works, Docket Nos. R-2019-3009016 & R-2019-3007636
6. Community Utilities Water, Docket No. R-2019-3008947
7. Aqua Purchase of Cheltenham, Docket No. A-2019-3008491
8. UGI North, Docket No. R-2019-3009647
9. UGI Central, Docket No. R-2019-3009647
10. UGI South, Docket No. R-2019-3009647
11. Twin Lakes Utilities, Docket No. R-2019-3010958
12. Penn Power Company, Docket No. P-2019-3012628
13. UGI Gas Utilities, Docket No. R-2019-3015162
14. National Fuel and Gas Distribution, Docket No. R-2020-3015251
15. Columbia Gas of PA, Docket Nos. R-2020-3018993 & R-2020-3018835
16. Duquesne Light Company, Docket No. P-2020-3019522
17. PA American Water Co., Docket Nos. R-2020-3019369 & R-2020-3010937
18. Bethlehem Water Company, Docket No. R-2020-3020256
19. Audubon Water Company, Docket No. R-2020-3020919
20. Twin Lakes Utilities, Docket No. P-2020-3020914
21. Pike County Light and Power-Gas, Docket No. R-2020-3022134
22. Pike County Light and Power-Electric, Docket No. R-2020-3022135
23. Duquesne Light Company, Docket No. R-2021-3024750
24. Community Utilities Water, Docket No. R-2021-3025206
25. Community Utilities Wastewater, Docket No. R-2021-3025206
26. Hanover Municipal Water Works, Docket No. R-2021-3026116
27. Aqua Pennsylvania, Inc., Docket Nos. R-2021-3027385 & R-2021-3027386
28. Aqua Purchase of Willistown, Docket No. A-2021-3027268
29. National Fuel and Gas Distribution, Docket No. R-2022-3030235
30. UGI Gas Utilities, Docket No. R-2021-3030218
31. PECO Energy Company – Gas, Docket No. R-2022-3031113

32. Valley Energy, Inc., Gas, Docket No. R-2022-3032300
33. Citizens' Electric Company, Docket No. R-2022-3032369
34. Leatherstocking Gas Company, LLC Docket No. R-2022-303276
35. National Fuel and Gas Distribution, Docket No. R-2022-3035730
36. Aqua Purchase of Shenandoah, Docket No. A-2022-3034143
37. UGI Electric Utilities, Docket No. R-2022-3037368
38. Philadelphia Gas Works, Docket No. R-2023-3037933
39. Columbia Water, Docket No. R-2023-3040258
40. Community Utilities Water, Docket No. R-2023-3042804
41. Community Utilities Wastewater, Docket No. R-2023-3042805
42. CAN DO, Inc., Docket Nos. R-2023-3040153 and R-2023-3040151
43. Veolia Water, Inc., Docket No. R-2024-3045192
44. Veolia Wastewater, Inc., No. Docket R-2024-3045193
45. Columbia Gas Company, Docket No. R-2024-3046519
46. PECO Energy Company – Electric, Docket No. R-2024-3046931
47. City of Lock Haven - Water Department., Docket No. R-2024-3049248
48. Deer Haven Wastewater LLC, Docket No. P-2024-305049
49. Deer Haven Water LLC, Docket No. P-2024-305048
50. Pike County Light and Power – Electric, Docket No. R-2024-3052359
51. Columbia Gas Company, Docket No. R-2025-3053499
52. Philadelphia Gas Works, Docket No. R-2025-3053112
53. Valley Energy, Inc., Gas, Docket No. R-2025-3054393
54. Pittsburgh Sewer and Water, Docket Nos. R-2025-305510, 3055011 & 3055012

I&E Exhibit No. 3
Witness: Esyan A. Sakaya

PENNSYLVANIA PUBLIC UTILITY
COMMISSION v.
CITY OF LANCASTER – BUREAU OF WATER
Docket No. R-2025-3057237

Exhibit to Accompany
the
Direct Testimony
of
Esyan A. Sakaya
Bureau of Investigation and Enforcement

Concerning:
Rate Base
Plant and Reporting Requirements
Present Rate Revenue
Unaccounted For Water
Scale Back of Rates

I&E Exhibit No. 3

Schedule 1

Page 1 of 1

CITY OF LANCASTER - BUREAU OF WATER
 PROJECTED COST OF SERVICE FOR THE TWELVE MONTHS ENDING FEBRUARY 29, 2016
 ALLOCATED TO RESIDENTIAL, COMMERCIAL, INDUSTRIAL, OTHER WATER UTILITIES AND FIRE SERVICE CUSTOMER CLASSIFICATIONS

ACCOUNT (1)	FACTOR REF (2)	COST OF SERVICE (3)	INSIDE-CITY					OUTSIDE - CITY						
			RESIDENTIAL (4)	COMMERCIAL & PUBLIC (5)	INDUSTRIAL (6)	PRIVATE FIRE (7)	PUBLIC FIRE (8)	RESIDENTIAL (9)	COMMERCIAL & PUBLIC (10)	INDUSTRIAL (11)	LARGE INDUSTRIAL (12)	OTHER UTILITIES (13)	PRIVATE FIRE (14)	PUBLIC FIRE (15)
303 LAND AND LAND RIGHTS	15	6,978,292	835,301	680,383	50,244	75,366	193,299	2,039,755	1,738,990	326,584	212,838	115,840	117,933	591,759
312.10 COLLECTING AND IMPOUNDING RESERVOIRS	2	2,472	319	302	24	1	2	731	770	156	103	54	1	8
312.12 LAKE, RIVER & OTHER INTAKES	2	216,990	27,992	26,494	2,083	87	195	64,207	67,614	13,714	9,027	4,774	130	673
312.20 POWER AND PUMPING STRUCTURES														
WILLOW STREET BOOSTER STATION - OUTSIDE C	3B	2,114,436	0	0	0	0	0	705,376	742,167	190,336	98,533	52,227	58,147	307,650
KISSEL HILL BOOSTER STATION - OUTSIDE	3B	33,738	0	0	0	0	0	11,255	11,842	2,399	1,572	833	928	4,909
SUSQUEHANNA RIVER INTAKE & H.S. - JOINT	3	240,722	25,871	24,433	1,926	3,346	7,799	59,194	62,347	12,662	8,329	4,405	4,839	25,661
CONESTOGA PUMP STATION - JOINT	3	899,609	96,348	91,310	7,197	12,505	29,147	221,214	232,999	47,319	31,126	16,463	18,082	95,898
HESS BLVD STATION - OUTSIDE	3B	587,167	0	0	0	0	0	195,879	206,096	41,748	27,362	14,503	16,147	85,433
CONESTOGA STRAINER BUILDING	3	807,937	86,530	82,006	6,463	11,230	26,177	198,872	209,256	42,497	27,955	14,785	15,240	86,126
DELP ROAD PUMP STATION	3B	659,275	0	0	0	0	0	219,934	231,406	46,874	30,722	16,284	18,130	95,925
WILLOW VALLEY PUMP STATION	3B	2,122,851	0	0	0	0	0	708,183	745,121	150,935	98,825	52,434	58,378	308,875
980.421 SOUTH TANK PUMP STATION	3A	627,469	256,070	243,935	19,326	32,628	76,049	0	0	0	0	0	0	0
SOUTH TANK PUMP STATION	3B	352,952	0	0	0	0	0	117,745	123,886	25,095	16,448	8,718	9,706	51,354
EAST PUMP STATION	3B	1,889,135	0	0	0	0	0	630,215	663,096	134,317	88,034	46,862	51,951	274,869
312.30 PURIFICATION BUILDINGS	2	70,919,912	9,148,669	8,659,321	680,831	28,368	63,828	20,985,202	22,098,645	4,482,138	2,950,268	1,560,238	42,552	219,852
312.50 DISTRIBUTION RESERVOIR AND STANDPIPES														
UNDERGROUND STORAGE RESERVOIR - JOINT	5	8,602,641	984,142	806,067	52,476	140,223	326,900	2,259,914	2,056,891	342,385	221,948	129,040	203,022	1,079,631
WILLOW ST. STANDPIPE - OUTSIDE	5B	193,893	0	0	0	0	0	69,879	63,384	10,470	6,767	3,955	6,243	33,194
LAFAYETTE STANDPIPE - OUTSIDE	5B	3,384,907	0	0	0	0	0	1,219,920	1,106,526	182,785	118,133	69,052	108,904	578,496
LAMPETER ELEVATED TANK - OUTSIDE	5B	5,096	0	0	0	0	0	1,837	1,666	275	178	104	164	874
NEFFSVILLE TANK - OUTSIDE	5B	15,476	0	0	0	0	0	5,578	5,059	836	540	316	498	2,629
PAINTING - OUTSIDE	5B	-	0	0	0	0	0	0	0	0	0	0	0	0
FENCING - JOINT	5	-	0	0	0	0	0	0	0	0	0	0	0	0
9.443.518 SOUTH TANK	5A	6,043,852	2,559,571	2,114,139	139,613	370,488	860,040	0	0	0	0	0	0	0
SOUTH TANK	5B	3,399,666	0	0	0	0	0	1,225,240	1,111,351	183,582	118,648	69,353	109,469	582,023
312.61 WATER ADMINISTRATION BUILDING	13	8,302,953	1,451,356	729,850	50,648	63,102	59,781	3,057,978	1,834,953	330,458	210,895	114,581	97,145	302,227
312.62 STORES, SHOP & GARAGE BUILDINGS	13	133,786	23,386	11,760	916	1,917	963	49,273	29,567	5,325	3,398	1,846	1,565	4,870
312.63 MISC. STRUCTURES AND IMPROVEMENTS	13	95,245	16,649	8,372	581	724	686	35,079	21,049	3,791	2,419	1,314	1,114	3,467
316 ELECTRIC PUMPING EQUIPMENT	6	9,478,114	788,579	680,529	47,391	138,380	322,256	2,519,283	2,363,842	412,298	268,231	152,598	283,396	1,501,333
TREATMENT PLANT EQUIPMENT - JOINT	2	3,583,124	462,223	437,499	34,398	1,433	3,225	1,060,246	1,116,501	226,453	149,058	78,829	2,150	11,108
WILLOW ST. CHLORINE BOOSTER STATION	2B	-	0	0	0	0	0	0	0	0	0	0	0	0
321 LABORATORY EQUIPMENT	2	5,314	686	649	51	2	5	1,572	1,656	336	221	117	3	16
322 MAINS AND ACCESSORIES														
CAST IRON, 4" AND UNDER - INSIDE	4A	5,162	2,039	1,684	111	399	929	0	0	0	0	0	0	0
CAST IRON, 4" AND UNDER - OUTSIDE	4B	389,883	0	0	0	0	0	131,078	118,836	19,650	12,671	7,447	15,907	84,293
CAST IRON, 6" AND 8" - INSIDE	4A	11,399,272	4,502,712	3,719,582	245,084	881,164	2,050,729	0	0	0	0	0	0	0
CAST IRON, OVER 8" - INSIDE	4A	12,257,703	5,002,369	4,754,763	377,537	637,401	1,485,634	0	0	0	0	0	0	0
CAST IRON, 6" AND 8" - OUTSIDE	4B	38,004,184	0	0	0	0	0	12,777,007	11,583,675	1,915,411	1,235,136	725,880	1,550,571	8,216,505
CAST IRON, OVER 8" - OUTSIDE	3B	25,200,471	0	0	0	0	0	8,406,877	8,845,365	1,791,753	1,174,342	622,452	693,013	3,666,669
CAST IRON, 6" AND 8" - JOINT	4	836,740	89,280	73,131	4,769	17,237	40,163	205,985	186,593	31,043	20,082	11,714	24,985	132,707
CAST IRON OVER 8" - JOINT	3	614,541	65,817	62,376	4,916	8,542	19,911	151,116	159,166	32,325	21,263	11,246	12,352	65,510
MANHOLES - INSIDE	3A	137,194	55,989	53,218	4,226	7,134	16,628	0	0	0	0	0	0	0
MANHOLES - OUTSIDE	3B	824,477	0	0	0	0	0	275,046	289,391	58,620	38,421	20,365	22,673	119,961
MANHOLES - JOINT	3	17,498	1,874	1,776	140	243	567	4,303	4,532	920	605	320	352	1,865
VALVES AND VALVE BOXES - INSIDE	3A	1,568,664	640,172	608,485	48,315	81,571	190,122	0	0	0	0	0	0	0
VALVES AND VALVE BOXES - OUTSIDE	3B	7,636,087	0	0	0	0	0	2,547,399	2,680,267	542,926	355,842	188,611	209,992	1,111,051
VALVES AND VALVE BOXES - JOINT	3	57,332	6,140	5,819	459	797	1,858	14,098	14,849	3,016	1,984	1,049	1,152	6,112
STEEL - OUTSIDE	3B	812,517	0	0	0	0	0	271,056	285,193	57,770	37,863	20,069	22,344	118,221
STEEL - JOINT	3	40,884	4,379	4,150	327	568	1,325	10,053	10,589	2,150	1,415	748	822	4,358
PLASTIC - OUTSIDE	4B	22,773	0	0	0	0	0	7,656	6,941	1,148	740	435	929	4,924
LANCASTER METER PIT - OUTSIDE	4B	-	0	0	0	0	0	0	0	0	0	0	0	0
RELINING	4	3,284,076	350,411	287,028	18,719	67,652	157,636	804,927	732,349	121,839	78,818	45,977	97,865	520,854
323 SERVICES - INSIDE	9A	2,759,145	2,253,946	349,584	11,864	143,751	0	0	0	0	0	0	0	0
323 SERVICES - OUTSIDE	9B	11,292,376	0	0	0	0	0	9,881,958	977,920	47,428	2,258	3,368	379,424	0
324 METERS - INSIDE	8A	138,777	94,701	40,745	3,331	0	0	0	0	0	0	0	0	0
324 METERS - OUTSIDE	8B	25,591	0	0	0	0	0	17,755	7,145	550	64	77	0	0
325 HYDRANTS - INSIDE	7A	1,123,446	0	0	0	0	1,123,446	0	0	0	0	0	0	0
325 HYDRANTS - OUTSIDE	7B	1,211,532	0	0	0	0	0	0	0	0	0	0	0	0
328 OFFICE FURNITURE	13	187,975	32,858	16,523	1,147	1,429	1,353	69,231	41,542	7,481	4,775	2,594	2,199	8,842
329 TRANSPORTATION EQUIPMENT	13	2,460,447	430,086	216,273	15,009	18,899	17,715	906,183	543,759	97,926	62,495	33,954	28,787	89,560
330 STORES EQUIPMENT	13	309	54	27	2	2	2	114	68	12	8	4	4	11
331 SHOP EQUIPMENT	13	0	0	0	0	0	0	0	0	0	0	0	0	0
332 TOOLS AND WORK EQUIPMENT	13	718,541	125,601	63,160	4,383	5,461	5,173	264,639	158,798	28,598	18,251	9,916	8,407	26,155
333 COMMUNICATION EQUIPMENT	13	820,590	143,439	72,130	5,006	6,236	5,908	302,223	181,350	32,659	20,843	11,324	9,601	29,869
334 MISCELLANEOUS EQUIPMENT	13	29,220	5,108	2,568	178	222	210	10,762	6,458	1,163	742	403	342	1,064
TOTAL PLANT IN SERVICE		255,574,431	30,570,577	24,929,513	1,839,591	2,757,409	7,089,663	74,721,925	63,681,456	11,970,159	7,790,295	4,247,298	4,308,601	21,667,943
OTHER RATE BASE ITEMS														
MATERIALS AND SUPPLIES	21	642,144	103,835	62,095	4,623	3,724	3,660	222,503	156,876	29,988	20,099	10,660	5,779	18,301
CASH WORKING CAPITAL	21	2,156,056	348,634	208,491	15,524	12,505	12,290	747,073	526,725	100,688	67,485	35,791	19,405	61,448
TOTAL RATE BASE		258,372,631	31,023,046	25,200,099	1,859,738	2,773,639	7,105,613	75,691,501	64,365,056	12,100,835	7,877,879	4,293,749	4,333,785	21,747,692
Factor 15		255,574,431	30,570,577	24,929,513	1,839,591	2,757,409	7,089,663	74,721,925	63,681,456	11,970,159	7,790,295	4,247,298	4,308,601	21,667,943
Other Rate Base Items		0.1197	0.											

CITY OF LANCASTER - WATER FUND

STATEMENT OF THE CALCULATION OF THE RATE OF RETURN UNDER PRESENT RATES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025
AND MARCH 31, 2027, AND THE ANTICIPATED RATE OF RETURN UNDER PROPOSED RATES
FOR INSIDE-CITY AND OUTSIDE-CITY CUSTOMERS

Pursuant To Subsection 53.53 Exhibit D I (2-4) of Tariff Regulations

Line No.	Description	12 Months Ended 31-Mar-25 (2)	Pro Forma Historic Test Year Adjustments		Pro Forma Present Rates, 31-Mar-25 (5)	Pro Forma Future and FPFTY Test Year Adjustments		Pro Forma Present Rates, 31-Mar-27 (8)	Under Proposed Rates, Supplement No. 49 to Tariff Water Pa-PUC No. 6	
			Ref. (3)	Amount (4)		Ref. (6)	Amount (7)		Increase (9)	Pro Forma 31-Mar-27 (10)
1	Operating Revenue	\$ 34,640,786	Sch. 2	\$ 66,083	\$ 34,706,869	Sch. 2	\$ 74,589	\$ 34,781,458	\$ 6,941,637	\$ 41,723,094
2										
3	Operating Revenue Deductions:									
4	Operation and Maintenance									
5	Expenses	23,962,520	Sch. 3	(7,401,090)	16,561,430	Sch. 3	687,019	17,248,449	-	17,248,449
6	Depreciation	7,240,494	Sch. 6	(2,195,387)	5,045,107	Sch. 6	848,218	5,893,325	-	5,893,325
7										
8	Total Operating									
9	Revenue Deductions	31,203,013		(9,596,477)	21,606,537		1,535,237	23,141,774	-	23,141,774
10										
11										
12	Net Operating Income									
13	Available for Return	<u>\$ 3,437,772</u>		<u>\$ 9,662,559</u>	<u>\$ 13,100,332</u>		<u>\$ (1,460,648)</u>	<u>\$ 11,639,684</u>	<u>\$ 6,941,637</u>	<u>\$ 18,581,321</u>
14										
15										
16	Original Cost Measure of Value	\$ 214,359,772		\$ -	\$ 214,359,772		\$ 44,012,859	\$ 258,372,631		\$ 258,372,631
17										
18	Rate of Return	1.60%			6.11%			4.50%		7.19%

CITY OF LANCASTER - WATER FUND

STATEMENT OF THE CALCULATION OF THE RATE OF RETURN UNDER PRESENT RATES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025
 AND MARCH 31, 2027, AND THE ANTICIPATED RATE OF RETURN UNDER PROPOSED RATES
INSIDE-CITY CUSTOMERS

Pursuant To Subsection 53.53 Exhibit D I (2-4) of Tariff Regulations

Line No.	Description (1)	12 Months Ended 31-Mar-25 (2)	Pro Forma Historic Test Year Adjustments		Pro Forma Present Rates, 31-Mar-25 (5)	Pro Forma Future and FPFTY Test Year Adjustments		Pro Forma Present Rates, 31-Mar-27 (8)	Under Proposed Rates, Supplement No. 49 to Tariff Water Pa-PUC No. 6	
			Ref. (3)	Amount (4)		Ref. (6)	Amount (7)		Increase (9)	Pro Forma 31-Mar-27 (10)
1	Operating Revenue	\$ 11,576,117	Sch. 2	\$ 63,291	\$ 11,639,408	Sch. 2	\$ (7,601)	\$ 11,631,807	\$ (0)	\$ 11,631,807
2										
3	Operating Revenue Deductions:									
4	Operation and Maintenance									
5	Expenses	6,539,230	Sch. 3	(2,019,714)	4,519,517	Sch. 3	187,483	4,707,000	-	4,707,000
6	Depreciation	1,838,795	Sch. 6	(557,540)	1,281,255	Sch. 6	215,413	1,496,668	-	1,496,668
7										
8	Total Operating									
9	Revenue Deductions	8,378,025		(2,577,254)	5,800,771		402,897	6,203,668	-	6,203,668
10										
11										
12	Net Operating Income									
13	Available for Return	\$ 3,198,092		\$ 2,640,545	\$ 5,838,637		\$ (410,498)	\$ 5,428,139	\$ (0)	\$ 5,428,139
14										
15										
16	Original Cost Measure of Value	\$56,385,026		-	\$56,385,026		\$11,577,108	\$67,962,134		67,962,134
17										
18	Rate of Return	5.67%			10.35%			7.99%		7.99%

* Operating revenue deductions and measures of value were allocated to Inside-City and Outside-City service areas based on the cost of service allocation study.

CITY OF LANCASTER - WATER FUND

STATEMENT OF THE CALCULATION OF THE RATE OF RETURN UNDER PRESENT RATES FOR THE TWELVE MONTHS ENDED MARCH 31, 2025
AND MARCH 31, 2027, AND THE ANTICIPATED RATE OF RETURN UNDER PROPOSED RATES
OUTSIDE-CITY CUSTOMERS

Line No.	Description (1)	12 Months Ended 31-Mar-25 (2)	Pursuant To Subsection 53.53 Exhibit D I (2-4) of Tariff Regulations		Pro Forma Present Rates, 31-Mar-25 (5)	Pro Forma Future and FPFTY Test Year Adjustments		Pro Forma Present Rates, 31-Mar-27 (8)	Under Proposed Rates, Supplement No. 49 to Tariff Water Pa-PUC No. 6	
			Pro Forma Historic Test Year Adjustments Ref. (3)	Amount (4)		Ref. (6)	Amount (7)		Increase (9)	Pro Forma 31-Mar-27 (10)
1	Operating Revenue	\$ 23,064,669	Sch. 2	\$ 2,792	\$ 23,067,460	Sch. 2	\$ 82,191	\$ 23,149,651	\$ 6,941,637	\$ 30,091,288
2										
3	Operating Revenue Deductions:									
4	Operation and Maintenance									
5	Expenses	17,423,289	Sch. 3	(5,381,376)	12,041,913	Sch. 3	499,535	12,541,449	-	12,541,449
6	Depreciation	5,401,699	Sch. 6	(1,637,847)	3,763,852	Sch. 6	632,805	4,396,657	-	4,396,657
7										
8	Total Operating									
9	Revenue Deductions	22,824,988		(7,019,223)	15,805,766		1,132,340	16,938,106	-	16,938,106
10										
11										
12	Net Operating Income									
13	Available for Return	\$ 239,680		\$ 7,022,014	\$ 7,261,695		\$ (1,050,150)	\$ 6,211,545	\$ 6,941,637	\$ 13,153,182
14										
15										
16	Original Cost Measure of Value	\$157,974,745		0	\$157,974,745		\$32,435,751	\$190,410,497		190,410,497
17										
18	Rate of Return	0.15%			4.60%			3.26%		6.91%

* Operating revenue deductions and measures of value were allocated to Inside-City and Outside-City service areas based on the cost of service allocation study.

City of Lancaster
 Water
 R-2025-3057237

Water Delivered into System During Year 2022
 December 31, 2022

Line	(A) Description	(B) Gallons
1	Obtained From Company Sources	7,771,608,000
2		
3	Metered Sales:	
4	Residential	2,185,265,000
5	Commercial	2,506,439,000
6	Industrial	761,134,000
7	Public	0
8	Other water Utilities	146,027,000
9	Private Fire Protection	0
10	Other Metered Service	0
11	Total Metered Sales	5,598,865,000
12		
13	Unmetered Sales	N/A
14	Residential	0
15	Commercial	0
16	Industrial	0
17	Public	0
18	Other water Utilities	0
19	Private Fire Protection	0
20	Other Metered Service	0
21	Total Unmetered Sales	0
22		
23	Total Gallons Delivered	5,598,865,000
24		
25	Non-Revenue Usage Allowances:	
26	Authorized Unmetered Usage	
27	Main Flushing	600000
28	Blow-Off Use	
29	Others: Fire Services, Hydrant flushing, Cement lining & Street sweepers	200000
30	Unauthooized Use	
31	Unavoidable Use	
32	Unavoidable Use	
33	Unavoidable Leakage ___ gpd/mile of main	
34	Adjustments	
35	Located & Repaired Breaks in Mains & Services	
36	Others: Identify__New Main Installs & New Developments	
37	Total Allowances & Adjustments	800000
38	Unaccounted-for-Water	2,171,943,000
39	Percentage of Unaccounted-for-Water	27.9%

City of Lancaster
 Water
 R-2025-3057237

Water Delivered into System During Year 2023
 December 31, 2023

(A)	(B)	
Line	Description	Gallons
1	Obtained From Company Sources	7,613,524,000
2		
3	Metered Sales:	
4	Residential	2,335,835,000
5	Commercial	2,341,800,000
6	Industrial	630,748,000
7	Public	0
8	Other water Utilities	131,268,000
9	Private Fire Protection	0
10	Other Metered Service	0
11	Total Metered Sales	5,439,651,000
12		
13	Unmetered Sales	N/A
14	Residential	0
15	Commercial	0
16	Industrial	0
17	Public	0
18	Other water Utilities	0
19	Private Fire Protection	0
20	Other Metered Service	0
21	Total Unmetered Sales	0
22		
23	Total Gallons Delivered	5,439,651,000
24		
25	Non-Revenue Usage Allowances:	
26	Authorized Unmetered Usage	
27	Main Flushing	600000
28	Blow-Off Use	
29	Others: Fire Services, Hydrant flushing, Cement lining & Street sweepers	200000
30	Unauthooized Use	
31	Unavoidable Use	
32	Unavoidable Use	
33	Unavoidable Leakage ___ gpd/mile of main	
34	Adjustments	
35	Located & Repaired Breaks in Mains & Services	
36	Others: Identify__New Main Installs & New Developments	
37	Total Allowances & Adjustments	800000
38	Unaccounted-for-Water	2,173,073,000
39	Percentage of Unaccounted-for-Water	28.5%

City of Lancaster
 Water
 R-2025-3057237

Water Delivered into System During Year 2024
 December 31, 2024

Line	(A) Description	(B) Gallons
1	Obtained From Company Sources	7,722,273,000
2		
3	Metered Sales:	
4	Residential	2,192,169,000
5	Commercial	2,377,054,000
6	Industrial	713,634,000
7	Public	0
8	Other water Utilities	167,135,000
9	Private Fire Protection	0
10	Other Metered Service	0
11	Total Metered Sales	5,449,992,000
12		
13	Unmetered Sales	N/A
14	Residential	0
15	Commercial	0
16	Industrial	0
17	Public	0
18	Other water Utilities	0
19	Private Fire Protection	0
20	Other Metered Service	0
21	Total Unmetered Sales	0
22		
23	Total Gallons Delivered	5,449,992,000
24		
25	Non-Revenue Usage Allowances:	
26	Authorized Unmetered Usage	
27	Main Flushing	600000
28	Blow-Off Use	
29	Others: Fire Services, Hydrant flushing, Cement lining & Street sweepers	200000
30	Unauthorized Use	
31	Unavoidable Use	
32	Unavoidable Use	
33	Unavoidable Leakage ___ gpd/mile of main	
34	Adjustments	
35	Located & Repaired Breaks in Mains & Services	
36	Others: Identify__New Main Installs & New Developments	
37	Total Allowances & Adjustments	800000
38	Unaccounted-for-Water	2,271,481,000
39	Percentage of Unaccounted-for-Water	29.4%

City of Lancaster
 Water

R-2025-3057237

Water Delivered into System

Water Delivered into System 2022 -2024 (3 - Year Average)

Line	(A) Description	(B) Gallons
1	Obtained From Company Sources	7,702,468,333
2		
3	Metered Sales:	
4	Residential	2,237,756,333
5	Commercial	2,408,431,000
6	Industrial	701,838,667
7	Public	0
8	Other water Utilities	148,143,333
9	Private Fire Protection	0
10	Other Metered Service	0
11	Total Metered Sales	5,496,169,333
12		
13	Unmetered Sales	N/A
14	Residential	0
15	Commercial	0
16	Industrial	0
17	Public	0
18	Other water Utilities	0
19	Private Fire Protection	0
20	Other Metered Service	0
21	Total Unmetered Sales	0
22		
23	Total Gallons Delivered	5,496,169,333
24		
25	Non-Revenue Usage Allowances:	
26	Authorized Unmetered Usage	
27	Main Flushing	600000
28	Blow-Off Use	0
29	Others: Fire Services, Hydrant flushing, Cement lining & Street sweepers	200000
30	Unauthooized Use	0
31	Unavoidable Use	0
32	Unavoidable Use	0
33	Unavoidable Leakage ___ gpd/mile of main	0
34	Adjustments	0
35	Located & Repaired Breaks in Mains & Services	0
36	Others: Identify__New Main Installs & New Developments	0
37	Total Allowances & Adjustments	800000
38	Unaccounted-for-Water 3-Yr Avg	2,205,499,000
39	Percentage of Unaccounted-for-Water	28.6%
40	I&E Adjustment	-665,399,200
41	Target UFW	1,540,099,800
42	Target UFW Percentage	20.0%

City of Lancaster
Water
R-2025-3057237
Unaccounted For Water related Expenses

Line No.	(A)	(B)	(C)	(D)
		Power Expense	Chemicals	TOTAL
1	*Expense - Susquehanna	\$1,109,537	\$684,718	\$1,794,255
2	**Expense - Conestoga	\$846,071	\$421,907	\$1,267,978
3	Expense Totals - Both plants	\$1,955,608	\$1,106,625	\$3,062,233
4	Factor 1 - Allocation - Outside Customers	0.7432	0.7432	0.7432
5	Adjusted - Outside Expense Total	\$1,453,408	\$822,444	\$2,275,852
6	Total Send Out	7,702,468,333	7,702,468,333	7,702,468,333
7	Cost Per Thousand	\$0.188694	\$0.106777	\$0.295470
8	Excess UFW	-665,399,200	-665,399,200	-665,399,200
9	UFW Adjustment	-\$125,557	-\$71,049	-\$196,606
10	***I&E Expense Total Allowed	\$1,327,851	\$751,395	\$2,079,246

**TUS-R-12 Exhibit GRH , Sch 3 Expenses, col 9, Lines 18 and 20*

***TUS-R-12 Exhibit GRH , Sch 3 Expenses, col 9, Lines 45 and 47*

****Adjustment is subject to change if I&E witness Getachew Bedasa's recommendation for purchased power is accepted.*

**Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of the Office of Consumer Advocate
OCA Set 7 to the City of Lancaster**

Responsible Witness: Christine Volkay-Hilditch

OCA-7-5. What is the City’s proposal with respect to the scale-back of rates in the event that the Commission authorizes an increase which is less than the requested increase?

Response: The City is confident the requested increase in rates is justified. However, in the event that the Commission authorizes an increase which is less than the requested increase, the City would propose scaling back the increases for the Residential, Commercial, Public and Industrial classes by adjusting the customer charges and volumetric rates. Additionally, the City would propose scaling back the increase to the Private Fire rates by adjusting the service line and hydrant rates.

**I&E Statement No. 4-R
Witness: Christine Wilson**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Rebuttal Testimony

of

Christine Wilson

Bureau of Investigation and Enforcement

Concerning:

LOW-INCOME PROGRAM PROPOSALS

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INTRODUCTION 1

WATER FUND’S EXISTING LOW-INCOME PROGRAM 2

OCA LOW-INCOME PROGRAM RECOMMENDATIONS..... 4

FINAL COMMENTS 10

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Christine Wilson, and my business address is Pennsylvania Public
4 Utility Commission, 400 North Street, Harrisburg, PA 17120.

5

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

7 A. I am employed by the Pennsylvania Public Utility Commission (Commission or
8 PUC) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility
9 Financial Analyst Supervisor.

10

11 **Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT BACKGROUND?**

12 A. My education and employment background is summarized in the attached
13 Appendix A.

14

15 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.**

16 A. I&E is responsible for representing the public interest in rate and other
17 proceedings before the Commission. I&E's analysis in this proceeding is based on
18 its responsibility to represent the public interest. This responsibility requires
19 balancing the interests of ratepayers, the regulated utility, and the regulated
20 community as a whole.

1 **Q. DID YOU PRESENT DIRECT TESTIMONY IN THIS PROCEEDING?**

2 A. No.

3

4 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

5 A. The purpose of my rebuttal testimony is to respond to the direct and supplemental
6 direct testimony of the Office of Consumer Advocate (OCA) witness LeeAnn
7 Wise concerning recommendations she made for the City of Lancaster – Bureau of
8 Water’s (Water Fund) low-income program.¹

9

10 **Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

11 A. Yes. I&E Exhibit No.4-R contains schedules that support my rebuttal testimony.

12

13 **WATER FUND’S EXISTING LOW-INCOME PROGRAM**

14 **Q. PLEASE SUMMARIZE THE WATER FUND’S CURRENTLY EXISTING**
15 **LOW-INCOME PROGRAM.**

16 A. The Water Fund indicated that it has offered a Community Action Partnership
17 (CAP)² low-income assistance program from 2023 to 2025 that requires the
18 account holder to have a shutoff notice and fall within 250% of the poverty level.

¹ OCA Statement Nos. 4 and 4-Supp.

² <https://caplanc.org/about-cap/>, accessed December 23, 2025.

1 The total annual funding is \$50,000.³ There were four customers enrolled in 2024
2 and five customers in 2025 through September.⁴

3

4 **Q. WHAT IS THE CAP PROGRAM?**

5 A. The CAP is a nonprofit corporation that aids low to moderate-income individuals
6 and families in Lancaster County⁵ operating similar to a hardship fund providing
7 support via lump-sum credits not required to be repaid.⁶ According to CAP’s
8 website, it is “Lancaster County’s largest anti-poverty organization focused on
9 economic mobility.”⁷

10

11 **Q. WHO FUNDS THE CAP PROGRAM?**

12 A. It is funded by federal, state, and local grants, allocations, and private donations.⁸

³ I&E Exhibit No. 4-R, Schedule 1.

⁴ OCA Statement No. 4, p. 8 and I&E Exhibit No. 4-R, Schedule 2.

⁵ <https://caplanc.org/wp-content/uploads/2024/04/2023-CAP-Lancaster-Audited-Financial-Statements.pdf>,
accessed December 23, 2025.

⁶ OCA Statement No. 4, pp. 7-8.

⁷ <https://caplanc.org/about-cap/>, accessed December 23, 2025.

⁸ <https://caplanc.org/wp-content/uploads/2024/04/2023-CAP-Lancaster-Audited-Financial-Statements.pdf>,
accessed December 23, 2025.

1 **OCA LOW-INCOME PROGRAM RECOMMENDATIONS**

2 **Existing CAP Program:**

3 **Q. WHAT WAS OCA WITNESS LEANN WISE’S RECOMMENDATION**
4 **CONCERNING CAP ENROLLMENT?**

5 A. Ms. Wise recommends that the Water Fund begin tracking low-income customers,
6 using this information to set up targeted outreach events for neighborhoods that
7 need it the most.⁹ She recommends that the Water Fund actively review customer
8 accounts regarding late payments or payment plan defaults, reaching out to
9 determine if affected customers qualify for the CAP program, inserting
10 information about the program on the Water Fund’s website, including a bill insert
11 that explains the CAP program and how to enroll, and updating training materials
12 with regard to the CAP program.¹⁰

13
14 **Q. WHY DOES MS. WISE SUGGEST THESE CHANGES TO THE**
15 **EXISTING CAP PROGRAM?**

16 A. She highlights the City’s low-income population and the Water Fund’s proposed
17 increase in rates¹¹ along with the low participation level in the CAP program of
18 four PUC jurisdictional customers in 2024 and five PUC jurisdictional customers
19 in 2025 through September.¹² She also highlights the growing yearly percentage

⁹ OCA Statement No. 4, p. 9.
¹⁰ OCA Statement No. 4, p. 10.
¹¹ OCA Statement No. 4, pp. 3-7.
¹² OCA Statement No. 4, p. 8.

1 of PUC jurisdictional arrearages that go from 11% in 2022 to 17% in 2024, and
2 18% year-to-date through September 2025.¹³

3
4 **Q. DO YOU ACCEPT THE CHANGES RECOMMENDED BY MS. WISE TO**
5 **THE EXISTING CAP PROGRAM?**

6 A. Yes. Since participation by jurisdictional customers in the CAP program is
7 relatively low, her recommended changes to the existing program are reasonable.
8 Additionally, I accept Ms. Wise’s general points made in her supplemental direct
9 testimony reinforcing the fact that individual jurisdictional customers are
10 expressing concern about rising rates, affordability, and how PUC jurisdictional
11 rates are already significantly higher than City residents (non-jurisdictional
12 customers) in highlighted instances.¹⁴

13
14 **Q. DOES OCA WITNESS WISE RECOMMEND ANY NEW LOW-INCOME**
15 **PROGRAMS BEYOND THE EXISTING CAP PROGRAM?**

16 A. Yes. She recommends a two-year pilot arrearage management program (AMP)¹⁵
17 and a two-year pilot bill discount program.¹⁶

¹³ OCA Statement No. 4, p. 11.

¹⁴ OCA Statement 4-Supp, pp. 1-3.

¹⁵ OCA Statement No. 4, p. 12.

¹⁶ OCA Statement No. 4, p. 14.

1 **OCA's Recommended Two-Year Pilot AMP:**

2 **Q. WHAT IS OCA'S BASIS FOR RECOMMENDING A TWO-YEAR PILOT**
3 **AMP?**

4 A. She uses the growing jurisdictional arrears amounts from 2022 of 11% to 17% in
5 2024 and 18% year-to-date through September 2025 as support for her
6 recommendation, and states that low participation in the CAP program means that
7 low-income customers are paying rates they cannot afford that would result in
8 higher levels of bad debt.¹⁷ She references Community Utilities of Pennsylvania
9 (CUPA) and its AMP citing it as support for her recommendation.¹⁸

10
11 **Q. DO YOU AGREE WITH THE OCA'S RECOMMENDATION FOR A**
12 **TWO-YEAR PILOT AMP?**

13 A. No. The Water Fund has not expressed the need for this additional program in its
14 base rate filing, and I am concerned about the suggestion that a municipal utility
15 should implement such a program when a large number of the customers are non-
16 jurisdictional.¹⁹ Additionally, Ms. Wise did not specify whether the recommended
17 AMP was for the total system or for just the jurisdictional customers. Since the
18 Water Fund has not expressed the need for the AMP, nor was a claim made for
19 uncollectibles in this case,²⁰ I am concerned about its ability and readiness to

¹⁷ OCA Statement No. 4, p. 11.

¹⁸ OCA Statement No. 4, pp. 12-13.

¹⁹ OCA Statement No. 4, p. 3.

²⁰ I&E Exhibit No. 4-R, Schedule 3.

1 implement and offer such a program. I am unaware of any other municipal
2 utilities that offer similar programs where customers are both jurisdictional and
3 non-jurisdictional. Finally, Ms. Wise recommends a two-year pilot AMP but
4 offers no budget for the recommended program, no indication of how it should be
5 funded, and no explanation for how a two-year pilot program would be analyzed
6 given that the Water Fund does not file rate cases every two years.

7
8 **Q. DOES THE FACT THAT CUPA IS KNOWN TO OFFER AN AMP LEND**
9 **SUPPORT FOR THE RECOMMENDATION OF A TWO-YEAR PILOT**
10 **AMP FOR THE WATER FUND?**

11 A. No. CUPA is not a municipal utility, and as a result, CUPA's AMP would not be
12 comparable to the Water Fund. Furthermore, control of CUPA is in process of
13 being transferred to American Water Works Company, Inc.²¹ and therefore, any
14 comparison to CUPA is not relevant.

15
16 **Q. WOULD A TWO-YEAR PILOT FOR AN AMP MAKE LOGICAL SENSE**
17 **FOR THE WATER FUND?**

18 A. No. Aside from the issues with the AMP discussed above, according to I&E
19 witness Getachew Bedasa, the historic base rate filing interval for the Water Fund
20 is 60 months.²² Thus, a two-year pilot does not make sense unless it would

²¹ *Joint Application of American Water Works Company, et. al.* at Docket No. A-2025-305551, etc.

²² I&E Statement No. 1, p. 27.

1 coincide with a subsequent rate case filing as any funding allowed for this
2 program would be embedded in base rates and could not be altered at an interim
3 point.

4
5 **OCA Proposed Two-Year Pilot Bill Discount Program:**

6 **Q. WHAT IS OCA’S BASIS FOR RECOMMENDING A TWO-YEAR PILOT**
7 **BILL DISCOUNT PROGRAM?**

8 A. OCA mentions that “similar small water utilities” like CUPA have offered
9 percentage discounts on volumetric usage and she recommends the Water Fund
10 adopt a similar percentage discount.²³ She cites concerns about affordability,
11 increasing rates along with an increased cost of living, and the low participation in
12 the CAP program.²⁴ She also explains how the Dollar Energy Fund can assist with
13 administration of low-income programs.²⁵

14
15 **Q. DO YOU AGREE WITH THE OCA’S RECOMMENDATION FOR A**
16 **TWO-YEAR PILOT BILL DISCOUNT PROGRAM?**

17 A. No. Similar to my response concerning the OCA’s proposed two-year pilot AMP,
18 the Water Fund has not expressed the need for this additional bill discount
19 program in its base rate filing, and I am concerned about the suggestion that a
20 municipal utility should implement such a program when a large number of the

²³ OCA Statement No. 4, p. 14.

²⁴ OCA Statement No. 4, p. 15.

²⁵ OCA Statement No. 4, pp. 15-18.

1 customers are non-jurisdictional.²⁶ Additionally, Ms. Wise did not specify
2 whether the recommended bill discount program was for the total system or for
3 just the jurisdictional customers. Since the Water Fund has not expressed the need
4 for the bill discount program, I am concerned about its ability and readiness to
5 implement and offer such a program to only jurisdictional ratepayers as a result of
6 the outcome of this proceeding. I am unaware of any other municipal utilities that
7 offer such a program solely for jurisdictional customers. Finally, Ms. Wise
8 recommends a two-year pilot bill discount program but offers no budget for the
9 recommended program, no indication of how it should be funded, and no
10 explanation of how the program would be reviewed in two years given that this
11 timeframe does not align with the Water Fund's historic filing frequency for rate
12 cases.

13
14 **Q. DOES THE FACT THAT CUPA IS KNOWN TO OFFER A SIMILAR BILL**
15 **DISCOUNT PROGRAM LEND SUPPORT FOR THE**
16 **RECOMMENDATION OF A TWO-YEAR PILOT BILL DISCOUNT**
17 **PROGRAM FOR THE WATER FUND?**

18 **A.** No. CUPA is not a municipal utility, and as a result, its bill discount program is
19 not comparable to the Water Fund. Furthermore, control of CUPA is in process of

²⁶ OCA Statement No. 4, p. 3.

1 being transferred to American Water Works Company, Inc.²⁷ and therefore, any
2 comparison to CUPA is not relevant.

3
4 **Q. WOULD A TWO-YEAR PILOT FOR A BILL DISCOUNT PROGRAM**
5 **MAKE LOGICAL SENSE FOR THE WATER FUND?**

6 A. No. Aside from the issues discussed above, according to I&E witness Getachew
7 Bedasa, the historic base rate filing interval for the Water Fund is 60 months.²⁸
8 Thus, a two-year pilot does not make sense unless it would coincide with a
9 subsequent rate case filing as any funding allowed for this program would be
10 embedded in base rates and could not be altered at an interim point.

11
12 **FINAL COMMENTS**

13 **Q. IS IT NECESSARY TO REITERATE ANY OVERARCHING CONCERNS**
14 **ABOUT OCA'S PROPOSED NEW LOW-INCOME PROGRAMS?**

15 A. Yes. I am sensitive to the fact that many jurisdictional and non-jurisdictional
16 customers may be struggling to make ends meet with rising prices. However, I am
17 not aware that the Commission has jurisdiction to require the Water Fund to
18 provide such programs for non-jurisdictional customers. Thus, it may be
19 impractical to administer low-income programs that are only provided to
20 jurisdictional ratepayers. If this is even possible and the Commission approves

²⁷ *Joint Application of American Water Works Company, et. al.* at Docket No. A-2025-305551, etc.

²⁸ I&E Statement No. 1, p. 27.

1 such programs for this municipal utility, the Water Fund should be required to
2 ensure that jurisdictional ratepayers do not fund program benefits for non-
3 jurisdictional City residents and vice versa, providing specific details of a method
4 and process to account for direct charges of such benefits.

5
6 **Q. DO YOU HAVE ANY OTHER COMMENTS CONCERNING THE OCA'S**
7 **PROPOSED ADDITIONS FOR LOW-INCOME PROGRAMS?**

8 A. Yes. Potential low-income programs for the Water Fund should not be compared
9 to Philadelphia Gas Works or Pittsburgh Water, because the PUC regulates the
10 entire utility in those instances with no separation of any jurisdictional and non-
11 jurisdictional customers.

12
13 **Q. DID YOU REVIEW OTHER MUNICIPAL UTILITIES' TARIFFS FOR**
14 **JURISDICTIONAL UTILITIES TO SEE WHETHER LOW-INCOME**
15 **PROGRAMS WERE OFFERED?**

16 A. Yes. I reviewed the Borough of Ambler,²⁹ the City of Bethlehem,³⁰ and the
17 Borough of Hanover, Hanover Municipal Water Works (Hanover)³¹ tariffs to see if
18 any of those offered low-income programs to jurisdictional ratepayers.

²⁹ https://boroughofambler.com/download/water-department/water_rates/Current-Ambler-Tariff-DSIC-Update-eff-1-18-23-A9388150.pdf, accessed December 29, 2025.

³⁰ <https://www.bethlehem-pa.gov/CityOfBethlehem/media/WSRMedia/Files/Water-Tariff-June-2021.pdf>, accessed December 29, 2025.

³¹ <https://www.hanoverboroughpa.gov/DocumentCenter/View/144/Water-Tariff-PDF>, accessed December 29, 2025.

1 **Q. DO ANY OF THE ABOVE-MENTIONED MUNICIPAL UTILITIES OFFER**
2 **LOW-INCOME PROGRAMS TO JURISDICTIONAL RATEPAYERS**
3 **THAT ARE FUNDED BY RATEPAYERS?**

4 A. No. I did not see any reference to low-income programs in the Borough of Ambler
5 tariff,³² the City of Bethlehem tariff for water,³³ or Hanover's tariff.³⁴

6

7 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

8 A. Yes.

³² https://boroughofambler.com/download/water-department/water_rates/Current-Ambler-Tariff-DSIC-Update-eff-1-18-23-A9388150.pdf, accessed December 29, 2025.

³³ <https://www.bethlehem-pa.gov/CityOfBethlehem/media/WSRMedia/Files/Water-Tariff-June-2021.pdf>, accessed December 29, 2025.

³⁴ <https://www.hanoverboroughpa.gov/DocumentCenter/View/144/Water-Tariff-PDF>, accessed December 29, 2025.

Christine S. Wilson
Professional and Educational Background

Experience:

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania

August 2013 to Present:

Fixed Utility Financial Analyst Supervisor, Bureau of Investigation and Enforcement

Responsible for supervising a team of fixed utility financial analysts and engineers in the analysis and preparation of written and oral testimony in base rate case proceedings, purchased gas cost proceedings, and other proceedings as required.

February 2008 to August 2013:

Fixed Utility Financial Analyst, Bureau of Investigation & Enforcement

Review of operating and maintenance expenses for regulated utilities as a part of the evaluation and recommendation process for utility base rate and purchased gas cost filings, preparing written testimony for cases, and testifying as an expert witness.

Prior Accounting Employment: Approximately fifteen years of performing public, corporate, and nonprofit accounting, in addition to eight years of full-time administrative work.

Education/Certification:

Certified Public Accountant in Pennsylvania, 2000 to 2023 (inactive as of January 1, 2024)

Green Mountain College, Poultney, Vermont

Sustainable MBA Program, four credits earned, 2009 to 2010

Pennsylvania State University, Middletown, Pennsylvania

Bachelor of Science, Professional Accountancy, 1995

(Graduated with distinction)

Utility-Related Trainings & Other Courses/Webinars:

PA Public Utility Commission Rate School, Presenter, January 2022 & February 2024

NARUC Staff Subcommittee on Accounting & Finance, Fall 2021 webinar, October 5-7, 2021

Institute of Public Utilities Accounting and Ratemaking Course (Online)

Michigan State University, East Lansing, Michigan, September 14-16, 2021 (not for credit)

NARUC Staff Subcommittee on Accounting & Finance, Spring 2021 webinar, April 6-8, 2021

NARUC Staff Subcommittee on Accounting & Finance, Fall 2020 webinar, October 21-22, 2020

Christine S. Wilson
Professional and Educational Background

Utility-Related Trainings & Other Courses/Webinars (continued):

S&P Global Essentials of Regulatory Finance, Georgetown University, Washington, DC, October 15-16, 2019

Taxation of Business Entities I: Corporations by University of Illinois, coursera.com, completed October 2019 (not for credit)

Federal Taxation II: Property Transactions of Business Owners and Shareholders by University of Illinois, coursera.com, completed August 2019 (not for credit)

Federal Taxation I: Individuals, Employees, and Sole Proprietorships by University of Illinois, coursera.com, completed July 2019 (not for credit)

Positive Psychology Specialization by University of Pennsylvania, coursera.com, completed May 2019 (not for credit)

Institute of Public Utilities Advanced Regulatory Studies Program
Michigan State University, East Lansing, Michigan, October 1-5, 2018 (not for credit)

Financial Markets (with Honors) by Yale University, coursera.com, completed November 2017 (not for credit)

PA Public Utility Commission Rate Case Training, March 5-6, 2010; October 4-5, 2012

Institute of Public Utilities Advanced Regulatory Studies Program
Michigan State University, East Lansing, Michigan, October 7-10, 2008

NARUC Utility Rate School (conducted by NARUC's Committee on Water and the Institute of Public Utilities, Michigan State University), San Diego, May 11-16, 2008

Testimony Submitted:

R-2025-3054393	Valley Energy, Inc.
R-2024-3046931	PECO Energy Company – Electric Division
R-2024-3047068	FirstEnergy Pennsylvania Electric Company
R-2023-3040153	Greater Hazleton Community Area New Development Organization, Inc. (CAN DO, Inc.)
R-2022-3032764	Leatherstocking Gas Company of PA, LLC
R-2022-3031704	Borough of Ambler – Water Department

Christine S. Wilson
Professional and Educational Background

Testimony Submitted (continued):

R-2021-3027385	Aqua Pennsylvania, Inc. base rate case (Water)
R-2021-3027386	Aqua Pennsylvania Wastewater, Inc. base rate case
R-2021-3024750	Duquesne Light Company
P-2020-3022426	PAWC Response to COVID-19 Emergency and Financial Impacts
R-2020-3019369	PAWC base rate case (Water)
R-2020-3019371	PAWC base rate case (Wastewater)
R-2018-3000164	PECO Energy Company – Electric Division
R-2017-2640058	UGI Utilities, Inc. – Electric Division
R-2014-2428745	Metropolitan Edison Company (Met-Ed)
R-2014-2428744	Pennsylvania Power Company (Penn Power)
R-2014-2428743	Pennsylvania Electric Company (Penelec)
R-2014-2428742	West Penn Power Company
R-2014-2402324	Emporium Water Company
R-2014-2406274	Columbia Gas of Pennsylvania, Inc.
R-2013-2397353	Pike County Power & Light (Gas)
R-2013-2372129	Duquesne Light Company
R-2013-2360798	Columbia Water Company
R-2012-2336379	York Water Company
R-2012-2321748	Columbia Gas of Pennsylvania, Inc.
R-2012-2292082	Peoples Natural Gas Company, LLC (1307(f))
R-2012-2285985	Peoples Natural Gas Company, LLC
R-2011-2267958	Aqua Pennsylvania, Inc.
R-2010-2214415	UGI Central Penn Gas, Inc.
R-2010-2201702	Peoples Natural Gas Company, LLC
R-2010-2166214	PAWC Northeast Wastewater Operations
R-2010-2166212	PAWC Coatesville Wastewater Operations
R-2010-2166210	PAWC Claysville Wastewater Operations

Christine S. Wilson
Professional and Educational Background

Testimony Submitted (continued):

R-2010-2166208	PAWC Clarion Wastewater Operations
R-2010-2161694	PPL Electric Utilities Corporation
R-2009-2132019	Aqua Pennsylvania, Inc.
R-2009-2117740	Penn Estates Utilities Inc. (Sewer)
R-2009-2117532	Penn Estates Utilities Inc. (Water)
M-2009-2123945	PPL Electric Utility Company (Smart Meter Plan)
M-2009-2123944	PECO Energy Company (Smart Meter Plan)
M-2009-2093216	PPL Electric Utility Corporation (EE&C Plan)
M-2009-2093215	PECO Energy Company (EE&C Plan)
R-2008-2079675	UGI Central Penn Gas, Inc.
R-2008-2046518	Pike County Light & Power Company (Electric)
R-2008-2042293	Newtown Artesian Water Company
R-2008-2032689	PAWC Coatesville Wastewater Operations

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Exhibit to Accompany

the

Rebuttal Testimony

of

Christine Wilson

Bureau of Investigation and Enforcement

Concerning:

LOW-INCOME PROGRAM PROPOSALS

Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of the Office of Consumer Advocate
OCA Set 4 to the City of Lancaster

Responsible Witness: Tina Campbell

OCA-4-33. Please provide a list of all low-income assistance programs offered by the City of Lancaster (CAP, LIHEAP, arrearage forgiveness, weatherization programs). Include all eligibility requirements, participation levels, and total funding for each program listed.

Response: The City has offered the following low-income assistance programs from 2023 through 2025:

- **CAP** – Community Action Partnership
 - Eligibility Requirements – Must have a shut off notice and be the account holder.
 - Participation Levels– 250% of the poverty level.
 - Total Funding - \$50,000 annually.

Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of the Office of Consumer Advocate
OCA Set 4 to the City of Lancaster

Responsible Witness: Tina Campbell

OCA-4-3. Where applicable, in Excel format, by month for the most recent 24 months available, please provide, disaggregated by Bill Discount Program (BDP) tier, the number of actual participants in (or recipients of):

- a. The City of Lancaster's Bill Discount Program;
- b. The City of Lancaster's Arrearage Forgiveness Program;
- c. The City of Lancaster's hardship grant program.

Response:

- a. The City does not have a Bill Discount Program.
- b. The City does not have an Arrearage Forgiveness Program.
- c. Please see Attachment OCA-4-3 for the requested information, by year, for PUC Jurisdictional customers.

PUC JURISDICTIONAL CUSTOMERS PARTICIPATING IN THE ASSISTANCE PROGRAM

	2024	2025
CAP	4	5
PAHAF	5	0

I&E Exhibit No. 4-R
Schedule 2
Page 2 of 2

OCA 4.3

THE CITY OF LANCASTER'S HARDSHIP GRANT PROGRAM - THROUGH CAP - EACH CUSTOMER
CAN GET UP TO \$500 IN ASSISTANCE

Pa. PUC v. City of Lancaster – Bureau of Water
Docket No. R-2025-3057237
Interrogatories of the Office of Consumer Advocate
OCA Set 7 to the City of Lancaster

Responsible Witness: Gregory Herbert

OCA-7-7. Please explain how uncollectible expense is reflected in the cost of service study and the amount.

Response: The City is not claiming any uncollectible expense in the rate filing.

**I&E Statement No. 1-SR
Witness: Getachew Bedasa**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Surrebuttal Testimony

of

Getachew Bedasa

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

CASH WORKING CAPITAL

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CASH WORKING CAPITAL..... 26

1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Getachew Bedasa, and my business address is Pennsylvania Public
4 Utility Commission, 400 North Street, Harrisburg, PA 17120.

5

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

7 A. I am employed by the Pennsylvania Public Utility Commission (Commission or
8 PUC) in the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility
9 Financial Analyst.

10

11 **Q. ARE YOU THE SAME GETACHEW BEDASA WHO IS
12 RESPONSIBLE FOR I&E STATEMENT NO. 1 AND I&E EXHIBIT
13 NO. 1?**

14 A. Yes.

15

16 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

17 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of
18 the City of Lancaster – Bureau of Water (Water Fund) witness Gregory R.
19 Herbert.¹

¹ Water Fund Statement No. 4R.

1 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN**
2 **ACCOMPANYING EXHIBIT?**

3 A. No.

4
5 **Q. PLEASE SUMMARIZE THE WATER FUND’S REQUESTED REVENUE**
6 **INCREASE.**

7 A. In rebuttal testimony, the Water Fund updated its requested increase in rates for
8 jurisdictional customers to \$6,941,619 for the Fully Projected Future Test Year
9 (FPFTY) ending March 31, 2027.²

10

11 **Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS AS CONTAINED IN**
12 **THIS SURREBUTTAL TESTIMONY.**

13 A. The following table summarizes my recommended adjustments to the Water
14 Fund’s rebuttal position for jurisdictional customers:

	Water Fund Jurisdictional Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses:			
Susquehanna Power Electric	\$824,497	\$535,388	(\$289,109)
Conestoga Power Electric	\$628,715	\$408,257	(\$220,458)
Postage Expense	\$191,793	\$127,004	(\$64,789)
Admin. Indirect Costs	\$803,880	\$0	(\$803,880)
Rate Case Expense	179,333	\$107,600	(\$71,733)
Total O&M Adjustments			<u>(\$1,449,969)</u>
Rate Base:			
Cash Working Capital	\$1,547,892	\$1,342,070	(\$205,822)
Total Rate Base Adjustments			<u>(\$205,822)</u>

15

² Water Fund Exhibit GRH-1R, Schedule 1, p. 3.

1 **SUMMARY OF I&E OVERALL UPDATED POSITION**

2 **Q. WHAT IS I&E’S TOTAL UPDATED RECOMMENDED REVENUE**
3 **REQUIREMENT?**

4 A. I&E’s total recommended revenue requirement is \$26,700,692. This
5 recommended revenue requirement represents an increase of \$3,543,989 to the
6 present rate revenues of \$23,156,703. This total recommended allowance
7 incorporates my adjustments made in this surrebuttal testimony and those
8 recommended adjustments made in the surrebuttal testimony of I&E witnesses
9 Dusyant Patel³ and Esyan Sakaya.⁴

10 An updated calculation of the I&E recommended revenue requirement is
11 shown below:

³ I&E Statement No. 2-SR.

⁴ I&E Statement No. 3-SR.

City of Lancaster - Bureau of Water (Outside-City)		TABLE I			
R-2025-3057237		INCOME		SUMMARY	
	3/31/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	23,156,703	0	23,156,703	3,543,989	26,700,692
Deductions:					
O&M Expenses	12,454,808	-1,646,575	10,808,233	0	10,808,233
Depreciation	4,493,362	0	4,493,362		4,493,362
Taxes, Other	0	0	0	0	0
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	0	0	0	0
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	16,948,170	-1,646,575	15,301,595	0	15,301,595
Income Available	6,208,533	1,646,575	7,855,108	3,543,989	11,399,097
Measure of Value	197,763,833	-205,822	197,558,011	0	197,558,011
Rate of Return	3.14%		3.98%		5.77%

1

2

3 **METER SHOP - SALARIES**

4 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
5 **FOR METER SHOP – SALARIES.**

6 A. I recommended a jurisdictional allowance of \$338,068 or a reduction of \$92,014
7 (\$430,082 - \$338,068) to the Water Fund’s claim. My recommendation was based
8 on removing two Plumbing Technicians’ salaries of \$130,000 as the positions were
9 not approved to fill. As a result, a total system allowance of \$477,632 (\$607,632 -
10 \$130,000) for the total system was recommended which resulted in my
11 recommended jurisdictional allowance of \$338,068 (\$477,632 x 0.7078) after

1 multiplying the total system allowance of \$477,632 by the Water Fund's allocation
2 factor 0.7078.⁵

3
4 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

5 A. Yes. Water Fund witness Gregory Herbert partially agrees with my recommended
6 adjustment to Meter Shop Salaries.

7
8 **Q. PLEASE SUMMARIZE MR. HERBERT'S RESPONSE.**

9 A. Mr. Herbert asserts that the Water Fund agreed to lower the Meter Shop Labor
10 expense claim based on the removal of the salaries of the two Plumbing
11 Technicians. However, he contends that my use of Factor 13 to calculate this
12 reduction is incorrect. He refers to Water Fund Exhibits GRH-2 and GRH-2R,
13 indicating that the Meter Shop Labor expense is divided between "Meter Reading"
14 calculated using Factor 12 and "Other" meter-related labor calculated using
15 Factor 8. He explains that this combination results in a composite allocation of
16 0.6610 for the Meter Shop Labor expense. Consequently, he argues that this leads
17 to a reduction in the jurisdictional expense of \$85,930 (\$65,000 x 2 technicians x
18 0.6610), rather than my calculated adjustment of \$92,014.⁶

⁵ I&E Statement No. 1, pp. 5-6.

⁶ Water Fund Statement No. 4R, p. 7.

1 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

2 A. Yes. I accept his explanation and based on these corrections and clarification, I
3 accept the Water Fund's updated claim and withdraw my recommended
4 adjustment.

5

6 **MEDICAL INSURANCE EXPENSE**

7 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
8 **FOR MEDICAL INSURANCE EXPENSE.**

9 A. I recommended a jurisdictional allowance of \$1,909,296 or a reduction of \$49,676
10 (\$1,958,972 - \$1,909,296) to the Water Fund's claim. My recommendation was
11 based on a total system allowance of \$2,642,624, or a reduction of \$68,756
12 (\$2,711,380 - \$2,642,624) to the total system claim which produces a
13 recommended jurisdictional allowance of \$1,909,296 ($\$2,642,624 \times 0.7225$) after
14 multiplying the recommended total system allowance of \$2,642,624 by the
15 allocation factor of 0.7225. Consistent with my recommended adjustment to
16 Meter Shop Salaries above, a reduction of \$68,756 to the total system claim was
17 obtained by dividing the total Medical Insurance Expense claim of \$2,711,380 by
18 employee headcount of 78.87 ($5.92 + 18.00 + 18.00 + 22.25 + 7.00 + 2.20 + 5.50$)
19 to determine the per employee expense and multiplied the quotient by the number
20 of removed (two) Plumbing Technicians positions. This produced my
21 recommended adjustment of \$68,756 [$(\$2,711,380 \div 78.87) \times 2$].⁷

⁷ I&E Statement No. 1, pp. 7-8.

1 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

2 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.

3

4 **Q. SUMMARIZE MR. HERBERT'S RESPONSE.**

5 A. Mr. Herbert explains that the Water Fund's claim for Medical Insurance was based
6 on the 2025 budget, which did not account for the two Plumbing Technicians, as
7 the positions were expected to be filled in 2026. He admits that the Water Fund
8 should have adjusted the Medical Insurance claims to reflect the anticipated new
9 positions for the FPFTY in the rate filing; however, that was not done.

10 Consequently, he rejects any modifications to the Medical Insurance claim for the
11 removal of these two positions, stating that the insurance cost for the two
12 Plumbing Technicians was never included in the Water Fund's FPFTY Medical
13 Insurance Expense claim.⁸

14

15 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION IN**
16 **RESPONSE TO MR. HERBERT'S REBUTTAL TESTIMONY?**

17 A. Yes. I find his explanation that a Medical Insurance Expense claim was never
18 made in the rate filing for these two positions credible. Therefore, I am
19 withdrawing my recommended adjustment.

⁸ Water Fund Statement No. 4R, pp. 7-8.

1 **DENTAL INSURANCE EXPENSE**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
3 **FOR DENTAL INSURANCE EXPENSE.**

4 A. I recommended a jurisdictional allowance of \$37,673 or a reduction of \$981
5 (\$38,654 - \$37,673) to the Water Fund's claim. This was based on my
6 recommended total system allowance of \$52,143, or a reduction of \$1,357
7 (\$53,500 - \$52,143) to the total system claim which resulted in a recommended
8 jurisdictional allowance of \$37,673 ($\$52,143 \times 0.7225$) after multiplying the
9 recommended total system allowance of \$52,143 by the allocation factor of
10 0.7225. Consistent with my recommended adjustment to Meter Shop Salaries
11 above, a reduction of \$1,357 to the total system claim was obtained by dividing
12 the total Dental Insurance Expense claim of \$53,500 by employee headcount of
13 78.87 to determine the per employee expense and multiplied the quotient by the
14 number of removed (two) Plumbing Technicians positions which results in \$1,357
15 $[(\$53,500 \div 78.87) \times 2]$.⁹

16
17 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

18 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.
19

20 **Q. SUMMARIZE MR. HERBERT'S RESPONSE.**

21 A. Mr. Herbert explains that the Water Fund's claim for Dental Insurance was based

⁹ I&E Statement No. 1, pp. 9-10.

1 on the 2025 budget, which did not account for the two Plumbing Technicians, as
2 the positions were expected to be filled in 2026. He admits that the Water Fund
3 should have adjusted the Dental Insurance claims to reflect the anticipated new
4 positions for the FPFTY in the rate filing; however, it was not done.

5 Consequently, he rejects any modifications to the Dental Insurance claim for the
6 removal of these two positions, stating that the insurance cost for the two
7 Plumbing Technicians never included in the Water Fund's FPFTY Dental
8 Insurance Expense claim.¹⁰

9
10 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION IN**
11 **RESPONSE TO MR. HERBERT'S REBUTTAL TESTIMONY?**

12 A. Yes. I find his explanation that a Dental Insurance Expense claim was never made
13 in the rate filing for these two positions credible. Therefore, I am withdrawing my
14 recommended adjustment.

15
16 **OVERTIME EXPENSE**

17 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
18 **FOR OVERTIME EXPENSE.**

19 A. I recommended a jurisdictional allowance of \$229,075 or a reduction of \$13,761
20 (\$242,836 - \$229,075) to the Water Fund's claim. This adjustment was based on
21 my recommended total system allowance of \$317,059, or a reduction of \$19,046

¹⁰ Water Fund Statement No. 4R, pp. 7-8.

1 (\$336,105 - \$317,059) to the total system results in my recommended
 2 jurisdictional allowance of \$229,075 ($\$317,059 \times 0.7225$) by multiplying the
 3 recommended total system allowance of \$317,059 by the allocation factor of
 4 0.7225. My recommendation was based on averaging three historical years of data
 5 provided by the Water Fund as summarized in the following table.

	Claims Per Exhibit	
	<u>GHR-1, Sch. 3</u>	<u>Three-year Average¹¹</u>
Susquehanna Treatment Plant	\$206,753	\$194,884
Conestoga Treatment Plant	\$66,064	\$62,272
Laboratory	\$4,325	\$4,325
Transmission & Distribution	\$52,512	\$49,497
Meter Shop	\$2,010	\$1,895
Administration	\$3	\$3
Grounds Maintenance	\$4,438	\$4,183
Total Overtime	<u>\$336,105</u>	<u>\$317,059</u>

6
 7 Based on the information provided, I recommended an allowance of \$317,059 or a
 8 reduction of \$19,046 ($\$336,105 - \$317,059$) to the Water Fund's total system
 9 claim. Then the recommended total system allowance was multiplied by the
 10 Water Fund's allocation factor to determine the recommended jurisdictional
 11 allowance of \$229,075 ($\$317,059 \times 0.7225$).¹²

13 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

14 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommended
 15 Overtime Expense adjustment.

¹¹ I&E Exhibit No. 1, Schedule 3.

¹² I&E Statement No. 1, pp.11-12.

1 **Q. SUMMARIZE MR. HERBERT’S RESPONSE.**

2 A. Mr. Herbert explains that the Water Fund has established a three-year average for
3 Overtime Expenses based on the fiscal years ending December 31, 2023, March
4 31, 2024, and the HTY of actual overtime expenses recorded during those periods.
5 The Water Fund then applied a 3% adjustment to this three-year average for both
6 the FTY and the FPFTY to reflect expected wage increases. He disagrees with my
7 recommendation which utilizes the three-year average as the recommended
8 allowance for Overtime Expenses without factoring in any adjustments for wage
9 increases in the FTY and FPFTY. In particular, he notes that I accepted the 3%
10 pay increases for the FTY and FPFTY labor expense but took issue with the same
11 3% pay increases here.¹³

12
13 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION AS A**
14 **RESULT OF MR. HERBERT’S REBUTTAL TESTIMONY?**

15 A. Yes. Due to my acceptance of the 3% pay increases for labor expense, as Mr.
16 Herbert points out, I have reconsidered my recommendation and withdraw my
17 recommended adjustment to Overtime Expense.

¹³ Water Fund Statement No. 4R, p. 8.

1 **PAYROLL TAX EXPENSE**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
3 **FOR PAYROLL TAX EXPENSE.**

4 A. I recommended a jurisdictional allowance of \$350,936 or a reduction of \$8,238
5 (\$359,174 - \$350,936) to the Water Fund's claim. This recommendation was
6 based on the exclusion of two Plumbing Technicians' salaries totaling \$130,000, as
7 the positions were not approved to be filled. Consequently, I suggested an
8 adjustment to the Payroll Tax Expense by adding the adjustments to the total
9 system expenses, \$130,000 for Meter Shop Salaries and \$19,046 for Overtime
10 Expense, resulting in a total payroll adjustment of \$149,046. This total payroll
11 adjustment was then multiplied by the FICA rate of 7.65%, leading to a
12 recommended Payroll Tax Expense adjustment of \$11,402 [(\$130,000 + \$19,046)
13 x 0.0765]. After adjusting the total system claim to \$485,725, which is the
14 original amount of \$497,127 minus \$11,402, I applied the allocation factor by
15 multiplying \$485,725 by 0.7225, resulting in a jurisdictional recommendation of
16 \$350,936 (\$485,725 x 0.7225).¹⁴

17
18 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

19 A. Yes. Water Fund witness Gregory Herbert agrees with my adjustments to Payroll
20 Tax Expense.

¹⁴ I&E Statement No. 1, pp. 13-14.

1 **Q. PLEASE SUMMARIZE MR. HERBERT’S RESPONSE.**

2 A. Mr. Herbert explains that I used the correct Factor 14 from Water Fund Exhibit
3 GRH-2 to develop the Payroll Taxes Expense adjustment, so he has no objections
4 to the methodology used to calculate the jurisdictional claim for Payroll Taxes.¹⁵
5 In short, he accepts the method of my adjustment but based on a different dollar
6 amount due to the correction of the factor for Meter Shop Salaries. Since he
7 disagrees with my recommended adjustment to Overtime Expense, he also
8 disagrees with any corresponding Payroll Tax Expense adjustment.¹⁶

9

10 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

11 A. Yes. Based on my acceptance of Mr. Herbert’s adjustment to the Meter Shop
12 Salaries reduction and the withdrawal of my Overtime Expense adjustment, I
13 accept Mr. Herbert’s modified change to Payroll Tax Expense and have no further
14 adjustment.

15

16 **SUSQUEHANNA TREATMENT PLANT - POWER ELECTRIC**

17 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
18 **FOR SUSQUEHANNA TREATMENT PLANT – POWER ELECTRIC.**

19 A. I recommended a jurisdictional allowance of \$535,388 or a reduction of \$289,109
20 (\$824,497 - \$535,388) to the Water Fund’s claim. This was based on my

¹⁵ Water Fund Statement No. 4R, p. 7.

¹⁶ Water Fund Statement No. 4R, p. 8.

1 recommended total system allowance of \$720,479, or a reduction of \$389,058
2 (\$1,109,537 - \$720,479) to the total system claim, which results in a recommended
3 jurisdictional allowance of \$535,388 ($\$720,479 \times 0.7431$) derived by multiplying
4 the total system allowance of \$720,479 by the allocation factor 0.7431. My
5 recommended total system reduction of \$389,058 is due to the fact that the Water
6 Fund failed to provide the necessary source documentation to support this large
7 increase in expense.¹⁷

8
9 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

10 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.

11
12 **Q. PLEASE SUMMARIZE MR. HERBERT'S RESPONSE.**

13 A. Mr. Herbert states that the Water Fund provided a new delivery rate of \$0.08351
14 per kWh in response to I&E-RE-23-D, along with an email from the Director of
15 Administrative Services confirming a 54% increase from the previous year's rate.
16 Prior to signing a new contract, the delivery rate was \$0.05419 per kWh. The rise
17 from \$0.05419 to \$0.08351 per kWh represents a 54% increase. He asserts that
18 the Water Fund anticipates that the FPFTY kWh of electric usage will align closely
19 with the HTY level, making a 54% increase in power expense reasonable.¹⁸

¹⁷ I&E Statement No. 1, pp. 15-16.

¹⁸ Water Fund Statement No. 4R, p. 5.

1 **Q. WHAT IS YOUR RESPONSE TO MR. HERBERT'S REBUTTAL**
2 **TESTIMONY CONCERNING SUSQUEHANNA TREATMENT PLANT**
3 **POWER ELECTRIC EXPENSE?**

4 A. Mr. Herbert has not provided adequate justification for the claimed increase in
5 costs of Susquehanna Power Electric. The rate that he provided is a generation
6 rate. It is improper to inflate the entire electric expense amount *for both*
7 *generation and distribution* by a generation rate. The Water Fund provided no
8 proof that the distribution portion of the electric bills will also increase by 54%.

9
10 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
11 **SUSQUEHANNA TREATMENT PLANT POWER ELECTRIC EXPENSE?**

12 A. No. Based on the one electric bill that was provided for the Conestoga Filter
13 Plant,¹⁹ there is no way to estimate one recent year's worth of usage to estimate an
14 appropriate increase to the generation portion of the electric bill. Thus, the Water
15 Fund has not provided sufficient information to support this increase, and I
16 continue to recommend that the entire jurisdictional increase of \$289,109 be
17 disallowed.

¹⁹ Water Fund Exhibit GRH-4R, pp. 56-57.

1 **CONESTOGA TREATMENT PLANT - POWER ELECTRIC**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
3 **FOR CONESTOGA TREATMENT PLANT – POWER ELECTRIC.**

4 A. I recommended a jurisdictional allowance of \$408,257 or a reduction of \$220,458
5 (\$628,715 - \$408,257) to the Water Fund’s claim. This was based on my
6 recommended total system allowance of \$549,397, or a reduction of \$296,674
7 (\$846,071 - \$549,397) to the total system claim, which results in a recommended
8 jurisdictional allowance of \$408,257 ($\$549,397 \times 0.7431$) derived by multiplying
9 the recommended total system allowance of \$549,397 by the allocation factor
10 0.7431. My recommended total system reduction of \$296,674 is due to the fact
11 that the Water Fund failed to provide the necessary source documentation to
12 support this large increase in expense.²⁰

13
14 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

15 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.
16

17 **Q. PLEASE SUMMARIZE MR. HERBERT’S RESPONSE.**

18 A. Mr. Herbert states that the Water Fund provided a new delivery rate of \$0.08351
19 per kWh in response to I&E-RE-23-D, along with an email from the Director of
20 Administrative Services confirming a 54% increase from the previous year’s rate.
21 Prior to signing a new contract, the delivery rate was \$0.05419 per kWh. The rise

²⁰ I&E Statement No. 1, pp. 17-18.

1 from \$0.05419 to \$0.08351 per kWh represents a 54% increase. He asserts that
2 the Water Fund anticipates that the FPPTY kWh of electric usage will align closely
3 with the HTY level, making a 54% increase in power expense reasonable.²¹
4

5 **Q. WHAT IS YOUR RESPONSE TO MR. HERBERT'S REBUTTAL**
6 **TESTIMONY CONCERNING CONESTOGA TREATMENT PLANT**
7 **POWER ELECTRIC?**

8 A. Mr. Herbert has not provided adequate justification for the claimed increasing
9 costs of Conestoga Power Electric. The rate that he provided is a generation rate.
10 It is improper to inflate the entire electric expense amount *for both generation and*
11 *distribution* by a generation rate. The Water Fund provided no proof that the
12 distribution portion of the electric bills will also increase by 54%.
13

14 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
15 **CONESTOGA TREATMENT PLANT POWER ELECTRIC EXPENSE?**

16 A. No. Based on the one electric bill that was provided for the Conestoga Filter
17 Plant,²² there is no way to estimate one recent year's worth of usage to estimate an
18 appropriate increase to the generation portion of the electric bill. Thus, the Water
19 Fund has not provided sufficient information to support this increase, and I

²¹ Water Fund Statement No. 4R, p. 5.

²² Water Fund Exhibit GRH-4R, pp. 56-57.

1 continue to recommend that the entire jurisdictional increase of \$220,458 be
2 disallowed.

3
4 **ADMINISTRATION – POSTAGE EXPENSE**

5 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
6 **FOR ADMINISTRATION – POSTAGE EXPENSE.**

7 A. I recommended a jurisdictional allowance of \$140,142 or a reduction of \$51,651
8 (\$191,793 - \$140,142) to the Water Fund's claim. This was based on my
9 recommended total system allowance of \$195,511, or a reduction of \$72,057
10 (\$267,568 - \$195,511) to the total system resulting in jurisdictional allowance of
11 \$140,142 ($\$195,511 \times 0.7168$) by multiplying the recommended total system
12 allowance of \$195,511 by the allocation factor 0.7168. The total system
13 allowance I recommended, amounting to \$195,511, was calculated by averaging
14 the data from the most recent three years: 2023, 2024, and 2025 producing a total
15 of \$195,511 [$(\$157,923 + \$161,041 + \$267,568) \div 3$].²³

16
17 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

18 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.
19

20 **Q. PLEASE SUMMARIZE MR. HERBERT'S RESPONSE.**

21 A. Mr. Herbert indicates that the rise in booked Postage Expense in the HTY was

²³ I&E Statement No. 1, pp. 19-20.

1 primarily a result of the Water Fund’s lead service line identification program,
2 which is anticipated to extend until October 2027, in line with the EPA’s Improved
3 Lead and Copper Rule. He asserts that the Water Fund is obligated to continue
4 notifying customers via mail to help in identifying lead service lines.

5 Furthermore, he states that the Water Fund is mandated by the PADEP to issue
6 annual public notifications concerning its PFOA and PFOS treatment initiatives,
7 and these mailed public notifications are expected to remain necessary at least
8 until the FPFTY.²⁴ Finally, Mr. Herbert indicates that I used an incorrect
9 allocation factor (Factor 13), and that the proper factor for this expense is Factor
10 11.

11
12 **Q. WHAT IS YOUR RESPONSE TO MR. HERBERT’S REBUTTAL**
13 **TESTIMONY ABOUT YOUR RECOMMENDATION FOR POSTAGE**
14 **EXPENSE?**

15 A. The Water Fund has indicated that this increase in expense was mainly due to the
16 lead service line identification program, however, it should not need to repeatedly
17 send mailings to customers where it has already confirmed whether lead lines
18 exist. Furthermore, the Water Fund has not explained why PFOA/PFOS mailers
19 cannot be included as bill inserts to save on postage.

²⁴ Water Fund Statement No. 4R, p. 10.

1 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
2 **ADMINISTRATION – POSTAGE EXPENSE?**

3 A. Yes. I am revising my recommendation to reflect the proper allocation, Factor 11,
4 as indicated by Mr. Herbert. This leads to an updated jurisdictional claim
5 allowance of \$127,004 ($\$195,511 \times 0.6496$), calculated by multiplying the
6 historical three-year average of \$195,511 [$(\$157,923 + \$161,041 + \$267,568) \div$
7 3]²⁵ by Factor 11 of 0.6496.²⁶ This results in a reduction of \$64,789 ($\$191,793 -$
8 $\$127,004$) to the Water Fund’s Postage Expense.

9

10 **Q. TYPICALLY, A HISTORIC THREE-YEAR AVERAGE MAY NOT BE**
11 **APPROPRIATE WHEN AN EXPENSE INCREASES YEAR OVER YEAR.**
12 **WHY IS A THREE-YEAR AVERAGE APPROPRIATE IN THIS**
13 **INSTANCE?**

14 A. The three-year average is appropriate, because as explained above, it is reasonable
15 to expect that the mailers associated with lead line surveys should decrease since
16 that program is ongoing and repeated mailings to households already identified
17 would be wasteful. My recommended three-year average is significantly higher
18 than both 2022 and 2023 expense amounts.

²⁵ I&E Statement No. 1, pp. 19-20.

²⁶ Water Fund Exhibit GRH-1R, Schedule E, p. 28.

1 **ADMINISTRATION – TELEPHONE EXPENSE**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
3 **FOR ADMINISTRATION – TELEPHONE EXPENSE.**

4 A. I recommended a jurisdictional allowance of \$107,447 or a reduction of \$26,592
5 (\$134,039 - \$107,447) to the Water Fund’s claim. This was based on my
6 recommended total system allowance of \$149,899, or a reduction of \$37,098
7 (\$186,997 - \$149,899) to the total system producing a jurisdictional allowance of
8 \$107,447 ($\$149,899 \times 0.7168$) when multiplying the recommended total system
9 allowance of \$149,899 by the allocation factor of 0.7168. The total system
10 allowance I recommended, amounting to \$149,899, was calculated by averaging
11 the data from the most recent three years: 2023, 2024, and 2025 \$149,899
12 [$\$118,282 + \$144,417 + \$186,997$] ÷ 3].²⁷

13
14 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

15 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.
16

17 **Q. PLEASE SUMMARIZE MR. HERBERT’S RESPONSE.**

18 A. Mr. Herbert argues that the expense has increased year over year from 2023 to
19 2025. He states that the Water Fund continues to add cell phones for its employees
20 as its workforce grows, and he indicates that the Water Fund has been enhancing
21 its cybersecurity by implementing redundancies in its internet services to increase

²⁷ I&E Statement No. 1, pp. 21-22.

1 reliability with SCADA service, thereby ensuring the system operates efficiently
2 and safely.²⁸

3
4 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
5 **TELEPHONE EXPENSE BASED ON MR. HERBERT'S RESPONSE IN**
6 **REBUTTAL TESTIMONY?**

7 A. Yes. Based on the increased spending for cybersecurity and changes due to
8 improved reliability with SCADA service, I have reconsidered my
9 recommendation and am persuaded that the Water Fund's claim is reasonable.
10 Therefore, I withdraw my recommended adjustment and accept the Water Fund's
11 claim for telephone expense.

12
13 **ADMINISTRATION – INDIRECT COSTS**

14 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
15 **FOR ADMINISTRATION – INDIRECT COSTS.**

16 A. I recommended a jurisdictional allowance of \$0, or a reduction of \$803,880 to the
17 Water Fund's jurisdictional claim for Administration Indirect Costs because of the
18 lack of response to my request for a detailed breakdown.²⁹

²⁸ Water Fund Statement No. 4R, p. 16.

²⁹ I&E Statement No. 1, pp. 23-24.

1 **Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?**

2 A. Yes. Water Fund witnesses Gregory Herbert disagrees with my recommendation.

3

4 **Q. PLEASE SUMMARIZE MR. HERBERT'S RESPONSE.**

5 A. Mr. Herbert indicates that a comprehensive breakdown of the expenses is

6 unavailable due to the methodology used to determine the Indirect costs for each

7 of the Lancaster City funds. The Water Fund provided its trial balance in response

8 to I&E-RE-12-D, which illustrates its allocated share of these shared costs, and

9 clarified what these Indirect costs pertain to, such as administrative, legal, fringe

10 benefit, and insurance. He explains that the amount of Indirect Costs charged or

11 allocated to the Water Fund is based on the annual Lancaster City-wide Full

12 Indirect Cost Allocation Plan prepared by MAXIMUS Consulting Services, Inc.

13 He asserts that the level of Indirect Costs will at least match the amount of the

14 HTY expense claim or will likely increase in the future, as its FPFTY claim is

15 derived from the fiscal year 2022 MAXIMUS report.³⁰

16

17 **Q. ARE YOU PERSUADED TO CHANGE YOUR RECOMMENDATION IN**
18 **RESPONSE TO MR. HERBERT'S REBUTTAL TESTIMONY?**

19 A. No. Mr. Herbert does not present a comprehensive breakdown of the items

20 included in this claim or even attempt to estimate dollar amounts by category of

21 expense. The explanation given does not justify the amount of money being

³⁰ Water Fund Statement No. 4R, p. 9.

1 requested. Consequently, I continue to recommend disallowance of the entire
2 claim for Administration Indirect Costs.

3
4 **RATE CASE EXPENSE**

5 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
6 **FOR RATE CASE EXPENSE.**

7 A. I recommended the Water Fund's rate case expense be normalized over a period of
8 60 months resulting in an annual allowance of \$107,600 [$(\$538,000 \div 60 \text{ months})$
9 $\times 12$] or a reduction of \$71,733 ($\$179,333 - \$107,600$) to the Water Fund's annual
10 rate case expense claim. My recommendation was based on both the Water
11 Fund's historic filing frequency and previous Commission decisions that
12 supported a rate case filing interval based on historic filing frequency.³¹

13
14 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

15 A. Yes. Water Fund witness Gregory Herbert disagrees with my recommendation.
16

17 **Q. PLEASE SUMMARIZE MR. HERBERT'S RESPONSE.**

18 A. Mr. Herbert asserts that normalizing rate case expense over several years is
19 appropriate since rate cases are not filed every year and the money spent benefits
20 more than a single year. He claims that the Water Fund's proposed three-year
21 normalization period is a reasonable approach as it recognizes that rate case

³¹ I&E Statement No. 1, pp. 26-28.

1 expenses should be spread over several years. Additionally, he opines, it does not
2 penalize the Water Fund for delaying a subsequent rate case, whether due to costs,
3 obligations from the previous case, limited resources, or various other factors that
4 may lead the Water Fund to file a rate case over a longer timeframe than initially
5 intended. Consequently, Mr. Herbert asserts that the rate case expense should be
6 normalized over a three-year period, rather than five years I recommended.³²

7
8 **Q. WHAT IS YOUR RESPONSE TO MR. HERBERT'S ASSERTION?**

9 A. The proposed three-year normalization period is not supported by the Water
10 Fund's historic filing frequency and appears to be speculative. As mentioned in
11 my direct testimony, the Commission has frequently relied on historical filing
12 frequency in recent cases, and I continue to recommend that this approach be
13 applied here to prevent an unreasonable rate increase for customers.

14
15 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
16 **RATE CASE EXPENSE?**

17 A. No. I continue to recommend normalizing the rate case expense over 60 months
18 which yields an annual allowance of \$107,600. This is a reduction of \$71,733
19 (\$179,333 - \$107,600) to the Water Fund's annual rate case expense claim.

³² Water Fund Statement No. 4R, p. 5.

1 **CASH WORKING CAPITAL**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
3 **FOR CASH WORKING CAPITAL (CWC).**

4 A. I recommended an allowance of \$1,331,173, or a reduction of \$228,087
5 (\$1,559,260 - \$1,331,173) to the Water Fund’s jurisdictional CWC based on all
6 recommended adjustments to O&M expenses as discussed in my direct
7 testimony.³³

8
9 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

10 A. Yes. Water Fund witness Gregory Herbert disagrees with my CWC
11 recommendation based on the Water Fund’s disagreement with my recommended
12 adjustments to individual O&M expenses. He also presented an updated CWC
13 claim due to expense claim changes presented in rebuttal testimony.

14
15 **Q. WHAT IS MR. HERBERT’S UPDATED CWC CLAIM?**

16 A. The Water Fund’s updated CWC claim is \$1,547,892 to reflect changes for all
17 O&M expense adjustments addressed in the Water Fund’s rebuttal testimony.³⁴

18
19 **Q. DO YOU AGREE WITH THE WATER FUND’S UPDATED CWC CLAIM?**

20 A. No.

³³ I&E Statement No. 1, pp. 31-32.

³⁴ Water Fund Statement No. 4R, p. 17.

1 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
2 **CWC?**

3 A. Yes. I am updating my CWC recommendation to reflect the Water Fund's updated
4 CWC claim in Mr. Herbert's rebuttal testimony, my updated recommendations
5 made herein, and the recommended expense adjustment presented by I&E witness
6 Esyan Sakaya for unaccounted for water (UFW) and related electric and chemical
7 expense.³⁵ My resulting recommended jurisdictional CWC allowance is
8 \$1,342,070 or a reduction of \$205,822 (\$1,547,892 - \$1,342,070) to the Water
9 Fund's updated jurisdictional CWC claim.

10

11 **Q. SUMMARIZE EACH OF THE I&E RECOMMENDED O&M EXPENSE**
12 **ADJUSTMENTS AS REFLECTED IN THE CWC COMPUTATION.**

13 A. The applicable O&M adjustments are as follows:

	I&E Adjustment
O&M Expenses:	
UFW-Electric/Chemicals	(\$196,606)
Susquehanna Power Electric	(\$289,109)
Conestoga Power Electric	(\$220,458)
Postage Expense	(\$64,789)
Admin. Indirect Costs	(\$803,880)
Rate Case Expense	(\$71,733)
Total O&M Adjustments	(\$1,646,575)

14

³⁵ I&E Statement No. 3-SR.

1 The sum of I&E's O&M adjustments reduces the Water Fund's jurisdictional
2 CWC claim by \$205,822 ($\$1,646,575 \div 8$), resulting in a recommended
3 jurisdictional CWC allowance of \$1,365,616 ($\$1,547,892 - \$205,822$).
4

5 **Q. DOES YOUR RECOMMENDED ALLOWANCE REPRESENT A FINAL**
6 **RECOMMENDED ALLOWANCE FOR CWC?**

7 A. No. All adjustments to the Company's claims for revenues, expenses, taxes, and
8 rate base must be continually brought together for each operating unit in the
9 Administrative Law Judge's Recommended Decision and again in the
10 Commission's Final Order. This process, known as iteration, effectively prevents
11 the determination of a precise calculation until all adjustments have been made to
12 the Company's claims.
13

14 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

15 A. Yes.

**I&E Statement No. 2-SR
Witness: D. C. Patel**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER - BUREAU OF WATER

Docket No. R-2025-3057237

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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TESTIMONY 39**

1 **INTRODUCTION OF WITNESS**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is D. C. Patel, and my business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6

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

8 A. I am employed by the Pennsylvania Public Utility Commission (Commission) in
9 the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Financial
10 Analyst.

11

12 **Q. ARE YOU THE SAME D. C. PATEL WHO IS RESPONSIBLE FOR THE**
13 **DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND**
14 **THE SCHEDULES IN I&E EXHIBIT NO. 2?**

15 A. Yes.

16

17 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

18 A. The purpose of my surrebuttal testimony is to address statements made by the City
19 of Lancaster - Bureau of Water (City or Water Fund) witness Harold Walker, III in
20 his rebuttal testimony¹ regarding rate of return topics including the cost of

¹ City Statement No. 6R.

1 common equity and the overall fair rate of return, which will be applied to the
2 Water Fund's rate base. In addition, I will address the Office of Consumer
3 Advocate (OCA) witness David J. Garrett's concerns regarding my recommended
4 10.08% return on equity (ROE) and growth rate used in my discounted cash flow
5 (DCF) analysis for the Water Fund.²

6 It should be noted that I do not intend for my surrebuttal testimony to
7 address each and every topic or issue raised or otherwise discussed by the City and
8 other parties' witnesses in rebuttal testimony because I discussed all the topics of
9 concern at length in my direct testimony. My lack of response to any specific
10 statement, assertion, or position of any witness in this surrebuttal testimony does
11 not necessarily indicate my acceptance or agreement with statements, assertions,
12 or positions expressed in rebuttal testimony.

13
14 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

15 A. No. However, I refer to my direct testimony and schedules contained in the
16 corresponding exhibit where necessary.³

17
18 **Q. WHAT WAS YOUR ORIGINAL OVERALL RATE OF RETURN**
19 **RECOMMENDATION IN DIRECT TESTIMONY?**

20 A. I recommended the following rate of return for the Water Fund for the fully

² OCA Statement No. 2-R.

³ I&E Statement No. 2 and I&E Exhibit No. 2.

1 projected future test year (FPFTY) ending March 31, 2027:⁴

I&E Recommendation			
CITY OF LANCASTER - WATER FUND			
Summary of Cost of Capital (<u>With Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	57.13%	4.20%	2.40%
Common Equity	<u>42.87%</u>	7.86%	<u>3.37%</u>
Total	<u>100.00%</u>		<u>5.77%</u>

2

3 It should be noted that my recommended tax adjusted ROE of 7.86% (ROE
4 10.08% x (1 - Implied Tax Rate of 22.00%)) is based on my DCF analysis result
5 of 10.08%.

6

7 **SUMMARY OF MR. WALKER'S REBUTTAL TESTIMONY**

8 **Q. SUMMARIZE MR. WALKER'S RESPONSE TO YOUR**
9 **RECOMMENDATIONS MADE IN DIRECT TESTIMONY.**

10 A. Mr. Walker disputes my recommendations regarding the ROE and overall fair rate
11 of return. Specifically, he disagrees with my recommended capital structure, my
12 implied tax adjustment, my suggested rejection of his financial risk leverage and
13 size adjustments, risk analysis, and various aspects of my DCF and Capital Asset
14 Pricing Model (CAPM) analyses such as the risk-free rate.⁵

⁴ I&E Statement No. 2, p. 7 and I&E Exhibit No. 2, Schedule 1.

⁵ City Statement No. 6R.

1 **Q. DID MR. WALKER UPDATE HIS SUPPORTED RATE OF RETURN?**

2 A. No. Mr. Walker does not provide any updated information or updated cost of
3 equity model results and continues to support his original cost of equity
4 recommendation and the overall rate of return for the FPFTY,⁶ which is
5 reproduced below:

CITY OF LANCASTER - WATER FUND			
Summary of Cost of Capital (<u>Without Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.20%	1.97%
Common Equity	<u>53.00%</u>	10.90%	<u>5.78%</u>
Total	<u>100.00%</u>		<u>7.75%</u>

6

CITY OF LANCASTER - WATER FUND			
Summary of Cost of Capital (<u>With Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	47.00%	4.20%	1.97%
Common Equity	<u>53.00%</u>	9.48%*	<u>5.02%</u>
Total	<u>100.00%</u>		<u>6.99%</u>

7

* 9.48% (ROE 10.90% x (1 - Implied Tax Rate 13.00%))

⁶ City Statement No. 6R, p. 2, lines 3-10 and p. 51, lines 2-3.

1 **Q. DID THE WATER FUND UPDATE THE CLAIMED OVERALL RATE OF**
2 **RETURN DESPITE MR. WALKER CONTINUING TO SUPPORT THE**
3 **ORIGINAL CLAIM?**

4 A. Yes. Despite Mr. Walker continuing to support the original claim, the Water Fund
5 updated its claimed overall rate of return to 6.65% for outside-city customers.⁷
6

7 **FAIR RATE OF RETURN**

8 **Q. PLEASE SUMMARIZE MR. WALKER'S REBUTTAL TESTIMONY**
9 **REGARDING A FAIR RATE OF RETURN.**

10 A. Mr. Walker disagrees with my recommended return on equity of 10.08% before
11 the tax adjustment and an overall rate of return of 5.77% after tax adjustment for
12 the Water Fund.⁸

13 Mr. Walker argues as follows: (1) that my recommended capital structure is
14 not supported by law, financial theory, and/or regulatory practice for utilities; (2)
15 my recommended ROE and related overall rate of return do not reflect current
16 capital cost rates and are below the returns their own proxy group companies will
17 earn; and (3) my recommended rate of return does not meet the comparable
18 earnings, capital attraction, and financial integrity standards.⁹

⁷ City Exhibit GRH-1R, Schedule 1, p. 3.

⁸ City Statement No. 6R, p. 3, lines 2-5.

⁹ City Statement No. 6R, p. 3, lines 10-20.

1 **Q. DOES I&E’S RECOMMENDATION VIOLATE THE PRINCIPLES OR**
2 **STANDARDS LAID OUT IN THE BLUEFIELD WATER AND HOPE**
3 **NATURAL GAS CASES?**

4 A. No. As outlined in my direct testimony,¹⁰ the *Bluefield* and *Hope* cases¹¹
5 established comparable earnings, financial integrity, capital attraction, and a
6 changing level of returns as the standards for a fair return.

7 The comparable earnings standard is supported by the use of a proxy group.
8 A proxy group’s cost of equity is used as a benchmark to satisfy the long-
9 established guidelines of utility regulation that seek to provide the subject utility
10 with the opportunity to earn a return similar to that of enterprises with
11 corresponding risks and uncertainties. The criteria used in my selection of a proxy
12 group were formulated to select a proxy group that resembles the water utility
13 industry.¹² However, it is important to keep in mind that municipal-owned water
14 and wastewater utilities encounter different levels of financial risk compared to
15 investor-owned utilities.

16 As I discuss in greater detail in my direct testimony,¹³ the Water Fund does
17 not have any debt service coverage requirements in the form of bond covenants
18 aside from an implied 1.0x coverage ratio to ensure timely debt payments can be
19 made. Commission precedent to use the rate base rate of return method in lieu of

¹⁰ I&E Statement No. 2, p. 3, line 19 through p. 4, line 16.

¹¹ *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 262 U.S. 679, 692-93 (1923), and the *Federal Power Commission et al v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

¹² I&E Statement No. 2, p. 9, lines 4-17.

¹³ I&E Statement No. 2, p. 70, line 5 through p. 72, line 11.

1 debt service coverage includes principal and interest recovery via depreciation
2 expense and the debt cost in the rate of return computation, therefore, my
3 recommendation supports the financial integrity principle.

4 The capital attraction standard is supported by allowing the Water Fund an
5 opportunity to earn a sufficient return to raise necessary capital. The capital that
6 the Water Fund currently has, and has attracted in the recent past, is in the form of
7 General Obligation (GO) Bonds and PennVest funding. The Water Fund has no
8 revenue bonds and does not issue equity stock, and therefore, it does not need a
9 return to attract equity capital.

10 Mr. Walker failed to address the principle that a fair rate of return can
11 change (increase or decrease) along with economic conditions and capital markets.
12

13 **Q. SHOULD THE WATER FUND RECEIVE A RATE OF RETURN WHICH**
14 **SUPPORTS CREDIT QUALITY THAT WOULD ENABLE IT TO**
15 **ATTRACT “ADDITIONAL” CAPITAL REGARDLESS OF THE CITY’S**
16 **ABILITY TO LEVY TAXES, AS MR. WALKER ASSERTS?**

17 A. No. The City or the Water Fund does not raise its own equity capital, and the cost
18 of debt included in both Mr. Walker’s and my recommended capital structures
19 necessarily reflects the Water Fund’s actual reliance on the City. To treat the
20 Water Fund as if its capital did not rely on the resources of the City would ignore
21 the obvious and observable relationship between the Water Fund and the City.
22 Again, the Water Fund receives its debt capital from the City via GO Bonds which

1 are guaranteed by the full faith, credit, and taxing authority of the City of
2 Lancaster. It is the City’s ability to levy taxes that allows the Water Fund to
3 obtain its low capital costs. If the Water Fund issued its own debt, the rate of
4 return would reflect the credit of the Water Fund alone. However, that is not the
5 case for this utility, and thus, there is no basis for reflecting phantom debt costs in
6 a rate of return allowance.

7
8 **CAPITAL STRUCTURE**

9 **Q. PLEASE SUMMARIZE MR. WALKER’S CAPITAL STRUCTURE**
10 **RECOMMENDATION.**

11 A. Mr. Walker continues to assert that the use of a hypothetical 47% debt and 53%
12 equity capital structure is appropriate because, in his opinion, it is consistent with
13 the 66 Pa. C.S.A. § 1301(b), that “the commission shall employ an imputed capital
14 structure of comparable public utilities providing water or wastewater service.”¹⁴

15
16 **Q. PLEASE SUMMARIZE MR. WALKER’S CRITIQUE OF YOUR CAPITAL**
17 **STRUCTURE RECOMMENDATION OF 57.13% DEBT AND 42.87%**
18 **EQUITY.**

19 A. First, Mr. Walker claims that my recommendation fails to comply with 66 Pa.
20 C.S.A. § 1301(b).¹⁵ He argues that my recommendation relied upon only a single

¹⁴ City Statement No. 6R, p. 18, line 21-22.

¹⁵ City Statement No. 6R, p. 18, lines 19-20.

1 utility's capital structure ratio, H2O America, which is the low end of my proxy
2 group's five-year average (2020 to 2024) common equity ratio of 42.87%.
3 Additionally, he argues that the FPFTY for this proceeding is the 12 months
4 ending March 31, 2027 and not the average of 2020 to 2024 (i.e., 2022).¹⁶ He
5 discusses size difference between H2O America and the Water Fund and claims
6 that my recommended capital structure is based on an average capital structure of
7 H2O America. He then states that I ignored the five-year average (2020-2024)
8 capital structure ratios of proxy group to support his assertion to reject my
9 recommended capital structure ratio.¹⁷

10 Second, he points to a projected capital structure ratio of 42% debt and 58%
11 equity for 2027 based on Value Line's capital structure ratio projections for 2026
12 and 2028 and claims that his recommended equity ratio of 53% falls within the
13 range of my comparison group's equity ratios for the FPFTY.¹⁸

14 Lastly, he argues that my recommended average common equity ratio for
15 the comparable public utilities providing water services was 53.83% in the last ten
16 rate filings since 2021 and in four of these cases I was the I&E witness. Therefore
17 he claims that my recommendation for the Water Fund's equity ratio may be
18 biased.¹⁹

¹⁶ City Statement No. 6R, p. 19, lines 1-6.

¹⁷ City Statement No. 6R, p. 19, line 7 through p. 20, line 22.

¹⁸ City Statement No. 6R, p. 21, lines 3-16.

¹⁹ City Statement No. 6R, p. 21, line 19 through p. 22, line 10.

1 **Q. DO YOU AGREE WITH MR. WALKER'S CRITIQUE OF YOUR**
2 **CAPITAL STRUCTURE DETERMINATION?**

3 A. No. As explained in greater detail in my direct testimony,²⁰ a capital structure
4 between 80% debt and 20% equity and 70% debt and 30% equity would be much
5 more appropriate for the Water Fund. Municipalities are able to secure lower cost
6 rates of debt and can tolerate higher amounts of debt in the capital structure, again,
7 due to the taxing authority. Therefore, it is inappropriate and unnecessary to pass
8 larger proportions of more expensive equity costs on to ratepayers. In order to
9 comply with 66 Pa. C.S.A. § 1301(b), which became effective December 21,
10 2017, I recommended a capital structure of 57.13% debt and 42.87% equity for the
11 Water Fund. This represents the low end of my range of equity ratios of the
12 average capital structures (2020-2024) of my proxy group.²¹ Therefore, it is
13 inappropriate for Mr. Walker to mischaracterize that my recommended equity
14 ratio is exclusively based on H2O America's five-year average equity ratio, which
15 coincidentally matches the low-end equity ratio of my proxy group average capital
16 structure.

17
18 **Q. WHY DID YOU APPLY THE LOW END OF YOUR PROXY GROUP**
19 **EQUITY RATIO RANGE TO THE WATER FUND?**

20 A. As discussed above, the Water Fund/City currently primarily uses General

²⁰ I&E Statement No. 2, p. 15, line 3 through p. 17, line 6.

²¹ I&E Exhibit No. 2, Schedule 2.

1 Obligation Bonds and PennVest funding to fund its capital expenditures. The
 2 Water Fund issued neither revenue bonds nor equity stocks. Therefore, it does not
 3 need a return on equity capital for investors. The Water Fund does not face the
 4 same level of financial risk as the companies in my proxy group, nor does it have
 5 any investor expectations to satisfy; therefore, it is not appropriate or necessary for
 6 the Water Fund to benefit from a higher equity ratio in its capital structure.
 7 Additionally, my recommendation of 42.87% equity is more than fair considering
 8 the Water Fund's actual five-year average capital structure of 95.1% long-term
 9 debt and 4.9% equity for the years 2019-2023:²²

	2019	2020	2021	2022	2023	Average
Long-term debt	96.2%	96.6%	94.6%	94.9%	93.3%	95.1%
Fund equity	3.8%	3.4%	5.4%	5.1%	6.7%	4.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

10
 11
 12 **Q. DOES YOUR RECOMMENDED CAPITAL STRUCTURE FOR THE**
 13 **WATER FUND COMPLY WITH TITLE 66, SECTION 1301(b)?**

14 A. Yes. 66 Pa. C.S.A. § 1301(b) states the following:

15 In determining a just and reasonable rate furnished or rendered
 16 by a municipal corporation or by the operating agencies of a
 17 municipal corporation providing public utility water or
 18 wastewater service beyond its corporate limits, the commission
 19 shall employ an imputed capital structure of comparable public
 20 utilities providing water or wastewater service.

²² City Filing Requirements, Exhibit D VII-1, p. 633.

1 The statute does not define what makes the public utilities providing water or
2 wastewater service comparable to the municipal utility, nor does it dictate where
3 the “imputed capital structure” must fall within the range of comparable utilities.
4

5 **Q. ON PAGES 18-19 OF HIS REBUTTAL TESTIMONY, MR. WALKER**
6 **APPEARS TO BE OFFERING A STATUTORY INTERPRETATION OF**
7 **TITLE 66, SECTION 1301(b) IN AN ATTEMPT TO ALLEGE THAT**
8 **YOUR ANALYSIS IS NON-COMPLIANT, DO YOU HAVE ANY**
9 **RESPONSE?**²³

10 A. Yes. Because I am not offering a legal opinion in this case, I will not respond to
11 Mr. Walker’s argument that appears to hinge on a legal interpretation of the
12 statute. Therefore, my surrebuttal testimony above is responsive to his position
13 other than statutory interpretation. I am advised by counsel that Mr. Walker’s
14 interpretation of the statute is flawed, unsupported, and inconsistent with the
15 General Assembly’s intent in enacting Section 1301(b). I will defer to counsel to
16 address this matter at hearings and/or in I&E’s legal briefs as appropriate.

²³ City Statement No. 6R, p. 18, lines 19 through p. 19, lines 6.

1 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER'S RELIANCE ON**
2 **VALUE LINE PROJECTED AVERAGE CAPITAL STRUCTURE RATIOS**
3 **OF 42% DEBT AND 58% EQUITY FOR 2027 TO SUPORT HIS CLAIMED**
4 **EQUITY RATIO OF 53%?**

5 A. Mr. Walker provides Value Line's projection for my proxy group utilities' capital
6 structure ratios for 2025-2030²⁴ and claims that his recommended equity ratio of
7 53% falls within the Value Line projected average equity ratio range of 51% and
8 65%. He tries to gain support for his recommended equity ratio based on Value
9 Line's projections, but he misses that the Commission has relied on historic actual
10 capital structure of the utility concerned and the historic capital structure of the
11 proxy group to ascertain reasonableness of a utility's claim for the equity ratio.
12 Additionally, as discussed above, the Water Fund's historic average actual
13 equity/fund (ratio) is far lower, at 4.9%, than the Value Line projected average
14 equity ratio of 58%. Therefore, Mr. Walker's comparison of Value Line's equity
15 projection is inappropriate and unsupported.

²⁴ City Exhibit HW-1R, Schedule 5.

1 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER’S RELIANCE ON I&E’S**
2 **RECOMMENDED AVERAGE COMMON EQUITY RATIO OF 53.83%**
3 **FOR THE COMPARABLE PUBLIC UTILITIES PROVIDING WATER**
4 **SERVICE IN THE LAST TEN RATE FILINGS SINCE 2021?**

5 A. Mr. Walker provides a list of ten water utilities’ rate cases since 2021, where
6 I&E’s recommended average equity ratio was 53.83%.²⁵ Mr. Walker’s list
7 contains all investor-owned water utilities, which to my knowledge had *actual*
8 and/or projected equity capital closely resembling I&E’s recommended equity
9 ratios in the respective investor-owned water utilities’ base rate cases. It is
10 important to note that the financial risk profiles of an investor-owned utility and
11 municipal-owned utility are different and not comparable to municipal utilities
12 because investor-owned water utilities finance rate base using a higher proportion
13 of equity capital from investors while municipal utilities largely rely on debt
14 capital. Additionally, as stated above, the Water Fund has no investor-provided
15 equity capital and does not require a return on equity investment. Therefore, it is
16 improper to compare historic investor-owned water utilities’ equity ratios
17 recommended by I&E to support the Water Fund’s claim for an equity ratio in this
18 case.

²⁵ City Exhibit HW-1R, Schedule 6.

1 **COST OF COMMON EQUITY**

2 **DISCOUNTED CASH FLOW**

3 **Q. SUMMARIZE MR. WALKER’S REBUTTAL TESTIMONY REGARDING**
4 **YOUR DCF ANALYSIS.**

5 A. Mr. Walker states that the Value Line projected ROE for my proxy group
6 companies will average 11.0% over the 2026 to 2030 period, which is higher than
7 my DCF results of 10.08%.²⁶ He opines that my recommended ROE based on
8 DCF results would place the Water Fund at a disadvantage in the competition to
9 attract capital and investors would not invest in the Water Fund with a deficient
10 authorized return.²⁷

11
12 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER’S REBUTTAL**
13 **TESTIMONY REGARDING YOUR RECOMMENDED ROE OF 10.08%,**
14 **WHICH IS BASED ON THE DCF RESULTS?**

15 A. It appears that Mr. Walker is trying to gain support for his recommended ROE of
16 10.90% by highlighting Value Line’s projected average ROE of 11.00% for my
17 proxy group. Aside from the fact that the Water Fund has no equity investors and
18 no need to attract equity investors, he misses the fact that my DCF analysis relies
19 on Value Line’s projected dividend rate and its projected growth rate along with
20 projected growth rates of S&P and Zacks for my proxy group, which properly

²⁶ City Statement No. 6R, p. 23, lines 4-6.
²⁷ City Statement No. 6R, p. 23, lines 8-14.

1 captures all factors of the DCF formula and produces an accurate and reasonable
2 result. The DCF method has the most wide-spread regulatory acceptance, and the
3 Commission has historically relied mostly upon DCF results in base rate
4 proceedings, including as recently as 2017, 2018, 2020, and 2021.²⁸ Further, in
5 some more recent base rate cases, the Commission accepted I&E’s calculated DCF
6 results as a basis along with input from the CAPM results for determining an
7 appropriate ROE for utilities.²⁹ Therefore, it is inappropriate and irrelevant to
8 compare Value Line’s projected ROE in this case.

9
10 **CAPITAL ASSET PRICING MODEL**

11 **Q. SUMMARIZE MR. WALKER’S REBUTTAL TESTIMONY REGARDING**
12 **YOUR CAPM ANALYSIS.**

13 **A.** Mr. Walker agrees with my forecasted CAPM methodology, however he disputes
14 my risk-free rate based on the 10-year Treasury Note and disagrees with my

²⁸ *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. - Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company*; Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA*; Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*; Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131; *Pa. PUC v. PECO Energy Company – Gas Division*; Docket No. R-2020-3018929 (Order Entered June 22, 2021). *See generally* Disposition of Return of Rate on Common Equity, p. 171.

²⁹ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 and 178 (Order entered May 16, 2022); *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, p. 105 (Order entered January 18, 2024); *Pa. PUC v. Pennsylvania-American Water Company*, Docket Nos. R-2023-30433189 & R-2023-3043190, p. 194 (Order Entered July 22, 2024); and *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). *See generally* Rate of Return on Common Equity - Disposition, pp. 226 and 234.

1 recommendation to reject a size premium adjustment in the CAPM result.³⁰

2 First, Mr. Walker alleges that my CAPM analysis significantly understates
3 the risk-free rate of return because I incorrectly gave the same weight to the yield
4 on the 10-year Treasury Notes for the five quarters (4Q 2025 through 4Q 2026)
5 and for the entire five-year period 2027 through 2031, which has a total of twenty
6 quarters. Then, Mr. Walker incorrectly recalculates the risk-free rate by averaging
7 the 10-year Treasury yield forecasts by quarter for the fourth quarter of 2025 and
8 first, second, third, and the fourth quarter of 2026, as well as by quarter for the
9 years from 2027 through 2031 for a total of twenty-five quarters to inflate my
10 calculated risk-free rate of 4.12% to 4.18%.³¹

11 Second, he disagrees with my use of the 10-year Treasury Note as my risk-
12 free rate claiming that “the risk-free rate should be based on the life of the asset,
13 not the time horizon of the investor,” further adding that the life of water assets is
14 much longer than ten years. He also states that the 10-year Treasury Note is more
15 sensitive to monetary policy activities and claims that 30-year Treasury Bonds are
16 more of an indication of investor sentiment of their required returns.³²

17 Finally, Mr. Walker disagrees with my recommendation to reject applying a
18 size premium to the CAPM result, which is discussed in more detail below.

³⁰ City Statement No. 6R, p. 24, lines 5-7.

³¹ City Statement No. 6R, p. 24, lines 8-13.

³² City Statement No. 6R, p. 24, line 18 through p. 25, line 4.

1 **Q. DO YOU AGREE WITH MR. WALKER'S REBUTTAL TESTIMONY**
2 **REGARDING YOUR RISK-FREE RATE?**

3 A. No. First, Mr. Walker's recalculation of my risk-free rate as described above is
4 flawed because the further out into the future quarterly forecasts are, the less
5 reliable and more speculative the estimates become; therefore, to give the less
6 reliable estimates equal weight would not be prudent. It is more appropriate to
7 weight the quarters and years as I have done in my direct testimony,³³ as my
8 calculation provides a more accurate estimation of the risk-free rate for the
9 FPFTY.

10 Second, while rate base assets are long-lived, utility company debt may
11 have the opportunity to be refinanced at any point to capture favorable interest
12 rates, which would reduce the financial risk associated with the corresponding
13 assets. Thus, it is more appropriate to utilize a risk-free rate that will be in effect
14 during the investment period being considered, which in this case is the FPFTY or
15 possibly the normalization period between base rate cases. Although short-term
16 Treasury Bills may align closer with the investment timeframe, they are very
17 volatile. As discussed in my direct testimony,³⁴ long-term Treasury Bonds (30-
18 year Treasury Bonds) have substantial maturity risk associated with market risk
19 and the risk of unexpected inflation. Long-term treasuries normally offer higher
20 yields to compensate investors for these risks.

³³ I&E Exhibit No. 2, Schedule 8.

³⁴ I&E Statement No. 2, p. 34, lines 3-12.

1 **Q. DOES MR. WALKER’S ARGUMENT REGARDING THE 10-YEAR**
2 **TREASURY NOTE IGNORE RECENT COMMISSION GUIDANCE TO**
3 **THE CONTRARY?**

4 A. Yes. While Mr. Walker appears to have ignored this, it is important to
5 acknowledge that the Commission has historically agreed with I&E and
6 recognized the 10-year Treasury Note as the superior measure of the risk-free rate
7 of return.³⁵

8
9 **Q. SUMMARIZE MR. WALKER’S REBUTTAL TESTIMONY REGARDING**
10 **YOUR KROLL CAPM RESULTS.**

11 A. First Mr. Walker states that my CAPM recommendation of 9.51% (an average of
12 the traditional CAPM and Kroll CAPM results), which reflects the Kroll CAPM
13 analysis result is inconsistent with the Commission’s precedential use of the 10-
14 year Treasury Note yield because the Kroll CAPM is determined by using the 20-
15 year U.S. Treasury yield as the risk-free rate.³⁶ Second, he disputes Kroll’s
16 determined equity risk premium of 5.50% because it does not reflect the S&P 500
17 market return. He calculates the errors in Kroll’s recommendations since February

³⁵ *Pa. PUC v. UGI Utilities, Inc. - Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). See generally *Disposition of Capital Asset Pricing Model (CAPM)*, p. 99; *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 154 (Order entered May 16, 2022); *Pa. PUC v. Columbia Water Company*; Docket No. R-2023-3040258 (Order Entered January 18, 2024). See generally *Disposition of Cost of Common Equity*, pp. 107-108; *Pa. PUC v. Pennsylvania-American Water Company*; Docket Nos. R-2023-3043189 and R-2023-3043190 (Order Entered July 22, 2024). See generally *Disposition of Capital Asset Pricing Model (CAPM)*, pp. 171-172; and *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). See generally *Rate of Return on Common Equity - Disposition*, pp. 226 and 234.

³⁶ City Statement No. 6R, p. 29, line 11 through p. 30, line 2.

1 2013 and states that Kroll understated the market's actual annual total return by
2 9.3% on average.³⁷ Third, he disagrees with Kroll's market premium of 5.50%
3 and claims that it does not reflect a CAPM-related size premium,³⁸ which is
4 discussed later in this surrebuttal testimony. Finally, he asserts that Kroll's
5 recommended market returns are considerably below the returns earned from
6 investing, and therefore, he opines the Commission should not rely on my Kroll
7 CAPM recommendation.³⁹

8
9 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER'S REBUTTAL**
10 **TESTIMONY REGARDING YOUR KROLL CAPM RESULTS?**

11 A. First, I disagree with Mr. Walker's nonsensical statement regarding the Kroll
12 CAPM's use of the 20-year U.S. Treasury yield as the risk-free rate is inconsistent
13 with the Commission's precedential use of the 10-year Treasury Note yield.
14 Basically, the Commission has recognized the 10-year Treasury Note yield as the
15 superior risk-free rate for the traditional CAPM analysis while Kroll has used a
16 20-year U.S. Treasury yield as the risk-free rate in determining the market
17 premium of 5.50%, which is based on its own in-depth analysis and judgement.
18 Therefore, Mr. Walker is unnecessarily conflating the traditional CAPM risk-free
19 rate with Kroll's CAPM risk-free rate.

³⁷ City Statement No. 6R, p. 31, lines 11-15.

³⁸ City Statement No. 6R, p. 30, lines 10-15.

³⁹ City Statement No. 6R, p. 32, lines 5-8.

1 Second, Kroll is a well-known and independent financial and risk advisory
2 organization with vast experience and expertise that has earned global recognition
3 in financial transaction opinions, investment banking, restructuring, etc. It stands
4 to reason that Kroll’s recommended equity risk premium must have considered
5 and analyzed all financial and economic factors including S&P 500 market returns
6 before recommending an equity risk premium of 5.50%. Therefore, it is
7 inappropriate to discredit Kroll’s recommended equity risk premium.

8 Lastly, in the context of Mr. Walker’s opinion that the Commission should
9 not rely on my Kroll CAPM recommendation, the Commission has acknowledged
10 and accepted I&E’s Kroll CAPM analysis results in computing a composite
11 CAPM result with the traditional CAPM results in the 2025 Columbia Gas rate
12 case.⁴⁰

13
14 **Q. WHAT IS MR. WALKER’S CONCLUSION REGARDING APPLYING**
15 **CAPM RESULTS IN DETERMINING AN APPROPRIATE ROE FOR THE**
16 **WATER FUND?**

17 A. Mr. Walker states that I have not given weight to the CAPM result in my ROE
18 recommendation for the Water Fund.⁴¹ He states that the forecasted CAPM is
19 more responsive to changes in interest rates than the DCF, and it is imperative,
20 given today’s high-interest rate environment, that the Commission consider

⁴⁰ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). *See generally* Rate of Return on Common Equity - Disposition, pp. 226 and 234.

⁴¹ City Statement No. 6R, p. 32, line 9 through p. 33, line 2.

1 models that directly measure interest rate levels (e.g., the CAPM and RP) when
2 determining the Water Fund's cost of equity.⁴²

3
4 **Q. WHAT WOULD YOUR COST OF EQUITY RECOMMENDATION BE IF**
5 **THE COMMISSION DECIDES TO AVERAGE THE DCF AND**
6 **COMPOSITE CAPM ANALYSES RESULTS AS MOST RECENTLY**
7 **APPROVED IN THE 2025 COLUMBIA GAS RATE CASE?**

8 A. Although my recommendation was based primarily on the results of my DCF
9 analysis, I also employed the CAPM as a comparison. The result of my DCF
10 analysis is 10.08% while the results of my traditional CAPM analysis is 10.17%,
11 Kroll CAPM is 8.85%, and Composite CAPM is 9.51%.⁴³ For the reasons
12 detailed in my direct testimony, I consider the DCF method the most reliable.⁴⁴ I
13 have considered the fact that no method can perfectly predict the return on equity,
14 which is why I also use the CAPM as a comparison to the DCF. Although no one
15 method can capture every factor that influences an investor, including the results
16 of methods that are less reliable than the DCF, it does not make the end result
17 more reliable or more accurate.

18 Considering Mr. Walker's suggestion to weight the CAPM results in
19 determining an ROE for the Water Fund, as discussed in my direct testimony,⁴⁵ if

⁴² City Statement No. 6R, p. 33, lines 10-13.

⁴³ I&E Exhibit No. 2, Schedules 6 and 11.

⁴⁴ I&E Statement No. 2, p. 20, line 17 through p. 24, line 13.

⁴⁵ I&E Statement No. 2, p. 38, line 16 through p. 39, line 7.

1 this was done according to the method utilized in the 2025 Columbia Gas base rate
2 case, my ROE recommendation would be 9.80% ((10.08% DCF + 9.51%
3 Composite CAPM) ÷ 2 = 9.80%) *before the tax adjustment* and 7.64% (9.80% x (1
4 – 22.00%) = 7.64%)) *after the tax adjustment* for the Water Fund.

6 **TAX ADJUSTMENT**

7 **Q. PLEASE SUMMARIZE MR. WALKER’S CRITIQUE OF YOUR** 8 **TAX ADJUSTMENT RECOMMENDATION.**

9 A. First, Mr. Walker agrees with my methodology to determine an income tax
10 adjustment factor by comparing the yield differences between Moody's “A” rated
11 municipal bonds and Moody’s “A” rated corporate utility bonds.⁴⁶ However, per
12 his calculation, he asserts that the monthly implied income tax rates decreased by
13 4% when separated between the pre-One Big Beautiful Bill Act (OBBBA) and
14 post-OBBBA months and the average tax rate during post-OBBBA months is 20%
15 rather than the 22% implied tax rate calculated by me.

16 Second, he states that the yield on GO bonds (e.g., Moody’s A-Rated
17 Municipal Bond Yields) measures the ability of the City to raise taxes while the
18 Water Fund’s cost of common equity should reflect the risk of the underlying
19 assets devoted to providing water service. He then opines that revenue bonds are a
20 better measure since they are backed or secured solely by the income received by

⁴⁶ City Statement No. 6R, p. 40, lines 15-17.

1 the revenue-producing enterprise (e.g., a water system) being financed by the
2 revenue bonds. Unlike GO bonds, revenue bonds are not backed by the full faith
3 and credit of the issuing entity and Moody's does not publish yields for revenue
4 bonds. Therefore, he claims that the use of GO bonds in my analysis produces a
5 higher income tax adjustment than is warranted by revenue bonds.⁴⁷

6
7 **Q. PLEASE RESPOND TO MR. WALKER'S ASSERTION THAT YOU**
8 **INCORRECTLY USED YIELDS ON A-RATED BONDS IN YOUR**
9 **IMPLIED TAX RATE CALCULATION.**

10 A. The City of Lancaster, which is the Water Fund's sole provider of debt financing
11 in the form of GO bonds, currently has a Moody's Investors Service bond rating of
12 A3,⁴⁸ which is considered to be upper-medium grade with low credit risk. I
13 compared the yield difference between Municipal "A" rated GO bonds and Public
14 Utility bonds to calculate an implied tax rate adjustment due to the yield
15 difference, which considers the twelve monthly yield difference from November
16 2024 through October 2025.⁴⁹ This period reflects the impact of tax changes in
17 yields for the pre-OBBBA (seven months) and post-OBBBA (five months) as
18 noted by Mr. Walker.⁵⁰ Hence my implied tax rate (22%) calculation for the 12-

⁴⁷ City Statement No. 6R, p. 43, line 18 through p. 44, line 3.

⁴⁸ I&E Statement No. 6R, p. 43, lines 1-3.

⁴⁹ I&E Exhibit No. 2, Schedule 12.

⁵⁰ City Exhibit HW-1R, Schedule 9.

1 month period average better reflects my position rather than breaking by pre-
2 OBBBA and post-OBBBA periods.

3 Notably, Mr. Walker calculated his implied tax adjustment of 13%
4 comparing the yield difference between *Pennsylvania utility revenue bonds* and
5 corporate utility (*nationwide*) bonds⁵¹ while the City uses GO bonds for financing
6 the Water Fund's assets and GO bonds and revenue bonds have different yields.
7 In fact, my calculation using the yield difference between public utility
8 (*nationwide*) bonds and municipal (*nationwide*) GO bonds produces a true result
9 for the Water Fund.

10
11 **Q. EXPLAIN WHY YOU HAVE CHOSEN THE 12-MONTH TIME PERIOD**
12 **IN YOUR TAX ADJUSTMENT CALCULATION.**

13 A. In recent years, I&E has moved from a multi-year time period to exclusively a 12-
14 month time period when determining an appropriate tax adjustment. This shift is
15 not novel here, as it can be seen in the 2019 City of Lancaster - Sewer Fund, 2020
16 Bethlehem - Bureau of Water, 2021 Hanover Water Fund, and in the most recent
17 2021 City of Lancaster - Water Fund rate case.⁵² This method has evolved in
18 response to I&E's determination that including more than one year of historical
19 data unnecessarily incorporates stale and irrelevant information, which likely does

⁵¹ City Exhibit HW-1, Schedule 20, p. 1.

⁵² *Pa. PUC v. City of Lancaster - Sewer Fund*; Docket No. R-2019-3010955, I&E Exhibit No. 2; *Pa. PUC v. City of Bethlehem - Water Department*; Docket No. R-2020-3020256, I&E Exhibit No. 2; and *Pa. PUC v. Borough of Hanover*; Docket No. R-2021-3026116, I&E Exhibit No. 2, and *Pa. PUC v. City of Lancaster - Water Fund*; Docket No. R-2021-3026682, I&E Exhibit No. 2.

1 not represent current economic conditions. For that reason, I used the most recent
2 12-month period available at the time of my analysis.

3
4 **Q. DO YOU CONTINUE TO SUPPORT YOUR RECOMMENDED IMPLIED**
5 **TAX RATE ADJUSTMENT OF 22% IN YOUR RECOMMENDED ROE?**

6 A. Yes.

7
8 **FINANCIAL RISK LEVERAGE ADJUSTMENT**

9 **Q. SUMMARIZE YOUR DIRECT TESTIMONY REGARDING MR.**
10 **WALKER'S FINANCIAL RISK LEVERAGE ADJUSTMENT.**

11 A. In my direct testimony, I provided significant analysis that demonstrated the
12 inappropriateness of Mr. Walker's 60-basis point "financial risk leverage
13 adjustment." To summarize, my analysis demonstrated that the proposed leverage
14 adjustment is inappropriate on multiple fronts, including its inconsistency with the
15 way rating agencies characterize financial risk, its inconsistency with the
16 Commission's precedent, its lack of support in academic literature, its failure to
17 acknowledge the availability of investment information to the public, and the fact
18 that Mr. Walker's yield spread adjustment is based on pure speculation.⁵³

⁵³ I&E Statement No. 2, p. 54, line 7 through p. 63, line 2.

1 **Q. SUMMARIZE MR. WALKER’S REBUTTAL TESTIMONY REGARDING**
2 **HIS USE OF A LEVERAGE ADJUSTMENT.**

3 A. Mr. Walker claims that I did not account for the risk difference between the
4 34%/66% (debt/equity) market value ratios used to calculate returns when applied
5 to my recommended book value capital structure ratio of 57%/43% (debt/equity)
6 for the Water Fund.⁵⁴ He explains that a leverage adjustment is required when a
7 cost of common equity model is based on market value and if its results are then
8 applied to book value. However, conceptually, he does not agree with the
9 leverage adjustment to account for the market-to-book ratio difference.⁵⁵ He
10 concedes that I correctly point out that the Commission rejected a leverage
11 adjustment in the 2008 Aqua Pennsylvania, Inc. decision and the 2018 UGI
12 Electric decision. Mr. Walker then references a 2005 City of Lancaster - Sewer
13 Fund (Lancaster Sewer) proceeding and a 2020 City of Bethlehem - Bureau of
14 Water (Bethlehem) proceeding in an attempt to support his leverage adjustment.⁵⁶

15
16 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER’S REBUTTAL**
17 **TESTIMONY REGARDING THE REFERENCED PRIOR COMMISSION**
18 **ORDERS IN YOUR DIRECT TESTIMONY?**

19 A. While Mr. Walker is correct that the Administrative Law Judge (ALJ) may have
20 accepted the City’s leverage, or “market-to book” adjustment in the 2005

⁵⁴ City Statement No. 6R, p. 50, lines 23-26.
⁵⁵ City Statement No. 6R, p. 50, lines 19-20.
⁵⁶ City Statement No. 6R, p. 48, line 23 through p. 50, line 14.

1 Lancaster Sewer proceeding, he fails to recognize that in the intervening
2 timeframe of more than 15 years, the Commission has rejected the adjustment in
3 the more recent cases that I cited in my direct testimony.

4 First, in *Pennsylvania Public Utility Commission v. Aqua Pennsylvania,*
5 *Inc.*, at Docket No. R-00072711 (Order Entered July 31, 2008), pp. 38-39, the
6 Commission rejected the ALJ’s recommendation for a leverage adjustment stating,
7 “[t]he fact that we have granted leverage adjustments in the past does not mean
8 that such adjustments are indicated in all cases.” In that case, the Commission
9 determined that there was no viable support for an upwards adjustment to
10 compensate for any perceived risk. Mr. Walker fails to address the fact that the
11 Commission has expressly rejected the notion that past approval of leverage
12 adjustments translates to future approval.

13 Second, and most relevant here, in the Water Fund’s litigated base rate
14 proceeding, the Commission rejected the risk/leverage adjustment that Mr. Walker
15 proposed. Specifically, in *Pennsylvania Public Utility Commission, et al v. City of*
16 *Lancaster – Bureau of Water*, at Docket No. R-2010-2179103 (Order Entered
17 July 14, 2011), p. 101, the Commission agreed with the I&E position and stated,
18 “any adjustment to the results of the market based DCF are unnecessary and will
19 harm ratepayers. Consistent with our determination in *Aqua 2008* there is no need
20 to add a leverage adjustment. . .”

21 Third, in *Pennsylvania Public Utility Commission, et al v. UGI Utilities,*
22 *Inc. - Electric Division*, at Docket No. R-2017-2640058 (Order Entered

1 October 25, 2018), pp. 93-94, the Commission agreed with the I&E position
2 refuting the necessity of a leverage adjustment and stated, “we conclude that an
3 artificial adjustment in this proceeding is unnecessary and contrary to the public
4 interest. Accordingly, we decline to include a leverage adjustment in our
5 calculation of the DCF cost of equity.”

6 Fourth, in *Pennsylvania Public Utility Commission, et. al v. Columbia Gas*
7 *of Pennsylvania, Inc.*, at Docket R-2020-3018835 (Order Entered February 19,
8 2021), pp. 137-141, the Commission adopted the ALJ’s recommendation to use
9 I&E’s DCF methodology, which excluded Columbia’s application of a leverage
10 adjustment.

11 Fifth, in *Pennsylvania Public Utility Commission, et. al v. PECO Energy*
12 *Company - Gas Division*, at Docket R-2020-3018929 (Order Entered June 22,
13 2021, Public Version), pp. 172-173, the Commission adopted the ALJ’s
14 recommendation to use I&E’s DCF methodology, which excluded PECO’s
15 application of a leverage adjustment.

16 Finally, in the most recent case of *Pennsylvania Public Utility Commission,*
17 *8 et. al v. Aqua Pennsylvania, Inc.*, at Docket No. R-2021-3027385 (Order Entered
18 9 June 22, 2021), pp. 154-155, the Commission adopted the ALJ’s
19 recommendation to use I&E’s DCF methodology, which excluded Aqua’s
20 application of a leverage adjustment.

1 **Q. MR. WALKER POINTS TO THE 2020 CITY OF BETHLEHEM RATE**
2 **CASE IN AN ATTEMPT TO DEFEND HIS LEVERAGE ADJUSTMENT**
3 **HERE. DO YOU AGREE THAT THE BETHLEHEM CASE SUPPORTS**
4 **THE NEED FOR A LEVERAGE ADJUSTMENT IN THIS CASE?**

5 A. No. While Mr. Walker may be correct that the Bethlehem case is a more recent
6 case, the Commission's determination there does not translate to Mr. Walker's
7 artificial adjustment to the Water Fund ROE. While in the 2020 Bethlehem
8 proceeding, Mr. Walker is correct that the Commission agreed with Bethlehem's
9 application of traditional return on equity models, however, Mr. Walker's analysis
10 fails to mention that in that proceeding, I&E and the City entered into a settlement
11 that did not agree to a specific return on equity or rate of return calculations.
12 Additionally, a review of the Commission Order reveals that the primary issue of
13 concern was between the City and the OCA regarding the determination of the
14 appropriate growth rate used to calculate the DCF. There was no Commission
15 discussion of a leverage adjustment.⁵⁷

⁵⁷ *Pa. PUC v. City of Bethlehem - Water Department*; Docket No. R-2020-3020256, pp. 84-85 (Order Entered April 15, 2021).

1 **Q. HOW DO YOU RESPOND TO MR. WALKER’S ATTEMPT TO DEFEND**
2 **HIS LEVERAGE ADJUSTMENT BY COMPARING YOUR RETURN ON**
3 **EQUITY RECOMMENDATION IN THIS PROCEEDING TO OTHER**
4 **PROCEEDINGS?**

5 A. As I stated above, the Commission has a history of and did in fact refuse to accept
6 a leverage adjustment in the 2021 Aqua case as well as the other cases I cited, so
7 the referenced proceedings do not support Mr. Walker’s argument in favor of a
8 leverage adjustment in this proceeding.

9
10 **Q. HAS MR. WALKER’S ATTEMPT TO DEFEND HIS LEVERAGE**
11 **ADJUSTMENT IN REBUTTAL TESTIMONY CAUSED YOU TO**
12 **CHANGE YOUR RECOMMENDATION THAT IT SHOULD BE DENIED?**

13 A. No. I continue to find an adjustment to account for the difference between market
14 and book value to be inappropriate for the reasons explained above and in my
15 direct testimony. Mr. Walker has failed to support the need for his adjustment for
16 the Water Fund, and his reliance on either older or factually distinguishable
17 precedent from other utilities does not make his 60-basis point adjustment
18 appropriate for the Water Fund.

1 **Q. BASED ON THE WATER FUND’S FILED RATE BASE AND CLAIMED**
2 **CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 60**
3 **BASIS POINTS FOR THE LEVERAGE ADJUSTMENT TO THE COST**
4 **OF EQUITY?**

5 A. As discussed in my direct testimony, an addition of 60 basis points (0.60%) to the
6 cost of equity would burden ratepayers to fund an additional approximately
7 \$605,326 to cover the increased portion of the inflated rate of return based on the
8 as-filed rate base request.⁵⁸

9

10 **SIZE ADJUSTMENT**

11 **Q. WHAT IS MR. WALKER’S POSITION IN REBUTTAL TESTIMONY**
12 **REGARDING THE ALLEGED RISK ASSOCIATED WITH THE WATER**
13 **FUND’S SIZE?**

14 A. Mr. Walker continues to opine that size is a recognized and meaningful element of
15 risk, and it is appropriate to reflect size risk in a company’s cost of equity.⁵⁹ He
16 cites to a few articles including a 2002 article by Dr. Thomas Zepp, “Utility Stocks
17 and the Size Effect: Revisited” which is intended to refute Dr. Annie Wong’s
18 article as referred to in my direct testimony, entitled “Utility Stocks and the Size
19 Effect.” Next, he references a Standard & Poor’s article to imply there is a
20 correlation between a company’s size and its credit rating. Finally, Mr. Walker

⁵⁸ I&E Statement No. 2, p. 62, lines 2-4.

⁵⁹ City Statement No. 6R, p. 46, lines 2-3.

1 asserts that additional support can be found for the use of size premium for utilities
2 in an article by Michael Annin.⁶⁰ Therefore he continues to assert that a size
3 premium should be added to the results of the CAPM to account for perceived
4 additional risk due to the Water Fund's small size.

5
6 **Q. DO YOU AGREE THAT THE REFERENCED ARTICLES SUPPORT A**
7 **SIZE ADJUSTMENT FOR THE WATER FUND IN THIS PROCEEDING?**

8 A. No. The article Mr. Walker references from Dr. Zepp does not recreate Dr.
9 Wong's study, as it simply speculates about other possible reasons for her results
10 and references the results of two other studies. The first study, completed by the
11 California Public Utilities Commission Staff in 1991, is not included in the article,
12 and therefore, Dr. Zepp's opinions cannot be properly evaluated. Dr. Zepp also
13 draws conclusions about an entire industry based on the second study, which
14 examines the effects of size on only four water utility companies. Such a small
15 sample size cannot accurately reflect the entirety of the market. Accordingly, this
16 article does not contain enough credible evidence to refute Dr. Wong's findings.

17 Next, although the section of Standard and Poor's article Mr. Walker
18 provides makes some assumptions regarding size, it specifically states, "we have
19 no minimum size criterion for any given rating level...."⁶¹ Further, this article is
20 not specific to the regulated utility industry, especially for a municipal-owned

⁶⁰ City Statement No. 6R, p. 47, line 1 through p. 48, line 4.

⁶¹ City Statement No. 6R, p. 48, line 1.

1 utility. Additionally, an excerpt from the S&P 2008 Corporate Credit Rating
2 Criteria states,

3 It is relative-not absolute-size that is crucial in determining
4 market position, extent of diversification, and financial
5 flexibility. Small companies also can enjoy the competitive
6 advantages that accompany a dominant market position...In
7 this sense, sheer mass is not important; demonstrable market
8 advantage is.⁶²

9 Finally, Mr. Walker referenced Michael Annin's article, "Equity and the
10 Small Stock Effect" published in Public Utilities Fortnightly, October 15, 1995 (p.
11 42). On page 43 of this article, Mr. Annin notes that the small size of a company
12 is measured by its market capitalization as compared to industry composite and
13 large company composite market capitalizations, and therefore, qualifies for a size
14 premium for the difference in the capitalization. This article does not attempt to
15 differentiate between the public utility industry and the universe of publicly traded
16 companies for the difference in the capitalization. He also notes that the size
17 premium addition to traditional CAPM results represents an adjustment over and
18 above any increase already provided to these smaller companies by having higher
19 betas.⁶³

⁶² Standard & Poor's Ratings Direct, 2008 Corporate Criteria: Analytical Methodology, pp. 16-17, April 15, 2008.

⁶³ [Equity and Small-stock Effect - Michael Annin.PDF](https://icc.illinois.gov/downloads/public/edocket/377761.PDF) p. 43,
<https://icc.illinois.gov/downloads/public/edocket/377761.PDF> (accessed on January 12, 2026).

1 **Q. DO YOU HAVE ANY FURTHER EVIDENCE TO SUPPORT YOUR**
2 **RECOMMENDATION TO REJECT THE PROPOSED SIZE**
3 **ADJUSTMENT?**

4 A. Yes. As discussed in my direct testimony, Dr. Wong's article presents evidence
5 that although a size effect may exist for industrial stocks, it does not exist for
6 utility stocks. In addition, the size effect that exists for industrial stocks varies to
7 such an extent that it is difficult to predict. The difficulty in predicting the effect
8 of size is demonstrated in the variance from year to year of the measurement of
9 difference between the annual returns on the large and small-capitalization stocks
10 of the NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation:*
11 *2015 Yearbook*. As stated on page 100 of the SBBI Yearbook,

12 While the largest stocks actually declined in 2001, the smallest
13 stocks rose more than 30%. A more extreme case occurred in
14 the depression-recovery year of 1933, when the difference
15 between the first and 10th decile returns was far more
16 substantial. The divergence in the performance of small- and
17 large-cap stocks is evident. In 30 of the 89 years since 1926,
18 the difference between the total returns of the largest stocks
19 (decile 1) and the smallest stocks (decile 10) has been greater
20 than 25 percentage points.

21 Page 109 states,

22 In four of the last 10 years, large-capitalization stocks (deciles
23 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-
24 capitalization stocks (deciles 9-10). This has led some market
25 observers to speculate that there is no size premium. But
26 statistical evidence suggests that periods of underperformance
27 should be expected.

1 Page 112 states,

2 Because investors cannot predict when small-cap returns will
3 be higher than large-cap returns, it has been argued that they
4 do not expect higher rates of return for small stocks.

5 Aswath Damodaran notes in his study “Equity Risk Premiums (ERP):

6 Determinants, Estimation, and Implications” - The 2022 Edition on page 50 states,

7 In the four decades since 1980, the small cap premium has been
8 non-existent, raising questions about whether it still persists or
9 whether it was an artifact of the twentieth century.

10 Page 51 states,

11 Finally, a series of studies have argued that market
12 capitalization, by itself, is not the reason for excess returns but
13 that it is a proxy for other ignored risks such as illiquidity and
14 poor information. The argument that there is, in fact, no small
15 cap premium and that we have observed over time is just an
16 artifact of history that should be given credence.

17 Page 53-54 states,

18 Even if you believe that small cap companies are more exposed
19 to market risk than large cap ones, this is a sloppy and lazy way
20 of dealing with that risk, since risk ultimately has to come from
21 something fundamental (and size is not a fundamental factor).
22

23 **Q. PLEASE CONTINUE.**

24 A. In my opinion, it is not appropriate to link the small size effect of non-regulated
25 companies with the regulated utility industry because regulated utilities, small or
26 large, have a market monopoly in the certificated service jurisdiction and are
27 permitted to seek recovery of the full cost of service and a fair and reasonable rate
28 of return on rate base. The regulatory ratemaking mechanism enables utilities to

1 reduce risk as opposed to unregulated companies that face sales revenue and net
2 income pressures due to a highly competitive market structure.

3
4 **Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. WALKER'S**
5 **SIZE ADJUSTMENT?**

6 A. For the reasons discussed above and as discussed in my direct testimony,⁶⁴ I
7 continue to recommend that the proposed size adjustment of 0.60% for the Water
8 Fund's small size in CAPM analysis results be disallowed.

9
10 **UNSYSTEMATIC RISK AND SYSTEMATIC RISK**

11 **Q. SUMMARIZE MR. WALKER'S REBUTTAL TESTIMONY REGARDING**
12 **UNSYSTEMATIC RISK (FIRM-SPECIFIC RISK) AND SYSTEMATIC**
13 **RISK (MARKET RISK).**

14 A. Mr. Walker claims that my direct testimony is misleading or vague in these areas
15 because systematic risk (non-diversifiable) is the only risk germane under the
16 CAPM portfolio theory. However, he opines that both systematic risk (non-
17 diversifiable) and unsystematic risk (company-specific) are relevant under the
18 DCF, risk premium, comparable earnings, credit analyses, bond ratings, etc.⁶⁵

⁶⁴ I&E Statement No. 2, p. 48, line 4 through p. 51, line 17.

⁶⁵ City Statement No. 6R, p. 15, lines 7-14.

1 **Q. WHAT IS YOUR RESPONSE TO MR. WALKER'S COMMENT**
2 **REGARDING UNSYSTEMATIC RISK (FIRM-SPECIFIC RISK) AND**
3 **SYSTEMATIC RISK (MARKET RISK)?**

4 A. I note that my direct testimony discussing systematic and unsystematic risk only
5 pertained to the theoretical basis for the CAPM.⁶⁶ I have not discussed relevance
6 of the systematic risk (non-diversifiable) and unsystematic risk (company-specific)
7 concepts for the DCF, risk premium, comparable earnings, credit analyses, bond
8 ratings, etc.

9

10 **OVERALL RATE OF RETURN**

11 **Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION**
12 **CHANGED FROM YOUR DIRECT TESTIMONY?**

13 A. No. My recommended cost of equity and overall rate of return remain unchanged
14 from my direct testimony.⁶⁷

15

16 **Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION**
17 **FOR THE WATER FUND?**

18 A. I continue to recommend the following rate of return for the Water Fund, which
19 includes a 22% implied tax rate adjustment to the cost of common equity:⁶⁸

⁶⁶ I&E Statement No. 2, p. 19, lines 6-16.

⁶⁷ I&E Statement No. 2 and I&E Exhibit No. 2.

⁶⁸ I&E Exhibit No. 2, Schedule 1.

I&E Recommendation CITY OF LANCASTER - WATER FUND Summary of Cost of Capital (<u>With Tax Adjustment</u>)			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	57.13%	4.20%	2.40%
Common Equity	<u>42.87%</u>	7.86%	<u>3.37%</u>
Total	<u>100.00%</u>		<u>5.77%</u>

1

2

3 **RESPONSE TO OCA WITNESS MR. GARRETT'S REBUTTAL TESTIMONY**

4 **Q. SUMMARIZE OCA WITNESS MR. GARRETT'S RESPONSE IN**
5 **REBUTTAL TESTIMONY.**

6 A. Mr. Garrett takes issue with my recommended 10.08% ROE and growth rate used
7 in my DCF analysis.⁶⁹

8

9 **Q. WHAT IS MR. GARRETT'S GENERAL CRITICISM REGARDING YOUR**
10 **RECOMMENDED ROE OF 10.08%?**

11 A. Mr. Garrett characterizes my DCF analysis results as inappropriate and states that
12 since he did not present a tax-adjusted ROE in his direct testimony, his proposed
13 ROE of 8.80% should be compared with my estimated cost of equity of 10.08%,
14 which he states is significantly higher than his proposed ROE.⁷⁰

⁶⁹ OCA Statement No. 2R, pp. 2-4.

⁷⁰ OCA Statement No. 2R, p. 2, lines 1-3.

1 **Q. DO YOU AGREE WITH MR. GARRETT’S CRITICISM?**

2 A. No. I disagree with Mr. Garrett’s criticism of my recommended ROE, which is
3 based on the DCF result for the Water Fund.
4

5 **Q. SUMMARIZE MR. GARRETT’S CRITICISMS REGARDING YOUR DCF**
6 **ANALYSIS.**

7 A. First, Mr. Garrett states that he considered long-term annual U.S. GDP growth
8 projections as a cap on the long-term growth rate of each individual company in
9 his proxy group because no domestic company can achieve annual earnings and/or
10 dividend growth at a rate that exceeds the growth rate (U.S. GDP) of the aggregate
11 economy over the long-run.⁷¹ He states that he incorporated the short-term
12 dividend growth rate projections published by Value Line and presented this
13 “analyst growth” variation in his DCF Model. Additionally, he states that despite
14 its shortcomings, it is often presented in rate proceedings and considered by
15 regulators. The result of his sustainable growth DCF Model indicates a cost of
16 equity of 6.70% and the result of his analyst-growth DCF Model indicates a cost
17 of equity of 9.20%. The average result of his two DCF Models is 8.0%.⁷²

18 Second, Mr. Garrett states that my DCF analysis produced a much higher
19 results because I used unsustainably high growth rate of 7.12% in contrast to his

⁷¹ OCA Statement No. 2R, p. 2, lines 8-13.

⁷² OCA Statement No. 2R, p. 2, lines 13-19.

1 use of analyst growth rate of 6.20% and sustainable growth rate (U.S. GDP
2 Growth Rate) of 3.70% in his DCF analysis.⁷³

3 Finally, Mr. Garrett concludes that an analyst forecasted annual dividend
4 (and/or earnings) growth rate of a proxy group nearly double the projected annual
5 GDP growth is impossible for utilities to achieve.⁷⁴

6
7 **Q. HOW DO YOU RESPOND TO MR. GARRETT'S CRITICISMS OF YOUR**
8 **DCF ANALYSIS?**

9 A. First, it should be noted, in the context of recommending an appropriate return on
10 equity and overall rate of return, I&E's role is to perform an unbiased analysis
11 using current and reputable sources. In determining an appropriate growth rate for
12 my constant growth DCF analysis, I relied upon the forecasted earnings growth
13 estimates from Value Line, S&P, and Zacks.⁷⁵ These sources are trusted and used
14 industry-wide, including by most companies, advocates, and I&E witnesses who
15 submit rate of return testimony. Mr. Garrett, Mr. Walker, and I all utilize these
16 independent analysts' sources for calculating an average growth rate for use in our
17 respective DCF analyses.

18 The growth estimates I use from the sources listed above are five-year
19 growth forecasts which are not short-term. The five-year growth estimates are
20 reasonable as they cover the time period of the FPFTY and rate case filing

⁷³ OCA Statement No. 2R, p. 3, lines 1-4.

⁷⁴ OCA Statement No. 2R, p. 3, lines 7-11.

⁷⁵ I&E Exhibit No. 2, Schedule 5.

1 frequency of many utilities. It is inappropriate and speculative to compare and set
2 an upper limit for a utility's growth rate with the U.S. economy nominal long-term
3 GDP growth forecast of 3.70% for next five and ten years. Mr. Garrett himself
4 used an analyst forecasted average growth rate of 6.20% for his proxy group
5 utilities in his constant growth DCF analysis, which is higher than his suggested
6 upper limit based on the GDP growth forecast of 3.70% for the water utilities'
7 growth rate and calculated a mean DCF result of 9.20% for his proxy group. It is
8 speculative to assume or conclude that utilities could not achieve an earnings
9 growth rate higher than the U.S. GDP growth.

10 Second, the Commission has repeatedly confirmed I&E's constant growth
11 DCF methodology for determining a fair return on common equity in several
12 recent base rate proceedings, where the Commission agreed with the ALJ's
13 recommendation to use I&E's cost of equity methodology, which included using
14 analysts forecasted five-year earnings growth estimates in the DCF analysis.⁷⁶

⁷⁶ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835, p. 141 (Order Entered February 19, 2021); *Pa. PUC v. PECO Energy Company - Gas Division*, Docket No. R-2020-3018929 (Order Entered June 22, 2021); *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 and 178 (Order entered May 16, 2022); *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, p. 105 (Order entered January 18, 2024); *Pa. PUC v. Pennsylvania-American Water Company*, Docket Nos. R-2023-30433189 & R-2023-3043190, p. 194 (Order Entered July 22, 2024); and *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). See generally *Rate of Return on Common Equity - Disposition*, pp. 226 and 234.

1 **Q. SUMMARIZE MR. GARRETT’S SUGGESTION TO USE THE DIVIDEND**
2 **GROWTH RATE RATHER THAN AN EARNINGS GROWTH RATE IN**
3 **YOUR DCF ANALYSIS.**

4 A. Mr. Garrett asserts that it is reasonable to consider a dividend growth rather than
5 earnings growth when employing the DCF Model because the ultimate form of
6 “cash flow” in the DCF model is dividends. He recommends that if the
7 Commission is inclined to give weight to the DCF Model that uses analysts’ short-
8 term growth rate projections as the long-term growth rate input to the model, it
9 should give more consideration to the dividend growth rate projections of the
10 proxy group rather than the earnings growth rate projections I used.⁷⁷

11
12 **Q. WHAT IS YOUR RESPONSE TO MR. GARRETT’S SUGGESTION TO**
13 **USE THE DIVIDEND GROWTH RATE RATHER THAN ANALYSTS**
14 **FORECASTED EARNINGS GROWTH RATE IN THE DCF ANALYSIS?**

15 A. In my DCF analysis, I used Value Line projected dividends to calculate a dividend
16 yield of the proxy group utilities. I agree that the DCF model relies on free cash
17 flow, but the cash flow is available to all capital holders, and it grows with the
18 growth in the company’s earnings. A company’s growth rate is usually measured
19 based on forecasts of earnings per share, dividend per share, and/or book value per
20 share and the use of a particular growth rate is subjective.⁷⁸ The growth factor

⁷⁷ OCA Statement No. 2R, p. 4, lines 1-10.

⁷⁸ A Guide to Utility Ratemaking - James Cawley and Norman J. Kennard, 2018 Edition, p. 131.

1 expresses the growth of the price of the stock and dividend (or dividend yield)
2 expected by investors.⁷⁹ As discussed above, the Commission has repeatedly
3 confirmed I&E's constant growth DCF methodology, which uses an analysts
4 forecasted earnings growth rate and dividend yield for determining a fair return on
5 common equity in several base rate proceedings.

6

7 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

8 A. Yes.

⁷⁹ A Guide to Utility Ratemaking - James Cawley and Norman J. Kennard, 2018 Edition, p. 131.

**I&E Statement No. 3-SR
Witness: Esyan A. Sakaya**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

CITY OF LANCASTER – BUREAU OF WATER

Docket No. R-2025-3057237

Surrebuttal Testimony

of

Esyan A. Sakaya

Bureau of Investigation and Enforcement

Concerning:

**Plant and Reporting Requirements
Unaccounted For Water
Scale Back of Rates**

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1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Eryan Sakaya, and my business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

6

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

8 A. I am employed by the Pennsylvania Public Utility Commission (Commission) in
9 the Bureau of Investigation & Enforcement (I&E) as a Fixed Utility Valuation
10 Engineer.

11

12 **Q. ARE YOU THE SAME ERYAN SAKAYA WHO IS RESPONSIBLE FOR**
13 **THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 3**
14 **AND I&E EXHIBIT NO. 3?**

15 A. Yes.

16

17 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

18 A. The purpose of my surrebuttal testimony is to address statements made by the
19 City of Lancaster – Bureau of Water (Water Fund) witnesses Christine Volkay-
20 Hilditch¹ and Gregory Herbert.²

¹ Water Fund Statement No. 3R.

² Water Fund Statement No. 4R.

1 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

2 A. No.

3

4 **PLANT AND REPORTING REQUIREMENTS**

5 **Q. WHAT DID YOU RECOMMEND REGARDING PLANT ADDITIONS**
6 **THAT THE WATER FUND PROJECTS TO BE IN SERVICE DURING**
7 **THE FUTURE TEST YEAR ENDING MARCH 31, 2026, AND THE FULLY**
8 **PROJECTED FUTURE TEST YEAR (FPFTY) ENDING MARCH 31, 2027?**

9 A. I recommended that the Water Fund be required to provide I&E, the Office of the
10 Consumer Advocate (OCA), and the Office of Small Business Advocate with an
11 update to Water Fund Exhibit GRH-1, Schedule 4 no later than July 1, 2026 which
12 should include actual capital expenditures, plant additions, and retirements by
13 month for the fiscal year ending March 31, 2026 and an additional update for
14 actuals for the fiscal year ending March 31, 2027, no later than July 1, 2027.³

15

16 **Q. DID THE WATER FUND RESPOND TO YOUR RECOMMENDATION**
17 **REGARDING PLANT ADDITION REPORTING REQUIREMENTS?**

18 A. Yes. Water Fund witness Christine Volkay-Hilditch accepted my
19 recommendation to provide such monthly data “to the extent it is available.”⁴

³ I&E Statement No. 3, p. 6.

⁴ Water Fund Statement No. 3R, p. 1.

1 **Q. DO YOU AGREE THAT PROVIDING THIS INFORMATION SHOULD**
2 **BE OPTIONAL?**

3 A. No. Ms. Volkay-Hilditch provides no reasonable explanation for why this data
4 will not be available in the future, and I continue to recommend that the
5 Commission require the Water Fund to provide this information as suggested in
6 my direct testimony and summarized above.

7

8 **UNACCOUNTED-FOR WATER**

9 **Q. WHAT IS THE WATER FUND'S OVERALL UNACCOUNTED-FOR**
10 **WATER (UFW) LEVEL?**

11 A. In my direct testimony, I determined the average percentage of UFW during
12 2022, 2023, and 2024 was 28.6%.⁵ Based upon this determination, I concluded
13 that the Water Fund has a combined three-year average of UFW that is above the
14 target set forth in the Commission's policy statement, which states UFW should be
15 kept within reasonable amounts and that levels above 20% have been considered
16 excessive by the Commission.⁶

⁵ I&E Exhibit No. 3, Schedule 3, p. 4.

⁶ I&E Statement No. 3, pp. 8-10.

1 **Q. WHAT DID YOU RECOMMEND REGARDING ADJUSTMENTS TO THE**
2 **WATER FUND’S REVENUE REQUIREMENT DUE TO THE**
3 **UNACCEPTABLE LEVEL OF UFW?**

4 A. I recommended that jurisdictional purchased power and chemical expense be
5 reduced by \$196,606 (665,399,200 gallons x \$0.295470 per thousand gallons)
6 based on an adjustment for excess UFW.⁷ This recommendation was based on a
7 665,399,200-gallon adjustment for UFW that was excessive and should be
8 removed.⁸

9
10 **Q. WHY DID YOU RECOMMEND THESE ADJUSTMENTS FOR**
11 **EXCESSIVE UFW?**

12 A. As described in my direct testimony, the Water Fund provided the amounts of
13 UFW for fiscal years 2022-2024 in its filing and the average percentage of
14 unaccounted-for water over these three years was 28.6%.⁹ The Commission allows
15 utilities to have UFW up to 20% to account for main breaks, leaks, and unknown
16 losses. Therefore, any amount over 20% should result in corresponding expenses
17 being adjusted.¹⁰

⁷ I&E Statement No. 3, pp. 10-11 and I&E Exhibit No. 3, Schedule 3, p. 5.

⁸ I&E Statement No. 3, pp. 9-11 and I&E Exhibit No. 3, Schedule 3, p. 5, cols. B and D, line 8.

⁹ I&E Exhibit No. 3, Schedule 3, P. 4, col B, line 39.

¹⁰ I&E Statement No. 3, pp. 8-11.

1 **Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION FOR**
2 **UFW?**

3 A. Yes. Water Fund witnesses Christine Volkay-Hilditch and Gregory Herbert
4 disagree with my recommended adjustment in its entirety.¹¹

5
6 **Q. PLEASE SUMMARIZE MS. VOLKAY-HILDITCH'S RESPONSE TO**
7 **YOUR RECOMMENDATION FOR UFW.**

8 A. Ms. Volkay-Hilditch opines that my recommendation is essentially a penalty for
9 UFW and that my recommendation should be rejected. She explains two projects
10 that will help reduce UFW that are on the verge of being completed. Finally, she
11 indicates that my recommended adjustment would eliminate money needed to be
12 applied toward leak reduction efforts.¹²

13
14 **Q. WHAT IS YOUR RESPONSE TO MS. VOLKAY-HILDITCH'S**
15 **ARGUMENTS?**

16 A. First, her argument about two projects being nearly completed that will aid in
17 reducing UFW only supports my argument that the claimed level of purchased
18 power and chemical expense should not be necessary in the FPFTY. In response
19 to her argument about leak reduction efforts, any expenses associated specifically
20 with those efforts would not have been appropriately claimed in purchased power

¹¹ Water Fund Statement 3R, pp. 2-3 and Water Fund Statement 4R, pp. 11-13.

¹² Water Fund Statement 3R, pp. 2-3.

1 and chemical expenses, and therefore, this is not a valid argument for the
2 Commission to reject my recommendation.

3
4 **Q. SUMMARIZE MR. HERBERT'S RESPONSE TO YOUR**
5 **RECOMMENDED ADJUSTMENT FOR UFW.**

6 A. Mr. Herbert reiterates some of the same concerns as Ms. Volkay-Hilditch
7 indicating that such an expense reduction is viewed as a penalty that would not put
8 the Water Fund in a position to make capital improvements and lower UFW.
9 Additionally, he mentions that non-jurisdictional customers (e.g., those inside the
10 City of Lancaster) are more prone to UFW and that the proposed plant reduction
11 by OCA witness Morgan works against the Water Fund being able to address this
12 issue.¹³

13
14 **Q. WHAT IS YOUR RESPONSE TO MR. HERBERT'S REBUTTAL**
15 **TESTIMONY ON THE TOPIC OF UFW AND YOUR RECOMMENDED**
16 **EXPENSE ADJUSTMENT?**

17 A. His arguments are not relevant to the purchased power and chemical expense
18 adjustment that I have recommended. My recommendation was not to reduce
19 utility plant that can be installed to reduce the UFW percentage. As for

¹³ Water Fund Statement No. 4R, pp. 11-13.

1 non-jurisdictional customers being more prone to UFW, his argument does
2 nothing to refute my recommended adjustment to jurisdictional expenses.

3
4 **Q. DO YOU HAVE ANY OTHER POINTS TO MAKE RELATED TO UFW**
5 **AND THE COMMISSION’S STANCE?**

6 A. Yes. The Commission’s policy regarding water conservation states that in rate
7 proceedings of water utilities, the Commission examines specific factors regarding
8 the action or failure to act to encourage cost-effective conservation by customers
9 and reviews utilities’ efforts to meet the criteria when determining just and
10 reasonable rates.¹⁴

11 As such, evaluating UFW and recommending adjustments due to excess
12 UFW is a valid component of determining appropriate rates, which is the purpose
13 of base rate proceedings.

14
15 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
16 **UFW?**

17 A. No. I continue to recommend the \$196,606 expense adjustment to remove the cost
18 of treating 665,399,200 gallons of excess UFW. This recommendation is
19 consistent with the Commission’s water conservation policy statement and is
20 proper to set just and reasonable rates.

¹⁴ 52 Pa. Code § 65.20. Water conservation measures—statement of policy. (pacodeandbulletin.gov)

1 **SCALE BACK OF RATES**

2 **Q. DID YOU DISAGREE WITH THE WATER FUND’S SCALE BACK**
3 **PROPOSAL?**

4 A. No, but I made one clarification. Ultimately, I stated, the Water Fund is correct to
5 adjust the customer charges and volumetric rates for the Residential, Commercial,
6 Public, and Industrial rate classes and the service line and hydrant rates for the
7 Private Fire rate class in any potential scale back proposal. However, I noted that,
8 prior to adjusting the rates, the appropriate allocation of revenue would first need
9 to be determined. I recommended that this be done such that the increase for each
10 customer class is scaled back proportionally to the increase in rates as originally
11 proposed by the Water Fund.

12
13 **Q. DID THE WATER FUND ACCEPT YOUR RECOMMENDATION?**

14 A. Yes. Water Fund witness Gregory Herbert accepted my recommendation and
15 reallocated revenue for the aforementioned rate classes in Water Fund Exhibit
16 GRH-2R, Schedule A, which proportionally scaled back the rate impact initially
17 proposed in Schedule 2 of TUS-R-12.¹⁵

18
19 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

20 A. Yes.

¹⁵ Water Fund Statement No. 4R, pp. 22-24.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	Docket No. R-2025-3057237
	:	
v.	:	
	:	
City of Lancaster – Bureau of Water	:	
Base Rate Case	:	

**WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, Getachew Bedasa, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 1; I&E Exhibit No. 1;
- I&E Statement No. 1-SR

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.



Getachew Bedasa
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: January 22, 2026

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	Docket No.: R-2025-3057237
	:	
v.	:	
	:	
City of Lancaster - Bureau of Water	:	
Base Rate Case	:	

**WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, D. C. Patel, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 2; I&E Exhibit No. 2; and
- I&E Statement No. 2-SR

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ DCPatel

D. C. Patel

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: January 22, 2026

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	Docket No. R-2025-3057237
	:	
v.	:	
	:	
City of Lancaster – Bureau of Water	:	
Base Rate Case	:	

**WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, Esyan A. Sakaya, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 3; I&E Exhibit No. 3; and
- I&E Statement No. 3-SR.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ Esyan A. Sakaya

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: January 22, 2026

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	Docket No. R-2025-3057237
	:	
v.	:	
	:	
City of Lancaster – Bureau of Water	:	
Base Rate Case	:	

**WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, Christine Wilson, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

- I&E Statement No. 4-R; I&E Exhibit No. 4-R.

were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Christine S. Wilson

Christine Wilson
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: January 22, 2026