



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

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

May 7, 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.
Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
I&E Pre-Served Testimony, Exhibits, and Verifications

Dear Secretary Homsher:

Enclosed for electronic filing please find the **NON-PROPRIETARY** version of the Bureau of Investigation and Enforcement's Pre-Served Testimony, Exhibits, and Verifications in the above-captioned proceeding. The **PROPRIETARY** version will be submitted to the Secretary's Bureau via their ShareFile. The following documents were admitted into the record at the evidentiary hearing held on March 23, 2026, before Administrative Law Judges Jeffrey A. Watson and Emily I. DeVoe:

Direct Testimony:

Vanessa Okum:	I&E Statement No. 1 (PROPRIETARY)	I&E Exhibit No. 1
D. C. Patel:	I&E Statement No. 2 (PROPRIETARY)	I&E Exhibit No. 2
Esyan A. Sakaya:	I&E Statement No. 3 (Corrected)	I&E Exhibit No. 3
Ethan H. Cline:	I&E Statement No. 4	I&E Exhibit No. 4

Surrebuttal Testimony:

Vanessa Okum:	I&E Statement No. 1-SR	I&E Exhibit No. 1-SR
D. C. Patel:	I&E Statement No. 2-SR	I&E Exhibit No. 2-SR
Esyan A. Sakaya:	I&E Statement No. 3-SR	
Ethan H. Cline:	I&E Statement No. 4-SR	I&E Exhibit No. 4-SR

Verifications:

Vanessa Okum
D. C. Patel
Esyan A. Sakaya
Ethan H. Cline

Copies 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 "Carrie B. Wright".

Carrie B. Wright
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CBW/ac
Enclosures

cc: ALJ Jeffrey A. Watson (*Cover Letter and Certificate of Service only – via email*)
ALJ Emily I. DeVoe (*Cover Letter and Certificate of Service only – via email*)
Per Certificate of Service (*Cover Letter and Certificate only – via email*)

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket Nos. R-2025-3057983 (Water)
	:	R-2025-3058051 (Wastewater)
Pennsylvania-American Water Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **Letter Regarding Pre-Served
Testimony, Exhibits, and Verifications** dated May 7, 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: Vanessa Okum
NON-PROPRIETARY**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

and

Docket No. R-2025-3058051 (Wastewater)

Direct Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

**OPERATING AND MAINTENANCE EXPENSES
PENSION AND OPEB REGULATORY ASSET TREATMENT
CASH WORKING CAPITAL**

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1 **INTRODUCTION**

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

3 A. My name is Vanessa Okum. My business address is Pennsylvania Public Utility
4 Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg,
5 PA 17120.

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

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

10

11 **Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL**
12 **BACKGROUND.**

13 A. Appendix A, which is attached to my testimony, describes my education
14 background and professional experience.

15

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

17 A. I&E is responsible for protecting the public interest in proceedings before the
18 Commission. The I&E analysis in this proceeding is based on its responsibility to
19 represent the public interest. This responsibility requires balancing the interests of
20 the ratepayers, the regulated utility, and the regulated 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
3 Pennsylvania-American Water Company (PAWC or Company) and make
4 recommended adjustments to PAWC's proposed operating and maintenance
5 (O&M) expense claims for the fully projected future test year (FPFTY) ending
6 June 30, 2027, including certain expenses that are partially capitalized to rate base.
7 I will also address the proposed deferred asset treatment for pension and other
8 post-retirement employee benefits (OPEB), as well as cash working capital.

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. WHAT ARE THE TEST YEARS USED BY PAWC IN THIS**
14 **PROCEEDING?**

15 A. PAWC uses the year ended June 30, 2025 as the historic test year (HTY), the year
16 ending June 30, 2026 as the future test year (FTY), and the year ending June 30,
17 2027 as the FPFTY in this proceeding.¹
18

19 **Q. WHAT IS PAWC'S REQUESTED REVENUE INCREASE?**

20 A. PAWC is requesting a total annual revenue increase of \$168,716,450 based on the

¹ PAWC Statement No. 6, p. 3.

FPFTY pro forma revenue requirement,² which reflects a total rate base claim for the combined water and wastewater operations. The revenue increase includes several acquired systems not previously included in Company claims. The breakdown of the revenue increase by operation is as follows:³

	Present Rate Revenue	Net Revenue Increase after Act 11 WW Allocation	% Increase in Revenue
Water Operations	\$947,784,779	\$152,417,957	16.1%
Wastewater SSS Ops.	\$108,561,975	\$7,329,642	6.8%
BASA WW Ops.	\$12,748,475	\$5,097,089	40.0%
Wastewater CSS Ops.	\$85,758,589	\$3,341,896	3.9%
Elizabeth Borough CSS WW Ops	<u>\$1,767,267</u>	<u>\$529,866</u>	30.0%
Total Company	<u>\$1,156,621,085</u>	<u>\$168,716,450</u>	14.6%

The requested Water Operations revenue increase of \$152,417,957 includes \$53,010,182 (34.78% of the Water Operations increase) allocated from the various Wastewater Operations per the Act 11 provision which is addressed by I&E witness Ethan Cline.⁴

I&E OPERATING AND MAINTENANCE EXPENSE ADJUSTMENTS

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS.

A. The following tables summarize my recommended adjustments:

² PAWC Exhibit No. 3-A, p. A.

³ PAWC Exhibit No. 3-A, p. A.

⁴ I&E Statement No. 4.

Water Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$60,387,172	\$59,632,332	(\$754,840)
Performance Pay	\$5,209,300	\$2,492,591	(\$2,716,709)
Payroll Taxes	\$5,088,679	\$4,820,894	(\$267,785)
Group Insurance	\$12,247,609	\$12,094,513	(\$153,096)
401k	\$1,730,994	\$1,709,357	(\$21,637)
Defined Contribution Plan	\$2,323,443	\$2,294,400	(\$29,043)
Waste Disposal	\$4,216,691	\$3,039,714	(\$1,122,977)
Transportation	\$3,321,224	\$2,864,899	(\$456,325)
Service Company	\$73,593,697	\$73,531,779	(\$61,918)
Total O&M Expense Adjustments			<u>(\$5,584,330)</u>
Rate Base:			
Salaries and Wages	\$45,203,267	\$44,638,226	(\$565,041)
Performance Pay	\$3,899,461	\$1,865,848	(\$2,033,613)
Payroll Taxes	\$3,809,168	\$3,608,716	(\$200,452)
Group Insurance	\$9,168,038	\$9,053,438	(\$114,600)
401k	\$1,295,749	\$1,279,552	(\$16,197)
Defined Contribution Plan	\$1,739,230	\$1,717,490	(\$21,740)
Transportation	\$2,485,807	\$2,144,542	(\$341,265)
Cash Working Capital	\$25,170,058	\$24,800,799	(\$369,259)
Total Rate Base Adjustments			<u>(\$3,662,167)</u>

Wastewater SSS Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$5,505,060	\$5,436,247	(\$68,813)
Performance Pay	\$409,090	\$204,545	(\$204,545)
Payroll Taxes	\$468,931	\$447,315	(\$21,616)
Group Insurance	\$1,310,989	\$1,294,602	(\$16,387)
401k	\$175,250	\$173,060	(\$2,190)
Defined Contribution Plan	\$248,805	\$245,695	(\$3,110)
Waste Disposal	\$1,673,584	\$1,254,740	(\$418,844)
Transportation	\$168,807	\$146,436	(\$22,371)
Service Company	\$2,277,631	\$2,275,747	(\$1,884)
Total O&M Expense Adjustments			<u>(\$759,760)</u>
Rate Base:			
Salaries and Wages	\$1,357,393	\$1,340,426	(\$16,967)
Performance Pay	\$100,870	\$50,435	(\$50,435)
Payroll Taxes	\$115,625	\$110,295	(\$5,330)
Group Insurance	\$323,253	\$319,212	(\$4,041)
401k	\$43,212	\$42,672	(\$540)
Defined Contribution Plan	\$61,348	\$60,581	(\$767)
Transportation	\$41,634	\$36,107	(\$5,527)
Cash Working Capital	\$2,268,679	\$2,239,077	(\$29,602)
Total Rate Base Adjustments			<u>(\$113,209)</u>

Wastewater CSS Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$7,085,441	\$6,996,873	(\$88,568)
Performance Pay	\$326,668	\$163,334	(\$163,334)
Payroll Taxes	\$587,649	\$567,804	(\$19,845)
Group Insurance	\$1,570,102	\$1,550,476	(\$19,626)
401k	\$124,961	\$123,399	(\$1,562)
Defined Contribution Plan	\$313,257	\$309,342	(\$3,915)
Waste Disposal	\$4,008,056	\$2,740,027	(\$1,268,029)
Transportation	\$442,804	\$389,081	(\$53,723)
Service Company	\$1,232,816	\$1,231,776	(\$1,040)
Total O&M Expense Adjustments			<u>(\$1,619,642)</u>
Rate Base:			
Salaries and Wages	\$1,747,071	\$1,725,232	(\$21,839)
Performance Pay	\$80,547	\$40,274	(\$40,273)
Payroll Taxes	\$144,898	\$140,005	(\$4,893)
Group Insurance	\$387,143	\$382,304	(\$4,839)
401k	\$30,812	\$30,427	(\$385)
Defined Contribution Plan	\$77,241	\$76,275	(\$966)
Transportation	\$109,211	\$95,936	(\$13,275)
Cash Working Capital	\$1,503,544	\$1,482,756	(\$20,788)
Total Rate Base Adjustments			<u>(\$107,258)</u>

1

BASA Wastewater Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$2,218,304	\$2,190,576	(\$27,728)
Performance Pay	\$120,340	\$60,170	(\$60,170)
Payroll Taxes	\$184,962	\$178,034	(\$6,928)
Group Insurance	\$499,278	\$493,037	(\$6,241)
401k	\$79,402	\$78,409	(\$993)
Defined Contribution Plan	\$111,007	\$109,619	(\$1,388)
Waste Disposal	\$339,322	\$298,279	(\$41,043)
Transportation	\$61,692	\$54,336	(\$7,356)
Service Company	\$119,223	\$119,093	(\$130)
Total O&M Expense Adjustments			<u>(\$151,977)</u>
Rate Base:			
Salaries and Wages	\$546,972	\$540,134	(\$6,838)
Performance Pay	\$29,673	\$14,837	(\$14,836)
Payroll Taxes	\$45,606	\$43,898	(\$1,708)
Group Insurance	\$123,108	\$121,569	(\$1,539)
401k	\$19,578	\$19,334	(\$244)
Defined Contribution Plan	\$27,371	\$27,029	(\$342)
Transportation	\$15,216	\$13,398	(\$1,818)
Cash Working Capital	\$1,061,398	\$1,052,302	(\$9,096)
Total Rate Base Adjustments			<u>(\$36,421)</u>

2

3

I am not making any adjustments to the revenue requirement for Elizabeth

4

Borough. Thus, I am not listing the Elizabeth Borough claims in sections of my

5

direct testimony below. Only I&E witness DC Patel addresses the revenue

6

requirement for Elizabeth Borough via a recommended adjustment to the rate of

1 return. There is not enough historical data to support adjustments to claims for
2 this recently acquired system.

3
4 **OVERALL I&E RECOMMENDED POSITION**

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

7 A. I&E's total recommended revenue requirement for Water Operations is
8 \$988,363,257. This recommended revenue requirement represents an increase of
9 \$40,578,478 to the Company's claimed present rate revenues of \$947,784,779.
10 This total recommended allowance incorporates my adjustments made in this
11 direct testimony to O&M expenses and rate base, as well as the recommended
12 adjustments made in the direct testimony of I&E witness D.C. Patel.⁵ A
13 calculation of the I&E recommended revenue requirement is shown in Table I(a)
14 below:

⁵ I&E Statement No. 2.

PAWC - Water Operations R-2025-3057983		TABLE I(a)			
		INCOME	SUMMARY		
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	947,784,779	0	947,784,779	40,578,478	988,363,257
Deductions:					
O&M Expenses	282,731,634	-5,584,330	277,147,304	445,146	277,592,450
Depreciation	228,579,069	0	228,579,069		228,579,069
Taxes, Other	17,198,781	0	17,198,781	298,948	17,497,729
Income Taxes:					
Current State	19,475,137	178,738	19,653,875	2,784,423	22,438,298
Current Federal	45,853,646	499,448	46,353,094	7,780,492	54,133,586
Deferred Taxes	0	0	0		0
ITC/Excess Def Taxes	-233,592	0	-233,592		-233,592
Total Deductions	593,604,675	-4,906,144	588,698,531	11,309,009	600,007,540
Income Available	354,180,104	4,906,144	359,086,248	29,269,469	388,355,717
Rate Base	5,174,843,488	-3,662,167	5,171,181,321	0	5,171,181,321
Rate of Return	6.84%		6.94%		7.51%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER SSS OPERATIONS?

A. I&E's total recommended revenue requirement for Wastewater SSS Operations is \$122,410,402. This recommended revenue requirement represents an increase of \$13,848,427 to the Company's claimed present rate revenues of \$108,561,975. This total recommended allowance incorporates my adjustments made in this direct testimony to O&M expenses and rate base, as well as the recommended adjustments made in the direct testimony of I&E witness D.C. Patel.⁶ A

⁶ I&E Statement No. 2.

calculation of the I&E recommended revenue requirement is shown in Table I(b) below:

PAWC - Wastewater SSS Operations R-2025-3058051		TABLE I(b) INCOME SUMMARY			
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	108,561,975	0	108,561,975	13,848,427	122,410,402
Deductions:					
O&M Expenses	29,374,837	-759,760	28,615,077	151,917	28,766,994
Depreciation	28,593,810	0	28,593,810		28,593,810
Taxes, Other	2,496,491	0	2,496,491	102,023	2,598,514
Income Taxes:					
Current State	3,134,563	53,138	3,187,701	950,255	4,137,956
Current Federal	8,176,053	148,480	8,324,533	2,655,289	10,979,822
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	71,775,754	-558,142	71,217,612	3,859,484	75,077,096
Income Available	36,786,221	558,142	37,344,363	9,988,943	47,333,306
Rate Base	661,192,899	-113,209	661,079,690	0	661,079,690
Rate of Return	5.56%		5.65%		7.16%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER CSS OPERATIONS?

A. I&E's total recommended revenue requirement for Wastewater CSS Operations is \$90,247,853. This recommended revenue requirement represents an increase of \$4,489,264 to the Company's claimed present rate revenues of \$85,758,589. This total recommended allowance incorporates my adjustments made in this direct testimony to O&M expenses and rate base, as well as the recommended

adjustments made in the direct testimony of I&E witness D.C. Patel.⁷ A calculation of the I&E recommended revenue requirement is shown in Table I(c) below:

PAWC - Wastewater CSS Operations R-2025-3058051		TABLE I(c) INCOME SUMMARY			
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	85,758,589	0	85,758,589	4,489,264	90,247,853
Deductions:					
O&M Expenses	19,952,953	-1,619,642	18,333,311	49,247	18,382,558
Depreciation	21,678,456	0	21,678,456		21,678,456
Taxes, Other	2,260,278	0	2,260,278	33,073	2,293,351
Income Taxes:					
Current State	2,526,024	113,300	2,639,324	308,045	2,947,369
Current Federal	6,523,450	316,593	6,840,043	860,769	7,700,812
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	52,941,161	-1,189,749	51,751,412	1,251,134	53,002,546
Income Available	32,817,428	1,189,749	34,007,177	3,238,130	37,245,307
Rate Base	520,293,107	-107,258	520,185,849	0	520,185,849
Rate of Return	6.31%		6.54%		7.16%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR BASA WASTEWATER OPERATIONS?

A. I&E's total recommended revenue requirement for BASA Wastewater Operations is \$45,951,062. This recommended revenue requirement represents an increase of \$33,202,587 to the Company's claimed present rate revenues of \$12,748,475.

⁷ I&E Statement No. 2.

This total recommended allowance incorporates my adjustments made in this direct testimony to O&M expenses and rate base, as well as the recommended adjustments made in the direct testimony of I&E witness D.C. Patel.⁸ A calculation of the I&E recommended revenue requirement is shown in Table I(d) below:

PAWC - BASA WW Operations R-2025-3058051		TABLE I(d)			
		INCOME	SUMMARY		
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	12,748,475	0	12,748,475	33,202,587	45,951,062
Deductions:					
O&M Expenses	7,536,236	-151,975	7,384,261	364,232	7,748,493
Depreciation	11,489,433	0	11,489,433		11,489,433
Taxes, Other	687,313	0	687,313	244,608	931,921
Income Taxes:					
Current State	-116,049	10,435	-105,614	2,278,303	2,172,689
Current Federal	-317,458	29,159	-288,299	6,359,426	6,071,127
Deferred Taxes	0	0	0		0
ITC	-39,775	0	-39,775		-39,775
Total Deductions	19,239,700	-112,381	19,127,319	9,246,569	28,373,888
Income Available	-6,491,225	112,381	-6,378,844	23,956,018	17,577,174
Rate Base	245,527,676	-36,421	245,491,255	0	245,491,255
Rate of Return	-2.64%		-2.60%		7.16%

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR ELIZABETH WASTEWATER CSS?

A. I&E's total recommended revenue requirement for Elizabeth Wastewater CSS is

⁸ I&E Statement No. 2.

\$5,018,487. This recommended revenue requirement represents an increase of \$3,251,220 to the Company's claimed present rate revenues of \$1,767,267. This total recommended allowance incorporates the recommended adjustments made in the direct testimony of I&E witness D.C. Patel.⁹ A calculation of the I&E recommended revenue requirement is shown in Table I(e) below:

PAWC - Elizabeth WW CSS Operations		TABLE I (e)			
R-2025-3058051		INCOME		SUMMARY	
1/22/26					
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	1,767,267	0	1,767,267	3,251,220	5,018,487
Deductions:					
O&M Expenses	867,000	0	867,000	35,666	902,666
Depreciation	1,090,336	0	1,090,336		1,090,336
Taxes, Other	29,882	0	29,882	23,952	53,834
Income Taxes:					
Current State	25,137	-24	25,113	223,093	248,206
Current Federal	73,075	-67	73,008	620,553	693,561
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	2,085,430	-91	2,085,339	903,264	2,988,603
Income Available	-318,163	91	-318,072	2,347,956	2,029,884
Rate Base	28,350,331	0	28,350,331	0	28,350,331
Rate of Return	-1.12%		-1.12%		7.16%

Q. SUMMARIZE I&E'S COMBINED RECOMMENDED REVENUE REQUIREMENT.

A. I&E's total recommended revenue requirement for all PAWC operations combined is \$1,252,219,576 as shown in Table II below. This recommended revenue

⁹ I&E Statement No. 2.

1 requirement represents an increase of \$95,598,491 to the Company's claimed total
2 present rate revenues of \$1,156,621,085 for Water Operations, Wastewater SSS
3 Operations, Wastewater CSS Operations, BASA Wastewater Operations, and
4 Elizabeth Borough Wastewater Operations. This total recommended allowance
5 incorporates my adjustments made in this testimony to O&M expenses and rate
6 base, as well as the recommended adjustments made in the testimony of I&E
7 witnesses D.C. Patel¹⁰ and Ethan Cline.¹¹

8
9 **Q. WHAT IS I&E'S PROPOSED ACT 11 REVENUE ALLOCATION AS**
10 **SUPPORTED BY I&E WITNESS ETHAN CLINE IN I&E STATEMENT**
11 **NO. 4?**

12 A. As further discussed in his testimony, I&E witness Ethan Cline recommends a
13 total Act 11 allocation of \$34,465,452, or a reduction of \$18,544,730¹²
14 (\$53,010,182 - \$34,465,452) to the Company's proposed allocation as shown in
15 the table below:

¹⁰ I&E Statement No. 2.

¹¹ I&E Statement No. 4.

¹² I&E Exhibit No. 4, Schedule 1.

TABLE II							
PAWC - Docket Nos. R-2025-3057983 and R-2025-3058051							
I&E Recommended Combined Water and Wastewater Revenue Requirement Summary							
		Total Company	Water Operations	WW SSS Ops	CSS WW Ops	BASA WW Ops	Elizabeth Boro WW Ops
I&E Present Rate Revenue	(1)	\$1,156,621,085	\$ 947,784,779	\$ 108,561,975	\$ 85,758,589	\$ 12,748,475	\$ 1,767,267
I&E Recommended:							
Additional Revenue Requirement	(2)	\$ 95,598,491	\$ 40,770,093	\$ 13,857,523	\$ 4,513,606	\$ 33,206,049	\$ 3,251,220
Act 11 Wastewater Allocation	(3)	\$ -	\$ 34,465,452	\$ (5,139,988)	\$ 3,722,081	\$ (30,280,040)	\$ (2,767,505)
Proposed Revenues	(4)	\$1,252,219,576	\$1,023,020,324	\$ 117,279,510	\$ 93,994,276	\$ 15,674,484	\$ 2,250,982
Rate Increase/(Decrease)	(5)	\$ 95,598,491	\$ 75,235,545	\$ 8,717,535	\$ 8,235,687	\$ 2,926,009	\$ 483,715
	(6)	8.3%	7.9%	8.0%	9.6%	23.0%	27.4%
Company Claimed Increase		\$ 168,716,801	\$ 152,426,504	\$ 7,331,142	\$ 3,342,673	\$ 5,090,287	\$ 526,195

SALARIES AND WAGES EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR SALARIES AND WAGES EXPENSE?

A. PAWC's claim for salaries and wages expense includes base pay, overtime, shift premium, and meal compensation.¹³

Q. WHAT IS PAWC'S CLAIM FOR SALARIES AND WAGES EXPENSE?

A. PAWC is claiming total FPFTY salaries and wages expense broken down by operation as follows:

¹³ I&E Exhibit No. 1, Schedule 1, p. 1.

	FPFTY Claim¹⁴	Capitalization Rate¹⁵	O&M Claim	Rate Base Claim
Water Operations	\$105,590,439	42.81%	\$60,387,172	\$45,203,267
Wastewater SSS Operations	\$6,862,453	19.78%	\$5,505,060	\$1,357,393
Wastewater CSS Operations	\$8,832,512	19.78%	\$7,085,441	\$1,747,071
BASA Wastewater Operations	<u>\$2,765,276</u>	19.78%	<u>\$2,218,304</u>	<u>\$546,972</u>
Total	<u>\$124,050,680</u>		<u>\$75,195,977</u>	<u>\$48,854,703</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. According to PAWC witness Lori O'Malley, labor and labor-related expenses are calculated on a position-by-position basis and reflect a full complement of projected employees. Base pay for existing employees is adjusted according to union contracts for union employees and uses a three-year average of base pay increases for non-union employees. Overtime is based on a three-year average of overtime hours by position multiplied by a projected overtime rate for each position. Shift premium is based on a three-year average of shift premiums, licensing, and training premiums per employee. Finally, meal compensation is based on HTY actual data per employee.¹⁶ Total salaries and wages expense is further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

¹⁴ PAWC Exhibit No. 3-B, p. 3.

¹⁵ PAWC Exhibit No. 3-B, p. 2.

¹⁶ PAWC Statement No. 6, pp. 5-8.

1 **Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR SALARIES AND**
2 **WAGES EXPENSE?**

3 A. No.

5 **Q. WHAT DO YOU RECOMMEND FOR SALARIES AND WAGES**
6 **EXPENSE?**

7 A. I recommend an O&M allowance for salaries and wages expense of \$74,256,028,
8 or a reduction of \$939,949 (\$75,195,977 - \$74,256,028) and capitalized salaries
9 and wages of \$48,244,018, or a reduction of \$610,685 (\$48,854,703 -
10 \$48,244,018) broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$60,387,172	\$59,632,332	(\$754,840)
Wastewater SSS Operations	\$5,505,060	\$5,436,247	(\$68,813)
Wastewater CSS Operations	\$7,085,441	\$6,996,873	(\$88,568)
BASA Wastewater Operations	<u>\$2,218,304</u>	<u>\$2,190,576</u>	<u>(\$27,728)</u>
Total	<u>\$75,195,977</u>	<u>\$74,256,028</u>	<u>(\$939,949)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$45,203,267	\$44,638,226	(\$565,041)
Wastewater SSS Operations	\$1,357,393	\$1,340,426	(\$16,967)
Wastewater CSS Operations	\$1,747,071	\$1,725,232	(\$21,839)
BASA Wastewater Operations	<u>\$546,972</u>	<u>\$540,134</u>	<u>(\$6,838)</u>
Total	<u>\$48,854,703</u>	<u>\$48,244,018</u>	<u>(\$610,685)</u>

1 **Q. HOW DID YOU CALCULATE YOUR RECOMMENDATION?**

2 A. I started by calculating an average vacancy rate for the Company as a whole. I
3 used budgeted headcount and vacancy data provided by PAWC in response to
4 I&E-RE-18¹⁷ which resulted in a three-year average vacancy rate of 1.25%.¹⁸ I
5 then applied the calculated vacancy rate to each operation's O&M expense claim
6 and rate base claim for salaries and wages by multiplying the FPFTY claim by the
7 vacancy rate to determine the vacancy adjustment.

8
9 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

10 A. My recommendation is based on an adjustment for average historic vacancy levels
11 to reflect a more accurate employee count in the FPFTY. Based on historic
12 vacancy records (budgeted headcount compared to actual headcount), it is
13 unreasonable to assume that PAWC will fill all of the budgeted positions and
14 maintain 100% full staffing during the FPFTY. Since there will always be search
15 and placement time involved in filling vacancies, as well as processing and
16 approval time for new positions, there will always be a certain level of vacancies
17 on a day-to-day operating basis that should be reflected in the payroll allowance.

¹⁷ I&E Exhibit No. 1, Schedule 2.

¹⁸ I&E Exhibit No. 1, Schedule 3.

PERFORMANCE PAY

Q. WHAT IS PERFORMANCE PAY?

A. Performance pay is a component of total compensation defined by PAWC witness Lori O'Malley as annual and long-term performance compensation for eligible employees. This is made up of two components: the Annual Performance Plan (APP) and the Long-Term Performance Plan (LTPP).¹⁹

Q. WHAT IS THE COMPANY'S CLAIM FOR PERFORMANCE PAY EXPENSE?

A. The Company is claiming FPFTY performance pay expense broken down by operation as follows:

	FPFTY Claim²⁰	Capitalization Rate²¹	O&M Claim	Rate Base Claim
Water Operations	\$9,108,761	42.81%	\$5,209,300	\$3,899,461
Wastewater SSS Operations	\$509,960	19.78%	\$409,090	\$100,870
Wastewater CSS Operations	\$407,215	19.78%	\$326,668	\$80,547
BASA Wastewater Operations	<u>\$150,013</u>	19.78%	<u>\$120,340</u>	<u>\$29,673</u>
Total	<u>\$10,175,949</u>		<u>\$6,065,398</u>	<u>\$4,110,551</u>

¹⁹ PAWC Statement No. 6, p. 8.

²⁰ PAWC Exhibit No. 3-B, p. 62.

²¹ PAWC Exhibit No. 3-B, p. 2.

1 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PERFORMANCE PAY**
2 **EXPENSE CLAIM?**

3 A. The Company's projected performance pay was calculated on a position-by-
4 position basis for eligible employees based on each position's target percent, or
5 percentage of base salary that is provided if an employee achieves their
6 performance target, under both the APP and LTPP. The target percentage was
7 multiplied by each eligible employee's FPFTY projected base salary to determine
8 the cost of compensation under the APP and LTPP.²² Total annual performance
9 compensation is further separated into expensed and capitalized portions by
10 application of the specified capitalization rates as shown in the table above.

11
12 **Q. DO YOU AGREE WITH THE COMPANY'S PERFORMANCE PAY**
13 **CLAIM?**

14 A. No.

15
16 **Q. WHAT DO YOU RECOMMEND FOR PERFORMANCE PAY?**

17 A. I recommend an O&M expense allowance for performance pay of \$2,920,640, or a
18 reduction of \$3,144,758 (\$6,065,398 - \$2,920,640) to the Company's claim and
19 capitalized performance pay of \$1,971,394, or a reduction of \$2,139,157
20 (\$4,110,551 - \$1,971,394) broken down by operation as follows:

²² PAWC Statement No. 6, p. 8.

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,209,300	\$2,492,591	(\$2,716,709)
Wastewater SSS Operations	\$409,090	\$204,545	(\$204,545)
Wastewater CSS Operations	\$326,668	\$163,334	(\$163,334)
BASA Wastewater Operations	<u>\$120,340</u>	<u>\$60,170</u>	<u>(\$60,170)</u>
Total	<u>\$6,065,398</u>	<u>\$2,920,640</u>	<u>(\$3,144,758)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$3,899,461	\$1,865,848	(\$2,033,613)
Wastewater SSS Operations	\$100,870	\$50,435	(\$50,435)
Wastewater CSS Operations	\$80,547	\$40,274	(\$40,273)
BASA Wastewater Operations	<u>\$29,673</u>	<u>\$14,837</u>	<u>(\$14,836)</u>
Total	<u>\$4,110,551</u>	<u>\$1,971,394</u>	<u>(\$2,139,157)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on removing 50% of the Company's claim related to cash awards paid out under the APP and 70% of the Company's claim related to stock-based compensation awarded under the LTPP.

According to confidential documents provided in support of PAWC's rate case filing, {BEGIN PROPRIETARY} [REDACTED]

[REDACTED]

[REDACTED]

²³ PAWC Filing Requirements FR.III.22 Attachment_Confidential and Proprietary p. 85.

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED] {END

6 **PROPRIETARY}**²⁴ The Company has not demonstrated how these financial
7 metrics benefit ratepayers; therefore, payment of related financial benefits to
8 employees should not be funded by ratepayers.

9
10 **Q. HOW DID YOU CALCULATE YOUR RECOMMENDATION FOR**
11 **PERFORMANCE PAY?**

12 A. In response to I&E-RE-51, the Company provided a breakdown of total
13 performance pay expense by APP and LTPP.²⁵ I used this breakdown to remove
14 50% of the APP amount, and 70% of the LTPP amount. Next, I added the
15 remaining APP and LTPP amounts to determine the total performance pay expense
16 allowance as shown below:

²⁴ PAWC Filing Requirements FR.III.22 Attachment_Confidential and Proprietary p. 104.

²⁵ I&E Exhibit No. 1, Schedule 4.

	PAWC APP	PAWC LTPP	APP 50% Allowance	LTPP 30% Allowance	Total Allowance
Water Operations	\$8,129,054	\$979,707	\$4,064,527	\$293,912	\$4,358,439
Wastewater SSS Operations	\$509,960	\$0	\$254,980	\$0	\$254,980
Wastewater CSS Operations	\$407,215	\$0	\$203,608	\$0	\$203,608
BASA Wastewater Operations	<u>\$150,013</u>	<u>\$0</u>	\$75,007	\$0	\$75,007
Total	<u>\$9,196,242</u>	<u>\$979,707</u>	<u>\$4,598,121</u>	<u>\$293,912</u>	<u>\$4,892,033</u>

I then applied the capitalization rate to find the O&M expense portion versus the rate base portion.

Q. HAS THE COMMISSION RECENTLY ADJUSTED A COMPANY’S CLAIM FOR INCENTIVE COMPENSATION BASED ON THE REMOVAL OF INCENTIVE COMPENSATION RELATED TO FINANCIAL GOALS?

A. Yes. In the most recent Columbia Gas of Pennsylvania, Inc. (Columbia Gas) base rate proceeding, the Commission removed 70% of Columbia Gas’ total incentive compensation claim, equal to the portion related to financial goals, finding that it was not necessary in providing safe and reliable service to ratepayers. The Commission stated:

We shall deny Columbia’s Exception Nos. 3 and 4. We agree with the ALJs’ recommendation to adopt the OCA’s proposed downward adjustment of \$1,798,165, to the Company’s cash-based STI compensation expense claim of \$2,568,807. As noted by the ALJs and the OCA, Columbia did not explain why 70% of the incentive compensation expense is necessary to provide adequate service to ratepayers, given that only 30% of this claimed expense is related to operational safety and customer experience. *See* OCA St. 2 at 18-19. Accordingly, we shall adopt the ALJs’ recommendation to apply a downward adjustment of \$1,798,165, [$\$2,568,807 \times 70\% = \$1,798,165$],

1 to reflect a total allowance for cash-based STI compensation
2 expense of \$770,642. [$\$2,568,807 - \$1,798,165 = \$770,642$].

3 We also agree with the ALJs and the OCA that Columbia failed
4 to present credible evidence that the totality of its LTI
5 compensation plan is reasonable, given that only 30% of the
6 plan is related to safety, customer care, customer satisfaction,
7 or other benefits to ratepayers. Accordingly, we shall adopt the
8 ALJs' recommendation that only 30% of the Company's LTI
9 compensation expense claim of \$754,446, or \$226,334,
10 [$\$754,446 \times 30\% = \$226,334$], be allowed for ratemaking
11 purposes, resulting in a downward adjustment of \$528,112.
12 [$\$754,446 - \$528,112 = \$226,334$].²⁶
13

14 **PAYROLL TAX EXPENSE**

15 **Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR PAYROLL TAX**
16 **EXPENSE?**

17 A. The Company's claim for payroll tax expense includes its share of federal and
18 state payroll taxes, such as Social Security, Medicare, and federal and state
19 unemployment taxes.²⁷
20

21 **Q. WHAT IS THE COMPANY'S CLAIM FOR PAYROLL TAX EXPENSE?**

22 A. The Company's payroll tax expense claim is broken down by operation as follows:

²⁶ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025). *See generally* Disposition of Incentive Compensation, p. 123.

²⁷ PAWC Statement No. 6, p. 12.

	FPFTY Claim²⁸	Capitalization Rate²⁹	O&M Claim	Rate Base Claim
Water Operations	\$8,897,847	42.81%	\$5,088,679	\$3,809,168
Wastewater SSS Operations	\$584,556	19.78%	\$468,931	\$115,625
Wastewater CSS Operations	\$732,547	19.78%	\$587,649	\$144,898
BASA Wastewater Operations	<u>\$230,568</u>	19.78%	<u>\$184,962</u>	<u>\$45,606</u>
Total	<u>\$10,445,518</u>		<u>\$6,330,221</u>	<u>\$4,115,297</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC's payroll tax claim is based on employee salaries and wages and is calculated on a position-by-position basis using current 2025 tax rates and projected FPFTY wages and salaries expense.³⁰ Total payroll tax expense is further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR PAYROLL TAX EXPENSE?

A. I recommend an O&M expense allowance for payroll tax expense of \$6,014,047, or a reduction of \$316,174 (\$6,330,221 - \$6,014,047) to the Company's claim and

²⁸ PAWC Exhibit No. 3-B, p. 97.

²⁹ PAWC Exhibit No. 3-B, p. 2.

³⁰ PAWC Statement No. 6, pp. 12-13.

capitalized payroll tax expense of \$3,902,914, or a reduction of \$212,383 (\$4,115,297 - \$3,902,914) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,088,679	\$4,820,894	(\$267,785)
Wastewater SSS Operations	\$468,931	\$447,315	(\$21,616)
Wastewater CSS Operations	\$587,649	\$567,804	(\$19,845)
BASA Wastewater Operations	<u>\$184,962</u>	<u>\$178,034</u>	<u>(\$6,928)</u>
Total	<u>\$6,330,221</u>	<u>\$6,014,047</u>	<u>(\$316,174)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$3,809,168	\$3,608,716	(\$200,452)
Wastewater SSS Operations	\$115,625	\$110,295	(\$5,330)
Wastewater CSS Operations	\$144,898	\$140,005	(\$4,893)
BASA Wastewater Operations	<u>\$45,606</u>	<u>\$43,898</u>	<u>(\$1,708)</u>
Total	<u>\$4,115,297</u>	<u>\$3,902,914</u>	<u>(\$212,383)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend adjusting payroll tax expense to align with my salaries and wages and performance pay expense adjustments. Since payroll tax expense is based on compensation, it is necessary to calculate a corresponding decrease in payroll tax expense.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDATION FOR PAYROLL TAX EXPENSE?

A. First, I calculated an effective payroll tax rate for each operation by dividing the payroll tax claim by the total compensation claim (salaries and wages plus performance pay) as shown below:

	Total Compensation Claim³¹	Payroll Tax Claim³²	Effective Payroll Tax Rate
Water Operations	\$114,699,200	\$8,897,847	7.76%
Wastewater SSS Operations	\$7,372,413	\$584,556	7.93%
Wastewater CSS Operations	\$9,239,727	\$732,547	7.93%
BASA Wastewater Operations	<u>\$2,915,289</u>	<u>\$230,568</u>	7.91%
Total	<u>\$134,226,629</u>	<u>\$10,445,518</u>	

Next, I calculated my total recommended O&M and rate base compensation allowance by adding the salaries and wages allowance plus the performance pay allowance. Finally, I applied the calculated effective payroll tax rate to the calculated I&E total compensation allowance.

O&M Payroll Tax	Salaries and Wages	Perf Pay	Total Comp	Effective Tax Rate	Payroll Tax
Water Operations	\$59,632,332	\$2,492,591	\$62,124,924	7.76%	\$4,820,894
Wastewater SSS Operations	\$5,436,247	\$204,545	\$5,640,792	7.93%	\$447,315
Wastewater CSS Operations	\$6,996,873	\$163,334	\$7,160,207	7.93%	\$567,804
BASA Wastewater Operations	<u>\$2,190,576</u>	<u>\$60,170</u>	<u>\$2,250,746</u>	<u>7.91%</u>	<u>\$178,034</u>
Total	<u>\$74,256,028</u>	<u>\$2,920,640</u>	<u>\$77,176,668</u>		<u>\$6,014,047</u>

³¹ PAWC Exhibit No. 3-B, pp. 3 and 62.

³² PAWC Exhibit No. 3-B, p. 97.

Rate Base Payroll Tax	Salaries and Wages	Perf Pay	Total Comp	Effective Tax Rate	Payroll Tax
Water Operations	\$44,638,226	\$1,865,848	\$46,504,074	7.76%	\$3,608,716
Wastewater SSS Operations	\$1,340,426	\$50,435	\$1,390,861	7.93%	\$110,295
Wastewater CSS Operations	\$1,725,232	\$40,274	\$1,765,506	7.93%	\$140,005
BASA Wastewater Operations	<u>\$540,134</u>	<u>\$14,837</u>	<u>\$554,971</u>	<u>7.91%</u>	<u>\$43,898</u>
Total	<u>\$48,244,018</u>	<u>\$1,971,394</u>	<u>\$50,215,411</u>		<u>\$3,902,914</u>

GROUP INSURANCE EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR GROUP INSURANCE EXPENSE?

A. The Company's claim for group insurance expense includes several insurance coverages that PAWC provides for its employees that can be grouped into two primary categories: (1) basic life, short-term disability, long-term disability, and accidental death and disability insurance; and (2) medical, dental, prescription, and vision insurance.³³

Q. WHAT IS THE COMPANY'S CLAIM FOR GROUP INSURANCE EXPENSE?

A. The Company's group insurance expense claim is broken down by operation as follows:

³³ PAWC Statement No. 6, p. 8.

	FPFTY Claim³⁴	Capitalization Rate³⁵	O&M Claim	Rate Base Claim
Water Operations	\$21,415,647	42.81%	\$12,247,609	\$9,168,038
Wastewater SSS Operations	\$1,634,242	19.78%	\$1,310,989	\$323,253
Wastewater CSS Operations	\$1,957,245	19.78%	\$1,570,102	\$387,143
BASA Wastewater Operations	<u>\$622,386</u>	19.78%	<u>\$499,278</u>	<u>\$123,108</u>
Total	<u>\$25,629,520</u>		<u>\$15,627,978</u>	<u>\$10,001,542</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC's group insurance claim is calculated on a position-by-position basis, using actual data as a starting point and increasing the expense by a three-year historical average of the change in Company costs.³⁶ Total group insurance expense is further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR GROUP INSURANCE EXPENSE?

A. I recommend an O&M expense allowance for group insurance expense of \$15,432,628, or a reduction of \$195,350 (\$15,627,978 - \$15,432,628) to the

³⁴ PAWC Exhibit No. 3-B, p. 143.

³⁵ PAWC Exhibit No. 3-B, p. 2.

³⁶ PAWC Statement No. 6, p. 9.

Company's claim and capitalized group insurance expense of \$9,876,523, or a reduction of \$125,019 (\$10,001,542 - \$9,876,523) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$12,247,609	\$12,094,513	(\$153,096)
Wastewater SSS Operations	\$1,310,989	\$1,294,602	(\$16,387)
Wastewater CSS Operations	\$1,570,102	\$1,550,476	(\$19,626)
BASA Wastewater Operations	<u>\$499,278</u>	<u>\$493,037</u>	<u>(\$6,241)</u>
Total	<u>\$15,627,978</u>	<u>\$15,432,628</u>	<u>(\$195,350)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$9,168,038	\$9,053,438	(\$114,600)
Wastewater SSS Operations	\$323,253	\$319,212	(\$4,041)
Wastewater CSS Operations	\$387,143	\$382,304	(\$4,839)
BASA Wastewater Operations	<u>\$123,108</u>	<u>\$121,569</u>	<u>(\$1,539)</u>
Total	<u>\$10,001,542</u>	<u>\$9,876,523</u>	<u>(\$125,019)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend adjusting group insurance expense to align with my salaries and wages expense adjustment. Since group insurance expense is based on employee count, it is necessary to calculate a corresponding decrease in group insurance expense. I calculated the adjustment by applying the same vacancy rate of 1.25% to PAWC's group insurance expense claim for each operation. It is reasonable to

conclude that if PAWC has a lower employee count than planned, it will also pay out less group insurance.

401K EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR 401K EXPENSE?

A. The Company's claim for 401k expense includes costs incurred when matching employee contributions to 401k retirement accounts.³⁷

Q. WHAT IS THE COMPANY'S CLAIM FOR 401K EXPENSE?

A. The Company's payroll tax expense claim is broken down by operation as follows:

	FPFTY Claim³⁸	Capitalization Rate³⁹	O&M Claim	Rate Base Claim
Water Operations	\$3,026,743	42.81%	\$1,730,994	\$1,295,749
Wastewater SSS Operations	\$218,462	19.78%	\$175,250	\$43,212
Wastewater CSS Operations	\$155,773	19.78%	\$124,961	\$30,812
BASA Wastewater Operations	<u>\$98,980</u>	19.78%	<u>\$79,402</u>	<u>\$19,578</u>
Total	<u>\$3,499,958</u>		<u>\$2,110,607</u>	<u>\$1,389,351</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC's 401k expense claim is calculated for each position based on projected

³⁷ PAWC Statement No. 6, p. 9.

³⁸ PAWC Exhibit No. 3-B, p. 97.

³⁹ PAWC Exhibit No. 3-B, p. 2.

wages, employee contribution levels, and the level of match for each employee's benefit group. PAWC employees are divided into two benefit groups based on hire date, which determine whether the Company matches either 50% or 100% of the employee's contribution.⁴⁰ Total 401k expense is further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND FOR 401K EXPENSE?

A. I recommend an O&M expense allowance for 401k expense of \$2,084,225, or a reduction of \$26,382 (\$2,110,607- \$2,084,225) to the Company's claim and capitalized 401k expense of \$1,371,985, or a reduction of \$17,366 (\$1,389,351 - \$1,371,985) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$1,730,994	\$1,709,357	(\$21,637)
Wastewater SSS Operations	\$175,250	\$173,060	(\$2,190)
Wastewater CSS Operations	\$124,961	\$123,399	(\$1,562)
BASA Wastewater Operations	<u>\$79,402</u>	<u>\$78,409</u>	<u>(\$993)</u>
Total	<u>\$2,110,607</u>	<u>\$2,084,225</u>	<u>(\$26,382)</u>

⁴⁰ PAWC Statement No. 6, pp. 9-10.

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$1,295,749	\$1,279,552	(\$16,197)
Wastewater SSS Operations	\$43,212	\$42,672	(\$540)
Wastewater CSS Operations	\$30,812	\$30,427	(\$385)
BASA Wastewater Operations	<u>\$19,578</u>	<u>\$19,334</u>	<u>(\$244)</u>
Total	<u>\$1,389,351</u>	<u>\$1,371,985</u>	<u>(\$17,366)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend adjusting 401k expense to align with my salaries and wages expense adjustment. Since 401k expense is based on employee count and salaries and wages expense, it is necessary to calculate a corresponding decrease in 401k expense. I calculated the adjustment by applying the same vacancy rate of 1.25% to PAWC's 401k expense claim for each operation. It is reasonable to conclude that if PAWC pays less in salaries and wages, it will also pay less in 401k contributions.

DEFINED CONTRIBUTION PLAN (DCP) EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR DCP EXPENSE?

A. PAWC's claim for DCP expense includes Company contributions to employees' DCP, which is a retirement savings program for employees not eligible for the

defined benefit pension program.⁴¹

Q. WHAT IS THE COMPANY'S CLAIM FOR DCP EXPENSE?

A. The Company's DCP expense claim is broken down by operation as follows:

	FPFTY Claim⁴²	Capitalization Rate⁴³	O&M Claim	Rate Base Claim
Water Operations	\$4,062,673	42.81%	\$2,323,443	\$1,739,230
Wastewater SSS Operations	\$310,153	19.78%	\$248,805	\$61,348
Wastewater CSS Operations	\$390,498	19.78%	\$313,257	\$77,241
BASA Wastewater Operations	<u>\$138,378</u>	19.78%	<u>\$111,007</u>	<u>\$27,371</u>
Total	<u>\$4,901,702</u>		<u>\$2,996,512</u>	<u>\$1,905,190</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIM?

A. PAWC's DCP expense claim is based on Company contributions equal to 5.25% of each employee's base pay.⁴⁴ Total DCP expense is further separated into expensed and capitalized portions by application of the specified capitalization rates as shown in the table above.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

⁴¹ PAWC Statement No. 6, p. 10.

⁴² PAWC Exhibit No. 3-B, p. 167.

⁴³ PAWC Exhibit No. 3-B, p. 2.

⁴⁴ PAWC Statement No. 6, p. 10.

Q. WHAT DO YOU RECOMMEND FOR DCP EXPENSE?

A. I recommend an O&M allowance for DCP expense of \$2,959,056, or a reduction of \$37,456 (\$2,996,512- \$2,959,056) to the Company's claim and capitalized DCP expense of \$1,881,375, or a reduction of \$23,815 (\$1,905,190 - \$1,881,375) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$2,323,443	\$2,294,400	(\$29,043)
Wastewater SSS Operations	\$248,805	\$245,695	(\$3,110)
Wastewater CSS Operations	\$313,257	\$309,342	(\$3,915)
BASA Wastewater Operations	<u>\$111,007</u>	<u>\$109,619</u>	<u>(\$1,388)</u>
Total	<u>\$2,996,512</u>	<u>\$2,959,056</u>	<u>(\$37,456)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$1,739,230	\$1,717,490	(\$21,740)
Wastewater SSS Operations	\$61,348	\$60,581	(\$767)
Wastewater CSS Operations	\$77,241	\$76,275	(\$966)
BASA Wastewater Operations	<u>\$27,371</u>	<u>\$27,029</u>	<u>(\$342)</u>
Total	<u>\$1,905,190</u>	<u>\$1,881,375</u>	<u>(\$23,815)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend adjusting DCP expense to align with my salaries and wages expense adjustment. Since DCP expense is based on employee count and base pay, it is necessary to calculate a corresponding decrease in DCP expense. I calculated the adjustment by applying the same vacancy rate of 1.25% to PAWC's DCP expense

claim for each operation. It is reasonable to conclude that if PAWC pays less in salaries and wages, it will also pay out less in DCP contributions.

WASTE DISPOSAL

Q. WHAT IS INCLUDED IN THE COMPANY’S CLAIM FOR WASTE DISPOSAL?

A. The Company’s claim for waste disposal includes costs associated with properly disposing of treatment residuals, including lower cost beneficial uses in addition to more conventional disposal at landfills.⁴⁵

Q. WHAT IS THE COMPANY’S CLAIM FOR WASTE DISPOSAL?

A. The Company is claiming waste disposal expense as follows:⁴⁶

Waste Disposal Expense:	FPFTY
Water Operations	\$4,216,691
Wastewater SSS Operations	\$1,673,584
Wastewater CSS Operations	\$4,008,056
BASA Wastewater Operations	<u>\$339,322</u>
Total PAWC Expense	<u>\$10,237,653</u>

Q. WHAT IS THE BASIS FOR THE COMPANY’S CLAIM?

A. According to PAWC witness Lori O’Malley, the Company’s claim for waste

⁴⁵ PAWC Statement No. 3, p. 36.

⁴⁶ PAWC Exhibit No. 3-B, p. 299.

disposal is based on the HTY level of expense and increased by a three-year average change in expense for the FTY and FPFTY.⁴⁷ Additionally, PAWC Exhibit 3-B shows that the expense for BASA Wastewater Operations was forecasted by annualizing a partial-year HTY expense.⁴⁸

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR WASTE DISPOSAL EXPENSE?

A. No.

Q. WHAT DO YOU RECOMMEND FOR WASTE DISPOSAL EXPENSE?

A. I recommend an allowance of \$7,386,760 for waste disposal expense, or a reduction of \$2,850,893 (\$10,237,653 - \$7,386,760) to the Company's claim, broken down as follows:

Waste Disposal Expense:	PAWC FPFTY Claim	I&E Allowance	I&E Adjustment
Water Operations	\$4,216,691	\$3,093,714	(\$1,122,977)
Wastewater SSS Operations	\$1,673,584	\$1,254,740	(\$418,844)
Wastewater CSS Operations	\$4,008,056	\$2,740,027	(\$1,268,029)
BASA Wastewater Operations	<u>\$339,322</u>	<u>\$298,279</u>	<u>(\$41,043)</u>
Total PAWC Expense	<u>\$10,237,653</u>	<u>\$7,386,760</u>	<u>(\$2,850,893)</u>

⁴⁷ PAWC Statement No. 6, p. 21.

⁴⁸ PAWC Exhibit No. 3-B, p. 299.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on a three-year average of actual waste disposal expense rather than a three-year average of the change in the expense, except for BASA Wastewater Operations, which has only one year of actual data. PAWC has provided no basis for the assumption that this expense will continue to rise annually as the Company has projected. When examining actual expenses from the past three fiscal years as shown in the calculation below, there is no clear upward trajectory for all operations.

Waste Disposal Expense:	FY Ended⁴⁹ 6/30/2023	FY Ended⁵⁰ 6/30/2024	FY Ended⁵¹ 6/30/2025	3-Year Average
Water Operations	\$2,554,345	\$3,468,484	\$3,258,312	\$3,093,714
Wastewater SSS Operations	\$1,305,011	\$1,166,000	\$1,293,208	\$1,254,740
Wastewater CSS Operations	<u>\$2,363,044</u>	<u>\$2,759,941</u>	\$3,097,096	\$2,740,027
BASA Wastewater Operations*			<u>\$298,279</u>	<u>\$298,279</u>
Total PAWC Expense	<u>\$6,222,400</u>	<u>\$7,394,425</u>	<u>\$7,754,718</u>	<u>\$7,386,760</u>

* Data for BASA Wastewater Operations is PAWC's annualized amount rather than actual data from the fiscal year ended June 30, 2025.

Additionally, PAWC witness Jim Runzer states that the Company has a long history of exploring and implementing cost-effective beneficial uses for its treatment residuals and has recently implemented a process that lowers the overall weight of the product to be disposed of, as well as the associated cost of disposal.⁵² Therefore, it is more appropriate to normalize this cost by using a three-year

⁴⁹ I&E Exhibit No. 1, Schedule 5.

⁵⁰ I&E Exhibit No. 1, Schedule 5.

⁵¹ PAWC Exhibit No. 3-B, p. 299.

⁵² PAWC Statement No. 3, p. 36.

average to project future expense levels rather than arbitrarily increasing the cost each year.

TRANSPORTATION EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY'S CLAIM FOR TRANSPORTATION EXPENSE?

A. The Company's claim for transportation expense includes the fleet management cost per vehicle, costs for fuel, title and registration fees, maintenance expenses, and reimbursement for use of personal vehicles.⁵³

Q. WHAT IS THE COMPANY'S CLAIM FOR TRANSPORTATION EXPENSE?

A. PAWC is claiming transportation expense broken down as follows:

	FPFTY Claim⁵⁴	Capitalization Rate⁵⁵	O&M Claim	Rate Base Claim
Water Operations	\$5,807,031	42.81%	\$3,321,224	\$2,485,807
Wastewater SSS Operations	\$210,441	19.78%	\$168,807	\$41,634
Wastewater CSS Operations	\$552,015	19.78%	\$442,804	\$109,211
BASA Wastewater Operations	<u>\$76,908</u>	19.78%	<u>\$61,692</u>	<u>\$15,216</u>
Total	<u>\$6,646,395</u>		<u>\$3,994,527</u>	<u>\$2,651,868</u>

⁵³ PAWC Statement No. 6, p. 22.

⁵⁴ PAWC Exhibit No. 3-B, pp. 301-304.

⁵⁵ PAWC Exhibit No. 3-B, p. 2.

1 **Q. WHAT IS THE BASIS FOR THE COMPANY’S CLAIM?**

2 A. According to PAWC witness Lori O’Malley, the forecast of fleet management
3 expense is based on the number of vehicles claimed in the FPFTY, and the change
4 in the number of vehicles from the HTY to the FPFTY is reflected in the cost for
5 fuel, title and registration fees, and maintenance expense. Additionally, all these
6 costs, along with reimbursement for use of personal vehicles, are adjusted by using
7 a three-year average of the Transportation Services Consumer Price Index (CPI)
8 Factor, or 6.94%, which is applied from HTY to FTY, and again from FTY to
9 FPFTY.⁵⁶

10
11 **Q. DO YOU AGREE WITH THE COMPANY’S CLAIM FOR**
12 **TRANSPORTATION EXPENSE?**

13 A. No.

14
15 **Q. WHAT IS YOUR RECOMMENDATION FOR TRANSPORTATION**
16 **EXPENSE?**

17 A. I recommend an O&M expense allowance for transportation expense of
18 \$3,454,752, or a reduction of \$539,775 (\$3,994,527- \$3,454,752) to the
19 Company’s claim and capitalized transportation expense of \$2,289,983, or a

⁵⁶ PAWC Statement No. 6, p. 22.

reduction of \$361,885 (\$2,651,868 - \$2,289,983) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$3,321,224	\$2,864,899	(\$456,325)
Wastewater SSS Operations	\$168,807	\$146,436	(\$22,371)
Wastewater CSS Operations	\$442,804	\$389,081	(\$53,723)
BASA Wastewater Operations	<u>\$61,692</u>	<u>\$54,336</u>	<u>(\$7,356)</u>
Total	<u>\$3,994,527</u>	<u>\$3,454,752</u>	<u>(\$539,775)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$2,485,807	\$2,144,542	(\$341,265)
Wastewater SSS Operations	\$41,634	\$36,107	(\$5,527)
Wastewater CSS Operations	\$109,211	\$95,936	(\$13,275)
BASA Wastewater Operations	<u>\$15,216</u>	<u>\$13,398</u>	<u>(\$1,818)</u>
Total	<u>\$2,651,868</u>	<u>\$2,289,983</u>	<u>(\$361,885)</u>

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on removing the CPI transportation inflation adjustment added by PAWC. When forecasting expenses in the FPFTY, all adjustments to expenses should be known and measurable. Adjustments for inflation are inherently speculative and therefore do not meet the standard of known and measurable and should be rejected.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDATION?

A. To calculate my recommendation, I started with the expenses labeled as “other transportation expenses” on PAWC Exhibit 3-B.⁵⁷ These are the expenses to which PAWC applied the inflation factor. I used the HTY data with no inflation factor applied, then added the FPFTY annual leasing expenses identified in the Exhibit as shown in the table below:

	PAWC HTY Actuals	Add Annual Costs	I&E Final FPFTY Allowance
Water Operations	\$4,823,104	\$186,337	\$5,009,441
Wastewater SSS Operations	\$171,200	\$11,343	\$182,543
Wastewater CSS Operations	\$466,509	\$18,508	\$485,017
BASA Wastewater Operations	<u>\$63,883</u>	<u>\$3,851</u>	<u>\$67,734</u>
Total	<u>\$5,524,696</u>	<u>\$220,039</u>	<u>\$5,744,735</u>

Finally, I applied the capitalization rate to my final FPFTY allowance to calculate the O&M portion versus the rate base portion of my adjustment.

SERVICE COMPANY EXPENSE

Q. WHAT IS INCLUDED IN THE COMPANY’S CLAIM FOR SERVICE COMPANY EXPENSE?

A. The Company’s claim for service company expense includes support services provided by American Water Works Service Company, Inc. (AWWSC) such as customer service, water quality testing, environmental compliance, human

⁵⁷ PAWC Exhibit 3-B, pp. 301-304.

resources, communications, information technology, finance, accounting, legal, engineering, supply chain, and risk management.⁵⁸

Q. WHAT IS THE COMPANY’S CLAIM FOR SERVICE COMPANY EXPENSE?

A. PAWC is claiming FPFTY service company expense of \$77,223,367. The total is allocated among the operations based on number of customers as follows:⁵⁹

	Total Customers	Allocation Factor	FPFTY Claim
Water Operations	694,439	95.3%	\$73,593,697
Wastewater SSS Operations	57,516	2.9%	\$2,277,631
Wastewater CSS Operations	42,903	1.6%	\$1,232,816
BASA Wastewater Operations	<u>15,813</u>	0.2%	<u>\$119,223</u>
Total	<u>810,671</u>		<u>\$77,223,367</u>

Q. WHAT IS THE BASIS FOR THE COMPANY’S CLAIM?

A. According to PAWC witness Lori O’Malley, service company expenses are charged to PAWC and its affiliates using Tier One or Tier Two allocation factors. The Tier One factor represents the allocation of costs between regulated and non-regulated companies and is based on cost-causation drivers. The Tier Two allocation factor is used to allocate regulated company costs to the regulated businesses that benefit from a service and is based on the number of customers

⁵⁸ PAWC Statement No. 6, p. 13.

⁵⁹ PAWC Exhibit No. 3-B, p. 314.

1 served in the immediately preceding year. The claim for service company expense
2 is based on HTY actual service company expense and is adjusted for various
3 factors, including wage increases, depreciation, and the removal of disallowed
4 expenses such as fines, penalties, and charitable deductions.⁶⁰

5
6 **Q. DID THE COMPANY PROVIDE ADDITIONAL INFORMATION**
7 **REGARDING THIS CLAIM?**

8 A. Yes. In response to I&E-RE-28, the PAWC witness Lori O'Malley identified
9 \$64,830 in lobbying expense and \$142 in penalties that were erroneously included
10 in service company expense.⁶¹

11
12 **Q. HAS THE COMPANY INDICATED IT WILL UPDATE ITS CLAIM?**

13 A. Yes. PAWC confirmed that it will update its claim for service company expense in
14 rebuttal by removing the above total of \$64,972.⁶²

15
16 **Q. DO YOU ACCEPT THE COMPANY'S REVISED FPFTY CLAIM?**

17 A. Yes. I accept the Company's forthcoming update to its claim and expect the
18 adjusted claim to reflect the following:

⁶⁰ PAWC Statement No. 6, pp. 15-17.

⁶¹ I&E Exhibit No. 1, Schedule 6.

⁶² I&E Exhibit No. 1, Schedule 6.

	PAWC FPFTY Claim	PAWC Rebuttal Adjustment	PAWC Rebuttal Claim
Water Operations	\$73,593,697	(\$61,918)	\$73,531,779
Wastewater SSS Operations	\$2,277,631	(\$1,884)	\$2,275,747
Wastewater CSS Operations	\$1,232,816	(\$1,040)	\$1,231,776
BASA Wastewater Operations	<u>\$119,223</u>	<u>(\$130)</u>	<u>\$119,093</u>
Total	<u>\$77,223,367</u>	<u>(\$64,972)</u>	<u>\$77,158,395</u>

PENSION AND OTHER POST-EMPLOYMENT BENEFITS (OPEB) DEFERRED

ACCOUNTING TREATMENT

Q. WHAT IS PAWC REQUESTING IN REGARD TO PENSION AND OPEB EXPENSES?

A. The Company is requesting Commission authorization to establish regulatory accounts for its pension and OPEB expenses. PAWC witness Dr. Christina Chard states that these costs are difficult to predict and that the associated claims in this case are based on actuarial forecasts that consider a number of economic and demographic factors. Dr. Chard also states that when actual outcomes differ from predicted values, over- or under-recovery of expenses from customers can occur.⁶³

Q. EXPLAIN HOW THE COMPANY PROPOSES THE PENSION AND OPEB REGULATORY ACCOUNT TREATMENT WOULD WORK.

A. The Company's proposal would compare its actual pension and OPEB expenses

⁶³ PAWC Statement No. 2, p. 27.

1 incurred to the amount included within base rates. The difference between the two
2 would be deferred to a regulatory asset or liability, and the net balance would be
3 addressed in the Company's next base rate case.⁶⁴ It should be noted here that this
4 methodology assumes that PAWC claims related to pension and OPEBs will be
5 specifically approved by the Commission in the event of any black box
6 settlements.

7
8 **Q. DO YOU AGREE THAT PENSION AND OPEB EXPENSES SHOULD BE**
9 **GRANTED REGULATORY ASSET TREATMENT?**

10 A. No. I recommend that the Commission disallow the proposed pension and OPEB
11 expense regulatory asset/liability treatment in its entirety.

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

14 A. While I do not dispute that the Commission has previously authorized utilities to
15 deferred recovery or refunds of certain expenses via regulatory asset/liability
16 treatment, the Company's pension and OPEB expenses do not meet the
17 requirements for deferral. Specifically, the Commission has previously ruled that
18 deferred accounting treatment may be granted if the expense is: (1) extraordinary;
19 (2) unanticipated; (3) non-recurring; and (4) substantial.⁶⁵

⁶⁴ PAWC Statement No. 2, p. 27.

⁶⁵ *Petition of Columbia Gas of Pa., Inc. for Authority to Defer for Accounting and Financial Purposes Certain Start Up Expenses Assoc. with the Redesign of Upgrade of Financial Processes and Info. Systems*, Docket No. P-2012-2319920 (Order Entered December 5, 2012).

1 **Q. HOW DO PENSION AND OPEB EXPENSES FAIL TO MEET THE**
2 **COMMISSION'S CRITERIA?**

3 A. While I agree that these costs have sometimes been substantial in the past, the
4 costs are not extraordinary because pension and OPEB costs are routine operating
5 expenses incurred by PAWC as well as many other water and wastewater utilities.
6 Secondly, the costs are not unanticipated because they are a part of contractual
7 agreements with employees and/or employee benefit packages. Finally, the
8 expenses cannot be categorized as non-recurring while also being forecasted on an
9 annual basis. For these reasons, it is not appropriate for the Commission to grant
10 approval for the Company to defer these costs.

11 Pension and OPEB expenses are normal, expected, recurring costs for
12 which the Company cannot expect a virtually guaranteed dollar-for-dollar
13 recovery. Pension and OPEB costs do not meet the requirements for deferral
14 treatment, and I recommend that the Commission deny the Company's request.

15
16 **CASH WORKING CAPITAL**

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

19 A. CWC includes the amount of funds necessary to operate a utility during the
20 interim period between the rendition of service, including the payment of related
21 expenses, and the receipt of revenue in payment for services rendered by the
22 utility.

1 **Q. HOW DOES THE COMPANY CALCULATE ITS CWC CLAIM?**

2 A. The Company calculates its CWC claim by using a lead/lag study. Briefly, the
3 CWC requirement is calculated by multiplying the net leg days (revenue lag days
4 less expense lag days) by the average operating expense per day (total operating
5 expenses ÷ 365 days). A lead/lag study measures the differences in time between:
6 (1) the time services are rendered until payment of those services is received; and
7 (2) the time between the point when a utility has incurred an expense and the
8 actual payment of the expense. Stating this in a different way, the lead/lag study
9 measures how many days exist on average between the midpoint of the service
10 period and the date the payment is made.

11
12 **Q. DO YOU AGREE WITH THE COMPANY’S USE OF A LEAD/LAG**
13 **METHOD?**

14 A. Yes. I agree with the Company’s use of this method.

15
16 **Q. WHAT IS THE COMPANY’S CLAIM FOR CWC?**

17 A. The following table shows PAWC’s CWC claim broken down by business
18 operation:⁶⁶

⁶⁶ PAWC Exhibit No. 3-A, pp. 32, 99, 148, and 196.

	FPFTY Claim
Water Operations	\$25,170,058
Wastewater SSS Operations	\$2,268,679
Wastewater CSS Operations	\$1,503,544
BASA Wastewater Operations	\$1,061,398
Elizabeth Borough WW CSS	<u>\$51,881</u>
Total	<u>\$30,055,560</u>

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM?

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an allowance of \$29,626,815, or a reduction of \$428,745 (\$30,055,560 - \$29,626,815) to the Company's FPFTY claim broken down by business operation as shown in the table below:

	FPFTY Claim	I&E Allowance	Adjustment
Water Operations	\$25,170,058	\$24,800,799	(\$369,259)
Wastewater SSS Operations	\$2,268,679	\$2,239,077	(\$29,602)
Wastewater CSS Operations	\$1,503,544	\$1,482,756	(\$20,788)
BASA Wastewater Operations	\$1,061,398	\$1,052,302	(\$9,096)
Elizabeth Borough WW CSS	<u>\$51,881</u>	<u>\$51,881</u>	<u>\$0</u>
Total	<u>\$30,055,560</u>	<u>\$29,626,815</u>	<u>(\$428,745)</u>

Note that no changes have been made to Elizabeth Borough's CWC claim since I did not recommend any O&M expense adjustments to this operating unit.

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

2 A. All O&M expense adjustments that are cash-based expense claims are included
3 when determining each operating unit's overall CWC requirement. My CWC
4 recommendations are based on my recommended adjustments to O&M expenses
5 as discussed in this direct testimony.

6 I subtracted all my recommended O&M expense adjustments from the
7 tables above in the I&E Operating and Maintenance Expense Adjustments section
8 that correspond to the Company's CWC calculation. I did this using the
9 Company's electronic workpapers for each operation. I&E-modified CWC
10 schedules reflect my changes for each operation's CWC allowance calculation.⁶⁷

11
12 **Q. ARE YOUR ABOVE-RECOMMENDED CWC ALLOWANCES FINAL**
13 **RECOMMENDATIONS?**

14 A. No. All adjustments to the Company's claims for revenues, expenses, taxes, and
15 rate base must be continually brought together for each operating unit in the
16 Administrative Law Judge's Recommended Decision and again in the
17 Commission's Final Order. This process, known as iteration, effectively prevents
18 the determination of a precise calculation until all adjustments have been made to
19 the Company's claims.

⁶⁷ I&E Exhibit No. 1, Schedule 7.

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

2 **A. Yes.**

Vanessa Okum

Professional and Educational Background

Experience:

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania

June 2022 – Present

Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement

Magnolia Realty Services, Elizabethville, Pennsylvania

February 2016 – May 2024

Realtor

May 2015 – May 2019

Business Manager

The Vanguard Group, Malvern, Pennsylvania

October 2011 – December 2014

Financial Administrator, Corporate Financial Services

March 2010 – October 2011

Financial Analyst, Fund Financial Services

June 2008 – March 2010

Financial Associate, Fund Financial Services

Education/Professional Development:

NARUC Rate School, Clearwater, Florida, October 16-20, 2023

University of Massachusetts – Amherst, Amherst, Massachusetts, 2012

Master of Business Administration

Elizabethtown College, Elizabethtown, Pennsylvania, 2008

Bachelor of Science in International Business

Concentration in Finance

Testimony Submitted:

I have submitted testimony in the following proceedings:

A-2024-3049015 – Aqua Pennsylvania, Inc. - Borough of Greenville (1329)

R-2025-3055010 et al. – Pittsburgh Water and Sewer Authority

R-2025-3053112 – Philadelphia Gas Works

R-2024-3050208 – Newtown Artesian Water Company

R-2024-3047068 – FirstEnergy Pennsylvania Electric Company

R-2024-3045192 at al. – Veolia Water Pennsylvania, Inc.

R-2023-3043189 et al. – Pennsylvania-American Water Company

R-2023-3039919 et al. – Pittsburgh Water and Sewer Authority

R-2023-3037428 – National Fuel Gas Distribution Corporation (1307(f))

R-2022-3037368 – UGI Utilities, Inc. – Electric Division

I have assisted with testimony in the following proceedings:

R-2022-3031704 – Borough of Ambler Water Department

R-2022-3032764 – Leatherstocking Gas Company, LLC

Casework not requiring testimony:

R-2025-3052742 – National Fuel Gas Distribution Corporation (1307(f))

R-2024-3049248 – City of Lock Haven Water Department

R-2024-3045177 – National Fuel Gas Distribution Corporation (1307(f))

I&E Exhibit No. 1
Witness: Vanessa Okum

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

and

Docket No. R-2025-3058051 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

**OPERATING AND MAINTENANCE EXPENSES,
PENSION AND OPEB REGULATORY ASSET TREATMENT,
CASH WORKING CAPITAL**

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation and Enforcement**

I&E-RE-19

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services

Question: Reference PAWC Exhibit No. 3-B, p. 3 concerning annualized salary and wages payroll expense claim:

- A. Confirm whether the claim includes base pay, overtime, shift premium, and meal compensation.
- B. Confirm that all forms of bonus pay are excluded from this claim.
- C. State whether any other components not mentioned in Part A above are included in the claims on this page.
- D. Provide the data in Excel format with all formulas intact. Include additional columns for actual data for the fiscal years ended June 30, 2023, 2024, and 2025.
- E. Provide a summary of current collective bargaining agreements, including the effective date and percentage of wage increases included in the claim, as well as a copy of each agreement.

Response:

- A. Yes, the annualized salary and wages payroll claim includes base pay, overtime, shift premium, and meal compensation.
- B. The Company interprets "bonus pay" as referring to the Company's performance pay. Performance pay is not a bonus, but part of an employee's overall total compensation. Performance pay is excluded from this claim and referenced separately in PAWC Exhibit No. 3-B, p. 62-96.
- C. There are no other components not mentioned in part A above included in the claim.
- D. Please refer to I&E-RE-19_Attachment 1 for the actual data for fiscal years ended June 30, 2023, 2024 and 2025 by PAWC Operations. Salaries and wages payroll by collective bargaining unit (CBU), non-CBU, or by hourly or salary employees, cannot be provided as the Company does not record the expense information in the requested categories.
- E. Please refer to I&E-RE-19_Attachment 2_CONFIDENTIAL for copies of current collective bargaining agreements which include the effective dates and percentages of wage

increases. For those bargaining units for which an agreement expired, a historic three-year average of contract wage increases was used to determine projected costs for the FTY and FPFTY. Please refer to the table below for a summary of the Company's current collective bargaining agreements:

District	Collective Bargaining Unit
Scranton	Utility Workers Union of America, AFL-CIO Local Union No. 648
Pittsburgh	United Steelworkers, AFL-CIO Local Union 01211
Mechanicsburg	Utility Workers Union of America, AFL-CIO Local Union No. 648
Butler, Clarion, Uniontown, Indiana, Kane, Kittanning, New Castle, Punxsutawney, Warren, McMurray and Valley	Utility Workers United Association, Local 537
Brownsville	Utility Workers Union of America, AFL-CIO Local Union No. 433
Kane	The American Federation of State, County and Municipal Employees, AFL-CIO District Council 85, Local 3603
Norristown	National Conference of Fireman and Oilers, District of 32BJ SEIU
Yardley	Local 32BJ Service Employees International Union, 32BJ SEIU
Scranton WW	Teamsters Union Local 229
McKeesport WW	The Utility Workers Union of America, AFL-CIO Local 433
Butler WW (BASA)	District Council 84, Local 757, The American Federation of State, County and Municipal Employees - AFL-CIO
York WW	Teamsters Local 776

Pennsylvania-American Water Company
Case No. R-2025-3057983 (Water) and R-2025-3058051 (Wastewater)
I&E RE-018-D_Attachment 2

<u>Water Operations</u>	12 Months Ended 6/30/23			12 Months Ended 6/30/24			12 Months Ended 6/30/25			July - October 2025		
Month	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy
July	1,022	1,051	-29	1,048	1,043	5	1,039	1,023	16	1,023	1,005	18
August	1,022	1,044	-22	1,048	1,043	5	1,039	1,015	24	1,023	1,005	18
September	1,022	1,039	-17	1,048	1,037	11	1,039	1,022	17	1,023	1,009	14
October	1,022	1,047	-25	1,048	1,041	7	1,041	1,025	16	1,023	1,014	9
November	1,022	1,048	-26	1,048	1,031	17	1,041	1,020	21			
December	1,022	1,044	-22	1,048	1,030	18	1,041	973	68			
January	1,048	1,044	4	1,039	1,035	4	1,012	974	38			
February	1,048	1,044	4	1,039	1,031	8	1,014	984	30			
March	1,048	1,047	1	1,039	1,024	15	1,018	986	32			
April	1,048	1,053	-5	1,039	1,010	29	1,018	989	29			
May	1,048	1,054	-6	1,039	1,017	22	1,023	1,007	16			
June	1,048	1,046	2	1,039	1,027	12	1,023	1,011	12			

<u>Wastewater SSS General Operations</u>	12 Months Ended 6/30/23			12 Months Ended 6/30/24			12 Months Ended 6/30/25			July - October 2025		
Month	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy
July	83	70	13	83	75	8	75	73	2	75	76	-1
August	83	72	11	83	75	8	75	71	4	75	75	0
September	83	74	9	83	75	8	75	72	3	75	75	0
October	83	75	8	83	74	9	75	71	4	75	79	-4
November	83	75	8	83	74	9	75	73	2			
December	83	75	8	83	75	8	75	74	1			
January	83	76	7	75	75	0	75	75	0			
February	83	76	7	75	75	0	75	76	-1			
March	83	75	8	75	75	0	75	75	0			
April	83	77	6	75	75	0	75	75	0			
May	83	76	7	75	76	-1	75	75	0			
June	83	76	7	75	75	0	75	75	0			

<u>Wastewater CSS Operations</u>	12 Months Ended 6/30/23			12 Months Ended 6/30/24			12 Months Ended 6/30/25			July - October 2025		
Month	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy
July	103	100	3	101	97	4	96	98	-2	96	95	1
August	103	101	2	101	96	5	96	98	-2	96	93	3
September	103	100	3	101	97	4	96	99	-3	96	95	1
October	103	101	2	101	97	4	96	98	-2	96	97	-1
November	103	101	2	101	97	4	96	98	-2			
December	103	101	2	101	97	4	96	98	-2			
January	101	101	0	96	98	-2	96	97	-1			
February	101	99	2	96	99	-3	96	97	-1			
March	101	98	3	96	98	-2	96	96	0			
April	101	97	4	96	98	-2	96	93	3			
May	101	98	3	96	98	-2	96	92	4			
June	101	98	3	96	100	-4	96	92	4			

<u>BASA WW Operations</u>	12 Months Ended 6/30/23			12 Months Ended 6/30/24			12 Months Ended 6/30/25			July - October 2025		
Month	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy	Budget	Actual	Vacancy
July	-	-	-	-	-	-	-	-	-	30	28	2
August	-	-	-	-	-	-	-	-	-	30	28	2
September	-	-	-	-	-	-	-	-	-	30	27	3
October	-	-	-	-	-	-	30	27	3	30	28	2
November	-	-	-	-	-	-	30	27	3			
December	-	-	-	-	-	-	30	27	3			
January	-	-	-	-	-	-	30	28	2			
February	-	-	-	-	-	-	30	27	3			
March	-	-	-	-	-	-	30	27	3			
April	-	-	-	-	-	-	30	27	3			
May	-	-	-	-	-	-	30	28	2			
June	-	-	-	-	-	-	30	28	2			

I&E Analysis - Average Vacancy Rate

Water Operations	6/30/2023	6/30/2024	6/30/2025
July	-29	5	16
August	-22	5	24
September	-17	11	17
October	-25	7	16
November	-26	17	21
December	-22	18	68
January	4	4	38
February	4	8	30
March	1	15	32
April	-5	29	29
May	-6	22	16
June	2	12	12
Average Vacancies	-11.8	12.8	26.6
Average Budgeted Headcount	1035	1043.5	1029
Vacancy Rate	-1.14%	1.22%	2.58%

Wastewater SSS General Operations	6/30/2023	6/30/2024	6/30/2025
July	13	8	2
August	11	8	4
September	9	8	3
October	8	9	4
November	8	9	2
December	8	8	1
January	7	0	0
February	7	0	-1
March	8	0	0
April	6	0	0
May	7	-1	0
June	7	0	0
Average Vacancies	8.3	4.1	1.3
Average Budgeted Headcount	83	79	75
Vacancy Rate	9.94%	5.17%	1.67%

Wastewater CSS Operations	6/30/2023	6/30/2024	6/30/2025
July	3	4	-2
August	2	5	-2
September	3	4	-3
October	2	4	-2
November	2	4	-2
December	2	4	-2
January	0	-2	-1
February	2	-3	-1
March	3	-2	0
April	4	-2	3
May	3	-2	4
June	3	-4	4
Average Vacancies	2.4	0.8	-0.3
Average Budgeted Headcount	102	98.5	96
Vacancy Rate	2.37%	0.85%	-0.35%

BASA WW Operations	6/30/2023	6/30/2024	6/30/2025
July			
August			
September			
October			3
November			3
December			3
January			2
February			3
March			3
April			3
May			2
June			2
Average Vacancies			2.7
Average Budgeted Headcount			30
Vacancy Rate			8.89%

Total PAWC	6/30/2023	6/30/2024	6/30/2025
July	-13	17	16
August	-9	18	26
September	-5	23	17
October	-15	20	21
November	-16	30	24
December	-12	30	70
January	11	2	39
February	13	5	31
March	12	13	35
April	5	27	35
May	4	19	22
June	12	8	18
Average Vacancies	-1.1	17.7	29.5
Average Budgeted Headcount	1220	1221	1230
Vacancy Rate	-0.09%	1.45%	2.40%

1.25% 3-Year Average Vacancy Rate

Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
I&E-RE-51_ Attachment

PAWC Operations	Annual Performance Plan (APP)				
	Actual	Actual	Actual	FTY	FPFTY
	12 Months Ended 6/30/2023	12 Months Ended 6/30/2024	12 Months Ended 6/30/2025	12 Months Ended 6/30/2026	12 Months Ended 6/30/2027
Water Operations	\$5,940,449	\$6,038,701	\$6,193,608	\$7,841,729	\$8,129,054
Wastewater SSS General Operations	388,510	411,461	415,476	491,321	509,960
Wastewater CSS Operations	484,141	499,494	509,363	394,479	407,215
BASA WW Operations	-	-	127,756	145,093	150,013
Total	\$6,813,100	\$6,949,656	\$7,246,203	\$8,872,622	\$9,196,242

PAWC Operations	Long-Term Performance Plan (LTPP)				
	Actual	Actual	Actual	FTY	FPFTY
	12 Months Ended 6/30/2023	12 Months Ended 6/30/2024	12 Months Ended 6/30/2025	12 Months Ended 6/30/2026	12 Months Ended 6/30/2027
Water Operations	\$322,459	\$426,970	\$368,078	\$942,658	\$979,707
Wastewater SSS General Operations	-	-	-	-	-
Wastewater CSS Operations	-	-	-	-	-
BASA WW Operations	-	-	-	-	-
Total	\$322,459	\$426,970	\$368,078	\$942,658	\$979,707

PAWC Operations	Total - Performance Pay				
	Actual	Actual	Actual	FTY	FPFTY
	12 Months Ended 6/30/2023	12 Months Ended 6/30/2024	12 Months Ended 6/30/2025	12 Months Ended 6/30/2026	12 Months Ended 6/30/2027
Water Operations	\$6,262,908	\$6,465,670	\$6,561,686	\$8,784,387	\$9,108,761
Wastewater SSS General Operations	388,510	411,461	415,476	491,321	509,960
Wastewater CSS Operations	484,141	499,494	509,363	394,479	407,215
BASA WW Operations	-	-	127,756	145,093	150,013
Total	\$7,135,559	\$7,376,625	\$7,614,281	\$9,815,280	\$10,175,949

Wase Disposal Expenses by Segment and Vendor - 12 Months ending June 2023 and June 2024

Segment	Vendor	Services Provided	12 Months Jun 2023	12 Months Jun 2024
Water	Amazon Capital Services Inc	miscoded		\$97
Water	American Water Works Serv Co.	miscoded		(56)
Water	Borough of Freeland Municipal	Sewer billing	25,481	
Water	Borough of Pottstown	Sewer billing	22,909	3,473
Water	Borough of Steelton	Sewer billing	20,604	93,275
Water	Brownsville Municipal Authority	Sewer billing	109,672	102,068
Water	Butler Area Sewer Authority	Sewer billing	141,752	224,546
Water	Casella Waste System	Waste disposal	547	
Water	Clym Environmental Services LLC	Biohazard waste disposal	1,627	1,250
Water	Commonwealth Disposal Inc.	Sludge removal and disposal	324,960	479,160
Water	Connell Equipment Inc.	Sludge removal and disposal	38,975	39,375
Water	Custom AG Service	Sludge removal and disposal	582,455	346,842
Water	CWM Environmental LLC	Sludge removal and disposal		17,193
Water	Dallas Area Municipal Authority	Sewer billing	180	180
Water	Daltons Service Co	Sludge removal and disposal	4,000	1,940
Water	Day Services LLC	Residuals removal		2,013
Water	Denali Water Solutions LLC	Sludge removal and disposal	862,220	306,073
Water	Eastern Environmental Co	Sludge removal and disposal		6,004
Water	Eldredge Inc	Septic Services	7,521	1,438
Water	Environmental Service Corp	Sludge removal and disposal		10,070
Water	Hach Co	Disposal supplies		250
Water	Hallstead Sanitary Service	Sludge removal and disposal	16,165	40,943
Water	Hazleton Oil And Environm	Waste disposal		1,054
Water	Heritage-Crystal Clean Inc	Cleaning services	424	3,944
Water	Hydrotech Environmental Inc.	Sludge removal and disposal		580,135
Water	Robinson Portable Toi	Porta Potty rental	420	390
Water	Indiana-American Water Co	miscoded	83	40
Water	Keystone Sanitary Landfill	Sludge removal and disposal	74,959	88,353
Water	Klines Services	Sludge removal and disposal	19,889	531,036
Water	Mealy Excavating & Construction	Sludge removal and disposal	3,864	1,932
Water	MSL Oil & Gas Corp	Sludge removal and disposal		214,717
Water	Municipal Maintenance Co	Sludge thickener cleaning	0	40,020
Water	New Jersey-American Water	miscoded		54
Water	RC Stahlnecker Co	Sludge removal and disposal	88,048	95,983
Water	Safety Kleen Systems	Cleaning services	3,557	2,350
Water	Soils Inc.	Residuals removal	189,443	220,060
Water	Eldredge Inc.	Waste disposal	6,213	
Water	USA Blue Book	miscoded	0	310
Water	Waste Management	Waste removal	8,379	11,976
Water Total			\$2,554,345	\$3,468,484
WW CSS	Casella Waste Management	Waste disposal	\$45,379	\$25,075
WW CSS	County Hauling	Sludge removal and disposal	284,471	315,503
WW CSS	CWM Environmental LLC	Sludge removal and disposal	31,668	0
WW CSS	Fournier Industries Inc	Sludge removal and disposal	6,383	0
WW CSS	Hapchuk Inc.	Sludge removal and disposal	86,220	92,260
WW CSS	Keystone Sanitary Landfill	Sludge removal and disposal	846,385	725,254
WW CSS	MSL Oil & Gas Corp	Sludge removal and disposal	4,505	7,908
WW CSS Total			\$1,305,011	\$1,166,000
WW SSS	Allstate Septic Systems	Septic services	\$71,303	\$55,069
WW SSS	American Water Works Serv	miscoded	43	
WW SSS	Amerigreen Inc.	Sludge removal and disposal	21,686	355,761
WW SSS	Borough Of Freeland Municipal	Sewer billing	220,563	474,679

Wase Disposal Expenses by Segment and Vendor - 12 Months ending June 2023 and June 2024

Segment	Vendor	Services Provided	12 Months Jun 2023	12 Months Jun 2024
WW SSS	Borough Of Pottstown	Bulk sewer collection	175,827	95,869
WW SSS	Carbon Limestone Landfill LLC	Sludge removal and disposal	2,439	
WW SSS	Connell Equipment Inc.	Sludge removal and disposal	171,274	155,042
WW SSS	Daltons Service Co	Sludge removal and disposal	9,295	12,823
WW SSS	Hapchuk Inc.	Sludge removal and disposal	74,536	79,977
WW SSS	Hydrotech Environmental Inc.	Sludge removal and disposal	110,330	117,638
WW SSS	Klines Services	Sludge removal and disposal	89,056	48,776
WW SSS	Koberlein Environmental Svcs	Sludge removal and disposal	18,466	2,866
WW SSS	Lower Allen Township Authority	Fairview Township treatment plant	129,859	141,002
WW SSS	Material Matters, Inc.	Sludge removal and disposal	472,487	
WW SSS	Modern Landfill	Sewer grit	9,641	32,235
WW SSS	Penn Waste Inc.	Sludge removal and disposal	237,979	315,428
WW SSS	RC Stahlnecker Co	Sludge removal and disposal	18,485	17,940
WW SSS	Republic Services	Sewer grit	10,324	0
WW SSS	Synagro Technologies Inc	Sludge recycling	247,252	405,559
WW SSS	Waste Management	Waste removal	266,064	445,102
WW SSS	Wind River Environmental	Septic services	6,135	4,176
WW SSS Total			\$2,363,044	\$2,759,941
Grand Total			\$6,222,401	\$7,394,425
Accruals & Adjustments			\$ 492,132.53	\$494,244
Total Waste Disposal Expense			\$6,714,533	\$7,888,668

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation and Enforcement**

I&E-RE-29

Responsible Witness: Lori O'Malley, Senior Manager Regulatory Services

Question: Reference PAWC Exhibit No. 3-B, pp. 312-313 and PAWC Statement No. 6, p. 17 concerning adjustments to service company expense. Indicate the amounts removed for each item listed on page 17, and which adjustment(s) on Exhibit 3-B shows the removal of these expenses.

Response:

Please see the amounts for each item listed below from page 17 of PAWC Statement No. 6. Please note that lobbying expense in the amount of \$64,830 and penalties in the amount of \$142 were erroneously included in service company expense. The Company will remove those amounts in the rebuttal phase of this proceeding.

Miscellaneous Adjustments	
Charitable Contributions	\$(6,135)
Penalties	(142)
Severance	(575,680)
Relocation	(61,915)
Contract Services - Outplacement	(6,715)
Total Miscellaneous Adjustments	<u>\$(650,587)</u>
NAWC Adjustment	\$(154,449)
Tax Accrual	(50,607)
Cyber Incident Adjustment	(230,612)
Executive Discretionary Payment	(164,560)

I&E MODIFIED

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	66,958,375	\$806,848,420
2	Group Insurance	11.00	11,977,661	131,754,271
3	OPEB's and VEBA	65.00	(6,900,426)	(448,527,664)
4	Pension	(5.50)	1,697,634	(9,336,990)
5	Purchased Power	32.60	21,106,340	688,114,722
6	Purchased Water	31.29	2,795,784	87,470,990
7	Chemicals	44.75	22,744,910	1,017,922,758
8	Miscellaneous	23.44	43,699,262	1,024,206,014
9	Transportation	32.34	2,864,899	92,654,571
10	Ins Other Than Group	(86.09)	18,773,193	(1,616,138,283)
11	Service Company	12.05	73,531,779	886,057,932
12	Waste Disposal	46.82	3,093,714	144,846,575
13	Telephone	34.55	3,365,806	116,281,363
14	Rents	52.71	180,238	9,499,730
15	Natural Gas	50.28	1,139,917	57,313,277
16	Totals		267,029,086	\$2,988,967,686

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$915,816,946	\$941,860,051	\$933,310,625	\$947,784,779
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$41,323,952,651	\$42,499,082,716	\$42,113,311,218	\$42,766,421,272
11	Total Billed Revenue	\$915,816,946	\$941,860,051	\$933,310,625	\$947,784,779
12	Total Dollar Days	\$41,323,952,651	\$42,499,082,716	\$42,113,311,218	\$42,766,421,272
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	9.8	9.6	11.7	11.2
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	35.3	35.5	33.4	33.9
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$250,700,147	\$267,147,571	\$267,029,086
20	Operating Expenses Per Day (Line 20 / 365 Days)		686,850	731,911	731,587
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$24,383,175	\$24,445,827	\$24,800,799

I&E MODIFIED

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$6,088,106	\$73,361,683
2	Group Insurance	11.00	1,285,099	14,136,093
3	OPEB's and VEBA	65.00	28,498	1,852,367
4	Pension	(5.50)	123,260	(677,931)
5	Purchased Power	32.60	3,773,519	123,025,311
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	1,601,088	71,654,890
8	Miscellaneous	23.44	6,247,886	146,435,475
9	Transportation	32.34	146,436	4,735,921
10	Ins Other Than Group	(86.09)	2,367,624	(203,822,931)
11	Service Company	12.05	2,275,747	27,422,751
12	Waste Disposal	46.82	3,589,212	168,045,609
13	Telephone	34.55	239,983	8,290,897
14	Rents	52.71	58,950	3,107,059
15	Natural Gas	50.28	67,674	3,402,526
16	Totals		\$27,893,082	\$440,969,720

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$88,333,183	\$106,155,765	\$106,587,996	\$108,561,975
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$3,985,814,286	\$4,790,013,795	\$4,809,517,140	\$4,898,588,013
11	Total Billed Revenue	\$88,333,183	\$106,155,765	\$106,587,996	\$108,561,975
12	Total Dollar Days	\$3,985,814,286	\$4,790,013,795	\$4,809,517,140	\$4,898,588,013
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	25.9	25.9	16.6	15.8
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	19.2	19.2	28.5	29.3
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$20,742,359	\$25,344,869	\$27,893,082
20	Operating Expenses Per Day (Line 20 / 365 Days)		56,828	69,438	76,419
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$1,091,098	\$1,978,983	\$2,239,077

I&E MODIFIED

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$7,728,011	\$93,122,533
2	Group Insurance	11.00	1,545,026	16,995,282
3	OPEB's and VEBA	65.00	57,235	3,720,258
4	Pension	(5.50)	138,136	(759,746)
5	Purchased Power	32.60	1,412,874	46,062,898
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	1,030,161	46,103,707
8	Miscellaneous	23.44	3,005,542	70,442,715
9	Transportation	32.34	389,081	12,583,379
10	Ins Other Than Group	(86.09)	748,668	(64,451,030)
11	Service Company	12.05	1,231,776	14,842,901
12	Waste Disposal	46.82	405,555	18,987,939
13	Telephone	34.55	124,772	4,310,621
14	Rents	52.71	11,450	603,490
15	Natural Gas	50.28	151,899	7,637,269
16	Totals		\$17,980,187	\$270,202,216

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$83,780,496	\$85,966,264	\$85,048,549	\$85,758,589
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$3,780,385,642	\$3,879,012,981	\$3,837,603,384	\$3,869,642,166
11	Total Billed Revenue	\$83,780,496	\$85,966,264	\$85,048,549	\$85,758,589
12	Total Dollar Days	\$3,780,385,642	\$3,879,012,981	\$3,837,603,384	\$3,869,642,166
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	22.4	22.4	17.3	15.0
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	22.7	22.7	27.8	30.1
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$15,954,982	\$17,709,014	\$17,980,187
20	Operating Expenses Per Day (Line 20 / 365 Days)		43,712	48,518	49,261
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$992,262	\$1,348,800	\$1,482,756

I&E MODIFIED

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$2,428,781	\$29,266,810
2	Group Insurance	11.00	484,551	5,330,062
3	OPEB's and VEBA	65.00	13,365	868,756
4	Pension	(5.50)	36,424	(200,334)
5	Purchased Power	32.60	533,237	17,384,747
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	148,715	6,655,572
8	Miscellaneous	23.44	1,379,394	32,329,696
9	Transportation	32.34	54,336	1,757,297
10	Ins Other Than Group	(86.09)	1,869,468	(160,937,949)
11	Service Company	12.05	119,093	1,435,071
12	Waste Disposal	46.82	298,279	13,965,308
13	Telephone	34.55	8,991	310,608
14	Rents	52.71	0	0
15	Natural Gas	50.28	54,734	2,751,944
16	Totals		\$7,429,369	(\$49,082,412)

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$7,462,807	\$12,627,309	\$12,627,309	\$12,748,475
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$336,740,542	\$569,775,785	\$569,775,785	\$575,243,098
11	Total Billed Revenue	\$7,462,807	\$12,627,309	\$12,627,309	\$12,748,475
12	Total Dollar Days	\$336,740,542	\$569,775,785	\$569,775,785	\$575,243,098
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	18.6	18.5	(5.6)	(6.6)
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	26.5	26.6	50.7	51.7
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$3,527,666	\$7,186,350	\$7,429,369
20	Operating Expenses Per Day (Line 20 / 365 Days)		9,665	19,689	20,354
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$257,089	\$998,232	\$1,052,302

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)
and
Docket No. R-2025-3058051 (Wastewater)

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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1 **INTRODUCTION**

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
3 Pennsylvania-American Water Company (PAWC or Company) and make
4 recommendations regarding PAWC's (water and wastewater operations) rate of
5 return, including capital structure, cost of long-term debt, the cost of equity, and
6 the overall fair rate of return for the fully projected future test year (FPFTY)
7 ending June 30, 2027.

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

10 A. Yes. I&E Exhibit No. 2 contains schedules that support my direct testimony.
11

12 **BACKGROUND**

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

15 A. Rate of return is one of the components of the revenue requirement formula. Rate
16 of return is the amount of revenue an investment generates in the form of net
17 income. It is typically expressed as a percentage of the amount of an asset base at
18 a particular point in time, which in base rate proceedings, is the projected rate base
19 balance at the end of the test year.
20

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

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

23
$$RR = E + D + T + (RB \times ROR)$$

Where:

RR = Revenue Requirement

E = Operating Expenses

D = Depreciation Expense

T = Taxes

RB = Rate Base

ROR = Overall Rate of Return

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

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

A. A fair and reasonable overall rate of return is one that will allow the utility an opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect. The Commission has the authority to determine the fair revenue requirement and rate of return considering customers' rate affordability, while the utility has the opportunity to earn, but not guaranteed to earn.

The *Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 262 U.S. 679, 692-93 (1923), and the *Federal Power*

1 *Commission et al v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) cases set
2 forth the principles that are generally accepted by regulators throughout the
3 country as the appropriate criteria for measuring a fair rate of return:

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

13
14 **Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS**
15 **TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.**

16 A. In base rate proceedings, the overall rate of return is traditionally calculated using
17 the weighted average cost of capital method. To calculate the weighted average
18 cost of capital, a company's capital structure must first be determined by
19 comparing the percentage of each capitalization component, which has a financed
20 rate base, to total capital. Next, the effective cost rate of each capital structure
21 component must be determined. The historical component of the cost rate of debt
22 can be computed accurately, and any future debt issuances are based on estimates.
23 The cost rate of common equity is not fixed and is more difficult to measure.

1 Because of this difficulty, a proxy group is used as discussed later in this direct
2 testimony. Then, each capital structure component percentage is multiplied by its
3 corresponding effective cost rate to determine the weighted capital component cost
4 rate. The table in the “*I&E Position*” section below demonstrates the interaction
5 of each capital structure component and its corresponding effective cost rate.
6 Finally, the sum of the weighted cost rates produces the overall rate of return.
7 This overall rate of return is multiplied by the rate base to determine the return
8 portion of a company’s revenue requirement.
9

10 **COMPANY’S RATE OF RETURN CLAIM**

11 **Q. WHO IS THE COMPANY’S RATE OF RETURN WITNESS IN THIS**
12 **PROCEEDING?**

13 A. Ann E. Bulkley, Principal of the Brattle Group, is the primary witness addressing
14 the rate of return.¹ Throughout her direct testimony, Ms. Bulkley provides her
15 analysis for the claimed capital structure, long-term debt, preferred stock, and the
16 cost of common equity for PAWC’s water and wastewater operations.
17

18 **Q. PLEASE SUMMARIZE MS. BULKLEY’S RATE OF RETURN**
19 **RECOMMENDATIONS FOR THE COMPANY.**

20 A. Ms. Bulkley recommends the following rates of return for the Company based on
21 the FPFTY ending June 30, 2027:²

¹ PAWC Statement No. 13.

² PAWC Exhibit No. 13-A, Schedules 16 and 17.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	43.68%	4.71%	2.06%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>56.31%</u>	10.95%	<u>6.17%</u>
Total	<u>100.00%</u>		<u>8.23%</u>
PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>51.52%</u>	10.95%	<u>5.64%</u>
Total	<u>100.00%</u>		<u>7.75%</u>

I&E POSITION

Q. PLEASE SUMMARIZE YOUR RATE OF RETURN

RECOMMENDATIONS FOR THE COMPANY.

A. I recommend the following rates of return for the Company:³

PENNSYLVANIA-AMERICAN WATER COMPANY – WATER OPERATIONS			
Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	44.99%	4.71%	2.12%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>55.00%</u>	9.80%	<u>5.39%</u>
Total	<u>100.00%</u>		<u>7.51%</u>

PENNSYLVANIA-AMERICAN WATER COMPANY – WASTEWATER OPERATIONS			
Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>51.52%</u>	9.80%	<u>5.05%</u>
Total	<u>100.00%</u>		<u>7.16%</u>

³ I&E Exhibit No. 2, Schedule 1.

PROXY GROUP

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

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

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

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

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

1 **Q. DID YOU REQUIRE THAT THE COMPANIES IN YOUR PROXY**
2 **GROUP EXCLUSIVELY PROVIDE WATER OR WASTEWATER**
3 **SERVICE?**

4 A. No. Few if any publicly held wastewater-only companies exist because most
5 water companies have diversified their businesses to include wastewater
6 operations. Accordingly, this type of criterion produces an insufficient sample of
7 companies for my proxy group, adversely affecting the calculation of a fair rate of
8 return for the subject utility. Additionally, Value Line does not specifically cover
9 the water industry, excluding wastewater, as a standalone category. Therefore, my
10 proxy group began with a search of the regulated water utility companies covered
11 by Value Line.

13 **Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR WATER**
14 **UTILITY PROXY GROUP?**

15 A. The criteria for my proxy group was designed to select companies that are
16 representative of PAWC. I applied the following criteria to Value Line's Water
17 Utility company group:

- 18 1. Fifty percent or more of the company's revenues must be generated
19 from the regulated water utility industry.
- 20 2. The company's stock must be publicly traded.
- 21 3. Investment information for the company must be available from more
22 than one source, which includes Value Line.

1 4. The company must not be currently involved in an announced merger or
2 the target of an acquisition.

3 5. The company must have four consecutive years of historic earnings
4 data.

5
6 **Q. WHAT CRITERIA DID MS. BULKLEY USE IN SELECTING THE**
7 **COMPANIES THAT FORMULATE HER COMBINED UTILITY PROXY**
8 **GROUP (WATER UTILITIES AND NATURAL GAS DISTRIBUTION**
9 **COMPANIES)?**

10 A. Ms. Bulkley implemented the following screening criteria to both Value Line's
11 "Water Utility" and "Natural Gas Distribution Utility" companies to formulate her
12 proxy group:⁴

13 1. Pay consistent quarterly cash dividends because companies that cannot
14 be analyzed using the Constant Growth DCF model.

15 2. Have investment grade long-term issuer rating.

16 3. Have positive long-term earnings growth forecasts from at least two
17 equity analysts.

18 4. Derive more than 70% of their total operating income from regulated
19 operations.

20 5. Were not parties to a merger or transformative transaction during the
21 analytical periods relied on.

⁴ PAWC Statement No. 13, p. 21, lines 11-23.

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 Service Group	CWT
H2O America (formerly known as SJW Group)	HTO
Middlesex Water Company	MSEX

3

4

5 **Q. WHAT PROXY GROUP DID MS. BULKLEY USE IN HER ANALYSIS?**

6 A. Ms. Bulkley used a combined (Water and Gas companies) proxy group consisting
7 of the following eleven companies in her analysis:⁵

Company	Stock Ticker
Atmos Energy Corporation (Gas)	ATO
Chesapeake Utilities Corporation (Gas)	CPK
NiSource Inc. (Gas)	NI
Northwest Natural Gas Company (Gas)	NWN
ONE Gas, Inc. (Gas)	OGS
Southwest Gas Corporation (Gas)	SWX
American States Water Company (Water)	AWR
California Water Service Group (Water)	CWT
Middlesex Water Company (Water)	MSEX
H2O America (SJW Group) (Water)	HTO
Essential Utilities, Inc. (Water)	WTRG

8

⁵ PAWC Statement No. 13, p. 27, lines 3-5.

1 **Q. DO YOU AGREE WITH MS. BULKLEY’S COMBINED PROXY GROUP?**

2 A. No. While Ms. Bulkley’s proxy group includes all four water utility companies of
3 my proxy group, I have not included Essential Utilities Inc. as she does. Ms.
4 Bulkley and I both exclude PAWC’s parent company, American Water Works
5 Company (AWK). Additionally, I have not considered the natural gas utility
6 companies, which she includes in her combined proxy group for determining a
7 return on equity (ROE) for PAWC.

8
9 **Q. WHY DOES MS. BULKLEY INCLUDE ESSENTIAL UTILITIES, INC.**
10 **(WTRG) IN HER PROXY GROUP?**

11 A. Ms. Bulkley includes WTRG because it meets with her fourth screening criterion
12 related to the operating income requirement. She also notes that WTRG satisfies
13 one of my screening criteria related to fifty percent or more of the company’s
14 revenues that must be generated from the regulated water utility industry.⁶

15
16 **Q. DO YOU AGREE WITH MS. BULKLEY’S INCLUSION OF WTRG IN**
17 **HER PROXY GROUP?**

18 A. No. Inclusion of WTRG violates Ms. Bulkley’s proxy group’s fifth screening
19 criterion listed above, which requires that a company must not be a party to a
20 merger or transformative transaction during the analytical periods relied upon.
21 Despite being aware of the announced merger agreement between AWK and

⁶ PAWC Statement No. 13, p. 22, lines 13-17.

1 WTRG, Ms. Bulkley includes WTRG in her proxy group stating that her analyses
2 used data through September 30, 2025 (prior to the merger announcement) and
3 does not include the effects of this merger.⁷
4

5 **Q. WHY DID MS. BULKLEY EXCLUDE AWK FROM HER PROXY**
6 **GROUP?**

7 A. Ms. Bulkley excludes PAWC's parent company, AWK, due to the circular logic
8 that would occur (meaning AWK would be used to determine its own subsidiary's
9 ROE), and therefore, it is not appropriate to include AWK in the proxy group,
10 which is used to determine the authorized ROE for PAWC.⁸
11

12 **Q. WHY DID YOU EXCLUDE AWK AND WTRG FROM YOUR PROXY**
13 **GROUP?**

14 A. I excluded AWK and WTRG from my proxy group because neither of these
15 companies satisfy my fourth proxy group screening criterion related to the
16 company not being involved in an announced merger or not being the target of an
17 acquisition. Recently, on October 27, 2025,⁹ AWK and WTRG announced that
18 each company's board of directors has unanimously approved a definitive
19 agreement to combine in an all-stock, tax-free merger as a leading regulated U.S.
20 water and wastewater public utility with a pro-forma market capitalization of

⁷ PAWC Statement No. 13, p. 22, footnote 29.

⁸ PAWC Statement No. 13, p. 22, lines 2-3.

⁹ <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 December 9, 2025).

1 approximately \$40 billion and a combined enterprise value of approximately \$63
2 billion, based on closing stock prices as of October 24, 2025.

3
4 **Q. WHAT IS THE BASIS FOR MS. BULKLEY'S INCLUSION OF GAS**
5 **DISTRIBUTION COMPANIES IN HER PROXY GROUP?**

6 A. First, Ms. Bulkley states that Value Line currently classifies only six companies as
7 water utilities and there is limited analyst coverage for these companies. After
8 applying screening criteria, there are a small number of water companies available
9 for inclusion in the proxy group, and therefore, she has considered natural gas
10 distribution companies that meet her screening criteria.¹⁰ Second, she asserts that
11 PAWC is a regulated water utility distribution company, which is similar to other
12 regulated utility distribution companies that provide natural gas service.¹¹ She
13 asserts that based on her fourth screening criterion, the natural gas distribution
14 companies included in her proxy group generate a large portion of (more than
15 70%) of their operating income from regulated operations (gas) similar to PAWC
16 (water and wastewater operations) and other water utilities that are included in her
17 proxy group.¹² Lastly, relying on Value Line safety rankings, Value Line
18 timeliness rankings, Value Line betas, and standard deviation of daily price returns
19 data, she claims that these metrics demonstrate that the natural gas companies and
20 water companies in her proxy group have similar risk characteristics.¹³ Therefore,

¹⁰ PAWC Statement No. 13, p. 23, lines 3-4 and 7-9.

¹¹ PAWC Statement No. 13, p. 23, lines 15-16.

¹² PAWC Statement No. 13, p. 23, line 18 through 24, lines 1-2.

¹³ PAWC Statement No. 13, p. 26, lines 21-24.

1 she asserts that it is reasonable to consider natural gas distribution companies for
2 purposes of establishing a proxy group of companies that are reasonably
3 comparable to PAWC.¹⁴
4

5 **Q. PLEASE EXPLAIN WHY YOU DO NOT INCLUDE THE NATURAL GAS**
6 **DISTRIBUTION COMPANIES IN YOUR PROXY GROUP THAT MS.**
7 **BULKLEY INCLUDES.**

8 A. Companies within the water industry are *similarly situated utilities* and have a
9 much better representation of the financial and operational risks faced by PAWC.
10 The companies used in my water utility proxy group are a fair and appropriate
11 representation of the regulated water industry. Ideally, it is better to have more
12 companies in a proxy group, however, using more companies (including gas
13 distribution utilities) that are dissimilar to the subject company will provide less
14 accurate or distorted information than using fewer water companies. A proxy
15 group of exclusively water companies tend to have similar risks and uncertainties
16 rather than including gas distribution companies.

17 Additionally, the water industry has less risk as it has a more captive
18 customer base for water and wastewater services. For example, unlike the natural
19 gas distribution industries where customers can shop for gas supply or limit or
20 eliminate the need for gas service entirely, there are generally no alternatives for
21 water customers. Gas companies also bear the risk of a certain degree of

¹⁴ PAWC Statement No. 13, p. 23, lines 13-15.

1 competition between each other and the potential alternative energy sources that
2 water utilities are immune from. Further, gas and water utilities face different
3 degrees of operational, health, safety, and weather-related risks and uncertainties
4 in addition to substantially different environmental regulations. Lastly, Ms.
5 Bulkley's opinion that the regulated gas utilities used in her analyses all possess a
6 set of financial risk characteristics that are substantially comparable to PAWC is
7 incorrect and unsupported. Ms. Bulkley's own proxy group data reflects
8 consistently higher equity return results for the gas companies in her proxy group,
9 which produces skewed/inflated DCF results and highlights the dissimilarities of
10 the water and gas companies included in her proxy group.¹⁵ She is not
11 demonstrating how operating characteristics and attached business risks of gas and
12 water industry are similar. Natural gas and water utilities are regulated but their
13 operating risks and uncertainties are different. Finally, it is important to note that
14 all gas distribution utilities included in Ms. Bulkley's proxy group are covered by
15 Value Line under the "Natural Gas Utility" industry screen or segment and present
16 financial projections.

17
18 **Q. PLEASE CONTINUE.**

19 **A.** In the most recent 2025 Columbia Gas of Pennsylvania, Inc. (Columbia) rate case
20 order,¹⁶ the Commission concurred with I&E and the Administrative Law Judge
21 (ALJ) that it is appropriate to apply a proxy group comprised exclusively of

¹⁵ PAWC Exhibit No. 13-A, Schedule 4, pp. 1-3.

¹⁶ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025).
See generally Fair Rate of Return, Proxy Groups - Disposition, pp. 204 and 205.

1 natural gas utilities in setting the rate of return for Columbia. The Commission
2 specifically noted that non-gas distribution utilities and non-utility companies with
3 unrelated or entirely dissimilar business segments are simply not comparable to
4 gas distribution utilities in terms of business risk and financial risk profiles.
5 Finally, the Commission adopted the ALJs' recommendation to utilize I&E's
6 Natural Gas Utility proxy group and rejected Columbia's Combined Utility Group
7 (Gas and Electric) and Non-regulated Company Group in setting the appropriate
8 rate of return for Columbia.

10 **CAPITAL STRUCTURE**

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

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

17 **Q. WHAT IS THE COMPANY'S CLAIMED CAPITAL STRUCTURES?**

18 A. The Company's claimed capital structures for Water and Wastewater operations
19 for the FPFTY are summarized in the tables below:¹⁷

¹⁷ PAWC Statement No. 13, p. 65, lines 10-11 and PAWC Exhibit No. 13-A, Schedules 16 and 17.

PAWC - Water Operations	
Type of Capital	Capitalization Ratio
Long-Term Debt	43.68%
Preferred Stock	0.01%
Common Equity	<u>56.31%</u>
Total	<u>100.00%</u>

PAWC - Wastewater Operations	
Type of Capital	Capitalization Ratio
Long-Term Debt	41.59%
WW Specific Debt	6.88%
Preferred Stock	0.01%
Common Equity	<u>51.52%</u>
Total	<u>100.00%</u>

Q. WHAT IS THE BASIS FOR THE COMPANY'S CLAIMED CAPITAL STRUCTURES?

A. Ms. Bulkley explains that the capital structure for the total Company was calculated first, including all debt issuances and all sources of capital.¹⁸ The capital structure for water service was calculated by removing the wastewater specific debt instruments from the total long-term debt of the Company and the

¹⁸ PAWC Statement No. 13, p. 66, lines 2-3.

1 ratios were recalculated for the remaining capital stock.¹⁹ She claims to have
2 reviewed PAWC's proposed capital structure comparing it to the actual capital
3 structures of the operating utilities of the proxy group companies for the most
4 recent three years.²⁰ She states that the mean common equity ratio for her proxy
5 group at the operating subsidiary level for the past three years was 53.09%, within
6 a range of 45.97% to 60.16%. She claims that PAWC's proposed equity ratio for
7 water operations is consistent with the mean equity ratio and well within the range
8 of equity ratios established by the proxy group. The wastewater operations' equity
9 ratio is well below the mean equity ratio for the proxy group companies.²¹

10
11 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S**
12 **CLAIMED CAPITAL STRUCTURES?**

13 A. I recommend using a capital structure of 55% common equity and 45% long-term
14 debt for the water operations as presented in the I&E recommendation. Regarding
15 wastewater operations, I recommend using the Company's claimed capital
16 structure as presented in the table above.

¹⁹ PAWC Statement No. 13, p. 66, lines 9-12.

²⁰ PAWC Statement No. 13, p. 66, lines 15-17.

²¹ PAWC Statement No. 13, p. 66, lines 8-14.

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

3 A. PAWC's FPFTY claimed actual capital structure for water operations is
4 unreasonable for ratemaking purposes, as the Company's equity ratio is well
5 above the highest end of my proxy group's equity ratios. The Company's
6 proposed equity ratio for water operations falls outside the range of my proxy
7 group's 2024 (most recently available) capital structures, where the most recent
8 five-year average range contains individual company capital structure ratios from
9 44.39% to 57.13% long-term debt and 42.87% to 55.61% equity, with an overall
10 five-year average of 48.21% long-term debt and 51.72% common equity.²²

11
12 **Q. WHY HAVE YOU LIMITED THE COMMON EQUITY RATIO TO 55% OF**
13 **THE CAPITAL STRUCTURE FOR WATER OPERATIONS IN YOUR**
14 **ANALYSIS?**

15 A. Limiting a company's capital structure from becoming too equity heavy is
16 reasonable and necessary for a fair ratemaking process. Implementing a capital
17 structure that is closer to 50% long-term debt and 50% common equity is
18 commonly considered optimal when trying to balance the financial integrity of a
19 utility and its impact on ratepayers. While it is not always possible to have a
20 capital structure that is exactly 50/50, implementing a limit helps in striking a
21 balance between rewarding a company for carrying more equity while also

²² I&E Exhibit No. 2, Schedule 2.

1 reducing the costs that would be passed on to ratepayers. For that reason, the
2 Company's capital structure should not exceed 55% equity. PAWC's claimed
3 capital structure of 56.31% equity and 43.68% debt for water operations is
4 significantly more equity-heavy than PAWC's parent company's (AWK) historic
5 five-year average capital structure of 42.69% equity and 57.31% long-debt.²³
6 Additionally, Value Line projects AWK's 2026 capital structure of 45.50% equity
7 and 54.50% long-term debt. PAWC's equity-heavy capital structure claim must be
8 recognized when considering its financial risk, as a higher equity ratio generally
9 corresponds with lower financial risk.

10
11 **Q. HAS THE COMMISSION RECENTLY COMMENTED ON A UTILITY'S**
12 **CAPITAL STRUCTURE CLAIM?**

13 A. Yes. Vice Chair Barrow expressed particular concern regarding the financial
14 impact to customers in relation to equity heavy capital structures. She commented
15 on Columbia's recent requested capital structure of 54.4% equity and 45.6% long-
16 term debt. She highlighted that the Office of Consumer Advocate (OCA) and the
17 Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania
18 (CAUSE-PA) argued in favor of a hypothetical 50/50 capital structure and that per
19 OCA, the average capital structure mix for the proxy group used in that case as
20 shown on Value Line consisted of 55% debt and 45% equity, the inverse of the
21 ratio proposed by Columbia.²⁴ Vice Chair Barrow stated that the discrepancy

²³ I&E Exhibit No. 2, Schedule 2.

²⁴ I&E Exhibit No. 2, Schedule 3, p. 2.

1 between the proxy group and Columbia's capital structure makes it necessary for
2 an adjustment to the capital structure, and that a 50/50 capital structure is a better
3 representation of Columbia's actual financial risk and would have resulted in
4 millions of dollars in reduced revenue requirement and lower rates for
5 customers.²⁵

6
7 **Q. WHAT IS THE FINANCIAL IMPACT OF THE COMPANY'S CLAIMED**
8 **EQUITY HEAVY CAPITAL STRUCTURE COMPARED TO AN**
9 **OPTIMUM 50/50 CAPITAL STRUCTURE?**

10 A. For consideration when examining the Company's overall financial risk, the table
11 below illustrates the cost savings to ratepayers if PAWC used an optimal 50%
12 long-term debt and 50% common equity capital structure in its cost of capital
13 while maintaining its claimed return on equity and rate base:

²⁵ I&E Exhibit No. 2, Schedule 3, pp. 2-3.

Pennsylvania-American Water Company (Water Operations) Summary of Cost of Capital			
Type of Capital	Ratio	Cost Rate	Weighted Cost
AS FILED CAPITAL STRUCTURE			
Long-Term Debt	43.68%	4.71%	2.06%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>56.31%</u>	10.95%	<u>6.17%</u>
Total	<u>100.00%</u>		<u>8.23%</u>
50/50 OPTIMAL CAPITAL STRUCTURE			
Long-Term Debt	49.99%	4.71%	2.35%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>50.00%</u>	10.95%	<u>5.48%</u>
Total	<u>100.00%</u>		<u>7.83%</u>
Difference in the Overall Rate of Return (8.23% - 7.83% = 0.40%)			0.40%
Impact prior to Gross Up (Claimed Rate Base* x Difference in the Overall Rate of Return) (\$5,174,843,488 x 0.0040)			\$20,699,374
Gross Revenue Conversion Factor**			1.3863
Total Impact to Ratepayers (\$20,699,374 x 1.3863)			\$28,695,542

* PAWC Exhibit 3-A, p. 26.

** I&E Exhibit No. 2, Schedule 4, p. 2.

In this example, if the Company were to employ a 50/50 capital structure and make no change to the requested return on equity, the cost savings to water customers would be \$28,695,542. While I understand that achieving and maintaining an exact 50/50 capital structure is not always feasible, this example is intended to demonstrate PAWC's financial security as compared to its peers.

1 **COST OF LONG-TERM DEBT**

2 **Q. WHAT IS THE COMPANY'S CLAIMED COST RATE OF LONG-TERM**
3 **DEBT?**

4 A. Ms. Bulkley recommends a 4.71% weighted cost rate of long-term debt for both
5 water and wastewater operations. Additionally, she recommends a 2.20%
6 weighted cost rate for the wastewater-specific long-term debt.²⁶

7
8 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S**
9 **LONG-TERM DEBT COST RATES?**

10 A. I recommend using the Company's FPFTY claimed 4.71% cost of long-term debt
11 for water and wastewater operations, as well as the 2.20% cost rate for the
12 wastewater-specific long-term debt.

13
14 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE**
15 **COMPANY'S CLAIMED COST RATES OF LONG-TERM DEBT?**

16 A. The Company's claimed cost rates of long-term debt are based on the projected
17 actual cost rates, and they are representative of the water industry. The 4.71%
18 long-term debt cost falls within my proxy group's 2024 implied long-term debt
19 cost range of 3.95% to 6.21% and it is below the average implied long-term debt
20 cost of 4.99%,²⁷ while the 2.20% wastewater-specific long-term debt cost falls
21 below that same range. The Mergent Bond Record shows an average yield of

²⁶ PAWC Statement No. 13, p. 70, lines 2-10.

²⁷ I&E Exhibit No. 2, Schedule 5.

5.77% (January through December 2025) for A-rated public utility bonds.²⁸

Therefore, I recommend applying the Company's claimed cost rates of long-term debt for water and wastewater operations as they are reasonable and fall within or below the metrics described above.

COST OF COMMON EQUITY

COMMON METHODS

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

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

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

A. The DCF method is the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. The DCF method assumes that investors evaluate stocks in the traditional economic framework, which maintains that the value of a financial asset is determined by its earning power, or its ability to generate future cash flows. The DCF method is also considered as a forward-looking model to estimate the cost of common equity.

²⁸ I&E Exhibit No. 2, Schedule 5.

Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?

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

Q. WHAT IS THE THEORETICAL BASIS FOR THE RP METHOD?

A. The theoretical basis for the RP method is a simplified version of the CAPM. The RP method's theory is that common stock is riskier than debt, thus, investors require a higher expected return on stocks than bonds. In the RP approach, the cost of equity is made up of the cost of debt and a risk premium. While the CAPM uses the market risk premium, it also directly measures the systematic risk of a company or proxy group through the use of beta. The RP method does not measure the specific risk of a company.

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

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

9
10 **I&E RECOMMENDED METHOD TO EMPLOY**

11 **Q. WHAT METHOD DO YOU RECOMMEND IN DETERMINING AN**
12 **APPROPRIATE COST OF COMMON EQUITY FOR THE COMPANY?**

13 A. I typically recommend using the DCF method as the primary method to determine
14 the cost of common equity and present a CAPM analysis to be used as a check
15 upon the reasonableness of the DCF derived return on equity (ROE). This is
16 because the DCF method has the most wide-spread regulatory acceptance.
17 However, since the Commission has more recently based ROE decisions on a
18 combination of the DCF and CAPM methods, in this proceeding I am
19 recommending the use of the DCF and CAPM methods as the primary methods to
20 determine the cost of common equity.

1 **Q. PLEASE EXPLAIN WHY YOU CHOSE TO EMPLOY THE DCF TO**
2 **DETERMINE YOUR RECOMMENDED RETURN ON EQUITY.**

3 A. I have used the DCF as one of the primary methods for several reasons. First, the
4 DCF is appealing to investors as it is based on the concept that the receipt of
5 dividends in addition to the expected appreciation is the total return requirement
6 determined by the market.²⁹ Second, the use of a growth rate and expected
7 dividend yield are also strengths of the DCF, as this recognizes the time value of
8 money and is forward-looking. Third, the use of the utility's own, or in this case,
9 the proxy group's stock prices and growth rates directly in the calculation also
10 causes the DCF to be industry and company specific. Finally, current inflationary
11 and economic trends are most certainly reflected in a stock's price, which is used
12 in determining the dividend yield, and by analysts who generate forecasted
13 earnings growth rates. Therefore, the DCF contains the most up-to-date projected
14 information of any model and is the superior method for determining the rate of
15 return for the current economic market because it measures the cost of equity
16 directly.

²⁹ David C. Parcell, "The Cost of Capital - A Practitioner's Guide," 2020 Edition, p. 153.

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

3 A. Considering the most recent Commission’s orders in base rate proceedings³⁰ that
4 relied on I&E’s DCF and CAPM analyses results in determining the appropriate
5 ROE, I have considered the CAPM with the DCF as a basis for my
6 recommendation in this proceeding. Additionally, both the CAPM and the DCF
7 include inputs that allow the results to be specific to the utility industry. However,
8 the CAPM is based on the performance of U.S. Treasury bonds and the
9 performance of the market as measured through the S&P 500 and is company-
10 specific through the use of beta. Beta reflects a stock's volatility relative to the
11 overall market, thereby incorporating an industry-specific aspect to the CAPM as a
12 measure of how reactive the industry is compared to the market as a whole.
13 Although changes in the utility industry are more likely to be accurately reflected
14 in the DCF, which uses the companies’ actual prices, dividends, and growth rates,
15 I have considered the results of my CAPM analysis because changes in the market,
16 whether as a whole or specific to the utility industry, affect the outcome of each
17 method in different ways. Although I have considered the results of the CAPM, it
18 does have several disadvantages.

³⁰ *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. EXPLAIN THE DISADVANTAGES OF THE CAPM.**

2 A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give
3 results that indicate to an investor what the equity cost rate should be if current
4 economic and regulatory conditions are the same as those present during the
5 historical period in which the risk premiums were determined. This is because
6 beta, which is the only company-specific variable in the CAPM model, measures
7 the *historical* volatility of a stock compared to the *historical* overall market return.
8 Although the CAPM and RP results can be useful to investors in making rational
9 buy and sell decisions within their portfolios, the DCF method is the superior
10 method for determining the rate of return for the current economic market and
11 measuring the forward-looking cost of equity directly. The CAPM and the RP
12 methods are less reliable indicators because they measure the cost of equity
13 indirectly and risk premiums vary depending on the debt and equity being
14 compared. Additionally, regulators can never be certain that economic and
15 regulatory conditions underlying the historical period during which the risk
16 premiums were calculated are the same today or will be the same in the future.

17
18 **Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE RP**
19 **METHOD FROM YOUR ANALYSIS.**

20 A. The RP method is excluded because it is a simplified version of the CAPM and is
21 subject to the same faults explained above, but it is even less company-specific
22 than the CAPM. The RP method has a number of underlying assumptions and the
23 most critical one, as well as the most disputed one, is the assumption that the

equity risk premium is constant over the time.³¹ Most importantly, unlike the CAPM, the RP method does not recognize or measure the company-specific risk through beta.

Q. EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE CE METHOD IN YOUR ANALYSIS.

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

SUMMARY OF THE COMPANY'S RESULTS

Q. WHAT ARE THE RESULTS OF THE COMPANY'S COST OF EQUITY ANALYSES?

A. Ms. Bulkley employed the Constant Growth DCF, CAPM, and Empirical Capital Asset Pricing Model (ECAPM) methods in analyzing the Company's cost of equity.³² Ms. Bulkley opines that a range for the authorized ROE from 10.25% to 11.25% is reasonable because it considers both the low and high end range of results of her analytical models.³³ Ultimately, she claims an ROE of 10.95% is reasonable and appropriate as it recognizes the Company's current market

³¹ David C. Parcell, "The Cost of Capital - A Practitioner's Guide," 2020 Edition, pp. 167-168.

³² PAWC Statement No. 13, p. 30, lines 5-6.

³³ PAWC Statement No. 13, p. 6, lines 5-8.

conditions, and the Company's relative risk, and strong management performance.³⁴

I&E RECOMMENDATION

Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR PAWC?

A. Based upon my analysis, I recommend a cost of common equity of 9.80% (10.09% DCF + 9.51% Composite CAPM) ÷ 2)) for both the Water and Wastewater Operations.³⁵ The 9.51% composite CAPM is the average of 9.96% traditional CAPM and the 9.05% Kroll CAPM results.³⁶

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. As explained above, in this proceeding my recommendation is based on the use of the DCF and CAPM methods for the cost of equity that is more consistent with the recent Commission orders in base rate proceedings.

DISCOUNTED CASH FLOW

Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.

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

$$K = D_1 / P_0 + g$$

³⁴ PAWC Statement No. 13, p. 6, lines 8-10.

³⁵ I&E Exhibit No. 2, Schedule 1.

³⁶ I&E Exhibit No. 2, Schedule 13.

Where:

K = Cost of equity

D_1 = Dividend expected during the year

P_0 = Current price of the stock

g = Expected growth rate

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

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

A. A representative dividend yield must be calculated over a time frame that avoids the problems of both short-term anomalies and stale data series. For my DCF analysis, the dividend yield calculation places equal emphasis on the most recent spot and the 52-week average dividend yields. The following table summarizes my dividend yield computations for the proxy group:³⁷

Proxy Group - Average Dividend Yields	
(a) Spot Dividend Yield	3.03%
(b) 52-week Average Dividend Yield	2.88%
(c) Average $((a + b) \div 2)$	2.96%

³⁷ I&E Exhibit No. 2, Schedule 6.

1 **Q. WHAT INFORMATION DID YOU RELY ON TO DETERMINE YOUR**
2 **EXPECTED GROWTH RATE?**

3 A. I have used five-year projected growth rate estimates from independent and
4 reputable analyst groups, i.e., Value Line, S&P, and Zacks.
5

6 **Q. WHAT WERE THE RESULTS OF YOUR FORECASTED EARNINGS**
7 **GROWTH RATES?**

8 A. The expected average growth rates for my proxy group ranged from 6.12% to
9 9.03% with an overall average of 7.13%.³⁸
10

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

13 A. The results of my DCF analysis are calculated as follows:³⁹

K	=	D₁/P₀	+	g
10.09%	=	2.96%	+	7.13%

14
15
16 **CAPITAL ASSET PRICING MODEL**

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

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

19
$$K = R_f + \beta(R_m - R_f)$$

³⁸ I&E Exhibit No. 2, Schedule 7.

³⁹ I&E Exhibit No. 2, Schedule 8.

Where:

K = Cost of equity

R_f = Risk-free rate of return

R_m = Expected rate of return on the overall stock market

B = Beta measures the systematic risk of an asset

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

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

1 **Q. HOW DID YOU DETERMINE YOUR BETA FOR YOUR CAPM**
2 **ANALYSIS?**

3 A. In estimating an equity cost rate for my proxy group companies, I used the average
4 of the betas for the proxy group companies as provided in the Value Line
5 Investment Survey. The average beta for my proxy group is 0.78.⁴⁰

7 **Q. WHAT RISK-FREE RATE OF RETURN HAVE YOU USED IN YOUR**
8 **FORECASTED CAPM ANALYSIS?**

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

⁴⁰ I&E Exhibit No. 2, Schedule 9.

Treasury Note as the superior measure of the risk-free rate of return.⁴¹

The forecasted yield on the 10-year Treasury Note, as seen in Blue Chip Financial Forecasts, is expected to remain at 4.10% from the first quarter of 2026 through the first quarter of 2027, and it is forecasted to be 4.20% for the period 2027-2031.⁴² For my CAPM analysis, I used 4.12%, which is the average of all the yield forecasts I observed.⁴³

Q. HOW DID YOU DETERMINE THE RETURN ON THE OVERALL STOCK MARKET EMPLOYED IN YOUR FORECASTED CAPM ANALYSIS?

A. To arrive at a representative expected return on the overall stock market, I observed Value Line's 1700 stocks and the S&P 500. Value Line expects its universe of 1700 stocks to have an average yearly return of 10.88% over the next three to five years based on a forecasted dividend yield of 2.10% and a yearly index appreciation of 40%.⁴⁴ The S&P 500 index has an average yearly return of 12.35% over the past 100 years (1926-2025).⁴⁵ I have averaged these two figures,

⁴¹ *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*, p. 234.

⁴² Blue Chip Financial Forecasts, Vol. 45, No. 1, December 30, 2025, p. 2 and Vol. 44, No. 12, December 1, 2025, p. 14.

⁴³ I&E Exhibit No. 2, Schedule 10.

⁴⁴ I&E Exhibit No. 2, Schedule 11.

⁴⁵ I&E Exhibit No. 2, Schedule 12.

which results in an estimated or expected market return of 11.61% $((10.88\% + 12.35\%) \div 2)$.⁴⁶

Q. WHAT IS THE COST OF EQUITY RESULT FROM YOUR TRADITIONAL CAPM ANALYSIS?

A. The result of my CAPM analysis is as follows:⁴⁷

K	=	R _f	+	β(R _m - R _f)
9.96%	=	4.12%	+	0.78 (11.61% - 4.12%)

Q. HAVE YOU PROVIDED AN ADDITIONAL CAPM ANALYSIS?

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

Q. WHAT IS KROLL'S CURRENT RECOMMENDED ERP?

A. As of September 3, 2025, Kroll recommends an ERP of 5.50%.⁴⁸

⁴⁶ I&E Exhibit No. 2, Schedule 11.

⁴⁷ I&E Exhibit No. 2, Schedule 13.

⁴⁸ <https://edge.sitecorecloud.io/krollllc17bf0-kroll6fee-proda464-0e9b/media/Cost-of-Capital/kroll-cost-of-capital-updated-inputs-to-reflect-heightened-uncertainty-in-global-economy.pdf> (accessed on January 8, 2026).

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

A. As of January 7, 2026, the 20-Year U.S. Treasury yield was 4.76%.⁴⁹

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

A. The result of my analysis using Kroll's recommended ERP and the 20-Year U.S. Treasury yield as risk-free rate are as follows:⁵⁰

K	=	Rf	+	β (ERP)
9.05%	=	4.76%	+	0.78 (5.50%)

Q. WHAT IS THE RESULT OF YOUR COMPOSITE CAPM ANALYSIS RESULTS BASED ON THE AVERAGE OF TRADITIONAL CAPM AND CAPM USING KROLL'S ERP?

A. The average of my CAPM analyses is 9.51% $((9.96\% + 9.05\%) \div 2)$.⁵¹

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

A. Yes. As discussed above, and as I&E has historically reasoned, a recommended cost of equity based solely on the DCF analysis would be preferable because the DCF includes a spot stock price in the dividend yield calculation and analysts who

⁴⁹ I&E Exhibit No. 2, Schedule 13.

⁵⁰ I&E Exhibit No. 2, Schedule 13.

⁵¹ I&E Exhibit No. 2, Schedule 13.

1 generate forecasted earnings growth almost certainly take inflation into
2 consideration as well, so it contains the most up-to-date projected information of
3 any model. In other words, the inputs of the DCF capture all known economic
4 factors, including inflation. However, in the interest of capturing the
5 Commission's recently preferred use of more than one model for the appropriate
6 ROE, I am recommending an average of the DCF and CAPM in this proceeding.
7

8 **CRITIQUE OF MS. BULKLEY'S PROPOSED COST OF EQUITY**

9 **Q. DO YOU AGREE WITH MS. BULKLEY'S PROPOSED COST OF** 10 **EQUITY?**

11 A. No. I disagree with Ms. Bulkley's proposed cost of equity analysis for several
12 reasons. First, I take issue with certain aspects of her discussion on capital market
13 conditions and her application of the DCF, CAPM, and ECAPM in determining a
14 ROE for PAWC. Additionally, I disagree with the purported claimed risks
15 resulting from the Company's capital expenditure program and adherence to
16 environmental and water quality regulations. Finally, I disagree with Ms.
17 Bulkley's recommendation to include an implied adjustment (unquantified) to the
18 cost of equity for stock flotation costs and her recognition of exemplary
19 management performance.

1 **CAPITAL MARKET CONDITIONS**

2 **Q. WHAT IS MS. BULKLEY’S POSITION REGARDING CURRENT**
3 **CAPITAL MARKET CONDITIONS?**

4 A. Ms. Bulkley claims that the capital market conditions influence cost of equity
5 models by affecting inputs in the model at the time the analysis is performed.
6 While the ROE that is established in a rate proceeding is intended to be forward-
7 looking, the analyst uses current and projected market data, specifically stock
8 prices, dividends, growth rates and interest rates, in the models to estimate the
9 required return for the subject company.⁵² She asserts that it is important to
10 consider projected market data to estimate the return of the forward-looking
11 period.⁵³ She discusses historic core inflation and the labor market trend for the
12 period January 2019 through September 2025 and the Federal Reserve inflation
13 target of 2%⁵⁴ and historic interest rate cuts through October 2025.⁵⁵

15 **Q. SUMMARIZE MS. BULKLEY’S COMMENTS REGARDING THE**
16 **IMPACT OF CURRENT MARKET CONDITIONS ON THE COST OF**
17 **EQUITY.**

18 A. Ms. Bulkley opines that long-term interest rates would remain elevated and are
19 expected to continue to remain elevated due to inflationary policies such as tariffs,
20 immigration policy, and tax cuts. With long-term interest rates expected to remain

⁵² PAWC Statement No. 13, p. 12 lines 3-8.

⁵³ PAWC Statement No. 13, p. 12 lines 14-15.

⁵⁴ PAWC Statement No. 13, p. 12, line 16 through p. 14, line 1.

⁵⁵ PAWC Statement No. 13, p. 14, line 2 through p. 16, line 15.

1 relatively high, borrowing would also remain relatively more expensive, and
2 therefore, the cost of capital would be impacted. As a result, investors would
3 demand a higher cost of equity over the near term.⁵⁶
4

5 **Q. PLEASE COMMENT ON MS. BULKLEY’S CONCERNS REGARDING**
6 **CURRENT MARKET CONDITIONS.**

7 A. First, despite the fact that interest rates have been coming down gradually,⁵⁷ I
8 cannot dispute the recent economic conditions with respect to higher interest rates
9 and government bond yields; however, it is important to note that all companies,
10 including regulated utilities, are impacted by higher interest rates. Second, I
11 disagree with Ms. Bulkley’s speculative statement that long-term interest rates are
12 expected to remain relatively high and borrowing would also remain relatively
13 more expensive in the future. Most recently at the Federal Open Market
14 Committee (FOMC) meeting held on December 10, 2025, the Federal Reserve has
15 made a third interest rate cut in 2025⁵⁸ and further rate cuts are likely in 2026-
16 2027. With respect to inflation rates, per the most recent monthly Blue Chip
17 Financial Forecasts (December 30, 2025),⁵⁹ the inflation rates for 2026 and the
18 first two quarters of 2027 are forecasted to be in the range of 2.1% to 2.9% as
19 shown in the table below:

⁵⁶ PAWC Statement No. 13, p. 19, line 17 through p. 20, line 2.

⁵⁷ <https://www.msn.com/en-us/money/economy/here-s-when-the-federal-reserve-is-expected-to-cut-interest-rates-in-2026-and-what-it-means-for-the-stock-market/ar-AA1TAHGV?ocid=BingNewsVerp> (accessed on January 20, 2026).

⁵⁸ <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 January 8, 2026).

⁵⁹ Blue Chip Financial Forecasts, Vol. 45, No. 1, December 30, 2025, p. 2.

	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027	Q2 2027
Consumer Price Index	2.9%	2.6%	2.5%	2.5%	2.4%	2.3%
PCE Price Index	2.9%	2.5%	2.4%	2.3%	2.3%	2.1%

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

Accordingly, PAWC has been taking advantage of FPFTY ratemaking by filing frequent base rate cases at regular intervals, particularly with increased inflation and capital costs due to the COVID-19 pandemic since the 2020 rate case filing as shown in the table below:

Base Rate Case Docket Nos.	Filing Date	Filing Interval - Months	Rate Increase (\$ and %)
R-2025-3057983 and 3058051	November 14, 2025	24 months	\$168.72M 14.6%
R-2023-3043189 and 3043190	November 8, 2023	18 months	\$182.82M 18.1%
R-2022-3031672 and 3031673	April 29, 2022	24 months	\$173.18M 20.8%
R-2020-3019369 and 3019371	April 29, 2020	36 months	\$138.60M 18.7%
R-2017-2595853	April 28, 2017	48 months	\$107.93M 16.4%
R-2013-2355276	April 30, 2013	--	\$58.60M 10.1%

Furthermore, utilities have the option to file petitions and rate cases with the Commission for increases in costs, unforeseen situations, or extraordinary circumstances that might occur.

DCF ANALYSIS

Q. PLEASE SUMMARIZE MS. BULKLEY’S CONSTANT GROWTH DCF ANALYSIS.

A. Ms. Bulkley calculates the dividend yield in her Constant Growth DCF model based on the combined (gas and water) proxy group companies’ current annual dividend and average closing stock prices over the 30-, 90-, and 180-trading days as of September 30, 2025.⁶⁰ She then applies one-half of the expected annual dividend growth rate for purpose of calculating the expected dividend yield component of the DCF model.⁶¹ Using three variation of five-year average forecasted growth rate (at minimum, average, and maximum) of Value Line, S&P Capital, and Zacks, she calculates average DCF results as shown in the table below:⁶²

	Minimum Growth Rate	Mean Growth Rate	Maximum Growth Rate
30-day Average Stock Price	9.78%	10.39%	11.05%
90-day Average Stock Price	9.83%	10.43%	11.10%
180-day Average Stock Price	9.84%	10.45%	11.12%
Average of DCF Results	9.82%	10.42%	11.09%

⁶⁰ PAWC Statement No. 13, p. 34, lines 18-20.

⁶¹ PAWC Statement No. 13, p. 35, lines 10-12.

⁶² PAWC Statement No. 13, p. 38, lines 4-6 and PAWC Exhibit No. 13-A, Schedule 1.

1 **Q. SUMMARIZE THE ISSUES YOU HAVE WITH MS. BULKLEY’S DCF**
2 **ANALYSIS.**

3 A. As previously discussed in the “*Proxy Group*” section above regarding my
4 opposition to Ms. Bulkley’s inclusion of gas utilities with water utilities in her
5 proxy group analysis, the primary issue I have with Ms. Bulkley’s DCF analysis is
6 her using the combined proxy group data, which inflates her DCF results. I have
7 recalculated her DCF analysis eliminating data pertaining to gas utilities, which
8 reflects her DCF analysis results of similarly situated water utilities (only) proxy
9 group, which is summarized below:⁶³

	Minimum Growth Rate	Mean Growth Rate	Maximum Growth Rate
30-day Average Stock Price	9.10%	9.74%	10.38%
90-day Average Stock Price	9.09%	9.72%	10.36%
180-day Average Stock Price	9.07%	9.70%	10.34%
Average of DCF Results	9.09%	9.72%	10.36%
Mean of Average Results	9.72%		

10
11 In my view, Ms. Bulkley undermines the purpose of using a proxy group by
12 including dissimilar gas utilities’ higher DCF results in her ROE analysis and
13 produces inappropriately skewed higher average DCF results of the combined
14 proxy group. Again, the purpose of a proxy group is to employ a group of
15 similarly situated companies with corresponding risks and uncertainties, in this
16 case, water utilities, to smooth out any anomalous data points in the ROE analysis.

⁶³ I&E Exhibit No. 2, Schedule 14.

1 **Q. WHAT IS YOUR CONCLUSION REGARDING MS. BULKLEY'S DCF**
2 **ANALYSIS?**

3 A. The overall average result of my recalculation yields a DCF result of 9.72%
4 $((9.74\% + 9.72\% + 9.70) \div 3)$ for the proxy group of water utilities after
5 removing all gas distribution utilities, which is lower than my DCF result of
6 10.09%.

7
8 **CAPM ANALYSIS**

9 **Q. PLEASE SUMMARIZE MS. BULKLEY'S CAPM ANALYSIS.**

10 A. Ms. Bulkley performs several variations of analyses for her CAPM and ECAPM.⁶⁴
11 She provides six CAPM, including ECAPM, analyses results using three risk-free
12 rates: (a) the current 30-day average yield on 30-year U.S. Treasury Bonds, (2) the
13 near term projected 30-year U.S. Treasury Bond yield for Q1-2026 through Q1-
14 2027, and (3) the long term projected 30-year U.S. Treasury Bond yield for 2027-
15 2031 and applying two subsets of Value Line beta.⁶⁵ She calculates the expected
16 return on the S&P 500 Index for each company in the entire S&P 500 Index
17 applying the Constant DCF model based on data published by Bloomberg
18 Professional.⁶⁶ Finally, Ms. Bulkley includes an ECAPM analysis paired with
19 each result of her standard CAPM analysis for the combined proxy group
20 companies.⁶⁷

⁶⁴ PAWC Exhibit No. 13-A, Schedule 6.

⁶⁵ PAWC Statement No. 13, p. 40, line 16 through p. 41, line 10.

⁶⁶ PAWC Statement No. 13, p. 41, line 12-17.

⁶⁷ PAWC Statement No. 13, p. 42, line 8 through p. 43, line 19.

1 **Q. WHAT ARE THE RESULTS OF MS. BULKLEY’S CAPM AND ECAPM**
2 **ANALYSIS?**

3 A. Ms. Bulkley’s CAPM and ECAPM analyses results are summarized in the table
4 below:⁶⁸

30-Year Treasury Bond Yield			
	Current 30- Day Avg.	Near-term Projected	Longer- term Projected
CAPM using Current Beta	11.40%	11.36%	11.31%
CAPM using Long-Term Avg. Beta	11.24%	11.20%	11.15%
ECAPM using Current Beta	11.88%	11.86%	11.82%
ECAPM using Long-Term Avg. Beta	11.77%	11.74%	11.70%

5
6
7 **Q. SUMMARIZE THE ISSUES YOU HAVE WITH MS. BULKLEY’S CAPM**
8 **ANALYSIS.**

9 A. Aside from the improper inclusion of gas utilities in her analysis, which I disputed
10 above, I disagree with Ms. Bulkley’s CAPM analysis using 30-year U.S. Treasury
11 Bond yields for the risk-free rate, market risk premium, and inclusion of the
12 ECAPM analysis results.

⁶⁸ PAWC Statement No. 13, p. 44, lines 2-5.

1 **Q. DISCUSS YOUR DISAGREEMENT WITH MS. BULKLEY’S RISK-FREE**
2 **RATE.**

3 A. As stated earlier, long-term Treasury Bonds have substantial maturity risk
4 associated with the market risk and the risk of unexpected inflation and normally
5 offer higher yields to compensate investors for these risks. Using the 10-year
6 Treasury Note is more appropriate to balance the short-term volatility risk and the
7 long-term inflation risk. Ms. Bulkley acknowledges that the Commission relied
8 on I&E’s CAPM including I&E’s risk-free rate (i.e., the 10-year Treasury Note)
9 and the market return in PAWC’s prior rate case at Docket Nos. R-2023-3043189
10 and 3043190⁶⁹ and determined the authorized return of 9.45% by averaging I&E’s
11 DCF (8.44%) and CAPM (10.44%) results.⁷⁰

12 In the 2017 UGI Utilities base rate proceeding, the Commission recognized
13 the 10-year Treasury Note as the superior measure for the risk-free rate by stating
14 the following,⁷¹

15 We agree with I&E and the ALJs that using the yield on the
16 10-year Treasury Note provides a better measure of the risk-
17 free rate of return than using the yield on the 30-year Treasury
18 Bond, as recommended by UGI. In our view, using the 10-year
19 Treasury Note balances the shortcomings of the short-term T-
20 Bill and the 30-year Treasury Bond. Although long-term
21 Treasury Bonds have less risk of being influenced by federal
22 policies, they have substantial maturity risk associated with the
23 market risk. In addition, long-term Treasury Bonds bear the
24 risk of unexpected inflation.

⁶⁹ PAWC Statement No. 13, p. 44, lines 9-10.

⁷⁰ PAWC Statement No. 13, p. 45, lines 7-8.

⁷¹ *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 99.

1 Additionally, in the 2021 Aqua Pennsylvania base rate proceeding
2 the Commission recognized,⁷²

3 I&E's CAPM model uses forecasted yields on ten-year
4 Treasury bonds, and accordingly, its methodology captures
5 forward-looking changes in interest rates.

6 Notably, in the most recent 2025 Columbia base rate proceeding, the Commission
7 determined an appropriate ROE using informed judgment based on I&E's DCF
8 and CAPM methodologies⁷³ including the average of I&E's traditional CAPM and
9 Kroll's CAPM results. As discussed above, I&E's traditional CAPM uses the 10-
10 year Treasury Note yield as the risk-free rate and Kroll's CAPM uses the 20-year
11 Treasury Bond yield as the risk-free rate and Kroll's forecasted market risk
12 premium.

13
14 **Q. WHAT IS THE ECAPM?**

15 A. The ECAPM is a modified version of the CAPM which attempts to address the
16 belief that the actual risk versus return correlation is flatter than what is predicted
17 by the CAPM. The implication is that the CAPM underestimates returns with
18 lower levels of risk and over-estimates the returns associated with higher levels of
19 risk. The ECAPM entails assigning 25% weight to the market beta (1.0) and 75%
20 weight to the individual company or proxy group beta.⁷⁴

⁷² *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 154 (Order Entered May 16, 2022).

⁷³ *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. 225-226 and 234.

⁷⁴ David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 104.

1 **Q. EXPLAIN YOUR DISAGREEMENT WITH MS. BULKLEY’S USE OF**
2 **THE ECAPM.**

3 A. Using the ECAPM in estimating the cost of capital does not increase the validity
4 of the result, but instead it injects another measure of subjectivity into the CAPM
5 in an attempt to make the Security Market Line more accurate. The ECAPM
6 reduces the purpose of the beta, which is the only company-specific variable in the
7 CAPM model. This additional layer of subjectivity provides an even stronger
8 basis to rely on the DCF as the primary method to calculate a utility’s cost of
9 equity.

10 Additionally, in the Columbia base rate proceeding, the Commission did
11 not consider Columbia’s ECAPM and RP analyses results in determining an
12 appropriate ROE.⁷⁵ Based on my information the Commission has not specifically
13 considered ECAPM results in determining a cost of equity in the past ten years. In
14 response to I&E-RR-10-D, Ms. Bulkley states that she has not conducted
15 exhaustive research on the acceptance of the ECAPM by regulatory commissions
16 across the United States, however she states that she is aware that the ECAPM has
17 been accepted by the New York Public Service Commission and North Carolina
18 Utilities Commission.⁷⁶

⁷⁵ 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. 225-226.

⁷⁶ I&E Exhibit No. 2, Schedule 15.

1 **BUSINESS RISKS**

2 **Q. SUMMARIZE MS. BULKLEY’S CLAIMS REGARDING THE**
3 **COMPANY’S BUSINESS RISKS.**

4 A. Ms. Bulkley explains that PAWC will spend approximately \$3.50 billion on
5 capital investments during the period 2026 to 2030, which includes significant
6 investment to replace aging infrastructure and to comply with various
7 regulations.⁷⁷ She claims that the additional pressure on cash flows associated
8 with high levels of capital expenditures exerts corresponding pressure on credit
9 metrics and credit ratings.⁷⁸

10
11 **Q. DO YOU AGREE WITH MS. BULKLEY’S CONCERNS REGARDING**
12 **THE COMPANY’S HIGH LEVEL OF CAPITAL EXPENDITURES OVER**
13 **THE NEXT FEW YEARS?**

14 A. Not entirely. While I accept that the Company makes substantial capital
15 investments and as usual will continue its capital expenditure program in the
16 coming years, this is not unique to PAWC. It is common knowledge that the
17 entire water industry must cope with aging infrastructure, which positions all
18 water companies in her proxy group in a similar situation. Additionally, Ms.
19 Bulkley acknowledges that there are several positive aspects of Pennsylvania
20 regulation that render PAWC somewhat less risky than the proxy group as a
21 whole.⁷⁹ This signifies that PAWC faces similar risks associated with cost

⁷⁷ PAWC Statement No. 13, p. 47, lines 16-19.

⁷⁸ PAWC Statement No. 13, p. 47, lines 20-21.

⁷⁹ PAWC Statement Np. 13, p. 47, lines 6-8.

1 recovery related capital investment/expenditures as compared to the water utilities
2 in her proxy group.

3
4 **Q. DO YOU AGREE WITH MS. BULKLEY’S CONCERN REGARDING THE**
5 **COMPANY’S CREDIT RATING RISK DUE TO CAPITAL**
6 **EXPENDITURES OR THE INVESTMENT PLAN?**

7 A. No. The Commission does encourage efficiency and savings in costs where
8 possible to reduce expenses and allows the opportunity for utilities to recover the
9 full true cost of doing business. Pennsylvania utilizes various mechanisms to
10 assist utilities in recovering costs and earning fair returns. Ms. Bulkley agrees that
11 the distribution system improvement charge (DSIC) mechanism is a positive
12 regulatory mechanism for capital expenditure recovery.⁸⁰ The DSIC mechanism
13 reduces regulatory lag in capital cost recovery. In addition to the DSIC,
14 Pennsylvania jurisdictional utilities, including PAWC, have the advantage of
15 FPFTY ratemaking, which allows utilities to recover forecasted expenses and
16 capital expenditure costs, and anticipate future anomalous events. Accordingly,
17 PAWC has taken advantage of the FPFTY for ratemaking by filing base rate cases
18 at regular intervals as discussed above. Succinctly, PAWC has regularly filed rate
19 cases for recovery of increasing costs, and four rate cases have been filed during
20 the period 2020-2025, which reduces PAWC’s business and financial risks.
21 Furthermore, utilities have the option to file petitions and rate cases with the

⁸⁰ PAWC Statement No. 13, p. 49, lines 10-11.

Commission should unforeseen or extraordinary circumstances occur. In short, the DSIC mechanism, the option to use an FPFTY, and base rate case filings in general are risk-reduction mechanisms available to PAWC that mitigate pressure on cash flows and alleviate concerns about potential credit rating risks.

Q. SUMMARIZE PAWC’S HISTORIC CAPITAL EXPENDITURES FOR THE PERIOD 2021-2025.

A. PAWC’s proposed capital expenditure program of \$3.50 billion (\$3,541.52 million) over the five-year period (2026-2030)⁸¹ is not unique, unusual or extraordinary because, historically, PAWC has been making significant capital expenditures as shown in the table below:⁸²

Fiscal year ended June 30	Water Ops.	Wastewater SSS Ops.	Wastewater CSS Ops.	Total
2021	\$314.60M	\$23.63M	\$35.11M	\$373.34M
2022	\$404.02M	\$38.06M	\$43.78M	\$485.86M
2023	\$555.30M	\$43.10M	\$96.11M	\$694.51M
2024	\$597.21M	\$31.99M	\$59.60M	\$688.80M
2025	\$484.52M	\$28.44M	\$25.87M	<u>\$538.83M</u>
			Total	<u>\$2,781.34M</u>

Additionally, it is speculative to assume that PAWC would fully spend its budgeted capital expenditures on a yearly basis (2026-2030). Notably, PAWC

⁸¹ I&E Exhibit No. 2, Schedule 16, p. 3.

⁸² I&E Exhibit No. 2, Schedule 16, p. 2.

1 does experience underspending of its budgeted capital expenditures, as shown in
2 the table:⁸³

Fiscal year ended June 30	Budget	Actual	Variance
2021	\$397.09M	\$373.34M	(\$23.75 M)
2022	\$511.08M	\$485.86M	(\$25.22M)
2023	\$659.28M	\$694.51M	\$35.23M
2024	\$681.46M	\$688.80M	\$7.34M
2025	\$701.22M	\$538.83M	(\$162.39M)

3
4
5 **Q. WHAT ARE THE CREDIT RATINGS OF PAWC AND AWK?**

6 A. Despite PAWC's consistent capital expenditure spending, it is important to note
7 that PAWC and its parent company, AWK, have consistently maintained their
8 credit ratings between 2020 and 2024, with yearly credit reviews by rating
9 agencies as shown in table below:⁸⁴

2020-2024	PAWC	AWK
Moody's Investors	A3 (Stable Outlook)	Baa1 (Stable Outlook)
S&P Global	A (Stable Outlook)	A (Stable Outlook)

10
11 Therefore, Ms. Bulkley's concerns regarding pressure on credit metrics and
12 potential credit rating risk due to the capital expenditure program (2026-2030) are

⁸³ I&E Exhibit No. 2, Schedule 16, p. 2.

⁸⁴ PAWC Filing, Volume 7, FR VII.17, p. 51

speculative and unsupported. Ms. Bulkley’s unfounded concerns do not support or justify PAWC’s claim for a higher cost of equity.

Q. PLEASE CONTINUE.

A. Despite the historically consistent increase in capital investment as shown in the table above, PAWC has demonstrated consistently improved financial results or increases in operating revenues, operating income, net income, and net utility plant (rate base) year over year as reported in the PUC Annual Reports (2020-2024) for water and wastewater operations, as summarized in the tables below:⁸⁵

Water Operations:

Fiscal Year ended December 31	Operating Revenue	Operating Income
2020	\$662.03M	\$246.82M
2021	\$686.62M	\$278.70M
2022	\$711.79M	\$281.10M
2023	\$807.90M	\$288.35M
2024	\$869.05M	\$316.47M

⁸⁵ [Document Search | PA PUC](#) (accessed on December 18, 2025).

Wastewater Operations:

Fiscal Year ended December 31	Operating Revenue	Operating Income
2020	\$71.03M	\$28.18M
2021	\$82.95M	\$31.44M
2022	\$106.61M	\$40.54M
2023	\$157.33M	\$83.00M
2024	\$170.09M	\$88.06M

Water Operations - Net Utility Plant:

2020	2021	2022	2023	2024
\$4,540.38M	\$4,739.56M	\$5,041.65M	\$5,465.88M	\$5,923.78M

Wastewater Operations - Net Utility Plant:

2020	2021	2022	2023	2024
\$786.72M	\$850.03M	\$1,158.65M	\$1,271.73M	\$1,556.00M

Simultaneously, the parent company, AWK has consistently improved its earnings per share as shown in the table below:⁸⁶

2020	2021	2022	2023	2024
\$3.91	\$6.95	\$4.51	\$4.90	\$5.39

⁸⁶ PAWC filing Volume 7, FR VII.05, pp. 7-8.

Notably, PAWC increased yearly dividend payments to its parent company since 2020 as shown in the table below:⁸⁷

Year	Amount	Year	Amount
2020	\$146.29M	2023	\$180.19M
2021	\$165.76M	2024	\$184.82M
2022	\$178.12M	2025*	\$98.68M

*2025 dividends are through June 30, 2025.

Similarly, AWK has consistently increased yearly dividend payments to its shareholders as shown in the table below:⁸⁸

Year	Dividend paid per stock	Year	Dividend paid per stock
2016	\$1.47	2021	\$2.36
2017	\$1.62	2022	\$2.57
2018	\$1.78	2023	\$2.78
2019	\$1.96	2024	\$3.00
2020	\$2.15	2025	\$3.25

AWK has affirmed its long-term targets, including long-term earnings per share and dividend per share compounded annual growth rates (CAGRs) of 7% to 9% as well as long-term rate base growth of 8% to 9% (including acquisitions).⁸⁹

In short, the above financial information indicates that PAWC and AWK have maintained steady and sustainable growth in financial condition mitigating

⁸⁷ PAWC filing Volume 7, FR VII.24, p. 58.

⁸⁸ <https://ir.amwater.com/stock-information/dividend-history/default.aspx> (accessed on December 18, 2025).

⁸⁹ [American Water - AMERICAN WATER REPORTS STRONG THIRD QUARTER 2025 RESULTS; AFFIRMS LONG-TERM TARGETS AND 2025 EPS GUIDANCE; INITIATES 2026 EPS GUIDANCE, REFLECTING GROWTH OF 8%; ANNOUNCED MERGER WITH ESSENTIAL UTILITIES, EXPECTED CLOSING Q1 2027](#) (accessed on December 18, 2025).

1 business and financial risks despite PAWC's increased capital expenditure
2 spending and post COVID-19 inflation in costs. There is no indication that
3 PAWC faces higher financial risks or challenges relating to volatile market
4 conditions, inflation, interest rates, changes in government policies, or general
5 economic events.

6
7 **Q. DO YOU HAVE ANY COMMENTS ON THE CURRENT FINANCIAL**
8 **STRENGTH OF PAWC AND AWK?**

9 A. Yes. Considering the sound historic financial performance and credit ratings of
10 PAWC and AWK discussed above, both companies have comfortable financial
11 profiles that enable easy access to attract or raise the required funding from the
12 capital market for PAWC's capital expenditure program. There is no evidence
13 that these companies face challenges to raise necessary long-term funding for
14 capital expenditure programs as well as for the acquisition of small water and
15 wastewater facilities. PAWC has consistently and successfully closed numerous
16 acquisitions of small water and wastewater facilities and expanded its business
17 territories. PAWC has strengthened its business and financial position and is able
18 to manage and reduce business and financial risks.

19 Additionally, if the proposed merger of AWK and Essential Utilities is
20 approved by the regulatory authorities concerned, PAWC through AWK would be
21 in a commanding position with the concentration of economic power in
22 Pennsylvania's water industry.

1 **Q. WHAT IS MS. BULKLEY’S COMMENTS CONCERNING THE**
2 **COMPANY’S DSIC?**

3 A. Ms. Bulkley briefly states that the water and wastewater DSIC allows PAWC to
4 recover the costs associated with replacing and repairing aging water and
5 wastewater infrastructure. She claims that approximately 78.00% of her proxy
6 group companies have infrastructure and capital recovery mechanisms that address
7 significant capital expenditure requirements.⁹⁰ She acknowledges that the
8 presence of the DSIC mechanism is a positive regulatory mechanism. However,
9 she claims that the DSIC mechanism does not reduce the Company’s risk in
10 relation to that of the proxy group.⁹¹

12 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S COMMENTS ABOUT**
13 **THE COMPANY’S DSIC?**

14 A. While the comparative risk to Ms. Bulkley’s proxy group companies (water and
15 gas utilities) with different jurisdictions that have implemented the infrastructure
16 and capital recovery mechanism may not change, mechanisms, such as the DSIC,
17 the FPFTY for ratemaking, and the ability to file rate cases as needed are
18 accessible to Pennsylvania’s regulated utilities to reduce that risk. Additionally,
19 these mechanisms were designed to reduce regulatory lag and assist in timely cost
20 recovery, not to replace rate case proceedings. Further, Ms. Bulkley notes that
21 S&P ranked Pennsylvania “Above Average 2” since 2019 using a scale of nine

⁹⁰ PAWC Statement No. 13, p. 49, lines 7-10.

⁹¹ PAWC Statement No. 13, p. 49, lines 10-12.

1 steps ranging from a low of “Below Average” to “Above Average,” which
2 indicates that this ranking is based on a constructive regulatory climate, relying on
3 forward test years, year-end rate base, and a reduction in regulatory lag.⁹²
4

5 **REGULATORY RISK**

6 **Q. WHAT IS MS. BULKLEY’S GENERAL DISCUSSION REGARDING** 7 **REGULATORY RISK FACED BY UTILITIES?**

8 A. Ms. Bulkley discusses in general the risk-return ratemaking process, regulatory lag
9 in cost recovery, capital intensive utility operations, and the need for a reasonable
10 opportunity to earn an appropriate return on invested capital to maintain an
11 acceptable financial profile. She asserts that the authorized return should enable
12 the utility to generate the cash flow needed to meet its near-term financial
13 obligations, make the capital investments needed to maintain and expand its
14 systems, and maintain the necessary levels of liquidity to fund unexpected
15 events.⁹³ S&P and Moody’s consider the overall regulatory framework, primarily
16 the business and financial profile, regulatory stability, tariff-setting procedures,
17 etc. in establishing credit ratings.⁹⁴

⁹² PAWC Statement No. 13, p. 50, lines 11-14.

⁹³ PAWC Statement No. 13, p. 51.

⁹⁴ PAWC Statement No. 13, pp. 52-53.

1 **Q. PLEASE COMMENT ON MS. BULKLEY’S DISCUSSION REGARDING**
2 **REGULATORY RISK FACED BY UTILITIES.**

3 A. As discussed above, PAWC has consistently maintained a sound financial profile.
4 I agree that all regulated utilities (industry-wide) face regulatory risks combined
5 with business and financial risks. As such, these risks are common and not new or
6 specific to PAWC. All regulated water and wastewater utilities enjoy a monopoly
7 market franchise in the certificated territorial jurisdiction that insulates them from
8 market competition risk. Therefore, to balance the public interest, regulatory
9 oversight is necessary. All water utilities providing water and/or wastewater
10 services are required and expected to comply with all applicable statutory (federal,
11 state, and local) rules and regulations for doing business within the framework of
12 the law. Since all regulated water and wastewater utilities must deal with
13 applicable regulations, not one water utility in Ms. Bulkley’s proxy group is riskier
14 than another in this respect. Further, operating costs associated with providing
15 safe and reliable water and wastewater service in compliance with regulations are
16 recoverable, eliminating a majority of the risks and concerns regarding this issue.

17
18 **Q. IS THERE CAUSE FOR CONCERN REGARDING THE IMPACT OF**
19 **REGULATORY RISK ON CREDIT QUALITY AND PAWC’S COST OF**
20 **EQUITY?**

21 A. No. As discussed above, regulatory risk factors faced by PAWC are industry-wide
22 realities and they are normal business risk factors managed by all water utilities in

1 the proxy group. Therefore, Ms. Bulkley’s claim for risk factors to support her
2 proposed ROE of 10.95% is not logical or appropriate.

3 Additionally, as discussed above, the risk factors discussed by Ms. Bulkley
4 would not impact the Company’s current credit ratings of “A2” with a stable
5 outlook from Moody’s Investors Service and an “A” rating with a stable outlook
6 from S&P Global. These credit ratings are considered investment grade with low
7 credit risk. In fact, in the most recent news article relating to Moody’s credit
8 opinion of August 14, 2025, Moody’s upgraded PAWC’s rating to “A2” from
9 “A3” with a stable outlook and notes,⁹⁵

10 The upgrade reflects the company's strong financial
11 performance and robust liquidity position. The rating agency
12 cited the company’s consistent earnings growth, solid cash
13 flows, and strong balance sheet as key factors contributing to
14 the upgrade [1].

15
16 Pennsylvania-American Water’s recent financial results have
17 shown a significant improvement in its operational
18 performance. The company reported a 10% increase in revenue
19 and a 15% improvement in net income for the fiscal year 2024.
20 These strong financial metrics have contributed to the
21 company's enhanced credit profile [2].
22

23 {BEGIN PROPRIETARY}

24 [REDACTED]

25 [REDACTED]
26 [REDACTED]
27 [REDACTED]
28 [REDACTED]
29 [REDACTED]

⁹⁵ <https://www.ainvest.com/news/moody-ratings-upgrades-pennsylvania-american-water-a2-2508/> (accessed on December 19, 2025).

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 {END PROPRIETARY}

12 S&P Global Ratings has performed annual review of PAWC's current credit
13 ratings on June 26, 2025.⁹⁷ Per S&P's rating component scores (assessment),
14 PAWC's scores include Business Risk: Excellent, Industry Risk: Very Low Risk,
15 Competitive Position: Excellent, Financial Risk: Intermediate, and Liquidity:
16 Adequate.

17
18 **RISK ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY**

19 **Q. WHAT IS MS. BULKLEY'S GENERAL DISCUSSION REGARDING RISK**
20 **ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY**
21 **REGULATION?**

22 A. Ms. Bulkley states that water supply utilities are subject to a complex array of
23 regulations at the federal, state, and river basin commission levels with respect to
24 water quantity, water quality, and other environmental aspects of their facilities
25 and operations.⁹⁸ She states that in addition to the requirement to make significant
26 investments to extend facilities or increase its withdrawals from existing sources

⁹⁷ <https://www.spglobal.com/ratings/en/regulatory/article/-/view/type/HTML/id/3396368> (accessed on January 5, 2026).

⁹⁸ PAWC Statement No. 13, p. 60, lines 5-7.

1 to accommodate applicants for service, there are multiple levels of authorization
2 and regulation that apply to a public water system that adds costs.⁹⁹ She relies on
3 discussion made by PAWC witness Anthony Nokovich¹⁰⁰ regarding
4 environmental regulation and risks associated with water and wastewater systems
5 and briefly narrates federal and state environmental regulation compliance
6 requirements.¹⁰¹

7
8 **Q. WHAT IS MS. BULKLEY'S CONCLUSION WITH RESPECT TO THE**
9 **EFFECT OF THE RISK ASSOCIATED WITH ENVIRONMENTAL**
10 **REGULATIONS AND WATER QUALITY REGULATIONS ON PAWC'S**
11 **COST OF EQUITY?**

12 A. Ms. Bulkley claims that PAWC has significant risk and uncertainty associated
13 with environmental and water quality regulations, and the recovery of costs to
14 comply with those regulations.¹⁰² She then states that environmental regulation
15 risk factors are faced by electric and natural gas utilities in the proxy group and the
16 magnitude of the capital program that the Company has planned to ensure
17 compliance, support an ROE above the proxy group mean and median.¹⁰³

⁹⁹ PAWC Statement No. 13, p. 60, lines 10-13.

¹⁰⁰ PAWC Statement No. 4.

¹⁰¹ PAWC Statement No. 13, p. 61, lines 5 through p. 62, line 5.

¹⁰² PAWC Statement No. 13, p. 62, lines 9-11.

¹⁰³ PAWC Statement No. 13, p. 62, lines 15-19.

1 **Q. DO YOU AGREE WITH MS BULKLEY’S CLAIM REGARDING RISKS**
2 **ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY**
3 **REGULATIONS AND THE CAPITAL INVESTMENT COSTS FOR**
4 **REGULATION COMPLIANCE?**

5 A. No. I accept that PAWC may be subject to environmental risks and challenges
6 that are faced by other water utilities. I disagree that those risks and challenges are
7 unique to PAWC and support a higher ROE. As discussed earlier in the
8 “Regulatory Risk” section, all water utilities providing water and/or wastewater
9 services are required and expected to comply with all applicable statutory (federal,
10 state, and local) rules and regulations including environmental and water quality-
11 related regulations for doing a business within the framework of the law. The
12 arguments made by Ms. Bulkley concerning environmental and water quality
13 regulations have an impact not only on PAWC, but they are industry-wide
14 realities. Since all regulated water and wastewater utilities must deal with these
15 regulations, no one water company in Ms. Bulkley’s proxy group is riskier than
16 another in this respect. Further, operating costs associated with providing safe and
17 reliable water and wastewater service in compliance with regulations are
18 recoverable, eliminating a vast majority of the risks and concerns regarding this
19 issue.

20 In fact, PAWC is expected to manage its business operations efficiently, so
21 that it can lower capital and operating costs, improve system resiliency and
22 reliability, reduce environmental impact, deliver better service and value to
23 customers, and support long-term affordability and rate stability.

1 **Q. IS THERE CAUSE FOR CONCERN REGARDING THE IMPACT OF**
2 **RISK ASSOCIATED WITH ENVIRONMENTAL AND WATER QUALITY**
3 **REGULATIONS ON PAWC’S COST OF EQUITY?**

4 A. No. Ms. Bulkley’s assertion that the significant environmental risk factors faced
5 by PAWC and the magnitude of the capital program planned to maintain
6 compliance support an ROE above the proxy group mean and median is
7 unsupported. As discussed above, environmental risk factors faced by PAWC are
8 industry-wide realities and they are normal business risk factors managed by all
9 water utilities in the proxy group. Therefore, Ms. Bulkley’s claims to support a
10 request above her proxy group’s mean and median ROE highlighting
11 environmental risk factors is not tenable or justified.

12
13 **FLOTATION COSTS**

14 **Q. WHAT ARE FLOTATION COSTS?**

15 A. Ms. Bulkley discusses stock issue flotation costs, the costs associated with the sale
16 of new issues of common stock of the parent company, which include out-of-
17 pocket expenditures for preparation, filing, underwriting, and other issuance
18 costs.¹⁰⁴

¹⁰⁴ PAWC Statement No. 13, p. 56, lines 5-7.

1 **Q. WHAT IS MS. BULKLEY’S RATIONALE FOR RECOVERY OF THE**
2 **FLOTATION COST IN THE ROE?**

3 A. She asserts that flotation costs are part of the invested costs of the utility that are
4 properly reflected on the balance sheet under ‘paid in capital’ and they are not
5 current expenses, and therefore, are not reflected on the income statement.¹⁰⁵ She
6 asserts that since PAWC is a wholly owned subsidiary of AWK, it is appropriate
7 to consider flotation costs because wholly owned subsidiaries receive equity
8 capital from their parent and provide returns on the capital that roll up to the
9 parent.¹⁰⁶

10
11 **Q. HOW DOES MS. BULKLEY CALCULATE THE FLOATATION COSTS**
12 **FOR PAWC?**

13 A. She used the flotation costs incurred by AWK in its last equity offering in
14 February 2023 as her basis and applied a flotation cost percentage using a formula
15 to inflate the expected dividend yield component of the DCF analysis to estimate
16 the impact of the flotation cost on the cost of equity.¹⁰⁷ She estimates five basis
17 points (0.05%) based on the median results of the proxy group.¹⁰⁸

18 Ms. Bulkley states that her final cost of equity results do not incorporate an
19 *explicit adjustment* for flotation costs, however, the estimated effect of flotation

¹⁰⁵ PAWC Statement No. 13, p. 56, lines 16-18.

¹⁰⁶ PAWC Statement Np. 13, p. 58, lines 3-5.

¹⁰⁷ PAWS Statement No. 13, p. 59, lines 8-11.

¹⁰⁸ PAWC Statement No. 13, p. 59, lines 12-13.

costs on the cost of equity is considered in identifying a recommended ROE within the range of cost of equity estimates from the various models.¹⁰⁹

Q. DO YOU AGREE WITH MS. BULKLEY'S DISCUSSION REGARDING THE POTENTIAL IMPACT OF STOCK ISSUE FLOTATION COSTS ON THE ROE?

A. No. Generally, the flotation costs of the parent company are accounted for and recovered as O&M expenses or amortized over a certain period in the books of the issuer company. PAWC does not issue stocks to the general public in the capital market, and the parent company issues stocks for a variety of reasons and uses, and they are not entirely issued and used for the benefit of PAWC. There is no indication that PAWC's parent company will issue new stocks during the FPFTY when the new rates will be effective. Ms. Bulkley's claim for the flotation cost impact in recommending an ROE for FPFTY ratemaking is improper and unsupported, when the claim for such cost is based on the historical flotation cost of the parent company. Therefore, it is inappropriate to present the potential flotation cost impact of 0.05% to support the claimed ROE of 10.95% in this proceeding. Though Ms. Bulkley does not explicitly claim adding a 0.05% flotation cost adjustment in the claimed ROE, she implies that she considered or included a 0.05% flotation cost adjustment in her recommended ROE of 10.95%.

¹⁰⁹ PAWC Statement No. 13, p. 59

1 Lastly, I am unaware of the Commission's specific authorization of a
2 flotation cost adjustment for the parent company's stock issue expenses in the
3 recent past for determining a utility's cost of equity in a base rate proceeding.

4
5 **Q. BASED ON THE COMPANY'S RATE BASE AND CAPITAL**
6 **STRUCTURE CLAIMS, WHAT IS THE VALUE OF THE SUGGESTED**
7 **FLOTATION COST ADJUSTMENT OF 0.05% TO THE COST OF**
8 **EQUITY?**

9 A. The example below illustrates the impact of 0.05% (5 basis points) on the
10 Company's cost of equity if the flotation cost adjustment is allowed in the cost of
11 equity when applied to the Company's total (water and wastewater operations
12 combined) claimed rate base and capital structure:

PAWC's Claimed Common Equity Percentage of Capital Structure*	55.33%
Flotation Cost Adjustment to the recommended ROE	0.05%
Claimed Rate Base**	\$6,630,207,501
Impact Prior to Gross Up (0.5533 x 0.0005 x \$6,630,207,501)	\$1,834,247
Gross Revenue Conversion Factor***	<u>1.3863</u>
Total Impact on Ratepayers (\$1,834,247 x 1.3863)	<u>\$2,542,817</u>

13 * PAWC Exhibit 13-A, Schedule 15 (Total Company).

14 ** PAWC Statement No. 5, p. 4 (Total Company).

15 *** I&E Exhibit No. 2, Schedule 4, p. 2.

16 In this example, an additional 0.05% to the cost of equity would burden ratepayers
17 to fund an extra \$2,542,817 annually to cover the increase of the inflated rate of

1 return along with the associated impact resulting from increases to income taxes,
2 uncollectibles, and assessments.

3
4 **MANAGEMENT PERFORMANCE**

5 **Q. WHAT IS MS. BULKLEY'S CLAIM FOR EXEMPLARY MANAGEMENT**
6 **PERFORMANCE AWARD POINTS IN THE ROE?**

7 A. Ms. Bulkley refers to 66 Pa C.S.A § 523(a) and (b) that lists efficiency,
8 effectiveness, and adequacy of service factors as well as management
9 effectiveness and operating efficiency that the Commission shall consider in
10 evaluating the performance of water and wastewater utilities. She also refers to 52
11 Pa. Code § 69.711, which outlines the Commission's acquisition incentives,
12 including rate of return premiums, acquisition adjustments, deferral of acquisition
13 improvement costs, and plant improvement surcharges to encourage the
14 acquisition of troubled water and wastewater systems by viable utilities.¹¹⁰ She
15 largely refers to PAWC witness Justin Ladner's testimony¹¹¹ to support the
16 Company's management performance claims. Ms. Bulkley states that similar to
17 other business risks, she has not quantified or made a *specific adjustment* (basis
18 points) for management performance; however, she considered this factor in
19 setting the overall ROE range (10.25% to 11.25%) and recommended the ROE of
20 10.95% within the range.¹¹² Additionally, she states that the Company's excellent
21 management performance supports an ROE above the midpoint of the range of
22 returns estimated for the proxy group companies and her ROE does not include a

¹¹⁰ PAWC Statement No. 13, p. 63, lines 4-12.

¹¹¹ PAWC Statement No. 1.

¹¹² PAWC Statement No. 13, pp. 6-8.

1 specific calculated adjustment for management performance but does consider
2 business risk and management performance factors that are discussed in her direct
3 testimony.¹¹³

4 Mr. Ladner supports Ms. Bulkley's recommended ROE of 10.95% at the
5 upper end of her ROE estimated range in recognition of the claim for superior
6 management performance.¹¹⁴

7
8 **Q. WHAT EVIDENCE DOES THE COMPANY PRESENT TO SUPPORT ITS**
9 **MANAGEMENT PERFORMANCE AWARD ADJUSTMENT IN THE ROE**
10 **CLAIM?**

11 A. Like Ms. Bulkley, Mr. Ladner also refers to 66 Pa C.S.A. §523, which dictates the
12 Commission "shall consider" "the efficiency, effectiveness, and adequacy of
13 service of each utility when determining just and reasonable rates" to support
14 additional basis points for exemplary management performance.¹¹⁵ He also refers
15 to 52 Pa Code § 69.711(a)(1) related to the acquisition incentives.¹¹⁶ Mr. Ladner
16 states that in the last ten years, the Company has completed 14 acquisitions of very
17 small, less-viable water and wastewater systems with less than 1,000 customer
18 connections.¹¹⁷ He also lists acquisitions of water/wastewater systems made under
19 Section 529.¹¹⁸ He notes the recent project for the extension of service to an
20 additional portion of Salem Township in Luzerne County at the request of

¹¹³ I&E Exhibit No. 2, Schedule 17.

¹¹⁴ PAWC Statement No. 1, p. 2, lines 18-23.

¹¹⁵ PAWC Statement No. 1, p. 8, lines 1-36.

¹¹⁶ PAWC Statement No. 1, p. 9, lines 1-20.

¹¹⁷ PAWC Statement No. 1, p. 10, lines 4-12.

¹¹⁸ PAWC Statement No. 2, p. 10, line 13 through p. 15, line 19.

1 Amazon Data Services, Inc. for water service to a proposed data center site.¹¹⁹ He
2 identifies operational cost savings through PENNVEST funding, community
3 involvement, and customer outreach efforts as additional factors that he claims
4 demonstrates the Company's "exemplary management performance."

5
6 **Q. DO YOU AGREE WITH THE COMPANY'S CLAIMS REGARDING**
7 **EXEMPLARY MANAGEMENT PERFORMANCE TO GAIN SUPPORT**
8 **FOR A HIGHER ROE?**

9 A. No. First, many of the topics presented by the Company witnesses fall within the
10 categories of reliability, customer service obligation, and safety that are required
11 of every public utility company under 66 Pa C.S.A. §1501. The Company passes
12 capital expenditures (investments) for infrastructure improvements onto ratepayers
13 via base rates and utilizes a DSIC mechanism for capital expenditure recovery.
14 Further, if the Company's operational efficiency results in controlling operating
15 and maintenance costs, those savings should flow through to ratepayers and/or
16 investors. These savings would likely be offset by the addition of basis points for
17 management performance as ratepayers would have to fund the additional costs.
18 This defeats the purpose of any cost cutting measures to benefit ratepayers.

19 As discussed earlier, the Company has burdened ratepayers with four
20 substantial rate increases starting January 1, 2018, caused by four consecutive base
21 rate cases filed on April 28, 2017, April 29, 2020, April 29, 2022, November 8,

¹¹⁹ PAWC Statement No. 2, p. 17, lines 18-20.

2023, and now, this fifth-rate case filed on November 14, 2025, in addition to the DSIC and other surcharges.

Q. DO YOU HAVE ANY OTHER POINTS TO SUPPORT YOUR RECOMMENDED REJECTION OF A HIGHER ROE FOR THE PROPOSED MANAGEMENT PERFORMANCE AWARD?

A. Yes. Further to my discussion above, I refer to the Company's last Management and Operations Audit Report, prepared by the Commission's Bureau of Audits, issued in October 2023, which illustrates the following summary of findings:¹²⁰

Functional Area	Meets Expected Performance Level	Minor Improvement Necessary	Moderate Improvement Necessary	Significant Improvement Necessary	Major Improvement Necessary
Executive Management and Organizational Structure		X			
Corporate Governance		X			
Cost Allocations and Affiliated Interests			X		
Financial Management		X			
Water Operations			X		
Wastewater Operations		X			
Emergency Preparedness			X		

¹²⁰ Management and Operations Audit of Pennsylvania-American Water Company, prepared by The Pennsylvania Public Utility Commission, Bureau of Audits at Docket No. D-2022-3035217, October 2023, Exhibit I-1, p. 4.

Purchasing and Materials Management		X			
Customer Service			X		
Information Technology		X			
Fleet Management		X			
Human Resources and Diversity		X			

It is important to note that not a single functional area out of the twelve functional areas met the expected level of performance. All twelve areas required some level of improvement. The audit report contained identifiable, potential quantifiable cost savings of approximately \$3.13 million in annual savings and \$4 million in one-time savings (summarized on Exhibit I-2, page 5 of the report) from effective implementation of the recommendations. Notably, the audit report recommendations identified operational and service improvements for customers as listed below:

- Reducing unaccounted-for-water (UFW) below the Commission's 20% threshold and reporting UFW correctly.
- Reducing line hits to the Company's underground facilities.
- Improving physical security for control rooms and SCADA control systems.
- Improving customer service performance to pre-pandemic levels at a minimum.

- Continuing outreach efforts to payment troubled customers and leveraging low-income resources to help reduce the level of outstanding customer balances.

PAWC's implementation plan¹²¹ accepted twenty-three of the recommendations and partially agreed with the remaining eight recommendations detailed in the audit report.

With the level of improvement that PAWC requires, and other topics discussed above, PAWC's claim for exemplary management performance to support a higher ROE is not justified or warranted in the interest of ratepayers.

Q. ARE YOU AWARE OF ANY WATER COMPANIES IN PENNSYLVANIA THAT HAVE RECEIVED ADDITIONAL BASIS POINTS IN RECOGNITION OF MANAGEMENT PERFORMANCE IN THE LAST TEN YEARS?

A. Yes. In one base rate case, the Commission awarded Aqua Pennsylvania an addition of 25 basis points for its management performance efforts.¹²² However, it is important to recognize that this addition was based specifically on the record created in the Aqua Pennsylvania case for it rescuing troubled water and wastewater systems at the Commission's request. The Commission stated,¹²³

¹²¹ PAWC Implementation Plan in response to the 2022-23 Focused Management and Operations Audit Report filed with the Commission at Docket No. D-2022-3035217.

¹²² *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 168-173 (Order Entered May 16, 2022).

¹²³ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, p. 169 (Order Entered May 16, 2022).

1 We specifically recognize Aqua's efforts and willingness to
2 quickly provide emergency aid to various water and
3 wastewater systems that needed substantial improvement.
4 Aqua has often provided this emergency aid on short notice
5 and at the request of the Commission or other parties to protect
6 the public from egregious health and safety threats and to
7 protect the Commonwealth's drinking water resources from
8 catastrophic damage.
9

10 **Q. DOES THE COMMISSION'S PAST ISSUANCE OF ADDITIONAL**
11 **EQUITY POINTS RECOGNIZING MANAGEMENT PERFORMANCE**
12 **MEAN THAT PAWC SHOULD ALSO RECEIVE AN ADJUSTMENT FOR**
13 **A HIGHER RETURN ON EQUITY?**

14 A. No. The issuance of equity points to recognize management performance should
15 be done on a case-by-case basis and based on the unique facts of each case.
16 Notably, in the recommended decision for the Aqua Pennsylvania case,
17 Administrative Law Judge Mary D. Long pointed out that while Aqua
18 Pennsylvania had in fact acquired troubled water systems, it had also acquired
19 non-troubled water and wastewater systems with the expectation that existing
20 customers help pay the costs to serve the newly acquired customers.¹²⁴

21 In fact, in this proceeding, PAWC is proposing to allocate approximately
22 \$53,010,182 of wastewater service costs including for the acquired wastewater
23 systems, which is approximately 4.82% of the FPFTY total proposed water
24 revenue of \$1,100,211,283 to its current water operation customers.¹²⁵ It is my
25 understanding that many of these water customers are not served by the Company

¹²⁴ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, Recommended Decision, pp. 79-80 (February 18, 2022).

¹²⁵ PAWC Filing Volume 3, Exhibit 3-A, Combined Water and Wastewater Revenue Requirement - Summary, p. A.

1 for wastewater services. The Company is causing unwarranted financial harm to
2 current customers by forcing them to subsidize services they do not and likely will
3 not ever use. I&E witness Ethan Cline discusses these subsidies and their impact
4 on rates in greater detail.¹²⁶

5 Additionally, it must be made clear that companies are made whole for
6 their acquisitions and receiverships of small nonviable water and wastewater
7 systems. PAWC is able to recover all costs associated with these acquisitions.
8 The Commission permits establishing a regulatory asset for any ineligible property
9 in order to claim appropriate ratemaking and revenue recovery in a future base rate
10 proceeding.

11
12 **Q. DID THE COMMISSION APPROVE A MANAGEMENT PERFORMANCE**
13 **ADJUSTMENT IN THE MOST RECENT 2025 COLUMBIA RATE CASE?**

14 A. No. The Commission found the ALJs' recommendation just and reasonable and
15 indicated that it is supported by substantial evidence in the record and adopted
16 ALJs' recommendation to deny Columbia's requested upward increase of 0.25%
17 to its ROE for management effectiveness.¹²⁷

¹²⁶ I&E Statement No. 4.

¹²⁷ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025).
See generally Management Effectiveness - Disposition, pp. 230 and 231.

1 **Q. ASIDE FROM BEING ABLE TO RECOVER COSTS OF ACQUIRING**
2 **TROUBLED SYSTEMS, DOES PAWC ALSO GET REWARDED ON TOP**
3 **OF JUST COST RECOUPMENT?**

4 A. Yes. Not only is PAWC able to recover all its acquisition costs, but it also earns a
5 return on the associated amount put into the rate base for both troubled and non-
6 troubled acquired systems. In fact, the benefit of the return PAWC earns on 66 Pa.
7 C.S. § 1329 (Section 1329) acquisitions are significantly compounded when
8 considering the continually increasing rate base is determined on a fair market
9 value basis, which is significantly higher than the book value of the acquired
10 system assets as of the date of acquisition. A rate base amount determined at fair
11 market value rather than on book value (net of depreciation) of the acquired
12 system assets adequately compensates for the investment risk of the acquiring
13 utility. This enhancement in return, due to Section 1329 acquisitions, also benefits
14 the Company's shareholders in the end. Lastly, besides the benefit of earning a
15 return on the inflated rate base value of the acquired system, PAWC is expanding
16 its service area (adding to its customer count) and forever revenue stream,
17 strengthening its market monopoly and it benefits from combined (water and
18 wastewater) business synergy in the certificated service areas, which results in an
19 improvement or enhancement in the financial performance and balance sheet.

20 Regardless of the Company's acquisition motives, it cannot be ignored that
21 it is earning a meaningful return on its acquisitions that are to be paid by all
22 PAWC customers. PAWC binds ratepayers to fund all the acquisitions, so

compelling ratepayers to reward them yet again, in the name of management performance, is inappropriate, unjust, and unreasonable.

Q. FOR ILLUSTRATION PURPOSE, BASED ON THE COMPANY'S CLAIMED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT WOULD BE THE HYPOTHETICAL VALUE OF A 25-BASIS POINT ADJUSTMENT FOR MANAGEMENT PERFORMANCE TO PAWC'S COST OF EQUITY?

A. The example below illustrates the impact of 25 additional basis points to the Company's cost of equity for management performance if applied to the its total as-filed rate base and combined capital structure:

PAWC's Claimed Common Equity Percentage of Capital Structure*	55.33%
Management Performance Adjustment to the ROE	0.25%
Claimed Rate Base**	\$6,630,207,501
Impact Prior to Gross Up (0.5533 x 0.0025 x \$6,630,207,501)	\$9,171,235
Gross Revenue Conversion Factor***	1.3863
Total Impact on Ratepayers (\$9,171,235 x 1.3863)	<u>\$12,714,083</u>

* PAWC Exhibit 13-A, Schedule 15 (Total Company).

** PAWC Statement No. 5, p. 4 (Total Company).

*** I&E Exhibit No. 2, Schedule 4, p. 2.

In this example, an addition of 25 basis points to the cost of equity in consideration of management performance would force ratepayers to fund an unnecessary additional \$12,714,083 annually to cover the increase of the inflated rate of return along with the associated impact resulting from increases to income taxes, uncollectibles, and assessments.

1 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE**
2 **CONSIDERATION OF ADDITIONAL BASIS POINTS IN ROE FOR**
3 **PAWC’S MANAGEMENT PERFORMANCE?**

4 A. I am aware that under 66 Pa C.S.A. §523 the Commission has authority to
5 *consider* a utility’s performance, however, it is not mandatory that the
6 Commission grant additional basis points to the ROE. Ultimately, for any
7 company, true management effectiveness is earning a higher return through
8 efficient use of resources and cost-cutting measures. Greater net income resulting
9 from growth, cost savings, and true efficiency in management and operations is
10 available to be passed onto shareholders. PAWC should not be granted any
11 additional basis points for doing what it is required to do under 66 Pa C.S.A.
12 §1501 to provide adequate, efficient, safe, and reliable service.

13 Yet, even putting aside cost savings and efficiency benefits for argument’s
14 sake, as I explained above, ratepayers are already paying PAWC a return for all
15 closed water and wastewater system acquisitions under Section 1329. On top of
16 this, PAWC has also made the management decision to bind ratepayers to fund
17 Section 1329 acquisitions as part of this rate case. I am certainly not opposed to
18 the Company making a fair return, but it is disingenuous to imply that PAWC is
19 making acquisitions consistently since the implementation of Act 12 of 2016
20 (Section 1329) out of goodwill, when in reality, it is simply forcing existing
21 customers to fund them to increase its rate base and earn a larger return. The
22 Company is already fairly compensated for these acquisitions so additional basis
23 points to the cost of equity are unreasonable and unnecessary. Per AWK’s

1 investor presentation on October 29, 2025, PAWC has closed five acquisitions,
2 and seven acquisitions are under agreement as of October 29, 2025, which would
3 impact customers' rates in the future.¹²⁸

4 For the reasons previously discussed and the financial impact on ratepayers,
5 I oppose awarding a higher ROE of 10.95% that includes management
6 performance consideration though the Company has not specified or quantified an
7 additional basis point adjustment in its claimed ROE of 10.95%.

8
9 **OVERALL RATE OF RETURN RECOMMENDATION**

10 **Q. WHAT IS THE COMPANY'S PROPOSED COST OF EQUITY AND**
11 **OVERALL RATES OF RETURN?**

12 A. The Company recommends a cost of equity of 10.95% for both water and
13 wastewater service and overall rates of return of 8.23% and 7.75% respectively.¹²⁹

14
15 **Q. WHAT IS I&E'S RECOMMENDED COST OF EQUITY AND OVERALL**
16 **RATES OF RETURN?**

17 A. I&E Exhibit No. 2, Schedule 1, shows the calculation of an appropriate cost of
18 equity for PAWC to be 9.80% for both water and wastewater operations and
19 overall rates of return of 7.51% and 7.16% respectively.

¹²⁸ https://s26.q4cdn.com/750150140/files/doc_financials/2025/q3/Q3-2025-Earnings-Presentation-Final-10-29-25.pdf pp. 30-31 (accessed on December 30, 2025).

¹²⁹ PAWC Exhibit No. 13-A, Schedules 16 and 17.

1 **FINAL COMMENTS**

2 **Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE**
3 **COMPANY’S PROPOSED RETURN ON EQUITY?**

4 A. Yes. First, when asked, Ms. Bulkley indicated that she is not aware of any
5 Commission-authorized ROEs of 10.95% or higher for water utilities throughout
6 the United States in the last five years¹³⁰ despite the high inflation and interest rate
7 environment post COVID-19 pandemic.

8 Additionally, the Company’s requested 10.95% return on common equity is
9 120 basis points (1.20%) higher than the Commission’s latest approved DSIC
10 incentive ROE of 9.75% (Q2 2025 Quarterly Earnings Summary Report)¹³¹ for
11 water utility companies. The DSIC rate is designed to encourage its use and to
12 incentivize accelerated pipeline replacement and infrastructure upgrades to bring
13 the existing aging infrastructure closer to meeting safety and reliability
14 requirements in between base rate filings. Additionally, it is my understanding
15 that the DSIC rate establishes a benchmark above which a utility is considered
16 “overearning.” As such, the DSIC rate does not serve as a proper measurement of
17 a subject utility’s cost of equity in a rate case proceeding. However, it is
18 inappropriate to suggest the cost of equity must be at or above the DSIC rate in a
19 base rate proceeding.

¹³⁰ I&E Exhibit No. 2, Schedule 18.

¹³¹ *PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended June 30, 2025*, approved at Public Meeting held on October 23, 2025 at Docket No. M-2025-3057215.

1 Finally, considering the impact PAWC's claimed high-end ROE of 10.95%
2 would have on rates, it is important to consider customers' rate affordability due to
3 the rate increase burden on ratepayers. As illustrated in the various charts above,
4 any additional basis points beyond the I&E recommended ROE of 9.80% are
5 unnecessary and will increase the burden on ratepayers.

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

8 **A. Yes.**

D. C. Patel
Professional and Educational Background

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

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-2025-3053499 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
- 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.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)
and
Docket No. R-2025-3058051 (Wastewater)

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			
Pennsylvania-American Water Company - Water Operations			
Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	44.99%	4.71%	2.12%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	55.00%	9.80%	5.39%
Total	100.00%		7.51%

I&E			
Summary of Cost of Capital			
Pennsylvania-American Water Company - Wastewater Operations			
Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	51.52%	9.80%	5.05%
Total	100.00%		7.16%

I&E Exhibit No. 2
Schedule 2

Proxy Group Capital Structure

	2024		2023		2022		2021		2020		Average
<u>American States Water Co.</u>											
Long-term Debt	811.776	46.87%	873.674	52.96%	476.637	40.18%	595.596	46.47%	584.184	47.66%	46.83%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	920.051	53.13%	776.109	47.04%	709.549	59.82%	685.947	53.53%	641.673	52.34%	53.17%
	1,731.827	100.00%	1,649.783	100.00%	1,186.186	100.00%	1,281.543	100.00%	1,225.857	100.00%	100.00%
<u>California Water Service Group</u>											
Long-term Debt	1,116.856	40.58%	1,065.373	42.75%	1,066.325	44.73%	1,069.395	47.59%	794.968	46.32%	44.39%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,635.271	59.42%	1,426.733	57.25%	1,317.590	55.27%	1,177.594	52.41%	921.344	53.68%	55.61%
	2,752.127	100.00%	2,492.106	100.00%	2,383.915	100.00%	2,246.989	100.00%	1,716.312	100.00%	100.00%
<u>H2O America (fka SJW Group)</u>											
Long-term Debt	1,706.904	55.53%	1,526.699	55.31%	1,491.965	57.32%	1,492.935	59.07%	1,287.580	58.40%	57.13%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,366.974	44.47%	1,233.397	44.69%	1,110.868	42.68%	1,034.519	40.93%	917.160	41.60%	42.87%
	3,073.878	100.00%	2,760.096	100.00%	2,602.833	100.00%	2,527.454	100.00%	2,204.740	100.00%	100.00%
<u>Middlesex Water Co.</u>											
Long-term Debt	355.254	44.29%	361.216	45.94%	293.986	42.22%	310.887	45.67%	278.286	44.41%	44.51%
Preferred Stock	1.635	0.20%	2.084	0.27%	2.084	0.30%	2.084	0.31%	2.084	0.33%	0.28%
Common Equity	445.263	55.51%	422.991	53.80%	400.328	57.49%	367.726	54.02%	346.208	55.25%	55.21%
	802.152	100.00%	786.291	100.00%	696.398	100.00%	680.697	100.00%	626.578	100.00%	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

For Reference:

	2024		2023		2022		2021		2020		Average
American Water Works Co. Inc.											
Long-term Debt	12,597.000	54.94%	11,791.000	54.62%	10,999.000	58.84%	10,424.000	58.82%	9,414.000	59.33%	57.31%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	10,332.000	45.06%	9,797.000	45.38%	7,693.000	41.16%	7,298.000	41.18%	6,454.000	40.67%	42.69%
	22,929.000	100.00%	21,588.000	100.00%	18,692.000	100.00%	17,722.000	100.00%	15,868.000	100.00%	100.00%

PENNSYLVANIA PUBLIC UTILITY COMMISSION
Harrisburg, Pennsylvania 17120

Pennsylvania Public Utility Commission, et al.
v.
Columbia Gas of Pennsylvania, Inc.

Public Meeting of December 4, 2025
3053499-OSA
Docket No. R-2025-3053499

STATEMENT OF VICE CHAIR KIMBERLY BARROW

Before us for consideration is the proposed rate increase request by Columbia Gas of Pennsylvania, Inc. (Columbia Gas or Company). Columbia Gas proposed an increase of \$110.4 million (12.02%) in additional annual revenues based on a fully projected future test year (FPFTY) ending December 31, 2026. The proposal would have resulted in an increase in a residential customer's bill using 70 Therms per month from \$138.52 to \$152.29 (an increase of \$15.77 or 11.38%). Columbia Gas also requested an increase in its residential customer charge from \$17.25 to \$31.97 (an increase of \$14.72 or 85.2%).

In their Recommended Decision, Administrative Law Judges (ALJs) Jeffery A. Watson and Chad L. Allensworth recommended that the Commission deny the Company's rate increase request in its entirety or alternatively grant an increase of \$66,424,574. Exceptions and Reply Exceptions were filed.¹

Below are a few issues of concern I would like to highlight.

Frequency of Rate Increase Filings:

The record in this case indicates that since 2008 Columbia Gas has requested an increase almost on an annual basis, including five rate increase requests since 2020.² Columbia Gas' rates have increased by almost \$500 million during this period. The record further shows that Columbia Gas has the highest rates in the state and the highest revenue per unit of natural gas in the state and the third highest for the 25 natural gas distribution companies (NGDCs) offering service in the mid-Atlantic region, surpassed only by NGDCs offering service to New York City.³ Columbia Gas' rates outpace inflation. Over the last 20 years, Columbia's residential customer rates for average heating customers (70 therms per month) have increased by 121% (from \$47.58 in 2005 to \$105.09 in 2025). During this period, the household income for a family of four at 150% FPL only increased 60% (from \$30,000 to \$48,225 per year). Columbia Gas has also filed 12 rate

¹ The Parties to this proceeding include Columbia Gas, the Office of Consumer Advocate (OCA), The Pennsylvania State University (PSU), the Commission's Bureau of Investigation and Enforcement (I&E), the OCA, the Office of Small Business Advocate (OSBA), and the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA).

² Including the instant proceeding, the Company has requested a rate increase twelve times since 2009: 2009, 2010, 2012, 2014, 2015, 2016, 2019, 2020, 2021, 2022, 2024, and now 2025. See OCA St. 5 at 7; OSBA M.B. at 5, Table IEC-1; Table 2, *supra*. Further, as noted in Table 2, the instant rate proceeding is the Company's thirteenth since 2008.

³ OCA Ex. MWD-7; I&E St. 2 at 9; OCA M.B. at 36; OCA R.B. at 12; OCA Exh. MWD-7.

cases during this period totaling approved distribution rate increases of over \$487 million.⁴

While I understand that Columbia Gas is entitled to recovery of the cost of investments made to its system, the Company's utilization of the FPFTY, as authorized under 66 Pa.C.S. § 315, and the availability of the distribution system improvement charge (DSIC), as authorized under 66 Pa.C.S. § 1350 and other rate recovery mechanisms, should be enough incentives to discourage Columbia Gas' current near-annual frequency of rate increase requests.

Capital Structure:

Columbia Gas requested a capital structure of 54.4% common equity and 45.60% debt (43.28% long-term debt and 2.32% short-term debt), along with a return on equity (ROE) of 11.35%. Although I&E accepts the Company's proposed capital structure, the OCA and CAUSE-PA, in opposition, argued that the Commission should instead award a hypothetical capital structure of 50% equity and 50% debt (47.68% long-term debt and 2.32% short-term debt).⁵ According to the OCA, the average capital structure mix for the proxy group used in this case as shown on the Value Line consists of 55% debt and 45% equity, the inverse of the ratio proposed by Columbia.⁶

Here, the record clearly reflects that the proxy group's capital structure is composed of less equity than Columbia Gas' capital structure, highlighting reduced risk for the Company when compared to that of the proxy group, and, therefore, suggesting the need for a lower ROE for Columbia Gas. I agree with the OCA that the discrepancy between Columbia Gas' capital structure and the proxy group necessitates an adjustment to the Company's capital structure since Columbia Gas' equity profile has less financial risk than the proxy group. A 50/50 capital structure in this case is equal to the proxy group's average capital structure.⁷ Also noteworthy, CAUSE-PA argued that if the Commission were to apply a hypothetical capital structure of 50% equity and 50% debt, the overall rate of return at the Company's desired ROE of 11.35% would be reduced by 0.27% (from 8.55% to 8.28%), which would have reduced the Company's overall annual revenue requirement increase by \$17.7 million, or from the proposed increase of \$110.5 million sought by Columbia to \$92.8 million.⁸ CAUSE-PA and the OCA propose an overall rate of return of 7.06%.⁹

⁴ CAUSE-PA St. 2 at 21.

⁵ OCA M.B. at 126; OCA St. 3 at 58; OCA Exh. DJG-16.

⁶ OCA M.B. at OCA St. 3 at 50.

⁷ Adoption of the OCA's recommended capital structure and ROE would result in a revenue requirement reduction of \$54.6 million. OCA St. 3 at 3-4, 50. I agree with the OCA that in *Riverton Consol. Water Co. v. Pa. PUC*, 140 A.2d 114 at 121 (Pa. Super. 1958), the Superior Court determined that the Commission may make adjustments to a utility's capital structure where circumstances indicate that the actual capital structure may be unfair to customers, such as when the actual capital structure may be weighted too heavily to the debt side or the equity side. See OCA M.B. at 125.

⁸ CAUSE-PA M.B. at 35-38.

⁹ The OCA's proposed overall rate of return was based upon a weighted average of a 5.20% rate of return on long-term debt, a 5.00% rate of return on short-term debt, and an 8.9% rate of return on common equity. OCA M.B. at 123, 127; OCA St. 3 at 58.

It is clear from the arguments put forward by the Parties in opposition to the Company's proposed capital structure that a 50% equity and 50% debt capital structure is a better representation of the Company's **actual** financial risk and would have resulted in millions of dollars in reduced revenue requirement for the Company and resultant lower rates for Columbia Gas' customers.

Rate of Return on Equity:

Columbia Gas proposed a rate of return on common equity of 11.35% inclusive of the Company's requested upward adjustment of 0.25% for management effectiveness.¹⁰ As a result of its DCF analysis, I&E recommended a cost of common equity of 10.51%.¹¹ The OCA recommended a cost of common equity of 8.90%, based on its CAPM model and the use of a hypothetical capital structure. The OCA noted that an ROE of 8.90% and overall rate of return of 7.06% are sufficient to ensure Columbia Gas' ability to attract capital and continue investment to provide safe and reliable service, while guarding the interests of consumers.¹² The ALJs rejected Columbia Gas' proposed rate of return on common equity of 11.35% and adopted I&E's proposed DCF ROE of 10.51% ROE.¹³

I believe an ROE lower than the ALJs' recommended 10.51% is more appropriate in this case, given Columbia Gas' unique lack of regulatory lag, associated reduced business risk, and the commensurate impact of the Company's nearly annual rate increases in the past five years on customers' rates. Using informed judgment, an ROE of 9.6% is more appropriate. The most recent five-year average of I&E's proxy group companies' capital structure ranges from 39.33% to 57% long-term debt, 0.51% to 12.82% short-term debt, and 35.96% to 60.16% common equity, with an overall five-year average of 47.42 long-term debt, 7.85% short-term debt, and 44.73% common equity.¹⁴ Since the proxy group's capital structure is composed of less equity than Columbia's capital structure (or the hypothetical capital structure) it is appropriate to adjust the equity return to account for the reduced risk of a capital structure that employs more equity. I&E's DCF results range from 9.06% to 11.68% (using an average dividend yield and average growth estimate for each company) with an average of 10.51% and a composite CAPM ROE of 9.935.

Based upon consideration of the competing evidence provided to the record, I believe an ROE that is in the range of the bottom of I&E's DCF range and the Composite CAPM ROE is appropriate. The 9.60% ROE is also an approximate median number between the OCA's proposed ROE of 8.90% and I&E's proposed ROE of 10.51%. With an ROE of 9.60% along with a 50/50 capital structure, the overall rate of return would be 7.40%, resulting in an overall rate increase of approximately \$30,573,357. Accordingly, I would support an ROE of 9.60%.

Smart Remote Methane Detection Pilot: I&E recommended a Smart Remote Methane Detector pilot program in a region where Columbia has risky pipe for the installation of

¹⁰ Columbia Gas St. 8 at 9-10.

¹¹ I&E M.B. at 40-41.

¹² OCA R. Exc. at 10-11; OCA M.B. at 137.

¹³ R.D. at 337-38.

¹⁴ I&E M.B at 37; I&E St. 2 at 20, citing I&E Exh. 2, Sch. 2.

500 to 1,000 Smart Remote Methane Detectors (SRMDs). Columbia stated that it could not commit to the Pilot as outlined by I&E, citing significant IT infrastructure costs and concerns, but was willing to evaluate technologies associated with the integration of Automated Metering Infrastructure and SRMDs for potential future deployment.

I support directing Columbia to implement an internal study to determine whether a methane detection pilot program would be feasible and how it would be implemented. With affordability always on our minds, it is very important for the company to fully understand the potential costs associated with the pilot prior to implementation. The usefulness and safety benefits of methane detectors are tremendous, allowing the ability of real-time smart reporting technology to simultaneously notify the customer and the emergency response officials of a potentially hazardous situation. I want to take the opportunity to thank I&E for putting forth this proposal and for Columbia to be willing to evaluate the pilot.

Additional CAP Screening: The OCA and CAUSE-PA proposed that Columbia conduct initial screening for all applicants applying for service or when transferring service to determine if they qualify as a low-income customer or may be eligible for assistance, such as customer assistance program (CAP). The record indicates that only 20,988 customers, or 23% of the estimated Columbia Gas' low-income customers, were enrolled in CAP and that additional screening is appropriate. I support this proposal and agree that additional screening is needed, and that any tool we can use to nudge customers into a healthy financial relationship with their utility is beneficial for everyone.



December 4, 2025

Kimberly Barrow, Vice Chair

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation & Enforcement Set 1**

I&E RR-019-D

Responsible Witness: Christina Chard, Senior Director Rates and Regulatory

Question:

Identify and provide the calculation for the gross revenue conversion factor separately for water, wastewater, and total Company for the HTY, FTY, and FPFTY to account for the need to gross-up revenue for taxes, uncollectibles, assessments, etc.

Response:

The Company does not employ a gross revenue conversion factor in the calculation of its revenue requirement. Please see I&E-RR-019-D_Attachment, which illustrates a gross revenue conversion factor based on the gross-up revenue components of the revenue requirement for the FPFTY.

Pennsylvania-American Water Company - Total Company
Gross Revenue Conversion Factor - Illustrative Example

I&E RR-019-D_Attachment

1	Gross Revenue Increase	\$168,716,450	
2	Less: Penalty Revenues	872,621	
3	Net: Revenue Increase	167,843,829	
4	Less: Uncollectibles	1,850,819	1.097%
5	General Assessments	1,235,347	0.736%
6	Taxable Income Before SIT	\$165,630,284	
7	Less: State Income Taxes	11,576,420	6.99%
8	Taxable Income Before FIT	\$154,053,864	
9	Less: Federal Income Taxes	32,347,897	21.00%
10	Change in Net Operating Income	121,705,967	
11	Gross Revenue Conversion Factor	1.3863	
12	Net Income	\$121,689,703	
13	Uncollectibles	1,850,819	
14	General Assessment	1,235,347	
15	State Income Taxes	11,576,420	
16	Federal Income Taxes	32,347,897	
17	Interest Synchronization CWC	16,264	
18	Total Revenue Increase	\$168,716,450	

19	Check	
19	$=1/((1-(0.01097+0.007367150258))*(1-0.0699)*(1-0.21))$	1.3864
20	Variance - Rounding	(0.0001)

	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 High	3.95% 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 January 7, 2026

Mergent Bond Record A-Rated Public Utility Bond Yields	
Month	Yield
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%
November 2025	5.62%
December 2025	5.68%
Average	<u>5.77%</u>

Source:

Mergent Bond Record

January 2026

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	41.29	43.75	44.17
52-wk high	82.94	51.63	57.17	67.09
Spot Price	72.54	43.33	50.65	50.94
Spot Div Yield	2.89%	2.88%	3.46%	2.87%
52-wk Div Yield	2.76%	2.69%	3.47%	2.62%
Average	2.83%	2.79%	3.46%	2.75%

	Average
Spot Div Yield	3.03%
52-wk Div Yield	2.88%
Average	2.96%

Sources: Barrons January 6, 2026
Value Line January 2, 2026

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%	5.70%	7.00%	6.12%
California Water Service Group	CWT	8.78%	8.80%	9.50%	9.03%
H2O America (fka SJW Group)	HTO	6.04%	6.50%	6.00%	6.18%
Middlesex Water Co.	MSEX	8.14%	5.90%	7.50%	7.18%
Average		7.15%	6.73%	7.50%	7.13%

Sources date:

January 2, 2026 and January 6, 2026
(From Internet)

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

	<u>Time Period</u>	<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	3.03%	7.13%	10.16%
(2)	Spot Price	<u>2.88%</u>	<u>7.13%</u>	<u>10.01%</u>
(3)	Average:	<u>2.96%</u>	<u>7.13%</u>	<u>10.09%</u>

Sources: Value Line January 2, 2026
Barrons January 6, 2026

Beta for Four Company Proxy Group

<u>Company</u>	<u>Beta</u>
American States Water Co.	0.75
California Water Service Group	0.80
H2O America (fka SJW Group)	0.75
Middlesex Water Co.	0.80
Average beta for CAPM	0.78

Source:

Value Line

January 2, 2026

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

Source:

Blue Chip Financial Forecasts
December 30, 2025 and 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	2.10%		8.78%	(a)	10.88%
S&P 500 Historical Return					12.35%
Average Expected Market Return				=	<u>11.61%</u>

(a) $((1+40\%)^{.25} - 1)$ Value Line forecast for the 3 to 5 year index appreciation is 40%

Sources:

S&P 500 Historical Rate	1926-2025	12.35%
Value Line Dividend Yield	January 9, 2026	2.10%
Value Line Appreciation Yield	January 9, 2026	40.00%

S&P 500 Total Return

Year	Return	Year	Return
2025	17.88	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	12.35

Source:

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

Accessed on January 14, 2026

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

$$\begin{aligned} \text{Re} &= \text{Rf} + \text{Be}(\text{Rm} - \text{Rf}) \\ \text{Rf} &= 4.12 \\ \text{Rm} &= 11.61 \\ \text{Be} &= 0.78 \\ \text{Re} &= \underline{\underline{9.96}} \quad (\text{A}) \end{aligned}$$

Sources: Value Line January 2, 2026
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

$$\begin{aligned} \text{Re} &= \text{Rf} + \text{Be}(\text{ERP}) \\ \text{Rf} &= 4.76 \\ \text{ERP} &= 5.50 \\ \text{Be} &= 0.78 \\ \text{Re} &= \underline{\underline{9.05}} \quad (\text{B}) \end{aligned}$$

Sources: CNBC January 7, 2026
Kroll ERP September 3, 2025

Average CAPM Result 9.51 $((\text{A} + \text{B}) / 2)$

I&E Modified PAWC Exhibit 13-A, Schedule 4, Page 1

30-DAY CONSTANT GROWTH DCF

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
					Expected	Value Line	S&P Capital	Zacks	Average	Cost of	Cost of	Cost of
					Dividend	Projected	IQ Projected	Projected	Projected	Equity:	Equity:	Equity:
		Annualized	Stock	Dividend	Yield	EPS	EPS Growth	EPS	EPS	Minimum	Mean	Maximum
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Rate	Growth	Growth	Growth	Growth	Growth
American States Water Company	AWR	\$2.02	\$73.36	2.75%	2.84%	7.00%	5.65%	n/a	6.32%	8.48%	9.16%	9.84%
California Water Service Group	CWT	\$1.20	\$46.18	2.60%	2.72%	9.50%	8.78%	n/a	9.14%	11.49%	11.85%	12.22%
Middlesex Water Company	MSEX	\$1.36	\$53.34	2.55%	2.63%	7.50%	5.86%	n/a	6.68%	8.48%	9.31%	10.15%
H2O America (SJW)	HTO	\$1.68	\$49.41	3.40%	3.50%	6.00%	5.19%	6.50%	5.90%	8.67%	9.40%	10.01%
Essential Utilities, Inc.	WTRG	\$1.37	\$38.53	3.56%	3.65%	6.00%	4.76%	5.20%	5.32%	8.41%	8.97%	9.66%
Mean										9.10%	9.74%	10.38%

Notes:

[1] Bloomberg Professional as of September 30, 2025

[2] Bloomberg Professional 30-day average as of September 30, 2025

[3] Equals [1]/[2]

[4] Equals [3] x (1 + 0.5 x [8])

[5] Value Line

[6] S&P Capital IQ

[7] Zacks

[8] Equals average of [5], [6], [7]

[9] Equals [3] x (1 + 0.5 x (min([5], [6], [7])) + (min([5], [6], [7]))

[10] Equals [4] + [8]

[11] Equals [3] x (1 + 0.5 x (max([5], [6], [7])) + (max([5], [6], [7]))

[12] S&P Capital IQ and Zacks report an equivalent projected EPS growth rate for AWR, CWT and MSEX. To avoid doubling counting, I exclude projected EPS growth rate from Zacks for AWR, CWT and MSEX.

90-DAY CONSTANT GROWTH DCF

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
					Expected	Value Line	S&P Capital	Zacks	Average	Cost of	Cost of	Cost of
					Dividend	Projected	IQ Projected	Projected	Projected	Equity:	Equity:	Equity:
		Annualized	Stock	Dividend	Yield	EPS	EPS Growth	EPS	EPS	Minimum	Mean	Maximum
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Rate	Growth	Growth	Growth	Growth	Growth
American States Water Company	AWR	\$2.02	\$75.11	2.68%	2.77%	7.00%	5.65%	n/a	6.32%	8.41%	9.09%	9.78%
California Water Service Group	CWT	\$1.20	\$45.96	2.61%	2.73%	9.50%	8.78%	n/a	9.14%	11.50%	11.87%	12.24%
Middlesex Water Company	MSEX	\$1.36	\$54.13	2.51%	2.60%	7.50%	5.86%	n/a	6.68%	8.44%	9.28%	10.11%
H2O America (SJW)	HTO	\$1.68	\$50.41	3.33%	3.43%	6.00%	5.19%	6.50%	5.90%	8.60%	9.33%	9.94%
Essential Utilities, Inc.	WTRG	\$1.37	\$37.84	3.62%	3.72%	6.00%	4.76%	5.20%	5.32%	8.47%	9.04%	9.73%
Mean										9.09%	9.72%	10.36%

Notes: Same as above.

180-DAY CONSTANT GROWTH DCF

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
					Expected	Value Line	S&P Capital	Zacks	Average	Cost of	Cost of	Cost of
					Dividend	Projected	IQ Projected	Projected	Projected	Equity:	Equity:	Equity:
		Annualized	Stock	Dividend	Yield	EPS	EPS Growth	EPS	EPS	Minimum	Mean	Maximum
Company	Ticker	Dividend	Price	Yield	Yield	Growth	Rate	Growth	Growth	Growth	Growth	Growth
American States Water Company	AWR	\$2.02	\$75.45	2.67%	2.76%	7.00%	5.65%	n/a	6.32%	8.40%	9.08%	9.77%
California Water Service Group	CWT	\$1.20	\$46.12	2.60%	2.72%	9.50%	8.78%	n/a	9.14%	11.49%	11.86%	12.23%
Middlesex Water Company	MSEX	\$1.36	\$55.33	2.46%	2.54%	7.50%	5.86%	n/a	6.68%	8.39%	9.22%	10.05%
H2O America (SJW)	HTO	\$1.68	\$50.98	3.30%	3.39%	6.00%	5.19%	6.50%	5.90%	8.57%	9.29%	9.90%
Essential Utilities, Inc.	WTRG	\$1.37	\$37.59	3.65%	3.74%	6.00%	4.76%	5.20%	5.32%	8.50%	9.06%	9.76%
Mean										9.07%	9.70%	10.34%

Notes: Same as above.

I&E calculated average of DCF results using mean growth rate (column 10) is 9.72% ((9.74%+9.72+9.70)/3).

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation & Enforcement Set 1**

I&E RR-010-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question: Reference PAWC Statement No. 13, pp. 42-44 concerning ECAPM analysis results. State whether Ms. Bulkley is aware of any instances where the Commission specifically recognized and relied upon an ECAPM analysis to determine an appropriate cost of equity in a base rate proceeding in the last ten years. If so, identify the underlying cases, including the docket numbers.

Response:

Ms. Bulkley has not conducted exhaustive research on the acceptance of the ECAPM by regulatory commissions across the United States, however she is aware that the ECAPM has been accepted by the New York Public Service Commission and North Carolina Utilities Commission. Dockets in each state are provided below:

- New York Public Service Commission, Case No. 20-G-0101.
- North Carolina Utilities Commission, Docket No. E-2, SUB 1300.

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation & Enforcement Set 1**

I&E RR-018-D

Responsible Witness: Tony Nokovich, Vice President of Engineering

Question: Reference PAWC Statement No. 13, p. 47, lines 16-19 concerning approximately \$3.50 billion capital investment for the period 2026-2030:

- A. Provide the budget vs. actual capital expenditures incurred by fiscal year ended June 30, 2021, 2022, 2023, 2024, and 2025 by water and wastewater divisions, and for acquisitions as separate line items.
- B. Provide a breakdown of the \$3.50 billion capital expenditure program by fiscal year for 2026-2030 broken down by the water and wastewater divisions.
- C. Identify how much of the projected \$3.50 billion capital expenditures is designated for each acquisition by year for the period 2026-2030.

Response:

- A. Please see I&E RR-018-D_Attachment 1 for the budget vs. actual capital expenditures incurred by fiscal year ended June 30, 2021, 2022, 2023, 2024, and 2025 by water and wastewater divisions, and for acquisitions as separate line items.
- B. Please see I&E RR-018-D_Attachment 2 for the breakdown of the \$3.50 billion capital expenditure program by fiscal year for 2026-2030 broken down by the water and wastewater divisions.
- C. Please see I&E RR-018-D_Attachment 2 for how much of the projected \$3.50 billion capital expenditures is designated for each acquisition by year for the period 2026-2030.

Division	6/30/2021		6/30/2021		Variance	6/30/2022		6/30/2022		Variance	6/30/2023		6/30/2023		Variance	6/30/2024		6/30/2024		Variance	Actuals thru		Variance		
	Budget	Actual	Budget	Actual		Budget	Actual	Budget	Actual		Budget	Actual	Budget	Actual		Budget	Actual	Budget	Actual		Budget	Actual		Budget	Actual
Water	\$333,227,459	\$314,601,475			(\$18,625,983)	\$409,700,364	\$404,016,757			(\$5,683,607)	\$533,465,668	\$555,303,557			\$21,837,889	\$569,034,671	\$597,213,392			\$28,178,721	\$608,484,559	\$484,521,598			(\$123,962,961)
WW SSS	29,838,872	23,633,492			(6,205,380)	46,354,686	38,065,237			(8,289,450)	41,054,893	43,095,540			2,040,648	53,081,008	31,988,199			(21,092,809)	33,070,796	28,437,804			(4,632,992)
WW CSS	34,021,433	35,111,273			1,089,839	55,024,026	43,783,307			(11,240,719)	84,763,322	96,115,239			11,351,917	59,341,033	59,596,290			255,258	59,668,290	25,871,252			(33,797,038)
Total	\$397,087,764	\$373,346,240			(\$23,741,524)	\$511,079,076	\$485,865,301			(\$25,213,776)	\$659,283,882	\$694,514,336			\$35,230,454	\$681,456,712	\$688,797,882			\$7,341,170	\$701,223,645	\$538,830,654			(\$162,392,991)
Post Acquisition *																									
Royersford WW SSS	\$615,000	\$501,154			(\$113,846)	\$1,175,000	\$1,008,948			(\$166,052)	\$920,000	\$1,048,597			\$128,597	\$472,000	\$2,691,922			\$2,219,922	\$457,000	\$1,748,996			\$1,291,996
Upper Pottsgrove WW SSS						147,000	324,555			177,555	67,000	367,860			300,860	67,000	195,154			128,154	67,000	508,435			441,435
York WW SSS						3,708,333	4,025,871			317,538	4,178,333	4,892,301			713,968	4,208,333	5,757,209			1,548,876	2,625,000	4,865,569			2,240,569
Farmington WW SSS																456,500	81,762			(374,738)	853,500	441,939			(411,561)
BASA WW SSS																8,590,000	853,474			(7,736,526)	9,375,000	7,150,116			(2,224,884)
Sadsbury WW SSS																416,800	376,770			(40,030)	416,800	376,770			(40,030)
Dilliner Water																3,565,675	1,378,182			(2,187,493)	3,565,675	1,378,182			(2,187,493)
Audubon Water																3,620,000	2,863,276			(756,724)	3,620,000	2,863,276			(756,724)
Appalachian Water																264,500	0			(264,500)	264,500	0			(264,500)
Post Acquisition Total	\$615,000	\$501,154			(\$113,846)	\$5,030,333	\$5,359,374			\$329,041	\$5,165,333	\$6,308,759			\$1,143,426	\$13,793,833	\$9,579,521			(\$4,214,312)	\$21,244,475	\$19,333,283			(\$1,911,192)
*Post Acquisition included in Division Totals																									

*Post Acquisition included in Division Totals

Pennsylvania-American Water Company - Water Operations
Capital Expenditure Program 2026-2030

I&E RR-018-D_Attachment 2

Division	2026	2027	2028	2029	2030	5 year Total
Water	\$464,153,600	\$476,178,066	\$572,418,968	\$674,108,303	\$717,461,111	\$2,904,320,048
WW SSS	77,183,356	63,348,661	62,002,617	50,762,150	45,536,795	298,833,579
WW CSS	57,985,577	101,803,644	43,962,616	29,454,371	32,211,536	265,417,744
Total	\$599,322,533	\$641,330,371	\$678,384,201	\$754,324,824	\$795,209,442	\$3,468,571,371
<u>Post Acquisition</u>						
East Dunkard Water (Dilliner)	\$3,347,744	\$3,533,244	\$3,361,500	\$2,418,000		\$12,660,488
Audubon Water	10,345,000	2,390,000	2,955,000	2,355,000		18,045,000
Manwalamink Wastewater	888,000	469,000	469,000	469,000		2,295,000
Manwalamink Water	1,075,000	705,000	655,000	655,000		3,090,000
Appalachian Water	1,321,750	1,008,750	908,750	708,750	\$3,308,750	7,256,750
Corner Water	2,487,375	747,354	522,486	522,486	416,666	4,696,367
Elizabeth Borough Wastewater	960,000	315,000	3,528,600	10,078,600	10,028,600	24,910,800
Post Acquisition Total	\$20,424,869	\$9,168,348	\$12,400,336	\$17,206,836	\$13,754,016	\$72,954,405
Total Capital Expenditure	\$619,747,402	\$650,498,719	\$690,784,537	\$771,531,660	\$808,963,458	\$3,541,525,776

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation & Enforcement Set 1**

I&E RR-011-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question: Reference PAWC Statement No. 13, p. 47, lines 1-12 where Ms. Bulkley states that the Company's excellent management performance supports an ROE at the midpoint of the range of returns estimated for the proxy group companies:

A. Identify or quantify any management performance adjustment (basis points or percentage) included or implied in the ROE range of 10.25% - 11.25% and in the recommended ROE of 10.95%.

B. Provide the basis or calculation quantifying a specific number for the management performance adjustment.

Response:

- A. Ms. Bulkley's testimony as referenced is in error, as it should state that "the Company's excellent management performance supports an ROE above the midpoint of the range of returns estimated by the proxy group companies". A correction will be filed to address this error. The ROE range does not reflect the specific risks of the Company, but rather a reasonable range that can be derived from the analytical results. The recommended ROE does not include a specific calculated adjustment for management performance, but rather takes into consideration all factors considered in the section of Ms. Bulkley's testimony that discusses business risks and management performance.
- B. Please see the response to I&E RR-011-D, part A.

**Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Bureau of Investigation & Enforcement Set 1**

I&E RR-014-D

Responsible Witness: Ann E. Bulkley, Principal, The Brattle Group

Question: Reference PAWC Statement No. 13, p. 70, line 22 and p. 71, lines 1-3:

- A. State whether Ms. Bulkley is aware of any water utilities throughout the United States that have been granted a Commission authorized 10.95% or higher cost of common equity in the past five years.
- B. If the answer to Part A above is yes, identify which company/companies have been authorized such cost of common equity, in what jurisdiction, and docket numbers associated with each instance.

Response:

- A. Historically authorized ROEs are not a reasonable indicator of the forward-looking cost of equity. Authorized ROEs are established based on market data known and expected during a rate proceeding and the specific circumstances in each rate proceeding. Therefore, while Ms. Bulkley is not aware of any authorized ROEs of 10.95 percent for water utilities in the last five years, it is also the case that the conditions that were present over the entire historical period referenced have not been consistent with the market conditions and specific circumstances for the Company that were considered in setting the recommended ROE in this proceeding.
- B. Please see the response to I&E-RR-14-D, part a.

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025- 3057983 (Water)

and

Docket No. R-2025-3058051 (Wastewater)

Direct Testimony

of

Esyan A. Sakaya

Bureau of Investigation and Enforcement

Concerning:

FPFTY Reporting Requirements
Customer Costs
Water Rate Design
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 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 BACKGROUND?**

11 A. An outline of my education and employment background 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 company, and the regulated
19 community as a whole.

20
21 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

22 A. The purpose of my direct testimony is to evaluate the Pennsylvania-American

1 Water Company's (PAWC or Company) request for an annual increase in
2 operating revenue of approximately \$168.7 million in the Fully Projected Future
3 Test Year (FPFTY) ending June 30, 2027. My direct testimony addresses issues
4 related to the rate proposals for Water Operations.
5

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

7 A. Yes. I&E Exhibit No. 3 contains schedules relating to my direct testimony.
8

9 **Q. PLEASE SUMMARIZE THE REQUESTED INCREASE IN RATES.**

10 A. On November 14, 2025, PAWC filed a combined water and wastewater base rate
11 case. Using the FPFTY ending June 30, 2027, PAWC requested a net increase of
12 \$168,716,450, which is comprised of an increase in Water Operations revenue of
13 \$152,417,957, and increases of \$7,329,642 for Wastewater Sanitary Sewer System
14 (SSS) General Operations, \$5,097,089 for Butler Area Sewer Authority (BASA)
15 Wastewater Operations, \$3,341,896 for Combined Sewer System (CSS)
16 Wastewater Operations, and \$529,866 for Elizabeth Borough CSS Wastewater
17 Operations.¹

¹ PAWC Exhibit 3-A, Combined Water and Wastewater Revenue Requirement-Summary.

1 **FPFTY REPORTING REQUIREMENTS**

2 **Q. WHAT DO YOU RECOMMEND REGARDING PLANT ADDITIONS**
3 **THAT PAWC PROJECTS TO BE IN SERVICE IN THE FPFTY?**

4 A. Consistent with agreements in previous PAWC base rate cases, I recommend that
5 the Company be required to provide I&E and the Office of Consumer Advocate
6 (OCA) with updates to PAWC Exhibit 3-A, pp. 27 and 95, Summary of Detailed
7 Plant Accounts for each separate revenue requirement no later than December 1,
8 2027, under this docket number. PAWC's updates should include actual plant
9 additions and retirements for the twelve months ending June 30, 2026, and for the
10 twelve months ending June 30, 2027.

11
12 **Q. WHY DO YOU RECOMMEND THAT PAWC BE REQUIRED TO**
13 **PROVIDE THESE UPDATES?**

14 A. As explained on PAWC Statement No. 4, pp. 4-5, the Company is estimating that
15 it will add approximately \$488,705,042 of gross plant additions in the Future Test
16 Year (FTY) ending June 30, 2026, and approximately \$676,410,111 of gross plant
17 additions in the FPFTY. There is value in determining how closely PAWC's
18 projected investments in future facility comport with the actual investments that
19 are made by the end of the FTY and the FPFTY. Determining the correlation
20 between PAWC's projected and actual plant additions and retirements will help
21 verify the validity of PAWC's projections.

1 **Q. HAS PAWC PROVIDED THE RECOMMENDED UPDATES IN THE**
2 **PAST?**

3 A. Yes. The Company previously agreed to provide similar updates to its capital
4 projections in previous base rate cases, most recently in its last base rate case at
5 Docket Nos. R-2023-3043189 and R-2023-3043190.

6
7 **RATE DESIGN – WATER OPERATIONS**

8 **Q. WHAT WATER RATE ZONES ARE ADDRESSED IN THE COMPANY**
9 **FILING?**

10 A. The Company's filing includes nine different primary rate zones. Most of PAWC's
11 customers are included in Rate Zone 1. The remaining rate zones are as follows:
12 Rate Zone 2 – Valley, Rate Zone 3 – Turbotville, Rate Zone 4 – Farmington, Rate
13 Zone 5 – East Dunkard, Rate Zone 6 – Audubon, Rate Zone 7 – Manwalamink, Rate
14 Zone 8 – Appalachian, and Rate Zone 9 – Corner Water.

15
16 **Q. IS PAWC PROPOSING RATE DESIGN ADJUSTMENTS?**

17 A. Yes. The Company is proposing to move Rate Zone 2 Valley, Rate Zone 3
18 Turbotville, Rate Zone 4 Farmington, and Rate Zone 5 East Dunkard rates to Rate
19 Zone 1 rates. The Company is also proposing to move Rate Zone 6 Audubon,
20 Rate Zone 7 Manwalamink, Rate Zone 8 Appalachian, and Rate Zone 9 Corner
21 Water toward Rate Zone 1 rates and rate structures.²

² PAWC Statement No. 10, p. 14.

1 **Q. WHAT IS YOUR RESPONSE TO THE COMPANY’S PROPOSAL TO**
2 **MERGE THE USAGE RATES IN RATE ZONES 2, 3, 4, AND 5 TO RATE**
3 **ZONE 1, AND HOW SHOULD RATE ZONES 6, 7, 8, AND 9 BE MOVED**
4 **TOWARDS RATE ZONE 1 IN THE FPFTY?**

5 A. I accept the Company’s proposal to merge Rate Zones 2, 3, 4, and 5 into Rate
6 Zone 1, and I accept the Rate Zone 6 and 9 proposals as explained below.
7 However, to move Rate Zones 7 and 8 toward Rate Zone 1, I am recommending
8 modifications to the rates as explained below.

9
10 **WATER OPERATIONS - CUSTOMER COST ANALYSIS**

11 **Q. WHAT IS A CUSTOMER COST ANALYSIS AND HOW IS IT USED?**

12 A. A customer cost analysis is a part of a cost of service study (COSS) that is used to
13 determine the appropriate fixed customer charges for the various classes and meter
14 sizes.

15
16 **Q. WHY IS IT NECESSARY TO PERFORM A CUSTOMER COST**
17 **ANALYSIS?**

18 A. A fixed customer charge represents the revenue that the Company is guaranteed to
19 receive each month, regardless of the level of usage. The seventh edition of the
20 American Water Works Association M1 Manual³ acknowledges that there is a

³ AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees, Charges, Seventh Edition.
pp. 154-155.

tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.

WATER OPERATIONS – CUSTOMER COSTS

Q. DID THE COMPANY PREPARE A CUSTOMER COST ANALYSIS TO SUPPORT INCREASING THE CUSTOMER CHARGES?

A. Yes. The Company provided two customer cost analyses for the FPFTY in PAWC Exhibit 12-A, Appendix A, Attachment RS1j. The results of the first cost analysis, shown on page 1 of 3, include all costs being allocated to the customer cost function and results in a unit cost of \$31.87 per month in the FPFTY.

Additionally, PAWC provided a second customer cost analysis that relies on the allocation of costs more directly applicable to customers. The result of the more direct customer cost analysis is \$26.15 per month per customer in the FPFTY.⁴

Q. WHICH CUSTOMER COST ANALYSIS DO YOU RECOMMEND USING TO DETERMINE THE CUSTOMER CHARGES FOR WATER OPERATIONS' CUSTOMERS?

A. I recommend that the second customer cost analysis be used to determine the customer charges for Water Operations' customers.

⁴ PAWC Exhibit 12-A, Appendix A, Attachments RS1j, p. 2 of 3.

1 **Q. WHY DO YOU RECOMMEND THE SECOND CUSTOMER COST**
2 **ANALYSIS BE USED?**

3 A. I recommend the second customer cost analysis for several reasons. Costs that are
4 recovered from customers are continuously increasing, even between rate cases,
5 with surcharges such the DSIC. Therefore, it is appropriate to limit the increase in
6 the customer charges and to consider the affordability of rates through a lower
7 customer charge and higher usage rates, which allows customers greater control
8 over their bills through conservation. Additionally, the Commission has
9 traditionally relied on customer cost analyses based on direct cost allocations to
10 determine customer charges. For these reasons, I recommend the Commission
11 continue to reject the “fully allocated” customer cost analysis provided by Mr.
12 Herbert and base the customer charges instead on the direct cost customer cost
13 analysis provided by the Company on PAWC Exhibit 12-A, Appendix A,
14 Attachments RS1j, p. 2 of 3.

15
16 **WATER CUSTOMER CHARGES**

17 **Q. IS PAWC PROPOSING TO INCREASE MOST RESIDENTIAL,**
18 **COMMERCIAL, MUNICIPAL, AND INDUSTRIAL CUSTOMER**
19 **CHARGES?**

20 A. Yes. For Rate Zone 1, the Company is proposing to increase the residential 5/8-,
21 3/4-, 1-, and 1 ½-inch customer charges from \$18.80 to \$20.00. The increases for

1 all Water Operations rate zones and meter sizes are shown on PAWC Exhibit No.
2 10-A.

3 As shown on PAWC Exhibit MWM-1, PAWC is also proposing to increase
4 the customer charges of the larger meter sizes and commercial, municipal, and
5 industrial classes by approximately 3.6% - 3.8%. Rate Zones 4, 5, 6, and 9 have
6 the same proposed \$20.00 customer charge, while Rate Zone 7 for all charges
7 reflects increases in the 9.7% -10% range, and Rate Zone 8 for all charges reflects
8 increases in the 9.1% -30% range.⁵
9

10 **Q. WHAT IS THE BASIS FOR THE COMPANY’S PROPOSED \$20.00 PER**
11 **MONTH CUSTOMER CHARGE FOR A 5/8-INCH RESIDENTIAL**
12 **CUSTOMER?**

13 A. The basis for the \$20.00 per month per month 5/8-inch customer charge is the
14 Company’s customer cost analysis that claims the Company incurs a cost of
15 \$26.15 per month to provide service to a 5/8-inch Residential customer as
16 described above.

⁵ I&E Exhibit No. 3, Schedule 1, pp. 4-7.

1 **Q. WHAT CUSTOMER CHARGES DO YOU RECOMMEND FOR**
2 **CUSTOMERS IN RATE ZONES 1 THROUGH 6 AND RATE ZONE 9, AND**
3 **WHAT CHANGES DO YOU RECOMMEND FOR RATE ZONES 7 AND 8?**

4 A. I recommend accepting the Company's proposed customer charges in Rate Zones
5 1 through 6 and Rate Zone 9.⁶ However, I am recommending changes to the
6 proposed customer charges in Rate Zones 7 and 8 as explained below.

7
8 **Q. WHAT CUSTOMER CHARGES DO YOU RECOMMEND FOR**
9 **CUSTOMERS IN RATE ZONE 8?**

10 A. I recommend Rate Zone 8 customer charges for meters up to 1-1/2" be moved to
11 those recommended for Rate Zone 1 to accelerate consolidation with Rate Zone
12 1. My proposed customer charges for Rate Zone 8 are shown on I&E Exhibit No.
13 3, Schedule 1, p. 9.

14
15 **Q. SINCE RATE ZONES 7 AND 8 INCLUDE ALL RATE CLASSES**
16 **INCLUDING RESIDENTIAL, WHAT CUSTOMER CHARGES DO YOU**
17 **RECOMMEND FOR CUSTOMERS IN RATE ZONES 7 AND 8?**

18 A. My recommendations for customers in Rate Zones 7 and 8 are below.

⁶ PAWC Statement No. 10, p. 8.

1 **Q. WHAT DO YOU RECOMMEND FOR ALL RATE CLASS CUSTOMERS**
2 **IN RATE ZONE 7?**

3 A. For Rate Zone 7, I recommend the following customer charges:⁷

Rate Zones 7 All Customer Charges			
Meter Size	Present Rate	I&E Proposed Rate	Revenue Percent Increase
5/8 — inch	\$8.89	\$15.00	68.73%
3/4-inch	\$8.89	\$15.00	68.73%
1 -inch	\$23.71	\$15.00	-36.74%
1 1/2-inch	\$47.42	\$15.00	-68.37%
2-inch	\$106.69	\$131.70	23.44%
3-inch	\$207.44	\$245.50	18.35%
4-inch	\$355.61	\$307.70	-13.47%
6-inch	N/A	\$460.40	0%
8-inch	N/A	891.70	0%

4
5
6 **USAGE RATES**

7 **RATE ZONE 7 - MANWALAMINK**

8 **Q. IS THE COMPANY PROPOSING THAT RATE ZONE 7 USAGE RATES**
9 **BE SET EQUAL TO RATE ZONE 1?**

10 A. No. As stated on PAWC Statement No. 10, p. 15, PAWC seeks to move usage
11 rates directionally toward Rate Zone 1 as shown on PAWC Exhibit 10-A, p. 9, p.
12 19, and p. 35.

⁷ I&E Exhibit No. 3, Schedule 1, p. 8.

1 **Q. DO YOU AGREE THAT THE COMPANY'S PROPOSAL MOVES ALL**
2 **CUSTOMER USAGE RATES FOR RATE ZONE 7 TOWARD RATE**
3 **ZONE 1 RATES?**

4 A. No. PAWC's proposal limits the increases for the customer charge and usage
5 rates to approximately 10%⁸ and results in the bill for an average Rate Zone 7
6 residential customer increasing by only 9.83%,⁹ and an average bill for a
7 commercial customer increasing by 9.88%.¹⁰ The result of the Company's
8 proposed increases would be to increase distance between Rate Zone 1 rates and
9 Rate Zone 7 rates.

11 **Q. WHAT DO YOU RECOMMEND REGARDING CUSTOMER CHARGE**
12 **AND USAGE RATES FOR RATE ZONE 7 RESIDENTIAL CUSTOMERS?**

13 A. In order to move Rate Zone 7 residential rates towards consolidation with Rate
14 Zone 1 rates, I recommend setting the customer charges for Rate Zone 7 5/8-inch,
15 3/4-inch, 1-inch, and 1-1/2-inch meter sizes to \$15.00 per month and setting the
16 larger meter sizes, which have no customers, equal to Rate Zone 1 rates. I
17 recommend increasing the residential usage rate for the first 100,000 gallons to
18 \$0.7500 per hundred gallons and eliminating the second block usage rate by
19 setting it equal to the first 100,000 gallons usage block. Similarly, for the Rate
20 Zone 7 commercial and municipal rates, I recommend the customer charges be set

⁸ PAWC Exhibit 10-A, pp. 9 and 19.

⁹ PAWC Exhibit 10-A, p. 84.

¹⁰ PAWC Exhibit 10-A, p. 93.

1 equal to those of Rate Zone 1 and both usage block rates be set to \$0.8000 per
2 hundred gallons, which would eliminate the second block usage rate. My
3 recommendation will allow for the creation of commercial and municipal
4 declining usage block rates split at the 16,000-gallon usage level that exists in Rate
5 Zone 1. This will result in an increase in the average bill of 41.74%¹¹ for the
6 residential customers and 39.82%¹² for the commercial and municipal customers.
7 When compared to the 16.82%¹³ increase for residential customers and 17.34%¹⁴
8 increase for commercial and municipal customers in Rate Zone 1, my
9 recommendation moves Rate Zone 7 towards consolidation with Rate Zone 1 in
10 future base rate cases.

11
12 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED CUSTOMER**
13 **CHARGES FOR RATE ZONE 7 RESIDENTIAL CUSTOMERS?**

14 A. First, I determined that setting Rate Zone 7 customer charges equal to the
15 customer charges for Rate Zone 1 customers would result in increases that were
16 too large, particularly for customers with low or no usage. I then determined that
17 increasing customer charges for 5/8-inch, 3/4-inch, 1-inch, and 1-1/2-inch meter
18 sizes to approximately 75% of the proposed Rate Zone 1 customer charge would

¹¹ I&E Exhibit No. 3, Schedule 2, p. 1.

¹² I&E Exhibit No. 3, Schedule 2, p. 3.

¹³ PAWC Exhibit 10A, p. 78.

¹⁴ PAWC Exhibit 10A, p. 87.

1 move the customer charges for Rate Zone 7 towards consolidation with Rate Zone
2 1 in future base rate cases, minimizing the impact to low or no usage customers.

3
4 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED USAGE RATES**
5 **FOR RATE ZONE 7?**

6 A. Once I determined my recommended customer charges for Rate Zone 7, described
7 above, I increased the usage rates such that the increase for an average residential
8 customer using 3,263 gallons per month and an average commercial customer
9 using 20,802 gallons per month was close to the increases proposed by the
10 Company for Rate Zone 4 Farmington, or approximately 41%¹⁵ for residential and
11 Rate Zone 5, or approximately 45%¹⁶ for commercial and municipal. These
12 recommended rates move Rate Zone 7 toward consolidation with Rate Zone 1 in
13 future base rate cases while maintaining increases that the Company has
14 determined are reasonable for similar customers in other rate zones.

15
16 **RATE ZONE 8 - APPALACHIAN**

17 **Q. IS THE COMPANY PROPOSING THAT RATE ZONE 8 USAGE RATES**
18 **BE SET EQUAL TO RATE ZONE 1?**

19 A. No. As stated on PAWC Statement No. 10, p. 15, PAWC seeks to move meter
20 and usage rates directionally toward Rate Zone 1 as shown on PAWC Exhibit 10-

¹⁵ PAWC Exhibit 10A, p. 81.

¹⁶ PAWC Exhibit 10A, p. 91.

1 A, p. 10, p. 20, and p. 36.

2
3 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO MOVE**
4 **RATE ZONE 8 RESIDENTIAL AND COMMERCIAL USAGE RATES**
5 **TOWARD RATE ZONE 1 RATES?**

6 A. Partially. Using PAWC's proposal to move all Rate Zone 8 customer usage rates
7 toward Rate Zone 1 rates would result in the bill for an average Rate Zone 8
8 residential customer increasing by 26.97%,¹⁷ and the average bill for a commercial
9 customer increasing by 24.13%.¹⁸ However, since the goal is to consolidate Rate
10 Zone 8 into Rate Zone 1 rates, I recommend keeping the same usage rate proposed
11 by PAWC for the first 16,500 gallons to \$0.9534 and over 16,500 gallons to
12 \$0.9534. This will slightly increase the average bill for customers with average
13 usage of 3,263 gallons to \$51.11 per month as opposed to \$45.81 per month.¹⁹

14
15 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO MOVE**
16 **RATE ZONE 8 RESIDENTIAL AND COMMERCIAL USAGE RATES**
17 **TOWARD RATE ZONE 1 RATES?**

18 A. Yes. The Company's proposal to move Rate Zone 8 residential and commercial
19 usage rates toward Rate Zone 1 rates would result in the bill for an average Rate

¹⁷ PAWC Exhibit 10-A, p. 85.

¹⁸ PAWC Exhibit 10-A, p. 94.

¹⁹ I&E Exhibit No. 3, Schedule 2, p. 3.

1 Zone 8 residential customer increasing by 26.97%,²⁰ and the average bill for a
2 commercial customer increasing by 24.13%.²¹
3

4 **RATE ZONE 9 - CORNER WATER**

5 **Q. IS THE COMPANY PROPOSING THAT RATE ZONE 9 USAGE RATES**
6 **BE SET EQUAL TO RATE ZONE 1?**

7 A. No. As stated on PAWC Statement No. 10, p. 15, PAWC seeks to move meter
8 and usage rates directionally towards Rate Zone 1 as shown on PAWC Exhibit 10-
9 A, p. 10, p. 20, and p. 36.
10

11 **Q. ARE YOU RECOMMENDING ANY CHANGES TO THE COMPANY'S**
12 **PROPOSED RATES FOR RATE ZONE 9?**

13 A. No. The Company's proposal to set customer charges equal to Rate Zone 1 and
14 eliminate the existing usage allowance and increase usage rates adequately moves
15 Rate Zone 9 toward consolidation with Rate Zone 1 in future base rate cases.
16

17 **SCALE BACK OF RATES**

18 **Q. WHAT IS A SCALE BACK OF RATES?**

19 A. If the Commission grants an increase less than the amount the Company requested,
20 the Company's proposed rates would be reduced, or scaled back, to produce the

²⁰ PAWC Exhibit 10-A, p. 85.

²¹ PAWC Exhibit 10-A, p. 94.

revenue requirement allowed by the Commission.

Q. WHAT IS THE FIRST STEP THAT MUST BE COMPLETED IN ANY SCALE BACK OF RATES?

A. The first step that must be completed in any scale back is to determine the revenue requirements and scale backs of the Wastewater Operations.

Q. WHY MUST THE WASTEWATER OPERATIONS REVENUE REQUIREMENT AND SCALE BACK BE DETERMINED PRIOR TO THE APPLICATION OF A SCALE BACK TO WATER OPERATION RATES?

A. The Wastewater Operations revenue requirement must be set first because that will determine the amount of revenue requirement that must be allocated to Water Operations. Once the wastewater to water allocation is determined, then the full Water Operations' revenue requirement will be known, and those rates can be scaled back.

Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE FOR ANY OF THE WASTEWATER OPERATIONS?

A. I recommend that any scale back be netted against the subsidy the Commission determines for the Wastewater Operations.

1 **WATER OPERATIONS RATE SCALE BACK**

2 **Q. DID THE COMPANY PROVIDE A PROPOSED SCALE BACK**
3 **METHODOLOGY IF THE COMMISSION APPROVES A REVENUE**
4 **REQUIREMENT LESS THAN WHAT WAS INITIALLY PROPOSED?**

5 A. Yes. In response to OSBA, PAWC provided a response showing two scenarios
6 involving scale backs at 75% and 50%.²²

7
8 **Q. WHAT OVERALL PERCENTAGE INCREASES HAS THE COMPANY**
9 **PROPOSED FOR EACH WATER CUSTOMER CLASS?**

10 A. As shown on PAWC Exhibit No. 12-A, Schedule A, the Company is proposing the
11 following increases for each class in the FPFTY:

- 12 • Residential 16.9%
- 13 • Commercial 15.2%
- 14 • Industrial 11.9%
- 15 • Municipal 7.5%
- 16 • Resale –A 16.0%
- 17 • Resale – B -0.1%
- 18 • Contract Sales 0.0%
- 19 • Private Fire 41.8%
- 20 • Public Fire 28.4%.

²² I&E Exhibit No. 3, Schedule 3, pp. 1-3.

1 **Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS AN**
2 **INCREASE THAT IS LESS THAN THE TOTAL REQUESTED INCREASE**
3 **FOR WATER OPERATIONS?**

4 A. If the Commission grants an increase less than PAWC's total requested increase, I
5 recommend that the usage rates and customer charges be decreased to produce the
6 revenue level the Commission approves.

7
8 **Q. WHY DO YOU RECOMMEND THAT THE CUSTOMER CHARGES BE**
9 **INCLUDED IN ANY SCALE BACK?**

10 A. Because the \$20.00 per month customer charge I recommend is based on direct
11 customer costs, reductions in any of the ratemaking inputs by the Commission would
12 reduce the inputs used in the customer cost analysis that was used to determine the
13 \$20.00 per month customer charge. The Commission recently reaffirmed its
14 commitment to including the customer charge in the scale back on pages 166-167 of
15 the Order for Philadelphia Gas Works in its recent base rate case at Docket No. R-
16 2023-3037933, Order entered November 9, 2023.

17
18 **Q. DO YOUR RECOMMENDED ADJUSTMENTS AS EXPLAINED ABOVE**
19 **REQUIRE MODIFICATION TO RATE ZONE 1 RATES?**

20 A. Yes. However, no adjustments are currently included in this direct testimony for
21 Rate Zone 1 rates, and any such changes can be captured in the scale back of rates.

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

2 **A. Yes.**

Esyan 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
55. City of Lancaster Water, Docket No. R-2025-3057237

I&E Exhibit No. 3
Witness: Esysan A. Sakaya

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket Nos. R-2025- 3057983 and R-2025-3058051

Exhibit to Accompany

the

Direct Testimony

of

Esysan A. Sakaya

Bureau of Investigation and Enforcement

Concerning:

FPFTY Reporting Requirements

Customer Costs

Water Rate Design

Scale Back of Rates

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 1 - PAWC

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Residential							
5/8 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
3/4 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 1/2 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
2 - Meter	\$	127.00	\$	131.70	\$	4.70	3.7%
3 - Meter	\$	236.80	\$	245.50	\$	8.70	3.7%
4 - Meter	\$	296.80	\$	307.70	\$	10.90	3.7%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.40	\$	891.70	\$	31.30	3.6%
Unmetered Service	\$	79.00	\$	95.00	\$	16.00	20.3%
All Usage (per 100 gallons)	\$	1.8772	\$	2.3069	\$	0.4297	22.9%
Commercial/Municipal							
5/8 - Meter	\$	19.30	\$	20.00	\$	0.70	3.6%
3/4 - Meter	\$	29.10	\$	30.20	\$	1.10	3.8%
1 - Meter	\$	48.40	\$	50.20	\$	1.80	3.7%
1 1/2 - Meter	\$	79.20	\$	82.10	\$	2.90	3.7%
2 - Meter	\$	127.10	\$	131.70	\$	4.60	3.6%
3 - Meter	\$	236.90	\$	245.50	\$	8.60	3.6%
4 - Meter	\$	296.90	\$	307.70	\$	10.80	3.6%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.50	\$	891.70	\$	31.20	3.6%
10 - Meter	\$	1,246.40	\$	1,291.60	\$	45.20	3.6%
12 - Meter	\$	1,782.20	\$	1,846.80	\$	64.60	3.6%
16 - Meter	\$	2,423.80	\$	2,511.70	\$	87.90	3.6%
18 - Meter	\$	2,730.20	\$	2,829.20	\$	99.00	3.6%
20 - Meter	\$	3,033.50	\$	3,143.50	\$	110.00	3.6%
Commercial - First 16,000 gallons	\$	1.8033	\$	2.1713	\$	0.3680	20.4%
Commercial - Over 16,000 gallons	\$	1.3523	\$	1.6285	\$	0.2762	20.4%
Municipal - First 16,000 gallons	\$	1.8988	\$	1.6157	\$	(0.2831)	-14.9%
Municipal - Over 16,000 gallons	\$	1.0499	\$	1.2118	\$	0.1619	15.4%

Zone 1 - PAWC

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Industrial							
5/8 - Meter	\$	28.00	\$	28.00	\$	-	0.0%
3/4 - Meter	\$	42.00	\$	42.00	\$	-	0.0%
1 - Meter	\$	70.00	\$	70.00	\$	-	0.0%
1 1/2 - Meter	\$	140.00	\$	140.00	\$	-	0.0%
2 - Meter	\$	224.00	\$	224.00	\$	-	0.0%
3 - Meter	\$	420.00	\$	420.00	\$	-	0.0%
4 - Meter	\$	701.00	\$	701.00	\$	-	0.0%
6 - Meter	\$	1,401.00	\$	1,401.00	\$	-	0.0%
8 - Meter	\$	2,243.00	\$	2,243.00	\$	-	0.0%
10 - Meter	\$	3,223.00	\$	3,223.00	\$	-	0.0%
12 - Meter	\$	4,625.00	\$	4,625.00	\$	-	0.0%
First 16,000 gallons	\$	1.6720	\$	1.9290	\$	0.2570	15.4%
Next 584,000 gallons	\$	1.2860	\$	1.4853	\$	0.1993	15.5%
All Over 600,000 gallons	\$	1.0022	\$	1.1574	\$	0.1552	15.5%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 2 - Valley

Residential		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
3/4 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 1/2 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
2 - Meter	\$	127.00	\$	131.70	\$	4.70	3.7%
3 - Meter	\$	236.80	\$	245.50	\$	8.70	3.7%
4 - Meter	\$	296.80	\$	307.70	\$	10.90	3.7%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.40	\$	891.70	\$	31.30	3.6%
All Usage (per 100 gallons)	\$	1.6276	\$	2.3069	\$	0.6793	41.7%

Commercial/Municipal		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	19.30	\$	20.00	\$	0.70	3.6%
3/4 - Meter	\$	29.10	\$	30.20	\$	1.10	3.8%
1 - Meter	\$	48.40	\$	50.20	\$	1.80	3.7%
1 1/2 - Meter	\$	79.20	\$	82.10	\$	2.90	3.7%
2 - Meter	\$	127.10	\$	131.70	\$	4.60	3.6%
3 - Meter	\$	236.90	\$	245.50	\$	8.60	3.6%
4 - Meter	\$	296.90	\$	307.70	\$	10.80	3.6%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.50	\$	891.70	\$	31.20	3.6%
10 - Meter	\$	-	\$	1,291.60	\$	1,291.60	0.0%
12 - Meter	\$	-	\$	1,846.80	\$	1,846.80	0.0%
Commercial - First 16,000 gallons	\$	1.5779	\$	2.1713	\$	0.5934	37.6%
Commercial - Over 16,000 gallons	\$	1.3282	\$	1.6285	\$	0.3003	22.6%
Municipal - First 16,000 gallons	\$	1.5779	\$	1.6157	\$	0.0378	2.4%
Municipal - Over 16,000 gallons	\$	1.3282	\$	1.2118	\$	(0.1164)	-8.8%

Zone 2 - Valley

Industrial		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	28.00	\$	28.00	\$	-	0.0%
3/4 - Meter	\$	42.00	\$	42.00	\$	-	0.0%
1 - Meter	\$	70.00	\$	70.00	\$	-	0.0%
1 1/2 - Meter	\$	140.00	\$	140.00	\$	-	0.0%
2 - Meter	\$	224.00	\$	224.00	\$	-	0.0%
3 - Meter	\$	420.00	\$	420.00	\$	-	0.0%
4 - Meter	\$	701.00	\$	701.00	\$	-	0.0%
6 - Meter	\$	1,401.00	\$	1,401.00	\$	-	0.0%
8 - Meter	\$	2,243.00	\$	2,243.00	\$	-	0.0%
10 - Meter	\$	-	\$	3,223.00	\$	3,223.00	0.0%
12 - Meter	\$	-	\$	4,625.00	\$	4,625.00	0.0%
First 16,000 gallons	\$	1.6720	\$	1.9290	\$	0.2570	15.4%
Next 584,000 gallons	\$	1.2860	\$	1.4853	\$	0.1993	15.5%
All Over 600,000 gallons	\$	1.0022	\$	1.1574	\$	0.1552	15.5%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 3 - Turbotville

Residential		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
3/4 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
1 1/2 - Meter	\$	18.80	\$	20.00	\$	1.20	6.4%
2 - Meter	\$	127.00	\$	131.70	\$	4.70	3.7%
3 - Meter	\$	236.80	\$	245.50	\$	8.70	3.7%
4 - Meter	\$	296.80	\$	307.70	\$	10.90	3.7%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.40	\$	891.70	\$	31.30	3.6%
Residential - All Usage	\$	1.8772	\$	2.3069	\$	0.4297	22.9%

Commercial/Municipal		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter		\$19.30		\$20.00	\$	0.70	3.6%
3/4 - Meter	\$	29.10	\$	30.20	\$	1.10	3.8%
1 - Meter	\$	48.40	\$	50.20	\$	1.80	3.7%
1 1/2 - Meter	\$	79.20	\$	82.10	\$	2.90	3.7%
2 - Meter	\$	127.10	\$	131.70	\$	4.60	3.6%
3 - Meter	\$	236.90	\$	245.50	\$	8.60	3.6%
4 - Meter	\$	296.90	\$	307.70	\$	10.80	3.6%
6 - Meter	\$	444.30	\$	460.40	\$	16.10	3.6%
8 - Meter	\$	860.50	\$	891.70	\$	31.20	3.6%
10 - Meter	\$	1,246.50	\$	1,291.60	\$	45.10	3.6%
12 - Meter	\$	1,782.20	\$	1,846.80	\$	64.60	3.6%
Commercial - First 16,000 gallons	\$	1.5779	\$	2.1713	\$	0.5934	37.6%
Commercial - Over 16,000 gallons	\$	1.3282	\$	1.6285	\$	0.3003	22.6%
Municipal - First 16,000 gallons	\$	1.8988	\$	1.6157	\$	(0.2831)	-14.9%
Municipal - Over 16,000 gallons	\$	1.0499	\$	1.2118	\$	0.1619	15.4%

Zone 3 - Turbotville

Industrial		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter		\$		28.00	\$	28.00	0.0%
3/4 - Meter		\$		42.00	\$	42.00	0.0%
1 - Meter		\$		70.00	\$	70.00	0.0%
1 1/2 - Meter		\$		140.00	\$	140.00	0.0%
2 - Meter		\$		224.00	\$	224.00	0.0%
3 - Meter		\$		420.00	\$	420.00	0.0%
4 - Meter		\$		701.00	\$	701.00	0.0%
6 - Meter		\$		1,401.00	\$	1,401.00	0.0%
8 - Meter		\$		2,243.00	\$	2,243.00	0.0%
10 - Meter		\$		3,223.00	\$	3,223.00	0.0%
12 - Meter		\$		4,625.00	\$	4,625.00	0.0%
First 16,000 gallons		\$		1.9290	\$	1.9290	0.0%
Next 584,000 gallons		\$		1.4853	\$	1.4853	0.0%
All Over 600,000 gallons		\$		1.1574	\$	1.1574	0.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 4 - Farmington

		Present		Proposed	Dollar	Percent	
Residential		Rate		Rate	Increase	Increase	
Service Charge per EDU	\$	67.50		\$	(67.50)	-100.0%	
5/8 - Meter		\$		20.00	\$	20.00	0.0%
3/4 - Meter		\$		20.00	\$	20.00	0.0%
1 - Meter		\$		20.00	\$	20.00	0.0%
1 1/2 - Meter		\$		20.00	\$	20.00	0.0%
2 - Meter		\$		131.70	\$	131.70	0.0%
3 - Meter		\$		245.50	\$	245.50	0.0%
4 - Meter		\$		307.70	\$	307.70	0.0%
6 - Meter		\$		460.40	\$	460.40	0.0%
8 - Meter		\$		891.70	\$	891.70	0.0%
Residential - First 16,000 gallons	\$	-	\$	2.3069	\$	2.3069	0.0%
Residential - Over 16,000 gallons	\$	1.5000	\$	2.3069	\$	0.8069	53.8%
		Present		Proposed	Dollar	Percent	
Commercial/Municipal		Rate		Rate	Increase	Increase	
Service Charge per EDU	\$	67.50		\$	(67.50)	-100.0%	
5/8 - Meter				\$20.00	\$	20.00	0.0%
3/4 - Meter				\$30.20	\$	30.20	0.0%
1 - Meter				\$50.20	\$	50.20	0.0%
1 1/2 - Meter				\$82.10	\$	82.10	0.0%
2 - Meter				\$131.70	\$	131.70	0.0%
3 - Meter				\$245.50	\$	245.50	0.0%
4 - Meter				\$307.70	\$	307.70	0.0%
6 - Meter				\$460.40	\$	460.40	0.0%
8 - Meter				\$891.70	\$	891.70	0.0%
10 - Meter				\$1,291.60	\$	1,291.60	0.0%
12 - Meter				\$1,846.80	\$	1,846.80	0.0%
Commercial First 5,000 gallons	\$	-		\$	-	0.0%	
Commercial Over 5,000 gallons	\$	1.5000		\$	(1.5000)	-100.0%	
Commercial First 16,000 gallons		\$		2.1713	\$	2.1713	0.0%
Commercial Over 16,000 gallons		\$		1.6285	\$	1.6285	0.0%
Municipal First 5,000 gallons	\$	-		\$	-	0.0%	
Municipal Over 5,000 gallons	\$	1.5000		\$	(1.5000)	-100.0%	
Municipal First 16,000 gallons		\$		1.6157	\$	1.6157	0.0%
Municipal Over 16,000 gallons		\$		1.2118	\$	1.2118	0.0%

Zone 4 - Farmington

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Industrial							
Service Charge per EDU	\$	67.50		\$		(67.50)	-100.0%
5/8 - Meter		\$	28.00	\$	28.00		0.0%
3/4 - Meter		\$	42.00	\$	42.00		0.0%
1 - Meter		\$	70.00	\$	70.00		0.0%
1 1/2 - Meter		\$	140.00	\$	140.00		0.0%
2 - Meter		\$	224.00	\$	224.00		0.0%
3 - Meter		\$	420.00	\$	420.00		0.0%
4 - Meter		\$	701.00	\$	701.00		0.0%
6 - Meter		\$	1,401.00	\$	1,401.00		0.0%
8 - Meter		\$	2,243.00	\$	2,243.00		0.0%
10 - Meter		\$	3,223.00	\$	3,223.00		0.0%
12 - Meter		\$	4,625.00	\$	4,625.00		0.0%
First 16,000 gallons		\$	1.9290	\$	1.9290		0.0%
Next 584,000 gallons		\$	1.4853	\$	1.4853		0.0%
All Over 600,000 gallons		\$	1.1574	\$	1.1574		0.0%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 5 - East Dunkard

Residential		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	35.04	\$	20.00	\$	(15.04)	-42.9%
3/4 - Meter	\$	35.04	\$	20.00	\$	(15.04)	-42.9%
1 - Meter	\$	55.04	\$	20.00	\$	(35.04)	-63.7%
1 1/2 - Meter	\$	92.54	\$	20.00	\$	(72.54)	-78.4%
2 - Meter	\$	137.54	\$	131.70	\$	(5.84)	-4.2%
3 - Meter	\$	257.54	\$	245.50	\$	(12.04)	-4.7%
4 - Meter	\$	392.54	\$	307.70	\$	(84.84)	-21.6%
6 - Meter	\$	767.54	\$	460.40	\$	(307.14)	-40.0%
8 - Meter	\$	1,217.54	\$	891.70	\$	(325.84)	-26.8%

Commercial / Municipal		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	35.04	\$	20.00	\$	(15.04)	-42.9%
3/4 - Meter	\$	35.04	\$	30.20	\$	(4.84)	-13.8%
1 - Meter	\$	55.04	\$	50.20	\$	(4.84)	-8.8%
1 1/2 - Meter	\$	92.54	\$	82.10	\$	(10.44)	-11.3%
2 - Meter	\$	137.54	\$	131.70	\$	(5.84)	-4.2%
3 - Meter	\$	257.54	\$	245.50	\$	(12.04)	-4.7%
4 - Meter	\$	392.54	\$	307.70	\$	(84.84)	-21.6%
6 - Meter	\$	767.54	\$	460.40	\$	(307.14)	-40.0%
8 - Meter	\$	1,217.54	\$	891.70	\$	(325.84)	-26.8%
10 - Meter	\$	1,742.54	\$	1,291.60	\$	(450.94)	-25.9%
12 - Meter	\$	-	\$	1,846.80	\$	1,846.80	0.0%

Industrial		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	35.04	\$	28.00	\$	(7.04)	-20.1%
3/4 - Meter	\$	35.04	\$	42.00	\$	6.96	19.9%
1 - Meter	\$	55.04	\$	70.00	\$	14.96	27.2%
1 1/2 - Meter	\$	92.54	\$	140.00	\$	47.46	51.3%
2 - Meter	\$	137.54	\$	224.00	\$	86.46	62.9%
3 - Meter	\$	257.54	\$	420.00	\$	162.46	63.1%
4 - Meter	\$	392.54	\$	701.00	\$	308.46	78.6%
6 - Meter	\$	767.54	\$	1,401.00	\$	633.46	82.5%
8 - Meter	\$	1,217.54	\$	2,243.00	\$	1,025.46	84.2%
10 - Meter	\$	1,742.54	\$	3,223.00	\$	1,480.46	85.0%
12 - Meter	\$	-	\$	4,625.00	\$	4,625.00	0.0%

Zone 5 - East Dunkard

Volumetric Rates		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Residential Usage	\$	1.3100	\$	2.3069	\$	0.9969	76.1%
Commercial - First 16,000 gallons	\$	1.3100	\$	2.1713	\$	0.8613	65.7%
Commercial - Over 16,000 gallons	\$	1.3100	\$	1.6285	\$	0.3185	24.3%
Municipal - First 16,000 gallons	\$	1.3100	\$	1.6157	\$	0.3057	23.3%
Municipal - Over 16,000 gallons	\$	1.3100	\$	1.2118	\$	(0.0982)	-7.5%
Industrial - First 16,000 gallons	\$	1.3100	\$	1.9290	\$	0.6190	47.3%
Industrial - Next 584,000 gallons	\$	1.3100	\$	1.4853	\$	0.1753	13.4%
Industrial - All Over 600,000 gallons	\$	1.3100	\$	1.1574	\$	(0.1526)	-11.6%
Public Fire		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Hydrants	\$		\$	29.42	\$	29.42	0.0%
Private Fire		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Qualified Private Hydrants	\$		\$	29.42	\$	29.42	0.0%

Pennsylvania-American Water Company

Proposed General Water Rate Design (not including special rates)

Volumetric Rates are in \$ per hundred gallons

Zone 6 - Audubon

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Residential							
5/8 - Meter	\$	16.80	\$	20.00	\$	3.20	19.0%
3/4 - Meter	\$	16.80	\$	20.00	\$	3.20	19.0%
1 - Meter	\$	42.80	\$	20.00	\$	(22.80)	-53.3%
1 1/2 - Meter	\$	72.90	\$	20.00	\$	(52.90)	-72.6%
2 - Meter	\$	116.40	\$	131.70	\$	15.30	13.1%
3 - Meter	\$	218.60	\$	245.50	\$	26.90	12.3%
4 - Meter	\$	363.90	\$	307.70	\$	(56.20)	-15.4%
6 - Meter	\$	727.80	\$	460.40	\$	(267.40)	-36.7%
8 - Meter	\$	1,164.60	\$	891.70	\$	(272.90)	-23.4%

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Commercial/Municipal							
5/8 - Meter	\$	16.80	\$	20.00	\$	3.20	19.0%
3/4 - Meter	\$	16.80	\$	30.20	\$	13.40	79.8%
1 - Meter	\$	42.80	\$	50.20	\$	7.40	17.3%
1 1/2 - Meter	\$	72.90	\$	82.10	\$	9.20	12.6%
2 - Meter	\$	116.40	\$	131.70	\$	15.30	13.1%
3 - Meter	\$	218.60	\$	245.50	\$	26.90	12.3%
4 - Meter	\$	363.90	\$	307.70	\$	(56.20)	-15.4%
6 - Meter	\$	727.80	\$	460.40	\$	(267.40)	-36.7%
8 - Meter	\$	1,164.60	\$	891.70	\$	(272.90)	-23.4%
10 - Meter	\$	1,410.60	\$	1,291.60	\$	(119.00)	-8.4%
12 - Meter	\$	-	\$	1,846.80	\$	1,846.80	0.0%

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Industrial							
5/8 - Meter	\$	16.80	\$	28.00	\$	11.20	66.7%
3/4 - Meter	\$	16.80	\$	42.00	\$	25.20	150.0%
1 - Meter	\$	42.80	\$	70.00	\$	27.20	63.6%
1 1/2 - Meter	\$	72.90	\$	140.00	\$	67.10	92.0%
2 - Meter	\$	116.40	\$	224.00	\$	107.60	92.4%
3 - Meter	\$	218.60	\$	420.00	\$	201.40	92.1%
4 - Meter	\$	363.90	\$	701.00	\$	337.10	92.6%
6 - Meter	\$	727.80	\$	1,401.00	\$	673.20	92.5%
8 - Meter	\$	1,164.60	\$	2,243.00	\$	1,078.40	92.6%
10 - Meter	\$	1,410.60	\$	3,223.00	\$	1,812.40	128.5%
12 - Meter	\$	1,935.00	\$	4,625.00	\$	2,690.00	139.0%

Zone 6 - Audubon

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Volumetric Rates							
Residential Usage - All Usage	\$	0.8619	\$	1.1754	\$	0.3135	36.4%
Nonresidential Usage - 1st 100,000 g	\$	0.8619			\$	(0.8619)	-100.0%
Nonresidential Usage - Over 100,000 g	\$	0.5723			\$	(0.5723)	-100.0%
Nonresidential Usage - 1st 16,000 g		\$		1.2000	\$	1.2000	0.0%
Nonresidential Usage - Over 16,000 g		\$		0.8619	\$	0.8619	0.0%

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Public Fire							
Hydrants	\$	25.70	\$	29.42	\$	3.72	14.5%

		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Private Fire							
1 Unmetered	\$	30.80	\$	30.80	\$	-	0.0%
2 Unmetered	\$	48.80	\$	48.80	\$	-	0.0%
3 Unmetered	\$	56.50	\$	56.50	\$	-	0.0%
4 Unmetered	\$	69.40	\$	91.40	\$	22.00	31.7%
6 Unmetered	\$	102.75	\$	143.90	\$	41.15	40.0%
8 Unmetered	\$	167.00	\$	233.80	\$	66.80	40.0%
10 Unmetered	\$	228.60	\$	320.00	\$	91.40	40.0%
1 Metered	\$	30.80	\$	45.80	\$	15.00	48.7%
2 Metered	\$	48.80	\$	72.50	\$	23.70	48.6%
3 Metered	\$	56.50	\$	83.90	\$	27.40	48.5%
4 Metered	\$	69.40	\$	103.10	\$	33.70	48.6%
6 Metered	\$	102.75	\$	152.70	\$	49.95	48.6%
8 Metered	\$	167.00	\$	248.10	\$	81.10	48.6%
10 Metered	\$	228.60	\$	339.70	\$	111.10	48.6%
Qualified Private Hydrants	\$	26.89	\$	29.42	\$	2.53	9.4%

Pennsylvania-American Water Company

Proposed General Water Rate Design (not including special rates)

Volumetric Rates are in \$ per hundred gallons

Zone 9 - Corner Water

Residential Charges		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	16.88	\$	20.00	\$	3.12	18.5%
3/4 - Meter	\$	16.88	\$	20.00	\$	3.12	18.5%
1 - Meter	\$	24.47	\$	20.00	\$	(4.47)	-18.3%
1 1/2 - Meter	\$	37.46	\$	20.00	\$	(17.46)	-46.6%
2 - Meter	\$	53.01	\$	68.90	\$	15.89	30.0%
3 - Meter	\$	89.34	\$	116.10	\$	26.76	30.0%
4 - Meter			\$	307.70	\$	307.70	0.0%
6 - Meter			\$	460.40	\$	460.40	0.0%
8 - Meter			\$	891.70	\$	891.70	0.0%

Nonresidential Charges		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
5/8 - Meter	\$	16.88	\$	20.00	\$	3.12	18.5%
3/4 - Meter	\$	16.88	\$	21.90	\$	5.02	29.7%
1 - Meter	\$	24.47	\$	31.80	\$	7.33	30.0%
1 1/2 - Meter	\$	37.46	\$	48.70	\$	11.24	30.0%
2 - Meter	\$	53.01	\$	68.90	\$	15.89	30.0%
3 - Meter	\$	89.34	\$	116.10	\$	26.76	30.0%
4 - Meter			\$	307.70	\$	307.70	0.0%
6 - Meter			\$	460.40	\$	460.40	0.0%
8 - Meter			\$	891.70	\$	891.70	0.0%

Residential Usage - 1st 1,000 gallons	\$	-	\$	0.3493	\$	0.3493	0.0%
Residential Usage - Next 9,000 gallons	\$	1.1510	\$	1.3972	\$	0.2462	21.4%
Residential Usage - Next 110,000 gallons	\$	0.9870	\$	1.3972	\$	0.4102	41.6%
Residential Usage - Over 120,000 gallons	\$	0.7840	\$	1.3972	\$	0.6132	78.2%
Nonresidential Usage - 1st 1,000 g	\$	-	\$	1.2800	\$	1.2800	0.0%
Nonresidential Usage - Next 9,000 g	\$	1.1510	\$	1.2800	\$	0.1290	11.2%
Nonresidential Usage - Next 110,000 g	\$	0.9870	\$	1.2800	\$	0.2930	29.7%
Nonresidential Usage - Over 120,000 g	\$	0.7840	\$	1.2800	\$	0.4960	63.3%

Zone 9 - Corner Water

Public Fire		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
Hydrants	\$	32.47	\$	32.47	\$	-	0.0%

Private Fire		Present Rate		Proposed Rate		Dollar Increase	Percent Increase
2 Unmetered	\$	2.69	\$	3.80	\$	1.11	41.3%
3 Unmetered	\$	5.68	\$	8.00	\$	2.32	40.8%
4 Unmetered	\$	10.01	\$	14.00	\$	3.99	39.9%
6 Unmetered	\$	22.44	\$	31.40	\$	8.96	39.9%
8 Unmetered	\$	39.88	\$	55.80	\$	15.92	39.9%
Qualified Private Hydrants	\$	22.44	\$	29.42	\$	6.98	31.1%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 7 - Manwalamink

All Charges	Present Rate	Proposed Rate	Dollar Increase	Percent Increase	I&E	
					Dollar Increase	Percent Increase
5/8 - Meter	\$ 8.89	\$ 9.75	\$ 0.86	9.7%	\$ 15.00	68.73%
3/4 - Meter	\$ 8.89	\$ 9.75	\$ 0.86	9.7%	\$ 15.00	68.73%
1 - Meter	\$ 23.71	\$ 26.05	\$ 2.34	9.9%	\$ 15.00	-36.74%
1 1/2 - Meter	\$ 47.42	\$ 52.15	\$ 4.73	10.0%	\$ 15.00	-68.37%
2 - Meter	\$ 106.69	\$ 117.35	\$ 10.66	10.0%	\$ 131.70	23.44%
3 - Meter	\$ 207.44	\$ 228.15	\$ 20.71	10.0%	\$ 245.50	18.35%
4 - Meter	\$ 355.61	\$ 307.70	\$ (47.91)	-13.5%	\$ 307.70	-13.47%
6 - Meter	\$	\$ 460.40	\$ 460.40	0.0%	\$ 460.40	0.00%
8 - Meter	\$	\$ 891.70	\$ 891.70	0.0%	\$ 891.70	0.00%
Residential Usage - 1st 100,000 gallons	\$ 0.5810	\$ 0.6385	\$ 0.0575	9.9%	\$ 0.7500	29.09%
Residential Usage - Over 100,000 gallons	\$ 0.4130	\$ 0.6385	\$ 0.2255	54.6%	\$ 0.7500	81.60%
Nonresidential Usage - 1st 100,000 g	\$ 0.5810	\$ 0.6385	\$ 0.0575	9.9%	\$ 0.8000	37.69%
Nonresidential Usage - Over 100,000 g	\$ 0.4130	\$ 0.4530	\$ 0.0400	9.7%	\$ 0.8000	93.70%

Pennsylvania-American Water Company
Proposed General Water Rate Design (not including special rates)
Volumetric Rates are in \$ per hundred gallons

Zone 8 - Appalachian

All Charges	Present Rate	Proposed Rate	Dollar Increase	Percent Increase	I&E Proposed Rate	I&E Dollar Increase	I&E Percent Increase
5/8 - Meter	\$ 11.28	\$ 14.70	\$ 3.42	30.3%	\$ 20.00	\$ 8.72	77.30%
3/4 - Meter	\$ 16.93	\$ 22.00	\$ 5.07	29.9%	\$ 20.00	\$ 3.07	18.13%
1 - Meter	\$ 28.21	\$ 36.70	\$ 8.49	30.1%	\$ 20.00	\$ (8.21)	-29.10%
1 1/2 - Meter	\$ 56.43	\$ 73.40	\$ 16.97	30.1%	\$ 20.00	\$ (36.43)	-64.56%
2 - Meter	\$ 90.29	\$ 117.40	\$ 27.11	30.0%	\$ 131.70	\$ 41.41	45.86%
3 - Meter	\$ 169.30	\$ 220.10	\$ 50.80	30.0%	\$ 245.50	\$ 76.20	45.01%
4 - Meter	\$ 282.16	\$ 307.70	\$ 25.54	9.1%	\$ 307.70	\$ 25.54	9.05%
6 - Meter	\$ 564.33	\$ 460.40	\$ (103.93)	-18.4%	\$ 460.40	\$ (103.93)	-18.42%
8 - Meter	\$	\$ 891.70	\$ 891.70	0.0%	\$ 891.70	\$ 891.70	0.00%
Residential Usage - 1st 16,500 gallons	\$ 0.7600	\$ 0.9534	\$ 0.1934	25.4%	\$ 0.9534	\$ 0.19	25.45%
Residential Usage - Over 16,500 gallons	\$ 0.3540	\$ 0.9534	\$ 0.5994	169.3%	\$ 0.9534	\$ 0.60	169.32%
Nonresidential Usage - 1st 16,500 g	\$ 0.7600	\$	\$ (0.7600)	-100.0%	\$ 0.9534	\$ 0.19	25.45%
Nonresidential Usage - Over 16,500 g	\$ 0.3540	\$	\$ (0.3540)	-100.0%	\$ 0.9534	\$ 0.60	169.32%
Nonresidential Usage - 1st 16,000 g	\$	\$ 0.9534	\$ 0.9534	0.0%	\$ 0.9534	\$ 0.95	0.00%
Nonresidential Usage - Over 16,000 g	\$	\$ 0.4441	\$ 0.4441	0.0%	\$ 0.9534	\$ 0.95	0.00%

Public Fire	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
Hydrants (Borough of Avis)	\$ 14.40	\$ 20.20	\$ 5.80	40.3%
Fire Protection (Pine Creek & Dunnstable)	\$ 2.40	\$ -	\$ (2.40)	-100.0%
Private Fire	Present Rate	Proposed Rate	Dollar Increase	Percent Increase
2 Metered	\$ 21.86	\$ 32.50	\$ 10.64	48.7%
3 Metered	\$ 32.45	\$ 48.20	\$ 15.75	48.5%
4 Metered	\$ 43.73	\$ 65.00	\$ 21.27	48.6%
6 Metered	\$ 65.60	\$ 97.50	\$ 31.90	48.6%
8 Metered	\$ 87.47	\$ 130.00	\$ 42.53	48.6%
10 Metered	\$ 109.34	\$ 162.50	\$ 53.16	48.6%
12 Metered	\$ 131.20	\$ 194.90	\$ 63.70	48.6%

PENNSYLVANIA-AMERICAN WATER COMPANY
ZONE 7 - MANWALAMINK

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			INCREASE		I&E		I&E		I&E	
	(1)	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)	PROPOSED RATES	INCREASE AMOUNT	I&E INCREASE AMOUNT	PERCENTAGE	5/8-Meter All Usage	Present Proposed \$ 8.89 \$ 9.75 0.5810 0.6385
0		\$8.89	\$9.75	\$0.86	9.67%			\$6.11	68.73%		
100		9.47	10.39	0.92	9.69%			\$6.28	66.30%		
500		11.80	12.94	1.15	9.73%			\$6.96	58.97%		
1,000		14.70	16.14	1.44	9.76%			\$7.80	53.06%		
2,000		20.51	22.52	2.01	9.80%			\$9.49	46.27%		
3,000		26.32	28.91	2.59	9.82%			\$11.18	42.48%		
3,263	*	27.85	30.58	2.74	9.83%			\$11.62	41.74%		
3,500		29.23	32.10	2.87	9.83%			\$12.03	41.15%		
4,000		32.13	35.29	3.16	9.84%			\$12.87	40.06%		
5,000		37.94	41.68	3.74	9.84%			\$14.56	38.38%		
6,000		43.75	48.06	4.31	9.85%			\$16.25	37.14%		
7,000		49.56	54.45	4.89	9.86%			\$17.94	36.20%		
8,000		55.37	60.83	5.46	9.86%			\$19.63	35.45%		
9,000		61.18	67.22	6.04	9.86%			\$21.32	34.85%		
10,000		66.99	73.60	6.61	9.87%			\$23.01	34.35%		
11,000		72.80	79.99	7.19	9.87%			\$24.70	33.93%		
12,000		78.61	86.37	7.76	9.87%			\$26.39	33.57%		
13,000		84.42	92.76	8.34	9.87%			\$28.08	33.26%		
14,000		90.23	99.14	8.91	9.87%			\$29.77	32.99%		
15,000		96.04	105.53	9.49	9.88%			\$31.46	32.76%		
16,000		101.85	111.91	10.06	9.88%			\$33.15	32.55%		
17,000		107.66	118.30	10.64	9.88%			\$34.84	32.36%		
18,000		113.47	124.68	11.21	9.88%			\$36.53	32.19%		
19,000		119.28	131.07	11.79	9.88%			\$38.22	32.04%		
20,000		125.09	137.45	12.36	9.88%			\$39.91	31.91%		
21,000		130.90	143.84	12.94	9.88%			\$41.60	31.78%		
22,000		136.71	150.22	13.51	9.88%			\$43.29	31.67%		
23,000		142.52	156.61	14.09	9.88%			\$44.98	31.56%		
24,000		148.33	162.99	14.66	9.88%			\$46.67	31.46%		
25,000		154.14	169.38	15.24	9.88%			\$48.36	31.37%		

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
 ZONE 7 - MANWALAMINK

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 COMMERCIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE		I&E		I&E		5/8-Meter First 100,000 All over 100,000	Present \$	Proposed \$	I&E Proposed \$	I&E Proposed %
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)	RATES	AMOUNT INCREASE	PERCENTAGE						
0	\$8.89	\$9.75	\$0.86	9.67%	\$15.00	6.11	68.73%			8.89	9.75	15.00	
100	9.47	10.39	0.92	9.69%	\$15.80	6.33	66.83%			0.5810	0.6385	0.8000	
500	11.80	12.94	1.15	9.73%	\$19.00	7.21	61.09%			0.4130	0.4530	0.8000	
1,000	14.70	16.14	1.44	9.76%	\$23.00	8.30	56.46%						
2,000	20.51	22.52	2.01	9.80%	\$31.00	10.49	51.15%						
3,000	26.32	28.91	2.59	9.82%	\$39.00	12.68	48.18%						
3,500	29.23	32.10	2.87	9.83%	\$43.00	13.78	47.13%						
4,000	32.13	35.29	3.16	9.84%	\$47.00	14.87	46.28%						
5,000	37.94	41.68	3.74	9.84%	\$55.00	17.06	44.97%						
6,000	43.75	48.06	4.31	9.85%	\$63.00	19.25	44.00%						
7,000	49.56	54.45	4.89	9.86%	\$71.00	21.44	43.26%						
8,000	55.37	60.83	5.46	9.86%	\$79.00	23.63	42.68%						
9,000	61.18	67.22	6.04	9.86%	\$87.00	25.82	42.20%						
10,000	66.99	73.60	6.61	9.87%	\$95.00	28.01	41.81%						
16,000	101.85	111.91	10.06	9.88%	\$143.00	41.15	40.40%						
20,000	125.09	137.45	12.36	9.88%	\$175.00	49.91	39.90%						
20,802	129.75	142.57	12.82	9.88%	\$181.42	51.67	39.82%						
21,000	130.90	143.84	12.94	9.88%	\$183.00	52.10	39.80%						
22,000	136.71	150.22	13.51	9.88%	\$191.00	54.29	39.71%						
23,000	142.52	156.61	14.09	9.88%	\$199.00	56.48	39.63%						
24,000	148.33	162.99	14.66	9.88%	\$207.00	58.67	39.55%						
25,000	154.14	169.38	15.24	9.88%	\$215.00	60.86	39.48%						
26,000	159.95	175.76	15.81	9.88%	\$223.00	63.05	39.42%						
27,000	165.76	182.15	16.39	9.88%	\$231.00	65.24	39.36%						
28,000	171.57	188.53	16.96	9.89%	\$239.00	67.43	39.30%						
29,000	177.38	194.92	17.54	9.89%	\$247.00	69.62	39.25%						
30,000	183.19	201.30	18.11	9.89%	\$255.00	71.81	39.20%						
40,000	241.29	265.15	23.86	9.89%	\$335.00	93.71	38.84%						
50,000	299.39	329.00	29.61	9.89%	\$415.00	115.61	38.62%						
60,000	357.49	392.85	35.36	9.89%	\$495.00	137.51	38.47%						
70,000	415.59	456.70	41.11	9.89%	\$575.00	159.41	38.36%						

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
 Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
 ZONE 8 - APPALACHIAN
 COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 RESIDENTIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER			I&E		I&E		I&E		I&E	
	PRESENT RATES (2)	PROPOSED RATES (3)	INCREASE		PROPOSED RATES	INCREASE		PRESENT	Proposed	Proposed	Proposed
			AMOUNT (4)	PERCENT (5)		AMOUNT	PERCENTAGE				
0	\$11.28	\$14.70	\$3.42	30.32%	\$20.00	\$8.72	77.30%				
100	12.04	15.65	3.61	30.01%	\$20.95	\$8.91	74.03%				
500	15.08	19.47	4.39	29.09%	\$24.77	\$9.69	64.24%				
1,000	18.88	24.23	5.35	28.36%	\$29.53	\$10.65	56.43%				
2,000	26.48	33.77	7.29	27.52%	\$39.07	\$12.59	47.54%				
3,000	34.08	43.30	9.22	27.06%	\$48.60	\$14.52	42.61%				
3,263	36.08	45.81	9.73	26.97%	\$51.11	\$15.03	41.66%				
3,500	37.88	48.07	10.19	26.90%	\$53.37	\$15.49	40.89%				
4,000	41.68	52.84	11.16	26.77%	\$58.14	\$16.46	39.48%				
5,000	49.28	62.37	13.09	26.56%	\$67.67	\$18.39	37.32%				
6,000	56.88	71.90	15.02	26.41%	\$77.20	\$20.32	35.73%				
7,000	64.48	81.44	16.96	26.30%	\$86.74	\$22.26	34.52%				
8,000	72.08	90.97	18.89	26.21%	\$96.27	\$24.19	33.56%				
9,000	79.68	100.51	20.83	26.14%	\$105.81	\$26.13	32.79%				
10,000	87.28	110.04	22.76	26.08%	\$115.34	\$28.06	32.15%				
11,000	94.88	119.57	24.69	26.03%	\$124.87	\$29.99	31.61%				
12,000	102.48	129.11	26.63	25.98%	\$134.41	\$31.93	31.16%				
13,000	110.08	138.64	28.56	25.95%	\$143.94	\$33.86	30.76%				
14,000	117.68	148.18	30.50	25.91%	\$153.48	\$35.80	30.42%				
15,000	125.28	157.71	32.43	25.89%	\$163.01	\$37.73	30.12%				
16,000	132.88	167.24	34.36	25.86%	\$172.54	\$39.66	29.85%				
17,000	138.45	176.78	38.33	27.68%	\$182.08	\$43.63	31.51%				
18,000	141.99	186.31	44.32	31.21%	\$191.61	\$49.62	34.95%				
19,000	145.53	195.85	50.32	34.57%	\$201.15	\$55.62	38.22%				
20,000	149.07	205.38	56.31	37.77%	\$210.68	\$61.61	41.33%				
21,000	152.61	214.91	62.30	40.83%	\$220.21	\$67.60	44.30%				
22,000	156.15	224.45	68.30	43.74%	\$229.75	\$73.60	47.13%				
23,000	159.69	233.98	74.29	46.52%	\$239.28	\$79.59	49.84%				
24,000	163.23	243.52	80.29	49.19%	\$248.82	\$85.59	52.43%				
25,000	166.77	253.05	86.28	51.74%	\$258.35	\$91.58	54.91%				

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%
 Bill at proposed rate was calculated using DSIC rate @ 0.00%

PENNSYLVANIA-AMERICAN WATER COMPANY
 ZONE 8 - APPALACHIAN

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 COMMERCIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER			INCREASE		I&E PROPOSED RATES	I&E INCREASE		Present \$ 11.28 0.7600 0.3540	Proposed \$ 14.70 \$ 20.00	I&E Proposed 0.9534 0.4441 0.000%
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)	AMOUNT		PERCENTAGE				
0	\$11.28	\$14.70	\$3.42	30.32%		\$20.00	\$8.72	77.30%			
100	12.04	15.65	3.61	30.01%		\$20.95	\$8.91	74.03%			
500	15.08	19.47	4.39	29.09%		\$24.77	\$9.69	64.24%			
1,000	18.88	24.23	5.35	28.36%		\$29.53	\$10.65	56.43%			
2,000	26.48	33.77	7.29	27.52%		\$39.07	\$12.59	47.54%			
3,000	34.08	43.30	9.22	27.06%		\$48.60	\$14.52	42.61%			
3,500	37.88	48.07	10.19	26.90%		\$53.37	\$15.49	40.89%			
4,000	41.68	52.84	11.16	26.77%		\$58.14	\$16.46	39.48%			
5,000	49.28	62.37	13.09	26.56%		\$67.67	\$18.39	37.32%			
6,000	56.88	71.90	15.02	26.41%		\$77.20	\$20.32	35.73%			
7,000	64.48	81.44	16.96	26.30%		\$86.74	\$22.26	34.52%			
8,000	72.08	90.97	18.89	26.21%		\$96.27	\$24.19	33.56%			
9,000	79.68	100.51	20.83	26.14%		\$105.81	\$26.13	32.79%			
10,000	87.28	110.04	22.76	26.08%		\$115.34	\$28.06	32.15%			
16,000	132.88	167.24	34.36	25.86%		\$172.54	\$39.66	29.85%			
20,000	149.07	185.01	35.94	24.11%		\$190.31	\$41.24	27.66%			
20,802	151.91	188.57	36.66	24.13%		\$193.87	\$41.96	27.62%			
21,000	152.61	189.45	36.84	24.14%		\$194.75	\$42.14	27.61%			
22,000	156.15	193.89	37.74	24.17%		\$199.19	\$43.04	27.56%			
23,000	159.69	198.33	38.64	24.20%		\$203.63	\$43.94	27.52%			
24,000	163.23	202.77	39.54	24.22%		\$208.07	\$44.84	27.47%			
25,000	166.77	207.21	40.44	24.25%		\$212.51	\$45.74	27.43%			
26,000	170.31	211.65	41.34	24.27%		\$216.95	\$46.64	27.39%			
27,000	173.85	216.09	42.24	24.30%		\$221.39	\$47.54	27.35%			
28,000	177.39	220.53	43.14	24.32%		\$225.83	\$48.44	27.31%			
29,000	180.93	224.97	44.04	24.34%		\$230.27	\$49.34	27.27%			
30,000	184.47	229.42	44.95	24.36%		\$234.72	\$50.25	27.24%			
40,000	219.87	273.82	53.95	24.54%		\$279.12	\$59.25	26.95%			
50,000	255.27	318.23	62.96	24.67%		\$323.53	\$68.26	26.74%			
60,000	290.67	362.64	71.97	24.76%		\$367.94	\$77.27	26.58%			
70,000	326.07	407.05	80.98	24.83%		\$412.35	\$86.28	26.46%			

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.00%

Bill at proposed rate was calculated using DSIC rate @ 0.00%

Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water)
R-2025-3058051 (Wastewater)
Office of Small Business Advocate Set II

OSBA-II-011

Responsible Witness: Max McClellan, Lead, Regulatory Analyst

Question: Reference PAWC Volume 9, Statement 10, page 30 describing the scale back of rates if the Commission grants a smaller increase.

- a) As an example, please provide a revised "3-A Combined Water and Wastewater Revenue Requirement Summary" contained on PAWC Volume 3, page A, showing the subsidies, increases and proposed revenues by operation if the Commission grants 75% of the increase.
- b) Provide the company's proposed methodology for class and customer allocation in the 25% scale back scenario outlined in a).
- c) As an example, please provide a revised "3-A Combined Water and Wastewater Revenue Requirement Summary" contained on PAWC Volume 3, page A, showing the subsidies, increases and proposed revenues by operation if the Commission grants 50% of the increase.

Provide the company's proposed methodology for class and customer allocation in the 50% scale back scenario outlined in c).

Response:

- a. Please see OSBA-II-011_Attachment, page 1, for a prospective summary of the revenue requirements in a scenario where the Commission granted only 75% of the requested water and wastewater increases with all else being equal. This reflects the Company's updated scale-back approach, which supersedes the approach described in Statement No. 10 in which the testimony suggested applying a proportional scale-back across water, wastewater, and Act 11. PAWC intends to make a correction to Statement No. 10 reflecting this change prior to the testimony being entered into the record of this proceeding.
- b. The 25% scale back scenario, with all else being equal and no additional stipulations, would result in a lower Act 11 revenue allocation, thus scaling back the proposed water rates. While the wastewater revenue responsibility would change, the proposed wastewater base rates themselves would stay the same, as those rates were proposed at a level that considered several factors including adherence to agreements.
- c. Please see OSBA-II-011_Attachment, page 2, for a prospective summary of the revenue requirements in a scenario where the Commission granted only 50% of the requested increase with all else being equal.

Pennsylvania-American Water Company
R-2025-3057983 (Water) and R-2025-3058051 (Wastewater)
OSBA-II-011 Attachment
Combined Water and Wastewater Revenue Requirement Summary showing 75% of Proposed Increase

	Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	CSS Wastewater Operations	Elizabeth CSS Wastewater Operations
Present Rate Revenue	(1) \$1,156,621,085	\$947,784,779	\$108,561,975	\$12,748,475	\$85,758,589	\$1,767,267
Additional Revenue Requirement	(2) 126,537,338	74,555,831	15,030,197	26,532,847	7,803,278	2,615,184
Act 11 - Wastewater Allocation	(3) 0	35,683,013	(7,700,555)	(21,435,758)	(4,461,382)	(2,085,318)
Proposed Revenues	\$1,283,158,423	\$1,058,023,623	\$115,891,617	\$17,845,564	\$89,100,485	\$2,297,133
Rate Increase/(Decrease)	\$126,537,338	\$110,238,844	\$7,329,642	\$5,097,089	\$3,341,896	\$529,866
	10.9%	11.6%	6.8%	40.0%	3.9%	30.0%

Notes:

- (1) **Present Rate Revenue:** Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.
- (2) **Additional Revenue Requirement:** The Additional Revenue Requirement are developed in subsequent sections of Exhibit 3-A for each of the operations.
- (3) **Act 11 - Wastewater Allocation** is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

Pennsylvania-American Water Company
R-2025-3057983 (Water) and R-2025-3058051 (Wastewater)
OSBA-II-011 Attachment
Combined Water and Wastewater Revenue Requirement Summary showing 50% of Proposed Increase

	Total Company	Water Operations	Wastewater SSS General Operations	BASA Wastewater Operations	CSS Wastewater Operations	Elizabeth CSS Wastewater Operations
Present Rate Revenue	(1) \$1,156,621,085	\$947,784,779	\$108,561,975	\$12,748,475	\$85,758,589	\$1,767,267
Additional Revenue Requirement	(2) 84,358,225	49,703,888	10,020,131	17,688,565	5,202,185	1,743,456
Act 11 - Wastewater Allocation	(3) 0	18,355,844	(2,690,489)	(12,591,476)	(1,860,290)	(1,213,590)
Proposed Revenues	\$1,240,979,310	\$1,015,844,511	\$115,891,617	\$17,845,564	\$89,100,485	\$2,297,133
Rate Increase/(Decrease)	\$84,358,225	\$68,059,732	\$7,329,642	\$5,097,089	\$3,341,896	\$529,866
	7.3%	7.2%	6.8%	40.0%	3.9%	30.0%

Notes:

- (1) **Present Rate Revenue:** Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.
- (2) **Additional Revenue Requirement:** The Additional Revenue Requirement are developed in subsequent sections of Exhibit 3-A for each of the operations.
- (3) **Act 11 - Wastewater Allocation** is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

I&E Statement No. 4
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

Docket No. R -2025-3058051 (Wastewater)

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:
Deduct Adjustment
Wastewater Proposed Rates
Act 11 Allocation
Wastewater Scale Back of Rates

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1 **INTRODUCTION**

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

3 A. My name is Ethan Cline. My business address is 400 North Street, Harrisburg, PA
4 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) in the
8 Bureau of Investigation and Enforcement (I&E) as a Fixed Utility Valuation
9 Engineer.

10
11 **Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?**

12 A. My education and professional background are set forth in Appendix A, which is
13 attached.

14
15 **Q. PLEASE DESCRIBE THE ROLE OF I&E IN RATE PROCEEDINGS.**

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

20
21 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

22 A. The purpose of my direct testimony is to evaluate Pennsylvania-American Water

1 Company's (PAWC or Company) request for an annual increase in operating
2 revenue of approximately \$168,716,450.¹ My testimony regarding PAWC's request
3 will focus on the exclusion of four wastewater systems, the rate structure contained
4 in the remaining two wastewater systems, Cost of Service Studies, and the scale back
5 of rates. In addition, I will address the Company's Deduct Adjustment proposal.
6

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

8 A. Yes. I&E Exhibit No. 4 contains schedules that support my direct testimony.
9

10 **Q. PLEASE SUMMARIZE THE COMPANY'S REQUESTED INCREASE.**

11 A. On November 14, 2025, PAWC filed a combined water and wastewater base rate
12 case based on a fully projected future test year (FPFTY) ending June 30, 2027. The
13 total requested increase of \$168,716,450 is comprised of an increase in Water
14 Operations revenue of \$152,417,957, an increase in Wastewater Sanitary Sewer
15 System (SSS) General Operations revenue of \$7,329,642, Butler Area Sewer
16 Authority (BASA) Wastewater Operations of \$5,097,089, Combined Sewer System
17 (CSS) Wastewater Operations of \$3,341,896, and the Elizabeth Borough (EBMA)
18 CSS Wastewater Operations of \$529,866.²

¹ PAWC Exhibit 3-A Combined Water and Wastewater Revenue Requirement – Summary.

² PAWC Exhibit 3-A Combined Water and Wastewater Revenue Requirement – Summary.

1 **Q. HOW MANY DIFFERENT WASTEWATER RATE ZONES DOES PAWC**
2 **HAVE AND DO THE RATES VARY BY ZONE?**

3 A. PAWC currently has eleven different wastewater rate zones with various rates, with
4 seven in the Wastewater SSS Operations, the newly added BASA Wastewater
5 Operations, two zones in the CSS Wastewater Operations, and the EBMA CSS
6 Wastewater Operations.³

7
8 **DEDUCT ADJUSTMENT**

9 **Q. IS THE COMPANY PROPOSING ANY CHANGES TO ITS WASTEWATER**
10 **RATE DESIGN?**

11 A. Yes. The Company is proposing to change from its current volumetric charges that
12 are based on monthly total metered water usage to a deduct adjustment methodology.

13
14 **Q. WHAT IS A DEDUCT ADJUSTMENT?**

15 A. A deduct adjustment, as the Company is proposing, is a method that separates
16 metered water usage that is likely to go through the wastewater system from water
17 usage that is used for outdoor purposes in the summertime. The seasonal wastewater
18 bills (April to December)⁴ would be determined by the lesser of actual metered water
19 usage for the summer month or the average water consumption for that customer in

³ PAWC Exhibits 10-B, 10-C, 10-D, and 10-E.

⁴ PAWC Notice of Proposed Wastewater Rate Changes, Rate Zones 1, 1a, 1b, 1c, 1d, 1e, 1f, and 2; PAWC Supplement No. 61 to Tariff Wastewater PA P.U.C. No. 16, Second Revised Page 31.1, Canceling First Revised Page 31.1.

1 the winter months (January, February and March), which is determined by actual
2 water usage.⁵

3
4 **Q. IS THE COMPANY PROPOSING TO CALCULATE ITS DEDUCT**
5 **ADJUSTMENT ON AVERAGE WINTER USAGE BY RATE CLASS OR ON**
6 **AN INDIVIDUAL CUSTOMER BASIS?**

7 A. The Company states that the deduct adjustment will be customized for each
8 individual customer.⁶

9
10 **Q. HOW IS PAWC PROPOSING THAT THE DEDUCT ADJUSTMENT BE**
11 **CALCULATED FOR CUSTOMERS WHO ARE NEW OR OTHERWISE DO**
12 **NOT HAVE ANY WINTER USAGE?**

13 A. The Company proposes to bill based on actual consumption until sufficient winter
14 average billing data is available. Additionally, for customers who travel or have
15 lower-than-normal winter usage, the Company is proposing to set a minimum usage
16 level of 1,000 gallons so that if the usage level in the winter is less than 1,000
17 gallons, the Company would use 1,000 gallons of usage for that month in its
18 calculation of average winter usage.⁷

⁵ PAWC Statement No. 10, pp. 25-26.

⁶ PAWC Statement No. 10, p. 26.

⁷ PAWC Statement No. 10, p. 27.

1 **Q. DO YOU HAVE ANY CONCERNS REGARDING THE PROPOSED**
2 **DEDUCT ADJUSTMENT?**

3 A. Yes. I have general concerns that the Company's proposal is too broad and may
4 have unintended consequences of shifting cost recovery from higher-income
5 customers to lower-income customers since it is intended to benefit customers who
6 water lawns, wash cars, fill pools, etc.⁸ in the summer. I also have concerns about
7 the months characterized as "summer months" and the usage rate for customers with
8 no history. Finally, I have concerns regarding customers with increased usage in the
9 shoulder months of October, November, December, and April.

10
11 **Q. PAWC WITNESS MAX MCCLELLAN REPEATEDLY REFERS TO THE**
12 **ADJUSTED MONTHS AS "SUMMER MONTHS." WHAT CONCERNS DO**
13 **YOU HAVE ABOUT THIS CHARACTERIZATION?**

14 A. The customer notices in PAWC Volume 1 and the proposed tariff changes in the
15 filing are clear that the winter months are January, February, and March, that are
16 used to calculate the average usage, and the months to be adjusted based on winter
17 usage are referred to as seasonal months, April through December.¹⁰ Thus, implying
18 that only the summer months are adjusted for winter usage is misleading.

⁸ PAWC Statement No. 10, p. 25.

⁹ PAWC Statement No. 10, pp. 25-29.

¹⁰ PAWC Supplement No. 61 to Tariff Wastewater PA P.U.C. No. 16, Second Revised Page 31.1, Canceling First Revised Page 31.1.

1 **Q. DO YOU AGREE WITH THE COMPANY’S PROPOSAL TO ADJUST**
2 **APRIL THROUGH DECEMBER BASED ON WINTER USAGE?**

3 A. No. If the Company’s concern is to address the watering of lawns, filling of
4 swimming pools, etc., adjusting April through December to reflect winter usage
5 should not be necessary as months like April, October, November, and December
6 should not be impacted.

7
8 **Q. WHAT MONTHS DO YOU RECOMMEND AS “SUMMER MONTHS”?**

9 A. I recommend the Company be required to use May through September as what Mr.
10 McClellan calls summer months. Shoulder months such as April, October,
11 November, and December are likely not high outdoor watering months, and it would
12 be more appropriate to use actual usage for those months to calculate customer bills.

13
14 **Q. SHOULD NOVEMBER AND DECEMBER BE INCLUDED IN THE**
15 **WINTER MONTH PERIOD?**

16 A. Yes. I recommend that November and December be included in the winter month
17 period. The weather in those months is typically cold enough that outside activities
18 such as lawn watering, pool filling, and car washing is extremely limited, if not non-
19 existent. Additionally, including more than three months will serve to provide a
20 more accurate baseline usage level for the deduct adjustment.

1 **Q. HOW WOULD THE COMPANY’S PROPOSAL SHIFT COST RECOVERY**
2 **FROM HIGHER INCOME CUSTOMERS TO LOWER INCOME**
3 **CUSTOMERS?**

4 A. My concern relates specifically to the 1,000-gallon minimum for customers with low
5 usage that is non-representative of actual consumption. This provision would most
6 likely apply to customers who have alternative properties where they reside during
7 the winter months. Therefore, as an example, a customer who has little or no usage
8 during the three months used to calculate the winter average (January, February,
9 March) would only be charged 1,000 gallons of usage during the seasonal period.
10 This customer would receive a significant discount on their wastewater bills if their
11 summer usage (outside of outdoor usage) is closer to the system average usage for
12 residential customers of 3,000 gallons per month. If this lower usage level is applied
13 in future base rate cases, the lower usage billing determinant would result in higher
14 usage costs which would increase the usage rates of all other customers. While I
15 agree with the cost causation principle and the concept of not charging wastewater
16 customers based on outdoor water usage that does not enter the treatment system,
17 providing discounts to higher-income customers at the expense of lower-income
18 customers is not a reasonable result.

1 **Q. WOULD INCREASING THE 1,000 GALLON MINIMUM REDUCE THE**
2 **POSSIBILITY OF SHIFTING COSTS BETWEEN HIGH AND LOWER-**
3 **INCOME CUSTOMERS?**

4 A. Yes. Increasing the 1,000-gallon minimum would help to reduce the possibility of
5 shifting costs between high and lower-income customers. Applying this higher
6 minimum usage such that customers are billed the lower of their actual usage and the
7 average of the three-month winter period would also protect against lower-usage
8 customers being billed more than their actual usage.

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

11 A. I recommend the minimum usage for customers with no winter usage be initially set
12 at 3,000-gallons, which is approximately the system average usage for SSS
13 Operations residential customers. I further recommend that the Company track and
14 calculate the system average usage for customers during the winter period. That way
15 the minimum usage level for customers with no or extremely low winter usage can
16 be revisited in subsequent rate cases and set approximately equal to the system
17 average winter usage level. Additionally, as described above, I recommend that
18 usage from November and December be included in the calculation of the winter
19 baseline usage.

1 **Q. SHOULD CUSTOMERS SERVED BY CSS WASTEWATER OPERATIONS**
2 **SYSTEMS ELIGIBLE FOR THE DEDUCT ADJUSTMENT UNDER THE**
3 **COMPANY’S PROPOSAL?**

4 A. No. While there is no discussion regarding the eligibility of CSS Wastewater
5 Operations customers for the proposed deduct adjustment in PAWC Statement No.
6 10, the Proposed Tariff for Rate Zones 2a and 2b includes a note that the “Sewer
7 Deduct Consumption does not apply to residential bills under this Schedule of
8 Rates.”¹¹ I recommend this sentence also be added under Rate Zone 2 so that it
9 applies to all CSS Wastewater Operations residential customers, not just Rate Zones
10 2a and 2b.

11
12 **Q. WHY DO YOU RECOMMEND THAT ALL CSS WASTEWATER**
13 **OPERATIONS RESIDENTIAL CUSTOMERS BE INELIGIBLE FOR THE**
14 **DEDUCT ADJUSTMENT?**

15 A. Treatment plants in the CSS Wastewater Operations treat flows that originate from
16 both sanitary sewer systems as well as storm sewer systems. Therefore, the outdoor
17 activity flows likely still get treated at the wastewater treatment plant despite not
18 entering through the sanitary sewer system. Therefore, deducting these volumes
19 from a customer’s bill does not follow cost causation principles.

¹¹ PAWC Supplement No. 61 to Tariff Wastewater PA PUC No. 16 Second Revised Page 12.1 Canceling First Revised Page 12.1 and Original Page 12.2 redlined.

1 **Q. IS THERE A MORE SIMPLE AND ACCURATE METHOD TO**
2 **DETERMINE A DEDUCT ADJUSTMENT THAN USING THE AVERAGE**
3 **OF WINTER MONTHS' USAGE?**

4 A. Yes. Having a program that allows customers to install deduct meters, at their own
5 expense and not spread across the rest of the customer base, would allow for the
6 direct measurement of water used for outdoor purposes to be deducted from the
7 overall usage for the wastewater bill. This option would provide far more accuracy
8 in summer period wastewater bills than using the average of three winter months,
9 particularly for those customers who only reside in their home during non-winter
10 seasonal months.

11
12 **Q. ARE YOU AWARE OF ANY OTHER PENNSYLVANIA WASTEWATER**
13 **UTILITIES THAT ALLOW CUSTOMERS TO INSTALL DEDUCT**
14 **METERS?**

15 A. Yes. Aqua Pennsylvania Wastewater, Inc. (Aqua), according to its website, allows
16 certain customers in its Lower Makefield, East Norriton, or Limerick systems that
17 previously purchased and installed a deduct meter to submit readings for a credit on
18 their bills.¹²

¹² <https://www.aquawater.com/deduct-meter-program>, accessed on January 21, 2026.

1 **Q. ARE YOU RECOMMENDING THAT PAWC BEGIN A DEDUCT**
2 **METERING PROGRAM IN THIS PROCEEDING?**

3 A. No. However, this is an option that the Company should explore in future base rate
4 cases when more data exists regarding this program, particularly considering the
5 proposed merger of American Water and Essential Utilities.¹³

6
7 **WASTEWATER PROPOSED RATE SUMMARY**

8 **Q. WHAT DID PAWC STATE CONCERNING ITS PROPOSED**
9 **WASTEWATER RATES?**

10 A. PAWC witness McClellan listed seven principles to be considered when developing
11 appropriate design mechanisms for retail water and wastewater service: cost
12 causation, revenue stability, efficiency of use, avoidance of discrimination, simplicity
13 and feasibility, and affordability. Mr. McClellan further stated that while cost
14 causation is the “foundation” of the Company’s rate design, it is not the “be-all and
15 end-all” and that all the principles are of equal importance.¹⁴

¹³ <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 January 21, 2026.

¹⁴ PAWC Statement No. 10, pp. 7-8.

1 **Q. DO YOU AGREE THAT THE COMPANY’S RATE DESIGN FOLLOWS**
2 **ALL OF THE PRINCIPLES DESCRIBED BY MR. MCCLELLAN?**

3 A. No. While I generally agree with the Company’s list of principles for rate design, as
4 I discuss below, certain proposals of the Company strayed too far from the cost
5 causation principles so that the wastewater rates are not sufficiently recovering the
6 cost to serve.

7
8 **Q. WHAT IS ACT 11 of 2012?**

9 A. On February 14, 2012, Governor Corbett signed into law Act 11 of 2012 (Act 11),
10 which amends Chapters 3, 13, and 33 of the Pennsylvania Public Utility Code. Act
11 11 amends Chapters 3 and 13 to allow jurisdictional utilities to make rate case claims
12 based on an FPFTY, to allow wastewater utilities to allocate a portion of their
13 revenue requirement to the combined wastewater and water utility customer base,
14 and to allow water and wastewater utilities, electric distribution companies, and
15 natural gas distribution companies or a city natural gas distribution operation to
16 petition for a distribution system improvement charge.¹⁵

¹⁵ *Implementation of Act 11 of 2012*, Docket No. M-2012-2293611, Final Implementation Order entered August 2, 2012.

1 **Q. DOES ACT 11 SPECIFY HOW RATES SHOULD BE DETERMINED OR**
2 **WHAT PORTION OF A COMPANY’S WASTEWATER REVENUE**
3 **REQUIREMENT SHOULD BE ALLOCATED TO ITS COMBINED WATER**
4 **AND WASTEWATER CUSTOMERS?**

5 A. No. Act 11 does not specify how the Commission should determine rates or dictate
6 the amount of revenue that should be allocated or shifted, leaving the Commission
7 wide latitude in applying this provision of Act 11. However, it is important to
8 remember that Section 1311(c) states that it must be in the public interest for the
9 utility to allocate a portion of the wastewater revenue requirement to the combined
10 water and wastewater customer base.

11
12 **Q. IS PAWC PROPOSING TO SHIFT SOME OF THE WASTEWATER**
13 **REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO**
14 **WATER CUSTOMERS IN THIS PROCEEDING?**

15 A. Yes. In its filing, the Company proposes that its wastewater operations receive a
16 \$53,010,182 subsidy from its water operations.¹⁶

¹⁶ PAWC Exhibit 3-A Combined Water and Wastewater Revenue Requirement – Summary.Exhibit.

1 **Q. WHY IS PAWC PROPOSING TO SHIFT SOME OF THE WASTEWATER**
2 **REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO**
3 **WATER CUSTOMERS?**

4 A. The Company stated that the guiding principle behind its reallocation proposal is to
5 promote gradualism of rates and avoid the risk of rate shock to PAWC customers.

6 The Company's goal was to have an average residential wastewater bill of
7 approximately \$119.50 per month in the SSS Zone and approximately \$124 per
8 month in the CSS Zone, which it claims is in parity with the proposed average
9 residential water customer bill of \$95 per month. This proposal results in a
10 wastewater revenue shortfall of \$53,010,182 being shifted to water customers.¹⁷

11
12 **Q. SHOULD THE COMMISSION ACCEPT PAWC'S PROPOSAL TO SHIFT**
13 **\$53,010,182 OF THE WASTEWATER REVENUE REQUIREMENT FROM**
14 **WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS**
15 **PROCEEDING?**

16 A. No, I disagree with this for several reasons. First, as described below, the primary
17 consideration should have been to design wastewater rates to recover the cost of
18 providing wastewater service, a goal the Company described, but ignored in favor of
19 other considerations such as affordability. Second, the Company's affordability
20 considerations are flawed because it ignores the wastewater rates paid to other

¹⁷ PAWC Statement No. 10, p. 32.

1 wastewater entities by PAWC water-only customers. Third, the Commission has a
2 history of limiting the costs that PAWC requests to be allocated from wastewater to
3 water customers. Finally, the wastewater rates that I recommend result in average
4 bills that are reasonable considering all the factors.

5
6 **Q. DO YOU AGREE WITH THE COMPANY’S STATED GOAL OF**
7 **BRINGING ADDITIONAL PARITY TO THE AVERAGE BILL FOR**
8 **WATER AND WASTEWATER CUSTOMERS?**¹⁸

9 A. No. Bringing additional “parity” to the average bills of water and wastewater
10 customers should not be the primary goal as there is a substantial difference in
11 operating costs between water and wastewater systems, and the Company itself notes
12 that cost causation should be a primary factor in rate setting. I am not aware of any
13 ratemaking criteria that implies water customers and wastewater customers should
14 have comparable rates.

15
16 **Q. ARE MOST PAWC WATER CUSTOMERS ALSO PAWC WASTEWATER**
17 **CUSTOMERS?**

18 A. No. The Company showed that it has a total of 86,297 customers that receive both
19 water and wastewater service from PAWC, which when compared to the total

¹⁸ PAWC Statement No. 10, p. 32.

1 694,439 water operations customers, shows that only 12.4% of its water customers
2 are also wastewater customers.¹⁹
3

4 **Q. WHY SHOULD THE COMPANY TAKE INTO CONSIDERATION THE**
5 **FACT THAT WATER-ONLY CUSTOMERS MAY BE PAYING FOR**
6 **WASTEWATER SERVICE FROM OTHER ENTITIES?**

7 A. The fact that certain water customers not receiving wastewater service from PAWC
8 will incur their own wastewater costs while they subsidize PAWC wastewater
9 customers means that these customers would pay, at least partially, for wastewater
10 service twice. While the sharing of these costs is specifically permitted by Act 11, as
11 discussed above, the fact that these customers are essentially paying for a service that
12 they do not use is sufficient reason to limit the amount of the Act 11 allocation as
13 much as possible.
14

15 **Q. WHAT IS THE HISTORY OF PAWC'S REQUESTED ACT 11**
16 **ALLOCATIONS IN ITS PREVIOUS BASE RATE CASES?**

17 A. Since Act 11 of 2012 was signed into law, PAWC has submitted five base rate cases,
18 not including the present case, which have been resolved either through litigation or
19 settlement. The following table shows the Act 11 allocation requested by the
20 Company and the amount ultimately approved by the Commission in each base rate

¹⁹ PAWC Schedule LNO-1, p. 1.

1 case. The total amount that PAWC has requested to be allocated to water customers,
2 not including the request in the present proceeding, is \$163,867,510 and the total
3 amount allocated by the Commission is \$90,849,981. When considering the
4 Company's stated water revenue requirement request, prior to the Act 11 allocation,
5 in this case of \$99,407,775, it becomes apparent that the Commission has allocated
6 an entire base rate case increase worth of wastewater funds across water customers
7 since Act 11 was enacted. This supports my position that the wastewater allocation
8 should be as limited as possible without causing rate shock to wastewater customers.

Case Docket No.	PAWC Proposed Act 11 Allocation	Commission approved Allocation
R-2013-2355276	\$9,092,115 ²⁰	\$5,411,134 ²¹
R-2017-2595853	\$13,805,187 ²²	\$4,700,000 ²³
R-2020-3019369 and R-2020-3019371	\$32,851,597 (Rate Year 1) \$35,171,958 (Rate Year 2) ²⁴	\$29,296,281 (Step 1) \$21,480,685 (Step 2) ²⁵
R-2022-3031672 and R-2022-3031673	\$72,946,653 ²⁶	\$26,961,883 ²⁷
R-2023-3043189 and R-2023-3043190	\$71,087,394 ²⁸	\$23,321,384 ²⁹
Total:	\$234,954,904	\$111,171,367

WASTEWATER RATE STRUCTURE AND REVENUE SUMMARY

Q. DID YOU COMPILE A SUMMARY THAT SHOWS THE REVENUE IMPACT OF I&E'S RATE STRUCTURE RECOMMENDATIONS?

A. Yes. A summary of the I&E wastewater revenue recommendations described below is provided on I&E Exhibit No. 4, Schedule 1. This exhibit schedule shows the

²⁰ PAWC base rate filing at Docket No. R-2013-2355276, PAWC Statement No. 1, p. 11.

²¹ *Pa. PUC vs. Pennsylvania-American Water Company*, Docket No. R-2013-2355276, Opinion and Order (Order Entered December 19, 2013), p. 17.

²² PAWC base rate filing at Docket No. R-2017-2595853 PAWC Exhibit No. 3-A, Water and Wastewater Revenue Requirement Summary.

²³ *Pa. PUC vs. Pennsylvania-American Water Company*, Docket No. R-2017-2595853, Recommended Decision, p. 31, Dated November 20, 2017.

²⁴ PAWC base rate filing at Docket Nos. R-2020-3019369 and R-2020-3019371, PAWC Exhibit No. 3-A, Combined Water and Wastewater Revenue Requirement Summary.

²⁵ *Pa. PUC vs. Pennsylvania-American Water*, Docket Nos. R-2020-3019369 and R-2020-3019371, Joint Petition for Non-Unanimous Settlement of Rate Investigation, p. 20.

²⁶ PAWC base rate filing at Docket Nos. R-2022-3031672 and R-2022-3031673, PAWC Exhibit No. 3-A, Combined Water and Wastewater Revenue Requirement Summary.

²⁷ *Pa. PUC vs. Pennsylvania-American Water Company*, Docket Nos. R-2022-3031672 and R-2022-3031673, Joint Petition for Settlement of Rate Investigation, p. 23.

²⁸ PAWC base rate filing at Docket Nos. R-2023-3043189 and R-2023-3043190 PAWC Exhibit No. 3-A, Water and Wastewater Revenue Requirement Summary.

²⁹ *Pa. PUC vs. Pennsylvania-American Water Company*, Docket Nos. R-2023-3043189 and R-2023-3043190, Opinion and Order (Order Entered July 22, 2024), Table Act 11.

1 Company's claims for present rate revenues and the additional claimed revenue
2 requirement, the Company's proposed Act 11 allocation, along with my
3 recommended adjustment to the Company's claimed Act 11 allocation and the
4 adjusted proposed revenues, adjusted rate increases and corresponding percentage
5 increases. This schedule does not factor in the recommended adjustments of other
6 I&E witnesses which are summarized by I&E witness Vanessa Okum.³⁰

7 Based on my proposed wastewater rates, I am recommending that the total
8 proposed Act 11 subsidy be reduced by \$18,544,730.³¹ I will provide a description
9 below, by rate zone and rate class, demonstrating how I determined the \$18,544,730
10 reduction in Act 11 allocation.

11
12 **SSS OPERATIONS – ZONES 1 AND 1A-1G**

13 **Q. DID THE COMPANY PROVIDE A COST OF SERVICE STUDY (COSS) TO**
14 **DETERMINE THE COSTS OF PROVIDING WASTEWATER SERVICE**
15 **FOR THE SSS OPERATIONS?**

16 A. Yes. The Company provided one COSS for the SSS Operations - Zones 1, and 1a –
17 1g.³² This COSS included a customer cost analysis that claims the SSS Operations
18 wastewater customer cost is comprised of \$13.55 per month of direct customer costs,

³⁰ I&E Statement No. 1.

³¹ I&E Exhibit No. 4, Schedule 1.

³² PAWC Exhibit 12-B.

1 and \$32.34 per month of Inflow and Infiltration (I&I) costs for a total cost of \$45.89
2 for a Residential customer.³³

3
4 **Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE FOR SSS**
5 **OPERATIONS?**

6 A. The Company proposed an increase in revenues of \$7,329,639, which is an
7 increase of 6.75%. To achieve this increase, the Company proposed to increase
8 customer charges, usage rates and flat rates.³⁴

9
10 **Q. DO THE PROPOSED REVENUES FROM SSS OPERATIONS RECOVER**
11 **THE ENTIRE COST OF PROVIDING WASTEWATER SERVICE TO SSS**
12 **OPERATIONS?**

13 A. No. The revenue shortfall for SSS Operations is \$12,710,621.³⁵

14
15 **Q. IS THIS REQUESTED SUBSIDY REASONABLE?**

16 A. No. As I described above, each type of utility service should recover as much of the
17 cost of providing that service as possible. Since most PAWC water customers are
18 not also PAWC wastewater customers, it is unreasonable to require these water
19 customers to subsidize wastewater customers to the extent PAWC has requested.

³³ PAWC Exhibit 12-B, Schedule RS1 j., Attachment, p. 2.

³⁴ PAWC Exhibit 10-B, p. 1.

³⁵ PAWC Exhibit 3-A.

1 Therefore, as described below, I recommend that rates increase for each rate zone
2 within the SSS General Operations to reduce the \$12,710,621 subsidy.

3
4 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION FOR SSS**
5 **OPERATIONS.**

6 A. My recommendation is to increase certain residential, commercial, industrial, and
7 municipal rate classes in Rate Zones 1 and 1a through 1g such that total SSS
8 Operations revenues are \$123,462,247, which is an increase of \$14,900,272 over
9 present rates of \$108,561,974.³⁶ I will discuss individual rate recommendations
10 below.

11
12 **Q. WHAT LIMITATIONS DID YOU FOLLOW TO REDUCE THE SUBSIDY**
13 **NEEDED TO OPERATE THE SSS OPERATIONS?**

14 A. I recommend monthly customer charges and usage rates that will limit the highest
15 increase in an average bill for residential customers to approximately 70%. As
16 described in more detail below, the highest average percent increase in a bill a
17 residential customer will experience is the 70.23% increase I recommend in Zone
18 1g – Manwalamink. The 70% maximum increase to an average bill also applies to
19 non-residential customers, with the exception of commercial customers in Zone 1g
20 - Manwalamink.³⁷

³⁶ I&E Exhibit No. 4, Schedule 2.

³⁷ I&E Exhibit No. 4, Schedule 4, p. 7.

1 **Q. ARE YOU CLAIMING THAT A 70% INCREASE IS THE UPPER LIMIT**
2 **ABOVE WHICH RATE SHOCK WOULD OCCUR?**

3 A. No. There is no defined percentage increase amount above which rate shock
4 would occur. I selected 70% because it allows an increase in rates that facilitates
5 the eventual consolidation of rate zones with Rate Zone 1 while also falling inside
6 the range of increase percentages that the Company has proposed for other rate
7 zones and rate classes.

8
9 **Q. DID YOU UTILIZE THE COMPANY'S COSS TO DEVELOP THE**
10 **VARIOUS WASTEWATER RATES TO MOVE EACH CLASS TOWARDS**
11 **1.0?**

12 A. No. When analyzing the Company's COSS, it shows relative rates of return under
13 proposed rates for the residential class of 1.21, commercial class of 1.22, large
14 industrial class of 0.87, Bulk Users / VA Hospital of 1.27, and bulk users contract of
15 negative 0.11. These relative rates of return show that the residential, commercial,
16 and Bulk Users / VA Hospital rate classes are greatly subsidizing the industrial and
17 contract bulk user classes. Typically, this would result in larger increases for the
18 industrial and contract bulk user classes and smaller or no increases for the other
19 classes. However, in this case, because the rates of the bulk users that are receiving
20 the largest subsidy are set by contract, the Company is unable to increase those rates
21 in accordance with the COSS. Therefore, while this significant subsidy persists

1 without the ability to increase rates for the bulk contract customers, it is not possible
2 for the other rate classes to reach a relative rate of return of 1.0.

3
4 **Q. PLEASE EXPLAIN THE TERMS RATE OF RETURN AND RELATIVE**
5 **RATE OF RETURN.**

6 A. The rate of return is the Commission authorized return on rate base that is
7 determined in a base rate proceeding. This is the return the Company and
8 shareholders earn on the rate base investment. A relative rate of return indicates how
9 the rate of return of each customer class compares to the system average rate of
10 return. In general, a relative rate of return that provides revenue equal to its cost to
11 serve would have a relative rate of return equal to 1.0. If a class of service has a
12 relative rate of return below 1.0, the revenue received from that class does not cover
13 the cost of providing service to that class. If a class of service has a relative rate of
14 return above 1.0, the revenue received from that class exceeds the cost of providing
15 service to that class.

1 **SSS OPERATIONS - RESIDENTIAL**

2 **Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR**
3 **PROPOSED RATES AND REVENUE FOR RESIDENTIAL CUSTOMERS**
4 **IN SSS OPERATIONS?**

5 A. Yes. I prepared a schedule showing present and proposed rates and revenue for
6 Residential SSS Operation customers in Rate Zones 1 and 1a through 1g.³⁸

7
8 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S**
9 **PROPOSED RESIDENTIAL CUSTOMER CHARGE OF \$20.00?**

10 A. Not at this time. However, as discussed below, I am recommending that the
11 customer charge be included in any scale back of rates.

12
13 **Q. HOW DID YOU DETERMINE THE SSS OPERATIONS RESIDENTIAL**
14 **USAGE RATES?**

15 A. In order to reduce the \$12,710,621 subsidy generated by the SSS Operations, I
16 increased the residential usage rates as shown in the following table.³⁹

³⁸ I&E Exhibit No. 4, Schedule 3.

³⁹ I&E Exhibit No. 4, Schedule 3.

Residential Usage Rate Recommendation (\$ per hundred gallons)			
Rate Zone	Present Usage Rates	Company Proposed Usage Rate	I&E Proposed Usage Rate
Rate Zone 1	\$2.9539	\$3.1446	\$3.4000
Rate Zone 1a	\$1.415	\$2.0334	\$2.4075
Rate Zone 1b			
First 2,000 g	\$0.75	\$1.7345	\$2.0000
Over 2,000 g	\$2.9539	\$3.1446	\$3.4000
Rate Zone 1c			
Flat Rate	\$110.00	\$120.00	\$128.33
Rate Zone 1e	\$128.33	\$128.33	\$128.33
Rate Zone 1f	\$0.0000	\$1.7345	\$1.7345
Rate Zone 1g			
First 10,000 g	\$0.6590	\$0.7240	\$1.4000
Over 10,000 g	\$0.2530	\$0.2780	\$1.4000

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. The residential customer charges and usage rates that I recommend increase the proposed rate revenue for residential customers by \$5,505,438, and therefore, reduces the subsidy by the same amount.⁴⁰

⁴⁰ I&E Exhibit No. 4, Schedule 2, Column B, line 23.

1 **Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING**
2 **THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS**
3 **FOR SSS OPERATIONS?**

4 A. Yes. I prepared bill analyses for each rate zone, showing the present and proposed
5 bills at various usage levels. The average bill is shown with an asterisk for each zone
6 in SSS Operations.⁴¹

7
8 **Q. WHAT INCREASE WILL THE AVERAGE RESIDENTIAL CUSTOMER IN**
9 **EACH SSS RATE ZONE RECEIVE UNDER YOUR CUSTOMER CHARGE**
10 **AND USAGE RATE PROPOSAL?**

11 A. The bill for an average Residential customer in each rate zone is shown in the table
12 below.⁴²

Bill Increase for Average Residential Customer by Rate Zone		
Rate Zone	As Filed Increase	I&E Increase
1	9.13%	16.62%
1a	39.76%	55.50%
1b	40.45%	59.37%
1c	8.05%	15.55%
1e	0.00%	0.00%
1f	39.96%	39.96%
1g	9.89%	70.23%

⁴¹ I&E Exhibit No. 4, Schedule 4, pp. 1-7.

⁴² I&E Exhibit No. 4, Schedule 4, pp. 1-7.

1 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
2 **RATE ZONE 1 RESIDENTIAL CUSTOMERS?**

3 A. I increased the proposed usage rate for Rate Zone 1 residential customers so that the
4 percent increase for the average customer was approximately equal to the percent
5 increase proposed by the Company for its residential Rate Zone 1 water customers,
6 which is 16.82%.⁴³ This results in a reasonable increase that helps to reduce the
7 subsidy being applied to water customers.
8

9 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASES FOR**
10 **ZONE 1A – ROYERSFORD AND ZONE 1B - YORK?**

11 A. In the interest of moving Zones 1a and 1b towards consolidation with Zone 1 in
12 future rate proceedings, I recommend setting usage rates that are halfway between
13 present rates for Zones 1b and 1c (first 2,000 gallons) and my recommended Zone 1
14 usage rates, or $(\$3.40 - \$1.415) / 2 + \$1.415 = \$2.4075$ per hundred gallons for Zone
15 1a and $(\$3.40 - \$0.75) / 2 + \$0.75 = \$2.075$ for the first 2,000 gallon rate for Zone
16 1b. I set Zone 1b's Over 2,000 gallon usage block equal to the Zone 1 usage rate
17 because the increase from \$2.9539 present rate to \$3.40 is reasonable and allows for
18 future consolidation of rate zones as was proposed by the Company.⁴⁴ My
19 recommendation furthers the Company's goal of consolidation of rate zones which
20 has the eventual benefit of eventually reducing and possibly removing the need for

⁴³ PAWC Exhibit 10-A, p. 78.

⁴⁴ PAWC Statement No. 10, p. 23.

1 other water and wastewater customers to subsidize the rates of the Zone 1a and 1b
2 customers.

3
4 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
5 **ZONE 1C – FOSTER AND ZONE 1E - SADSURY?**

6 A. Zone 1c customers are charged flat rates that are set based on the average bill of rate
7 zone 1 customers. Typically, I would propose a flat rate equal to the average bill of a
8 Rate Zone 1 customer, rounded to the nearest dollar. However, I recommend the flat
9 rate be increased to \$128.33, which is the same as the flat rate for Rate Zone 1e
10 customers and would allow for the consolidation of the two rate zones. I am not
11 recommending any increase to the Rate Zone 1e flat rate because the existing
12 \$128.33 rate is approximately equal to the average bill of the Rate Zone 1 customers
13 that I am recommending. Therefore, no increase for these customers is necessary. If
14 the Company would prefer to consolidate Rate Zones 1c and 1e with Rate Zone 1
15 flat rates, I would not oppose increasing Rate Zone 1 flat rates to \$128.33 to facilitate
16 that consolidation.

17
18 **Q. WHY ARE YOU NOT YOU RECOMMENDING ANY CHANGES TO THE**
19 **COMPANY’S PROPOSED RATES FOR RATE ZONE 1F – FARMINGTON**
20 **RATES?**

21 A. The Company is proposing moving Rate Zone 1f customers from a flat rate to a
22 monthly service charge per customer plus a usage rate per 100 gallons. Typically,

1 such a move can result in increases that vary wildly by usage amount and can be
2 confusing for those customers. Therefore, I am not recommending a change to Rate
3 Zone 1f rates proposed by the Company and these customers can be moved towards
4 consolidation in future base rate cases.

5
6 **Q. WHY DID THE COMPANY PROPOSE A UNIFORM INCREASE OF LESS**
7 **THAN 10% FOR RATE ZONE 1G – MANWALAMINK?**

8 A. The Company stated that its proposed increase for Rate Zone 1g – Manwalamink,
9 which is limited to a uniform increase not to exceed a compounded annual growth
10 rate (CAGR) of 10% and with any changes to take place on June 25, 2027, is
11 consistent with the settlement⁴⁵ for the acquisition of that system.⁴⁶

12
13 **Q. IF THE COMPANY’S PROPOSAL IS CONSISTENT WITH THE ASSET**
14 **PURCHASE AGREEMENT (APA) OF THE ACQUISITION CASE FOR**
15 **THE MANWALAMINK SYSTEM, WHY ARE YOU RECOMMENDING AN**
16 **INCREASE FOR THAT RATE ZONE?**

17 A. While the APA of the Manwalamink system acquisition case does limit what the
18 Company can propose in terms of rate increases, it does not limit the Commission in
19 what rates that it determines are reasonable. As such, I do not agree that limiting the
20 increase for the Rate Zone 1f customers to just 10% is in the public interest because

⁴⁵ I am advised by counsel that that the Manwalamink acquisition case was resolved through litigation and the provision at question is included in the Asset Purchase Agreement.

⁴⁶ PAWC Statement No. 10, pp. 23-24.

1 the rates for these customers are substantially below those of Rate Zone 1 customers,
2 and it will take many rate cases before they are able to be consolidated with Rate
3 Zone 1. The result will be that both wastewater and water customers are allocated a
4 subsidy based on a benefit that will only affect Manwalamink customers. Therefore,
5 increasing the rates of the Rate Zone 1g customers beyond what is in the acquisition
6 settlement is reasonable and in the public interest.

7
8 **Q. HOW DID YOU DETERMINE THE USAGE RATE YOU RECOMMENDED**
9 **FOR RATE ZONE 1G?**

10 A. Initially, I determined a usage rate for the first block of usage rates up to 10,000
11 gallons that is halfway between the present rate of \$0.7240 per hundred gallons and
12 the Rate Zone 1 usage rate that I recommend of \$3.40 per hundred gallons.
13 However, as I discussed above, I wanted to limit the increase of the average bill to
14 approximately 70%. Therefore, I lowered the first block usage rate to \$1.400 per
15 hundred gallons, which results in a usage rate for the average bill of 70.23%.⁴⁷
16 Additionally, because the second block usage rate does not generate any revenue,⁴⁸ a
17 large increase for that rate is unlikely to affect any customers. Therefore, I set the
18 second block usage rate equal to the first block so that it can be eliminated, which
19 moves Rate Zone 1g towards consolidation with Rate Zone 1, which has a single
20 block usage rate.

⁴⁷ I&E Exhibit No. 4, Schedule 4, p. 7.

⁴⁸ I&E Exhibit No. 4, Schedule 3, p. 8.

1 **Q. ARE THERE ANY OTHER PROVISIONS FOR RATE ZONE 1G THAT**
2 **YOU WOULD LIKE TO ADDRESS?**

3 A. Yes. PAWC is proposing that the rate increase of Rate Zone 1g not go into effect
4 until June 25, 2027, regardless of when the rates for the rest of the company become
5 effective.⁴⁹
6

7 **Q. DO YOU AGREE WITH THE PROPOSED RATE DELAY PROPOSAL?**

8 A. No. Delaying the effective date of the rate increase for Rate Zone 1g customers
9 creates a revenue shortfall that, as proposed by the Company, must be allocated
10 across the other PAWC customers. This rate delay provides zero benefit to any
11 customers other than Rate Zone 1g customers. Therefore, I recommend the
12 Commission either reject the rate delay provision entirely and have Rate Zone 1g
13 customers' rates increase at the same time as all other customers, or alternatively, the
14 Company could impute any revenue shortfall so that it is not recovered from the
15 other PAWC customers.

⁴⁹ PAWC Statement No. 10, pp. 23-24.

1 **SSS OPERATIONS – COMMERCIAL**

2 **Q. DID YOU PREPARE A SCHEDULE SHOWING AS FILED PRESENT,**
3 **PROPOSED, AND YOUR RECOMMENDED PROPOSED RATES AND**
4 **REVENUE FOR COMMERCIAL CUSTOMERS IN SSS OPERATIONS?**

5 A. Yes. I prepared a schedule showing present and proposed rates and revenue for
6 Residential SSS Operation customers in Rate Zones 1 and 1a through 1g.⁵⁰

7
8 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY’S**
9 **PROPOSED COMMERCIAL CUSTOMER CHARGE OF \$45.50?**

10 A. Not at this time. However, as I discuss below, I am recommending that the customer
11 charge be included in any scale back of rates.

12
13 **Q. WHAT SSS OPERATIONS COMMERCIAL USAGE RATES DO YOU**
14 **RECOMMEND?**

15 A. In order to reduce the \$12,710,621 subsidy generated by the SSS Operations, I
16 increased the commercial usage rates as shown in the following table.⁵¹

⁵⁰ I&E Exhibit No. 4, Schedule 5.

⁵¹ I&E Exhibit No. 4, Schedule 5.

Commercial Usage Rate Recommendation (\$ per hundred gallons)			
Rate Zone	Present Usage Rates	Company Proposed Usage Rate	I&E Proposed Usage Rate
Rate Zone 1	\$2.1986	\$2.3417	\$2.5000
Rate Zone 1a	\$0.7500	\$1.0890	\$1.5400
Rate Zone 1b			
First 2,000 g	\$0.400	\$2.3417	\$2.5000
Over 2,000 g	\$2.1986	\$2.500	\$2.5000
Rate Zone 1c			
Flat Rate	\$150.00	\$162.00	\$171.00
Rate Zone 1e			
Flat Rate	\$128.33	\$162.00	\$171.00
Rate Zone 1f	\$0.0000	\$1.5400	\$1.5400
Rate Zone 1g			
First 10,000 g	\$0.6590	\$0.7240	\$0.9000
Over 10,000 g	\$0.2530	\$0.2780	\$0.9000

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. The commercial customer charges and usage rates that I recommend increase the proposed rate revenue for commercial customers by \$1,710,774, and therefore, reduces the subsidy by the same amount.⁵²

⁵² I&E Exhibit No. 4, Schedule 2, Column E, line 23.

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR THE SSS OPERATIONS?

A. Yes. I prepared bill analyses for each rate zone, showing the present and proposed bills at various usage levels. The average bill is shown with an asterisk for each rate zone in SSS Operations.⁵³

Q. WHAT INCREASE WILL THE AVERAGE COMMERCIAL CUSTOMER IN EACH SSS RATE ZONE RECEIVE UNDER YOUR CUSTOMER CHARGE AND USAGE RATE PROPOSAL?

A. The bill for an average Residential customer in each rate zone is shown in the table below.⁵⁴

Bill Increase for Average Residential Customer by Rate Zone		
Rate Zone	As Filed Increase	I&E Increase
1	6.78%	13.38%
1a	39.82%	88.04%
1b	15.17%	22.29%
1c	6.97%	12.92%
1e	26.24%	33.25%
1f	36.77%	36.77%
1g	9.88%	92.66%

⁵³ I&E Exhibit No. 4, Schedule 6, pp. 1-7.

⁵⁴ I&E Exhibit No. 4, Schedule 6, pp. 1-7.

1 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
2 **RATE ZONE 1 COMMERCIAL CUSTOMERS?**

3 A. Because the relative rate of return for the commercial class under present rates as
4 presented by the Company is slightly above that of the residential class (1.19 for
5 residential compared to 1.23 for commercial),⁵⁵ I decided to increase the average bill
6 for the commercial customers slightly less than that of the residential customers
7 described above. Therefore, I increased the Rate Zone 1 usage charge to \$2.500 per
8 hundred gallons, which results in an increase to the average bill of a commercial
9 customer of 13.38%. This results in a reasonable increase that helps to reduce the
10 subsidy being applied to water customers.

11
12 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASES FOR**
13 **RATE ZONE 1A – ROYERSFORD?**

14 A. In the interest of moving Rate Zones 1a towards consolidation with Rate Zone 1 in
15 future cases, I am recommending Rate Zone 1a rates be set equal to those of Rate
16 Zone 1f, which would allow these two commercial rate zones to be consolidated and
17 would move them towards consolidation with Rate Zone 1 in a future base rate case.

⁵⁵ PAWC Exhibit 12-B, Schedule B.

1 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
2 **RATE ZONE 1B – YORK?**

3 A. The Company proposed that the commercial rates for Rate Zone 1b be set equal to
4 those of Rate Zone 1. I do not disagree with that proposal; therefore, I simply set the
5 Rate Zone 1b usage rate equal to my recommended Rate Zone 1 usage rate,
6 described above.

7
8 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
9 **RATE ZONE 1C – FOSTER AND RATE ZONE 1E - SADSBBURY?**

10 A. Rate Zone 1c customers are charged flat rates that are set based on the average bill of
11 Rate Zone 1 customers that use 5,000 gallons of water. This is a reasonable
12 approach to flat rates for commercial customers, therefore, I recommend the flat rates
13 for Rate Zones 1c and 1e be set to \$171.00, which is the average bill for a Rate Zone
14 1 commercial customer that uses 5,000 gallons of water, rounded to the nearest
15 dollar.

16
17 **Q. WHY ARE YOU NOT YOU RECOMMENDING ANY CHANGES TO THE**
18 **COMPANY’S PROPOSED RATES FOR RATE ZONE 1F – FARMINGTON**
19 **RATES?**

20 A. Similar to the residential bill discussed above, the Company is proposing moving
21 Rate Zone 1f customers from a flat rate to a monthly service charge per customer
22 plus a usage rate per 100 gallons. Typically, such a move can result in increases that

1 vary wildly by usage amount and can be confusing for those customers. Therefore, I
2 am not recommending a change to the Rate Zone 1f rates proposed by the Company
3 and these customers can be moved towards consolidation in future base rate cases.
4

5 **Q. WHY DID THE COMPANY PROPOSE A UNIFORM INCREASE OF LESS**
6 **THAN 10% FOR RATE ZONE 1G – MANWALAMINK?**

7 A. As described above, the Company's rate proposal for Rate Zone 1g is limited by the
8 APA for the acquisition of that system.⁵⁶
9

10 **Q. IF THE COMPANY'S PROPOSAL IS CONSISTENT WITH THE APA FOR**
11 **THE ACQUISITION OF THE MANWALAMINK SYSTEM, WHY ARE**
12 **YOU RECOMMENDING AN INCREASE FOR THAT RATE ZONE?**

13 A. While the APA of the Manwalamink system acquisition case does limit what the
14 Company can propose in terms of rate increases, it does not limit the Commission in
15 what rates that it determines are reasonable. As such, I do not agree that limiting the
16 increase for the Rate Zone 1f customers to just 10% is in the public interest because
17 the rates for these customers are substantially below those of Rate Zone 1 customers
18 it will take many rate cases before they are able to be consolidated with Rate Zone 1.
19 The result will be both wastewater and water customers will be allocated a subsidy
20 based on a benefit that will only affect Manwalamink customers. Therefore,

⁵⁶ PAWC Statement No. 10, pp. 23-24.

1 increasing the rates of the Rate Zone 1g customers beyond what is in the acquisition
2 settlement is reasonable and in the public interest.

3
4 **Q. HOW DID YOU DETERMINE THE USAGE RATE YOU RECOMMENDED**
5 **FOR RATE ZONE 1G?**

6 A. Initially, I determined a usage rate for the first block of usage rates up to 10,000
7 gallons that is halfway between the present rate of \$0.6590 per hundred gallons and
8 the Rate Zone 1 usage rate that I recommend of \$3.40 per hundred gallons.
9 However, I determined that would result in a rate increase that would be too high for
10 those customers. Therefore, I reduced my recommended rate increase to \$0.9000,
11 which is less than a quarter of the difference between present rates and my
12 recommended Rate Zone 1 recommendation. Additionally, because the second
13 block usage rate does not generate any revenue,⁵⁷ a large increase for that rate is
14 unlikely to affect any customers. Therefore, I set the second block usage rate equal
15 to the first block so that it can be eliminated, which moves Rate Zone 1g towards
16 consolidation with Rate Zone 1, which has a single block usage rate.

⁵⁷ I&E Exhibit No. 4, Schedule 5, p. 8.

1 **SSS OPERATIONS – INDUSTRIAL**

2 **Q. DID YOU PREPARE A SCHEDULE SHOWING AS FILED PRESENT,**
3 **PROPOSED, AND YOUR RECOMMENDED PROPOSED RATES AND**
4 **REVENUE FOR INDUSTRIAL CUSTOMERS IN SSS OPERATIONS?**

5 A. Yes. I prepared a schedule showing present and proposed rates and revenue for
6 Industrial SSS Operation customers in Rate Zones 1 and 1a through 1g.⁵⁸

7
8 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY’S**
9 **PROPOSED INDUSTRIAL CUSTOMER CHARGE OF \$45.50?**

10 A. Not at this time. However, as I discuss below, I am recommending that the customer
11 charge be included in any scale back of rates.

12
13 **Q. WHAT SSS OPERATIONS INDUSTRIAL USAGE RATES DO YOU**
14 **RECOMMEND?**

15 A. In order to reduce the \$12,710,621 subsidy generated by SSS Operations, I increased
16 the Industrial usage rates as shown in the following table.⁵⁹

⁵⁸ I&E Exhibit No. 4, Schedule 7.

⁵⁹ I&E Exhibit No. 4, Schedule 7.

Industrial Usage Rate Recommendation (\$ per hundred gallons)			
Rate Zone	Present Usage Rates	Company Proposed Usage Rate	I&E Proposed Usage Rate
Rate Zone 1	\$2.1986	\$2.3417	\$2.7000
Rate Zone 1a	\$0.7500	\$1.0890	\$1.7250
Rate Zone 1b	\$2.1986	\$2.3417	\$2.7000
Rate Zone 1c Flat Rate	\$150.00	\$162.00	\$181.00

Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?

A. The industrial customer charges and usage rates that I recommend increase the proposed rate revenue for industrial customers by \$163,716 and, therefore, reduces the subsidy by the same amount.⁶⁰

Q. DID YOU ALSO PREPARE BILL COMPARISON SCHEDULES SHOWING THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS FOR SSS OPERATIONS?

A. Yes. I prepared bill analyses for each rate zone, showing the present and proposed bills at various usage levels. The average bill is shown with an asterisk for each zone in SSS Operations.⁶¹

⁶⁰ I&E Exhibit No. 4, Schedule 2, Column H, line 23.

⁶¹ I&E Exhibit No. 4, Schedule 8, pp. 1-4.

1 **Q. WHAT INCREASE WILL THE AVERAGE INDUSTRIAL CUSTOMER IN**
2 **EACH SSS RATE ZONE RECEIVE UNDER YOUR CUSTOMER CHARGE**
3 **AND USAGE RATE PROPOSAL?**

4 A. The bill for an average Industrial customer in each rate zone is shown in the table
5 below.⁶²

Bill Increase for Average Industrial Customer by Rate Zone		
Rate Zone	As Filed Increase	I&E Increase
1	5.54%	21.64%
1a	43.66%	127.03%
1b	5.81%	21.95%
1c	6.97%	19.52%

6
7
8 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
9 **RATE ZONE 1 INDUSTRIAL CUSTOMERS?**

10 A. Because the relative rate of return for the industrial class under present rates as
11 presented by the Company is below 1.0,⁶³ I decided to increase the average bill for
12 the industrial customers slightly more than that of the residential customers,
13 described above. Therefore, I increased the Rate Zone 1 usage charge to \$2.700 per
14 hundred gallons, which results in an increase to the average bill of a industrial
15 customer of 21.64%. This results in a reasonable increase that helps to reduce the
16 subsidy being applied to water customers.

⁶² I&E Exhibit No. 4, Schedule8, pp. 1-4.

⁶³ PAWC Exhibit 12-B, Schedule B.

1 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASES FOR**
2 **RATE ZONE 1A – ROYERSFORD?**

3 A. In the interest of moving Rate Zone 1a towards consolidation with Rate Zone 1 in
4 future cases, I am recommending a usage rate that is halfway between present rate of
5 \$0.7500 per hundred gallons and the usage rate for Rate Zone 1 industrial customers
6 that I recommended of \$2.700. While the resulting percent increase of 127.03% is
7 very large, it is within the range of increases proposed by the Company for other
8 industrial customers. For example, industrial customers in Rate Zone 1b that use
9 1,000 gallons of water will receive an increase of 210.48% under the Company's
10 proposed rates.

11
12 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
13 **RATE ZONE 1B – YORK?**

14 A. The Company proposed that the industrial rates for Rate Zone 1b be set equal to
15 those of Rate Zone 1. I do not disagree with that proposal therefore I simply set the
16 Rate Zone 1b usage rate equal to my recommended Rate Zone 1 usage rate,
17 described above.

18
19 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED INCREASE FOR**
20 **RATE ZONE 1C – FOSTER?**

21 A. Rate Zone 1c customers are charged flat rates that are set based on the average bill of
22 Rate Zone 1 customers that use 5,000 gallons of water. This is a reasonable

1 approach to flat rates for industrial customers; therefore, I recommend the flat rates
2 for Rate Zones 1c be set to \$181.00, which is the average bill for a Rate Zone 1
3 industrial customer that uses 5,000 gallons of water, rounded to the nearest dollar.
4

5 **SSS OPERATIONS – MUNICIPAL**

6 **Q. DID YOU PREPARE A SCHEDULE SHOWING AS FILED PRESENT,**
7 **PROPOSED, AND YOUR RECOMMENDED PROPOSED RATES AND**
8 **REVENUE FOR MUNICIPAL CUSTOMERS IN SSS OPERATIONS?**

9 A. Yes. I prepared a schedule showing present and proposed rates and revenue for
10 Municipal SSS Operation customers in Rate Zones 1 and 1a through 1g.⁶⁴
11

12 **Q. ARE THE MUNICIPAL RATES FOR SSS GENERAL OPERATIONS THE**
13 **SAME AS THE COMMERCIAL CLASS?**

14 A. Yes.
15

16 **Q. ARE YOU RECOMMENDING THE SAME RATES FOR THE MUNICIPAL**
17 **CLASS THAT YOU ARE FOR THE COMMERCIAL CLASS?**

18 A. Yes. The municipal rates should remain the same as commercial rates, therefore I
19 am recommending the same changes to municipal rates as I am for the commercial
20 class, as described above.

⁶⁴ I&E Exhibit No. 4, Schedule 9.

1 **SSS OPERATIONS OTHER OPERATING REVENUE**

2 **Q. WHAT TYPES OF OTHER OPERATING REVENUE DOES PAWC**
3 **COLLECT?**

4 A. PAWC includes industrial pretreatment revenue, late payment fees, and
5 miscellaneous revenue in other operating revenue. The Company is projecting it will
6 collect \$3,072,167 of other operating revenue in SSS Operations.⁶⁵

7
8 **Q. DID YOU REFLECT AN INCREASE IN OTHER OPERATING REVENUE**
9 **UNDER PROPOSED RATES?**

10 A. Yes. I reflected an increase of \$39,156 in other operating revenue.⁶⁶

11
12 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDED ADJUSTMENT TO**
13 **OTHER OPERATING REVENUES?**

14 A. Included in the Company's calculation of other operating revenues is an amount for
15 late payment revenues.⁶⁷ Late payment revenues are calculated as a percentage of
16 proposed revenues. Therefore, because my rate recommendations result in an
17 increase to proposed revenues, there will be a corresponding increase to late payment
18 revenues.

⁶⁵ PAWC Exhibit 10-B, p. 34.

⁶⁶ I&E Exhibit No. 4, Schedule 2, Column O, line 21.

⁶⁷ PAWC Exhibit 10-B, p. 34.

1 **Q. HOW DID YOU DETERMINE THE \$39,156 INCREASE IN LATE**
2 **PAYMENT REVENUE?**

3 A. In the electronic files provided by the Company at the beginning of the proceeding,
4 PAWC identified a late payment fee percentage of 0.5199%. I multiplied the total
5 proposed rate revenue as a result of my rate recommendations by that 0.5199% to
6 determine the other operating revenues under proposed rates shown on I&E Exhibit
7 No. 4, Schedule 2 ($\$7,531,477 \times 0.5199\% = \$39,156$).
8

9 **Q. IF THE COMMISSION SETS PROPOSED REVENUE DIFFERENT THAN**
10 **WHAT YOU HAVE RECOMMENDED, SHOULD THE OTHER**
11 **OPERATING REVENUES BE ADJUSTED AS WELL?**

12 A. Yes. As stated above, late payment revenue is determined as a percentage of
13 revenues under proposed rates. Therefore, the final other operating revenues should
14 be adjusted based on the proposed rate revenue eventually approved by the
15 Commission.

1 **CSS OPERATIONS SUMMARY**

2 **Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE FOR CSS**
3 **OPERATIONS?**

4 A. The Company proposed to increase present rate revenue by \$3,341,893, or 3.90%,
5 from \$85,758,591 to \$89,100,484.⁶⁸ To achieve this increase, the Company
6 proposed to increase its Rate Zone 2 rates and no increase for Rate Zone 2a –
7 Scranton.⁶⁹

8
9 **CSS OPERATIONS – ZONES 2 AND 2A**

10 **Q. DID THE COMPANY PROVIDE A COSS TO DETERMINE THE COSTS**
11 **OF PROVIDING WASTEWATER SERVICE FOR CSS OPERATIONS?**

12 A. Yes. The Company provided one COSS for the CSS Operations - Zones 2 and 2a.⁷⁰
13 This COSS did not include a customer cost analysis.

14
15 **Q. DO THE PROPOSED REVENUES FROM CSS OPERATIONS RECOVER**
16 **THE ENTIRE COST OF PROVIDING WASTEWATER SERVICE TO CSS**
17 **OPERATIONS?**

18 A. No. The revenue shortfall for CSS Operations is \$7,062,475.⁷¹

⁶⁸ PAWC Exhibit 10-C, p. 1.

⁶⁹ PAWC Exhibit 10-C, p. 2.

⁷⁰ PAWC Exhibit 12-C, Schedules B and C.

⁷¹ PAWC Exhibit 3-A, p. A.

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR CSS**
2 **OPERATIONS.**

3 A. I am not recommending any adjustment to the Company's proposed increase for
4 Rate Zone 2 customers. I am recommending that Rate Zone 2a – Scranton
5 customers remain merged with Zone 2 and be allocated the same increase.
6

7 **Q. IS PAWC'S PROPOSAL NOT TO INCREASE RATE ZONE 2A'S RATES**
8 **BASED ON A COST ANALYSIS OF ANY KIND?**

9 A. No. The Company's proposal not to increase Rate Zone 2a's rates is based solely
10 on the promises made by the Company during the acquisition of the Scranton
11 system. Specifically, the Asset Purchase Agreement provided that PAWC would
12 not propose rate increases that would be equal to an amount greater than a 1.9%
13 CAGR increase in annual revenues over a ten-year period relative to the starting
14 amount of annual revenues.⁷²
15

16 **Q. DO YOU AGREE THAT THE RATES FOR RATE ZONE 2A - SCRANTON**
17 **SHOULD NOT BE INCREASED IN LINE WITH RATE ZONE 2 RATES?**

18 A. No. Holding the rates for the Scranton system at present rates and moving that
19 system back into its own rate class is contradictory to the goals of regionalization and
20 consolidation and does not adhere to cost causation in any way. Furthermore,

⁷² PAWC Statement No. 2, p. 20.

1 assigning the revenue shortfall created by this proposal to water customers who are
2 likely to have their own wastewater costs, many of whom are not PAWC wastewater
3 customers, and who were unable to offer any input into the deal made by the
4 Company during the acquisition is not reasonable.

5
6 **Q. WHAT DO YOU RECOMMEND?**

7 A. I recommend that Rate Zone 2a rates remain consolidated with Rate Zone 2.

8
9 **Q. WHAT IS THE RESULT OF SETTING RATE ZONE 2A RATES EQUAL**
10 **TO THOSE OF RATE ZONE 2?**

11 A. The results of setting Rate Zone 2a proposed rates equal to Rate Zone 2 rates is a
12 total revenue increase of \$10,784,556 over the Company's proposed rates from
13 \$84,012,737 to \$94,797,294.⁷³ I have attached schedules showing the increase by
14 rate class as I&E Exhibit No. 4, Schedules 11-14.

15
16 **Q. DOES YOUR RECOMMENDATION INCLUDE AN ADJUSTMENT TO**
17 **OTHER OPERATING REVENUES?**

18 A. Yes. Similar to SSS General Operations, described above, an increase in proposed
19 rates necessitates an increase in late payment revenues, which is a part of the
20 Company's claimed other operating revenues. In this case, the other operating

⁷³ I&E Exhibit No. 4, Schedule 10.

revenues increased by \$55,779.⁷⁴ This adjustment would change if the Commission approves proposed revenues different than what I recommended.

BASA WW OPERATIONS – RATE ZONE 1D

Q. DID THE COMPANY PROVIDE A COSS TO DETERMINE THE COSTS OF PROVIDING WASTEWATER SERVICE FOR BASA WW OPERATIONS?

A. Yes. The Company provided one COSS for BASA WW Operations - Zone 1d.⁷⁵ This COSS did not include a customer cost analysis.

Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE FOR BASA WASTEWATER OPERATIONS?

A. The Company proposed an increase in revenues of \$5,097,091, which is an increase of 40.00%. To achieve this increase, the Company proposed to increase customer charges, usage rates and flat rates.⁷⁶

⁷⁴ I&E Exhibit No. 4, Schedule 10.

⁷⁵ PAWC Exhibit 12-D.

⁷⁶ PAWC Exhibit 10-D, p. 1.

1 **Q. DO THE PROPOSED REVENUES FROM BASA WASTEWATER**
2 **OPERATIONS RECOVER THE ENTIRE COST OF PROVIDING**
3 **WASTEWATER SERVICE TO BASA WASTEWATER OPERATIONS?**

4 A. No. The revenue shortfall for BASA wastewater Operations is \$30,280,040.⁷⁷

6 **Q. ARE YOU RECOMMENDING ANY CHANGES TO THE COMPANY'S**
7 **PROPOSED RATES FOR BASA WASTEWATER OPERATIONS?**

8 A. No. Similar to the Rate Zone 1f system above, PAWC is proposing to move the
9 BASA system from flat rates to a monthly customer charge and usage rates. The
10 result of this is very large increases for certain customers and increasing rates for
11 those customers beyond what the Company has proposed would not be reasonable.
12 The rates for Rate Zone 1d will be moved towards consolidation with Rate Zone 1 in
13 future base rate cases.

15 **EBMA CSS WASTEWATER OPERATIONS – ZONES 2B**

16 **Q. DID THE COMPANY PROVIDE A COSS TO DETERMINE THE COST OF**
17 **PROVIDING WASTEWATER SERVICE TO EBMA CSS WASTEWATER**
18 **OPERATIONS?**

19 A. Yes. The Company provided one COSS for the EBMA CSS Wastewater Operations
20 – Rate Zone 2b. This COSS did not include a customer cost analysis.⁷⁸

⁷⁷ PAWC Exhibit 3-A.

⁷⁸ PAWC Exhibit 12-E.

1 **Q. WHAT CHANGE IN REVENUE DID THE COMPANY PROPOSE FOR**
2 **EBMA CSS WASTEWATER OPERATIONS?**

3 A. The Company proposed an increase in revenues of \$529,867, which is an increase
4 of 29.98%. To achieve this increase, the Company proposed to increase customer
5 charges, usage rates and flat rates.⁷⁹ The Company limited its proposed increase in
6 this case to 30% based on an agreement included in the settlement of its
7 acquisition case.⁸⁰

8
9 **Q. DO THE PROPOSED REVENUES FROM EBMA CSS WASTEWATER**
10 **OPERATIONS RECOVER THE ENTIRE COST OF PROVIDING**
11 **WASTEWATER SERVICE TO EBMA CSS OPERATIONS?**

12 A. No. The revenue shortfall for EBMA CSS Wastewater Operations is \$2,957,046.⁸¹

13
14 **Q. IS THIS REQUESTED SUBSIDY REASONABLE?**

15 A. No. As I described above, each type of utility service should recover as much of the
16 cost of providing that service as possible. Since most PAWC water customers are
17 not also PAWC wastewater customers, it is unreasonable to require water customers
18 to subsidize wastewater customers to the extent PAWC has requested. Therefore, as
19 described below, I recommend that rates increase for each rate zone within EBMA
20 CSS Operations to reduce the \$2,957,046 subsidy.

⁷⁹ PAWC Exhibit 10-E.

⁸⁰ PAWC Statement No. 2, p. 22.

⁸¹ PAWC Exhibit 3-A.

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION FOR EBMA CSS**
2 **OPERATIONS.**

3 A. My recommendation is to increase certain residential, commercial, industrial, and
4 municipal rate classes in Rate Zone 2b such that the total EBMA CSS Wastewater
5 Operations revenues are \$2,486,675, which is an increase of \$719,408 over
6 present rates of \$1,767,267.⁸² I will discuss individual rate recommendations
7 below.

8
9 **Q. ARE YOU RECOMMENDING RATE ZONE 2B RATES BE INCREASED**
10 **TO MATCH THOSE OF RATE ZONE 2?**

11 A. No. The distance between Rate Zone 2b and Rate Zone 2 is too large to
12 reasonably consolidate these rate zones in this proceeding. However, I am
13 recommending increases that will move Rate Zone 2b towards consolidation in
14 future base rate cases.

⁸² I&E Exhibit No. 4, Schedule 15.

1 **EBMA CSS OPERATIONS – RESIDENTIAL**

2 **Q. DID YOU PREPARE A SCHEDULE SHOWING PRESENT AND YOUR**
3 **PROPOSED RATES AND REVENUE FOR CUSTOMERS IN ALL**
4 **CLASSES IN EBMA CSS WASTEWATER OPERATIONS?**

5 A. Yes. I prepared a schedule showing present and proposed rates and revenue for all
6 classes in the EBMA CSS Wastewater Operations.⁸³

7
8 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY’S**
9 **PROPOSED RESIDENTIAL CUSTOMER CHARGE OF \$35.00?**

10 A. No. The existing residential customer charge for Rate Zone 2b is \$35.00, which is
11 higher than the \$20.00 residential customer charge proposed for Rate Zone 2.

12 Therefore, rather than reducing the customer charge in this case and increasing the
13 subsidy, I agree with the Company’s proposal to not adjust the \$35.00 residential
14 customer charge under proposed rates.

15
16 **Q. WHAT USAGE RATES DO YOU RECOMMEND FOR RATE ZONE 2B**
17 **RESIDENTIAL CUSTOMERS?**

18 A. In order to move the Rate Zone 2b residential customer closer to consolidation with
19 Rate Zone 2 and reduce the subsidy, I am recommending a residential usage rate of
20 \$1.97 per hundred gallons. This \$1.97 per hundred gallons is the midpoint between

⁸³ I&E Exhibit No. 4, Schedule 16.

1 the existing rate of \$0.8000 per hundred gallons and the Company's proposed usage
2 rate for residential Rate Zone 2 customers of \$3.134 per hundred gallons.

3
4 **Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE**
5 **RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?**

6 A. The residential customer charges and usage rates that I recommend increase the
7 proposed rate revenue for residential customers by \$158,330, and therefore, reduces
8 the subsidy by the same amount.⁸⁴

9
10 **Q. DID YOU ALSO PREPARE A BILL COMPARISON ANALYSIS SHOWING**
11 **THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS**
12 **FOR THE RESIDENTIAL RATE ZONE 2B?**

13 A. Yes. I prepared a bill analysis for residential customers in Rate Zone 2b. The
14 average bill increase under my recommendation is 61.38%.⁸⁵ This average bill falls
15 below the 70% limit I discussed above.

⁸⁴ I&E Exhibit No. 4, Schedule 15.

⁸⁵ I&E Exhibit No. 4, Schedule 17.

1 **EBMA CSS WASTEWATER OPERATIONS – NON-RESIDENTIAL**

2 **Q. DID YOU PREPARE A SCHEDULE SHOWING AS FILED PRESENT,**
3 **PROPOSED, AND YOUR RECOMMENDED PROPOSED RATES AND**
4 **REVENUE FOR NON-RESIDENTIAL CUSTOMERS IN RATE ZONE 2B?**

5 A. Yes. I prepared a schedule showing present and proposed rates and revenue for Non-
6 Residential customers in Rate Zone 2b.⁸⁶

7
8 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY’S**
9 **PROPOSED NON-RESIDENTIAL CUSTOMER CHARGE OF \$45.50?**

10 A. Yes. I am recommending an increase in the non-residential customer charge to
11 \$50.00 in order to match the customer charge proposed by the Company in Rate
12 Zone 2.

13
14 **Q. WHAT USAGE RATES DO YOU RECOMMEND FOR RATE ZONE 2B**
15 **NON-RESIDENTIAL CUSTOMERS?**

16 A. In order to move the Rate Zone 2b non-residential customer closer to consolidation
17 with Rate Zone 2 and reduce the subsidy, I am recommending a non-residential
18 usage rate of \$1.685 per hundred gallons.⁸⁷ This \$1.685 per hundred gallons is the
19 midpoint between the existing rate of \$0.8000 per hundred gallons and the

⁸⁶ I&E Exhibit No. 4, Schedule 16.

⁸⁷ I&E Exhibit No. 4, Schedule 16.

1 Company's proposed usage rate for non-residential Rate Zone 2 customers of \$2.57
2 per hundred gallons.
3

4 **Q. HOW MUCH DO YOUR CUSTOMER CHARGE AND USAGE RATE**
5 **RECOMMENDATIONS REDUCE THE SSS OPERATIONS SUBSIDY?**

6 A. The non-residential customer charges and usage rates that I recommend increase the
7 proposed rate revenue for non-residential customers by \$48,914 and, therefore,
8 reduces the subsidy by the same amount.⁸⁸
9

10 **Q. DID YOU ALSO PREPARE A BILL COMPARISON ANALYSIS SHOWING**
11 **THE PRESENT AND PROPOSED BILLS AT VARIOUS USAGE LEVELS**
12 **FOR THE NON-RESIDENTIAL RATE ZONE 2B?**

13 A. Yes. I prepared a bill analysis non-residential customer in Rate Zone 2b. The
14 average bill under my recommendation is 61.38%.⁸⁹ This average bill falls below the
15 70% limit I discussed above.

⁸⁸ I&E Exhibit No. 4, Schedule 15.

⁸⁹ I&E Exhibit No. 4, Schedule 17, p. 2.

1 **ACT 11 SUBSIDY - SUMMARY**

2 **Q. BASED ON YOUR RATE RECOMMENDATIONS DESCRIBED ABOVE,**
3 **WHAT IS YOUR OVERALL RECOMMENDED REDUCTION TO THE**
4 **COMPANY'S PROPOSED ACT 11 SUBSIDY?**

5 A. Based on my rate recommendations for the various SSS and CSS rate classes, I am
6 recommending a reduction in the Act 11 subsidy of \$18,544,730.⁹⁰
7

8 **SCALE BACK OF RATES**

9 **Q. WHAT DO YOU RECOMMEND FOR SSS OPERATIONS IF THE**
10 **COMMISSION GRANTS LESS THAN THE FULL INCREASE?**

11 A. If the Commission grants less than the full increase for SSS Operations, including
12 Rate Zone 2d - BASA, I recommend the following steps to reduce revenue and rates
13 for SSS Wastewater Operations customers: First, any subsidy from water customers
14 should be eliminated. That way, water customers will not subsidize any of the SSS
15 Wastewater Operations. Second, the customer charges and usage rates for Rate Zone
16 1 rate classes should be scaled back proportional to the increases that they received.
17 The Rate Zone 1a-1g rates should not be scaled back unless and until they are equal
18 to or above the corresponding rates in Rate Zone 1. Any proposed rate that remains
19 below existing Rate Zone 1 rates should not be included in any scale back, nor
20 should any rate that is not proposed to have an increase.

⁹⁰ I&E Exhibit No. 4, Schedule 1.

1 **Q. WHAT DO YOU RECOMMEND FOR CSS WASTEWATER OPERATIONS**
2 **IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?**

3 A. If the Commission grants less than the full increase for CSS Wastewater Operations,
4 including Rate Zone 2b - EBMA, similar to the SSS Wastewater Operations
5 described above, I recommend that any subsidy from water customers should be
6 eliminated. Also, the customer charges and usage rates for Rate Zone 2 rate classes
7 should be scaled back proportional to the increases that they received. The Rate
8 Zone 2b rates should not be scaled back unless and until they are equal to or above
9 the corresponding rates in Rate Zone 1. Any proposed rate that remains below
10 existing Rate Zone 2 rates should not be included in any scale back, nor should any
11 rate that is not proposed to have an increase.

12
13 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

14 A. Yes.

ETHAN H. CLINE

PROFESSIONAL EXPERIENCE AND EDUCATION

EXPERIENCE:

03/2009 - Present

Bureau of Investigation and Enforcement, Pennsylvania Public Utility Commission - Harrisburg, Pennsylvania

Fixed Utility Valuation Engineer – Assists in the performance of studies and analyses of the engineering-related areas including valuation, depreciation, cost of service, quality and reliability of service as they apply to fixed utilities. Assists in reviewing, comparing and performing analyses in specific areas of valuation engineering and rate structure including valuation concepts, original cost, rate base, fixed capital costs, inventory processing, excess capacity, cost of service, and rate design.

06/2008 – 09/2008

Akens Engineering, Inc. - Shiremanstown, Pennsylvania

Civil Engineer – Responsible, primarily, for assisting engineers and surveyors in the planning and design of residential development projects

10/2007 – 05/2008

J. Michael Brill and Associates - Mechanicsburg, Pennsylvania

Design Technician – Responsible, primarily, for assisting engineers in the permit application process for commercial development projects.

01/2006 – 10/2007

CABE Associates, Inc. - Dover, Delaware

Civil Engineer – Responsible, primarily, for assisting engineers in performing technical reviews of the sewer and sanitary sewer systems of Sussex County, Delaware residential development projects.

EDUCATION:

Pennsylvania State University, State College, Pennsylvania
Bachelor of Science; Major in Civil Engineering, 2005

- Attended NARUC Rate School, Clearwater, FL
- Attended Society of Depreciation Professionals Annual Conference and Training

TESTIMONY SUBMITTED:

I have testified and/or submitted testimony in the following proceedings:

1. Clean Treatment Sewage Company, Docket No. R-2009-2121928
2. Pennsylvania Utility Company – Water Division, Docket No. R-2009-2103937
3. Pennsylvania Utility Company – Sewer Division, Docket No. R-2009-2103980
4. UGI Central Penn Gas, Inc., 1307(f) proceeding, Docket No. R-2010-2172922
5. PAWC Clarion Wastewater Operations, Docket No. R-2010-2166208
6. PAWC Claysville Wastewater Operations, Docket No. R-2010-2166210
7. Citizens' Electric Company of Lewisburg, Pa, Docket No. R-2010-2172665
8. City of Lancaster – Bureau of Water, Docket No. R-2010-2179103
9. Peoples Natural Gas Company LLC, Docket No. R-2010-2201702
10. UGI Central Penn Gas, Inc., Docket No. R-2010-2214415
11. Pennsylvania-American Water Company, Docket No. R-2011-2232243
12. Pentex Pipeline Company, Docket No. A-2011-2230314
13. Peregrine Keystone Gas Pipeline, LLC, Docket No. A-2010-2200201
14. Philadelphia Gas Works 1307(f), Docket No. R-2012-2286447
15. Peoples Natural Gas Company LLC, Docket No. R-2012-2285985
16. Equitable Gas Company, Docket Nos. R-2012-2312577, G-2012-2312597
17. City of Lancaster – Sewer Fund, Docket No. R-2012-2310366
18. Peoples TWP, LLC 1307(f), Docket No. R-2013-2341604
19. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2013-2361763
20. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2013-2361764
21. Joint Application, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651
22. City of Dubois – Bureau of Water, Docket No. R-2013-2350509
23. The Columbia Water Company, Docket No. R-2013-2360798
24. Pennsylvania American Water Company, Docket No. R-2013-2355276
25. Generic Investigation Regarding Gas-on-Gas Competition, Docket Nos. P-2011-227868, I-2012-2320323
26. Philadelphia Gas Works 1307(f), Docket No. R-2014-2404355
27. Pike County Light and Power Company (Gas), Docket No. R-2013-2397353
28. Pike County Light and Power Company (Electric), Docket No. R-2013-2397237
29. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2014-2403939
30. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2014-2420273
31. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2014-2420276
32. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2014-2420279
33. Emporium Water Company, Docket No. R-2014-2402324
34. Borough of Hanover – Hanover Municipal Water, Docket No. R-2014-2428304
35. Philadelphia Gas Works 1307(f), Docket No. R-2015-2465656
36. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2015-2465172
37. Peoples Natural Gas Company – Equitable Division 1307(f), Docket No. R-2015-2465181
38. PPL Electric Utilities Corporation, Docket No. R-2015-2469275
39. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2015-2480934
40. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2015-2480937
41. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2015-2480950
42. UGI Utilities, Inc. – Gas Division, Docket No. R-2015-2518438

43. Joint Application of Pennsylvania American Water, et al., Docket No. A-2016-2537209
44. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2016-2543309
45. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2016-2543311
46. City of Dubois – Company, Docket No. R-2016-2554150
47. UGI Penn Natural Gas, Inc., Docket No. R-2016-2580030
48. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2017-2602627
49. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2017-2602633
50. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2017-2602638
51. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the City of McKeesport, Docket No. A-2017-2606103
52. Pennsylvania American Water Company, Docket No. R-2017-2595853
53. Pennsylvania American Water Company Lead Line Petition, Docket No. P-2017-2606100
54. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058
55. Peoples Natural Gas Company, LLC – Peoples and Equitable Division 1307(f), Docket Nos. R-2018-2645278 & R-2018-3000236
56. Peoples Gas Company, LLC 1307(f), Docket No. R-2018-2645296
57. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577
58. Duquesne Light Company, Docket No. R-2018-3000124
59. Suez Water Pennsylvania, Inc., Docket No. R-2018-3000834
60. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the Township of Sadsbury, Docket No. A-2018-3002437
61. The York Water Company, Docket No. R-2018-3000006
62. Application of SUEZ Water Pennsylvania, Inc. Acquisition of the Water and Wastewater Assets of Mahoning Township, Docket Nos. A-2018-3003517 and A-2018-3003519
63. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645 and
64. R-2018-3002647
65. Joint Application of Aqua America, Inc. et al., Acquisition of Peoples Natural Gas Company LLC, et al., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063
66. Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority, Docket Nos. M-2018-2640802 and M-2018-2640803
67. Philadelphia Gas Works 1307(f), Docket No. R-2019-3007636
68. People Natural Gas Company, LLC, Docket No. R-2018-3006818
69. Application of Pennsylvania American Water Company Acquisition of the Steelton Borough Authority, Docket No. A-2019-3006880
70. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the Township of Cheltenham, Docket No. A-2019-3006880
71. Philadelphia Gas Works, Docket No. R-2019-3009016
72. Wellsboro Electric Company, Docket No. R-2019-3008208
73. Valley Energy, Inc., Docket No. R-2019-3008209
74. Citizens’ Electric Company of Lewisburg, Pa, Docket Non. R-2019-3008212
75. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the East Norriton Township, Docket No. A-2019-3009052
76. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2020-3017850
77. Peoples Gas Company, LLC 1307(f), Docket No. R-2020-3017846
78. Philadelphia Gas Works, Docket No. R-2020-3017206
79. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 et al.

80. Columbia Gas of Pennsylvania, Docket No. R-2020-3018835
81. Pennsylvania America Water Company, Docket Nos. R-2020-3019369 and
82. R-2020-3019371
83. PECO Energy Company – Gas Division, Docket No. R-2020-3019829
84. PGW 1307(f), Docket No. R-2021-3023970
85. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2021-3023965
86. Peoples Gas Company, LLC 1307(f), Docket No. R-2021-3023967
87. UGI Utilities, Inc. – Electric Division, Docket No. R-2021-3023618
88. Columbia Gas of Pennsylvania, Inc., Docket No. R-2021-3024926
89. Duquesne Light Company, Docket No. R-2021-3024750
90. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2021-3025652
91. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773 et al.
92. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of Lower Makefield Township, Docket No. A-2021-3024267
93. Aqua Pennsylvania Water, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385 and R-2021-3027386
94. Application of Pennsylvania-American Water Company for Acquisition of the Wastewater Collection and Treatment System Assets of the York City Sewer Authority, Docket No. A-2021-3024681
95. City of Lancaster – Bureau of Water, Docket No. R-2021-3026682
96. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of East Whiteland Township, Docket No. A-2021-30246132
97. UGI Utilities, Inc. – Gas Division, Docket No. R-2021-3030218
98. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2022-3030661
99. Columbia Gas of Pennsylvania, Inc., Docket No. R-2022-3031211
100. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2022-3032242
101. Pennsylvania American Water Company, Docket Nos. R-2022-3031672 and R-2022-3031673
102. The York Water Company, Docket Nos. R-2022-3031340 and R-2022-3032806
103. Columbia Gas of Pennsylvania, Inc., Docket No. R-2022-3032167
104. National Fuel Gas Distribution Corporation, Docket No. R-2022-3035730
105. UGI Utilities, Inc. – Electric Division, Docket No. R-2022-3037368
106. Application of Pennsylvania-American Water Company for Acquisition of the Wastewater Collection and Treatment System Assets of the Butler Area Sewer Authority, Docket No. A-2022-3037047
107. Philadelphia Gas Works, Docket No. R-2023-3037933
108. Pittsburgh Water and Sewer Authority, Docket Nos. R-2023-3039920 et al.
109. Pennsylvania-American Water Company, Docket Nos. R-2023-3043189 and R-2023-3043190
110. Peoples Natural Gas Company, LLC, Docket No. R-2023-3044549
111. Duquesne Light Company, Docket No. R-2024-3046523
112. PECO Energy Company – Gas Division, Docket No. R-2024-3046932
113. Aqua Pennsylvania Water, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2024-3047822 and R-2024-3047824
114. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of Beaver Falls, Docket No. A-202-3033138
115. Pike County Light and Power Company (Gas), Docket No. R-2024-3052357
116. UGI Utilities, Inc. – Gas Division, Docket No. R-2024-3052716

- 117. Philadelphia Gas Works, Docket No. R-2025-3053112
- 118. Citizens' Electric Company of Lewisburg, Pa, Docket No. R-2025-3054394
- 119. Wellsboro Electric Company, Docket No. R-2025-3054392
- 120. Pittsburgh Water and Sewer Authority, Docket No. R-2025-3055010, R-2025-3055011, and R-2025-3055012
- 121. Section 529 Investigation of Rock Spring Water Company, Docket No. P-2024-3051313
- 122. Energy Center Harrisburg LLC, Docket. No. R-2025-3055959
- 123. PPL Electric Utilities Corporation, Docket No. R-2025-3057164

I&E Exhibit No. 4
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

Docket No. R -2025-3058051 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:
Deduct Adjustment
Wastewater Proposed Rates
Act 11 Allocation
Wastewater Scale Back of Rates

Pennsylvania-American Water Company
3-A Combined Water and Wastewater Revenue Requirement - Summary
I&E Recommended Act 11 Adjustment

Line No.		Total Company (A)	Water Operations (B)	Wastewater General Operations (C)	BASA Wastewater Operations (D)	CSS Wastewater Operations (E)	Elizabeth CSS Wastewater Operations (F)
1	Present Rate Revenue	(1) \$1,156,621,085	\$947,784,779	\$108,561,975	\$12,748,475	\$85,758,589	\$1,767,267
2	Additional Revenue Requirement	(2) 168,716,450	\$99,407,775	\$20,040,263	\$35,377,129	\$10,404,371	\$3,486,912
3	Act 11 - Wastewater Allocation	(3) 0	53,010,182	(12,710,621)	(30,280,040)	(7,062,475)	(2,957,046)
4	I&E Adjustment to Wastewater Allocation		(18,544,730)	7,570,633		10,784,556	189,541
5	Proposed Revenues	\$1,325,337,535	\$1,081,658,006	\$123,462,250	\$17,845,564	\$99,885,041	\$2,486,674
6	Rate Increase/(Decrease)	\$168,716,450	\$133,873,227	\$14,900,275	\$5,097,089	\$14,126,452	\$719,407
7		14.6%	14.1%	13.7%	40.0%	16.5%	40.7%

Notes:

- (1) **Present Rate Revenue:** Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.
(2) **Additional Revenue Requirement:** The Additional Revenue Requirement are developed in subsequent sections of this Exhibit 3-A for each of the operations.
(3) **Act 11 - Wastewater Allocation** is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2027

Line No.	Rate Zone	As Filed Residential (A)	Adjustment (B)	I&E Residential (C)	As Filed Commercial (D)	Adjustment (E)	I&E Commercial (F)	As Filed Industrial (G)	Adjustment (H)	I&E Industrial (I)	As Filed Municipal (J)	Adjustment (K)	I&E Municipal (L)	Bulk (M)	Total Revenues (N)	Adjustment (O)	I&E Total Revenues (P)
Present Rate Application																	
1	Zone 1 - Most WW Areas	\$46,831,704	\$0	\$46,831,704	\$14,056,069	\$0	\$14,056,069	\$1,503,868	\$0	\$1,503,868	\$1,373,904	\$0	\$1,373,904	\$2,470,705	\$66,236,250	\$0	\$66,236,250
2	Zone 1a - Royersford WW	930,164	\$0	930,164	475,911	\$0	\$475,911	15,675	\$0	\$15,675	19,032	\$0	\$19,032	88,094	\$1,528,876	0	\$1,528,876
3	Zone 1b - York WW	16,237,546	\$0	16,237,546	8,453,272	\$0	\$8,453,272	12,112	\$0	\$12,112	434,125	\$0	\$434,125	9,874,150	\$35,011,205	0	\$35,011,205
4	Zone 1c - Foster Township	613,270	\$0	613,270	29,834	\$0	\$29,834	789,608	\$0	\$789,608	32,272	\$0	\$32,272	0	\$1,464,984	0	\$1,464,984
5	Zone 1e - Sadsbury	346,491	\$0	346,491	132,437	\$0	\$132,437	0	\$0	\$0	17,334	\$0	\$17,334	\$478,928	0	\$478,928	
6	Zone 1f - Farmington	251,131	\$0	251,131	40,446	\$0	\$40,446	0	\$0	\$0	1,649	\$0	\$1,649	\$308,911	0	\$308,911	
7	Zone 1g - Manwalamink	245,727	\$0	245,727	255,873	\$0	\$255,873	0	\$0	\$0	0	\$0	\$0	\$503,249	0	\$503,249	
8		\$65,456,033	\$0	\$65,456,033	\$23,443,842	\$0	\$23,443,842	\$2,321,263	\$0	\$2,321,263	\$1,878,316	\$0	\$1,878,316	\$12,432,949	\$105,532,403	\$0	\$105,532,403
9	IPP Surcharge													\$906,000	\$906,000	\$0	\$906,000
10	Other Revenues													\$2,123,571	\$2,123,571	\$0	\$2,123,571
11	Total WW SSS	\$65,456,033	\$0	\$65,456,033	\$23,443,842	\$0	\$23,443,842	\$2,321,263	\$0	\$2,321,263	\$1,878,316	\$0	\$1,878,316	\$12,432,949	\$108,561,974	\$0	\$108,561,974
Proposed Rate Application																	
12	Zone 1 - Most WW Areas	\$49,462,175	\$3,359,687	\$52,821,862	\$14,243,272	\$858,929	\$15,102,201	\$1,511,983	\$54,010	\$1,565,993	\$1,455,798	\$89,438	\$1,545,236	\$2,451,130	\$69,124,358	\$4,362,064	\$73,486,422
13	Zone 1a - Royersford WW	\$1,284,528	\$185,616	1,470,144	\$658,241	\$172,171	\$830,412	\$21,422	\$8,685	\$30,107	\$26,905	\$31,323	\$58,228	119,466	\$2,110,562	\$97,795	\$2,208,357
14	Zone 1b - York WW	\$18,681,702	\$1,786,587	20,468,289	\$9,635,579	\$590,941	\$10,226,520	\$13,324	\$1,955	\$15,279	\$470,657	\$30,212	\$500,869	9,780,259	\$38,581,521	2,409,695	\$40,991,216
15	Zone 1c - Foster Township	\$661,622	\$47,581	709,203	\$31,914	\$1,773	\$33,687	\$844,668	\$99,066	\$943,734	\$44,750	\$0	\$44,750	0	\$1,582,954	148,420	\$1,731,374
16	Zone 1e - Sadsbury	\$346,491	\$0	346,491	\$167,184	\$9,288	\$176,472	0	\$0	\$0	\$19,324	\$576	\$19,900	\$513,675	\$513,675	9,288	\$522,963
17	Zone 1f - Farmington	\$289,143	\$652	289,795	\$44,884	(\$3,168)	\$41,716	0	(\$3,168)	\$41,716	\$1,812	\$0	\$1,812	\$353,351	\$353,351	(1,940)	\$351,411
18	Zone 1g - Manwalamink	\$270,031	\$125,315	395,346	\$281,183	\$80,840	\$362,023	0	\$0	\$0	0	\$0	\$0	\$553,026	\$553,026	206,155	\$759,181
19		\$70,995,692	\$5,505,438	\$76,501,130	\$25,062,257	\$1,710,774	\$26,773,031	\$2,391,397	\$163,716	\$2,555,113	\$2,019,246	\$151,549	\$2,170,795	\$12,350,855	\$112,819,447	\$7,531,477	\$120,350,924
20	IPP Surcharge													\$906,000	\$906,000	\$0	\$906,000
21	Other Revenues													\$2,166,167	\$2,166,167	\$39,156	\$2,205,323
22	Total WW SSS	\$70,995,692	\$5,505,438	\$76,501,130	\$25,062,257	\$1,710,774	\$26,773,031	\$2,391,397	\$163,716	\$2,555,113	\$2,019,246	\$151,549	\$2,170,795	\$12,350,855	\$115,891,614	\$7,570,633	\$123,462,247
23	Change in Revenues	\$5,539,659	\$5,505,438	\$11,045,097	\$1,618,415	\$1,710,774	\$3,329,189	\$70,134	\$163,716	\$233,850	\$140,930	\$151,549	\$292,479	(\$82,094)	\$7,329,640	\$7,570,632	\$14,900,272
24	% Change in Revenues	8.46%		16.87%	6.90%		14.20%	3.02%		10.07%	7.50%		15.57%	-0.66%	6.75%		13.73%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Residential Class	6/30/2025		6/30/2026		6/30/2027		Proforma DSC Revenues		6/30/2027 Proforma @ Present Rate		Company 6/30/2027 Proforma @ Proposed Rate		I&E 6/30/2027 Proforma @ Proposed Rate		% Percent Change	
	Water Usage (in 100 Gallons)	Annualized Revenues	Water Usage (in 100 Gallons)	Proforma Revenues	Water Usage (in 100 Gallons)	Proforma Revenues	Water Usage (in 100 Gallons)	Proforma Revenues	6/30/2027 Proforma @ Present Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	12,216,967	\$47,061,100	12,101,812	\$46,758,748	11,976,244	\$46,831,704	\$445,309	\$46,831,704	\$49,462,175	5.62%	\$52,821,862	12.79%	\$52,821,862	12.79%	\$52,821,862	12.79%
Zone 1a - Royerford WW	501,311	935,035	496,647	928,435	491,618	930,164	8,845	930,164	1,284,528	38.10%	1,470,144	58.05%	1,470,144	58.05%	1,470,144	58.05%
Zone 1b - York WW	6,694,648	16,360,432	6,632,369	16,227,019	6,565,208	16,237,546	154,397	16,237,546	18,681,702	15.05%	20,468,289	26.06%	20,468,289	26.06%	20,468,289	26.06%
Zone 1c - Foster Township		607,440		607,440		613,270	5,830	613,270	661,622	7.88%	709,203	15.64%	709,203	15.64%	709,203	15.64%
Zone 1e - Sadsbury		346,491		346,491		346,491	0	346,491	346,491	0.00%	346,491	0.00%	346,491	0.00%	346,491	0.00%
Zone 1f - Farmington		251,131		251,131		251,131	0	251,131	289,143	15.14%	289,795	15.40%	289,795	15.40%	289,795	15.40%
Zone 1g - Manwalamink	0	0	159,716	245,727	159,716	245,727	0	245,727	270,031	9.89%	395,346	60.89%	395,346	60.89%	395,346	60.89%
Total Residential	19,412,925	\$65,561,629	19,390,543	\$65,364,991	19,197,786	\$65,456,033	\$614,381	\$65,456,033	\$70,995,692	8.46%	\$76,501,130	16.87%	\$76,501,130	16.87%	\$76,501,130	16.87%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Rate	6/30/2026 Annualized Revenue		Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge per EDU Service Charge Consumption Charges Usage (100 Gallons)	411,372	\$15.00	\$6,170,575		410,856	\$15.00	\$6,162,835		413,376 412,020	\$15.00	\$59,526	\$6,260,166	\$ 20.00	8,240,400	31.63%	\$ 20.00	8,240,400	31.63%		
	12,233,125	\$2.9539	\$36,135,429		12,216,967	\$2.9539	\$36,087,698		12,101,812	\$2.9539	\$343,176	\$36,090,717								
Flat Rate per EDU (Unmetered) Flat Rate per Customer	52,350	\$110.00	\$5,758,537		52,350	\$110.00	\$5,758,537		52,350 49,884	\$110.00	\$55,282	\$5,813,819	120.00	\$5,986,080	2.96%	\$128.33	\$6,401,614	10.11%		
Low Income: Low Income Discount Tier 1 Low Income Discount Tier 2 Low Income Discount Tier 3 Low Income Discount Tier 4			(\$330,429)				(\$330,429)				(\$3,172)	(\$333,601)		(\$353,460)	5.95%		(\$353,460)	5.95%		
			(324,320)				(324,320)				(3,113)	(327,433)		(346,925)	5.95%		(346,925)	5.95%		
			(242,993)				(242,993)				(2,333)	(245,326)		(259,930)	5.95%		(259,930)	5.95%		
			(50,228)				(50,228)				(482)	(50,710)		(53,729)	5.95%		(53,729)	5.95%		
Adjustment (1): Service Charge Per EDU Consumption Charges Usage (100 Gallons)																				
Adjustment (2): Usage (100 Gallons)																				
Adjustment (3): Service Charge Per EDU																				
Total Usage Annualized Winter Usage (4)	12,216,967				12,101,812		\$38,525		11,976,244 11,527,615				\$3.1446	\$36,249,739	1.49%	\$3.4000	\$39,193,892	9.74%		
Total Zone 1 Residential			\$47,061,100				\$46,758,748				\$445,309	\$46,831,704		\$49,462,175	5.62%		\$52,821,862	12.79%		

Note (1) Adjustment to account for the growth (loss) in customers
Note (2) Adjustment to normalize usage
Note (3) Adjustment to account for experienced changes to EDU counts
Note (4) Annualized Winter Usage is from average winter usage multiplied by 12

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1a - Royersford WW	6/30/2025				6/30/2026		6/30/2027		Proforma			Company			I&E		
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	6/30/2026 Billing Determinants	Rate	6/30/2026 Annualized Revenue	6/30/2027 Billing Determinants	Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	
Service Charge	15,212	\$15.00	\$228,176	15,212	\$15.00	\$228,176	15,212	\$15.00	\$2,190	\$230,366	\$20.00	\$304,234	32.07%	\$20.00	\$304,234	32.07%	
Consumption Charges Usage (100 Gallons)	501,311	\$1.4150	\$709,355	501,311	\$1.4150	\$709,355	496,647	\$1.4150	\$6,746	\$709,501	\$84.00	\$8,064	10.94%	\$84.00	\$8,064	10.94%	
Flat (Unmetered)	96	\$75.00	\$7,200	96	\$75.00	\$7,200	96	\$75.00	\$69	\$7,269							
Low Income:																	
Low Income Discount Tier 1			(\$4,401)			(\$4,401)			(\$42)	(\$4,443)		(\$6,146)	38.33%		(\$6,146)	38.33%	
Low Income Discount Tier 2			(1,080)			(1,080)			(10)	(1,090)		(1,508)	38.35%		(1,508)	38.35%	
Low Income Discount Tier 3			(2,847)			(2,847)			(27)	(2,874)		(3,977)	38.38%		(3,977)	38.38%	
Low Income Discount Tier 4			(1,368)			(1,368)			(13)	(1,381)		(1,911)	38.38%		(1,911)	38.38%	
Adjustment (1): Usage (100 Gallons)				(4,664)	\$1.4150	(\$6,600)	(5,029)	\$1.4150	(\$68)	(\$7,184)							
Total Usage Annualized Winter Usage (2)	501,311			496,647			491,618 484,790				\$2.0334	\$985,772	40.36%	\$2.4075	\$1,167,132	66.18%	
Total Zone 1a Residential			\$935,035			\$928,435			\$8,845	\$930,164		\$1,284,528	38.10%		\$1,470,144	58.05%	

Note (1) Adjustment to normalize usage

Note (2) Annualized Winter Usage is from average winter usage multiplied by 12.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1b - York WW	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	Annualized Revenue		Billing Determinants	Rate	Annualized Revenue		Billing Determinants	Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge	140,877	\$15.00	\$2,113,161		140,877	\$15.00	\$2,113,161		140,877	\$15.00	\$20,286	\$2,133,447	\$20.00	\$2,817,548	32.07%	\$20.00	\$2,817,548	32.07%		
Consumption Charges																				
First 2,000 Gallons	2,465,716	\$0.7500	\$1,849,287		2,465,716	\$0.7500	\$1,849,287		2,442,778	\$0.7500	\$17,588	\$1,849,672								
All Over 2,000 Gallons	4,228,932	\$2.9539	12,491,841		4,228,932	\$2.9539	12,491,841		4,189,591	\$2.9539	118,806	12,494,438								
<i>Low Income:</i>																				
Low Income Discount Tier 1			(\$42,356)				(\$42,356)				(\$407)	(\$42,763)		(\$85,669)	100.33%		(\$85,669)	100.33%		
Low Income Discount Tier 2			(25,729)				(25,729)				(247)	(25,976)		(52,040)	100.34%		(52,040)	100.34%		
Low Income Discount Tier 3			(21,725)				(21,725)				(209)	(21,934)		(43,940)	100.33%		(43,940)	100.33%		
Low Income Discount Tier 4			(4,047)				(4,047)				(39)	(4,086)		(8,186)	100.34%		(8,186)	100.34%		
<i>Adjustment (1):</i>																				
First 2,000 Gallons			(\$17,204)		(22,938)	\$0.7500	(\$17,204)		(24,736)	\$0.7500	(\$178)	(\$18,730)								
All Over 2,000 Gallons			(116,209)		(39,341)	\$2.9539	(116,209)		(42,425)	\$2.9539	(1,203)	(126,522)								
Total Usage	6,694,648				6,632,369				6,565,208											
Annualized Winter Usage (2)																				
First 2,000 Gallons									2,418,042				\$1.7345	\$4,194,094	129.07%	\$2.0750	\$5,017,437	174.04%		
All Over 2,000 Gallons									3,771,512				\$3.1446	11,859,895	-4.11%	\$3.4000	12,823,139	3.68%		
									6,189,554											
Total Zone 1b Residential			\$16,360,432				\$16,227,019				\$154,397	\$16,237,546			15.05%		\$18,681,702	26.06%		

Note (1) Adjustment to normalize usage

Note (2) Annualized Winter Usage is from average winter usage multiplied by 12.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1c - Foster Township	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	Annualized Revenue		Billing Determinants	Rate	Annualized Revenue		Billing Determinants	Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Fiat Rate Per EDU	5,721	\$110.00	\$629,273		5,721	\$110.00	\$629,273		5,721	\$110.00	\$6,041	\$635,314	\$120.00	\$685,440	7.89%	\$128.33	\$733,021	15.38%		
Fiat Rate Per Customer																				
Low Income:																				
Low Income Discount Tier 1			(\$2,244)				(\$2,244)				(\$22)	(\$2,266)		(\$2,448)	8.03%		(\$2,448)	8.03%		
Low Income Discount Tier 2			(9,636)				(9,636)				(93)	(9,729)		(10,512)	8.05%		(10,512)	8.05%		
Low Income Discount Tier 3			(6,534)				(6,534)				(63)	(6,597)		(7,128)	8.05%		(7,128)	8.05%		
Low Income Discount Tier 4			(3,419)				(3,419)				(33)	(3,452)		(3,730)	8.05%		(3,730)	8.05%		
Total Zone 1c Residential			\$607,440				\$607,440				\$5,830	\$613,270		\$661,622	7.88%		\$709,203	15.64%		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1e - Sadsbury	6/30/2025										6/30/2026										6/30/2027										Company										I&E									
	Billing Determinants		Current Rate	Annualized Revenue	Billing Determinants		Rate	Annualized Revenue (1)	Billing Determinants		Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate		6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate		6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate		6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate		6/30/2027 Proforma @ Proposed Rate	% Percent Change																					
Service Charge Per EDU	1,570		\$128.33	\$201,426	2,700		\$128.33	\$346,491	2,700		\$128.33	\$0	\$346,491	\$ 128.33		\$346,491	0.00%	\$ 128.33		\$346,491	0.00%	\$ 128.33		\$346,491	0.00%	\$ 128.33		\$346,491	0.00%																					
Low Income:																																																		
Low Income Discount Tier 1				\$0				\$0				\$0	\$0			\$0	0.00%			\$0	0.00%			\$0	0.00%			\$0	0.00%																					
Low Income Discount Tier 2				0				0				0	0			0	0.00%			0	0.00%			0	0.00%			0	0.00%																					
Low Income Discount Tier 3				0				0				0	0			0	0.00%			0	0.00%			0	0.00%			0	0.00%																					
Low Income Discount Tier 4				0				0				0	0			0	0.00%			0	0.00%			0	0.00%			0	0.00%																					
Adjustment (1):																																																		
Service Charge Per EDU	1,130		\$128.33	\$145,065																																														
Total Zone 1e Residential				\$346,491				\$346,491				\$0	\$346,491			\$346,491	0.00%			\$346,491	0.00%			\$346,491	0.00%			\$346,491	0.00%																					

Note (1) Sadsbury was acquired October 2024. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1f - Farmington	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	Annualized Revenue		Billing Determinants	Rate	Annualized Revenue (1)		Billing Determinants	Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
<u>Customer Charge per EDU</u> Service Charge Per EDU	2,780	\$53.50	\$148,712		4,716	\$53.50	\$252,306		4,716	\$53.50	\$0	\$252,306								
<u>Customer Charge per Customer</u> 5/8-METER									108				\$ 20.00	\$ 20.00	\$2,160	\$ 20.00	\$2,160			
3/4-METER									4,512				\$ 20.00	\$ 20.00	90,240	\$ 20.00	90,240			
1-METER									24				\$ 20.00	\$ 20.00	480	\$ 20.00	480			
1.5-METER									24				\$ 20.00	\$ 20.00	480	\$ 20.00	480			
2-METER									12				\$ 20.00	\$ 20.00	240	\$ 20.00	240			
Flat Rate (Unmetered)									12				\$ 74.00	\$ 74.00	\$888	\$ 128.33	\$1,540	-62.29%		
<u>Low Income:</u> Low Income Discount Tier 1			\$0				\$0				\$0	\$0		\$0	\$0	\$0	\$0	0.00%		
Low Income Discount Tier 2			(469)				(469)				0	(469)		(550)	(550)	(550)	(550)	17.27%		
Low Income Discount Tier 3			(706)				(706)				0	(706)		(828)	(828)	(828)	(828)	17.28%		
Low Income Discount Tier 4			0				0				0	0		0	0	0	0	0.00%		
<u>Adjustment (1):</u> Service Charge Per EDU	1,936	\$53.50	\$103,594																	
Annualized Winter Usage (2)									113,020				\$1.7345	\$1.7345	\$196,033	\$1.7345	\$196,033			
Annualized Usage									143,498											
Total Zone 1f Residential							\$251,131				\$0	\$251,131			\$289,143		\$289,795	15.40%		

Note (1) Farmington was acquired November 2024. Adjustment is to annualize the revenue to reflect 12 full months of billing.
Note (2) Annualized Winter Usage is from average winter usage multiplied by 12.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND FINAL RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Zone 1g - Manwalamink	6/30/2025			6/30/2026			6/30/2027			Company			I&E			
	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Rate	Annualized Revenue (1)	Billing Determinants	Present Rate	Proforma DSC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Service Charge	-	\$ 16.92	\$0	-	\$ 16.92	\$0	6,936	\$16.92	\$0	\$117,357	\$ 18.60	\$ 129,010	9.93%	\$ 20.00	\$138,720	18.20%
Flat Rate		\$ 44.80	\$0	-	\$ 44.80	\$0	516	\$44.80	\$0	\$23,117	\$ 49.20	\$25,387	9.82%	\$ 64.00	\$33,024	42.86%
Usage (in 100 Gallons)																
First 10,000 g	0	\$0.6590	\$0	-	\$0.6590	\$0	159,716	\$0.6590	\$0	\$105,253	\$0.7240	\$115,634	9.86%	\$1.4000	\$223,602	112.44%
Over 10,000 g	0	\$0.2530	0	-	\$0.2530	0	-	\$0.2530	0	0	\$0.2780	\$0	0.00%	\$1.4000	\$0	0.00%
Low Income:																
Low Income Discount Tier 1									\$0	0	\$0	\$0	0.00%		\$0	0.00%
Low Income Discount Tier 2									0	0	0	0	0.00%		0	0.00%
Low Income Discount Tier 3									0	0	0	0	0.00%		0	0.00%
Low Income Discount Tier 4									0	0	0	0	0.00%		0	0.00%
Adjustment (1):																
Service Charge				6,936	\$ 16.92	\$117,357										
Flat Rate				516	\$ 44.80	23,117										
Usage (in 100 Gallons)				159,716	\$0.6590	\$105,253										
First 10,000 g				-	\$0.2530	0										
Over 10,000 g																
Total Usage	0			159,716			159,716									
Total Zone 1f Residential			\$0			\$245,727			\$0	\$245,727		\$270,031	9.89%		\$395,346	60.89%

Note (1) Manwalamink was acquired June 2025. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1 RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E	
	PRESENT RATES	PROPOSED RATES	PROPOSED RATES	INCREASE		INCREASE	
				AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$15.14	\$20.00	\$20.00	\$4.86	32.07%	\$4.86	32.07%
100	18.13	23.14	23.40	5.02	27.69%	5.27	29.09%
500	30.06	35.72	37.00	5.67	18.86%	6.94	23.11%
1,000	44.97	51.45	54.00	6.48	14.41%	9.03	20.09%
2,000	74.79	82.89	88.00	8.10	10.83%	13.21	17.66%
3,000	104.61	114.34	122.00	9.73	9.30%	17.39	16.62%
3,164	* 109.50	119.50	127.58	9.99	9.13%	18.07	16.50%
3,500	119.52	130.06	139.00	10.54	8.82%	19.48	16.30%
4,000	134.43	145.78	156.00	11.35	8.44%	21.57	16.04%
5,000	164.26	177.23	190.00	12.97	7.90%	25.74	15.67%
6,000	194.08	208.68	224.00	14.60	7.52%	29.92	15.42%
7,000	223.90	240.12	258.00	16.22	7.24%	34.10	15.23%
8,000	253.72	271.57	292.00	17.84	7.03%	38.28	15.09%
9,000	283.55	303.01	326.00	19.47	6.87%	42.45	14.97%
10,000	313.37	334.46	360.00	21.09	6.73%	46.63	14.88%
11,000	343.19	365.91	394.00	22.71	6.62%	50.81	14.80%
12,000	373.01	397.35	428.00	24.34	6.52%	54.99	14.74%
13,000	402.84	428.80	462.00	25.96	6.44%	59.16	14.69%
14,000	432.66	460.24	496.00	27.58	6.38%	63.34	14.64%
15,000	462.48	491.69	530.00	29.21	6.32%	67.52	14.60%
16,000	492.31	523.14	564.00	30.83	6.26%	71.69	14.56%
17,000	522.13	554.58	598.00	32.45	6.22%	75.87	14.53%
18,000	551.95	586.03	632.00	34.08	6.17%	80.05	14.50%
19,000	581.77	617.47	666.00	35.70	6.14%	84.23	14.48%
20,000	611.60	648.92	700.00	37.32	6.10%	88.40	14.45%
21,000	641.42	680.37	734.00	38.95	6.07%	92.58	14.43%
22,000	671.24	711.81	768.00	40.57	6.04%	96.76	14.42%
23,000	701.06	743.26	802.00	42.19	6.02%	100.94	14.40%
24,000	730.89	774.70	836.00	43.82	6.00%	105.11	14.38%
25,000	760.71	806.15	870.00	45.44	5.97%	109.29	14.37%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1a ROYERSFORD TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E	
	PRESENT RATES	As Filed	I&E PROPOSED RATES	INCREASE		INCREASE	
		PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$15.14	\$20.00	\$20.00	\$4.86	32.07%	\$4.86	32.07%
100	16.57	22.03	22.41	5.46	32.95%	5.83	35.21%
500	22.29	30.17	32.04	7.88	35.36%	9.75	43.75%
1,000	29.43	40.33	44.08	10.90	37.05%	14.65	49.76%
2,000	43.72	60.67	68.15	16.95	38.78%	24.43	55.89%
3,000	58.00	81.00	92.23	23.00	39.65%	34.22	59.00%
3,164	*	84.34	96.17	23.99	39.76%	35.83	59.37%
3,500	65.14	91.17	104.26	26.02	39.95%	39.12	60.05%
4,000	72.29	101.34	116.30	29.05	40.18%	44.01	60.89%
5,000	86.57	121.67	140.38	35.10	40.54%	53.80	62.15%
6,000	100.86	142.00	164.45	41.14	40.79%	63.59	63.05%
7,000	115.14	162.34	188.53	47.19	40.99%	73.38	63.73%
8,000	129.43	182.67	212.60	53.24	41.13%	83.17	64.26%
9,000	143.72	203.01	236.68	59.29	41.25%	92.96	64.68%
10,000	158.00	223.34	260.75	65.34	41.35%	102.75	65.03%
11,000	172.29	243.67	284.83	71.39	41.43%	112.54	65.32%
12,000	186.57	264.01	308.90	77.43	41.50%	122.33	65.56%
13,000	200.86	284.34	332.98	83.48	41.56%	132.12	65.77%
14,000	215.15	304.68	357.05	89.53	41.61%	141.90	65.96%
15,000	229.43	325.01	381.13	95.58	41.66%	151.69	66.12%
16,000	243.72	345.34	405.20	101.63	41.70%	161.48	66.26%
17,000	258.00	365.68	429.28	107.67	41.73%	171.27	66.38%
18,000	272.29	386.01	453.35	113.72	41.77%	181.06	66.50%
19,000	286.57	406.35	477.43	119.77	41.79%	190.85	66.60%
20,000	300.86	426.68	501.50	125.82	41.82%	200.64	66.69%
21,000	315.15	447.01	525.58	131.87	41.84%	210.43	66.77%
22,000	329.43	467.35	549.65	137.92	41.86%	220.22	66.85%
23,000	343.72	487.68	573.73	143.96	41.88%	230.01	66.92%
24,000	358.00	508.02	597.80	150.01	41.90%	239.80	66.98%
25,000	372.29	528.35	621.88	156.06	41.92%	249.59	67.04%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1b YORK TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E		
	PRESENT RATES	As Filed	I&E PROPOSED RATES	INCREASE		INCREASE		
		PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$15.14	\$20.00	\$20.00	\$4.86	32.07%	\$4.86	32.07%	
100	15.90	21.73	22.08	5.83	36.68%	6.17	38.83%	
500	18.93	28.67	30.38	9.74	51.47%	11.45	60.46%	
1,000	22.72	37.35	40.75	14.63	64.40%	18.03	79.39%	
2,000	30.29	54.69	61.50	24.40	80.57%	31.21	103.05%	
3,000	60.11	86.14	95.50	26.03	43.30%	35.39	58.87%	
3,164	*	65.00	91.29	101.08	26.29	40.45%	36.07	55.50%
3,500		75.02	101.86	112.50	26.84	35.77%	37.48	49.96%
4,000		89.93	117.58	129.50	27.65	30.74%	39.57	44.00%
5,000		119.76	149.03	163.50	29.27	24.44%	43.74	36.53%
6,000		149.58	180.47	197.50	30.90	20.66%	47.92	32.04%
7,000		179.40	211.92	231.50	32.52	18.13%	52.10	29.04%
8,000		209.22	243.37	265.50	34.14	16.32%	56.28	26.90%
9,000		239.05	274.81	299.50	35.77	14.96%	60.45	25.29%
10,000		268.87	306.26	333.50	37.39	13.91%	64.63	24.04%
11,000		298.69	337.70	367.50	39.01	13.06%	68.81	23.04%
12,000		328.51	369.15	401.50	40.64	12.37%	72.99	22.22%
13,000		358.34	400.60	435.50	42.26	11.79%	77.16	21.53%
14,000		388.16	432.04	469.50	43.88	11.31%	81.34	20.96%
15,000		417.98	463.49	503.50	45.51	10.89%	85.52	20.46%
16,000		447.80	494.93	537.50	47.13	10.52%	89.70	20.03%
17,000		477.63	526.38	571.50	48.75	10.21%	93.87	19.65%
18,000		507.45	557.83	605.50	50.38	9.93%	98.05	19.32%
19,000		537.27	589.27	639.50	52.00	9.68%	102.23	19.03%
20,000		567.09	620.72	673.50	53.62	9.46%	106.41	18.76%
21,000		596.92	652.16	707.50	55.25	9.26%	110.58	18.53%
22,000		626.74	683.61	741.50	56.87	9.07%	114.76	18.31%
23,000		656.56	715.06	775.50	58.49	8.91%	118.94	18.12%
24,000		686.38	746.50	809.50	60.12	8.76%	123.12	17.94%
25,000		716.21	777.95	843.50	61.74	8.62%	127.29	17.77%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.
Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1c FOSTER TOWNSHIP RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		I&E PROPOSED RATES	Company INCREASE		I&E INCREASE	
	PRESENT RATES	As Filed PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$111.06	\$120.00	\$128.33	\$8.94	8.05%	\$17.27	15.55%
100	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
500	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
1,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
2,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
3,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
3,164	* 111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
3,500	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
4,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
5,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
6,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
7,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
8,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
9,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
10,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
11,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
12,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
13,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
14,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
15,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
16,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
17,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
18,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
19,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
20,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
21,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
22,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
23,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
24,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%
25,000	111.06	120.00	128.33	8.94	8.05%	17.27	15.55%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1f FARMINGTON RESIDENTIAL - MONTHLY
1 EDU PER 4000 GALLONS to 5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		I&E PROPOSED RATES	As Filed INCREASE		I&E INCREASE	
	PRESENT RATES	PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$53.50	\$20.00	\$20.00	(\$33.50)	-62.62%	(\$33.50)	-62.62%
100	53.50	21.73	21.73	(31.77)	-59.37%	(31.77)	-59.37%
500	53.50	28.67	28.67	(24.83)	-46.41%	(24.83)	-46.41%
1,000	53.50	37.35	37.35	(16.16)	-30.20%	(16.16)	-30.20%
2,000	53.50	54.69	54.69	1.19	2.22%	1.19	2.22%
3,000	53.50	72.04	72.04	18.54	34.64%	18.54	34.64%
3,164	*	74.88	74.88	21.38	39.96%	21.38	39.96%
3,500	53.50	80.71	80.71	27.21	50.86%	27.21	50.86%
4,000	53.50	89.38	89.38	35.88	67.07%	35.88	67.07%
5,000	53.50	106.73	106.73	53.23	99.49%	53.23	99.49%
6,000	53.50	124.07	124.07	70.57	131.91%	70.57	131.91%
7,000	53.50	141.42	141.42	87.92	164.33%	87.92	164.33%
8,000	107.00	158.76	158.76	51.76	48.37%	51.76	48.37%
9,000	107.00	176.11	176.11	69.11	64.58%	69.11	64.58%
10,000	107.00	193.45	193.45	86.45	80.79%	86.45	80.79%
11,000	107.00	210.80	210.80	103.80	97.00%	103.80	97.00%
12,000	160.50	228.14	228.14	67.64	42.14%	67.64	42.14%
13,000	160.50	245.49	245.49	84.99	52.95%	84.99	52.95%
14,000	160.50	262.83	262.83	102.33	63.76%	102.33	63.76%
15,000	160.50	280.18	280.18	119.68	74.56%	119.68	74.56%
16,000	214.00	297.52	297.52	83.52	39.03%	83.52	39.03%
17,000	214.00	314.87	314.87	100.87	47.13%	100.87	47.13%
18,000	214.00	332.21	332.21	118.21	55.24%	118.21	55.24%
19,000	214.00	349.56	349.56	135.56	63.34%	135.56	63.34%
20,000	267.50	366.90	366.90	99.40	37.16%	99.40	37.16%
21,000	267.50	384.25	384.25	116.75	43.64%	116.75	43.64%
22,000	267.50	401.59	401.59	134.09	50.13%	134.09	50.13%
23,000	267.50	418.94	418.94	151.44	56.61%	151.44	56.61%
24,000	321.00	436.28	436.28	115.28	35.91%	115.28	35.91%
25,000	321.00	453.63	453.63	132.63	41.32%	132.63	41.32%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1e SADSURY RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
0	\$128.33	\$128.33	\$0.00	0.00%
100	128.33	128.33	0.00	0.00%
500	128.33	128.33	0.00	0.00%
1,000	128.33	128.33	0.00	0.00%
2,000	128.33	128.33	0.00	0.00%
3,000	128.33	128.33	0.00	0.00%
3,164	*	128.33	0.00	0.00%
3,500	128.33	128.33	0.00	0.00%
4,000	128.33	128.33	0.00	0.00%
5,000	128.33	128.33	0.00	0.00%
6,000	128.33	128.33	0.00	0.00%
7,000	128.33	128.33	0.00	0.00%
8,000	128.33	128.33	0.00	0.00%
9,000	128.33	128.33	0.00	0.00%
10,000	128.33	128.33	0.00	0.00%
11,000	128.33	128.33	0.00	0.00%
12,000	128.33	128.33	0.00	0.00%
13,000	128.33	128.33	0.00	0.00%
14,000	128.33	128.33	0.00	0.00%
15,000	128.33	128.33	0.00	0.00%
16,000	128.33	128.33	0.00	0.00%
17,000	128.33	128.33	0.00	0.00%
18,000	128.33	128.33	0.00	0.00%
19,000	128.33	128.33	0.00	0.00%
20,000	128.33	128.33	0.00	0.00%
21,000	128.33	128.33	0.00	0.00%
22,000	128.33	128.33	0.00	0.00%
23,000	128.33	128.33	0.00	0.00%
24,000	128.33	128.33	0.00	0.00%
25,000	128.33	128.33	0.00	0.00%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1g MANWALAMINK RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E	
	PRESENT RATES	As Filed	I&E PROPOSED RATES	INCREASE		INCREASE	
		PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$16.92	\$18.60	\$20.00	\$1.68	9.93%	\$3.08	18.20%
100	17.58	19.32	21.40	1.75	9.93%	\$3.82	21.74%
500	20.22	22.22	27.00	2.01	9.92%	\$6.79	33.56%
1,000	23.51	25.84	34.00	2.33	9.91%	\$10.49	44.62%
2,000	30.10	33.08	48.00	2.98	9.90%	\$17.90	59.47%
3,000	36.69	40.32	62.00	3.63	9.89%	\$25.31	68.98%
3,164	*	41.51	64.30	3.74	9.89%	\$26.53	70.23%
3,500	39.99	43.94	69.00	3.96	9.89%	\$29.02	72.56%
4,000	43.28	47.56	76.00	4.28	9.89%	\$32.72	75.60%
5,000	49.87	54.80	90.00	4.93	9.89%	\$40.13	80.47%
6,000	56.46	62.04	104.00	5.58	9.88%	\$47.54	84.20%
7,000	63.05	69.28	118.00	6.23	9.88%	\$54.95	87.15%
8,000	69.64	76.52	132.00	6.88	9.88%	\$62.36	89.55%
9,000	76.23	83.76	146.00	7.53	9.88%	\$69.77	91.53%
10,000	82.82	91.00	160.00	8.18	9.88%	\$77.18	93.19%
11,000	85.35	93.53	174.00	8.18	9.58%	\$88.65	103.87%
12,000	87.88	96.06	188.00	8.18	9.31%	\$100.12	113.93%
13,000	90.41	98.59	202.00	8.18	9.05%	\$111.59	123.43%
14,000	92.94	101.12	216.00	8.18	8.80%	\$123.06	132.41%
15,000	95.47	103.65	230.00	8.18	8.57%	\$134.53	140.91%
16,000	98.00	106.18	244.00	8.18	8.35%	\$146.00	148.98%
17,000	100.53	108.71	258.00	8.18	8.14%	\$157.47	156.64%
18,000	103.06	111.24	272.00	8.18	7.94%	\$168.94	163.92%
19,000	105.59	113.77	286.00	8.18	7.75%	\$180.41	170.86%
20,000	108.12	116.30	300.00	8.18	7.57%	\$191.88	177.47%
21,000	110.65	118.83	314.00	8.18	7.39%	\$203.35	183.78%
22,000	113.18	121.36	328.00	8.18	7.23%	\$214.82	189.80%
23,000	115.71	123.89	342.00	8.18	7.07%	\$226.29	195.57%
24,000	118.24	126.42	356.00	8.18	6.92%	\$237.76	201.08%
25,000	120.77	128.95	370.00	8.18	6.77%	\$249.23	206.37%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Commercial Class	6/30/2027 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2027 Proforma @ Present Rate	Company		I&E	
				6/30/2027 Proforma @ Proposed Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1 - Most WW Areas	5,057,019	\$133,655	\$14,056,069	\$14,243,272	1.33%	\$15,102,201	7.44%
Zone 1a - Royersford WW	347,859	4,524	475,911	658,241	38.31%	830,412	74.49%
Zone 1b - York WW	3,733,042	80,380	8,453,272	9,635,579	13.99%	10,226,520	20.98%
Zone 1c - Foster Township		284	29,834	31,914	6.97%	33,687	12.91%
Zone 1e - Sadsbury		0	132,437	167,184	26.24%	176,472	33.25%
Zone 1f - Farmington		0	40,446	44,884	10.97%	41,716	3.14%
Zone 1g - Manwalamink	220,448	0	255,873	281,183	9.89%	362,023	41.49%
Total Commercial	<u>9,358,369</u>	<u>\$218,843</u>	<u>\$23,443,842</u>	<u>\$25,062,257</u>	<u>0.00%</u>	<u>\$26,773,031</u>	<u>14.20%</u>

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E			
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	% Percent Change
Zone 1 - Most WW Areas								
Service Charge per EDU	46,690	\$36.70	\$16,450	\$1,729,964	\$ 45.50	1,333,196	-27.26%	-27.26%
Service Charge	29,301							
Consumption Charges					\$ 2,3417	\$11,791,469	5.50%	12.63%
Usage per 100 Gallons	4,559,912	\$2.1986	\$96,244	\$10,121,666				
Flat Rate per EDU (Unmetered)	6,869	\$150.00	\$9,891	\$1,040,233	\$ 162.00	\$1,112,770	6.97%	12.92%
Cleveland Cliff Plate & Victory Brewing Service Charge	-	\$456.50	\$0	\$0	\$ 456.50	\$0	0.00%	0.00%
Rainbow Washhouse Service Charge	12	\$75.00	\$9	\$909	\$ 76.73	\$921	1.32%	1.32%
Consumption Charges								
Usage per 100 Gallons:	21,588	\$0.2226	\$46	\$4,851	\$ 0.2277	\$4,916	1.34%	1.34%
<i>Adjustment (1):</i>								
Service Charge Per EDU	2,778	\$36.70	\$979	\$102,932				
Consumption Charges								
Usage (100 Gallons)	529,379	\$2.1986	\$11,173	\$1,175,065				
<i>Adjustment (2):</i>								
Usage (100 Gallons)	(53,859)	\$2.1986	(\$1,137)	(\$119,551)				
<i>Adjustment (3):</i>								
Cleveland Cliff Plate & Victory Brewing Service Charge								
<i>Adjustment (4):</i>								
Service Charge Per EDU								
Total Zone 1 Commercial			\$133,655	\$14,056,069		\$14,243,272	1.33%	7.44%

Note (1) Adjustment to account for the growth (loss) in customers
Note (1) Adjustment to normalize usage
Note (3) Adjustment to annualize amount of service charges to reflect 12 months of billing
Note (4) Adjustment to account for experienced changes to EDU counts

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E		
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate @ Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1a - Royersford WW							
Service Charge	2,374	\$36.70	\$836	\$87,951	\$ 45.50	\$108,004	22.80%
Consumption Charges All Usage	352,254	\$0.7500	\$2,536	266,727	\$ 1.5400	535,704	103.38%
Flat Rate per EDU (Unmetered)	1,092	\$113.00	\$1,184	124,561	\$ 171.00	186,704	49.89%
<i>Adjustment (1):</i> All Usage	(4,395)	\$0.7500	(\$32)	(3,328)			
Total Zone 1a Commercial			<u><u>\$4,524</u></u>	<u><u>\$475,911</u></u>		<u><u>\$830,412</u></u>	<u>74.49%</u>

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E			
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	% Percent Change
Zone 1b - York WW								
Service Charge	19,646	\$36.70	\$6,922	\$727,947	\$ 45.50	\$893,914	22.80%	22.80%
Consumption Charges								
First 2000 Gallons	312,810	\$0.4000	\$1,201	126,325	\$ 2.3417	\$723,367	472.62%	511.33%
All Over 2000 Gallons	3,467,396	\$2.1986	73,185	7,696,603	\$ 2.3417	8,018,298	4.18%	11.22%
<i>Adjustment (1):</i>								
First 2000 Gallons	(3,903)	\$0.4000	(\$15)	(1,576)				
All Over 2000 Gallons	(43,261)	\$2.1986	(913)	(96,027)				
Total Zone 1b Commercial			\$80,380	\$8,453,272		\$9,635,579	13.99%	20.98%

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E		
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate @	6/30/2027 Proforma Proposed Rate	% Percent Change
Zone 1c - Foster Township							
Flat Rate per EDU (Unmetered)	197	\$150.00	\$284	\$29,834	\$ 171.00	\$33,687	12.91%
Total Zone 1c Commercial			<u>\$284</u>	<u>\$29,834</u>		<u>\$33,687</u>	<u>12.91%</u>

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E		
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate @ Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1e - Sadsbury							
Flat Rate per EDU (Unmetered)	1,032	\$128.33	\$0	132,437	\$ 171.00	176,472	33.25%
<i>Adjustment (1):</i>							
Flat Rate per EDU (Unmetered)							
Total Zone 1e Commercial			<u>\$0</u>	<u>\$132,437</u>		<u>\$176,472</u>	<u>33.25%</u>

Note (1) Sadsbury was acquired October 2024. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E			
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	% Percent Change
Zone 1f - Farmington								
<u>Customer Charge by EDU</u>								
Service Charge Per EDU	756	\$53.50	\$0	40,446				
<u>Customer Charge by Meter Size</u>								
5/8-METER	36				\$ 53.50	\$1,926	0.00%	0.00%
3/4-METER	288				\$ 53.50	15,408	0.00%	0.00%
1-METER	36				\$ 53.50	1,926	0.00%	0.00%
1.5-METER	24				\$ 53.50	1,284	0.00%	0.00%
2-METER	12				\$ 53.50	642	0.00%	0.00%
Usage (in 100 Gallons)	15,388				\$ 1.5400	\$23,698	0.00%	0.00%
Flat Rate Per EDU (Unmetered)	0				\$ 74.00	\$0	0.00%	0.00%
<u>Adjustment (1):</u>								
Service Charge Per EDU								
Total Zone 1f Commercial			<u>\$0</u>	<u>\$40,446</u>		<u>\$44,884</u>	10.97%	3.14%

Note (1) Farmington was acquired November 2024. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

	Company				I&E		
	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate @ Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1g - Manwalamink WW							
Service Charge	6,372	\$16.92	\$0	\$107,814	\$ 25.00	\$159,300	47.75%
Flat Rate	48	\$58.00	\$0	\$2,784	\$ 90.00	\$4,320	55.17%
Flat Rate - Recreation Area Pool	-	\$124.29	\$0	\$0	\$ 136.70	\$0	0.00%
Flat Rate - Shawnee Mountain Ski Area	-	\$426.12	\$0	\$0	\$ 468.70	\$0	0.00%
Consumption Charges							
First 10,000 Gallons	220,448	\$0.6590	\$0	145,275	\$ 0.9000	198,403	36.57%
All Over 10,000 Gallons	-	\$0.2530	0	0	\$ 0.9000	0	0.00%
<i>Adjustment (1):</i>							
Service Charge							
Flat Rate							
Flat Rate - Recreation Area Pool							
Flat Rate - Shawnee Mountain Ski Area							
Consumption Charges							
First 10,000 Gallons							
All Over 10,000 Gallons							
Total Zone 1g Commercial			\$0	\$255,873		\$362,023	41.49%

Note (1) Manwalamink was acquired June 2025. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1 COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E	
	PRESENT RATES	PROPOSED RATES	PROPOSED RATES	INCREASE		INCREASE	
				AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$37.05	\$45.50	\$45.50	\$8.45	22.80%	\$8.45	22.80%
100	39.27	47.84	48.00	8.57	21.82%	8.73	22.22%
500	48.15	57.21	58.00	9.06	18.81%	9.85	20.45%
1,000	59.25	68.92	70.50	9.67	16.32%	11.25	18.99%
2,000	81.45	92.33	95.50	10.89	13.37%	14.05	17.25%
3,000	103.64	115.75	120.50	12.11	11.68%	16.86	16.26%
3,500	114.74	127.46	133.00	12.72	11.08%	18.26	15.91%
4,000	125.84	139.17	145.50	13.33	10.59%	19.66	15.62%
5,000	148.04	162.59	170.50	14.55	9.83%	22.46	15.17%
6,000	170.23	186.00	195.50	15.77	9.26%	25.27	14.84%
7,000	192.43	209.42	220.50	16.99	8.83%	28.07	14.59%
8,000	214.63	232.84	245.50	18.21	8.48%	30.87	14.38%
9,000	236.83	256.25	270.50	19.43	8.20%	33.67	14.22%
10,000	259.02	279.67	295.50	20.65	7.97%	36.48	14.08%
16,000	392.21	420.17	445.50	27.97	7.13%	53.29	13.59%
20,000	480.99	513.84	545.50	32.85	6.83%	64.51	13.41%
20,802	*	498.80	532.62	33.82	6.78%	66.75	13.38%
21,000		503.19	537.26	34.07	6.77%	67.31	13.38%
22,000		525.39	560.67	35.29	6.72%	70.11	13.34%
23,000		547.58	584.09	36.51	6.67%	72.92	13.32%
24,000		569.78	607.51	37.73	6.62%	75.72	13.29%
25,000		591.98	630.93	38.95	6.58%	78.52	13.26%
26,000		614.18	654.34	40.17	6.54%	81.32	13.24%
27,000		636.37	677.76	41.39	6.50%	84.13	13.22%
28,000		658.57	701.18	42.61	6.47%	86.93	13.20%
29,000		680.77	724.59	43.83	6.44%	89.73	13.18%
30,000		702.96	748.01	45.05	6.41%	92.54	13.16%
35,000		813.95	865.10	51.15	6.28%	106.55	13.09%
45,000		1,035.92	1,099.27	63.34	6.11%	134.58	12.99%
55,000		1,257.89	1,333.44	75.54	6.01%	162.61	12.93%
65,000		1,479.86	1,567.61	87.74	5.93%	190.64	12.88%
75,000		1,701.83	1,801.78	99.94	5.87%	218.67	12.85%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1f FARMINGTON COMMERCIAL - MONTHLY
1 EDU PER 4000 GALLONS to 5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER						
	PRESENT RATES	As Filed	I&E PROPOSED RATES	As Filed		I&E	
		PROPOSED		INCREASE		INCREASE	
		RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$53.50	\$45.50	\$45.50	(\$8.00)	-14.95%	(\$8.00)	-14.95%
100	53.50	47.04	47.04	(6.46)	-12.07%	(6.46)	-12.07%
500	53.50	53.20	53.20	(0.30)	-0.56%	(0.30)	-0.56%
1,000	53.50	60.90	60.90	7.40	13.83%	7.40	13.83%
2,000	53.50	76.30	76.30	22.80	42.62%	22.80	42.62%
3,000	53.50	91.70	91.70	38.20	71.40%	38.20	71.40%
3,500	53.50	99.40	99.40	45.90	85.79%	45.90	85.79%
4,000	53.50	107.10	107.10	53.60	100.19%	53.60	100.19%
5,000	53.50	122.50	122.50	69.00	128.97%	69.00	128.97%
6,000	53.50	137.90	137.90	84.40	157.76%	84.40	157.76%
7,000	53.50	153.30	153.30	99.80	186.54%	99.80	186.54%
8,000	107.00	168.70	168.70	61.70	57.66%	61.70	57.66%
9,000	107.00	184.10	184.10	77.10	72.06%	77.10	72.06%
10,000	107.00	199.50	199.50	92.50	86.45%	92.50	86.45%
16,000	214.00	291.90	291.90	77.90	36.40%	77.90	36.40%
20,000	267.50	353.50	353.50	86.00	32.15%	86.00	32.15%
20,802	*	267.50	365.85	98.35	36.77%	98.35	36.77%
21,000		267.50	368.90	101.40	37.91%	101.40	37.91%
22,000		267.50	384.30	116.80	43.66%	116.80	43.66%
23,000		267.50	399.70	132.20	49.42%	132.20	49.42%
24,000		321.00	415.10	94.10	29.31%	94.10	29.31%
25,000		321.00	430.50	109.50	34.11%	109.50	34.11%
26,000		321.00	445.90	124.90	38.91%	124.90	38.91%
27,000		321.00	461.30	140.30	43.71%	140.30	43.71%
28,000		374.50	476.70	102.20	27.29%	102.20	27.29%
29,000		374.50	492.10	117.60	31.40%	117.60	31.40%
30,000		374.50	507.50	133.00	35.51%	133.00	35.51%
35,000		428.00	584.50	156.50	36.57%	156.50	36.57%
45,000		588.50	738.50	150.00	25.49%	150.00	25.49%
55,000		695.50	892.50	197.00	28.32%	197.00	28.32%
65,000		856.00	1,046.50	190.50	22.25%	190.50	22.25%
75,000		963.00	1,200.50	237.50	24.66%	237.50	24.66%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1e SADBURY COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E	
	PRESENT RATES	PROPOSED RATES	PROPOSED RATES	INCREASE		INCREASE	
				AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$128.33	\$162.00	\$171.00	33.67	26.24%	\$42.67	33.25%
100	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
500	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
1,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
2,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
3,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
3,500	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
4,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
5,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
6,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
7,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
8,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
9,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
10,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
16,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
20,000	128.33	162.00	171.00	33.67	26.24%	42.67	33.25%
20,802	*	128.33	162.00	33.67	26.24%	42.67	33.25%
21,000		128.33	162.00	33.67	26.24%	42.67	33.25%
22,000		128.33	162.00	33.67	26.24%	42.67	33.25%
23,000		128.33	162.00	33.67	26.24%	42.67	33.25%
24,000		128.33	162.00	33.67	26.24%	42.67	33.25%
25,000		128.33	162.00	33.67	26.24%	42.67	33.25%
26,000		128.33	162.00	33.67	26.24%	42.67	33.25%
27,000		128.33	162.00	33.67	26.24%	42.67	33.25%
28,000		128.33	162.00	33.67	26.24%	42.67	33.25%
29,000		128.33	162.00	33.67	26.24%	42.67	33.25%
30,000		128.33	162.00	33.67	26.24%	42.67	33.25%
35,000		128.33	162.00	33.67	26.24%	42.67	33.25%
45,000		128.33	162.00	33.67	26.24%	42.67	33.25%
55,000		128.33	162.00	33.67	26.24%	42.67	33.25%
65,000		128.33	162.00	33.67	26.24%	42.67	33.25%
75,000		128.33	162.00	33.67	26.24%	42.67	33.25%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1b YORK TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E		
	PRESENT RATES	PROPOSED RATES	PROPOSED RATES	INCREASE		INCREASE		
				AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$37.05	\$45.50	\$45.50	\$8.45	22.80%	\$8.45	22.80%	
100	37.46	47.84	48.00	10.39	27.73%	10.54	28.15%	
500	39.07	57.21	58.00	18.14	46.42%	18.93	48.45%	
1,000	41.09	68.92	70.50	27.83	67.72%	29.41	71.57%	
2,000	45.13	92.33	95.50	47.20	104.60%	50.37	111.62%	
3,000	67.33	115.75	120.50	48.42	71.93%	53.17	78.98%	
3,500	78.42	127.46	133.00	49.03	62.52%	54.58	69.59%	
4,000	89.52	139.17	145.50	49.64	55.45%	55.98	62.53%	
5,000	111.72	162.59	170.50	50.86	45.53%	58.78	52.61%	
6,000	133.92	186.00	195.50	52.08	38.89%	61.58	45.99%	
7,000	156.11	209.42	220.50	53.30	34.14%	64.39	41.24%	
8,000	178.31	232.84	245.50	54.52	30.58%	67.19	37.68%	
9,000	200.51	256.25	270.50	55.74	27.80%	69.99	34.91%	
10,000	222.71	279.67	295.50	56.96	25.58%	72.79	32.69%	
16,000	355.89	420.17	445.50	64.28	18.06%	89.61	25.18%	
20,000	444.68	513.84	545.50	69.16	15.55%	100.82	22.67%	
20,802	*	462.48	532.62	565.55	70.14	15.17%	103.07	22.29%
21,000		466.87	537.26	570.50	70.38	15.08%	103.63	22.20%
22,000		489.07	560.67	595.50	71.60	14.64%	106.43	21.76%
23,000		511.27	584.09	620.50	72.82	14.24%	109.23	21.37%
24,000		533.46	607.51	645.50	74.04	13.88%	112.04	21.00%
25,000		555.66	630.93	670.50	75.26	13.54%	114.84	20.67%
26,000		577.86	654.34	695.50	76.48	13.24%	117.64	20.36%
27,000		600.06	677.76	720.50	77.70	12.95%	120.44	20.07%
28,000		622.25	701.18	745.50	78.92	12.68%	123.25	19.81%
29,000		644.45	724.59	770.50	80.14	12.44%	126.05	19.56%
30,000		666.65	748.01	795.50	81.36	12.20%	128.85	19.33%
35,000		777.63	865.10	920.50	87.46	11.25%	142.87	18.37%
45,000		999.60	1,099.27	1,170.50	99.66	9.97%	170.90	17.10%
55,000		1,221.57	1,333.44	1,420.50	111.86	9.16%	198.93	16.28%
65,000		1,443.54	1,567.61	1,670.50	124.06	8.59%	226.96	15.72%
75,000		1,665.51	1,801.78	1,920.50	136.26	8.18%	254.99	15.31%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1c FOSTER TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		I&E PROPOSED RATES	As Filed		I&E		
	PRESENT RATES	PROPOSED RATES		INCREASE		INCREASE		
				AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$151.44	\$162.00	\$171.00	\$10.56	6.97%	\$19.56	12.92%	
100	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
500	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
1,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
2,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
3,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
3,500	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
4,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
5,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
6,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
7,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
8,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
9,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
10,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
16,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
20,000	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%	
20,802	*	151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
21,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
22,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
23,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
24,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
25,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
26,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
27,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
28,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
29,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
30,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
35,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
45,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
55,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
65,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%
75,000		151.44	162.00	171.00	10.56	6.97%	19.56	12.92%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1a ROYERSFORD TOWNSHIP COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E	
	PRESENT RATES	PROPOSED RATES	I&E PROPOSED RATES	INCREASE		INCREASE	
				AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$37.05	\$45.50	\$45.50	\$8.45	22.80%	\$8.45	22.80%
100	37.81	46.59	47.04	8.78	23.22%	9.23	24.41%
500	40.84	50.95	53.20	10.11	24.75%	12.36	30.27%
1,000	44.62	56.39	60.90	11.77	26.37%	16.28	36.47%
2,000	52.20	67.28	76.30	15.08	28.90%	24.10	46.18%
3,000	59.77	78.17	91.70	18.40	30.79%	31.93	53.43%
3,500	63.55	83.62	99.40	20.06	31.56%	35.85	56.40%
4,000	67.34	89.06	107.10	21.72	32.25%	39.76	59.04%
5,000	74.91	99.95	122.50	25.04	33.42%	47.59	63.52%
6,000	82.48	110.84	137.90	28.36	34.38%	55.42	67.18%
7,000	90.06	121.73	153.30	31.67	35.17%	63.24	70.23%
8,000	97.63	132.62	168.70	34.99	35.84%	71.07	72.80%
9,000	105.20	143.51	184.10	38.31	36.42%	78.90	75.00%
10,000	112.77	154.40	199.50	41.63	36.91%	86.73	76.91%
16,000	158.20	219.74	291.90	61.54	38.90%	133.70	84.51%
20,000	188.49	263.30	353.50	74.81	39.69%	165.01	87.54%
20,802	*	194.57	272.03	77.47	39.82%	171.29	88.04%
21,000		196.06	274.19	78.13	39.85%	172.84	88.15%
22,000		203.64	285.08	81.44	39.99%	180.66	88.72%
23,000		211.21	295.97	84.76	40.13%	188.49	89.24%
24,000		218.78	306.86	88.08	40.26%	196.32	89.73%
25,000		226.35	317.75	91.40	40.38%	204.15	90.19%
26,000		233.92	328.64	94.72	40.49%	211.98	90.62%
27,000		241.50	339.53	98.03	40.59%	219.80	91.02%
28,000		249.07	350.42	101.35	40.69%	227.63	91.39%
29,000		256.64	361.31	104.67	40.78%	235.46	91.75%
30,000		264.21	372.20	107.99	40.87%	243.29	92.08%
35,000		302.07	426.65	124.58	41.24%	282.43	93.50%
45,000		377.79	535.55	157.76	41.76%	360.71	95.48%
55,000		453.51	644.45	190.94	42.10%	438.99	96.80%
65,000		529.23	753.35	224.12	42.35%	517.27	97.74%
75,000		604.95	862.25	257.30	42.53%	595.55	98.45%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1g MANWALAMINK COMMERCIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			As Filed		I&E		
	PRESENT RATES	PROPOSED RATES	I&E PROPOSED RATES	INCREASE		INCREASE		
				AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$16.92	\$18.60	\$25.00	\$1.68	9.93%	\$8.08	47.75%	
100	17.58	19.32	25.90	1.75	9.93%	8.32	47.33%	
500	20.22	22.22	29.50	2.01	9.92%	9.29	45.93%	
1,000	23.51	25.84	34.00	2.33	9.91%	10.49	44.62%	
2,000	30.10	33.08	43.00	2.98	9.90%	12.90	42.86%	
3,000	36.69	40.32	52.00	3.63	9.89%	15.31	41.73%	
3,500	39.99	43.94	56.50	3.96	9.89%	16.52	41.30%	
4,000	43.28	47.56	61.00	4.28	9.89%	17.72	40.94%	
5,000	49.87	54.80	70.00	4.93	9.89%	20.13	40.36%	
6,000	56.46	62.04	79.00	5.58	9.88%	22.54	39.92%	
7,000	63.05	69.28	88.00	6.23	9.88%	24.95	39.57%	
8,000	69.64	76.52	97.00	6.88	9.88%	27.36	39.29%	
9,000	76.23	83.76	106.00	7.53	9.88%	29.77	39.05%	
10,000	82.82	91.00	115.00	8.18	9.88%	32.18	38.86%	
16,000	98.00	107.68	169.00	9.68	9.88%	71.00	72.45%	
20,000	108.12	118.80	205.00	10.68	9.88%	96.88	89.60%	
20,802	*	110.15	121.03	212.22	10.88	9.88%	102.07	92.66%
21,000		110.65	121.58	214.00	10.93	9.88%	103.35	93.40%
22,000		113.18	124.36	223.00	11.18	9.88%	109.82	97.03%
23,000		115.71	127.14	232.00	11.43	9.88%	116.29	100.50%
24,000		118.24	129.92	241.00	11.68	9.88%	122.76	103.82%
25,000		120.77	132.70	250.00	11.93	9.88%	129.23	107.01%
26,000		123.30	135.48	259.00	12.18	9.88%	135.70	110.06%
27,000		125.83	138.26	268.00	12.43	9.88%	142.17	112.99%
28,000		128.36	141.04	277.00	12.68	9.88%	148.64	115.80%
29,000		130.89	143.82	286.00	12.93	9.88%	155.11	118.50%
30,000		133.42	146.60	295.00	13.18	9.88%	161.58	121.11%
35,000		146.07	160.50	340.00	14.43	9.88%	193.93	132.77%
45,000		171.37	188.30	430.00	16.93	9.88%	258.63	150.92%
55,000		196.67	216.10	520.00	19.43	9.88%	323.33	164.40%
65,000		221.97	243.90	610.00	21.93	9.88%	388.03	174.81%
75,000		247.27	271.70	700.00	24.43	9.88%	452.73	183.09%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Industrial Class	6/30/2025 Water Usage (in 100 Gallons)	6/30/2025 Annualized Revenues	6/30/2026 Water Usage (in 100 Gallons)	6/30/2026 Proforma Revenues	6/30/2027 Water Usage (in 100 Gallons)	Company			I&E		
						Proforma DSIC Revenues	6/30/2027 Proforma @ Present Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change	
Zone 1 - Most WW Areas	673,965	\$1,489,752	673,965	\$1,489,569	673,965	\$14,300	\$1,503,868	0.54%	\$1,511,983	0.54%	\$1,565,993
Zone 1a - Royersford WW	13,655	15,526	13,655	15,526	13,655	149	15,675	36.66%	21,422	36.66%	30,107
Zone 1b - York WW	5,457	11,997	5,457	11,997	5,457	115	12,112	10.01%	13,324	10.01%	15,279
Zone 1c - Foster Township		782,100		782,100		7,508	789,608	6.97%	844,668	6.97%	943,734
Zone 1e - Sadsbury											
Zone 1f - Farmington											
Zone 1g - ManwalaMink											
Total Industrial	<u>693,077</u>	<u>\$2,299,375</u>	<u>693,077</u>	<u>\$2,299,192</u>	<u>693,077</u>	<u>\$22,072</u>	<u>\$2,321,263</u>	<u>3.02%</u>	<u>\$2,391,397</u>	<u>3.02%</u>	<u>\$2,555,113</u>

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2025			6/30/2026			6/30/2027			Company			I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	Billing Determinants	Rate	6/30/2026 Annualized Revenue	Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Service Charge per EDU	101	\$36.70	\$3,707	101	\$36.70	\$3,707	96	\$36.70	\$34	\$3,557	\$45.50	\$4,368	22.80%	\$45.50	\$4,368	22.80%
Service Charge Consumption Charges							96									
Usage per 100 Gallons:	150/739	\$2.1986	\$331,415	150/739	\$2.1986	\$331,415	150,739	\$2.1986	\$3,182	\$334,597	\$2,341.7	\$352,985	5.50%	\$2,700.00	\$406,995	21.64%
Flat Rate per EDU (Unmetered)	9	\$150.00	\$1,350	-	\$150.00	\$0	-	\$150.00	\$0	\$0	\$162.00	\$0	0.00%	\$170.00	\$0	0.00%
Special Rate:																
Cleveland Cliffs Plate and Victory Brewing																
Service Charge	17	\$456.50	\$7,760	24	\$456.50	\$10,956	24	\$456.50	\$105	\$11,061	\$456.50	\$10,956	-0.95%	\$456.50	\$10,956	-0.95%
Usage (100 Gallons)	523,226	\$1,480.00	774,374	523,226	\$1,480.00	774,374	523,226	\$1,480.00	7,434	781,808	\$1,480.00	774,374	-0.95%	\$1,480.00	774,374	-0.95%
Special Rate (Flat):																
Knouse Foods	12	\$8,683.00	\$104,196	12	\$8,683.00	\$104,196	12	\$8,683.00	\$1,000	\$105,196	\$8,683.00	\$104,196	-0.95%	\$8,683.00	\$104,196	-0.95%
Penn State Special Metals	12	\$2,988.00	35,856	12	\$2,988.00	35,856	12	\$2,988.00	344	36,200	\$2,988.00	35,856	-0.95%	\$2,988.00	35,856	-0.95%
PSC Metals	12	\$1,156.00	13,872	12	\$1,156.00	13,872	12	\$1,156.00	133	14,005	\$1,156.00	13,872	-0.95%	\$1,156.00	13,872	-0.95%
Ipsco Kopper Tubilers	11	\$17,948.00	197,428	12	\$17,948.00	215,376	12	\$17,948.00	2,068	217,444	\$17,948.00	215,376	-0.95%	\$17,948.00	215,376	-0.95%
Adjustment (1):																
Flat Rate per EDU (Unmetered)	(9)	150.00	(\$1,350)													
Cleveland Cliffs Plate and Victory	7	\$456.50	3,196													
Ipsco Kopper Tubilers	1	\$17,948.00	17,948													
Adjustment (2):																
Service Charge Per EDU				(5)	\$36.70	(\$183)										
Total Zone 1 Industrial			\$1,489,752			\$1,489,569			\$14,300	\$1,503,868		1,511,983	0.54%		1,565,993	4.13%

Note (1) Adjustment to annualize amount of service charges to reflect 12 months of billing

Note (2) Adjustment to account for experienced changes to EDU counts

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	6/30/2025			6/30/2026			6/30/2027			Company			I&E		
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	6/30/2026 Billing Determinants	Rate	6/30/2026 Annualized Revenue	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1a - Royersford WW															
Service Charge	144	\$36.70	\$5,285	144	\$36.70	\$5,285	144	\$36.70	\$51	\$ 45.50	\$6,552	22.79%	\$ 45.50	\$6,552	22.79%
Consumption Charges	13,655	\$0.7500	10,241	13,655	\$0.7500	10,241	13,655	\$0.7500	\$98	\$1.0890	14,870	43.82%	\$1.7250	23,555	127.83%
Flat Rate per EDU (Unmetered)		\$113.00	0	-	\$113.00	0	-	\$113.00	\$0	\$ 157.00	0	0.00%	\$ 170.00	0	0.00%
Total Zone 1a Industrial			\$15,526			\$15,526			\$149		\$21,422	36.66%		\$30,107	92.07%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Rate	6/30/2026 Annualized Revenue		Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Zone 1b - York WW																				
Service Charge									12				\$ 45.50	\$546	0.00%	\$ 45.50	\$546	0.00%		
Consumption Charges	5,457	\$2.1986	\$11,997		5,457	\$2.1986	\$11,997		5,457	\$2.1986	\$115	\$12,112	\$2,341.7	\$12,778	5.50%	\$2,700.0	\$14,733	21.64%		
All Usage																				
Total Zone 1b Industrial			<u><u>\$11,997</u></u>				<u><u>\$11,997</u></u>				<u><u>\$115</u></u>	<u><u>\$12,112</u></u>		<u><u>\$13,324</u></u>	10.01%		<u><u>\$15,279</u></u>	26.15%		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

	6/30/2025			6/30/2026			6/30/2027			Company			I&E		
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	6/30/2026 Billing Determinants	Rate	6/30/2026 Annualized Revenue	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 1c - Foster Township															
Flat Rate per EDU (Unmetered)	5,214	\$150.00	\$782,100	5,214	\$150.00	\$782,100	5,214	\$150.00	\$7,508	\$	\$162.00	6.97%	\$ 181.00	\$943,734	19.52%
Total Zone 1c Industrial			<u>\$782,100</u>			<u>\$782,100</u>			<u>\$7,508</u>		<u>\$844,668</u>	6.97%		<u>\$943,734</u>	19.52%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1 INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E		
	PRESENT	As Filed	I&E	INCREASE		INCREASE		
	RATES	PROPOSED RATES	PROPOSED RATES	AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$37.05	\$45.50	\$45.50	\$8.45	22.80%	\$8.45	22.80%	
1,000	59.25	68.92	72.50	9.67	16.32%	13.25	22.36%	
2,000	81.45	92.33	99.50	10.89	13.37%	18.05	22.17%	
3,000	103.64	115.75	126.50	12.11	11.68%	22.86	22.05%	
4,000	125.84	139.17	153.50	13.33	10.59%	27.66	21.98%	
5,000	148.04	162.59	180.50	14.55	9.83%	32.46	21.93%	
10,000	259.02	279.67	315.50	20.65	7.97%	56.48	21.80%	
16,000	392.21	420.17	477.50	27.97	7.13%	85.29	21.75%	
20,000	480.99	513.84	585.50	32.85	6.83%	104.51	21.73%	
30,000	702.96	748.01	855.50	45.05	6.41%	152.54	21.70%	
40,000	924.93	982.18	1,125.50	57.25	6.19%	200.57	21.68%	
50,000	1,146.91	1,216.35	1,395.50	69.44	6.05%	248.59	21.68%	
60,000	1,368.88	1,450.52	1,665.50	81.64	5.96%	296.62	21.67%	
70,000	1,590.85	1,684.69	1,935.50	93.84	5.90%	344.65	21.66%	
80,000	1,812.82	1,918.86	2,205.50	106.04	5.85%	392.68	21.66%	
90,000	2,034.79	2,153.03	2,475.50	118.24	5.81%	440.71	21.66%	
100,000	2,256.76	2,387.20	2,745.50	130.44	5.78%	488.74	21.66%	
200,000	4,476.47	4,728.90	5,445.50	252.43	5.64%	969.03	21.65%	
300,000	6,696.17	7,070.60	8,145.50	374.43	5.59%	1,449.33	21.64%	
400,000	8,915.88	9,412.30	10,845.50	496.42	5.57%	1,929.62	21.64%	
500,000	11,135.59	11,754.00	13,545.50	618.41	5.55%	2,409.91	21.64%	
600,000	13,355.29	14,095.70	16,245.50	740.41	5.54%	2,890.21	21.64%	
647,754	*	14,415.29	15,213.96	17,534.86	798.67	5.54%	3,119.57	21.64%
700,000		15,575.00	16,437.40	18,945.50	862.40	5.54%	3,370.50	21.64%
800,000		17,794.70	18,779.10	21,645.50	984.40	5.53%	3,850.80	21.64%
900,000		20,014.41	21,120.80	24,345.50	1,106.39	5.53%	4,331.09	21.64%
1,000,000		22,234.12	23,462.50	27,045.50	1,228.38	5.52%	4,811.38	21.64%
1,100,000		24,453.82	25,804.20	29,745.50	1,350.38	5.52%	5,291.68	21.64%
1,200,000		26,673.53	28,145.90	32,445.50	1,472.37	5.52%	5,771.97	21.64%
1,300,000		28,893.24	30,487.60	35,145.50	1,594.36	5.52%	6,252.26	21.64%
1,400,000		31,112.94	32,829.30	37,845.50	1,716.36	5.52%	6,732.56	21.64%
1,500,000		33,332.65	35,171.00	40,545.50	1,838.35	5.52%	7,212.85	21.64%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1b YORK TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E	
	PRESENT RATES	As Filed	I&E	INCREASE		INCREASE	
		PROPOSED RATES	PROPOSED RATES	AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$0.00	\$45.50	\$45.50	\$45.50	0.00%	\$45.50	0.00%
1,000	22.20	68.92	72.50	46.72	210.48%	50.30	226.62%
2,000	44.39	92.33	99.50	47.94	107.99%	55.11	124.13%
3,000	66.59	115.75	126.50	49.16	73.82%	59.91	89.97%
4,000	88.79	139.17	153.50	50.38	56.74%	64.71	72.88%
5,000	110.99	162.59	180.50	51.60	46.49%	69.51	62.63%
10,000	221.97	279.67	315.50	57.70	25.99%	93.53	42.14%
16,000	355.15	420.17	477.50	65.02	18.31%	122.35	34.45%
20,000	443.94	513.84	585.50	69.90	15.75%	141.56	31.89%
30,000	665.91	748.01	855.50	82.10	12.33%	189.59	28.47%
40,000	887.88	982.18	1,125.50	94.30	10.62%	237.62	26.76%
50,000	1,109.85	1,216.35	1,395.50	106.50	9.60%	285.65	25.74%
60,000	1,331.82	1,450.52	1,665.50	118.70	8.91%	333.68	25.05%
70,000	1,553.79	1,684.69	1,935.50	130.90	8.42%	381.71	24.57%
80,000	1,775.77	1,918.86	2,205.50	143.09	8.06%	429.73	24.20%
90,000	1,997.74	2,153.03	2,475.50	155.29	7.77%	477.76	23.92%
100,000	2,219.71	2,387.20	2,745.50	167.49	7.55%	525.79	23.69%
200,000	4,439.41	4,728.90	5,445.50	289.49	6.52%	1,006.09	22.66%
300,000	6,659.12	7,070.60	8,145.50	411.48	6.18%	1,486.38	22.32%
400,000	8,878.83	9,412.30	10,845.50	533.47	6.01%	1,966.67	22.15%
500,000	11,098.53	11,754.00	13,545.50	655.47	5.91%	2,446.97	22.05%
600,000	13,318.24	14,095.70	16,245.50	777.46	5.84%	2,927.26	21.98%
647,754	* 14,378.24	15,213.96	17,534.86	835.72	5.81%	3,156.62	21.95%
700,000	15,537.95	16,437.40	18,945.50	899.45	5.79%	3,407.55	21.93%
800,000	17,757.65	18,779.10	21,645.50	1,021.45	5.75%	3,887.85	21.89%
900,000	19,977.36	21,120.80	24,345.50	1,143.44	5.72%	4,368.14	21.87%
1,000,000	22,197.07	23,462.50	27,045.50	1,265.43	5.70%	4,848.43	21.84%
1,100,000	24,416.77	25,804.20	29,745.50	1,387.43	5.68%	5,328.73	21.82%
1,200,000	26,636.48	28,145.90	32,445.50	1,509.42	5.67%	5,809.02	21.81%
1,300,000	28,856.19	30,487.60	35,145.50	1,631.41	5.65%	6,289.31	21.80%
1,400,000	31,075.89	32,829.30	37,845.50	1,753.41	5.64%	6,769.61	21.78%
1,500,000	33,295.60	35,171.00	40,545.50	1,875.40	5.63%	7,249.90	21.77%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1c FOSTER TOWNSHIP INDUSTRIAL - MONTHLY
PER EDU

CONSUMPTION GALLONS	BILLS UNDER		I&E PROPOSED RATES	Company		I&E		
	PRESENT RATES	As Filed PROPOSED RATES		INCREASE		INCREASE		
				AMOUNT	PERCENT	AMOUNT	PERCENT	
0	\$151.44	\$162.00	\$181.00	\$10.56	6.97%	\$29.56	19.52%	
1,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
2,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
3,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
4,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
5,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
10,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
16,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
20,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
30,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
40,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
50,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
60,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
70,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
80,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
90,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
100,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
200,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
300,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
400,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
500,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
600,000	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%	
647,754	*	151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
700,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
800,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
900,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,000,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,100,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,200,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,300,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,400,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%
1,500,000		151.44	162.00	181.00	10.56	6.97%	29.56	19.52%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RATE ZONE 1a ROYERSFORD TOWNSHIP INDUSTRIAL - MONTHLY
2 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER			INCREASE		INCREASE	
	PRESENT RATES	PROPOSED RATES	PROPOSED RATES				
				AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$37.05	\$45.50	\$45.50	\$8.45	22.80%	\$8.45	22.80%
1,000	44.62	56.39	62.75	11.77	26.37%	18.13	40.62%
2,000	52.20	67.28	80.00	15.08	28.90%	27.80	53.27%
3,000	59.77	78.17	97.25	18.40	30.79%	37.48	62.71%
4,000	67.34	89.06	114.50	21.72	32.25%	47.16	70.03%
5,000	74.91	99.95	131.75	25.04	33.42%	56.84	75.87%
10,000	112.77	154.40	218.00	41.63	36.91%	105.23	93.31%
16,000	158.20	219.74	321.50	61.54	38.90%	163.30	103.22%
20,000	188.49	263.30	390.50	74.81	39.69%	202.01	107.17%
30,000	264.21	372.20	563.00	107.99	40.87%	298.79	113.09%
40,000	339.93	481.10	735.50	141.17	41.53%	395.57	116.37%
50,000	415.65	590.00	908.00	174.35	41.95%	492.35	118.45%
60,000	491.37	698.90	1,080.50	207.53	42.23%	589.13	119.89%
70,000	567.09	807.80	1,253.00	240.71	42.45%	685.91	120.95%
80,000	642.81	916.70	1,425.50	273.89	42.61%	782.69	121.76%
90,000	718.53	1,025.60	1,598.00	307.07	42.74%	879.47	122.40%
100,000	794.25	1,134.50	1,770.50	340.25	42.84%	976.25	122.91%
200,000	1,551.45	2,223.50	3,495.50	672.05	43.32%	1,944.05	125.31%
300,000	2,308.65	3,312.50	5,220.50	1,003.85	43.48%	2,911.85	126.13%
400,000	3,065.85	4,401.50	6,945.50	1,335.65	43.57%	3,879.65	126.54%
500,000	3,823.05	5,490.50	8,670.50	1,667.45	43.62%	4,847.45	126.80%
600,000	4,580.25	6,579.50	10,395.50	1,999.25	43.65%	5,815.25	126.96%
647,754	* 4,941.85	7,099.54	11,219.26	2,157.70	43.66%	6,277.41	127.03%
700,000	5,337.45	7,668.50	12,120.50	2,331.05	43.67%	6,783.05	127.08%
800,000	6,094.65	8,757.50	13,845.50	2,662.85	43.69%	7,750.85	127.17%
900,000	6,851.85	9,846.50	15,570.50	2,994.65	43.71%	8,718.65	127.25%
1,000,000	7,609.05	10,935.50	17,295.50	3,326.45	43.72%	9,686.45	127.30%
1,100,000	8,366.25	12,024.50	19,020.50	3,658.25	43.73%	10,654.25	127.35%
1,200,000	9,123.45	13,113.50	20,745.50	3,990.05	43.73%	11,622.05	127.39%
1,300,000	9,880.65	14,202.50	22,470.50	4,321.85	43.74%	12,589.85	127.42%
1,400,000	10,637.85	15,291.50	24,195.50	4,653.65	43.75%	13,557.65	127.45%
1,500,000	11,395.05	16,380.50	25,920.50	4,985.45	43.75%	14,525.45	127.47%

* Average monthly bill.

Bill at present rate was calculated using DSIC rate @ 0.96%.

Bill at proposed rate was calculated using DSIC rate @ 0.00%.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Municipal Class	6/30/2025 Water Usage (in 100 Gallons)	6/30/2025 Annualized Revenues	6/30/2026 Water Usage (in 100 Gallons)	6/30/2026 Proforma Revenues	6/30/2027 Water Usage (in 100 Gallons)	Proforma DSIC Revenues	6/30/2027 Proforma @ Present Rate	Company			I&E		
								6/30/2027 Proforma @ Proposed Rate	% Percent Change		6/30/2027 Proforma @ Proposed Rate	% Percent Change	
Zone 1 - Most WW Areas	570,271	\$1,406,380	550,518	\$1,362,772	549,639	\$13,064	\$1,373,904	\$1,455,798	0.00%		\$1,545,236	12.47%	
Zone 1a - Royersford WW	23,033	19,477	22,235	18,878	22,199	181	19,032	26,905	0.00%		58,228	205.95%	
Zone 1b - York WW	198,017	445,417	191,158	430,652	190,853	4,129	434,125	470,657	0.00%		500,869	15.37%	
Zone 1c - Foster Township		31,965		31,965		307	32,272	44,750	0.00%		44,750	38.67%	
Zone 1e - Sadsbury		17,335		17,334		0	17,334	19,324	0.00%		19,900	14.80%	
Zone 1f - Farmington		0	830	1,649	830	0	1,649	1,812	0.00%		1,812	9.88%	
Zone 1g - Manwalamink													
Total Municipal	<u>791,321</u>	<u>\$1,920,574</u>	<u>764,741</u>	<u>\$1,863,250</u>	<u>763,521</u>	<u>\$17,681</u>	<u>\$1,878,316</u>	<u>\$2,019,246</u>	<u>0.00%</u>		<u>\$2,170,795</u>	<u>15.57%</u>	

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1 - Most WW Areas	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Rate	6/30/2026 Annualized Revenue		Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge per EDU	953	\$36.70	\$34,970		953	\$36.70	\$34,970		948	\$36.70	\$334	\$35,126	\$45.50	42,588	21.24%	\$ 45.50	42,588	21.24%		
Service Charge									936											
Consumption Charges																				
Usage per 100 Gallons:	570,271	\$2.1986	\$1,253,798		570,271	\$2.1986	\$1,253,798		550,518	\$2.1986	\$11,620	\$1,221,989	\$2,341.7	\$1,287,090	5.50%	\$2,500.00	\$1,374,098	12.63%		
Flat Rate per EDU (Unmetered)	270	\$150.00	\$40,500		270	\$150.00	\$40,500		270	\$150.00	\$389	\$40,889	\$162.00	\$43,740	6.97%	\$ 171.00	\$46,170	12.92%		
Special Rate:																				
Strattanville Borough	12	\$6,426.00	\$77,112		12	\$6,426.00	\$77,112		12	\$6,426.00	\$740	\$77,852	\$6,865.00	\$82,380	5.82%	\$6,865.00	\$82,380	5.82%		
Adjustment (1):																				
Usage (100 Gallons)	(19,753)	\$2.1986	(\$43,429)		(19,753)	\$2.1986	(\$43,429)		(879)	\$2.1986	(\$19)	(\$1,952)								
Adjustment (2):																				
Service Charge Per EDU	(5)	\$36.70	(\$179)		(5)	\$36.70	(\$179)													
Total Zone 1 Municipal			\$1,406,380				\$1,362,772				\$13,064	\$1,373,904			0.00%		\$1,455,798	12.47%		

Note (1) Adjustment to normalize usage.

Note (2) Adjustment to account for experienced changes to EDU counts

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1a - Royersford WW	6/30/2025			6/30/2026			6/30/2027			Company			I&E		
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	Billing Determinants	Rate	6/30/2026 Annualized Revenue	Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proposed Rate	Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Service Charge	60	\$36.70	\$2,202	60	\$36.70	\$2,202	60	\$36.70	\$21	\$45.50	\$2,730	22.81%	\$ 45.50	\$2,730	22.81%
Consumption Charges	23,033	\$0.7500	\$17,275	23,033	\$0.7500	\$17,275	22,235	\$0.7500	\$160	\$1,0890	\$24,175	43.59%	\$2,5000	\$55,498	229.64%
Flat Rate per EDU (Unmetered)		\$113.00	\$0	-	\$113.00	\$0	-	\$113.00	\$0	\$157.00	\$0	0.00%	\$ 171.00	\$0	0.00%
Adjustment (1): All Usage				(798)	\$0.7500	(\$599)	(36)	\$0.7500	\$0						
Total Zone 1a Municipal			\$19,477			\$18,878			\$181		\$26,905			\$58,228	205.95%

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1b - York WW	6/30/2025		6/30/2026		6/30/2027		Company		I&E					
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	6/30/2026 Billing Determinants	Rate	6/30/2026 Annualized Revenue	6/30/2027 Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proposed Rate	Proforma @ Proposed Rate	% Percent Change		
Service Charge Consumption Charges First 2000 Gallons All Over 2000 Gallons	522	\$36.70	\$19,146	522	\$36.70	\$19,146	522	\$36.70	\$184	\$19,330	\$45.50	\$23,737	22.80%	
	5,053	\$0.4000	\$2,021	5,053	\$0.4000	\$2,021	4,878	\$0.4000	\$19	\$1,970	\$2,341.7	\$11,404	479.77%	
	192,964	\$2.1986	\$424,250	192,964	\$2.1986	\$424,250	186,280	\$2.1986	3,932	413,487	\$2,341.7	435,516	5.00%	
Adjustment (1): First 2000 Gallons All Over 2000 Gallons				(175) (6,684)	\$0.4000 \$2.1986	(\$70) (14,695)	(8) (297)	\$0.4000 \$2.1986	\$0 (6)	(\$3) (659)				
Total Zone 1b Municipal			\$445,417			\$430,652			\$4,129	\$434,125		\$470,657	\$500,869	15.37%

Note (1) Adjustment to normalize usage

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1c - Foster Township	6/30/2025			6/30/2026			6/30/2027			Company			I&E		
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	Billing Determinants	Rate	6/30/2026 Annualized Revenue	Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Flat Rate Per EDU	799	\$150.00	\$0	-	\$150.00	\$0	-	\$150.00	\$0	\$162.00	\$0	0.00%	\$ 171.00	\$0	0.00%
Flat Rate Per EDU (Butler Township)	799	\$40.00	\$31,965	799	\$40.00	\$31,965	799	\$40.00	307	\$56.00	44,750	38.67%	\$56.00	44,750	38.67%
Total Zone 1c Municipal			\$31,965			\$31,965			\$307		\$44,750			\$44,750	38.67%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1f - Farmington	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Rate	6/30/2026 Annualized Revenue		Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
<i>Customer Charge by EDU</i> Service Charge Per EDU	189	\$53.50	\$10,112		324	\$53.50	\$17,334		324	\$53.50	\$0	\$17,334	\$53.50							
									0				\$53.50	\$0	0.00%	\$ 45.50	\$0	0.00%		
									72				\$53.50	3,852	0.00%	\$ 45.50	3,276	0.00%		
									0				\$53.50	0	0.00%	\$ 45.50	0	0.00%		
									0				\$53.50	0	0.00%	\$ 45.50	0	0.00%		
<i>Customer Charge by Meter Size</i> 5/8-METER 3/4-METER 1-METER 1.5-METER 2-METER Usage (in 100 Gallons)									9,470				\$1,5400	\$14,584	0.00%	\$1,5400	\$14,584	0.00%		
									12				\$ 74.00	\$888	0.00%	\$ 170.00	\$2,040	0.00%		
<i>Adjustment (1):</i> Service Charge Per EDU	135	\$53.50	\$7,223																	
Total Zone 1e Municipal			\$17,335				\$17,334				\$0	\$17,334		\$19,324	11.48%		\$19,900	14.80%		

Note (1) Farmington was acquired November 2024. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER SSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 1g - Manwalamink WW	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Rate	6/30/2026 Annualized Revenue(2)		Billing Determinants	Present Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge	-	\$ 16.92	\$0		-	\$ 16.92	\$0		24	\$16.92	\$0	\$406	\$ 18.60	\$446	9.85%	\$ 18.60	\$446	9.85%		
Flat Rate	-	\$ 58.00	\$0		-	\$ 58.00	\$0		12	\$58.00	\$0	\$696	\$ 63.75	\$765	9.91%	\$ 63.75	\$765	9.91%		
Consumption Charges	-	\$0.6590	\$0		-	\$0.6590	0		830	\$0.6590	\$0	547	\$0.7240	601	9.87%	\$0.7240	601	9.87%		
First 10,000 Gallons	-	\$0.2530	0		-	\$0.2530	0		-	\$0.2530	0	0	\$0.2780	0	0.00%	\$0.2780	0	0.00%		
All Over 10,000 Gallons																				
Adjustment (1):																				
Service Charge					24	\$ 16.92	\$406													
Flat Rate					12	\$ 58.00	\$696													
Consumption Charges					830	\$0.6590	\$547													
First 10,000 Gallons					0	\$0.2530	0													
All Over 10,000 Gallons																				
Total Zone 1g Commercial			\$0				\$1,649				\$0	\$1,649			9.88%	\$1,812	\$1,812	9.88%		

Note (1) Manwalamink was acquired June 2025. Adjustment is to annualize the revenue to reflect 12 full months of billing.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2027

Rate Zone	As Filed Residential	Adjustment	I&E Residential	As filed Commercial	Adjustment	I&E Commercial	As filed Industrial	Adjustment	I&E Industrial	As filed Municipal	Adjustment	I&E Municipal	As filed Bulk	Adjustment	Total Revenues
<u>Present Rate Application</u>															
Zone 2	\$12,467,398	\$0	\$12,467,398	\$4,111,001	\$0	\$4,111,001	\$64,914	\$0	\$64,914	\$477,548	\$0	\$477,548	\$8,995,477	\$0	\$26,116,339
Zone 2a - Scranton WW	34,910,196	0	34,910,196	19,448,656	0	19,448,656	2,530,682	0	2,530,682	772,052	0	772,052	1,359,018	0	\$59,020,603
	\$47,377,595	\$0	\$47,377,595	\$23,559,657	\$0	\$23,559,657	\$2,595,596	\$0	\$2,595,596	\$1,249,600	\$0	\$1,249,600	\$10,354,495	\$0	\$85,136,943
IPP Surcharge													150,000		150,000
Other Revenues													471,648		471,648
Total WW CSS	\$47,377,595	\$0	\$47,377,595	\$23,559,657	\$0	\$23,559,657	\$2,595,596	\$0	\$2,595,596	\$1,249,600	\$0	\$1,249,600	\$10,354,495	\$0	\$85,758,591
<u>Proposed Rate Application</u>															
Zone 2	\$14,952,089	\$0	\$14,952,089	\$4,929,561	\$0	\$4,929,561	\$77,528	\$0	\$77,528	\$571,419	\$0	\$571,419	\$8,909,942	\$0	\$29,440,539
Zone 2a - Scranton WW	34,909,800	7,176,623	42,086,423	19,448,640	3,893,241	23,341,881	2,530,716	491,995	3,022,711	772,061	150,909	922,969	1,359,019	10,728,778	\$64,687,582
Total WW CSS	\$49,861,889	\$7,176,623	\$57,038,512	\$24,378,201	\$3,893,241	\$28,271,442	\$2,608,244	\$491,995	\$3,100,239	\$1,343,480	\$150,909	\$1,494,389	\$10,268,961	\$10,728,778	\$94,128,121
IPP Surcharge													150,000		150,000
Other Revenues													463,394	55,779	519,173
Total WW CSS	\$49,861,889	\$7,176,623	\$57,038,512	\$24,378,201	\$3,893,241	\$28,271,442	\$2,608,244	\$491,995	\$3,100,239	\$1,343,480	\$150,909	\$1,494,389	\$10,268,961	\$10,784,556	\$94,797,294
Change in Revenues	\$2,484,294		\$9,660,917	\$818,544		\$4,711,785	\$12,648		\$504,643	\$93,880		\$244,789	(\$85,534)	\$10,784,556	\$9,038,703
% Change in Revenues	5.24%		20.39%	3.47%		20.00%	0.49%		19.44%	7.51%		19.59%	-0.83%	-2.04%	10.54%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

Residential Class	6/30/2025 Water Usage (in 100 Gallons)		6/30/2026 Water Usage (in 100 Gallons)		6/30/2026 Proforma Revenues		6/30/2027 Water Usage (in 100 Gallons)		6/30/2027 Proforma Revenues		6/30/2027 Proforma @ Proposed Rate		6/30/2027 Proforma @ Proposed Rate		I&E	
	3,887,287 11,056,897	\$12,524,007 34,713,753	3,853,247 10,997,986	\$12,436,606 34,586,057	3,818,497 10,974,963	\$118,549 331,950	\$12,467,398 34,910,196	0 7,176,623	\$0	\$14,952,089 42,086,423	0.0% 0.0%	\$14,952,089 34,909,800	0.0% 0.0%	\$14,952,089 42,086,423	19.9% 20.6%	
Total Residential	14,944,183	\$47,237,760	14,851,233	\$47,022,663	14,793,459	\$450,500	\$47,377,595	\$7,176,623	\$0	\$57,038,512	20.4%	\$49,861,889	0.0%	\$57,038,512	20.4%	
Zone 2	I&E															
	6/30/2025 Billing Determinants		6/30/2026 Billing Determinants		6/30/2026 Annualized Revenue		6/30/2027 Billing Determinants		6/30/2027 Proforma Revenues		6/30/2027 Proforma @ Proposed Rate		6/30/2027 Proforma @ Proposed Rate		I&E	
	138,226		138,238		\$2,764,516		138,313		\$26,556		\$3,461,570		\$3,461,570		23.8%	
	3,886,947		3,887,287		\$10,151,539		3,853,247 4,274,608		\$96,610		\$11,967,169		\$11,967,169		18.9%	
	333		333		\$34,680		333		\$333		\$41,349		\$41,349		18.1%	
	Low Income:		Low Income:		Low Income:		Low Income:		Low Income:		Low Income:		Low Income:		Low Income:	
	Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1		Low Income Discount Tier 1	
	Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2		Low Income Discount Tier 2	
	Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3		Low Income Discount Tier 3	
	Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4		Low Income Discount Tier 4	
Adjustment (2):	Service Charge		Service Charge		Service Charge		Service Charge		Service Charge		Service Charge		Service Charge		Service Charge	
	Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges	
	Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)	
Adjustment (3):	Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges		Consumption Charges	
	Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)	
	Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)		Usage (in 100 Gallons)	
Total Zone 2 Residential	\$12,524,007		\$12,436,606		\$12,467,398		\$118,549		\$12,467,398		\$14,952,089		\$14,952,089		19.9%	

Note (1): Winter Average Usage not utilized. In the Company's proposal, if actual usage falls below winter-average usage, the actual usage will be utilized for billing.
Note (2): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (3): Adjustment from usage normalization

APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

[illegible]

Note (1): Adjustment to reflect the change in revenue brought about by customer growth (loss)

Note (2): Adjustment from usage normalization

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)
Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO COMMERCIAL CLASS BILL ANALYSIS

Zone 2a - Scranton WW	6/30/2025					6/30/2026					6/30/2027					Company					I&E				
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue	6/30/2025 Proforma Revenues	Current Rate	6/30/2025 Proforma Revenues	Billing Determinants	Current Rate	6/30/2026 Proforma Revenues	Current Rate	6/30/2026 Proforma Revenues	DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change			
Service Charge Per EDU	66,629	\$40.00	\$2,665,146																						
Consumption Charges																									
Usage (in 100 Gallons)	7,921,989	\$2.1320	\$16,889,680																						
Adjustment (1):																									
Service Charge Per EDU	288	\$40.00	\$11,520																						
Usage (in 100 Gallons)	66,233	\$2.1320	141,209																						
Adjustment (2):																									
Usage (in 100 Gallons)																									
Total Zone 2a Commercial																									
												</													

Note(1): Adjustment to reflect the change in revenue brought about by customer growth (loss)

Note (2): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Industrial Class						Company			I&E	
	6/30/2025 Water Usage (in 100 Gallons)	6/30/2025 Annualized Revenues	6/30/2026 Water Usage (in 100 Gallons)	6/30/2026 Proforma Revenues	6/30/2027 Water Usage (in 100 Gallons)	6/30/2027 Proforma Revenues	6/30/2027 Proforma DSIC Revenues	6/30/2027 Proforma @ Present Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Zone 2	29,933	\$64,297	29,933	\$64,297	29,933	\$64,914	\$617	\$64,914	\$77,528	19.4%
Zone 2a - Scranton WW	1,163,800	2,506,618	1,163,800	2,506,618	1,163,800	2,530,682	24,064	2,530,682	3,022,711	19.4%
Total Industrial	1,193,733	\$2,570,915	1,193,733	\$2,570,915	1,193,733	\$2,595,596	\$24,681	\$2,595,596	\$3,100,239	19.4%
Zone 2						Company			I&E	
	6/30/2025 Billing Determinants	6/30/2025 Current Rate	6/30/2026 Billing Determinants	6/30/2026 Current Rate	6/30/2027 Billing Determinants	6/30/2027 Current Rate	6/30/2027 Proforma DSIC Revenues	6/30/2027 Proforma @ Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change
Service Charge	12	\$ 40.00	12	\$40.00	12	\$40.00	\$5	\$50.00	\$ 50.00	23.8%
Consumption Charges All Usage (100 Gallons)	29,933	\$2,1320	29,933	\$2,1320	29,933	\$2,1320	\$613	\$2,5700	\$2,5700	19.4%
Total Zone 2 Industrial							\$617		\$77,528	19.4%

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO INDUSTRIAL CLASS BILL ANALYSIS

Zone 2a - Scranton WW	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	6/30/2025 Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		6/30/2026 Billing Determinants	Current Rate	6/30/2026 Proforma Revenues		6/30/2027 Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge Per EDU	635	\$ 40.00	\$25,396		635	\$40.00	\$25,396		635	\$40.00	\$244	\$25,640	\$40.38	\$25,637	0.0%	\$50.00	\$31,745	23.8%		
Consumption Charges	1,163,800	\$2.1320	\$2,481,222		1,163,800	\$2.1320	\$2,481,222		1,163,800	\$2.1320	\$23,820	\$2,505,042	\$2.1525	\$2,505,079	0.0%	\$2.5700	\$2,990,966	19.4%		
All Usage (100 Gallons)																				
Total Zone 2a Industrial			<u>2,506,618</u>				<u>\$2,506,618</u>				<u>\$24,064</u>	<u>\$2,530,682</u>		<u>2,530,716</u>	<u>0.0%</u>		<u>3,022,711</u>	<u>19.4%</u>		

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Municipal Class	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Water Usage (in 100 Gallons)	Annualized Revenues	Water Usage (in 100 Gallons)	6/30/2025 Annualized Revenues	Water Usage (in 100 Gallons)	6/30/2026 Annualized Revenues	Water Usage (in 100 Gallons)	6/30/2027 Annualized Revenues	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change	6/30/2027 Proforma @ Proposed Rate	% Percent Change			
Zone 2	216,677	\$489,720	209,172	\$473,719	208,838	\$477,548	346,518	\$772,052	\$4,541	\$477,548	0.0%	\$571,419	19.7%	\$571,419	19.7%	\$571,419	19.5%			
Zone 2a - Scranton WW	359,525	792,442	347,072	765,892	346,518	772,052			7,341	772,052	0.0%	772,061	0.0%	772,061	0.0%	922,969	19.5%			
Total Municipal	576,202	\$1,282,162	556,244	\$1,239,611	555,356	\$1,249,600			\$11,882	\$1,249,600	0.0%	\$1,343,480	0.0%	\$1,343,480	0.0%	\$1,494,389	19.6%			
Zone 2	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	Annualized Revenue	6/30/2025 Annualized Revenue	Billing Determinants	Current Rate	Annualized Revenue	6/30/2026 Annualized Revenue	Billing Determinants	Current Rate	Annualized Revenue	6/30/2027 Annualized Revenue	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change			
	694	\$ 40.00	\$27,764	\$27,764	694	\$40.00	\$27,764	\$27,764	694	\$40.00	\$27,764	\$28,031	\$267	\$28,031	\$50.00	\$34,706	23.8%			
	216,677	\$2.1320	\$461,955	\$461,955	216,677	\$2.1320	\$461,955	\$461,955	209,172	\$2.1320	\$450,236	\$450,236	\$4,281	\$450,236	\$2.5700	\$536,714	19.4%			
Adjustment (1): All Usage (100 Gallons)			(7,505)	(\$16,001)	(7,505)	\$2.1320	(\$16,001)	(\$16,001)	(334)	\$2.1320	(\$7)	(\$719)	(\$7)	(\$719)			0.0%			
Total Zone 2 Municipal		\$489,720		\$473,719									\$4,541	\$477,548		\$571,419	19.7%			

Note (1): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO MUNICIPAL CLASS BILL ANALYSIS

Zone 2a - Scranton WW	6/30/2025				6/30/2026				6/30/2027				Company				I&E			
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Current Rate	6/30/2026 Annualized Revenue		Billing Determinants	Current Rate	Proforma DSIC Revenues	6/30/2027 Proforma Revenues	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change	Proposed Rate	6/30/2027 Proforma @ Proposed Rate	% Percent Change		
Service Charge Per EDU	648	\$ 40.00	\$25,935		648	\$40.00	\$25,935		648	\$40.00	\$249	\$26,184	\$40.38	\$26,181	0.0%	\$50.00	\$32,418	23.8%		
Consumption Charges	359,525	\$2.1320	\$766,507		359,525	\$2.1320	\$766,507		347,072	\$2.1320	\$7,104	\$747,061	\$2.1525	\$745,880	0.0%	\$2.5700	\$890,551	19.4%		
All Usage (100 Gallons)																				
<i>Adjustment (1):</i>																				
All Usage (100 Gallons)					(12,453)	\$2.1320	(\$26,550)		(554)	\$2.1320	(\$11)	(\$1,192)								
Total Zone 2a Municipal			\$792,442				\$765,892				\$7,341	\$772,052		\$772,061	0.0%		\$922,969			19.5%

Note (1): Adjustment from usage normalization

PENNSYLVANIA-AMERICAN WATER COMPANY
ELIZABETH BOROUGH WW CSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDING JUNE 30, 2027

Rate Zone 2b: ELIZABETH BOROUGH WW CSS OPERATIONS	Residential		Commercial		Municipal		Bulk WW		Total Sales		Late		Total	
	Company	Adjustment	I&E	Company	Adjustment	I&E	Company	Adjustment	Company	Adjustment	Payments (*)	Revenues	Revenues	Revenues
Present Rate Application	\$454,286	\$0	\$454,286	\$60,425	\$0	\$60,425	\$1,586	\$0	\$1,586	\$1,758,126	\$9,141	\$1,767,267	\$0	\$1,767,267
Proposed Rate Application	\$590,572	\$158,330	\$748,902	\$78,552	\$30,786	\$109,338	\$2,062	\$425	\$2,487	\$2,474,793	\$11,881	\$2,297,133	\$189,541	\$2,486,675
Change in Revenues	\$136,286	\$158,330	\$294,615	\$18,127	\$30,786	\$48,914	\$476	\$425	\$372,237	\$527,126	\$2,741	\$529,867	\$189,541	\$719,408
% Change in Revenues	30.00%		64.85%	30.00%		80.95%	30.00%		56.80%	29.97%	29.98%	29.98%	29.98%	40.71%

(*) Utilized the same 0.5199% late payment rate as calculated for PA American Water Company.

PENNSYLVANIA-AMERICAN WATER COMPANY
ELIZABETH BOROUGH WW CSS OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO RESIDENTIAL CLASS BILL ANALYSIS

All Class	6/30/2025				6/30/2026				6/30/2027				Company		I&E	
	Billing Determinants	Current Rate	6/30/2025 Annualized Revenue		Billing Determinants	Current Rate	6/30/2026 Annualized Revenue		Billing Determinants	Current Rate	6/30/2027 Annualized Revenue		Proposed Rate	Proforma Revenue @ Proposed Rate	Proposed Rate	Proforma Revenue @ Proposed Rate
Residential	Service Charge per EDU per month															
	Usage Charge (100 Gal)				7,224	\$35.00	\$252,840		7,224	\$35.00	\$252,840		\$35.00	\$252,840	\$35.00	\$252,840
	Low Income Discounts- Tier 1															
	Low Income Discounts- Tier 2															
Commercial	Service Charge per EDU per month															
	Usage Charge (100 Gal)				756	\$35.00	\$26,460		756	\$35.00	\$26,460		\$45.50	\$34,398	\$50.00	\$37,800
	Low Income Discounts- Tier 1															
	Low Income Discounts- Tier 2															
Municipal	Service Charge per EDU per month															
	Usage Charge (100 Gal)				42,456	\$0.8000	33,965		42,456	\$0.8000	33,965		\$10.000	\$44,154	\$1.6850	\$71,538
	Low Income Discounts- Tier 1															
	Low Income Discounts- Tier 2															
Bulk	Service Charge per EDU per month															
	Usage Charge (100 Gal)				36	\$35.00	\$1,260		36	\$35.00	\$1,260		\$45.50	\$1,638	\$50.00	\$1,800
	Low Income Discounts- Tier 1															
	Low Income Discounts- Tier 2															
Redacted - Refer to Confidential Volume 6d																
Other Revenue: Late Fees							\$9,140				\$9,140			\$11,881		\$11,881
							<u>\$1,767,266</u>				<u>\$1,767,266</u>			<u>\$2,297,133</u>		<u>\$2,297,133</u>
ELIZABETH BOROUGH WW CSS																

PENNSYLVANIA-AMERICAN WATER COMPANY
ELIZABETH BOROUGH WW CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METER SIZES

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E	
	PRESENT RATES	As Filed	I&E PROPOSED RATES	INCREASE		INCREASE	
		PROPOSED RATES		AMOUNT	PERCENT	AMOUNT	PERCENT
0	\$35.00	\$35.00	\$35.00	\$0.00	0.00%	\$0.00	0.00%
100	35.80	36.34	36.97	\$0.54	1.51%	\$1.17	3.27%
500	39.00	41.71	44.85	\$2.71	6.94%	\$5.85	15.00%
1,000	43.00	48.41	54.70	\$5.41	12.59%	\$11.70	27.21%
2,000	51.00	61.82	74.40	\$10.82	21.22%	\$23.40	45.88%
3,000	59.00	75.24	94.10	\$16.24	27.52%	\$35.10	59.49%
3,164	*	60.31	77.44	\$17.12	28.39%	\$37.02	61.38%
3,500		63.00	81.94	\$18.94	30.07%	\$40.95	65.00%
4,000		67.00	88.65	\$21.65	32.31%	\$46.80	69.85%
4,500		71.00	95.36	\$24.36	34.30%	\$52.65	74.15%
5,500		79.00	108.77	\$29.77	37.68%	\$64.35	81.46%
6,500		87.00	122.18	\$35.18	40.44%	\$76.05	87.41%
7,500		95.00	135.59	\$40.59	42.73%	\$87.75	92.37%
8,500		103.00	149.00	\$46.00	44.66%	\$99.45	96.55%
9,500		111.00	162.42	\$51.42	46.32%	\$111.15	100.14%
10,000		115.00	169.12	\$54.12	47.06%	\$117.00	101.74%
11,000		123.00	182.54	\$59.54	48.40%	\$128.70	104.63%
12,000		131.00	195.95	\$64.95	49.58%	\$140.40	107.18%
13,000		139.00	209.36	\$70.36	50.62%	\$152.10	109.42%
14,000		147.00	222.77	\$75.77	51.55%	\$163.80	111.43%
15,000		155.00	236.18	\$81.18	52.38%	\$175.50	113.23%
16,000		163.00	249.60	\$86.60	53.13%	\$187.20	114.85%
17,000		171.00	263.01	\$92.01	53.81%	\$198.90	116.32%
18,000		179.00	276.42	\$97.42	54.43%	\$210.60	117.65%
19,000		187.00	289.83	\$102.83	54.99%	\$222.30	118.88%
20,000		195.00	303.25	\$108.25	55.51%	\$234.00	120.00%
21,000		203.00	316.66	\$113.66	55.99%	\$245.70	121.03%
22,000		211.00	330.07	\$119.07	56.43%	\$257.40	121.99%
23,000		219.00	343.48	\$124.48	56.84%	\$269.10	122.88%
24,000		227.00	356.89	\$129.89	57.22%	\$280.80	123.70%
25,000		235.00	370.31	\$135.31	57.58%	\$292.50	124.47%
30,000		275.00	437.37	\$162.37	59.04%	\$351.00	127.64%

* Average residential monthly bill.

PENNSYLVANIA-AMERICAN WATER COMPANY
ELIZABETH BOROUGH WW CSS OPERATIONS

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
NON RESIDENTIAL - MONTHLY
ALL METER SIZES

CONSUMPTION GALLONS	BILLS UNDER			Company		I&E	
	PRESENT RATES	As Filed	I&E PROPOSED RATES	INCREASE		INCREASE	
		PROPOSED		AMOUNT	PERCENT	AMOUNT	PERCENT
		RATES					
0	\$35.00	\$45.50	\$50.00	\$10.50	30.00%	\$15.00	42.86%
100	35.80	46.54	51.69	\$10.74	30.00%	\$15.89	44.37%
500	39.00	50.70	58.43	\$11.70	30.00%	\$19.43	49.81%
1,000	43.00	55.90	66.85	\$12.90	30.00%	\$23.85	55.47%
2,000	51.00	66.30	83.70	\$15.30	30.00%	\$32.70	64.12%
3,000	59.00	76.70	100.55	\$17.70	30.00%	\$41.55	70.42%
4,000	67.00	87.10	117.40	\$20.10	30.00%	\$50.40	75.22%
5,000	75.00	97.50	134.25	\$22.50	30.00%	\$59.25	79.00%
6,000	83.00	107.90	151.10	\$24.90	30.00%	\$68.10	82.05%
7,000	91.00	118.30	167.95	\$27.30	30.00%	\$76.95	84.56%
8,000	99.00	128.70	184.80	\$29.70	30.00%	\$85.80	86.67%
9,000	107.00	139.10	201.65	\$32.10	30.00%	\$94.65	88.46%
10,000	115.00	149.50	218.50	\$34.50	30.00%	\$103.50	90.00%
11,000	123.00	159.90	235.35	\$36.90	30.00%	\$112.35	91.34%
12,000	131.00	170.30	252.20	\$39.30	30.00%	\$121.20	92.52%
13,000	139.00	180.70	269.05	\$41.70	30.00%	\$130.05	93.56%
14,000	147.00	191.10	285.90	\$44.10	30.00%	\$138.90	94.49%
15,000	155.00	201.50	302.75	\$46.50	30.00%	\$147.75	95.32%
16,000	163.00	211.90	319.60	\$48.90	30.00%	\$156.60	96.07%
17,000	171.00	222.30	336.45	\$51.30	30.00%	\$165.45	96.75%
18,000	179.00	232.70	353.30	\$53.70	30.00%	\$174.30	97.37%
19,000	187.00	243.10	370.15	\$56.10	30.00%	\$183.15	97.94%
20,000	195.00	253.50	387.00	\$58.50	30.00%	\$192.00	98.46%
20,802	*	201.42	400.51	\$60.42	30.00%	\$199.10	98.85%
21,000		203.00	403.85	\$60.90	30.00%	\$200.85	98.94%
22,000		211.00	420.70	\$63.30	30.00%	\$209.70	99.38%
23,000		219.00	437.55	\$65.70	30.00%	\$218.55	99.79%
24,000		227.00	454.40	\$68.10	30.00%	\$227.40	100.18%
25,000		235.00	471.25	\$70.50	30.00%	\$236.25	100.53%
30,000		275.00	555.50	\$82.50	30.00%	\$280.50	102.00%
40,000		355.00	724.00	\$106.50	30.00%	\$369.00	103.94%
50,000		435.00	892.50	\$130.50	30.00%	\$457.50	105.17%

* Average commercial monthly bill.

**I&E Statement No. 1-SR
Witness: Vanessa Okum**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

and

Docket No. R-2025-3058051 (Wastewater)

Surrebuttal Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

**OPERATING AND MAINTENANCE EXPENSES
PENSION AND OPEB REGULATORY ASSET TREATMENT
CASH WORKING CAPITAL**

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1 **INTRODUCTION**

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

3 A. My name is Vanessa Okum. 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 as a Fixed Utility Financial Analyst in the Pennsylvania Public Utility
9 Commission's (Commission) Bureau of Investigation and Enforcement (I&E).

10
11 **Q. ARE YOU THE SAME VANESSA OKUM WHO SUBMITTED DIRECT**
12 **TESTIMONY IN THIS PROCEEDING?**

13 A. Yes. I submitted I&E Statement No. 1 Proprietary, I&E Statement No. 1 Non-
14 Proprietary, and I&E Exhibit No. 1. For purposes of clarity, when I reference my
15 prior testimony, I will be referencing the Non-Proprietary version unless otherwise
16 indicated.

17
18 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN**
19 **ACCOMPANYING EXHIBIT?**

20 A. Yes. I&E Exhibit No. 1-SR contains schedules related to my surrebuttal
21 testimony.

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

2 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of
3 the following witnesses for Pennsylvania-American Water Company (PAWC or
4 Company) regarding PAWC's operating and maintenance (O&M) expenses, the
5 Company's proposed pension and other post-employment benefits (OPEB)
6 regulatory accounting treatment, and cash working capital (CWC):

- 7 • Christina Chard – PAWC Statement No. 2-R
- 8 • Jim Runzer – PAWC Statement No. 3-R
- 9 • Jared Deason – PAWC Statement No. 5-R
- 10 • Lori O'Malley - PAWC Statement No. 6-R
- 11 • Robert V. Mustich - PAWC Statement No. 16-R

12 Note that I do not intend for my surrebuttal testimony to address every
13 issue raised or otherwise discussed by the witnesses in this proceeding. My lack
14 of response to any recommendation, position, or assertion of any witness does not
15 necessarily indicate agreement with their rebuttal testimony.

16
17 **Q. HAS PAWC UPDATED ITS OVERALL REVENUE REQUIREMENT CLAIM**
18 **IN REBUTTAL TESTIMONY?**

19 A. Yes. The Company updated its overall revenue requirement claim from
20 \$1,325,337,535 to \$1,325,493,605 based upon the revised fully projected future
21 test year (FPFTY) pro forma revenue requirement calculation that reflects a total
22 revenue increase of \$163,357,736 for the combined water and wastewater

operations, compared to the original increase of \$168,716,450. The updated revenue requirement also reflects present rate revenue of \$1,162,135,869, compared to the original \$1,156,621,085. A revised breakdown of PAWC's requested revenue increase by operation after the proposed Act 11 wastewater (WW) allocation is as follows:¹

	Present Rate Revenue	Net Revenue Increase after Act 11 WW Allocation	% Increase in Revenue
Water Operations	\$953,098,389	\$146,779,691	15.4%
Wastewater SSS Ops.	\$108,665,761	\$7,230,952	6.7%
Wastewater CSS Ops.	\$85,843,356	\$3,723,610	4.3%
BASA WW Ops.	\$12,761,096	\$5,072,056	39.7%
Elizabeth Borough CSS WW Ops	<u>\$1,767,267</u>	<u>\$566,017</u>	31.5%
Total Company	<u>\$1,162,135,869</u>	<u>\$163,362,326</u>	14.1%

Q. DOES PAWC EXPLAIN THE REVISIONS TO ITS ORIGINAL FILING?

A. Yes. PAWC witness Christina Chard points to Exhibit 3-A Revised, which provides a summary of the revisions for each operating unit.

Q. HAS THE COMPANY ACCEPTED ANY OF YOUR RECOMMENDATIONS FROM DIRECT TESTIMONY?

A. Yes. PAWC has updated service company expense² according to the errors

¹ PAWC Exhibit 3-A Revised, Combined Water and Wastewater Revenue Requirement – Summary.

² PAWC Statement No. 6-R, p. 7.

1 discovered by the Company as discussed in my direct testimony.³ The Company
2 has also accepted my recommended vacancy adjustment in part.⁴ My
3 recommended vacancy adjustment impacted salaries and wages, payroll taxes,
4 group insurance, 401k, and the defined contribution plan (DCP), and resulted in a
5 total reduction of \$1,515,312 to the Company's claimed FPFTY O&M expenses,
6 as well as a total reduction of \$989,268 to the Company's claimed FPFTY rate
7 base across all business operations.⁵

8 PAWC witness Lori O'Malley addresses the Company's approach to the
9 vacancy adjustment in her rebuttal testimony. Ms. O'Malley states that the
10 Company accepts the vacancy rate of 1.25% and has applied it to each of my
11 recommended expense categories, in addition to performance pay expense and
12 employee stock purchase plan expense. Ms. O'Malley points out that the
13 Company rejects my recommended adjustment to performance pay, which will be
14 discussed later in this surrebuttal testimony, and has chosen to adjust this expense
15 by applying the vacancy rate instead. The Company also rejects all rate base
16 adjustments related to my recommended vacancy adjustment. The total impact of
17 the Company's vacancy adjustment is \$1,357,243 across all business operations.⁶
18 In my surrebuttal testimony, I make further recommendations for the expense
19 categories affected by the vacancy adjustment.

³ I&E Statement No. 1, pp. 40-43.

⁴ PAWC Statement No. 6-R, pp. 2-3.

⁵ I&E Statement No. 1.

⁶ PAWC Statement No. 6-R, pp. 2-3.

The rest of my recommendations, which were not accepted by the Company's witnesses, are also discussed below.

I&E OPERATING AND MAINTENANCE EXPENSE ADJUSTMENTS

Q. PLEASE SUMMARIZE YOUR RECOMMENDED ADJUSTMENTS AS UPDATED IN THIS SURREBUTTAL TESTIMONY.

A. The following tables summarize my updated recommendations as discussed in this surrebuttal testimony:

Water Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$59,632,332	\$59,067,291	(\$565,041)
Performance Pay	\$5,144,184	\$2,463,535	(\$2,680,649)
Payroll Taxes	\$5,025,070	\$4,773,204	(\$251,866)
Group Insurance	\$12,094,513	\$11,979,913	(\$114,600)
401k	\$1,709,357	\$1,693,160	(\$16,197)
Defined Contribution Plan	\$2,294,399	\$2,272,659	(\$21,740)
Waste Disposal	\$4,216,691	\$3,039,714	(\$1,122,977)
Transportation	\$3,095,090	\$2,864,899	(\$230,191)
Total O&M Expense Adjustments			<u>(\$5,003,261)</u>
Rate Base:			
Performance Pay			(\$2,006,620)
Payroll Taxes			(\$155,714)
Transportation	\$2,316,544	\$2,144,542	(\$172,012)
Cash Working Capital	\$24,869,831	\$24,556,348	(\$313,483)
Total Rate Base Adjustments			<u>(\$2,647,829)</u>

1

Wastewater SSS Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$5,436,246	\$5,419,279	(\$16,967)
Performance Pay	\$403,976	\$201,988	(\$201,988)
Payroll Taxes	\$463,069	\$445,706	(\$17,363)
Group Insurance	\$1,294,602	\$1,290,561	(\$4,041)
401k	\$173,059	\$172,519	(\$540)
Defined Contribution Plan	\$245,695	\$244,928	(\$767)
Waste Disposal	\$1,673,584	\$1,254,740	(\$418,844)
Transportation	\$157,572	\$146,436	(\$11,136)
Total O&M Expense Adjustments			<u>(\$671,646)</u>
Rate Base:			
Performance Pay			(\$49,805)
Payroll Taxes			(\$3,950)
Transportation	\$38,863	\$36,107	(\$2,756)
Cash Working Capital	\$2,269,221	\$2,254,066	(\$15,155)
Total Rate Base Adjustments			<u>(\$71,666)</u>

2

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Wastewater CSS Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$6,996,873	\$6,975,034	(\$21,839)
Performance Pay	\$322,585	\$161,293	(\$161,292)
Payroll Taxes	\$580,304	\$565,782	(\$14,522)
Group Insurance	\$1,550,475	\$1,545,636	(\$4,839)
401k	\$123,398	\$123,013	(\$385)
Defined Contribution Plan	\$309,341	\$308,375	(\$966)
Waste Disposal	\$4,008,056	\$2,740,027	(\$1,268,029)
Transportation	\$412,698	\$389,081	(\$23,617)
Total O&M Expense Adjustments			<u>(\$1,495,489)</u>
Rate Base:			
Performance Pay			(\$39,770)
Payroll Taxes			(\$3,154)
Transportation	\$101,786	\$95,936	(\$5,850)
Cash Working Capital	\$1,497,842	\$1,482,756	(\$11,821)
Total Rate Base Adjustments			<u>(\$60,595)</u>

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BASA Wastewater Operations:

	<u>Company Claim</u>	<u>Recommended Allowance</u>	<u>I&E Adjustment</u>
O&M Expenses:			
Salaries and Wages	\$2,190,576	\$2,183,738	(\$6,838)
Performance Pay	\$118,836	\$59,418	(\$59,418)
Payroll Taxes	\$182,651	\$177,410	(\$5,241)
Group Insurance	\$493,037	\$491,498	(\$1,539)
401k	\$78,409	\$78,165	(\$244)
Defined Contribution Plan	\$109,619	\$109,277	(\$342)
Waste Disposal	\$339,322	\$298,279	(\$41,043)
Transportation	\$57,569	\$54,336	(\$3,233)
Total O&M Expense Adjustments			<u>(\$117,898)</u>
Rate Base:			
Performance Pay			(\$14,651)
Payroll Taxes			(\$1,159)
Transportation	\$14,199	\$13,398	(\$801)
Cash Working Capital	\$1,059,448	\$1,053,042	(\$6,406)
Total Rate Base Adjustments			<u>(\$23,017)</u>

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I did not make any adjustments to the revenue requirement for Elizabeth Borough in my direct testimony and likewise am not making any in my surrebuttal testimony. Thus, I am not listing the Elizabeth Borough claims in sections of my direct testimony below. Only I&E witness DC Patel addresses the revenue requirement for Elizabeth Borough via a recommended adjustment to the rate of return. There is not enough historical data to support adjustments to other claims for this recently acquired system.

1 OVERALL I&E UPDATED POSITION

2 **Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE**
3 **REQUIREMENT FOR WATER OPERATIONS?**

4 A. I&E's total updated recommended revenue requirement for Water Operations is
5 \$985,036,740. This recommended revenue requirement represents an increase of
6 \$31,938,351 to the Company's present rate revenues of \$953,098,389. This total
7 recommended allowance incorporates my adjustments made in this surrebuttal
8 testimony to O&M expenses and rate base, as well as the recommended
9 adjustments made in the surrebuttal testimony of I&E witness D.C. Patel.⁷ A
0 calculation of the I&E recommended revenue requirement is shown in Table I(a)
1 below:

PAWC - Water Operations		TABLE I(a)			
R-2025-3057983		INCOME SUMMARY			
	6/30/27	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	953,098,389	0	953,098,389	31,938,351	985,036,740
Deductions:					
O&M Expenses	281,915,131	-5,003,261	276,911,870	373,998	277,285,868
Depreciation	228,670,649	0	228,670,649		228,670,649
Taxes, Other	17,174,070	0	17,174,070	235,295	17,409,365
Income Taxes:					
Current State	19,888,012	136,422	20,024,434	2,189,901	22,214,335
Current Federal	46,994,519	381,204	47,375,723	6,119,223	53,494,946
Deferred Taxes	0	0	0		0
ITC/Excess Def Taxes	-233,592	0	-233,592		-233,592
Total Deductions	594,408,789	-4,485,635	589,923,154	8,918,417	598,841,571
Income Available	358,689,600	4,485,635	363,175,235	23,019,934	386,195,169
Rate Base	5,179,526,769	-2,647,829	5,176,878,940	0	5,176,878,940
Rate of Return	6.93%		7.02%		7.46%

⁷ I&E Statement No. 2-SR.

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER SSS OPERATIONS?

A. I&E's total recommended revenue requirement for Wastewater SSS Operations is \$122,044,190. This recommended revenue requirement represents an increase of \$13,378,429 to the Company's present rate revenues of \$108,665,761. This total recommended allowance incorporates my adjustments made in this surrebuttal testimony to O&M expenses and cash working capital, as well as the recommended adjustments made in the surrebuttal testimony of I&E witness D.C. Patel.⁸ A calculation of the I&E recommended revenue requirement is shown in Table I(b) below:

PAWC - Wastewater SSS Operations R-2025-3058051		TABLE I(b) INCOME SUMMARY			
	6/30/27 Proforma	INVESTIGATION & ENFORCEMENT			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	108,665,761	0	108,665,761	13,378,429	122,044,190
Deductions:					
O&M Expenses	29,370,450	-671,646	28,698,804	156,661	28,855,465
Depreciation	28,595,513	0	28,595,513		28,595,513
Taxes, Other	2,491,390	0	2,491,390	98,561	2,589,951
Income Taxes:					
Current State	3,141,738	46,916	3,188,654	917,312	4,105,966
Current Federal	8,196,101	131,102	8,327,203	2,563,238	10,890,441
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	71,795,192	-493,628	71,301,564	3,735,772	75,037,336
Income Available	36,870,569	493,628	37,364,197	9,642,657	47,006,854
Rate Base	661,208,859	-71,666	661,137,193	0	661,137,193
Rate of Return	5.58%		5.65%		7.11%

⁸ I&E Statement No. 2-SR.

1 **Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE**
2 **REQUIREMENT FOR WASTEWATER CSS OPERATIONS?**

3 A. I&E's total recommended revenue requirement for Wastewater CSS Operations is
4 \$90,439,036. This recommended revenue requirement represents an increase of
5 \$4,595,680 to the Company's claimed present rate revenues of \$85,843,356. This
6 total recommended allowance incorporates my adjustments made in this
7 surrebuttal testimony to O&M expenses and cash working capital, as well as the
8 recommended adjustments made in the surrebuttal testimony of I&E witness D.C.
9 Patel.⁹ A calculation of the I&E recommended revenue requirement is shown in
0 Table I(c) below:

1	Rate of Return	6.27%	6.48%	7.11%

⁹ I&E Statement No. 2-SR.

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT FOR BASA WASTEWATER OPERATIONS?

A. I&E's total recommended revenue requirement for BASA Wastewater Operations is \$45,809,629. This recommended revenue requirement represents an increase of \$33,048,533 to the Company's claimed present rate revenues of \$12,761,096. This total recommended allowance incorporates my adjustments made in this surrebuttal testimony to O&M expenses and rate base, as well as the recommended adjustments made in the surrebuttal testimony of I&E witness D.C. Patel.¹⁰ A calculation of the I&E recommended revenue requirement is shown in Table I(d) below:

PAWC - BASA WW Operations R-2025-3058051		TABLE I(d) INCOME SUMMARY			
	6/30/27 Proforma Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	12,761,096	0	12,761,096	33,048,533	45,809,629
Deductions:					
O&M Expenses	7,504,913	-117,898	7,387,015	386,998	7,774,013
Depreciation	11,490,654	0	11,490,654		11,490,654
Taxes, Other	685,092	0	685,092	243,474	928,566
Income Taxes:					
Current State	-112,877	8,033	-104,844	2,266,022	2,161,178
Current Federal	-308,593	22,448	-286,145	6,325,111	6,038,966
Deferred Taxes	0	0	0		0
ITC/Excess ADIT	-39,775	0	-39,775		-39,775
Total Deductions	19,219,414	-87,417	19,131,997	9,221,605	28,353,602
Income Available	-6,458,318	87,417	-6,370,901	23,826,928	17,456,027
Rate Base	245,536,760	-23,017	245,513,743	0	245,513,743
Rate of Return	-2.63%		-2.59%		7.11%

¹⁰ I&E Statement No. 2-SR.

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT FOR ELIZABETH WASTEWATER CSS OPERATIONS?

A. I&E's total recommended revenue requirement for Elizabeth Wastewater CSS Operations is \$5,025,819. This recommended revenue requirement represents an increase of \$3,258,552 to the Company's claimed present rate revenues of \$1,767,267. This total recommended allowance incorporates the recommended adjustments made in the surrebuttal testimony of I&E witness D.C. Patel.¹¹ A calculation of the I&E recommended revenue requirement is shown in Table I(e) below:

PAWC - Elizabeth WW CSS Operations R-2025-3058051		TABLE I(e) INCOME SUMMARY			
	6/30/27 Proforma	INVESTIGATION & ENFORCEMENT			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	1,767,267	0	1,767,267	3,258,552	5,025,819
Deductions:					
O&M Expenses	868,308	5	868,313	38,158	906,471
Depreciation	1,099,465	0	1,099,465		1,099,465
Taxes, Other	29,882	0	29,882	24,006	53,888
Income Taxes:					
Current State	24,927	-73	24,854	223,428	248,282
Current Federal	72,489	-204	72,285	621,487	693,772
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	2,095,071	-272	2,094,799	907,079	3,001,878
Income Available	-327,804	272	-327,532	2,351,473	2,023,941
Rate Base	28,466,120	0	28,466,120	0	28,466,120
Rate of Return	-1.15%		-1.15%		7.11%

¹¹ I&E Statement No. 2-SR.

1 **Q. SUMMARIZE I&E’S UPDATED COMBINED RECOMMENDED**
2 **REVENUE REQUIREMENT.**

3 A. I&E’s total recommended revenue requirement for all PAWC operations combined
4 is \$1,248,355,414 as shown in Table II below. This recommended revenue
5 requirement represents an increase of \$86,219,545 to the Company’s present rate
6 revenues of \$1,162,135,869 for Water Operations, Wastewater SSS Operations,
7 Wastewater CSS Operations, BASA Wastewater Operations, and Elizabeth
8 Wastewater CSS Operations. This total recommended allowance incorporates my
9 adjustments made in this surrebuttal testimony to O&M expenses and cash
10 working capital, as well as the recommended adjustments made in the surrebuttal
11 testimony of I&E witness D.C. Patel.¹²

12
13 **Q. WHAT IS I&E’S UPDATED PROPOSED ACT 11 REVENUE**
14 **ALLOCATION AS SUPPORTED BY I&E WITNESS ETHAN CLINE IN**
15 **I&E STATEMENT NO. 4?**

16 A. As further discussed in his testimony,¹³ I&E witness Ethan Cline recommends the
17 following application of the Act 11 allocation:

¹² I&E Statement No. 2-SR.

¹³ I&E Statement No. 4-SR.

TABLE II							
PAWC Base Rate Case - I&E Surrebuttal Position							
I&E Recommended Combined Water and Wastewater Revenue Requirement Summary							
		Total Company	Water Operations	WW SSS Ops	CSS WW Ops	BASA WW Ops	Elizabeth Boro WW Ops
I&E Present Rate Revenue	(1)	\$ 1,162,135,869	\$ 953,098,389	\$ 108,665,761	\$ 85,843,356	\$ 12,761,096	\$ 1,767,267
I&E Recommended:							
Additional Revenue Requirement	(2)	\$ 86,219,545	\$ 31,938,351	\$ 13,378,429	\$ 4,595,680	\$ 33,048,533	\$ 3,258,552
Act 11 Wastewater Allocation	(3)	\$ -	\$ 24,268,248	\$ (1,958,896)	\$ 11,632,644	\$ (31,272,945)	\$ (2,669,051)
Proposed Revenues		\$ 1,248,355,414	\$ 1,009,304,988	\$ 120,085,294	\$ 102,071,680	\$ 14,536,684	\$ 2,356,768
Rate Increase/(Decrease)		\$ 86,219,545	\$ 56,206,599	\$ 11,419,533	\$ 16,228,324	\$ 1,775,588	\$ 589,501
		7.4%	5.9%	10.5%	18.9%	13.9%	33.4%
Company Claimed Increase		\$ 163,361,192	\$ 146,779,691	\$ 7,230,952	\$ 3,723,610	\$ 5,072,291	\$ 554,648

SALARIES AND WAGES EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR SALARIES AND WAGES EXPENSE.

A. I recommended an O&M allowance for salaries and wages expense of \$74,256,028, or a reduction of \$939,949 (\$75,195,977 - \$74,256,028) to the Company's claim and capitalized salaries and wages of \$48,244,018, or a reduction of \$610,685 (\$48,854,703 - \$48,244,018) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$60,387,172	\$59,632,332	(\$754,840)
Wastewater SSS Operations	\$5,505,060	\$5,436,247	(\$68,813)
Wastewater CSS Operations	\$7,085,441	\$6,996,873	(\$88,568)
BASA Wastewater Operations	<u>\$2,218,304</u>	<u>\$2,190,576</u>	<u>(\$27,728)</u>
Total	<u>\$75,195,977</u>	<u>\$74,256,028</u>	<u>(\$939,949)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$45,203,267	\$44,638,226	(\$565,041)
Wastewater SSS Operations	\$1,357,393	\$1,340,426	(\$16,967)
Wastewater CSS Operations	\$1,747,071	\$1,725,232	(\$21,839)
BASA Wastewater Operations	<u>\$546,972</u>	<u>\$540,134</u>	<u>(\$6,838)</u>
Total	<u>\$48,854,703</u>	<u>\$48,244,018</u>	<u>(\$610,685)</u>

This recommendation was based on a calculated vacancy rate of 1.25% across all business operations.¹⁴

Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witnesses Lori O'Malley and Jared Deason responded to my recommendation.

Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.

A. Ms. O'Malley states that the Company has accepted my recommended adjustment to reflect an average vacancy rate of 1.25% and has adjusted O&M expenses accordingly for each business operation. However, the Company has rejected my recommended adjustment to rate base.¹⁵ The Company's updated O&M claim reflecting the vacancy rate is shown below:

¹⁴ I&E Statement No. 1, pp. 16-18.

¹⁵ PAWC Statement No. 6-R, pp. 2-3.

	FPFTY Claim¹⁶	Capitalization Rate¹⁷	O&M Claim
Water Operations	\$104,270,558	42.81%	\$59,632,332
Wastewater SSS Operations	\$6,776,672	19.78%	\$5,436,246
Wastewater CSS Operations	\$8,722,105	19.78%	\$6,996,873
BASA Wastewater Operations	<u>\$2,730,710</u>	19.78%	<u>\$2,190,576</u>
Total	<u>\$122,500,045</u>		<u>\$74,256,027</u>

**Q. WHAT IS THE COMPANY'S BASIS FOR REJECTING YOUR
RECOMMENDED RATE BASE ADJUSTMENT?**

A. PAWC witness Jared Deason states that I erroneously assumed that in developing its claim for FPFTY plant additions the Company adjusted the estimated cost of those additions to reflect a portion of the pro-forma payroll-related increase deemed to be capital-related. Mr. Deason states that to develop the estimated cost of plant additions, the Company included appropriate estimates of labor costs based on actual work hours that will be required to construct those additions. He asserts that the Company employs a bottom-up rather than a top-down estimation process, therefore the labor costs capitalized as part of projected plant additions are not a function of the amount of total projected labor included in the Company's O&M expense claim and should not be reduced in relation to my recommended vacancy adjustment.¹⁸

¹⁶ PAWC Exhibit LNO-1R, p. 1.

¹⁷ PAWC Exhibit No. 3-B, p. 2.

¹⁸ PAWC Statement No. 5-R, pp. 5-6.

1 **Q. DO YOU ACCEPT MR. DEASON’S ASSERTION REGARDING**
2 **CAPITALIZED LABOR COSTS?**

3 A. Yes, I accept Mr. Deason’s assertion that capitalized labor should not be adjusted
4 in relation to my recommended vacancy adjustment.

6 **Q. HOW DOES THIS IMPACT YOUR RECOMMENDED ADJUSTMENT?**

7 A. Since the claim for capitalized labor is based on estimated required work hours
8 and therefore should not be affected by the vacancy adjustment, the entire
9 adjustment should be reflected in O&M expense, and I am adjusting my
10 recommendation accordingly.

12 **Q. WHAT IS YOUR UPDATED RECOMMENDATION REGARDING**
13 **SALARIES AND WAGES?**

14 A. I recommend a total FPFTY O&M allowance of \$73,645,342 for salaries and
15 wages expense, or a reduction of \$610,685 (\$74,256,027 - \$73,645,342) to the
16 Company’s updated claim. Since the Company updated its claim to reflect only a
17 portion of the vacancy adjustment, my updated adjustment will further reduce the
18 Company’s expense claim, as shown in the following table, to include the portion
19 of the adjustment that I originally allocated to rate base:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$59,632,332	\$59,067,291	(\$565,041)
Wastewater SSS Operations	\$5,436,246	\$5,419,279	(\$16,967)
Wastewater CSS Operations	\$6,996,873	\$6,975,034	(\$21,839)
BASA Wastewater Operations	<u>\$2,190,576</u>	<u>\$2,183,738</u>	<u>(\$6,838)</u>
Total	<u>\$74,256,027</u>	<u>\$73,645,342</u>	<u>(\$610,685)</u>

Q. WHAT IS THE BASIS FOR YOUR UPDATED RECOMMENDATION?

A. The Company argues that the capitalized labor budget is based on the amount of actual work hours required to complete plant additions, therefore any vacancies in the Company will not affect the capitalized labor claim. However, without reducing the capitalized portion of the expense, only part of the vacancy adjustment is reflected. To reflect the entire amount, the O&M portion of the claim must be further reduced by the amount of the adjustment originally allocated to rate base.

PERFORMANCE PAY

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PERFORMANCE PAY.

A. I recommended an O&M expense allowance for performance pay of \$2,920,640, or a reduction of \$3,144,758 (\$6,065,398 - \$2,920,640) to the Company's claim

and capitalized performance pay of \$1,971,394, or a reduction of \$2,139,157 (\$4,110,551 - \$1,971,394) broken down by operation as follows:¹⁹

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,209,300	\$2,492,591	(\$2,716,709)
Wastewater SSS Operations	\$409,090	\$204,545	(\$204,545)
Wastewater CSS Operations	\$326,668	\$163,334	(\$163,334)
BASA Wastewater Operations	<u>\$120,340</u>	<u>\$60,170</u>	<u>(\$60,170)</u>
Total	<u>\$6,065,398</u>	<u>\$2,920,640</u>	<u>(\$3,144,758)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$3,899,461	\$1,865,848	(\$2,033,613)
Wastewater SSS Operations	\$100,870	\$50,435	(\$50,435)
Wastewater CSS Operations	\$80,547	\$40,274	(\$40,273)
BASA Wastewater Operations	<u>\$29,673</u>	<u>\$14,837</u>	<u>(\$14,836)</u>
Total	<u>\$4,110,551</u>	<u>\$1,971,394</u>	<u>(\$2,139,157)</u>

My recommendation was based on removing 50% of the Company's claim related to cash awards paid out under the APP and 70% of the Company's claim related to stock-based compensation awarded under the LTPP due to the metrics for these portions of performance pay being solely focused on earnings per share.

Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witnesses Lori O'Malley, Jim Runzer, and Robert Mustich disagree

¹⁹ I&E Statement No. 1, pp. 19-23.

1 with my recommendation.

2
3 **Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.**

4 A. Ms. O'Malley notes her disagreement with my recommendation but points to Mr.
5 Runzer and Mr. Mustich for further explanation. She also presents an updated
6 claim for performance pay based on the 1.25% vacancy rate adjustment to salaries
7 and wages broken down by business operation as follows:

	Updated FPFTY Claim²⁰	Capitalization Rate²¹	Updated O&M Claim
Water Operations	\$8,994,901	42.81%	\$5,144,184
Wastewater SSS Operations	\$503,586	19.78%	\$403,976
Wastewater CSS Operations	\$402,125	19.78%	\$322,585
BASA Wastewater Operations	<u>\$148,138</u>	19.78%	<u>\$118,836</u>
Total	<u>\$10,048,750</u>		<u>\$5,989,581</u>

8
9
10 **Q. PLEASE SUMMARIZE MR. RUNZER'S RESPONSE.**

11 A. Mr. Runzer states that it is inappropriate to disallow recovery of a portion of
12 reasonable market-based employee compensation simply because part of it is
13 awarded through a performance pay component. He states that the Company
14 should be entitled to recover those expenses which are reasonably necessary to
15 provide utility service if the total expense is reasonable and prudently incurred.

²⁰ PAWC Exhibit LNO-1R, p. 46.

²¹ PAWC Exhibit No. 3-B, p. 2.

1 He continues that the Commission should focus on the reasonableness of the
2 Company's overall level of compensation so that management has the discretion
3 to design a compensation package that is competitive in the utility market and
4 motivates employees to achieve goals that will improve performance and
5 efficiency for the benefit of its customers.

6 Mr. Runzer also states that the compensation structure benefits customers
7 through aligning employee and customer interests and attracting skilled
8 employees.

9
10 **Q. WHAT IS YOUR RESPONSE TO MR. RUNZER?**

11 A. Mr. Runzer mischaracterizes my argument when he states that my
12 recommendation to disallow a portion of compensation is based simply on the fact
13 that it is awarded through a performance pay component. Performance pay is an
14 acceptable method of compensation, and I have not disputed that fact. My
15 argument is against the portion of performance pay that is not based on safety,
16 customer satisfaction, or other operational goals but is based on financial goals,
17 specifically earnings per share.

18 Additionally, I agree that PAWC should be entitled to recover those
19 expenses that are reasonably necessary to provide utility service, however I do not
20 agree that performance pay based on earnings per share qualifies as necessary to
21 provide utility service.

1 Finally, I disagree that the portion of compensation pay in question aligns
2 the interests of employees and customers but rather aligns the interests of
3 employees and shareholders.

4
5 **Q. PLEASE SUMMARIZE MR. MUSTICH’S RESPONSE.**

6 A. Mr. Mustich discusses a review performed by professional services company
7 Willis Towers Watson (WTW) regarding PAWC’s total compensation package.
8 He conveys the findings of the review, which confirm that PAWC’s compensation
9 philosophy is consistent with the large majority of the Company’s peers.

10 Mr. Mustich also states that performance-based compensation plans that
11 use both financial and non-financial metrics are common in his experience and
12 among WTW’s thousands of clients. He continues that my recommended
13 adjustment fails to recognize the interdependence of a Company’s financial
14 performance with its operational success.

15 Finally, Mr. Mustich claims that the circumstances surrounding the
16 Commission decision cited in my direct testimony differ from PAWC because
17 Columbia Gas did not provide sufficient evidence that the totality of its
18 performance compensation claim is reasonable, whereas PAWC has done so.²²

²² PAWC Statement No. 16-R, pp. 3-7.

1 **Q. WHAT IS YOUR RESPONSE TO MR. MUSTICH?**

2 A. Again, I reiterate that my argument is not against PAWC's total compensation
3 plan or either performance plan as a whole, but specifically the portion of the
4 performance plans that is based on earnings per share and whether that should be
5 recovered from ratepayers. I do understand that there is an interdependence
6 between a Company's financial performance and its operational success, but I
7 maintain that financial metrics in performance pay align employees primarily with
8 shareholder interests, whereas operational metrics align employees with
9 customers. Therefore, ratepayers should not be required to fund the payout of
10 such metrics.

11
12 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**
13 **PERFORMANCE PAY EXPENSE?**

14 A. Yes. Since the Company has updated its claim, I am updating my
15 recommendation. I used the same methodology that was used in my direct
16 testimony but applied the new claim to the calculation. As a result, I recommend a
17 total allowance to FPFTY O&M expense of \$2,886,234 for performance pay
18 expense, or a reduction of \$3,103,348 (\$5,989,581 - 2,886,234) to the Company's
19 updated claim broken down by operation as follows:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,144,184	\$2,463,535	(\$2,680,649)
Wastewater SSS Operations	\$403,976	\$201,988	(\$201,988)
Wastewater CSS Operations	\$322,585	\$161,293	(\$161,292)
BASA Wastewater Operations	<u>\$118,836</u>	<u>\$59,418</u>	<u>(\$59,418)</u>
Total	<u>\$5,989,581</u>	<u>\$2,886,234</u>	<u>(\$3,103,347)</u>

Additionally, unlike the vacancy related adjustment where the Company argued that rate base should not be impacted because the budget for capitalized labor was created based on the number of work hours needed and that will not change with vacancies, that argument should not apply to performance pay. Most employees are eligible for performance pay, including the employees performing capitalized labor. Regardless of how the capitalized labor budget was created, a portion of performance pay will be capitalized. Therefore, I recommend a corresponding reduction to rate base of \$2,110,846 which represents the portion of the estimated capitalized performance pay expense that should not be recovered from ratepayers, and is broken down by operation as shown:

	I&E O&M Adjustment
Water Operations	(\$2,006,620)
Wastewater SSS Operations	(\$49,805)
Wastewater CSS Operations	(\$39,770)
BASA Wastewater Operations	<u>(\$14,651)</u>
Total	<u>(\$2,110,846)</u>

PAYROLL TAX EXPENSE

**Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY
FOR PAYROLL TAX EXPENSE.**

A. I recommended an O&M expense allowance for payroll tax expense of \$6,014,047, or a reduction of \$316,174 (\$6,330,221 - \$6,014,047) to the Company's claim and capitalized payroll tax expense of \$3,902,914, or a reduction of \$212,383 (\$4,115,297 - \$3,902,914) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,088,679	\$4,820,894	(\$267,785)
Wastewater SSS Operations	\$468,931	\$447,315	(\$21,616)
Wastewater CSS Operations	\$587,649	\$567,804	(\$19,845)
BASA Wastewater Operations	<u>\$184,962</u>	<u>\$178,034</u>	<u>(\$6,928)</u>
Total	<u>\$6,330,221</u>	<u>\$6,014,047</u>	<u>(\$316,174)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$3,809,168	\$3,608,716	(\$200,452)
Wastewater SSS Operations	\$115,625	\$110,295	(\$5,330)
Wastewater CSS Operations	\$144,898	\$140,005	(\$4,893)
BASA Wastewater Operations	<u>\$45,606</u>	<u>\$43,898</u>	<u>(\$1,708)</u>
Total	<u>\$4,115,297</u>	<u>\$3,902,914</u>	<u>(\$212,383)</u>

This recommendation was made to align with my recommended adjustments to salaries and wages and performance pay expense and was based on

a calculated effective tax rate for each business operation.²³

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witness Lori O'Malley indirectly addresses my recommendation for payroll tax expense in her discussion of my vacancy rate and performance pay adjustments.²⁴

Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.

A. Ms. O'Malley states that the Company has accepted my recommended adjustment to reflect an average vacancy rate of 1.25% to align with salaries and wages expense and has adjusted O&M expenses accordingly for each business operation. However, the Company has rejected my recommended adjustment to rate base.²⁵

The Company's updated O&M claim reflecting the vacancy rate is shown below:

	Updated FPFTY Claim²⁶	Capitalization Rate²⁷	Updated O&M Claim
Water Operations	\$8,786,623	42.81%	\$5,025,070
Wastewater SSS Operations	\$577,249	19.78%	\$463,069
Wastewater CSS Operations	\$723,391	19.78%	\$580,304
BASA Wastewater Operations	<u>\$227,687</u>	19.78%	<u>\$182,651</u>
Total	<u>\$10,314,950</u>		<u>\$6,251,094</u>

²³ I&E Statement No. 1, pp. 17-18.

²⁴ PAWC Statement No. 5-R, pp. 3-4.

²⁵ PAWC Statement No. 6-R, pp. 2-3.

²⁶ PAWC Exhibit LNO-1R, p. 96.

²⁷ PAWC Exhibit No. 3-B, p. 2.

1 **Q. WHAT IS THE COMPANY’S BASIS FOR REJECTING THE RATE BASE**
2 **ADJUSTMENT?**

3 A. PAWC witness Jared Deason states that I erroneously assumed that in developing
4 its claim for FPFTY plant additions the Company adjusted the estimated cost of
5 those additions to reflect a portion of the pro-forma payroll-related increase that
6 would be deemed to be capital-related. Mr. Deason states that to develop the
7 estimated cost of plant additions, the Company included appropriate estimates of
8 labor costs based on actual work hours that will be required to construct those
9 additions. He asserts that the Company employs a bottom-up rather than a top-
10 down estimation process, therefore the labor costs capitalized as part of projected
11 plant additions are not a function of the amount of total projected labor included in
12 the Company’s O&M expense claim and should not be reduced in relation to my
13 recommended vacancy adjustment.²⁸

14
15 **Q. DO YOU ACCEPT MR. DEASON’S ASSERTION REGARDING**
16 **CAPITALIZED LABOR COSTS?**

17 A. Yes, in part. I accept Mr. Deason’s assertion that capitalized labor should not be
18 adjusted with regard to the vacancy rate adjustment which affects payroll tax.
19 However, my performance pay adjustment will also affect payroll tax, and because
20 I recommended a reduction to both O&M expense and rate base for that

²⁸ PAWC Statement No. 5-R, pp. 5-6.

adjustment, I recommend a corresponding rate base adjustment for payroll tax.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PAYROLL TAX EXPENSE?

A. Yes. Since changes have been made by both me and the Company which affect payroll tax, I have updated my recommended adjustment accordingly. I recommend a total FPFTY O&M allowance of \$5,962,102 for payroll tax expense, or a reduction of \$288,992 (\$6,251,094 - \$5,962,102) broken down by operation as shown below:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$5,025,070	\$4,773,204	(\$251,866)
Wastewater SSS Operations	\$463,069	\$445,706	(\$17,363)
Wastewater CSS Operations	\$580,304	\$565,782	(\$14,522)
BASA Wastewater Operations	<u>\$182,651</u>	<u>\$177,410</u>	<u>(\$5,241)</u>
Total	<u>\$6,251,094</u>	<u>\$5,962,102</u>	<u>(\$288,992)</u>

I calculated this by applying the effective tax rates of each operating unit to the total amount of the vacancy and performance pay adjustments. Accordingly, I recommend a reduction to rate base of \$163,977 to correspond with the rate base portion of my performance pay adjustment, broken down by operation as follows:

	I&E O&M Adjustment
Water Operations	(\$155,714)
Wastewater SSS Operations	(\$3,950)
Wastewater CSS Operations	(\$3,154)
BASA Wastewater Operations	<u>(\$1,159)</u>
Total	<u>(\$163,977)</u>

GROUP INSURANCE EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR GROUP INSURANCE EXPENSE.

A. I recommended an O&M expense allowance for group insurance expense of \$15,432,628, or a reduction of \$195,350 (\$15,627,978 - \$15,432,628) to the Company's claim and capitalized group insurance expense of \$9,876,523, or a reduction of \$125,019 (\$10,001,542 - \$9,876,523) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$12,247,609	\$12,094,513	(\$153,096)
Wastewater SSS Operations	\$1,310,989	\$1,294,602	(\$16,387)
Wastewater CSS Operations	\$1,570,102	\$1,550,476	(\$19,626)
BASA Wastewater Operations	<u>\$499,278</u>	<u>\$493,037</u>	<u>(\$6,241)</u>
Total	<u>\$15,627,978</u>	<u>\$15,432,628</u>	<u>(\$195,350)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$9,168,038	\$9,053,438	(\$114,600)
Wastewater SSS Operations	\$323,253	\$319,212	(\$4,041)
Wastewater CSS Operations	\$387,143	\$382,304	(\$4,839)
BASA Wastewater Operations	<u>\$123,108</u>	<u>\$121,569</u>	<u>(\$1,539)</u>
Total	<u>\$10,001,542</u>	<u>\$9,876,523</u>	<u>(\$125,019)</u>

This recommendation was made to align with salaries and wages expense and was based on a calculated vacancy rate of 1.25% across all business operations.²⁹

Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witnesses Lori O'Malley and Jared Deason responded to my recommendation.

Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.

A. Ms. O'Malley states that the Company has accepted my recommended adjustment to reflect an average vacancy rate of 1.25% to align with salaries and wages expense and has adjusted O&M expenses accordingly for each business operation. However, the Company has rejected my recommended adjustment to rate base.³⁰

The Company's updated O&M claim reflecting the vacancy rate is shown below:

²⁹ I&E Statement No. 1, pp. 28-29.

³⁰ PAWC Statement No. 6-R, pp. 2-3.

	Updated FPFTY Claim³¹	Capitalization Rate³²	Updated O&M Claim
Water Operations	\$21,147,951	42.81%	\$12,094,513
Wastewater SSS Operations	\$1,613,815	19.78%	\$1,294,602
Wastewater CSS Operations	\$1,932,779	19.78%	\$1,550,475
BASA Wastewater Operations	<u>\$614,606</u>	19.78%	<u>\$493,037</u>
Total	<u>\$25,309,151</u>		<u>\$15,432,627</u>

Q. WHAT IS THE COMPANY'S BASIS FOR REJECTING THE RATE BASE ADJUSTMENT?

A. PAWC witness Jared Deason states that I erroneously assumed that in developing its claim for FPFTY plant additions the Company adjusted the estimated cost of those additions to reflect a portion of the pro-forma payroll-related increase that would be deemed capital-related. Mr. Deason states that to develop the estimated cost of plant additions, the Company included appropriate estimates of labor costs based on actual work hours that will be required to construct those additions. He asserts that the Company employs a bottom-up rather than a top-down estimation process, therefore the labor costs capitalized as part of projected plant additions are not a function of the amount of total projected labor included in the Company's O&M expense claim and should not be reduced in relation to my recommended vacancy adjustment.³³

³¹ PAWC Exhibit LNO-1R, p. 77.

³² PAWC Exhibit No. 3-B, p. 2.

³³ PAWC Statement No. 5-R, pp. 5-6.

1 **Q. DO YOU ACCEPT MR. DEASON’S ASSERTION REGARDING**
2 **CAPITALIZED LABOR COSTS?**

3 A. Yes, I accept Mr. Deason’s assertion that capitalized labor should not be adjusted
4 in relation to my recommended vacancy adjustment.

6 **Q. HOW DOES THIS IMPACT YOUR RECOMMENDED ADJUSTMENT?**

7 A. Since the claim for capitalized labor and associated benefits is based on estimated
8 required work hours and therefore should not be affected by the vacancy
9 adjustment, the entire adjustment should be reflected in O&M expense.

11 **Q. WHAT IS YOUR UPDATED RECOMMENDATION FOR GROUP**
12 **INSURANCE EXPENSE?**

13 A. I recommend a total FPFTY O&M allowance of \$15,307,608 for group insurance
14 expense, or a reduction of \$125,019 (\$15,432,627 - \$15,307,608) to the
15 Company’s updated claim. Since the Company updated its claim to reflect only a
16 portion of the vacancy adjustment, my updated adjustment will further reduce the
17 Company’s claim, as shown in the following table, to include the portion of the
18 adjustment that I originally allocated to rate base:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$12,094,513	\$11,979,913	(\$114,600)
Wastewater SSS Operations	\$1,294,602	\$1,290,561	(\$4,041)
Wastewater CSS Operations	\$1,550,475	\$1,545,636	(\$4,839)
BASA Wastewater Operations	<u>\$493,037</u>	<u>\$491,498</u>	<u>(\$1,539)</u>
Total	<u>\$15,432,627</u>	<u>\$15,307,608</u>	<u>(\$125,019)</u>

Q. WHAT IS THE BASIS FOR YOUR UPDATED RECOMMENDATION?

A. The Company argues that the capitalized labor budget is based on the amount of actual work hours required to complete plant additions, therefore any vacancies in the Company will not affect the capitalized labor claim. However, without reducing the capitalized portion of the expense, only part of the vacancy adjustment is reflected. To reflect the entire amount, the O&M portion of the claim must be further reduced by the amount of the adjustment originally allocated to rate base.

401K EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR 401K EXPENSE.

A. I recommended an O&M expense allowance for 401k expense of \$2,084,225, or a reduction of \$26,382 (\$2,110,607- \$2,084,225) to the Company's claim and

capitalized 401k expense of \$1,371,985, or a reduction of \$17,366 (\$1,389,351 - \$1,371,985) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$1,730,994	\$1,709,357	(\$21,637)
Wastewater SSS Operations	\$175,250	\$173,060	(\$2,190)
Wastewater CSS Operations	\$124,961	\$123,399	(\$1,562)
BASA Wastewater Operations	<u>\$79,402</u>	<u>\$78,409</u>	<u>(\$993)</u>
Total	<u>\$2,110,607</u>	<u>\$2,084,225</u>	<u>(\$26,382)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$1,295,749	\$1,279,552	(\$16,197)
Wastewater SSS Operations	\$43,212	\$42,672	(\$540)
Wastewater CSS Operations	\$30,812	\$30,427	(\$385)
BASA Wastewater Operations	<u>\$19,578</u>	<u>\$19,334</u>	<u>(\$244)</u>
Total	<u>\$1,389,351</u>	<u>\$1,371,985</u>	<u>(\$17,366)</u>

This recommendation was made to align with salaries and wages expense and was based on a calculated vacancy rate of 1.25% across all business operations.³⁴

Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witnesses Lori O'Malley and Jared Deason responded to my recommendation.

³⁴ I&E Statement No. 1, pp. 31-32.

1 **Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.**

2 A. Ms. O'Malley states that the Company has accepted my recommended adjustment
3 to reflect an average vacancy rate of 1.25% to align with salaries and wages
4 expense and has adjusted O&M expenses accordingly for each business operation.
5 However, the Company has rejected my recommended adjustment to rate base.³⁵

6 The Company's updated O&M claim reflecting the vacancy rate is shown below:

	Updated FPFTY Claim³⁶	Capitalization Rate³⁷	Updated O&M Claim
Water Operations	\$2,988,909	42.81%	\$1,709,357
Wastewater SSS Operations	\$215,731	19.78%	\$173,059
Wastewater CSS Operations	\$153,825	19.78%	\$123,398
BASA Wastewater Operations	<u>\$97,743</u>	19.78%	<u>\$78,409</u>
Total	<u>\$3,456,208</u>		<u>\$2,084,223</u>

7
8
9 **Q. WHAT IS THE COMPANY'S BASIS FOR REJECTING THE RATE BASE**
10 **ADJUSTMENT?**

11 A. PAWC witness Jared Deason states that I erroneously assumed that in developing
12 its claim for FPFTY plant additions the Company adjusted the estimated cost of
13 those additions to reflect a portion of the pro-forma payroll-related increase that
14 would be deemed capital-related. Mr. Deason states that to develop the estimated
15 cost of plant additions, the Company included appropriate estimates of actual labor

³⁵ PAWC Statement No. 6-R, pp. 2-3.

³⁶ PAWC Exhibit LNO-1R, p. 96.

³⁷ PAWC Exhibit No. 3-B, p. 2.

1 costs based on actual work hours that will be required to construct those additions.
2 He asserts that the Company employs a bottom-up rather than a top-down
3 estimation process, therefore the labor costs capitalized as part of projected plant
4 additions are not a function of the amount of total projected labor included in the
5 Company's O&M expense claim and should not be reduced in relation to my
6 recommended vacancy adjustment.³⁸
7

8 **Q. DO YOU ACCEPT MR. DEASON'S ASSERTION REGARDING**
9 **CAPITALIZED LABOR COSTS?**

10 A. Yes, I accept Mr. Deason's assertion that capitalized labor should not be adjusted
11 in relation to my recommended vacancy adjustment.
12

13 **Q. HOW DOES THIS IMPACT YOUR RECOMMENDED ADJUSTMENT?**

14 A. Since capitalized labor is based on estimated required work hours and therefore
15 should not be affected by the vacancy adjustment, the entire adjustment should be
16 reflected in O&M expense.
17

18 **Q. WHAT IS YOUR UPDATED RECOMMENDATION REGARDING 401K**
19 **EXPENSE?**

20 A. I recommend a total FPFTY O&M allowance of \$2,066,857 for 401k expense, or a

³⁸ PAWC Statement No. 5-R, pp. 5-6.

reduction of \$17,366 (\$2,084,223 - \$2,066,857) to the Company's updated claim. Since the Company updated its claim to reflect only a portion of the vacancy adjustment, my updated adjustment further reduces the Company's claim, as shown in the following table, to include the portion of the adjustment that I originally allocated to rate base:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$1,709,357	\$1,693,160	(\$16,197)
Wastewater SSS Operations	\$173,059	\$172,519	(\$540)
Wastewater CSS Operations	\$123,398	\$123,013	(\$385)
BASA Wastewater Operations	<u>\$78,409</u>	<u>\$78,165</u>	<u>(\$244)</u>
Total	<u>\$2,084,223</u>	<u>\$2,066,857</u>	<u>(\$17,366)</u>

Q. WHAT IS THE BASIS FOR YOUR UPDATED RECOMMENDATION?

A. The Company argues that the capitalized labor budget is based on the amount of actual work hours required to complete plant additions, therefore any vacancies in the Company will not affect the capitalized labor claim. However, without reducing the capitalized portion of the expense, only part of the vacancy adjustment is reflected. To reflect the entire amount, the O&M portion of the claim must be further reduced by the amount of the adjustment originally allocated to rate base.

DEFINED CONTRIBUTION PLAN (DCP) EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR DCP EXPENSE.

A. I recommended an O&M allowance for DCP expense of \$2,959,056, or a reduction of \$37,456 (\$2,996,512- \$2,959,056) to the Company's claim and capitalized DCP expense of \$1,881,375, or a reduction of \$23,815 (\$1,905,190 - \$1,881,375) to the Company's claim broken down by operation as follows:

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$2,323,443	\$2,294,400	(\$29,043)
Wastewater SSS Operations	\$248,805	\$245,695	(\$3,110)
Wastewater CSS Operations	\$313,257	\$309,342	(\$3,915)
BASA Wastewater Operations	<u>\$111,007</u>	<u>\$109,619</u>	<u>(\$1,388)</u>
Total	<u>\$2,996,512</u>	<u>\$2,959,056</u>	<u>(\$37,456)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$1,739,230	\$1,717,490	(\$21,740)
Wastewater SSS Operations	\$61,348	\$60,581	(\$767)
Wastewater CSS Operations	\$77,241	\$76,275	(\$966)
BASA Wastewater Operations	<u>\$27,371</u>	<u>\$27,029</u>	<u>(\$342)</u>
Total	<u>\$1,905,190</u>	<u>\$1,881,375</u>	<u>(\$23,815)</u>

1 This recommendation was made to align with salaries and wages expense
2 and was based on a calculated vacancy rate of 1.25% across all business
3 operations.³⁹
4

5 **Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION?**

6 A. Yes. PAWC witnesses Lori O'Malley and Jared Deason responded to my
7 recommendation.
8

9 **Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.**

10 A. Ms. O'Malley states that the Company has accepted my recommended adjustment
11 to reflect an average vacancy rate of 1.25% to align with salaries and wages
12 expense and has adjusted O&M expenses accordingly for each business operation.
13 However, the Company has rejected my recommended adjustment to rate base.⁴⁰

14 The Company's updated O&M claim reflecting the vacancy rate is shown below:

	FPFTY Claim⁴¹	Capitalization Rate⁴²	O&M Claim
Water Operations	\$4,011,889	42.81%	\$2,294,399
Wastewater SSS Operations	\$306,276	19.78%	\$245,695
Wastewater CSS Operations	\$385,616	19.78%	\$309,341
BASA Wastewater Operations	<u>\$136,648</u>	19.78%	<u>\$109,619</u>
Total	<u>\$4,840,429</u>		<u>\$2,959,054</u>

³⁹ I&E Statement No. 1, pp. 33-34.

⁴⁰ PAWC Statement No. 6-R, pp. 2-3.

⁴¹ PAWC Exhibit LNO-1R, p. 96.

⁴² PAWC Exhibit No. 3-B, p. 2.

1 **Q. WHAT IS THE COMPANY’S BASIS FOR REJECTING THE RATE BASE**
2 **ADJUSTMENT?**

3 A. PAWC witness Jared Deason states that I erroneously assumed that in developing
4 its claim for FPFTY plant additions the Company adjusted the estimated cost of
5 those additions to reflect a portion of the pro-forma payroll-related increase that
6 would be deemed capital-related. Mr. Deason states that to develop the estimated
7 cost of plant additions, the Company included appropriate estimates of labor costs
8 based on actual work hours that will be required to construct those additions. He
9 asserts that the Company employs a bottom-up rather than a top-down estimation
10 process, therefore the labor costs capitalized as part of projected plant additions
11 are not a function of the amount of total projected labor included in the
12 Company’s O&M expense claim and should not be reduced in relation to my
13 recommended vacancy adjustment.⁴³

14
15 **Q. DO YOU ACCEPT MR. DEASON’S ASSERTION REGARDING**
16 **CAPITALIZED LABOR COSTS?**

17 A. Yes, I accept Mr. Deason’s assertion that capitalized labor should not be adjusted
18 in relation to my recommended vacancy adjustment.

⁴³ PAWC Statement No. 5-R, pp. 5-6.

1 **Q. HOW DOES THIS IMPACT YOUR RECOMMENDED ADJUSTMENT?**

2 A. Since capitalized labor is based on estimated required work hours and therefore
3 should not be affected by the vacancy adjustment, my entire recommended
4 adjustment should be reflected in O&M expense.

5
6 **Q. WHAT IS YOUR UPDATED RECOMMENDATION REGARDING DCP
7 EXPENSE?**

8 A. I recommend a total FPFTY O&M allowance of \$2,935,339 for DCP expense, or a
9 reduction of \$23,815 (\$2,959,054 - \$2,935,339) to the Company's updated claim.
10 Since the Company updated its claim to reflect only a portion of the vacancy
11 adjustment, my updated adjustment will further reduce the Company's claim, as
12 shown in the following table, to include the portion of the adjustment that I
13 originally allocated to rate base:

	Updated FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$2,294,399	\$2,272,659	(\$21,740)
Wastewater SSS Operations	\$245,695	\$244,928	(\$767)
Wastewater CSS Operations	\$309,341	\$308,375	(\$966)
BASA Wastewater Operations	<u>\$109,619</u>	<u>\$109,277</u>	<u>(\$342)</u>
Total	<u>\$2,959,054</u>	<u>2,935,339</u>	<u>(\$23,815)</u>

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

17 A. The Company argues that the capitalized labor budget is based on the amount of

actual work hours required to complete plant additions, therefore any vacancies in the Company will not affect the capitalized labor claim. However, without reducing the capitalized portion of the expense, only part of the vacancy adjustment is reflected. To reflect the entire amount, the O&M portion of the claim must be further reduced by the amount of the adjustment originally allocated to rate base.

WASTE DISPOSAL EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY REGARDING WASTE DISPOSAL EXPENSE.

A. I recommended an allowance of \$7,386,760 for waste disposal expense, or a reduction of \$2,850,893 (\$10,237,653 - \$7,386,760) to the Company's claim, broken down as follows:⁴⁴

Waste Disposal Expense:	PAWC FPFTY Claim	I&E Allowance	I&E Adjustment
Water Operations	\$4,216,691	\$3,093,714	(\$1,122,977)
Wastewater SSS Operations	\$1,673,584	\$1,254,740	(\$418,844)
Wastewater CSS Operations	\$4,008,056	\$2,740,027	(\$1,268,029)
BASA Wastewater Operations	<u>\$339,322</u>	<u>\$298,279</u>	<u>(\$41,043)</u>
Total PAWC Expense	<u>\$10,237,653</u>	<u>\$7,386,760</u>	<u>(\$2,850,893)</u>

This recommendation was based on a three-year average of actual waste disposal expense rather than the Company's three-year average of the change in

⁴⁴ I&E Statement No. 1, pp. 35-37.

1 the expense, except for BASA Wastewater Operations, which has only one year of
2 actual data.

3
4 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

5 A. Yes. PAWC witness Lori O'Malley disagrees with my recommendation.
6

7 **Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.**

8 A. Ms. O'Malley states that the Company is currently experiencing increasing
9 dredging costs. To illustrate this, Ms. O'Malley mentions a vendor change in one
10 district which resulted in higher costs. Ms. O'Malley admits that the Company's
11 waste disposal costs fluctuate year to year, but notes that there has been a \$3.6
12 million increase from 2021 through 2025. Finally, Ms. O'Malley states that I&E
13 accepted the same methodology to calculate waste disposal expense in PAWC's
14 last rate case.⁴⁵
15

16 **Q. WHAT IS YOUR RESPONSE TO MS. O'MALLEY'S STATEMENTS?**

17 A. First, it is inaccurate to assume that I&E accepted the Company's methodology to
18 calculate waste disposal costs in the last base rate case simply because I&E did not
19 address this topic in that proceeding. Second, while I don't dispute that waste
20 disposal expense did rise overall in recent historical years, it has not consistently

⁴⁵ PAWC Statement No. 6-R, pp. 21-22.

1 done so and the Company has not provided any evidence to show that this expense
2 will continue to rise at a rate of 13.76% each year. This is a significant increase
3 and is speculative in nature. Finally, the data presented in the chart in Ms.
4 O'Malley's rebuttal testimony does not match the data provided in the initial
5 filing, therefore I am hesitant to use this data to update my recommendation.
6

7 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

8 A. No. I continue to recommend a total FPFTY allowance of \$7,386,760 for waste
9 disposal expense, or a reduction of \$2,850,893 (\$10,237,653 - \$7,386,760) to the
10 Company's claim, based on a three-year average of historical costs.
11

12 **TRANSPORTATION EXPENSE**

13 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
14 **REGARDING TRANSPORTATION EXPENSE.**

15 A. I recommended an O&M expense allowance for transportation expense of
16 \$3,454,752, or a reduction of \$539,775 (\$3,994,527- \$3,454,752) to the
17 Company's claim and capitalized transportation expense of \$2,289,983, or a
18 reduction of \$361,885 (\$2,651,868 - \$2,289,983) to the Company's claim broken
19 down by operation as follows:⁴⁶

⁴⁶ I&E Statement No. 1, pp. 38-40.

	FPFTY O&M Claim	I&E O&M Allowance	I&E O&M Adjustment
Water Operations	\$3,321,224	\$2,864,899	(\$456,325)
Wastewater SSS Operations	\$168,807	\$146,436	(\$22,371)
Wastewater CSS Operations	\$442,804	\$389,081	(\$53,723)
BASA Wastewater Operations	<u>\$61,692</u>	<u>\$54,336</u>	<u>(\$7,356)</u>
Total	<u>\$3,994,527</u>	<u>\$3,454,752</u>	<u>(\$539,775)</u>

	FPFTY Rate Base Claim	I&E Rate Base Allowance	I&E Rate Base Adjustment
Water Operations	\$2,485,807	\$2,144,542	(\$341,265)
Wastewater SSS Operations	\$41,634	\$36,107	(\$5,527)
Wastewater CSS Operations	\$109,211	\$95,936	(\$13,275)
BASA Wastewater Operations	<u>\$15,216</u>	<u>\$13,398</u>	<u>(\$1,818)</u>
Total	<u>\$2,651,868</u>	<u>\$2,289,983</u>	<u>(\$361,885)</u>

This recommendation was based on removing the CPI transportation inflation adjustment added by PAWC.

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witness Lori O'Malley disagrees with my recommendation.

Q. PLEASE SUMMARIZE MS. O'MALLEY'S RESPONSE.

A. Ms. O'Malley states that because fuel and maintenance expenses fluctuate year to year, a three-year average inflation factor is generally appropriate to project future costs. She also states that the Company used the same methodology in its last base rate case and the adjustment was accepted by I&E. However, Ms. O'Malley

acknowledges that the CPI transportation services inflation factor has decreased as of June 2025 and states that the Company will use an inflation rate of 3.11%, which represents the annual inflation for the year ending June 30, 2025.⁴⁷ The change in inflation rate results in the following updated claim:

	Updated FPFTY Claim⁴⁸	Capitalization Rate⁴⁹	Updated O&M Claim	Updated Rate Base Claim
Water Operations	\$5,411,644	42.81%	\$3,095,090	\$2,316,544
Wastewater SSS Operations	\$196,435	19.78%	\$157,572	\$38,863
Wastewater CSS Operations	\$514,484	19.78%	\$412,698	\$101,786
BASA Wastewater Operations	<u>\$71,768</u>	19.78%	<u>\$57,569</u>	<u>\$14,199</u>
Total	<u>\$6,194,331</u>		<u>\$3,722,929</u>	<u>\$2,471,402</u>

Q. WHAT IS YOUR RESPONSE TO MS. O'MALLEY'S UPDATED CLAIM FOR TRANSPORTATION EXPENSE?

A. First, as I stated earlier in my surrebuttal testimony, it is incorrect to assume that I&E accepted the Company's methodology for calculating this expense in the last base rate case simply because I&E did not address this topic in that proceeding. Second, I disagree that any inflation factor, whether a three-year average or the Company's updated factor, is generally appropriate to project future costs. I reiterate from my direct testimony that, when forecasting FPFTY expenses, all adjustments to expenses should be known and measurable. Adjustments for

⁴⁷ PAWC Statement No. 6-R, pp. 20-21.

⁴⁸ PAWC Exhibit No. 3-B, pp. 301-304.

⁴⁹ PAWC Exhibit No. 3-B, p. 2.

1 inflation are inherently speculative and therefore do not meet the standard of
2 known and measurable and should be rejected.

3
4 **Q. DID ANY OTHER WITNESS RESPOND TO YOUR RECOMMENDATION?**

5 A. Yes. PAWC witness Jared Deason briefly mentions that he rejects my
6 transportation expense adjustment but erroneously states that the adjustment is
7 related to vacancy rates. He then explains that capitalized labor costs are
8 estimated using a bottom-up approach and should not be adjusted in relation to the
9 vacancy rate, but does not offer an explanation as to how capitalized transportation
10 costs are estimated or why it would be inappropriate to adjust rate base in relation
11 to a transportation adjustment.⁵⁰ In absence of that explanation, I continue to
12 recommend reducing both O&M expense and rate base for this adjustment.

13
14 **Q. DO YOU HAVE ANY UPDATES TO YOUR RECOMMENDATION?**

15 A. Yes. Since PAWC has updated its claim, my recommended adjustment has also
16 changed, as shown in the chart below. However, my recommended allowance and
17 the underlying calculation have not changed from my position in direct testimony.

⁵⁰ PAWC Statement No. 5-R, pp. 5-6.

	Updated FPFTY O&M Claim	I&E O&M Allowance	Updated I&E O&M Adjustment
Water Operations	\$3,095,090	\$2,864,899	(\$230,191)
Wastewater SSS Operations	\$157,572	\$146,436	(\$11,136)
Wastewater CSS Operations	\$412,698	\$389,081	(\$23,617)
BASA Wastewater Operations	<u>\$57,569</u>	<u>\$54,336</u>	<u>(\$3,233)</u>
Total	<u>\$3,722,929</u>	<u>\$3,454,752</u>	<u>(\$268,177)</u>

	Updated FPFTY Rate Base Claim	I&E Rate Base Allowance	Updated I&E Rate Base Adjustment
Water Operations	\$2,316,544	\$2,144,542	(\$172,012)
Wastewater SSS Operations	\$38,863	\$36,107	(\$2,756)
Wastewater CSS Operations	\$101,786	\$95,936	(\$5,850)
BASA Wastewater Operations	<u>\$14,199</u>	<u>\$13,398</u>	<u>(\$801)</u>
Total	<u>\$2,471,402</u>	<u>\$2,289,983</u>	<u>(\$181,419)</u>

**PENSION AND OTHER POST-EMPLOYMENT BENEFITS (OPEB) DEFERRED
ACCOUNTING TREATMENT**

**Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY
REGARDING THE PROPOSED PENSION AND OPEB DEFERRED
ACCOUNTING TREATMENT.**

A. I recommended that the Commission disallow the proposed pension and OPEB expense deferred accounting treatment in its entirety, as the expenses do not meet the requirements to be treated as a regulatory asset.⁵¹ Specifically, the

⁵¹ I&E Statement No. 1, pp. 44-55.

1 Commission has previously ruled that deferred accounting treatment may be
2 granted if the expense is: (1) extraordinary; (2) unanticipated; (3) non-recurring;
3 and (4) substantial.⁵²
4

5 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

6 A. Yes. PAWC witness Dr. Christina Chard disagrees with my recommendation.
7

8 **Q. PLEASE SUMMARIZE DR. CHARD'S RESPONSE.**

9 A. Dr. Chard states that the Commission regularly authorizes utilities to defer costs
10 arising from unanticipated events outside the utility's control to provide the
11 opportunity to claim these costs for recovery in a future rate case proceeding. She
12 asserts that pension and OPEB costs are subject to material change based on
13 factors that are outside of the Company's control and thus are within the scope of
14 the Commission's exception to the prohibition against retroactive ratemaking. She
15 follows that deferred accounting is a fair way to ensure that neither the customers
16 nor the Company would be required to bear more than PAWC's actual costs.

17 Dr. Chard continues that all deferred net benefits or liabilities will be
18 subject to review in the Company's next base rate case, purportedly eliminating
19 the argument that deferred accounting authorization removes incentives to control
20 costs.

⁵² *Petition of Columbia Gas of Pa., Inc. for Authority to Defer for Accounting and Financial Purposes Certain Start Up Expenses Assoc. with the Redesign of Upgrade of Financial Processes and Info. Systems*, Docket No. P-2012-2319920 (Order Entered December 5, 2012).

1 Dr. Chard also disagrees that deferred accounting treatment constitutes
2 single-issue ratemaking. She reiterates that these expenses will be subject to
3 review in the Company's next base rate case. She compares the circumstances to
4 the ability of natural gas utilities to recover the commodity cost of natural gas
5 through automatic rate adjustment clauses. She claims that the nature of these
6 costs acknowledges that there is an inherent deviation in expense that is outside of
7 the Company's control, yet required to provide service to customers, which
8 fluctuates dramatically between periods. She also mentions electric utilities'
9 ability to adjust rates for various reasons. She points out that although gas and
10 electric utilities' automatic rate adjustments are statutorily authorized unlike water
11 utilities, the same principles apply in this circumstance.⁵³

12
13 **Q. WHAT IS YOUR RESPONSE TO DR. CHARD'S ASSERTIONS RELATED**
14 **TO THE PROPOSED DEFERRAL TREATMENT FOR PENSION AND**
15 **OPEB COSTS?**

16 A. As stated in my direct testimony, pension and OPEB expenses simply do not fit
17 the criteria for deferred accounting treatment. These expenses are not
18 extraordinary, unanticipated, or non-recurring. Although the expenses vary from
19 year to year, they are still recurring expenses that are a normal part of the
20 Company's operation. I also disagree that these expenses are within the scope of

⁵³ PAWC Statement No. 2-R, pp. 17-18.

1 the Commission's exception to the prohibition against retroactive ratemaking.

2 Additionally, Dr. Chard is making a false equivalence when comparing its
3 current circumstances to automatic rate adjustments employed by natural gas and
4 electric utilities. Rate adjustment mechanisms for gas and electric companies find
5 their history in legislative actions and the severing of the production and
6 distribution functions. What PAWC requests here is practically a revenue
7 guarantee for fluctuation in normal expenses related to employee pensions and
8 OPEBs, which are normal operating expenses that many businesses choose to
9 offer.

10
11 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION**
12 **REGARDING THE PROPOSED PENSION AND OPEB DEFERRED**
13 **ACCOUNTING TREATMENT?**

14 A. No. I continue to recommend disallowance of the proposed pension and OPEB
15 deferred accounting treatment in its entirety.

16
17 **CASH WORKING CAPITAL**

18 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**
19 **FOR CASH WORKING CAPITAL (CWC).**

20 A. I recommended an allowance of \$29,626,815, or a reduction of \$428,745
21 (\$30,055,560 - \$29,626,815) to the Company's FPFTY claim broken down by
22 business operation as shown in the table below:

	FPPTY Claim	I&E Allowance	Adjustment
Water Operations	\$25,170,058	\$24,800,799	(\$369,259)
Wastewater SSS Operations	\$2,268,679	\$2,239,077	(\$29,602)
Wastewater CSS Operations	\$1,503,544	\$1,482,756	(\$20,788)
BASA Wastewater Operations	\$1,061,398	\$1,052,302	(\$9,096)
Elizabeth Borough WW CSS	<u>\$51,881</u>	<u>\$51,881</u>	<u>\$0</u>
Total	<u>\$30,055,560</u>	<u>\$29,626,815</u>	<u>(\$428,745)</u>

This adjustment was based on changes to various O&M expenses affecting the cash working capital claim. Note that no changes were made to Elizabeth Borough's CWC claim since I did not recommend any O&M expense adjustments to this operating unit.

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. PAWC witness Jared Deason disagrees with my claim because the Company disagrees with my recommended adjustments.⁵⁴

Q. DID PAWC REVISE ITS CWC CLAIM IN REBUTTAL TESTIMONY?

A. Yes. Since PAWC updated its O&M expense claims, the FPPTY CWC claims have been updated for each operating unit as follows:⁵⁵

⁵⁴ PAWC Statement No. 5-R, p. 7.

⁵⁵ PAWC Exhibit 3-A Revised, pp. 26R, 94R, 145R, 192R, and 237R.

	FPFTY Claim
Water Operations	\$24,869,831
Wastewater SSS Operations	\$2,269,221
Wastewater CSS Operations	\$1,497,842
BASA Wastewater Operations	\$1,059,448
Elizabeth Borough WW CSS	<u>\$51,881</u>
Total	<u>\$29,748,223</u>

1

2

3 **Q. DO YOU AGREE WITH THE COMPANY’S CLAIM?**

4 A. No. However, I have an update to my recommendation for CWC. As stated in
5 direct testimony, all O&M expense adjustments that are cash-based expense claims
6 are included when determining the Company’s overall CWC requirement.
7 Therefore, I am modifying my CWC recommendation to reflect the updated O&M
8 expense adjustments as discussed above.⁵⁶

9

10 **Q. BASED ON THE ABOVE SURREBUTTAL TESTIMONY, WHAT IS**
11 **YOUR UPDATED RECOMMENDED ALLOWANCE FOR CWC?**

12 A. Reflecting all of I&E’s recommended adjustments as discussed above, my updated
13 recommendation for CWC broken down by business operation unit is as shown
14 below:

⁵⁶ I&E Exhibit No. 1-SR, Schedule 1.

	FPFTY Claim	I&E Allowance	Adjustment
Water Operations	\$24,869,831	\$24,556,348	(\$313,483)
Wastewater SSS Operations	\$2,269,221	\$2,254,066	(\$15,155)
Wastewater CSS Operations	\$1,497,842	\$1,482,756	(\$11,821)
BASA Wastewater Operations	\$1,059,448	\$1,053,042	(\$6,406)
Elizabeth Borough WW CSS	<u>\$51,881</u>	<u>\$51,881</u>	<u>\$0</u>
Total	<u>\$29,748,223</u>	<u>\$29,401,358</u>	<u>(\$346,865)</u>

Q. ARE YOUR ABOVE RECOMMENDED CWC ALLOWANCES FINAL RECOMMENDATIONS?

A. No. All adjustments to the Company's claims for revenues, expenses, taxes, and rate base must be continually brought together for each operating unit in the Administrative Law Judge's Recommended Decision and again in the Commission's Final Order. This process, known as iteration, effectively prevents the determination of a precise calculation until all adjustments have been made to the Company's claims.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

**I&E Exhibit No. 1-SR
Witness: Vanessa Okum**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

and

Docket No. R-2025-3058051 (Wastewater)

Exhibit to Accompany

the

Surrebuttal Testimony

of

Vanessa Okum

Bureau of Investigation and Enforcement

Concerning:

**OPERATING AND MAINTENANCE EXPENSES
PENSION AND OPEB REGULATORY ASSET TREATMENT
CASH WORKING CAPITAL**

I&E Modified

Pennsylvania-American Water Company - Water Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$66,316,588	\$799,114,886
2	Group Insurance	11.00	11,863,061	130,493,671
3	OPEB's and VEBA	65.00	(5,885,345)	(382,547,399)
4	Pension	(5.50)	(324,092)	1,782,503
5	Purchased Power	31.06	21,106,340	655,562,910
6	Purchased Water	31.29	2,795,784	87,470,990
7	Chemicals	44.75	22,744,910	1,017,922,758
8	Miscellaneous	23.44	43,658,469	1,023,249,924
9	Transportation	32.34	2,864,899	92,654,571
10	Ins Other Than Group	(86.09)	18,773,193	(1,616,138,283)
11	Service Company	12.05	74,272,977	894,989,368
12	Waste Disposal	47.04	3,093,714	145,528,315
13	Telephone	34.55	3,365,806	116,281,363
14	Rents	52.71	180,238	9,499,730
15	Natural Gas	50.28	1,139,917	57,313,277
16	Totals		\$265,966,459	\$3,033,178,584

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$915,816,946	\$941,860,051	\$933,310,625	\$953,098,389
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$41,323,952,651	\$42,499,082,716	\$42,113,311,218	\$43,006,184,653
11	Total Billed Revenue	\$915,816,946	\$941,860,051	\$933,310,625	\$953,098,389
12	Total Dollar Days	\$41,323,952,651	\$42,499,082,716	\$42,113,311,218	\$43,006,184,653
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	9.7	9.5	11.9	11.4
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	35.4	35.6	33.2	33.7
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$250,700,147	\$264,798,582	\$265,966,459
20	Operating Expenses Per Day (Line 20 / 365 Days)		686,850	725,476	728,675
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$24,451,860	\$24,085,803	\$24,556,348

I&E Modified

Pennsylvania-American Water Company - Wastewater SSS General Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$6,066,973	\$73,107,030
2	Group Insurance	11.00	1,281,059	14,091,653
3	OPEB's and VEBA	65.00	28,498	1,852,367
4	Pension	(5.50)	123,260	(677,931)
5	Purchased Power	31.06	3,773,519	117,205,501
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	1,601,088	71,654,890
8	Miscellaneous	23.44	6,246,467	146,402,221
9	Transportation	32.34	146,436	4,735,921
10	Ins Other Than Group	(86.09)	2,367,624	(203,822,931)
11	Service Company	12.05	2,298,654	27,698,781
12	Waste Disposal	47.04	3,589,212	168,836,539
13	Telephone	34.55	239,983	8,290,897
14	Rents	52.71	58,950	3,107,059
15	Natural Gas	50.28	67,674	3,402,526
16	Totals		\$27,889,397	\$435,884,523

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$88,333,183	\$106,155,765	\$106,587,996	\$108,665,761
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$3,985,814,286	\$4,790,013,795	\$4,809,517,140	\$4,903,271,097
11	Total Billed Revenue	\$88,333,183	\$106,155,765	\$106,587,996	\$108,665,761
12	Total Dollar Days	\$3,985,814,286	\$4,790,013,795	\$4,809,517,140	\$4,903,271,097
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	25.7	25.7	16.4	15.6
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	19.4	19.4	28.7	29.5
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$20,742,359	\$25,241,514	\$27,889,397
20	Operating Expenses Per Day (Line 20 / 365 Days)		56,828	69,155	76,409
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$1,102,463	\$1,984,749	\$2,254,066

I&E Modified

Pennsylvania-American Water Company - Wastewater CSS Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$7,702,109	\$92,810,414
2	Group Insurance	11.00	1,540,186	16,942,050
3	OPEB's and VEBA	65.00	57,235	3,720,258
4	Pension	(5.50)	138,136	(759,746)
5	Purchased Power	31.06	1,412,874	43,883,857
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	1,030,161	46,103,707
8	Miscellaneous	23.44	3,004,028	70,407,219
9	Transportation	32.34	389,081	12,583,379
10	Ins Other Than Group	(86.09)	748,668	(64,451,030)
11	Service Company	12.05	1,244,195	14,992,550
12	Waste Disposal	47.04	405,555	19,077,308
13	Telephone	34.55	124,772	4,310,621
14	Rents	52.71	11,450	603,490
15	Natural Gas	50.28	151,899	7,637,269
16	Totals		\$17,960,350	\$267,861,346

LINE NO.	DESCRIPTION	PER BOOK	PRESENT RATES	PRESENT RATES	PRESENT RATES
		AMOUNT	06/30/25 AMOUNT	06/30/26 AMOUNT	06/30/27 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$83,780,496	\$85,966,264	\$85,048,549	\$85,843,356
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$3,780,385,642	\$3,879,012,981	\$3,837,603,384	\$3,873,467,065
11	Total Billed Revenue	\$83,780,496	\$85,966,264	\$85,048,549	\$85,843,356
12	Total Dollar Days	\$3,780,385,642	\$3,879,012,981	\$3,837,603,384	\$3,873,467,065
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	22.3	22.3	17.3	14.9
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	22.8	22.8	27.8	30.2
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$15,954,982	\$17,573,151	\$17,960,350
20	Operating Expenses Per Day (Line 20 / 365 Days)		43,712	48,146	49,206
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$996,634	\$1,338,459	\$1,486,021

I&E Modified

Pennsylvania-American Water Company - BASA WW Operations

Notes to Rate Base Elements

Calculation of Cash Working Capital Requirements

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PRESENT RATES 06/30/2027	
			AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.05	\$2,420,566	\$29,167,819
2	Group Insurance	11.00	483,011	5,313,122
3	OPEB's and VEBA	65.00	13,365	868,756
4	Pension	(5.50)	36,424	(200,334)
5	Purchased Power	31.06	533,237	16,562,348
6	Purchased Water	31.29	0	0
7	Chemicals	44.75	148,715	6,655,572
8	Miscellaneous	23.44	1,378,783	32,315,375
9	Transportation	32.34	54,336	1,757,297
10	Ins Other Than Group	(86.09)	1,869,468	(160,937,949)
11	Service Company	12.05	120,323	1,449,892
12	Waste Disposal	47.04	298,279	14,031,038
13	Telephone	34.55	8,991	310,608
14	Rents	52.71	0	0
15	Natural Gas	50.28	54,734	2,751,944
16	Totals		\$7,420,233	(\$49,954,512)

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 06/30/25	PRESENT RATES 06/30/26	PRESENT RATES 06/30/27
			AMOUNT	AMOUNT	AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 06/30/2025				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$7,462,807	\$12,627,309	\$12,627,309	\$12,761,096
9	Lag Days	45.1	45.1	45.1	45.1
10	Dollar Days	\$336,740,542	\$569,775,785	\$569,775,785	\$575,812,589
11	Total Billed Revenue	\$7,462,807	\$12,627,309	\$12,627,309	\$12,761,096
12	Total Dollar Days	\$336,740,542	\$569,775,785	\$569,775,785	\$575,812,589
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	45.1	45.1	45.1	45.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	18.5	18.4	(5.9)	(6.7)
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	26.6	26.7	51.0	51.8
18	Working Capital Requirements				
19	Annual Operating Expenses (Including Payroll Expenses)		\$3,527,666	\$7,145,464	\$7,420,233
20	Operating Expenses Per Day (Line 20 / 365 Days)		9,665	19,577	20,329
21	Cash Working Capital Required				
22	(Line 17 * Line 20)		\$258,056	\$998,427	\$1,053,042

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)
&
Docket No. R-2025-3058051 (Wastewater)

Surrebuttal 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. 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:
19 (1) Pennsylvania-American Water Company (PAWC or Company) witnesses Ann
20 E. Bulkley¹ and Christina E. Chard² regarding rate of return topics including the

¹ PAWC Statement No. 13-R.

² PAWC Statement No. 2-R.

1 proxy group, cost of common equity, flotation costs, management performance,
2 and the overall fair rate of return, as applied to PAWC's rate base to determine the
3 revenue requirement; and (2) Office of Consumer Advocate (OCA) witness David
4 J. Garrett regarding my recommended 9.80% return on equity (ROE), the growth
5 rate used in my discounted cash flow (DCF) analysis, the equity risk premium
6 (ERP) used in my Kroll capital asset pricing method (CAPM) analysis, and the
7 9.51% composite CAPM results.³

8 It should be noted that I do not intend for my surrebuttal testimony
9 to address each and every topic or issue raised or otherwise discussed by
10 the PAWC and other parties' witnesses in rebuttal testimony because I
11 discussed all the topics of concern at length in my direct testimony. My
12 lack of response to any specific statement, assertion, or position of any
13 witness in this surrebuttal testimony does not necessarily indicate my
14 acceptance or agreement with statements, assertions, or positions expressed
15 in rebuttal testimony.

16
17 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

18 **A.** Yes. I will refer to my exhibit⁴ and direct testimony and schedules contained in
19 the corresponding exhibit where necessary.⁵

³ OCA Statement No. 2R.

⁴ I&E Exhibit No. 2-SR.

⁵ I&E Statement No. 2 and I&E Exhibit No. 2.

1 **Q. WHAT WAS YOUR OVERALL RECOMMENDATION IN DIRECT**
2 **TESTIMONY?**

3 A. I recommended the following rates of return for the Company's Water and
4 Wastewater Operations based on market data as on January 6, 2026:⁶

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS			
Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	44.99%	4.71%	2.12%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>55.00%</u>	9.80%	<u>5.39%</u>
Total	<u>100.00%</u>		<u>7.51%</u>

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS			
Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>51.52%</u>	9.80%	<u>5.05%</u>
Total	<u>100.00%</u>		<u>7.16%</u>

⁶ I&E Statement No. 2, p. 7.

1 **SUMMARY OF MS. BULKLEY'S RESPONSE IN REBUTTAL TESTIMONY**

2 **Q. SUMMARIZE MS. BULKLEY'S RESPONSE TO YOUR**
3 **RECOMMENDATIONS MADE IN DIRECT TESTIMONY.**

4 A. First, Ms. Bulkley provides an updated cost of equity analysis based on market
5 data through January 31, 2026⁷ that she claims supports her ROE recommendation
6 of 10.95% made in her direct testimony.⁸ Second, she challenges my discussion
7 regarding: (1) capital market conditions; (2) the exclusion of natural gas
8 distribution companies in my proxy group; (3) the application of the DCF and
9 CAPM in the cost of capital analysis; and (4) PAWC's business and regulatory
10 risks. She also emphasizes the Commission's orders in the Aqua Pennsylvania
11 and Columbia Water base rate proceedings that considered DCF and CAPM
12 results in determining an appropriate ROE. Third, she presents my DCF and
13 CAPM analysis results after making changes in the data points at her discretion to
14 produce a higher ROE to support her recommended ROE of 10.95%. Fourth, Ms.
15 Bulkley echoes the concerns made by Dr. Chard regarding my recommendation to
16 reject consideration of any additional basis points to the cost of equity for
17 exemplary management performance.

⁷ PAWC Statement No. 13-R and PAWC Exhibit No. 13-R, Schedules 1-13.

⁸ PAWC Statement No. 13-R, p. 2.

1 **COMPANY'S UPDATED POSITION**

2 **Q. SUMMARIZE MS. BULKLEY'S UPDATED ANALYSIS AND OVERALL**
3 **RATE OF RETURN FOR THE COMPANY.**

4 A. Ms. Bulkley provides an updated ROE analysis employing the same
5 methodologies as presented in her direct testimony. In her updated analysis, she
6 uses market data through January 31, 2026⁹ in place of her original market data
7 through September 30, 2025 that was used in her analysis presented in direct
8 testimony and the accompanying exhibit.¹⁰ However, she does not change her
9 cost of equity recommendation or capital structure. Considering the updated cost
10 of equity model results, the current and projected market conditions, and
11 management performance, she simply argues that her original ROE claim of
12 10.95% is reasonable.¹¹

13
14 **Q. WHAT IS THE COMPANY'S OVERALL RATE OF RETURN CLAIM?**

15 A. The Company's fully projected future test year (FPFTY) overall rate of return
16 claims for water and wastewater operations are as follows:¹²

⁹ PAWC Exhibit 13-R, p. 3, lines 24-25, p. 10, lines 22-24 and PAWC Exhibit 13-R, Schedules 1-5.

¹⁰ PAWC Exhibit 13-A, Schedules 1-20.

¹¹ PAWC Statement No. 13-R, p. 3, lines 25-26 and p. 10, line 222 through p. 11, line 234.

¹² PAWC Exhibit 13-A, Schedule 16 and 17.

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS Summary of Cost of Capital			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	43.68%	4.71%	2.06%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>56.31%</u>	10.95%	<u>6.17%</u>
Total	<u>100.00%</u>		<u>8.23%</u>

1

PENNSYLVANIA-AMERICAN WATER COMPANY – WASTEWATER OPERATIONS Summary of Cost of Capital			
Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>51.52%</u>	10.95%	<u>5.64%</u>
Total	<u>100.00%</u>		<u>7.75%</u>

2

3

4 **CAPITAL MARKET CONDITIONS**

5 **Q. PLEASE SUMMARIZE MS. BULKLEY’S REBUTTAL TESTIMONY**
6 **REGARDING CURRENT CAPITAL MARKET CONDITIONS.**

7 A. First, Ms. Bulkley states that in the 2021 Aqua Pennsylvania base rate proceeding,
8 the Commission concluded that I&E’s DCF result was likely understating the cost
9 of equity given increased inflation and the expected increases in interest rates and
10 capital costs, and therefore, placed weight on the CAPM results to set a range of

1 reasonableness and accordingly authorized the ROE of 9.75%.¹³ Likewise, in the
2 2023 Columbia Water base rate proceeding, the Commission utilized both the
3 DCF and CAPM results to establish an authorized ROE of 9.75%, stating that it
4 considered increasing inflation, interest rates, and capital costs in its
5 determination.¹⁴ Second, she reiterates that the current market conditions are still
6 characterized by high interest rates and capital costs, therefore, she asserts that it is
7 important that the Commission continue to place weight on the results of the
8 CAPM in determining the authorized ROE for PAWC.¹⁵ Third, she references the
9 projected 10-year Treasury Note yield of 4.10% for the period Q1-2026 through
10 Q1-2027 and 4.20% for the period 2027-2031 used in my CAPM analysis to
11 support her conclusion that interest rates are expected to remain high and
12 potentially increase in the future.¹⁶ Fourth, she refers to the January 28, 2026
13 Federal Reserve Open Market Committee (FOMC) meeting and Federal Reserve
14 Chair Powell's statement that Federal Reserve is well positioned to rely on
15 incoming economic data to determine the extent and timing of any additional
16 changes in the federal funds rate. She notes that at the December 2025 meeting,
17 the FOMC forecasted one rate cut in 2026 and one rate cut in 2027.¹⁷

¹³ PAWC Statement No. 13-R, p. 11, lines 239-242.

¹⁴ PAWC Statement No. 13-R, p. 12, lines 245-248.

¹⁵ PAWC Statement No. 13-R, p. 12, lines 248-252.

¹⁶ PAWC Statement No. 13-R, p. 13, lines 264-274.

¹⁷ PAWC Statement No. 13-R, p. 14, lines 285-289.

1 Lastly, she points to December 1, 2025 Blue Chip forecasts for the 10-year
2 Treasury Note and 30-year Treasury Bond yields and concludes that bonds yields
3 would remain near the current level until 2031.¹⁸

4
5 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S CLAIMS?**

6 A. First, I partly disagree with Ms. Bulkley’s statement that the Commission
7 concluded I&E’s DCF result was likely understating the cost of equity given the
8 increased inflation and expected increases in interest rates and capital costs. The
9 Commission order in the 2021 Aqua Pennsylvania base rate proceeding states:¹⁹

10 Based upon our informed judgment, which includes
11 consideration of *a variety of factors* (emphasis added)
12 including increasing inflation leading to increases in interest
13 rates and capital costs since the rate filing, we determine that a
14 base ROE of 9.75% is reasonable and appropriate for Aqua.
15 When combined with our upward adjustment of 25 basis points
16 to the Company’s ROE for management effectiveness, this will
17 produce a final authorized ROE for Aqua of 10.00% (*i.e.*,
18 9.75% + 0.25% = 10.00%).

19 It is important to note that the Commission relied on *various other factors* besides
20 inflation leading to increases in interest rates and capital costs for determining a
21 range of reasonableness for the ROE based on I&E’s DCF and CAPM results.

22 Similarly, in the 2023 Columbia Water rate case order, the Commission
23 states:²⁰

¹⁸ PAWC Statement No. 13-R, pp. 14-16, line 292 through line 313.

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

²⁰ *Pa. PUC v. Columbia Water Company*, Docket No. R-2023-3040258, p. 108 (Order Entered January 18, 2024).

1 Based upon our informed judgment, which includes
2 consideration of *a variety of factors* (emphasis added) such as
3 increasing inflation leading to increases in interest rates and
4 capital costs, we determine that an ROE of 9.75% is reasonable
5 and appropriate for Columbia.

6 Like in the 2021 Aqua base rate case, in the Columbia Water proceeding, the
7 Commission relied on *various other factors* besides inflation leading to increases
8 in interest rates and capital costs for determining a range of reasonableness for the
9 ROE based on I&E's DCF and CAPM results. In both these cases, the
10 Commission concluded its decision to rely on the DCF and CAPM results in
11 determining a reasonable ROE was based on various factors, evidence, and
12 informed judgment specific to each case. It is important to note that in 2022 and
13 2024 when the Commission determined the ROE of 9.75% for Aqua PA and
14 Columbia Water, inflation and interest rates were quite high at that time compared
15 to current inflation and interest rates. Since September 18, 2024, the FOMC made
16 six interest rate cuts (total 1.75%) to date²¹ and the current inflation rate is
17 approximately 2.8%-3.0%.

18 Second, considering the current market conditions regarding interest rates
19 and capital costs, I agree that the Commission should continue to place weight on
20 the results of the CAPM in determining the authorized ROE for PAWC.

21 However, it is speculative to assume that the current inflation and interest rates
22 scenario will continue in the longer term. It is also important to note that the

²¹ <https://www.forbes.com/advisor/investing/fed-funds-rate-history/> (accessed on March 2, 2026).

Company's new rates will be effective during the FPFTY ending June 30, 2027, and will continue thereafter when the capital market conditions would be different.

Third, the 4.12% risk-free rate used in my CAPM analysis (which is based on the average of projected 10-year Treasury Notes yield of 4.10% for the five quarters Q1-2026 through Q1-2027 and 4.20% for the period 2027-2031)²² appropriately reflects the current and future expectation of interest rate environment when PAWC's new rates will remain effective.

Fourth, as discussed in my direct testimony, potential future reductions in interest rates would have the effect of reducing the interest rate risk for capital costs in 2026-2027, when PAWC's new rates will be in effect. Per the most recent monthly Blue Chip Financial Forecasts (February 27, 2026),²³ the inflation rates by two measures are forecasted to be in the range of 2.2% to 3.0% as shown in the table below:

	Q1 2026	Q2 2026	Q3 2026	Q4 2026	Q1 2027	Q2 2027
Consumer Price Index	2.8%	2.7%	2.6%	2.5%	2.5%	2.3%
PCE Price Index	3.0%	2.6%	2.5%	2.4%	2.4%	2.2%

Considering the inflation rates and other economic factors, it is still likely that the Federal Reserve will consider additional interest rate cuts in 2026 and 2027. In light of the above discussion, Ms. Bulkley's conclusion that the interest rates are

²² PAWC Exhibit No. 2, Schedule 10.

²³ Blue Chip Financial Forecasts Vol. 45, No. 3, February 27, 2026, p. 2.

1 expected to remain high and potentially increase in the future is speculative and
2 unsupported.

3
4 **Q. DOES MS. BULKLEY'S POSITION REGARDING CAPITAL MARKET**
5 **CONDITIONS IGNORE FACTS THAT DIFFERENTIATE PAWC FROM**
6 **COMPANIES THAT ARE NOT REGULATED UTILITIES?**

7 A. Yes. Notably, unlike companies in unregulated industries, public utilities, such as
8 PAWC, are in a unique position to recover their entire cost of doing business by
9 filing rate cases as required and PAWC has filed four base rate cases since April
10 2020 including this case.²⁴ This includes addressing revenue shortfalls due to
11 increased expenses and costs resulting from unforeseen circumstances, including
12 interest rates and inflation and the consequent increase in capital costs. PAWC
13 will be shielded from any volatile market conditions in ways that unregulated
14 entities are not regarding inflation and higher interest rates. I&E is not disputing
15 the FPFTY claimed long-term debt cost rates as presented above.

²⁴ I&E Statement No. 2, p. 43, lines 8-12.

1 **PROXY GROUP**

2 **Q. SUMMARIZE MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING**
3 **YOUR PROXY GROUP.**

4 A. Ms. Bulkley notes that my proxy group consists of four water-only companies²⁵
5 and agrees with my exclusion of American Water Company and Essential
6 Utilities as they are currently involved in a merger transaction.²⁶ However, she
7 disagrees with my exclusion of natural gas distribution companies in my proxy
8 group due to there being few water utilities as a result of consolidation in the water
9 industry and two water companies are recently engaged in a merger transaction.²⁷
10 She opines that there are significant similarities between the business and
11 operating risks of the water and natural gas distribution utilities included in her
12 proxy group.²⁸ She references Value Line’s stock market performance related to
13 risk measures of water and gas utilities and opines that based on safety and
14 timelines rankings and beta coefficients, water and gas utilities have comparable
15 risk profiles.²⁹ She points to an irrelevant comparison of a lesser number of
16 analysts contributing to S&P’s EPS growth projections for water utilities as
17 compared to gas utilities.³⁰ Additionally, she states that three other state public
18 utility commissions have considered the results of a proxy group that includes

²⁵ PAWC Statement No. 13-R, p. 18, lines 346-348.

²⁶ PAWC Statement No. 13-R, p. 18, line 351 through p. 19, line 373.

²⁷ PAWC Statement No. 13-R, p. 20, lines 387-389.

²⁸ PAWC Statement No. 13-R, p. 21, lines 400-402.

²⁹ PAWC Statement No. 13-R, p. 21, line 416 through p. 22, line 423.

³⁰ PAWC Statement No. 13-R, p. 22, line 436 through p. 23, line 446.

1 natural gas companies when determining the authorized ROE for water and
2 wastewater utilities.³¹ Finally, based on the similarities in the expected
3 performance and volatility of the stocks, their historical betas, and analyst
4 coverage, she opines that the risks and operations of the businesses are similar and
5 it is appropriate to include the natural gas companies in the proxy group for
6 PAWC.³²

7
8 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY'S REBUTTAL**
9 **TESTIMONY REGARDING YOUR EXCLUSION OF NATURAL GAS**
10 **DISTRIBUTION COMPANIES IN YOUR PROXY GROUP?**

11 A. I generally agree that it is advantageous to have a greater number of companies in
12 a proxy group; however, I reject the notion that skewing the analysis by including
13 companies that are demonstrably dissimilar, simply in favor of having a larger
14 group, produces a valid analysis. Instead, it is more appropriate to include fewer
15 companies that are more like the subject company, because it will produce a more
16 valid result. Specifically, as explained in my direct testimony, water companies
17 face different degrees of operational, health, hazardous risks, and weather-related
18 risks and uncertainties in addition to different environmental regulations than
19 natural gas distribution companies. Water companies also have a more captive
20 customer base than natural gas companies as customers cannot eliminate the need

³¹ PAWC Statement No. 13-R, p. 24, lines 461-465.

³² PAWC Statement No. 13-R, p. 25, lines 468-474.

1 for water whereas gas is not a necessity and can be replaced with other fuel
2 sources. Additionally, water companies remain vertically integrated wherein the
3 company generates and distributes the commodity, so there is no opportunity for
4 customers to shop competitively for the commodity as there is with gas shopping.
5 All these differences, among others as discussed in my direct testimony,³³ make
6 gas utilities dissimilar enough from water companies to properly be excluded from
7 a water proxy group. Lastly, Ms. Bulkley's belief that the regulated gas utilities
8 used in her analyses all possess risk profiles and operating and financial risk
9 characteristics that are substantially comparable to PAWC is incorrect and
10 unsupported. Therefore, including natural gas distribution companies in the proxy
11 group for PAWC dilutes the integrity of the water and wastewater utility analysis.
12 Companies within the water industry are similarly situated utilities and have a
13 much better representation of the financial and operational risks faced by PAWC.
14 Therefore, the companies used in my water utility proxy group provide a fair and
15 appropriate representation of the regulated water industry.

³³ I&E Statement No. 2, p. 15, line 8 through p. 16, line 16.

1 **Q. ARE THERE ANY RECENT COMMISSION DECISIONS THAT**
2 **SUPPORT YOUR RECOMMENDATION TO DISALLOW GAS**
3 **UTILITIES IN A WATER UTILITY PROXY GROUP?**

4 A. Yes. In the most recent 2025 Columbia Gas of Pennsylvania, Inc. (Columbia) rate
5 case order,³⁴ the Commission adopted the ALJs' recommendation to utilize I&E's
6 Natural Gas Utility proxy group and rejected Columbia's Combined Utility Group
7 (Gas and Electric) and Non-regulated Company Group in setting the appropriate
8 rate of return for Columbia.

9
10 **Q. DO YOU HAVE ANY CHANGES TO YOUR PROXY GROUP IN**
11 **RESPONSE TO MS. BULKLEY'S REBUTTAL TESTIMONY?**

12 A. No. I continue to support the proxy group I used in my cost of equity analysis as
13 shown in my direct testimony.³⁵

14
15 **COST OF COMMON EQUITY**

16 **DISCOUNTED CASH FLOW**

17 **Q. SUMMARIZE MS. BULKLEY'S REBUTTAL TESTIMONY REGARDING**
18 **YOUR DCF ANALYSIS.**

19 A. First, Ms. Bulkley notes that my application of the DCF model is generally similar
20 to hers. However, she identifies differences and raises concerns with my DCF

³⁴ *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2025-3053499 (Order Entered December 9, 2025).
See generally Fair Rate of Return, Proxy Groups - Disposition, pp. 204 and 205.

³⁵ I&E Statement No. 2, p. 11, lines 2-3.

1 results. Ms. Bulkley notes the primary difference of proxy group companies used
2 in our analysis, which is already discussed above. Second, she raises issue with
3 using the spot prices and the 52-week average prices (as opposed to her use of 30-
4 day, 90-day, and 180-day average stock prices) for determining the average
5 dividend yield and my average growth rate (as opposed to her use of three
6 variations of minimum, average, and maximum growth rates) of proxy group
7 utilities.³⁶ Third, she presents a modified I&E DCF result using her selective
8 parameters of the data for dividend yields and growth rate range and applied these
9 to my proxy group and also to the combined water and gas utilities proxy group.
10 She then states that based on her modified analysis, my proxy group produces the
11 DCF cost of equity range of 9.56% to 10.72% and suggests that it is reasonable to
12 consider the range of results of the model considering the high and low growth
13 rates.³⁷ Similarly, applying her suggested data points to the combined water and
14 gas utilities proxy group result in the DCF cost of equity range of 9.90% to
15 11.43%.³⁸

³⁶ PAWC Statement No. 13-R, p. 25, line 478 through p. 26, line 507.

³⁷ PAWC Statement No. 13-R, p. 28, lines 534-535.

³⁸ PAWC Statement No. 13-R, p. 28, line 550 through p. 29, line 554 and PAWC Exhibit 13-A, Schedule 6.

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE DCF MODEL TO THE PROXY GROUP.

A. First, I disagree with Ms. Bulkley’s assertion that it is inappropriate to rely on the spot stock prices and 52-week average prices in developing an ROE estimate and her suggestion to consider the 30-day, 90-day, and 180-day average stock prices in my DCF analysis. My DCF analysis considers the spot price, the 52-week high and 52-week low price in calculating the spot dividend yield and average 52-week dividend yield as shown in the table below:³⁹

Dividend Yields of Four Company Proxy Group					
Company	American States Water Co.	California Water Service Group	H2O America (fka SJW Group)	Middlesex Water Co.	
Symbol	AWR	CWT	HTO	MSEX	
Dividend	2.10	1.25	1.75	1.46	
52-wk low	69.45	41.29	43.75	44.17	
52-wk high	82.94	51.63	57.17	67.09	
Spot Price	72.54	43.33	50.65	50.94	
Spot Div Yield	2.89%	2.88%	3.46%	2.87%	
52-wk Div Yield	2.76%	2.69%	3.47%	2.62%	
Average	2.83%	2.79%	3.46%	2.75%	
	Average				
Spot Div Yield	3.03%				
52-wk Div Yield	2.88%				
Average	2.96%				
Sources:	Barrons	January 6, 2026			
	Value Line	January 2, 2026			

³⁹ I&E Exhibit No. 2, Schedule 6.

1 The above calculation reflects the average current dividend yield based on the
2 current stock price and the historic average of the 52-week dividend yield of proxy
3 group companies, which largely satisfies Ms. Bulkley's suggestion for the DCF
4 analysis using a 30-day, 90-day, and 180-day average stock prices scenario.

5 Second, Ms. Bulkley's suggestion to calculate DCF using three variations of
6 minimum, average, and maximum growth rates rather than using the analysts'
7 consensus for average growth rate projection does not provide an additional
8 weight but simply inflates the DCF results. In fact, Ms. Bulkley and I used the
9 same sources (Value Line, S&P, and Zacks) for the forecasted earnings growth
10 projections in the DCF analysis. Third, I disagree with Ms. Bulkley's modified
11 DCF analysis results using her selective parameters of the data for dividend yields
12 and growth rate range applied to my proxy group and also to the combined water
13 and gas utilities proxy group. It appears that Ms. Bulkley tries to mischaracterize
14 my DCF analysis results to support her high-end range of DCF results.

15 Finally, it is important to note that the Commission has consistently relied
16 on I&E's DCF and CAPM methodologies and results in determining an
17 appropriate cost of equity in the most recent four cases.⁴⁰

⁴⁰ *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 **CAPITAL ASSET PRICING MODEL**

2 **Q. SUMMARIZE MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING**
3 **YOUR CAPM ANALYSIS.**

4 A. Ms. Bulkley’s major concern with my CAPM analysis is that I relied on traditional
5 CAPM and Kroll CAPM analysis results along with the DCF results in
6 recommending a fair and reasonable ROE for PAWC while in prior rate cases
7 including the 2023 PAWC rate case, I recommended an ROE solely relying on the
8 DCF results.⁴¹ She disagrees with my: (1) reliance on the projected 10-year
9 Treasury Note yield as the risk-free rate rather than 30-year Treasury Bond yield
10 she uses; (2) average market return used in my traditional CAPM analysis; and (3)
11 proxy group comprised of only water utilities, which is already discussed above.⁴²

12
13 **Q. EXPLAIN MS. BULKLEY’S CRITICISM REGARDING YOUR USE OF**
14 **THE 10-YEAR TREASURY NOTE YIELD TO DETERMINE THE RISK-**
15 **FREE RATE.**

16 A. First, Ms. Bulkley acknowledges the Commission’s decision to use the 10-year
17 Treasury Note yield as opposed to the 30-year Treasury Bond yield as the risk-free
18 rate in the CAPM model. However, she suggests that it is important to select the
19 term that most matches the useful life of the underlying investment and utility
20 companies represent long duration investment, and therefore, the 30-year Treasury

⁴¹ PAWC Statement No. 13-R, p. 30, lines 581-584.

⁴² PAWC Statement No. 13-R, p. 30, line 587 through p. 31, line 592.

Bond yield is the appropriate measure of the risk-free rate for purpose of CAPM analysis.⁴³

Q. DO YOU AGREE WITH MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING YOUR RISK-FREE RATE?

A. No. First, while rate base assets are long-lived, a utility may have the opportunity to refinance long-term debt at any point to capture favorable interest rates, which would reduce the financial risk associated with the corresponding assets. Second, it is more appropriate to utilize a risk-free rate that will be in effect during the investment period being considered, which in this case is the FPFTY or possibly the normalization period between base rate cases. As discussed above, PAWC has been consistently filing base rate cases at regular intervals (four rate cases filed) since 2020, so the return on investment changes with every new rate case. Although short-term Treasury Bills may align closer with the investment timeframe, they are very volatile. Finally, as Ms. Bulkley has acknowledged the Commission’s previous decisions, it is important to reiterate that the Commission has recently agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.⁴⁴

⁴³ PAWC Statement No. 16-R, p. 33, lines 619-631.

⁴⁴ *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, pp. 154 (Order entered May 16, 2022). *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. 225-226 and 234.

1 **Q. EXPLAIN MS. BULKLEY’S CRITICISM REGARDING YOUR**
2 **CALCULATION OF THE AVERAGE EXPECTED MARKET RETURN**
3 **FOR CAPM ANALYSIS.**

4 A. First, Ms. Bulkley points to the 2022 PAWC rate case when I&E was using the
5 average of two estimates of projected market return (using Value Line and S&P
6 500 market data) in the CAPM analysis, which she opines was reflecting the
7 investors’ expected return on equity over the forward-looking period.⁴⁵ Since
8 then, this method has evolved and in the 2023 PAWC rate proceeding, I&E
9 included the S&P 500 long-term historical average return on the market.⁴⁶ She
10 then disagrees with my average expected market return as a whole calculated
11 using the Value Line expected return and the S&P 500 historical market return and
12 opines that this average market return is not necessarily the expectation of the
13 future return on the market.⁴⁷ Finally, she concludes that my CAPM analysis does
14 not reflect a sufficient market risk premium for the projected interest rates that I
15 relied upon.⁴⁸

⁴⁵ PAWC Statement No. 13-R, p. 31, lines 600-603.

⁴⁶ PAWC Statement No. 13-R, p. 31, lines 604-606.

⁴⁷ PAWC Statement No. 13-R, p. 34, lines 649-650.

⁴⁸ PAWC Statement No. 13-R, p. 36, lines 693-695.

1 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S CRITICISM**
2 **REGARDING YOUR AVERAGE OVERALL MARKET RETURN AS A**
3 **WHOLE FORECASTED FOR THE TRADITIONAL CAPM ANALYSIS?**

4 A. I disagree with Ms. Bulkley that my CAPM analysis does not reflect a sufficient
5 market risk premium for the projected risk-free rate. My average projected market
6 return of 11.61% is calculated using the 10.88% Value Line expected market
7 return and the 12.35% S&P 500 historical average annual return (1926-2025).⁴⁹
8 The 100-year historical S&P 500 average annual market return is a very
9 reasonable data point to include when attempting to determine the projected
10 market return of the S&P 500 companies. Historic returns accurately represent
11 market volatility due to changes in the U.S. financial market, economic conditions,
12 political risk, external factors, etc. Therefore, using the Value Line forecasted
13 market return with the S&P 500’s actual return provides an appropriate and
14 reasonable estimation of expected *sustainable* market return for the investors. In
15 fact, the S&P 500 historic market return is higher than the Value Line forecasted
16 return by 1.47% (147 basis points), which drives a higher average market return
17 that is used in my CAPM analysis. If I rely solely on the Value Line forecasted
18 market return of 10.88% and remove the S&P 500 historic return of 12.35% in my
19 overall market return calculation, my CAPM results would be 9.39% as opposed
20 to my original CAPM result of 9.96%.

⁴⁹ I&E Exhibit No. 2, Schedule 11.

1 In the 2023 PAWC rate case proceeding, Ms. Bulkley did not specifically
2 raise her concern or dispute my calculation method of averaging the Value Line
3 expected market return and S&P 500 historic market return used in my CAPM
4 analysis.⁵⁰ It appears that Ms. Bulkley vaguely tries to invalidate my CAPM
5 analysis results in this proceeding to gain support for her CAPM results and her
6 recommended ROE of 10.95%.

7 Finally, the Commission has relied on I&E's CAPM methodology and
8 results in the most recent three base rate cases including the 2023 PAWC rate case
9 while determining the fair and reasonable ROE for utilities.⁵¹

10
11 **Q. DO YOU AGREE WITH MS. BULKLEY'S SUGGESTED S&P 500**
12 **MARKET RETURN OF 18.56% AND HER MODIFIED CAPM RESULTS**
13 **OF 12.39%?⁵²**

14 A. No. The S&P 500 forecasted market return of 18.56% is disproportionately higher
15 and an outlier as compared to the Value Line forecasted market return of 10.88%,
16 which is used in my CAPM analysis. As discussed above, the S&P 500 historic
17 average annual return of 12.35% is a reasonable indicator of a forward-looking
18 market return. Ms. Bulkley's calculated CAPM result of 12.39% translates to an

⁵⁰ R-2023-3043189 et al (PAWC) I&E Exhibit No. 2, Schedule 9.

⁵¹ *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.

⁵² PAWC Statement No. 13-R, p. 38, lines 724-731.

1 unreasonably higher ERP of 7.68% (12.39% Modified CAPM results - 4.71%
2 PAWC long-term debt cost rate). It appears Ms. Bulkley inflates my CAPM
3 results by including the S&P 500 forecasted market return to invalidate my CAPM
4 analysis results and to establish her CAPM analysis results as appropriate and
5 reasonable for determining the ROE for PAWC.

6 Finally, I disagree with Ms. Bulkley's random and unsystematic alternative
7 suggestion to use the average of I&E's CAPM methodology results presented in
8 the PAWC base rate cases (of 2023, 2026, and 2020-2022) to strike down or
9 invalidate my CAPM analysis results in this proceeding.⁵³ As financial conditions
10 have changed and Commission positions have guided I&E in updating its
11 methodology over the years, it is inappropriate to attempt to average methods used
12 in historic proceedings that are not aligned with current processes.

13
14 **KROLL CAPM**

15 **Q. EXPLAIN MS. BULKLEY'S CRITICISM REGARDING YOUR KROLL**
16 **CAPM ANALYSIS RESULTS.**

17 A. Ms. Bulkley claims that there is no information provided in schedules or work
18 papers as to how a 5.50% ERP was derived and used a 4.76% 20-year Treasury
19 bond yield as a risk-free rate.⁵⁴ She argues that the Kroll ERP is lower than the
20 historical average and concludes that Kroll CAPM estimate of the cost of equity is

⁵³ PAWC Statement No. 13-A, p. 39, lines 739-744.

⁵⁴ PAWC Statement No. 13-R, p. 37, lines 699-702.

understated.⁵⁵ Therefore, she recommends Kroll CAPM results should be ignored in the final determination of the cost of equity.⁵⁶

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S CRITICISM OF YOUR KROLL CAPM ANALYSIS?

A. I disagree with Ms. Bulkley’s claim that there is no information provided in schedules or work papers as to how the 5.50% ERP was derived and for the 4.76% risk-free rate. Kroll is a trusted and publicly available source that bases its recommended ERP on current and forecasted economic and financial market conditions. I did provide a cite referencing the Kroll article of September 3, 2025 that recommended the U.S. ERP be lowered from 5.50% to 5.00% when developing USD-denominated discount rates as of September 2, 2025, and thereafter, until further guidance is issued.⁵⁷ Additionally, the cited Kroll article and the spot yield on the 20-year Treasury Bond source (CNBC website) were provided in response to PAWC-I&E-I-1.⁵⁸ Kroll regularly reviews fluctuations in global economic and financial market conditions that may warrant changes to the ERP and accompanying risk-free rate recommendations. Most recently on January 30, 2026, Kroll reaffirmed the U.S. ERP of 5.00%.⁵⁹ The risk-free rate

⁵⁵ PAWC Statement No. 13-R, p. 37, lines 704-705.

⁵⁶ PAWC Statement No. 13-R, p. 37, lines 710-712.

⁵⁷ I&E Statement No. 2, p. 38, footnote 48. <https://edge.sitecorecloud.io/krollllc17bf0-kroll6fee-proda464-0e9b/media/Cost-of-Capital/kroll-cost-of-capital-updated-inputs-to-reflect-heightened-uncertainty-in-global-economy.pdf> (accessed on January 8, 2026).

⁵⁸ I&E Exhibit No. 2-SR, Schedule 1.

⁵⁹ <https://edge.sitecorecloud.io/krollllc17bf0-kroll6fee-proda464-0e9b/media/Cost-of-Capital/kroll-cost-of-capital-updates-jan26-executive-summary.pdf> (accessed on March 4, 2026).

1 and ERP are key inputs used to calculate the cost of equity capital in the context of
2 the CAPM, used to develop discount rates. Kroll recommends using the higher of
3 3.50% or spot 20-year Treasury yield as the proxy risk-free rate while using the
4 5.00% ERP in the CAPM analysis. Therefore, I used the 4.76% spot 20-year
5 Treasury yield (as of January 7, 2026) as the proxy risk-free rate with 5.50% ERP
6 in my Kroll CAPM analysis.⁶⁰

7 Ms. Bulkley's concern regarding the lower Kroll ERP is irrelevant because
8 my overall recommended ROE of 9.80% is more than double PAWC's claimed
9 long-term debt cost rate of 4.71%, which translates to an ERP 5.09%.

10
11 **Q. DO YOU HAVE AN UPDATE TO YOUR KROLL CAPM ANALYSIS**
12 **RESULTS?**

13 A. Yes. While compiling my rate of return workbook, by oversight I used a 5.50%
14 ERP rather than a 5.00% ERP in my Kroll CAPM cost of equity calculation,
15 which overstated my Kroll CAPM results of 9.05%, and consequently the
16 composite CAPM of 9.51% and the recommended ROE of 9.80%.⁶¹

17 I am correcting my Kroll CAPM results to use the correct 5.00% ERP but
18 keeping the same risk-free rate and beta factor as shown in the table below:

⁶⁰ I&E Exhibit No. 2, Schedule 13.

⁶¹ I&E Exhibit No. 2-SR, Schedule 2.

K	=	Rf	+	β (ERP)
8.66%	=	4.76%	+	0.78 (5.00%)

As a result of the above correction in Kroll CAPM results, my composite/average CAPM result is revised to 9.31% [(Traditional CAPM 9.96% + Kroll CAPM 8.66%) $\div$ 2] as opposed to 9.51%.⁶²

I&E UPDATED RECOMMENDATION

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDED ROE FOR PAWC BASED ON YOUR CORRECTION TO THE KROLL CAPM RESULTS?

A. Yes. Based upon my corrected Kroll CAPM analysis results and composite CAPM results as discussed above, I recommend an updated cost of common equity of 9.70% [(10.09% DCF + 9.31% Composite CAPM) $\div$ 2] as opposed to my original recommendation of 9.80% for PAWC's Water and Wastewater Operations.⁶³

⁶² I&E Exhibit No. 2-SR, Schedule 2

⁶³ I&E Exhibit No. 2-SR.

1 **Q. DO YOU AGREE WITH MS. BULKLEY’S MODIFICATION OF YOUR**
2 **DCF AND CAPM RESULTS?**

3 A. No. As discussed in the DCF and CAPM sections above, I disagree with Ms.
4 Bulkley’s modification of my cost of equity analysis results as well as her
5 recommendation to use the calculated average of those adjusted results to
6 determine an appropriate ROE for PAWC, which is summarized in the table
7 below:⁶⁴

Proxy Group	Water Companies Only	Combined Water and Gas Distribution Companies
Adjusted DCF	10.06%	10.72%
Adjusted CAPM	10.47%	10.35%
Average	10.26%	10.53%

8
9
10 **BUSINESS AND REGULATORY RISK**

11 **Q. DID MS. BULKLEY RESPOND TO YOUR BUSINESS RISK**
12 **ASSESSMENT FOR PAWC?**

13 A. No. Ms. Bulkley did not specifically respond to my discussion regarding PAWC’s
14 capital expenditures, credit rating risk, historic strong financial performance and
15 condition, PAWC and American Water Works’ (parent company) consistently
16 increased dividend payments, and the parent company’s future yearly growth rates

⁶⁴ PAWC Statement No. 13-R, p. 40, lines 750-754.

(CAGRs) target of 7% to 9% as well as long-term rate base growth of 8% to 9% (including acquisitions).⁶⁵

Q. DID MS. BULKLEY RESPOND TO YOUR REGULATORY RISK ASSESSMENT FOR PAWC?

A. Yes. Ms. Bulkley states that it is not reasonable or appropriate to consider the regulatory mechanisms of the utilities in Pennsylvania generally, or the regulatory mechanisms applicable to the Company specifically, on a stand-alone basis without reference to the relative risk of other comparable utilities. She opines that a majority of the operating subsidiaries of the proxy group have timely cost recovery through mechanisms such as forecasted test years, capital cost recovery, and non-volumetric rate design. Therefore, the distribution system improvement charge (DSIC) mechanism and FPFTY ratemaking in Pennsylvania does not lower PAWC's business and regulatory risk relative to the proxy group.⁶⁶

⁶⁵ I&E Statement No. 2, pp. 51-58.

⁶⁶ PAWC Statement No. 13-R, p. 81, line 1541 through p. 82, line 1555.

1 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S OPINION THAT THE**
2 **AVAILABLE REGULATORY MECHANISMS DO NOT LOWER PAWC’S**
3 **BUSINESS AND REGULATORY RISKS RELATIVE TO THE PROXY**
4 **GROUP?**

5 A. As discussed in my direct testimony,⁶⁷ the DSIC mechanism reduces regulatory
6 lag in capital cost recovery. In addition to the DSIC, Pennsylvania jurisdictional
7 utilities, including PAWC, have the advantage of FPFTY ratemaking, which
8 allows utilities to recover forecasted expenses and capital expenditure costs, and
9 anticipate future anomalous events. PAWC has regularly filed rate cases for
10 recovery of increasing costs, and four rate cases have been filed during the period
11 2020-2025, which reduces PAWC’s business and financial risks. Reviewing Ms.
12 Bulkley’s comparison of water companies’ regulatory cost recovery mechanisms
13 contained in her combined proxy group, I noticed that water companies in (1)
14 eight out of twelve state jurisdictions have a DSIC or similar mechanism; (2) six
15 out of twelve state jurisdictions have an FPFTY ratemaking mechanism; and (3)
16 four out of twelve state jurisdictions have non-volumetric rate design.⁶⁸ Ms.
17 Bulkley’s statement that a majority of the operating subsidiaries of the proxy
18 group have timely cost recovery through mechanisms such as forecasted test years,
19 capital cost recovery, and non-volumetric rate design is inaccurate in the context
20 of water companies. Ms. Bulkley acknowledges that there are several positive

⁶⁷ I&E Statement No. 2, p. 52, line 7 through p. 53, line 4.

⁶⁸ PAWC Statement No. 13-R, Schedule 13.

aspects of Pennsylvania regulation that render PAWC somewhat less risky than the proxy group as a whole.⁶⁹

FLOTATION COST

Q. SUMMARIZE MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING A FLOTATION COST ADJUSTMENT.

A. Ms. Bulkley is not recommending a specific flotation cost adjustment, however, she opines that flotation costs are legitimate costs for equity holders that are not recovered through the rate of return on equity derived from the DCF or CAPM analysis.⁷⁰ She asserts that similar to rate base investments, flotation costs are also part of the invested costs of the utility, and the need to reimburse shareholders for the lost returns associated with equity issuance costs has been recognized by the academic and financial communities.⁷¹

Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S REBUTTAL TESTIMONY REGARDING A FLOTATION COST ADJUSTMENT?

A. As discussed in my direct testimony,⁷² I reiterate that (1) the flotation costs of the parent company are accounted for and recovered as O&M expenses or amortized over a certain period in the books of the issuer company; (2) PAWC does not issue

⁶⁹ PAWC Statement No. 13, p. 47, lines 6-8.

⁷⁰ PAWC Statement No. 13-R, p. 82, lines 1564-1566.

⁷¹ PAWC Statement No. 13-R, p. 82, line 1566 through p. 83, line, 1569.

⁷² I&E Statement No. 2, p. 68, lines 7-13.

1 stocks to the general public in the capital market, and the parent company issues
2 stocks for a variety of reasons and uses, and they are not entirely issued and used
3 for the benefit of PAWC; and (3) there is no indication that PAWC's parent
4 company will issue new stocks during the FPFTY when the new rates will be
5 effective. Ms. Bulkley's claim for the potential flotation cost impact of 0.05% in
6 recommending an ROE of 10.95% for the FPFTY is improper and unsupported,
7 when the implied claim for such cost is based on the historical flotation cost of the
8 parent company, which could be characterized as retroactive cost recovery.

10 **MANAGEMENT PERFORMANCE**

11 **Q. SUMMARIZE THE COMPANY'S RESPONSE TO YOUR DISCUSSION** 12 **CONCERNING MANAGEMENT PERFORMANCE.**

13 A. First, Ms. Bulkley disagrees with my rejection of consideration of any additional
14 basis points for management performance in the cost of equity, and she points to
15 Dr. Chard's discussion on this topic. She states that I have not provided any
16 evidence that the compensation for investment risk to recover costs associated
17 with acquiring troubled water and wastewater systems is adequate. She opines
18 that the Commission may consider rate of return incentives to encourage the
19 acquisition of troubled water and wastewater systems. Lastly, she states that Dr.
20 Chard discusses how the superior performance that the Company delivered goes
21 well beyond the requirements of the Public Utility Code.

1 **Q. WHAT IS YOUR RESPONSE TO MS. BULKLEY’S REBUTTAL**
2 **TESTIMONY REGARDING MANAGEMENT PERFORMANCE?**

3 A. Further to my discussion in direct testimony,⁷³ the benefit of the return PAWC
4 earns on small system acquisitions per 66 Pa. C.S.A. § 1329 (Section 1329) is
5 significantly compounded when considering that the continually increasing rate
6 base is determined on a fair market value (FMV) basis, which is significantly
7 higher than the book value (net of depreciation) of the acquired system assets as of
8 the date of acquisition. A rate base amount determined at FMV rather than the
9 book value of the acquired system assets adequately compensates for the
10 investment risk of the acquiring company. Additionally, PAWC is expanding its
11 service area (adding to its customer count) and forever revenue stream and
12 strengthening its market monopoly and benefits from the combined (water and
13 wastewater) business synergy in the certificated service areas. As discussed in my
14 direct testimony, PAWC’s financial performance has improved year after year.
15 Ms. Bulkley did not reject my assertion that the Company is forcing existing
16 customers to fund the increase to rate base and PAWC is earning a larger return on
17 the inflated rate base amount due to the FMV-determined rate base addition of the
18 acquired system assets, however, she requires evidence as to the adequacy of the
19 compensation for investment risk. Per American Water Company’s investor
20 presentation on October 29, 2025, PAWC has closed five acquisitions, and seven

⁷³ I&E Statement No. 2, p. 80, line 4 through p. 81, line 7.

1 acquisitions are under agreement as of October 29, 2025, which would continue to
2 impact customers' rates in the future. It is expected that PAWC will continue
3 consistent acquisitions of small utilities under Section 1329 on an ongoing basis to
4 expand and consolidate its service territories at the cost of ratepayers.

5
6 **Q. SUMMARIZE DR. CHARD'S RESPONSE TO YOUR DISCUSSION OF**
7 **THE COMPANY'S MANAGEMENT PERFORMANCE.**

8 A. First, Dr. Chard refers to the provisions of 52 Pa. Code § 69.711 and 66 Pa. C.S.A.
9 § 523 (Section 523) and lists assistance provided to three troubled water systems⁷⁴
10 and elaborates on the types assistance rendered.⁷⁵ Second, she explains that in a
11 Section 1329 proceeding, the Commission establishes the amount that the
12 acquiring public utility can put into rate base in its next base rate case as a result of
13 the acquisition and the Company is simply recovering the ratemaking rate base
14 amount approved by the Commission never more than the Company's actual cost
15 to acquire, and a return on its investment in the acquired systems when those
16 systems are included in rate base.⁷⁶ Lastly, she disagrees with my assertion that
17 the Company's most recent Management and Operation Audit Report (October
18 2023 is inconsistent with superior management performance and states that the
19 Company entirely accepted twenty three of the audit recommendations and
20 partially accepted the remaining eight of the Management and Operation Audit

⁷⁴ PAWC Statement No. 2-R, p. 22, lines 3-20.

⁷⁵ PAWC Statement No. 2-R, p. 24, line 14 through p. 25, line 10.

⁷⁶ PAWC Statement No. 2-R, p. 25, line 20 through p. 26, line 2.

1 Report. Per the Company's most recent update, twenty-four of the thirty-one
2 implementation plan items are now complete, and the Company is continuing to
3 improve inventory turnover while also navigating supply chain constraints,
4 shortages, and limited material availability.⁷⁷

5
6 **Q. WHAT IS YOUR RESPONSE TO DR. CHARD REGARDING**
7 **MANAGEMENT PERFORMANCE?**

8 A. As discussed in greater detail in my direct testimony,⁷⁸ I maintain my position that
9 PAWC or any utility, should not be entitled to additional rewards for
10 implementing programs funded by ratepayers or for meeting the obligations of 66
11 Pa C.S.A. §1501 (Section 1501).

12 I am aware that under Section 523 the Commission shall consider a utility's
13 performance, however, it is not mandatory that the Commission grant additional
14 basis points to the ROE. Although I am not offering a legal position and I will
15 defer to counsel to address the legal aspect of it in briefing, I am advised by
16 counsel that the Commission's consideration is not limited to the listing of claims
17 made by PAWC but that it should also consider other factors including evidence
18 of PAWC's efficiency, effectiveness, and adequacy of service. Ultimately, for any
19 company, true management effectiveness is earning a higher return through
20 efficient use of resources and cost-cutting measures. The greater net income

⁷⁷ PAWC Statement No. 2-R, p. 26, lines 12-15.

⁷⁸ I&E Statement No. 2, p.72, line 6 through p. 81, line 7.

1 resulting from growth, cost savings, and true efficiency in management and
2 operations is available to be passed onto shareholders. PAWC should not be
3 granted additional basis points for doing what it is required to do under Section
4 1501 to provide adequate, efficient, safe, and reliable service.

5 As explained above, ratepayers are already paying PAWC a return on the
6 FMV-determined rate base associated with Section 1329 water and wastewater
7 acquisitions. Beyond that, in this proceeding PAWC is proposing to allocate (via
8 Act 11) approximately \$53 million of wastewater service costs to current water
9 customers, causing an unwarranted financial burden in subsidizing wastewater
10 service of others to facilitate PAWC's continued acquisition of water and
11 wastewater systems.

12 Finally, Dr. Chard states that Section 1329 establishes a voluntary fair
13 market valuation process that mitigates the risk that a utility will not be able to
14 fully recover its investment when water or wastewater assets are acquired from a
15 municipality or authority.⁷⁹ This implies that fair market valuation process
16 enables PAWC to recover fully the cost of investment for the acquired small
17 utilities, which reflects a disconnect of Section 1329 acquisitions and management
18 performance standard.

⁷⁹ PAWC Statement No. 2, p. 25, lines 18-20.

1 **Q. PLEASE CONTINUE.**

2 A. Section 523(b)(1) requires the Commission to review management effectiveness
3 and operating efficiency as measured by an audit pursuant to 66 Pa. C.S.A. § 516
4 (Section 516) as one of the management performance factors. As discussed in my
5 direct testimony, PAWC's most recent Management and Operations Audit Report
6 pursuant to Section 516 prepared by the Commission's Bureau of Audits, issued in
7 October 2023, identified, and recommended the need for improvements in several
8 functional areas relating to the operations and service improvements for
9 customers. PAWC accepted and implemented some of the recommendations,
10 however, some of the functional areas' improvements are pending or in the
11 process of implementation.

12 Finally, the Company's actions and initiatives to excel in its operating
13 performance are not a novel effort, but it is a normal business requirement to
14 provide adequate, efficient, safe, and reliable services to ratepayers as required
15 under Section 1501. In fact, with PAWC's efficient operating performance, all
16 stakeholders of the Company, including its shareholders, benefit because
17 management effectiveness leads to a higher return through efficient use of
18 resources and cost-cutting measures.

19 Considering the above discussion and increase in ratepayers' rate burden,
20 management performance or effectiveness should not be considered or recognized
21 in determining an appropriate and reasonable ROE for PAWC. I oppose awarding

PAWC's claimed ROE of 10.95% that includes/considers an unspecified or unquantified management performance additional basis point adjustment.

FAIR RATE OF RETURN

Q. DO YOU HAVE ANY COMMENTS REGARDING MS. BULKLEY'S UPDATED ANALYSIS RESULTS AND HER EMPHASIS ON PRIMARY FACTORS THAT SHOULD BE CONSIDERED IN DETERMINING A FAIR AND REASONABLE RATE OF RETURN?

A. Yes. In the cost of equity analysis, a proxy group is used to satisfy the very standard that seeks to provide the subject utility with the opportunity to earn a return similar to that of companies with corresponding risks and uncertainties. The criteria I used in developing my proxy group were specifically designed to identify a group of comparable water utilities that serves as a benchmark in determining a fair and reasonable cost of equity and overall rate of return.

Additionally, it is important to recognize another standard determined by the *Hope* and *Bluefield* cases when determining a fair rate of return that dictates a fair return can change (increase or decrease) along with economic conditions and capital markets. It is also equally important to consider the interests of ratepayers (rate affordability due to the consistent rate increase burden on ratepayers) with investors' interest in determining a fair and reasonable rate of return. Therefore, while my updated 9.70% ROE recommendation may not be as high as

Ms. Bulkley would like (i.e., a 10.95% ROE), it is a fair return when considering the current market conditions and expectations through the FPPTY.

I&E UPDATED OVERALL RATE OF RETURN RECOMMENDATION

Q. WHAT IS I&E'S UPDATED RECOMMENDATION FOR THE COST OF EQUITY AND OVERALL RATES OF RETURN?

I recommend the following rates of return for the Company's Water and Wastewater Operations:

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS			
Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	44.99%	4.71%	2.12%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>55.00%</u>	9.70%	<u>5.34%</u>
Total	<u>100.00%</u>		<u>7.46%</u>

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS Summary of Cost of Capital			
Type of Capital	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	41.59%	4.71%	1.96%
Wastewater Specific Debt	6.88%	2.20%	0.15%
Preferred Stock	0.01%	9.71%	0.00%
Common Equity	<u>51.52%</u>	9.70%	<u>5.00%</u>
Total	<u>100.00%</u>		<u>7.11%</u>

RESPONSE TO OCA WITNESS GARRETT'S REBUTTAL TESTIMONY

Q. SUMMARIZE OCA WITNESS GARRETT'S RESPONSE IN REBUTTAL TESTIMONY.

A. Mr. Garrett takes issue with my recommended 9.80% ROE for PAWC.⁸⁰ He disputes my growth rate of 7.13% used in the DCF analysis⁸¹ and takes issue with my composite CAPM results of 9.51% and the equity risk premium (ERP) used in my Kroll CAPM analysis results.⁸²

⁸⁰ OCA Statement No. 2R, p. 2, lines 3-7.

⁸¹ OCA Statement No. 2R, p. 3, lines 3-4 and 9-10.

⁸² OCA Statement No. 2R, p. 4, line 11 through p. 5, line 22.

1 **Q. WHAT IS MR. GARRETT’S GENERAL COMMENT REGARDING YOUR**
2 **RECOMMENDED ROE OF 9.80%?**

3 A. Mr. Garrett characterizes my ROE of 9.80% as significantly higher by 110 basis
4 points than his recommended 8.70% ROE for PAWC and states that this
5 difference in ROE impacts heavily PAWC’s revenue requirement calculation.⁸³
6

7 **Q. WHAT IS YOUR RESPONSE TO MR. GARRETT’S CRITICISM?**

8 A. I agree that my recommended ROE is higher than Mr. Garrett’s ROE, however, it
9 is important to note that we use different data points and methods in the cost of
10 equity analysis, which produces different results.
11

12 **Q. SUMMARIZE MR. GARRETT’S CRITICISMS REGARDING THE**
13 **GROWTH RATE USED IN YOUR DCF ANALYSIS.**

14 A. First, Mr. Garrett states that he considered long-term annual U.S. Gross Domestic
15 Product (GDP) growth projections as a cap on the long-term growth rate of each
16 individual company in his proxy group because no domestic company can achieve
17 annual earnings and/or dividend growth at a rate that exceeds the U.S. GDP
18 growth rate of the aggregate economy over the long-run.⁸⁴ He states that he
19 incorporated the short-term dividend growth rate projections published by Value
20 Line and presented this “analyst growth” variation in his DCF Model.

⁸³ OCA Statement No. 2R, p. 2, lines 6-9.

⁸⁴ OCA Statement No. 2R, p. 2, lines 8-13.

1 Additionally, he states that despite its shortcomings, it is often presented in rate
2 proceedings and considered by regulators. The result of his sustainable growth
3 DCF Model indicates a cost of equity of 6.80% and the result of his analyst-
4 growth based DCF Model indicates a cost of equity of 9.30%. The average result
5 of his two DCF Models is 8.00%.⁸⁵

6 Second, Mr. Garrett opines that my DCF analysis produced a much higher
7 results because I used an unsustainably high growth rate of 7.13% in contrast to
8 his use of an analyst growth rate of 6.20% and a sustainable growth rate (U.S.
9 GDP Growth Rate) of 3.70% in his DCF analysis.⁸⁶

10 Finally, Mr. Garrett states that this growth rate suggests the proxy group, on
11 average, can achieve dividend (and/or earnings) growth at a rate nearly two times
12 projected annual GDP growth every year in perpetuity.⁸⁷

13
14 **Q. HOW DO YOU RESPOND TO MR. GARRETT’S CRITICISMS**
15 **REGARDING THE GROWTH RATE USED IN YOUR DCF ANALYSIS?**

16 A. First, it should be noted, in the context of recommending an appropriate ROE and
17 overall rate of return, I&E’s role is to perform an unbiased analysis using current
18 and reputable sources. In determining an appropriate growth rate for my constant
19 growth DCF analysis, I relied upon the forecasted earnings growth estimates from

⁸⁵ OCA Statement No. 2R, p. 2, lines 18-24.

⁸⁶ OCA Statement No. 2R, p. 3, lines 2-7.

⁸⁷ OCA Statement No. 2R, p. 3, lines 10-12.

1 Value Line, S&P, and Zacks.⁸⁸ These sources are trusted and used industry-wide,
2 including by most companies, advocates, and I&E witnesses who submit rate of
3 return testimony. Mr. Garrett, Ms. Bulkley, and I all utilize these independent
4 analysts' sources for calculating an average growth rate in our respective DCF
5 analyses.

6 The growth estimates I use from the sources listed above are five-year
7 growth forecasts, which are not short-term. The five-year growth estimates are
8 reasonable as they cover the time period of the FPFTY and rate case filing
9 frequency of many utilities. It is inappropriate and speculative to compare and set
10 an upper limit for a utility's growth rate with the U.S. economy nominal long-term
11 GDP growth forecast of 3.70%. Mr. Garrett himself used an analyst forecasted
12 average growth rate of 6.20% for his proxy group utilities in his constant growth
13 DCF analysis, which is higher than his suggested upper limit based on the GDP
14 growth forecast of 3.70% for the water utilities' growth rate, which resulted in his
15 DCF result of 9.30% for his proxy group. It is speculative to assume or conclude
16 that utilities could not achieve an earnings growth rate higher than the U.S. GDP
17 growth rate. It is important to note that share prices of utilities rely on projected
18 earnings growth rates and not the nominal GDP growth rate threshold of 3.70%
19 assumed by Mr. Garrett. Generally, investors assume that the companies in which

⁸⁸ I&E Exhibit No. 2, Schedule 5.

1 they propose to make an investment would grow at a rate higher than the GDP
2 growth rate and expect appreciation in share price.

3 Second, the Commission has repeatedly confirmed I&E's constant growth
4 DCF methodology for determining a fair return on common equity in recent base
5 rate proceedings, where the Commission agreed with the ALJ's recommendation
6 to use I&E's cost of equity methodology, which included using analysts forecasted
7 five-year earnings growth estimates in the DCF analysis.⁸⁹
8

9 **Q. SUMMARIZE MR. GARRETT'S SUGGESTION TO USE THE DIVIDEND**
10 **GROWTH RATE RATHER THAN AN EARNINGS GROWTH RATE IN**
11 **YOUR DCF ANALYSIS.**

12 A. Mr. Garrett asserts that it is reasonable to consider a dividend growth rate rather
13 than an earnings growth rate when employing the DCF Model because the
14 ultimate form of "cash flow" in the DCF Model is dividends. He recommends that
15 if the Commission is inclined to give weight to the DCF Model that uses analysts'
16 short-term growth rate projections as the long-term growth rate input to the model,

⁸⁹ *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 it should give more consideration to the dividend growth rate projections of the
2 proxy group rather than the earnings growth rate projections I used.⁹⁰

3
4 **Q. WHAT IS YOUR RESPONSE TO MR. GARRETT'S SUGGESTION TO**
5 **USE THE DIVIDEND GROWTH RATE RATHER THAN ANALYSTS'**
6 **FORECASTED EARNINGS GROWTH RATE IN THE DCF ANALYSIS?**

7 A. In my DCF analysis, I used Value Line projected dividends to calculate a dividend
8 yield of the proxy group utilities. I agree that the DCF model relies on free cash
9 flow, but the cash flow is available to all capital holders, and it grows with the
10 growth in the company's earnings. A company's growth rate is usually measured
11 based on forecasts of earnings per share, dividend per share, and/or book value per
12 share and the use of a particular growth rate is subjective.⁹¹ The growth factor
13 expresses the growth of the price of the stock and dividend (or dividend yield)
14 expected by investors.⁹² As discussed above, the Commission has repeatedly
15 confirmed I&E's constant growth DCF methodology, which uses an analysts'
16 forecasted earnings growth rate and dividend yield for determining a fair return on
17 common equity in several base rate proceedings.

⁹⁰ OCA Statement No. 2R, p. 4, lines 1-10.

⁹¹ A Guide to Utility Ratemaking - James Cawley and Norman J. Kennard, 2018 Edition, p. 131.

⁹² A Guide to Utility Ratemaking - James Cawley and Norman J. Kennard, 2018 Edition, p. 131.

1 **Q. SUMMARIZE MR. GARRETT’S COMMENT ON YOUR CAPM**
2 **INCLUDING KROLL’S CAPM RESULTS.**

3 A. Mr. Garrett states that his CAPM indicates a cost of equity of 8.70% for PAWC,
4 which is less than my composite CAPM cost of equity result of 9.51%.⁹³ He then
5 states that Kroll has published an ERP estimate of 5.00% rather than 5.50% in
6 September 2025, which is reaffirmed in January 2026.⁹⁴ Relying on a 5.00% ERP,
7 he indicates that my Kroll CAPM results would be 8.60%, which would be
8 substantially similar to his recommended ROE of 8.70%.⁹⁵ Additionally, he states
9 that an ERP estimate that relies on stock market data as old as 1926 is not nearly
10 as accurate as Kroll’s current ERP estimate and there is abundant research
11 showing that the current and forward-looking ERP is lower than one that is
12 determined strictly from historical calculations. Therefore, he opines that my
13 updated Kroll CAPM (with an ERP of 5.00%) would produce the most reasonable
14 result.⁹⁶

⁹³ OCA Statement No. 2R, p. 4, lines 13-14.

⁹⁴ OCA Statement No. 2R, p. 5, lines 3-4.

⁹⁵ OCA Statement No. 2R, p. 5, lines 7-13.

⁹⁶ OCA Statement No. 2R, p. 5, lines 16-22.

1 **Q. WHAT IS YOUR RESPONSE TO MR. GARRETT'S COMMENT**
2 **REGARDING THE KROLL ERP OF 5.00% THAT SHOULD HAVE BEEN**
3 **USED IN YOUR KROLL CAPM ANALYSIS?**

4 A. As discussed above, I am correcting my typographical error in the ERP rate,
5 changing it from 5.50% to 5.00% as applied in the calculation of my Kroll CAPM
6 results. Using the corrected ERP rate of 5.00% and keeping the same risk-free rate
7 and beta factor, my updated Kroll CAPM result is 8.66% rather than 9.05% and
8 the composite (average) CAPM result is 9.31% rather than 9.51%.⁹⁷

9 As discussed above, I&E has been consistently using the overall market
10 return based on the average of the S&P 500 historical equity return (in this case
11 1926-2025 period) and Value Line's forecasted dividend yields and price
12 appreciation potential on its universe of stocks in the traditional CAPM analysis.⁹⁸
13 Using these data points produces an accurate forward-looking estimate for the
14 traditional CAPM forecasted market return as a whole, normalizing both historical
15 negative returns and overly excessive returns due to volatile economic conditions.

16
17 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

18 A. Yes.

⁹⁷ I&E Exhibit No. 2-SR, Schedule 2.

⁹⁸ I&E Exhibit No. 2, Schedule 11.

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

**Docket No. R-2025-3057983 (Water)
and
Docket No. R-2025-3058051 (Wastewater)**

Exhibit to Accompany

the

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

**Pennsylvania Public Utility Commission v.
Pennsylvania-American Water Company
Docket Nos. R-2025-3057983 (Water) and R-2025-3058051 (Wastewater)**

**Responses of the Bureau of Investigation and Enforcement to the
Interrogatories of Pennsylvania-American Water Company – Set I
Witness: D. C. Patel**

PAWC-I&E-I-1 Refer to I&E Statement No. 2. Please provide all cited sources referenced in Mr. Patel’s Direct Testimony.

Response Most of the cited sources of Mr. Patel’s direct testimony are public information available at the Pennsylvania Public Utility Commission’s (Commission) website or other specific website links, which are provided in the footnotes. For data sources used or relied upon in the exhibit (I&E Exhibit No. 2, Schedules 1-18), please refer to I&E Response to PAWC-I&E-I-1 - Patel - Attachment A.

Regarding the footnote cites related to the published book and article reference pages, please refer to I&E Response to PAWC-I&E-I-1 - Patel - Attachment B. Due to the size of these documents, only the pages upon which Mr. Patel relied have been provided. The full documents are available upon request.



September 3, 2025

Kroll Cost of Capital Inputs Updated to Reflect a De-Escalation of Trade Tensions and Economic Support from Monetary and Fiscal Policies

Executive Summary

Kroll regularly reviews fluctuations in global economic and financial market conditions that may warrant changes to our equity risk premium (ERP) and accompanying risk-free rate recommendations. The risk-free rate and ERP are key inputs used to calculate the cost of equity capital in the context of the Capital Asset Pricing Model (CAPM) and other models used to develop discount rates. We also update country risk data on a quarterly basis for 175+ countries using various models.

On April 15, 2025, we raised our ERP recommendations for the U.S. and Eurozone to reflect the heightened uncertainty for the global economy and financial markets, following the rapid rise in trade conflicts between the U.S. and its trading partners. Since then, the likelihood of a full-scale global trade war has notably diminished, as several bi-lateral trade agreements have been negotiated or advanced through final stages. While trade tensions remain, clearer agreement frameworks are now enabling businesses to begin assessing the impact of tariffs and adapt their operations accordingly.

Meanwhile, key economies are deploying monetary and fiscal policy tools to stimulate investment and economic activity, which may help mitigate the impact of tariffs. In recent months, certain major central banks (e.g., Bank of England, European Central Bank, Swiss National Bank, Reserve Bank of Australia) have continued to lower their policy interest rates to support their economies. In the U.S., the Federal Reserve has recently suggested it may resume lowering interest rates as early as its September meeting.

Several countries have also approved or announced fiscal spending plans to support investments in various areas (targeting for example, manufacturing, energy, defense, and infrastructure), partly intended to counterbalance tariff pressures. In the U.S., this includes the enactment of the One Big Beautiful Bill Act (OBBBA), which is expected to provide a short-term boost to economic growth and create a positive environment for M&A and IPO activity.

These developments, coupled with massive business investments in artificial intelligence (AI), data centers and related technology, have contributed to record highs in stock markets across the U.S. and elsewhere.

Based on recent economic indicators and financial market conditions, the Kroll Recommended U.S. ERP is lowered from 5.5% to 5.0% when developing USD-denominated discount rates as of September 2, 2025, and thereafter, until further guidance is issued. This is matched with the higher of a U.S. normalized risk-free rate of 3.5% or the spot 20-year U.S. Treasury yield as of the valuation date.

The Kroll Recommended Eurozone ERP remains in the range of 5.5% to 6.0% when developing EUR-denominated discount rates as of September 2, 2025, and thereafter, until further guidance is issued. However, we now believe that an ERP towards the lower end of the range (i.e., closer to a 5.5% ERP) is likely more appropriate. This is matched with the higher of a German normalized risk-free rate of 2.5% or the spot 15-year German government bond yield as of the valuation date.

Incremental country risk adjustments for other Eurozone countries with a sovereign debt rating below AAA may be appropriate. Please note that this information does not supersede Germany's IDW (Institut der Wirtschaftsprüfer) guidance for projects that will be reviewed by German auditors or regulators.

We will continue to monitor economic and geopolitical events that may change our guidance in the coming months.

A more detailed alert describing the factors supporting our latest guidance is forthcoming and will be posted on the Kroll Cost of Capital Resource Center.

Please contact our support team with any questions: costofcapital.support@kroll.com.

Kroll Cost of Capital Inputs

Data as of September 02, 2025

	U.S. (in USD)	Eurozone ** (in EUR)	U.K. †† (in GBP)	Canada †† (in CAD)	Australia †† (in AUD)
Normalized Risk-Free Rate	Higher of 3.5% or Spot*	Higher of 2.5% or Spot†	Higher of 4.0% or Spot‡	Higher of 3.5% or Spot§	Higher of 3.5% or Spot#
Kroll Recommended Equity Risk Premium	5.0% *	5.5% to 6.0%†	n/a	n/a	n/a

* We recommend using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our U.S. normalized risk-free rate of 3.5%. This guidance is effective when developing USD-denominated discount rates as of June 16, 2022, and thereafter. Based on current economic indicators and financial market conditions, the Kroll Recommended U.S. ERP is 5.0% when developing USD-denominated discount rates as of September 02, 2025, and thereafter.

† We recommend using the spot 15-year German government bond yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our German normalized risk-free rate of 2.5%. This guidance is effective when developing EUR-denominated discount rates as of March 31, 2024, and thereafter. Based on current economic and financial market conditions, the Kroll Recommended Eurozone ERP remains in the range of 5.5% to 6.0%, and we believe that an ERP towards the lower end of the range (i.e., closer to 5.5%) is likely more appropriate when developing EUR-denominated discount rates as of September 02, 2025, and thereafter.

‡ We recommend using the spot 20-year U.K. Gilt yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our U.K. normalized risk-free rate of 4.0%. This guidance is effective when developing GBP-denominated discount rates as of October 18, 2022, and thereafter.

§ We recommend using the spot Government of Canada Benchmark Long-Term Bond yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our Canada normalized risk-free rate of 3.5%. This guidance is effective when developing CAD-denominated discount rates as of October 18, 2022, and thereafter.

We recommend using the spot 10-year Australia Commonwealth Government bond yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our Australia normalized risk-free rate of 3.5%. This guidance is effective when developing AUD-denominated discount rates as of October 31, 2022, and thereafter.

** German normalized risk-free rate and Eurozone equity risk premium (ERP) for use in EUR-denominated discount rates from a German investor perspective. Additional country risk adjustments may be warranted when estimating discount rates for other countries in the Eurozone.

†† Although currently we do not have an official Kroll Recommended ERP for the U.K., Canada and Australia, historical and other forward-looking ERP information for these countries is available in the International Cost of Capital Inputs dataset within the Cost of Capital Navigator.

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U.S. 20 Year Treasury

US20Y:Tradeweb



☐ LIVESTREAM **Squawk Box**

RT Quote | Exchange
Yield | 8:55 AM EST

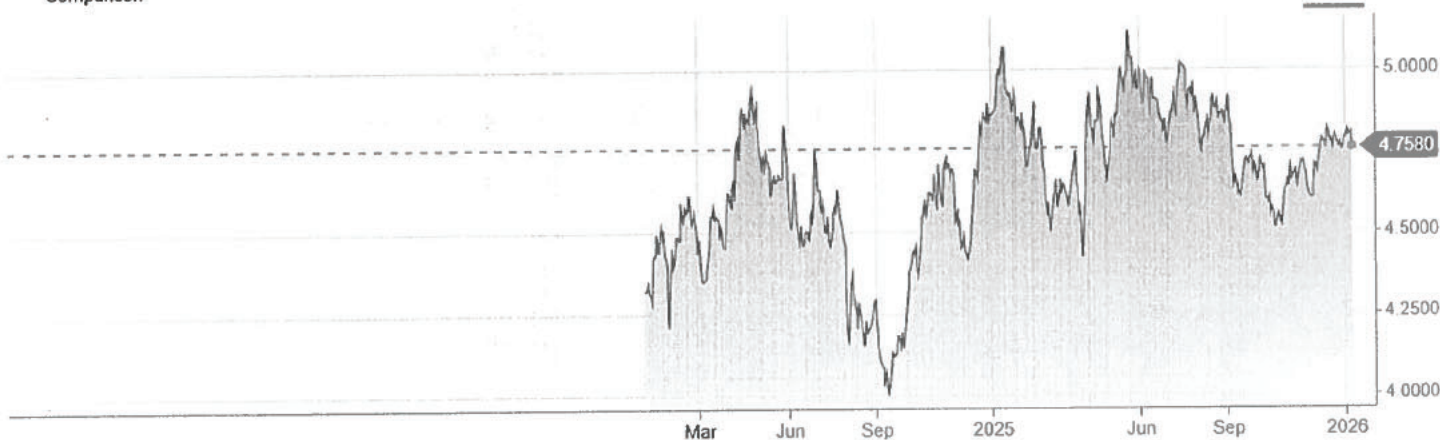
4.761% ▼ -0.047

1D 5D 1M 3M 6M YTD 1Y 5Y ALL



Comparison

1D ▾ Display ▾ Studies ▾ ▾



Yield Open	4.804%	Price	98.2656
Yield Day High	4.804%	Price Change	+0.5938
Yield Day Low	4.751%	Price Change %	+0.6079%
Yield Prev Close	4.808%	Price Prev Close	97.6719

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



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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

$$\text{Re} = \text{Rf} + \text{Be}(\text{Rm} - \text{Rf})$$

Rf	=	4.12
Rm	=	11.61
Be	=	0.78
Re	=	<u>9.96</u> (A)

Sources: Value Line January 2, 2026
Blue Chip December 1, 2025
December 30, 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

$$\text{Re} = \text{Rf} + \text{Be}(\text{ERP})$$

			Updated
Rf	=	4.76	4.76
ERP	=	5.50	5.00 corrected
Be	=	0.78	0.78
Re	=	<u>9.05</u> (B)	<u>8.66</u>

Sources: CNBC January 7, 2026
Kroll ERP September 3, 2025

Average CAPM Result	<u>9.51</u>	<u>9.31</u>
((A + B) / 2)		

ROE Recommendation	
DCF	10.09
Comp CAPM	9.51
Average	<u>9.80</u>

Updated ROE Recommendation	
DCF	10.09
Comp CAPM	9.31
Average	<u>9.70</u>

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

and

Docket No. R -2025-3058051 (Wastewater)

Surrebuttal Testimony

of

Esyan A. Sakaya

Bureau of Investigation and Enforcement

Concerning:

**FPFTY Reporting Requirements
Customer Charges and Usage Rates
Water Rate Design
Scale Back of Rates**

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WATER OPERATIONS RATE SCALE BACK	13

1 **INTRODUCTION**

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

3 A. My name is Esysan A. Sakaya, and my business address is 400 North Street,
4 Harrisburg, PA 17120.

5

6 **Q. ARE YOU THE SAME ESYAN A. SAKAYA RESPONSIBLE FOR THE**
7 **DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 3 AND**
8 **I&E EXHIBIT NO. 3?**

9 A. Yes.

10

11 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

12 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony
13 of Pennsylvania-American Water Company (PAWC or Company) witnesses
14 Jared Deason¹ and Max McClellan.² I will also address the rebuttal testimony of
15 Cleveland-Cliffs Steel (Cleveland-Cliffs) witness Richard Baudino³ and the
16 rebuttal testimony of Office of Consumer Advocate (OCA) witness Jerome
17 Mierzwa.⁴

¹ PAWC Statement No. 5-R.

² PAWC Statement No. 10-R.

³ Cleveland-Cliffs Statement No. R-1.

⁴ OCA Statement No. 3R.

1 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

2 A. No. However, I will refer to I&E Exhibit No. 3, which was the exhibit
3 accompanying my direct testimony.
4

5 **FULLY PROJECTED FUTURE TEST YEAR (FPFTY) REPORTING**

6 **REQUIREMENTS**

7 **Q. WHAT DID YOU RECOMMEND REGARDING PLANT ADDITIONS**
8 **THAT PAWC PROJECTS TO BE IN SERVICE DURING THE FPFTY?**

9 A. I recommended that the Company provide I&E and OCA with updates to
10 PAWC Exhibit 3-A, pp. 27 and 95, Summary of Detailed Plant Accounts for
11 each separate revenue requirement no later than December 1, 2027, under this
12 docket number. I stated that PAWC's updates should include actual plant
13 additions and retirements for the twelve months ending June 30, 2026, and for
14 the twelve months ending June 30, 2027.⁵
15

16 **Q. DID THE COMPANY RESPOND TO YOUR FPFTY REPORTING**
17 **RECOMMENDATION?**

18 A. Yes. PAWC witness Deason accepted my reporting requirement
19 recommendation and indicates that PAWC will provide the Commission with

⁵ I&E Statement No. 3, p. 3.

1 timely and appropriate information regarding projected investments in utility
2 plant during the FPFTY.⁶

3
4 **CUSTOMER CHARGES**

5 **Q. WHAT CUSTOMER CHARGES DID YOU RECOMMEND FOR**
6 **CUSTOMERS IN RATE ZONES 1 THROUGH 6 AND RATE ZONE 9,**
7 **AND WHAT CHANGES DID YOU RECOMMEND FOR RATE ZONES 7**
8 **AND 8?**

9 A. I accepted the Company's proposed customer charges in Rate Zones 1 through 6
10 and Rate Zone 9.⁷ However, I recommended changing the proposed customer
11 charges in Rate Zones 7 and 8.⁸

12
13 **RATE ZONE 7 – MANWALAMINK CUSTOMER CHARGE**

14 **Q. WHAT CUSTOMER CHARGE DID YOU RECOMMEND FOR ALL**
15 **RATE CLASSES FOR RATE ZONE 7?**

16 A. I recommended the following customer charges for Rate Zone 7:⁹

⁶ PAWC Statement No. 5-R, p. 10.

⁷ I&E Statement No. 3, p. 5.

⁸ I&E Statement No. 3, pp. 9-10.

⁹ I&E Exhibit No. 3, Schedule 1, p. 8.

Rate Zones 7 All Customer Charges			
Meter Size	Present Rate	I&E Proposed Rate	Revenue Percent Increase
5/8 — inch	\$8.89	\$15.00	68.73%
3/4-inch	\$8.89	\$15.00	68.73%
1 -inch	\$23.71	\$15.00	-36.74%
1 1/2-inch	\$47.42	\$15.00	-68.37%
2-inch	\$106.69	\$131.70	23.44%
3-inch	\$207.44	\$245.50	18.35%
4-inch	\$355.61	\$307.70	-13.47%
6-inch	N/A	\$460.40	0%
8-inch	N/A	891.70	0%

1

2

3 **Q. WHY DID YOU RECOMMEND THESE CHANGES TO RATE ZONE 7**
4 **CUSTOMER CHARGES?**

5 A. I recommended these changes to accelerate consolidation with Rate Zone 1
6 customer charges.

7

8 **Q. HOW DID THE COMPANY RESPOND TO YOUR CUSTOMER**
9 **CHARGE RECOMMENDATION FOR RATE ZONE 7?**

10 A. PAWC witness McClellan stated that PAWC is not in agreement with my
11 recommendation to increase the customer charges above the 10% limit

1 proposed by the Company because of the Commission approved settlement for
2 the Manawalamink acquisition by PAWC.¹⁰

3
4 **Q. DO YOU AGREE WITH PAWC’S CUSTOMER CHARGE INCREASE**
5 **PERCENTAGE LIMIT FOR RATE ZONE 7?**

6 A. No.

7
8 **Q. WHY DO YOU DISAGREE WITH PAWC’S CUSTOMER CHARGE**
9 **INCREASE PERCENTAGE LIMIT FOR RATE ZONE 7?**

10 A. Upon advice of counsel, I am told that the 10% rate increase limitation was a
11 provision of the Asset Purchase Agreement and was not accepted in the
12 Commission’s Order.

13
14 **Q. WHAT DOES THE COMMISSION ORDER STATE REGARDING**
15 **RATE INCREASES IN MANWALAMINK?**

16 A. The Commission Order states:

17 [T]he Commission is in no way limited in exercising its
18 power and discretion in setting rates due to PAWC’s
19 agreement in the SPA First Amendment.¹¹

¹⁰ PAWC Statement No. 10-R, p. 23.

¹¹ *Joint Application of Pennsylvania American Water Company, Manwalamink Water Company, and Manwalamink Sewer Company to Transfer by Sale and Merger all Property of Manwalamink Water and Sewer Company to PAWC*, Opinion and Order, p. 67 at Docket No. A-2023-3044418 (Order Entered March 27, 2025).

1 **Q. DID OCA WITNESS MIERZWA AGREE WITH YOUR CUSTOMER**
2 **CHARGE RECOMMENDATION FOR RATE ZONE 7?**

3 A. No. While Mr. Mierzwa's original position was accepting PAWC's 10%
4 increase limitation, he acknowledged in rebuttal that accepting that limitation
5 was in error. However, Mr. Mierzwa disagreed with my proposed \$15.00
6 customer charge recommendation and proposed a \$12.00 customer charge
7 instead.¹²

8
9 **Q. DO YOU AGREE WITH MR. MIERZWA'S CUSTOMER CHARGE**
10 **RECOMMENDATION FOR RATE ZONE 7?**

11 A. No. While OCA's \$12.00 customer charge recommendation is a 35% increase
12 over present rates ($\$12.00 - \$8.89 = \$3.11$) and ($\$3.11 / \$8.89 = 0.3498$), I do
13 not agree that it will move the customer charge sufficiently closer to the
14 proposed Rate Zone 1 rate of \$20.00. While my recommended customer charge
15 of \$15.00 is higher, it moves Rate Zone 7 customers closer to the Rate Zone 1
16 rate of \$20.00 and would make it easier to consolidate Rate Zone 7 customers in
17 future base rate cases. Therefore, OCA's recommendation of a \$12.00
18 customer charge should be rejected.

¹² OCA Statement No. 3-R, pp. 2-3.

1 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

2 A. No. I continue to recommend a customer charge of \$15.00 per month for most
3 Rate Zone 7 customers.

4
5 **Q. DO YOU HAVE ANY CORRECTIONS TO YOUR DIRECT**
6 **TESTIMONY WHERE YOU ADDRESS THE RATE ZONE 7**
7 **CUSTOMER CHARGE ISSUE?**

8 A. Yes. The following question and answer should be stricken from my corrected
9 direct testimony:¹³

10
11 **“Q. SINCE RATE ZONES 7 AND 8 INCLUDE ALL RATE**
12 **CLASSES INCLUDING RESIDENTIAL, WHAT**
13 **CUSTOMER CHARGES DO YOU RECOMMEND FOR**
14 **CUSTOMERS IN RATE ZONES 7 AND 8?**

15
16 A. My recommendations for customers in Rate Zones 7 and 8 are
17 below.”
18

19 **RATE ZONE 8 – APPALACHIAN CUSTOMER CHARGE**

20 **Q. WHAT CUSTOMER CHARGES DID YOU RECOMMEND FOR RATE**
21 **ZONE 8?**

22 A. I recommended Rate Zone 8 customer charges for meters up to 1-1/2” be moved
23 to those recommended for Rate Zone 1 to accelerate consolidation with Rate

¹³ I&E Statement No. 3, p. 9, lines 15-18.

1 Zone 1. My recommended customer charges for Rate Zone 8 are shown on I&E
2 Exhibit No. 3, Schedule 1, p. 9.

3
4 **Q. DID THE COMPANY AGREE WITH YOUR CUSTOMER CHARGE**
5 **RECOMMENDATION FOR RATE ZONE 8?**

6 A. Yes. PAWC witness McClellan accepted my recommendation to move the
7 customer charges for meters up to 1-1/2" in Rate Zone 8 to those recommended
8 for Rate Zone 1.¹⁴

9
10 **USAGE RATES**

11 **RATE ZONE 7 – MANWALAMINK USAGE RATES**

12 **Q. WHAT DID YOU RECOMMEND REGARDING CUSTOMER**
13 **CHARGES AND USAGE RATES FOR RATE ZONE 7 RESIDENTIAL**
14 **CUSTOMERS?**

15 A. To move Rate Zone 7 residential rates towards consolidation with Rate Zone 1
16 rates, I recommended setting the customer charges for Rate Zone 7 5/8-inch,
17 3/4-inch, 1-inch, and 1-1/2-inch meter sizes to \$15.00 per month and setting the
18 larger meter sizes, which have no customers, equal to Rate Zone 1 rates. For
19 usage, I recommended increasing the residential usage rate for the first 100,000
20 gallons to \$0.7500 per hundred gallons and eliminating the second block usage

¹⁴ PAWC Statement No. 10-R, p. 23.

1 rate by setting it equal to the first 100,000 gallons usage block. Likewise, for
2 the Rate Zone 7 commercial and municipal rates, I recommended the customer
3 charges be set equal to those of Rate Zone 1 and both usage block rates be set to
4 \$0.8000 per hundred gallons, which would eliminate the second block usage
5 rate. As explained in my direct testimony, my recommendations would allow
6 the creation of commercial and municipal declining usage block rates split at
7 the 16,000-gallon usage level that exists in Rate Zone 1. This would result in an
8 increase in the average bill of 41.74%¹⁵ for the residential customers and
9 39.82%¹⁶ for the commercial and municipal customers. When compared to the
10 16.82%¹⁷ increase for residential customers and 17.34%¹⁸ increase for
11 commercial and municipal customers in Rate Zone 1, my recommendation
12 moves Rate Zone 7 towards consolidation with Rate Zone 1 in future base rate
13 cases.

14
15 **Q. DID ANY PARTY DISAGREE WITH YOUR RECOMMENDED RATE**
16 **ZONE 7 USAGE RATES?**

17 A. Yes. While OCA witness Mierzwa agreed with my proposed usage rate for
18 Rate Zone 7 customers,¹⁹ PAWC witness McClellan disagreed with my
19 recommendation to increase the usage rate above the 10% limit proposed by the

¹⁵ I&E Exhibit No. 3, Schedule 2, p. 1.

¹⁶ I&E Exhibit No. 3, Schedule 2, p. 3.

¹⁷ PAWC Exhibit 10A, p. 78.

¹⁸ PAWC Exhibit 10A, p. 87.

¹⁹ OCA Statement No. 3-R, p. 3.

1 Company because of the Commission approved settlement for the
2 Manawalamink acquisition by PAWC.²⁰
3

4 **Q. DO YOU AGREE WITH PAWC’S USAGE RATE INCREASE**
5 **PERCENTAGE LIMIT FOR RATE ZONE 7?**

6 A. No.
7

8 **Q. WHY DO YOU DISAGREE WITH PAWC’S USAGE RATE INCREASE**
9 **PERCENTAGE LIMIT FOR RATE ZONE 7?**

10 A. As stated in the customer charge section above, upon advice of counsel, I am
11 told that the 10% rate increase limitation for Manwalamink customers was a
12 provision of the Asset Purchase Agreement and was not accepted in the
13 Commission’s Order that was highlighted above in this testimony.
14

15 **Q. DO YOU HAVE ANY CHANGES TO YOUR USAGE RATE**
16 **RECOMMENDATION FOR RATE ZONES 7 USAGE RATES?**

17 A. No. I continue to recommend my initially proposed usage rates for Rate Zone
18 7.

²⁰ PAWC Statement No. 10-R, p. 26 and I&E Statement No. 3, p. 13.

1 **RATE ZONE 8 – APPALACHIAN USAGE RATES**

2 **Q. WHAT USAGE RATES DID YOU RECOMMEND FOR RESIDENTIAL**
3 **AND COMMERCIAL CUSTOMERS IN RATE ZONE 8?**

4 A. I recommended keeping the same usage rate proposed by PAWC for the first
5 16,500 gallons of \$0.9534 and over 16,500 gallons of \$0.9534. This would
6 slightly increase the average bill for customers with average usage of 3,263
7 gallons to \$51.11 per month as opposed to \$45.81 per month.²¹

8
9 **Q. DID ANY PARTY DISAGREE WITH YOUR RATE ZONE 8 USAGE**
10 **RATES?**

11 A. No. OCA witness Mierzwa did not oppose my recommended Rate Zone 8
12 volumetric charges. PAWC witness McClellan agreed with my
13 recommendation to move Rate Zone 8 volumetric charges to a uniform block
14 structure to facilitate the consolidation of usage rates of Rate Zone 8 with Rate
15 Zone 1 in a future rate case.²²

16
17 **Q. DO YOU HAVE ANY CHANGES TO YOUR USAGE RATE**
18 **RECOMMENDATION FOR RATE ZONES 8 USAGE RATES?**

19 A. No. I continue to recommend my initially proposed usage rates for Rate Zone
20 8.

²¹ I&E Exhibit No. 3, Schedule 2, p. 3.

²² PAWC Statement No. 10-R, p. 26.

1 **SCALE BACK OF RATES**

2 **Q. WHAT DID YOU RECOMMEND IF THE COMMISSION GRANTS AN**
3 **INCREASE THAT IS LESS THAN THE TOTAL REQUESTED**
4 **INCREASE FOR WATER OPERATIONS?**

5 A. I recommended that any scale back would first determine the revenue
6 requirements and scale backs of the Wastewater Operations and that this would
7 determine the amount of revenue requirement to allocate to Water Operations.
8 Then once the wastewater to water allocation is determined, a full Water
9 Operations revenue requirement would be known, and those rates can be scaled
10 back. I recommended that any scale back be netted against the subsidy the
11 Commission determines for Wastewater Operations.²³

12
13 **Q. DID THE COMPANY RESPOND TO YOUR SCALE BACK**
14 **RECOMMENDATION?**

15 A. Yes. PAWC witness McClellan stated that,
16 If the Commission approves a revenue requirement that is less than
17 that proposed by the Company, PAWC proposes to reduce the
18 proposed amount of reallocation from wastewater to water under
19 Act 11 so that the water rate increases are reduced by the amount
20 of reduced allocation and the proposed wastewater rate increases
21 are maintained at their proposed levels until the Act 11 wastewater
22 reallocation for any given operation reaches \$0. This approach
23 results in a just and reasonable outcome for all customer groups and
24 should be approved by the Commission.²⁴

²³ I&E Statement No. 3, p. 16.

²⁴ PAWC Statement No. 10-R, p. 14.

1 **Q. DO YOU AGREE WITH THE COMPANY’S RECOMMENDATION?**

2 A. Yes.

3
4 **WATER OPERATIONS RATE SCALE BACK**

5 **Q. WHAT DID YOU RECOMMEND IF THE COMMISSION GRANTS AN**
6 **INCREASE THAT IS LESS THAN THE TOTAL REQUESTED**
7 **INCREASE FOR WATER OPERATIONS?**

8 A. I recommended if the Commission grants an increase less than PAWC’s total
9 requested increase, the usage rates and customer charges be decreased to produce
10 the revenue level approved by the Commission.²⁵

11
12 **Q. DID ANY WITNESSES RESPOND TO YOUR RECOMMENDATION**
13 **REGARDING THE SCALE BACK OF CUSTOMER CHARGE, USAGE**
14 **RATES?**

15 A. Yes. PAWC witness McClellan had no objection to my scale back
16 methodology in which I first propose determining the revenue requirement for
17 wastewater before determining the scale back to water operations rates.²⁶
18 Cleveland-Cliffs witness Baudino agreed to the scale back in principle, however
19 he objected to a scale back of Industrial class customer charges as those charges
20 were not increased.²⁷

²⁵ I&E Statement No. 3, p. 18.

²⁶ PAWC Statement No. 10-R, pp. 14-15.

²⁷ Cleveland-Cliffs Statement No. R-1, pp. 5-6.

1 **Q. DO YOU AGREE WITH THE SCALE BACK CONCERNS OF THE**
2 **INDUSTRIAL CUSTOMER CLEVELAND-CLIFFS?**

3 A. Yes. A review of I&E Exhibit No. 3, Schedule 1, pp. 1-6 shows the Company
4 is proposing a consolidated customer charge of \$28.00 for Industrial customers
5 in Rate Zones 1 through 6, with little to no increases in usage rates in the
6 forementioned Industrial Rate Zones.

7

8 **Q. SHOULD THE SCALE BACK BE APPLIED TO INDUSTRIAL CLASS**
9 **CUSTOMERS?**

10 A. No. As it applies to Industrial customers in Zones 1 through 6, if a scale back is
11 granted, it should only be applied to the usage rate, not the customer charge.

12

13 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

14 A. Yes.

**I&E Statement No. 4-SR
Witness: Ethan H. Cline**

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

Docket No. R -2025-3058051 (Wastewater)

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

**Concerning:
Deduct Adjustment
Wastewater Proposed Rates
Act 11 Allocation
Wastewater Scale Back of Rates**

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1 **INTRODUCTION**

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

3 A. My name is Ethan H. Cline. 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. ARE YOU THE SAME ETHAN H. CLINE WHO SUBMITTED I&E**
11 **STATEMENT NO. 4 AND I&E EXHIBIT NO. 4?**

12 A. Yes.

13
14 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

15 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony
16 submitted on behalf of Pennsylvania-American Water Company (PAWC or
17 Company) by Max McClellan (PAWC St. No. 10-R). I will also address the rebuttal
18 testimony submitted on behalf of the Office of Small Business Advocate (OSBA) by
19 witness Joseph Kubas (OSBA St. No. 1-R), and the rebuttal testimony submitted on
20 behalf of the Office of Consumer Advocate (OCA) by witness Jerome Mierzwa
21 (OCA St. No. 3R).

1 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

2 A. Yes. I&E Exhibit No. 4-SR contains schedules that support my surrebuttal
3 testimony.

4
5 **DEDUCT ADJUSTMENT**

6 **Q. WHAT IS A DEDUCT ADJUSTMENT?**

7 A. A deduct adjustment, as the Company is proposing, is a method that separates
8 metered water usage that is likely to go through the wastewater system from water
9 usage that is used for outdoor purposes in the summertime. The seasonal wastewater
10 bills (April to December)¹ would be determined by the lesser of actual metered water
11 usage for the summer month or the average water consumption for that customer in
12 the winter months (January, February, and March), which is determined by actual
13 water usage.²

14
15 **Q. DID YOU AGREE WITH THE COMPANY'S PROPOSAL TO ADJUST**
16 **APRIL THROUGH DECEMBER BASED ON WINTER USAGE?**

17 A. No. If the Company's concern is to address the watering of lawns, filling of
18 swimming pools, etc., adjusting April through December to reflect winter usage

¹ PAWC Notice of Proposed Wastewater Rate Changes, Rate Zones 1, 1a, 1b, 1c, 1d, 1e, 1f, and 2; PAWC Supplement No. 61 to Tariff Wastewater PA P.U.C. No. 16, Second Revised Page 31.1, Canceling First Revised Page 31.1.

² PAWC Statement No. 10, pp. 25-26.

1 should not be necessary as months like April, October, November, and December
2 should not be substantially impacted.³

3
4 **Q. WHAT MONTHS DID YOU RECOMMEND AS “SUMMER MONTHS”?**

5 A. I recommended the Company be required to use May through September as what
6 Mr. McClellan refers to as summer months. Shoulder months such as April,
7 October, November, and December are likely not high outdoor watering months,
8 therefore, it would be more appropriate to use actual usage for those months to
9 calculate customer bills.

10
11 **Q. DID YOU RECOMMEND THAT NOVEMBER AND DECEMBER BE**
12 **INCLUDED IN THE WINTER MONTH PERIOD?**

13 A. Yes. I recommended that November and December be included in the winter month
14 period. The weather in those months is typically cold enough that outside activities
15 such as lawn watering, pool filling, and car washing are extremely limited, if not
16 non-existent. Additionally, including more than three months will serve to provide a
17 more accurate baseline usage level for the deduct adjustment.⁴

³ I&E Statement No. 4, p. 6.

⁴ I&E Statement No. 4, p. 6.

1 **Q. WHAT DID YOU RECOMMEND REGARDING THE MINIMUM USAGE**
2 **FOR CUSTOMERS WITH NO WINTER USAGE?**

3 A. I recommended the minimum usage for customers with no winter usage be initially
4 set at 3,000-gallons, which is approximately the system average usage for Sanitary
5 Sewer System (SSS) Operations residential customers. I further recommended that
6 the Company track and calculate the system average usage for customers during the
7 winter period. That way the minimum usage level for customers with no or
8 extremely low winter usage can be revisited in subsequent rate cases and set
9 approximately equal to the system average winter usage level. Additionally, as
10 described above, I recommended that usage from November and December be
11 included in the calculation of the winter baseline usage.⁵
12

13 **Q. DID YOU RECOMMEND THAT CUSTOMERS SERVED BY COMBINED**
14 **SEWER SYSTEM (CSS) WASTEWATER OPERATIONS SYSTEMS BE**
15 **INELIGIBLE FOR THE DEDUCT ADJUSTMENT UNDER THE**
16 **COMPANY'S PROPOSAL?**

17 A. Yes. While there was no discussion regarding the eligibility of CSS Wastewater
18 Operations customers for the proposed deduct adjustment in PAWC Statement No.
19 10, the Proposed Tariff for Rate Zones 2a and 2b includes a note that the "Sewer
20 Deduct Consumption does not apply to residential bills under this Schedule of

⁵ I&E Statement No. 4, p. 8.

1 Rates.”⁶ I recommended this sentence also be added under Rate Zone 2 so that it
2 applies to all CSS Wastewater Operations residential customers, not just Rate Zones
3 2a and 2b.⁷

4
5 **Q. WHY DID YOU RECOMMEND THAT ALL CSS WASTEWATER**
6 **OPERATIONS RESIDENTIAL CUSTOMERS BE INELIGIBLE FOR THE**
7 **DEDUCT ADJUSTMENT?**

8 A. Treatment plants in the CSS Wastewater Operations treat flows that originate from
9 both sanitary sewer systems as well as storm sewer systems. Therefore, the outdoor
10 activity flows likely still get treated at the wastewater treatment plant despite not
11 entering through the sanitary sewer system. Therefore, deducting these volumes
12 from a customer’s bill does not follow cost causation principles.

13
14 **Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATIONS?**

15 A. Partially. The Company disagreed with my recommendation to include the billing
16 months of November and December in its calculation of the customers’ winter
17 average.⁸ The Company also agreed to provide updated billing determinants
18 reflecting my recommended five-month winter period, incorporating my suggestion
19 to not adjust actual usage for the shoulder months of April and October, or any

⁶ PAWC Supplement No. 61 to Tariff Wastewater PA PUC No. 16 Second Revised Page 12.1 Canceling First Revised Page 12.1 and Original Page 12.2 redlined.

⁷ I&E Statement No. 4, p. 9.

⁸ PAWC Statement No. 10-R, p. 33.

1 variation of my proposal or the Company's proposal.⁹ The Company indicated that,
2 if the Commission orders a change in the Scranton rates that the deduct adjustment
3 billing methodology also apply to Scranton.¹⁰ The Company did not, however,
4 address my recommendation to adjust the minimum usage to 3,000 gallons.
5

6 **Q. WHY DID THE COMPANY NOT AGREE WITH YOUR**
7 **RECOMMENDATION TO INCLUDE THE MONTHS OF NOVEMBER**
8 **AND DECEMBER IN ITS CALCULATION OF THE WINTER AVERAGE?**

9 A. The Company claimed that early spring and fall are often ideal times for planting or
10 other lawn maintenance and that the billing month of November likely includes
11 October usage due to the nature of utility bill cycles aligning perfectly with calendar
12 months.¹¹
13

14 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION BASED**
15 **ON THE COMPANY'S RESPONSE?**

16 A. Yes. I acknowledge that early spring and fall are the ideal times for planting or other
17 lawn maintenance and that the billing month of November would include October
18 usage. Therefore, I agree that it is reasonable to not include November in the
19 calculation of the winter average. However, the Company's reasoning also means

⁹ PAWC Statement No. 10-R, p. 34.

¹⁰ PAWC Statement No. 10-R, p. 28.

¹¹ PAWC Statement No. 10-R, p. 33.

1 that, instead of November, the billing month of April should be included in the
2 winter average. This is because the April billing month would consist of usage from
3 the end of March through the beginning of April, when frosts are still likely and it is
4 not yet the ideal time to begin planting or lawn maintenance. Therefore, I am now
5 recommending that the winter average be calculated using the five billing months of
6 December through April.

7
8 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO APPLY THE**
9 **DEDUCT ADJUSTMENT TO SCRANTON CUSTOMERS IF THE**
10 **COMMISSION ORDERS A CHANGE IN RATES FOR THAT SYSTEM?**

11 A. No. As I stated in my direct testimony, and above, because CSS systems treat both
12 sanitary sewer and storm sewer flows at the wastewater treatment plant, and outdoor
13 activity flows likely still get treated at the wastewater treatment plant despite not
14 entering through the sanitary sewer system. As such, the deduct adjustment does not
15 follow cost causation principles. Therefore, all CSS customers (which includes
16 Scranton customers) should be excluded from the deduct adjustment. The Company
17 did not provide any support for why Scranton CSS customers should be included in
18 the deduct adjustment. Therefore, I continue to recommend that all CSS customers,
19 including Scranton customers, be excluded from eligibility for the deduct
20 adjustment.

1 **WASTEWATER RATE STRUCTURE AND REVENUE SUMMARY**

2 **Q. DID YOU COMPILE A SUMMARY THAT SHOWS THE REVENUE**
3 **IMPACT OF I&E'S RATE STRUCTURE RECOMMENDATIONS?**

4 A. Yes. A summary of the I&E wastewater revenue recommendations was provided on
5 I&E Exhibit No. 4, Schedule 1. Based on my proposed wastewater rates, I
6 recommended that the total proposed Act 11 subsidy be reduced by \$18,544,730.¹²

7
8 **Q. DID THE COMPANY IDENTIFY AN ERROR IN YOUR EXHIBIT**
9 **SCHEDULES?**

10 A. Yes. PAWC witness McClellan identified discrepancies between I&E Exhibit No. 4,
11 Schedule 1 and I&E Exhibit No. 4, Schedule 10.¹³ The discrepancies were caused
12 by calculation errors in the Company and I&E proposed rates for Rate Zone 2a in the
13 Microsoft Excel spreadsheet for I&E Exhibit No. 4, Schedule 10.¹⁴ I have provided
14 corrected Schedules 1 and 10 as I&E Exhibit No. 4-SR, Schedule 1. The correction
15 increases the CSS adjustment shown on the original I&E Exhibit No. 4, Schedule 1
16 of \$10,784,556 to \$11,773,663 shown on the corrected exhibit.¹⁵

¹² I&E Statement No. 4, pp. 18-19.

¹³ PAWC Statement No. 10-R, pp. 12-13.

¹⁴ PAWC witness McClellan referenced I&E Exhibit No. 4, Schedule 2, but that schedule did not include any errors and is not related to the CSS Wastewater Operations.

¹⁵ I&E Exhibit No. 4-SR, Schedule 1.

1 **Q. ARE YOU CHANGING YOUR RECOMMENDATION BASED ON THIS**
2 **CORRECTION?**

3 A. No. As discussed below, my recommendation is no longer applicable due to
4 changes in my recommended rate design based on the rebuttal testimony from
5 OSBA witness Kubas.

6
7 **RATE DESIGN**

8 **Q. PLEASE SUMMARIZE YOUR RATE DESIGN RECOMMENDATIONS.**

9 A. I recommended adjustments to residential, industrial, and municipal rate class
10 usage charges in order to increase the proposed rate revenues of SSS Operations
11 Rate Zones 1, 1a-1c, 1e, and 1g. I did not adjust the Company's proposed rates for
12 Rate Zone 1f due to the proposed change from a monthly flat rate to a customer
13 charge and usage rate. Similar to Rate Zone 1f, I did not recommend an
14 adjustment for Rate Zone 1d – Butler Area Sewer Authority (BASA) WW
15 Operations due to the proposed changes in rate structure.¹⁶ For CSS Operations
16 Rate Zones 2 and 2a, I recommended that Rate Zone 2a rates be set equal to Rate
17 Zone 2.¹⁷ Finally, I recommended an adjustment to the proposed usage rates for
18 Rate Zone 2b – Elizabeth Borough Municipal Authority (EBMA) in order to move
19 those rates towards consolidation in future base rate cases. My usage rate

¹⁶ I&E Statement No. 4, pp. 49-50.

¹⁷ I&E Statement No. 4, pp. 46-49.

1 recommendations for the SSS and CSS Operations were calculated based upon the
2 Company's proposed customer charge.¹⁸
3

4 **Q. DID ANY PARTIES OPPOSE YOUR RECOMMENDATION REGARDING**
5 **RATE DESIGN?**

6 A. Yes. PAWC witness McClellan disagreed with my rate proposals based on my
7 recommendations to not set SSS industrial volumetric rates equal to those of
8 commercial and industrial customers,¹⁹ to increase the rates of Zone 1g beyond the
9 10% that was included in the Commission-approved settlement of that acquisition
10 case,²⁰ and to increase CSS Rate Zone 2a – Scranton beyond the current rates
11 because it goes against a pre-existing agreement that currently applies to
12 Scranton.²¹ OCA witness Mierzwa agreed that the Act 11 allocations should be
13 reduced, and recommended that the SSS General Operations and CSS Operations
14 allocations be eliminated entirely, but disagreed with my methodology mostly due
15 to gradualism concerns.²² OSBA witness Kubas disagreed with my non-
16 residential rate recommendations based on his position that the proposed customer
17 charge increases are not supported by the Company's customer cost analysis,

¹⁸ I&E Statement No. 4, pp. 24-43.

¹⁹ PAWC Statement No. 10-R, p. 39.

²⁰ PAWC Statement No. 10-R, pp. 40-41.

²¹ PAWC Statement No. 10-R, pp. 48-49.

²² OCA Statement No. 3R, pp. 5-9.

1 which includes Inflow and Infiltration (I&I) costs in the calculation of the
2 customer costs.²³

3
4 **Q. PLEASE ADDRESS THE COMPANY’S REBUTTAL TESTIMONY**
5 **REGARDING INCREASING RATE ZONES 1G AND 2A BEYOND THE**
6 **LIMITS OF THE PRE-EXISTING AGREEMENTS THAT WERE**
7 **ESTABLISHED IN THE ACQUISITION AGREEMENTS FOR THOSE**
8 **SYSTEMS.**

9 A. The rate limit provisions agreed to in the acquisition cases do not in any way
10 prevent the Commission from setting rates that are just and reasonable. As I stated
11 in my direct testimony, the limits set forth for Rate Zones 1g and 2a result in both
12 water and wastewater customers being allocated a subsidy based on a benefit that
13 will only affect Manwalamink and Scranton customers, respectively. Therefore,
14 increasing these rates beyond what is in the acquisition settlements is reasonable
15 and in the public interest.²⁴ The Company did not provide any support that
16 suggests the rate limits set for Manwalamink and Scranton customers would be
17 reasonable and in the public interest for the rest of PAWC’s customer base.

²³ OSBA Statement No. 1-R, pp. 5-7.

²⁴ I&E Statement No. 4, pp. 29-30 and 47-48.

1 **Q. PLEASE ADDRESS MR. KUBAS' POSITION THAT I&I COSTS ARE**
2 **NOT PROPERLY INCLUDED IN A CUSTOMER COST ANALYSIS.**

3 A. After further review, in PAWC's most recent base rate case, the Commission
4 determined that, while it recognized that I&I costs are a large portion of the cost of
5 operating wastewater systems, the amount of I&I costs recovered through the
6 customer charge should be limited. As such, it approved I&E's proposed \$15.00
7 per month customer charge, which recovered 3.6% of I&I costs, instead of the
8 Company's proposed customer charge, which would have recovered
9 approximately two-thirds of the I&I costs through the customer charge.²⁵

10
11 **Q. WHAT IS THE PERCENTAGE OF I&I INCLUDED IN THE COMPANY'S**
12 **WASTEWATER SSS CUSTOMER COST ANALYSIS?**

13 A. The Company proposed to include approximately two-thirds of its I&I costs in its
14 customer cost analysis, which is the same amount that the Commission rejected in
15 its Order resolving this issue in the 2023 base rate case.²⁶

16
17 **Q. WHAT IS THE APPROPRIATE AMOUNT OF I&I COSTS TO INCLUDE**
18 **IN THE CALCULATION OF THE TOTAL CUSTOMER COST?**

19 A. As I described above, the Commission determined in the 2023 PAWC base rate
20 case that the I&I cost recovery in the customer charge should be limited and

²⁵ Docket Nos. R-2023-3043189 and R-2023-3043190 Opinion and Order entered July 22, 2024, p. 245.

²⁶ PAWC Exhibit 12-B, Appendix A, RS1-j Attachment, p. 2 of 3.

1 approved recovery of approximately 3.6% of the Company's I&I costs in the
2 customer charge in that proceeding. Therefore, to determine the appropriate
3 amount of I&I costs to include in the customer cost analysis, I multiplied the total
4 cost related to I&I of \$39,657,608²⁷ by 3.6%, which results in \$1,427,674 of I&I
5 costs to be allocated to the customer charge. This amount divided by the 817,672
6 annualized service equivalents results in an I&I related cost per bill of \$1.75
7 (\$1,427,674 / 817,672). This \$1.75 plus the \$9.87 meter related cost per bill and
8 the \$3.68 customer accounting cost per bill provided by the Company in its
9 calculation of direct customer cost per month results in a total customer cost per
10 month of \$15.30. As the customer charge under present rates is \$15.00, Mr.
11 Kubas is correct that an increase to the customer charge is not supported.

12
13 **Q. DO YOU HAVE ANY CHANGES TO YOUR RATE DESIGN**
14 **RECOMMENDATIONS IN ORDER TO ADDRESS THE CONCERNS OF**
15 **THE OTHER PARTIES?**

16 A. Yes. Based on the above analysis, I generally support the rate proposals of OSBA
17 witness Kubas.

²⁷ PAWC Exhibit 10-C, RS1-j. Attachment, p. 2 of 3.

1 **Q. WHY ARE YOU RECOMMENDING THE RATE PROPOSAL OF OSBA**
2 **WITNESS KUBAS RATHER THAN THE PROPOSAL FROM OCA**
3 **WITNESS MIERZWA TO NOT ALLOCATE ANY ACT 11 REVENUE**
4 **FROM THE SSS GENERAL OPERATIONS AND CSS OPERATIONS TO**
5 **WATER CUSTOMERS?**

6 A. While I do not disagree, in principle, with OCA witness Mierzwa's
7 recommendation to fully eliminate the SSS General Operations and CSS
8 Operations Act 11 allocations to water customers entirely, Mr. Mierzwa did not
9 provide any analysis that shows a rate design that can fully eliminate the Act 11
10 allocations while adhering to the concept of gradualism. Mr. Kubas did provide
11 such an analysis. Therefore, Mr. Kubas' proposal is more reasonable.

12
13 **OTHER OPERATING REVENUE**

14 **Q. DID YOU REFLECT AN INCREASE IN OTHER OPERATING REVENUE**
15 **UNDER PROPOSED RATES?**

16 A. Yes. I reflected an increase of \$39,156 in other operating revenue. I also stated that
17 late payment revenue is determined as a percentage of revenues under proposed
18 rates. Therefore, the final other operating revenues should be adjusted based on the
19 proposed rate revenue eventually approved by the Commission.²⁸

²⁸ I&E Statement No. 4, pp. 44-45.

1 **Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?**

2 A. Yes. The Company agreed that changes in late fee revenues should ultimately be
3 based on changes in proposed rates as ordered by the Commission in this
4 proceeding.²⁹

5
6 **ACT 11 SUBSIDY - SUMMARY**

7 **Q. PLEASE UPDATE YOUR OVERALL RECOMMENDED REDUCTION TO**
8 **THE COMPANY'S PROPOSED ACT 11 SUBSIDY?**

9 A. The Act 11 subsidy generated by the rate proposal of OSBA witness Kubas is
10 \$24,268,248.³⁰ The following table shows the OSBA Act 11 subsidy by system as
11 shown on OSBA Exhibit JK-2.

Water Subsidy	Wastewater Subsidy Total	SSS System	BASA System	CSS System	EBMA System
\$24,268,248	(\$24,268,248)	(\$1,958,896)	(\$31,272,945)	\$11,632,644	(\$2,669,051)

12
13
14 **SCALE BACK OF RATES**

15 **Q. WHAT DID YOU RECOMMEND FOR SSS OPERATIONS IF THE**
16 **COMMISSION GRANTS LESS THAN THE FULL INCREASE?**

17 A. If the Commission grants less than the full increase for SSS Operations, including
18 Rate Zone 2d - BASA, I recommended the following steps to reduce revenue and

²⁹ PAWC Statement No. 10-R, p. 51.

³⁰ OSBA Statement No. 1-R, p. 7.

1 rates for SSS Wastewater Operations customers. First, any subsidy from water
2 customers should be eliminated. That way, water customers will not subsidize any
3 of the SSS Wastewater Operations. Second, I recommended that the customer
4 charges and usage rates for Rate Zone 1 rate classes be scaled back proportional to
5 the increases that they received. I recommended that the Rate Zone 1a-1g rates
6 should not be scaled back unless and until they are equal to or above the
7 corresponding rates in Rate Zone 1. Finally, I recommended that any proposed rate
8 that remains below existing Rate Zone 1 rates not be included in any scale back, nor
9 should any rate that is not proposed to have an increase.

10
11 **Q. WHAT DID YOU RECOMMEND FOR CSS WASTEWATER OPERATIONS**
12 **IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE?**

13 A. If the Commission grants less than the full increase for CSS Wastewater Operations,
14 including Rate Zone 2b - EBMA, similar to the SSS Wastewater Operations
15 described above, I recommended that any subsidy from water customers should be
16 eliminated. Also, I recommended that the customer charges and usage rates for Rate
17 Zone 2 rate classes be scaled back proportional to the increases that they received. I
18 recommended that the Rate Zone 2b rates should not be scaled back unless and until
19 they are equal to or above the corresponding rates in Rate Zone 1. Finally, I
20 recommended that any proposed rate that remains below existing Rate Zone 2 rates
21 should not be included in any scale back, nor should any rate that is not proposed to
22 have an increase.

1 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

2 A. Yes. OSBA witness Kubas provided a targeted scale back recommendation
3 designed specifically around his rate recommendations.³¹ Therefore, as I am
4 supporting the rate recommendations of the OSBA, it is reasonable to also support
5 Mr. Kubas' scale back methodology.

6

7 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

8 A. Yes.

³¹ OSBA Statement No. 1-R, p. 8.

I&E Exhibit No. 4-SR
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

PENNSYLVANIA-AMERICAN WATER COMPANY

Docket No. R-2025-3057983 (Water)

Docket No. R -2025-3058051 (Wastewater)

Exhibit to Accompany

the

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:
Deduct Adjustment
Wastewater Proposed Rates
Act 11 Allocation
Wastewater Scale Back of Rates

Pennsylvania-American Water Company

3-A Combined Water and Wastewater Revenue Requirement - Summary - CORRECTED
I&E Recommended Act 11 Adjustment

Line No.		Total Company (A)	Water Operations (B)	Wastewater General Operations (C)	BASA Wastewater Operations (D)	CSS Wastewater Operations (E)	Elizabeth CSS Wastewater Operations (F)
1	Present Rate Revenue	(1) \$1,156,621,085	\$947,784,779	\$108,561,975	\$12,748,475	\$85,758,589	\$1,767,267
2	Additional Revenue Requirement	(2) 168,716,450	\$99,407,775	\$20,040,263	\$35,377,129	\$10,404,371	\$3,486,912
3	Act 11 - Wastewater Allocation	(3) 0	53,010,182	(12,710,621)	(30,280,040)	(7,062,475)	(2,957,046)
4	I&E Adjustment to Wastewater Allocation		(19,533,837)	7,570,633		11,773,663	189,541
5	Proposed Revenues	\$1,325,337,535	\$1,080,668,899	\$123,462,250	\$17,845,564	\$100,874,148	\$2,486,674
6	Rate Increase/(Decrease)	\$168,716,450	\$132,884,120	\$14,900,275	\$5,097,089	\$15,115,559	\$719,407
7		14.6%	14.0%	13.7%	40.0%	17.6%	40.7%

Notes:

- (1) **Present Rate Revenue:** Present Rate Revenues are developed in the sections of Exhibit 3-A that relate to each of these operations.
(2) **Additional Revenue Requirement:** The Additional Revenue Requirement are developed in subsequent sections of this Exhibit 3-A for each of the operations.
(3) **Act 11 - Wastewater Allocation** is the allocation between wastewater operations and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

PENNSYLVANIA-AMERICAN WATER COMPANY
WASTEWATER CSS OPERATIONS
SUMMARY OF APPLICATION OF PRESENT AND PROPOSED RATES - CORRECTED
FOR THE TWELVE MONTHS ENDING JUNE 30, 2027

Rate Zone	As Filed Residential	Adjustment	I&E Residential	As filed Commercial	Adjustment	I&E Commercial	As filed Industrial	Adjustment	I&E Industrial	As filed Municipal	Adjustment	I&E Municipal	As filed Bulk	Total Revenues	Adjustment	I&E Total Revenues
<u>Present Rate Application</u>																
Zone 2	\$12,467,398	\$0	\$12,467,398	\$4,111,001	\$0	\$4,111,001	\$64,914	\$0	\$64,914	\$477,548	\$0	\$477,548	\$8,995,477	\$26,116,339	\$0	\$26,116,339
Zone 2a - Scranton WW	34,910,196	0	34,910,196	19,448,656	0	19,448,656	2,530,682	0	2,530,682	772,052	0	772,052	1,359,018	\$59,020,603	0	\$59,020,603
	\$47,377,595	\$0	\$47,377,595	\$23,559,657	\$0	\$23,559,657	\$2,595,596	\$0	\$2,595,596	\$1,249,600	\$0	\$1,249,600	\$10,354,495	\$85,136,943	\$0	\$85,136,943
IPP Surcharge														150,000		150,000
Other Revenues														471,648		471,648
Total WW CSS	\$47,377,595	\$0	\$47,377,595	\$23,559,657	\$0	\$23,559,657	\$2,595,596	\$0	\$2,595,596	\$1,249,600	\$0	\$1,249,600	\$10,354,495	\$85,758,591	\$0	\$85,758,591
<u>Proposed Rate Application</u>																
Zone 2	\$14,952,089	\$0	\$14,952,089	\$4,929,561	\$0	\$4,929,561	\$77,528	\$0	\$77,528	\$571,419	\$0	\$571,419	\$8,909,942	\$29,440,539	\$0	\$29,440,539
Zone 2a - Scranton WW	34,909,800	7,176,623	42,086,423	19,448,640	3,893,241	23,341,881	2,530,716	491,995	3,022,711	772,061	150,909	922,969	1,359,019	\$59,020,236	11,712,768	\$70,733,004
Total WW CSS	\$49,861,889	\$7,176,623	\$57,038,512	\$24,378,201	\$3,893,241	\$28,271,442	\$2,608,244	\$491,995	\$3,100,239	\$1,343,480	\$150,909	\$1,494,389	\$10,268,961	\$88,460,775	\$11,712,768	\$100,173,543
IPP Surcharge														150,000		150,000
Other Revenues														489,708	60,895	550,603
Total WW CSS	\$49,861,889	\$7,176,623	\$57,038,512	\$24,378,201	\$3,893,241	\$28,271,442	\$2,608,244	\$491,995	\$3,100,239	\$1,343,480	\$150,909	\$1,494,389	\$10,268,961	\$89,100,483	\$11,773,663	\$100,874,146
Change in Revenues	\$2,484,294		\$9,660,917	\$818,544		\$4,711,785	\$12,648		\$504,643	\$93,880		\$244,789	(\$85,534)	\$3,341,893	\$11,773,663	\$15,115,555
% Change in Revenues	5.24%		20.39%	3.47%		20.00%	0.49%		19.44%	7.51%		19.59%	-0.83%	3.90%		17.63%

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2025-3057983
	:	R-2025-3058051
Pennsylvania American Water Company	:	

**VERIFICATION OF
VANESSA OKUM**

I, **Vanessa Okum**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 1 (Proprietary and Non-Proprietary), I&E Exhibit No. 1, I&E Statement No. 1-SR and I&E Exhibit 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 if called to the stand at any evidentiary hearing held in this matter.

This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Signed in Harrisburg, Pennsylvania, this 18th of March 2026.

_ /s/ Vanessa Okum _____

Vanessa Okum

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2025-3057983
	:	R-2025-3058051
Pennsylvania American Water Company	:	

**VERIFICATION OF
D. C. PATEL**

I, **D. C. Patel**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 2 (Proprietary and Non-Proprietary), I&E Exhibit No. 2, I&E Statement No. 2-SR and I&E Exhibit 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 if called to the stand at any evidentiary hearing held in this matter.

This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Signed in Harrisburg, Pennsylvania, this 18th day of March 2026.

/s/ DCPatel
D. C. Patel

PA Public Utility Commission
Commonwealth Keystone Building,
400 North Street,
Harrisburg , PA 17120.

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission

v.

Pennsylvania American Water Company

:
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:
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Docket No. R-2025-3057983
R-2025-3058051

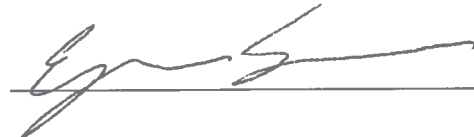
**VERIFICATION OF
ESYAN SAKAYA**

I, **Esyen Sakaya**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **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 if called to the stand at any evidentiary hearing held in this matter.

This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Signed in Harrisburg, Pennsylvania, this 18th of March 2026.



Esyan Sakaya

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2025-3057983
	:	R-2025-3058051
Pennsylvania American Water Company	:	

**VERIFICATION OF
ETHAN CLINE**

I, **Ethan Cline**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 4, I&E Exhibit No. 4, I&E Statement No. 4-SR** and **I&E Exhibit No. 4-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 if called to the stand at any evidentiary hearing held in this matter.

This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Signed in Harrisburg, Pennsylvania, this 18th of March 2026.

/s/ Ethan Cline

Ethan Cline