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

BUREAU OF
INVESTIGATION
&
ENFORCEMENT

October 27, 2022

Via Electronic Filing
Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Pennsylvania Public Utility Commission v.
The York Water Company
Docket Nos.: R-2022-3031340 (Water) & R-2022-3032806 (Wastewater)
I&E Pre-Served Testimony

Dear Secretary Chiavetta:

Enclosed please find the following prepared Pre-Served Testimony, Exhibits and Verification Statements of the Bureau of Investigation and Enforcement's witnesses, that were admitted at the evidentiary hearing on October 6, 2022:

Zachari Walker	**I&E Statement No. 1**	**I&E Exhibit No. 1**
Christopher Keller	**I&E Statement No. 2**	**I&E Exhibit No. 2**
Ethan H. Cline	**I&E Statement No. 3**	**I&E Exhibit No. 3**
Zachari Walker	**I&E Statement No. 1-SR**	**I&E Exhibit No. 1-SR**
Christopher Keller	**I&E Statement No. 2-SR**	
Ethan H. Cline	**I&E Statement No. 3-SR**	**I&E Exhibit No. 3-SR**
Verification Statements		

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

Sincerely,

Erika L. McLain

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Enclosures

cc: Administrative Law Judge Katrina L. Dunderdale
(Cover Letter & Certificate of Service only – via email)
Per Certificate of Service *(Cover Letter & Certificate of Service only – via email)*

I&E Statement No. 1
Witness: Zachari Walker

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Direct Testimony

of

Zachari Walker

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

STATE INCOME TAX EXPENSE

CASH WORKING CAPITAL

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Zachari Walker, and my business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

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

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

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND?

A. My education and employment background is attached as Appendix A.

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

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

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to review the base rate filing of The York Water Company (York Water or Company), and recommend adjustments to the Company's proposed operating and maintenance (O&M) expenses, taxes, and cash working capital (CWC) claims for the Company's proposed water and wastewater rates for the fully projected future test year (FPFTY) ending February 29, 2024.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

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

Q. WHAT ARE THE TEST YEARS USED BY YORK WATER IN THIS PROCEEDING?

A. The Company is using the year ended December 31, 2021, as the historic test year (HTY), the year ending December 31, 2022, as the future test year (FTY), and the year ending February 29, 2024, as the FPFTY in the instant proceeding.

Q. PLEASE SUMMARIZE THE COMPANY'S REQUESTED REVENUE INCREASE.

A. The Company's base rate case was filed on May 27, 2022, with a total requested increase of $20,310,530[1] to claimed present rate revenues of $59,926,650 resulting in an overall revenue requirement of $80,237,180.[2] This represents a $16,182,882[3] requested increase to claimed water operations present rate revenues of $55,764,388.[4] Combined with the allocated wastewater operations revenues per the Act 11 provision, this results in proposed revenues of $74,618,125 for water operations.[5]

Additionally, the total requested increase represents a $4,127,648[6] requested increase to claimed wastewater operations present rates revenues of $4,162,262.[7] Accounting for the requested increase and the $2,670,856 revenue allocation to water operations revenues per the Act 11 provision, the result is proposed revenues of $5,619,055 for wastewater operations.[8]

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS.

A. The following table summarizes my recommended adjustments:

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1 York Water Exhibit No. FII-2, p. 10.
2 York Water Exhibit No. FII-2, p. 10.
3 York Water Exhibit No. FV-1, p. 6.
4 York Water Exhibit No. FII-2, p. 10.
5 York Water Exhibit No. FII-2, p. 10.
6 York Water Exhibit No. FV-1W, p. 6.
7 York Water Exhibit No. FII-2, p. 10.
8 York Water Exhibit No. FII-2, p. 10.

Water Operations:

	Company Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses:			
Payroll Expense	$9,176,583	$8,812,433	($364,150)
Employee Benefits	$2,351,476	$2,265,177	($86,299)
General Price Level Adjustment	$1,383,543	$0	($1,383,543)
Total O&M Expense Adjustments			**($1,833,992)**
Taxes:			
Payroll Taxes	$997,932	$958,349	($39,583)
State Income Tax Expense	$1,196,175	$369,185	($826,990)
Total Tax Adjustments			**($866,573)**
Rate Base Adjustments:			
Cash Working Capital	$3,070,957	$2,928,071	($142,886)
Total Rate Base Adjustments			**($142,886)**

Wastewater Operations:

	Company Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses:			
General Price Level Adjustment	$404,886	$0	($404,886)
Total O&M Expense Adjustments			**($404,886)**
Taxes:			
State Income Tax Expense	$136,093	$59,403	($76,690)
Total Tax Adjustments			**($76,690)**

SUMMARY OF I&E OVERALL POSITION

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WATER OPERATIONS PRIOR TO THE ACT 11 ALLOCATION?

A. I&E's total recommended revenue requirement for the Company's water operations is $60,500,064. This recommended revenue requirement represents an increase of $6,857,604 to the present rate revenues of $53,642,460 prior to the Act 11 allocation. This total recommended allowance incorporates my adjustments made in this testimony and those made in the testimony of I&E witness Christopher Keller.[9]

A calculation of the I&E recommended revenue requirement is shown in the table below:

York Water Company - Water Operations		TABLE 1A			
R-2022-3031340		INCOME	SUMMARY		
	2/29/24	INVESTIGATION & ENFORCEMENT			
	Proforma	[-------------------			-------------------]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	53,642,460	0	53,642,460	6,857,604	60,500,064
Deductions:					
O&M Expenses	23,702,383	-1,833,992	21,868,391	35,660	21,904,051
Depreciation	12,960,981	0	12,960,981		12,960,981
Taxes, Other	1,378,995	-39,583	1,339,412	46,053	1,385,465
Income Taxes:					
Current State	-401,238	166,691	-234,547	603,732	369,185
Current Federal	-622,007	357,867	-264,140	1,296,153	1,032,013
Deferred Taxes	211,523	0	211,523		211,523
ITC	-39,126	0	-39,126		-39,126
Total Deductions	37,191,511	-1,349,017	35,842,494	1,981,598	37,824,092
Income Available	16,450,949	1,349,017	17,799,966	4,876,006	22,675,972
Measure of Value	350,621,590	-142,886	350,478,704	0	350,478,704
Rate of Return	4.69%		5.08%		6.47%

9 I&E Statement No. 2.

Q. WHAT IS I&E'S TOTAL RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER OPERATIONS PRIOR TO THE ACT 11 ALLOCATION?

A. I&E's total recommended revenue requirement for the Company's wastewater operations is $7,182,490. This recommended revenue requirement represents an increase of $3,020,233 to the present rate revenues of $4,162,262 prior to the Act 11 allocation (adjusted for rounding in I&E's revenue requirement computation). This total recommended allowance incorporates my adjustments made in this testimony and those made in the testimony of I&E witness Christopher Keller.[10]

A calculation of the I&E recommended revenue requirement is shown in the table below:

York Water Company - Wastewater Operations		TABLE 1B			
R-2022-3032806		INCOME	SUMMARY		
	2/29/24	INVESTIGATION & ENFORCEMENT			
	Proforma	[---			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	4,162,262	-5	4,162,257	3,020,233	7,182,490
Deductions:					
O&M Expenses	4,229,013	-404,886	3,824,127	0	3,824,127
Depreciation	933,718	0	933,718		933,718
Taxes, Other	43,491	0	43,491	20,283	63,774
Income Taxes:					
Current State	-516,042	36,030	-480,012	539,415	59,403
Current Federal	-273,490	77,353	-196,137	323,667	127,530
Deferred Taxes	15,937	0	15,937		15,937
ITC	0	0	0		0
Total Deductions	4,432,627	-291,503	4,141,124	883,365	5,024,489
Income Available	-270,365	291,498	21,133	2,136,868	2,158,001
Measure of Value	33,353,950	0	33,353,950	0	33,353,950
Rate of Return	-0.81%		0.06%		6.47%

[10] I&E Statement No. 2.

Q. PLEASE SHOW THE COMPUTATION FOR THE I&E PROPOSED WASTEWATER REVENUE ALLOCATION AS SUPPORTED BY I&E WITNESS ETHAN CLINE IN I&E STATEMENT NO. 3.

A. The I&E proposed allocation adjustment as discussed by I&E witness Ethan Cline[11] is summarized below in Table 2:

I&E Table 2

York Water Company
Revenue Summary
As Recommended by I&E in Direct Testimony

	Total Company	Water	Wastewater
Present Rate Revenues (1)	$ 57,804,722	$ 53,642,460	$ 4,162,262
Company Claimed DSIC & STAS (2)	2,121,928	2,121,928	-
Total Present Rate Revenues	$ 59,926,650	$ 55,764,388	$ 4,162,262
Additional Revenue Requirement (3)	$ 20,310,530	$ 16,182,882	$ 4,127,648
Company Claimed Proposed Revenues	$ 80,237,180	$ 71,947,270	$ 8,289,910
Wastewater Revenue Allocation (3)	-	2,670,856	(2,670,856)
Company Proposed Revenues (3)	$ 80,237,180	$ 74,618,126	$ 5,619,054
I&E Recommended Revenues - Prior to Allocation (4)	$ 67,682,554	$ 60,500,064	$ 7,182,490
Company Claimed DSIC & STAS (2)	2,121,928	2,121,928	-
Subtotal	$ 69,804,482	$ 62,621,992	$ 7,182,490
I&E Wastewater Revenue Allocation (5)	-	844,015	(844,015)
I&E Recommended Revenues	$ 67,682,554	$ 61,344,079	$ 6,338,475

(1) York Water Exhibit Nos. FV-1, p. 6 and FV-1W, p. 6.
(2) York Water Exhibit No. FII-2, p. 9.
(3) York Water Exhibit No. FII-2, p. 10.
(4) I&E Table 1A and Table 1B.
(5) Per I&E Statement No. 3.

[11] I&E Statement No. 3.

<u>PAYROLL EXPENSE - WATER OPERATIONS</u>

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

A. The Company's payroll expense claim includes operations and maintenance salaries and wages for union, exempt, and non-exempt employees.

Q. WHAT IS THE COMPANY'S CLAIM FOR THE WATER OPERATIONS PAYROLL EXPENSE?

A. The Company's water operations claim for payroll expense is $9,176,583.[12]

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

A. The Company's water operations claim for payroll expense is based on the pro forma payroll expense for union and non-union employees to reflect salaries and hourly rates effective February 29, 2024, applied to a two-year average of regular, overtime, and double time hours from the years ended December 31, 2020, and December 31, 2021, projected forward to the FTY, the projected FPFTY, and the pro forma FPFTY.[13]

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

A. No.

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12 York Water Exhibit No. FIII-2-40.
13 York Water Exhibit Nos. HIII-2-4, FIII-2-1, FIII-2-15, FIII-2-25, and FIII-2-40.

Q. WHAT IS YOUR RECOMMENDATION FOR PAYROLL EXPENSE?

A. I recommend an allowance of $8,812,433, or a reduction of $364,150 ($9,176,583 - $8,812,433) to the Company's water operations claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on an employee vacancy adjustment for unfilled positions included in the Company's claim.

Q. PLEASE EXPLAIN YOUR RECOMMENDED VACANCY ADJUSTMENT.

A. My recommended vacancy adjustment is based on a weighted-average employee vacancy rate of 3.67% [(2.60% x 0.33) + (4.20% x 0.67)] determined from the response to I&E-RE-7, Part B.[14] I calculated the weighted-average vacancy rate by multiplying the actual annual average vacancy rate by the assigned weight for each vacancy rate based on the number of years represented by each vacancy rate. Next, I calculated the weighted average vacancy rate by adding the weighted vacancy rates, as summarized in the table below:

Time Period	**Vacancy Rate**	**Weight**	**Weighted Vacancy Rate**
2019	2.60%	0.33	0.86%
2020-2021	4.20%	0.67	2.81%
Weighted Average Vacancy Rate			3.67%

[14] I&E Exhibit No. 1, Schedule 1, pp. 1-2.

The weighted average of the annual employee vacancy rate, 3.67% [(2.60% x 0.33) + (4.20% x 0.67)] yields 4.62 vacancies which rounds up to five [(116 current employees[15] + 10 net increase of employees in FTY)[16] x 0.0367) vacant positions for the FPFTY. Finally, I multiplied the vacant positions by the average annual payroll, $72,830 ($9,176,583 ÷ 126), per employee which produces my recommended payroll adjustment of $364,150 ($72,830 x 5 positions). This adjustment results in my recommended payroll allowance of $8,812,433 ($9,176,583 - $364,150).

Q. EXPLAIN YOUR RATIONALE FOR THE VACANCY ADJUSTMENT.

A. The Company budgeted its payroll expense based on the employee count of 126 at the end of the FPFTY as compared to the HTY employee count of 114 employees,[17] which includes 10 anticipated additional new employees in the FTY.[18] It is unreasonable to assume that the Company will fill and maintain 100% full staffing of 126 budgeted positions in the FPFTY based on its own historic vacancy records for the years ended December 31, 2019, 2020, and 2021. As discussed above, using my recommendation, the Company would reflect a normal vacancy rate of 3.67% in the FPFTY. Additionally, as evidenced at the end of the

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15 I&E Exhibit No. 1, Schedule 1, p. 4.
16 York Water Exhibit No. FIII-2-42.
17 I&E Exhibit No. 1, Schedule 1, p. 3.
18 York Water Exhibit No. FIII-2-42.

first half of the FTY, the Company experienced an overall increase to a 4.40% vacancy rate and an average vacancy rate of 3.76%.[19]

Time Period	Vacancy Rate	Weight	Weighted Vacancy Rate
2019	2.60%	0.29	0.75%
2020-2021	4.20%	0.57	2.39%
First Half 2022	4.40%	0.14	0.62%
Weighted Average Vacancy Rate			3.76%

These historic vacancy rates support my recommended five vacant positions based on an average vacancy rate of 3.67% for an adjustment to payroll expense.

Given the "Great Resignation,"[20] the Company may continue to face challenges to fill all positions as budgeted in the FTY and FPFTY. Additionally, there will always be a certain level of normal vacancies due to retirements, resignations, transfers, layoffs, etc., on a day-to-day operating basis, which are unpredictable and there will always be search and placement time involved in filling normal employee vacancies as well as newly added positions. Such vacancies will yield an annual savings in payroll costs that must be reflected in payroll expense to eliminate an unreasonable impact to ratepayers.

[19] Weights are calculated by dividing the respective time period by 42 months (12 months + 24 months + 6 months).

[20] https://www.investopedia.com/the-great-resignation-5199074.

<u>EMPLOYEE BENEFITS- WATER OPERATIONS</u>

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

A. The Company's employee benefits claim includes 401k matching, pension administration, 401k administration, health insurance, and other employee benefits.[21]

Q. WHAT IS THE COMPANY'S WATER OPERATIONS CLAIM FOR EMPLOYEE BENEFITS EXPENSE?

A. The Company's water operations is claiming employee benefits expense of $2,351,476 ($340,092 + $229,510 + $1,696,843 + $85,031).[22]

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

A. The Company based its claim for employee benefits expense on budgeted 2022 fiscal year health, dental, and life insurance expense.

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

A. No.

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[21] York Water Exhibit No. FIII-1, p. 7.
[22] York Water Exhibit No. FIII-1, p. 7.

Q. WHAT IS YOUR RECOMMENDATION FOR EMPLOYEE BENEFITS EXPENSE?

A. I recommend an allowance of $2,265,177, or a reduction of $86,299 ($2,351,476 - $2,265,177) to the Company's water operations claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on an employee vacancy adjustment as noted in the payroll expense section above. I applied the 3.67% vacancy rate to the Company's claim for employee benefits to calculate my employee benefits expense adjustment. The result is my recommended adjustment of $86,299 ($2,351,476 x 0.0367).

PAYROLL TAXES- WATER OPERATIONS

Q. WHAT IS THE COMPANY'S WATER OPERATIONS CLAIM FOR PAYROLL TAXES?

A. The Company's water operations claim is $997,932 for payroll taxes.[23]

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

A. The Company's claim is based on the FPFTY payroll expense claim and includes the social security and Medicare taxes, federal unemployment tax, and

[23] York Water Exhibit No. FIII-2-49.

Pennsylvania state unemployment tax.

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

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR PAYROLL TAXES?

A. I recommend an allowance of $958,349, or a reduction of $39,583 ($997,932 - $958,349) to the Company's FPFTY claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on my recommended total payroll expense adjustment of $364,150 and calculated by applying the Company's payroll tax rate of 10.87% [($997,932[24] ÷ $9,176,583[25]) x 100]. The result is my recommended adjustment of $39,583 ($364,150 x 0.1087), a reduction to the Company's water operations payroll tax claim.

<u>GENERAL PRICE LEVEL ADJUSTMENT</u>

Q. BRIEFLY EXPLAIN THE NATURE OF A GENERAL PRICE LEVEL ADJUSTMENT.

A. A general price level adjustment is an attempt to project an estimated increase in

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[24] York Water Exhibit No. FIII-2-49.
[25] York Water Exhibit No. FIII-2-40.

expenses that are inflation-sensitive, for which known and measurable changes are not determined. The effect is the general price level adjustment brings the inflation-sensitive expenses, not otherwise adjusted by known and measurable changes, up to a projected level for ratemaking purposes.

Q. WHAT GENERAL PRICE LEVEL ADJUSTMENT HAS THE COMPANY APPLIED TO THE UNADJUSTED O&M EXPENSES?

A. The Company proposed specific expense adjustments for the known and measurable changes in certain categories of FTY and FPFTY expense claims for ratemaking. However, the Company applied a general price level adjustment to O&M expenses that were not specifically adjusted to determine the FTY and FPFTY claims.[26] This results in total O&M expenses in the FTY and FPFTY adjusted or increased for ratemaking purposes by a total of $1,383,543 ($360,236[27] + $1,023,307[28]) for water operations and $404,886 ($106,523[29] + $298,363[30]) for wastewater operations.

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

A. York Water witness Matthew Hoff states the projected effect of inflation on operating expenses not specifically adjusted was determined by applying the

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[26] York Water Statement No. 103, pp. 61, 89-90 and York Water Statement No. 103W, pp. 21-22, 24-25.
[27] York Water Exhibit No. FIII-2, p. 15.
[28] York Water Exhibit No. FIII-2, p. 15.
[29] York Water Exhibit No. FIII-2W, p. 5.
[30] York Water Exhibit No. FIII-2W, p. 5.

annual percent change in Consumer Price Index for All Urban Consumers (CPI-U Index) between February 2021 and February 2022 of 6.4% to the total operating expenses not specifically adjusted for both the FTY and the FPFTY claims.[31] General price level adjustments are detailed in York Water Exhibit Nos. FIII-2-12, FIII-2-37, FIII-2-4W, and FIII-2-28W.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMED GENERAL PRICE LEVEL ADJUSTMENT TO THE UNADJUSTED O&M EXPENSES?

A. No.

Q. WHAT DO YOU RECOMMEND FOR THE GENERAL PRICE LEVEL ADJUSTMENT?

A. **Water Operations:**

I recommend a disallowance of entire general price level adjustment of $1,383,543 ($360,236 + $1,023,307) claimed in the FTY and FPFTY unadjusted total O&M expense claims.

Wastewater Operations:

I recommend a disallowance of entire general price level adjustment of $404,886 ($106,523 + $298,363) claimed in the FTY and FPFTY unadjusted total O&M expense claims.

[31] York Water Statement No. 103, pp. 61, 89-90 and York Water Statement No. 103W, pp. 21-22, 24-25.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the Company's failure to support its claim by relying on an unsupported general price level adjustment. Applying a general price level adjustment to the FTY and FPFTY total unadjusted O&M expense claims is unreasonable and unsupported when there are several categories of expenses (that may include sub-categories of expenses) within the main expense category. Additionally, applying blanket inflation rates of 6.40% across the unadjusted expenses in all cost elements of unadjusted total O&M expenses is inappropriate and unreasonably overstates the expense claims and inappropriately impacts customers' rates. Each cost element is a separate expense claim, and, therefore, each expense item should be evaluated and budgeted based on its individual merit and future known and measurable changes. I calculated my recommended allowance by removing York Water's FTY and FPFTY general price level adjustment factors applied to the unadjusted total O&M expense claim for each business operation separately.

Q. DO YOU HAVE ANY ADDITIONAL SUPPORT FOR REMOVAL OF THE GENERAL PRICE LEVEL ADJUSTMENTS?

A. Yes. Recently, the Commission denied a blanket increase in the 2019 Wellsboro Electric Company base rate case, which applied a 3% blanket inflation adjustment (general price level adjustment) to the FTY expenses to estimate the FPFTY expenses claim, and the Commission stated that,

> [T]he Company did not demonstrate that making this blanket adjustment to each expense claim directly relates to the actual costs expected to be incurred in each expense account in the FPFTY. [32]

Even more recently, in Aqua Pennsylvania's 2021 base rate case, the Commission denied a General Price Level Adjustment to expenses, which was neither targeted nor specific. Specifically, in its Order, which adopted the portion of the Administrative Law Judge's Recommended Decision that recommended denial of a general inflation adjustment, the Commission stated as follows,

> We also agree that allowing Aqua to apply a general inflation adjustment to a block of expenses could incentivize less accurate tracking of expenses and a less rigorous approach to controlling costs for those expenses. [33]

Considering the Commission's Orders, the Company did not meet its burden in demonstrating that its proposed blanket inflation adjustment to all line items of expenses contained in the service company other costs claim would meet the "known and measurable" standard for increasing each expense line item in the FTY and FPFTY expense claims.

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[32] Pa. PUC v. Wellsboro Electric Company at Docket No. R-2019-3008208 (Order entered April 29, 2020, p. 40).

[33] Pa. PUC v. Aqua Pennsylvania, Inc. at Docket No. R-2021-3027385 (Order entered on May 16, 2022, pp. 116-117).

STATE INCOME TAX EXPENSE

Q. WHAT IS THE COMPANY'S CLAIM FOR STATE INCOME TAX EXPENSE?

A. The Company's claim for state income tax expense is $1,196,175 for the water operations[34] and $136,093 for wastewater operations.[35]

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

A. The Company's state income tax expense claim is based on the existing Pennsylvania corporate net income tax rate of 9.99%.[36]

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

A. No.

Q. WHAT DO YOU RECOMMEND FOR STATE INCOME TAX EXPENSE?

A. I recommend an allowance of $369,185 or a reduction of $826,990 ($1,196,175 - $369,185) to the Company's claim for water operations. I recommend an allowance of $59,403 or a reduction of $76,690 ($136,093 - $59,403) to the Company's claim for wastewater operations.

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[34] York Water Exhibit No. FI-2, p. 12.
[35] York Water Exhibit No. FI-2W, p. 4.
[36] York Water Exhibit No. FIV-17-10 and York Water Exhibit No. FIV-17-10W.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. On July 8, 2022, Pennsylvania House Bill 1342 was signed into law as Act 53 of 2022. Act 53 will lower the current 9.99% corporate net income tax rate to 8.99% for tax year 2023 and will decrease the tax rate by 0.5% each year until 2031, when the tax rate will be 4.99%.[37] Therefore, I recommend a weighted Pennsylvania income tax rate of 8.91%, as show below, to reflect the Pennsylvania corporate income tax rate that will be in effect for the FPFTY.

Time Period	State Income Tax Rate	Weight	Weighted State Income Tax Rate
February 2023 – December 2023	8.99%	0.83	7.49%
January 2024 – February 2024	8.49%	0.17	1.42%
Weighted Average State Income Tax Rate			8.91%

This change is reflected in my recommended revenue requirement in Table 1A for water operations and Table 1B for wastewater operations above[38] and incorporates the state income tax effect of my other recommended adjustments and those of I&E witness Christopher Keller.[39]

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37 I&E Exhibit No. 1, Schedule 2, p. 1.
38 I&E Statement No. 1, pp. 5-6.
39 I&E Statement No. 2.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDED WEIGHTED STATE INCOME TAX RATE?

A. First, I calculated the weight by dividing each time period by twelve months, resulting in 0.83 (10 months ÷ 12 months), for the ten months of the FPFTY in 2023, and 0.17 (2 months ÷ 12 months), for the two months of the FPFTY in 2024. Next, I multiplied the applicable state tax income rate by the respective weight yielding the weighted state income tax rates: 7.49% (8.99%[40] x 0.83) for the ten months in 2023 and 1.42% (8.49%[41] x 0.17) for the two months in 2024. Finally, the sum of the weighted state income tax rates produces my recommended weighted average state income tax rate of 8.91% (7.49% + 1.42%).

CASH WORKING CAPITAL

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

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

[40] I&E Exhibit No. 1, Schedule 2, p. 1.
[41] I&E Exhibit No. 1, Schedule 2, p. 1.

Q. HOW DID THE COMPANY CALCULATE ITS CWC CLAIM?

A. The Company calculated its CWC claim using a lead/lag study. A lead/lag study measures the differences in time between: (1) the time services are rendered until payment of those services is received; and (2) the time between the point when a utility has incurred an expense and the actual payment of the expense. Stated a different way, the lead/lag study measures how many days exist on average between the midpoint of the service period and the date the payment is made.

Q. DO YOU AGREE WITH THE COMPANY'S USE OF THE LEAD/LAG METHOD?

A. Yes. I agree with the Company's use of the lead/lag method for CWC calculation.

Q. WHAT IS THE COMPANY'S CWC CLAIM?

A. The Company's claim for CWC for water operations is $3,070,957.[42]

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

A. No. I disagree with the Company's CWC claim in as much as I disagree with the O&M expense claims as discussed above.

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42 York Water Exhibit No. FV-1, p. 3.

Q. WHAT IS YOUR RECOMMENDED ALLOWANCE FOR CWC?

A. I recommend an allowance of $2,928,071[43] or a reduction of $142,886 ($3,070,957 - $2,928,071) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation includes modification of the Company's claim based on my recommended adjustments to O&M expenses as discussed previously in this testimony as explained below.

Q. HOW DO YOUR PROPOSED ADJUSTMENTS, DISCUSSED ABOVE, IMPACT YOUR RECOMMENDATION FOR CWC?

A. All O&M adjustments that are cash-based expense claims are included in determining the Company's overall CWC requirement. Therefore, CWC was adjusted to reflect these recommended adjustments. To reflect my recommended adjustments, I modified the Company's electronic CWC file as shown on York Water Exhibit No. FV-8, p. 2 and York Water Exhibit No. FV-8-1, p. 3.[44]

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43 I&E Exhibit No. 1, Schedule 3, p. 1.
44 I&E Exhibit No. 1, Schedule 3, pp. 1-4.

Q. SUMMARIZE WHERE EACH OF THE I&E RECOMMENDED O&M EXPENSE ADJUSTMENTS ARE REFLECTED IN THE CWC COMPUTATION.

A. **Expense Lag Days – Payroll:**

I recommended a payroll expense adjustment of ($364,150) in the Expense Lag – Payroll, which is reflected as a reduction to the Payroll (a) line of the Company's Exhibit No. FV-8-1, p. 3 as shown in I&E modified Exhibit No. FV-8-1, p. 3.[45]

Expense Lag Days – Other Goods and Services:

I recommended the following expense adjustments in the Expense Lag – Other Goods and Services as an overall decrease of $1,469,842 of the Company's Exhibit No. FV-8-1, p. 3 as shown in I&E modified Exhibit No. FV-8-1, p. 3.[46]

Other Expenses	Reduction
Employee Benefits Expense	$86,299
General Price Level Adjustment	$1,383,543
Total	**$1,469,842**

Expense Lag Days – Payroll Taxes:

I recommended a payroll tax expense adjustment of ($39,583) in the Expense Lag – Payroll Taxes, which is reflected as a reduction to the Payroll Taxes (c) line of the Company's Exhibit No. FV-8-1, p. 3 as shown in I&E modified Exhibit No. FV-8-1, p. 3.[47]

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[45] I&E Exhibit No. 1, Schedule 3, p. 2.
[46] I&E Exhibit No. 1, Schedule 3, p. 2.
[47] I&E Exhibit No. 1, Schedule 3, p. 2.

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

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

<u>COVID-19 RELATED EXPENSES</u>

Q. WHAT COVID-19 RELATED DEFERRALS IS THE COMPANY CLAIMING IN THE INSTANT PROCEEDING?

A. There is no expense claim made for COVID-19 related deferrals. In response to I&E-RE-46, the Company stated it started tracking COVID-19 related expenses in 2020, but by the end of 2020 there were no COVID-19 related expenses incurred[48]

Q. DO YOU ACCEPT THAT THE COMPANY HAS MADE NO CLAIM FOR COVID-19 RELATED DEFERRALS?

A. Yes.

[48] I&E Exhibit No. 1, Schedule 5.

Q. WHAT IS YOUR RECOMMENDATION FOR ANY POTENTIAL FUTURE DEFERRAL AND RELATED AMORTIZATION OF COVID-19 RELATED EXPENSES?

A. The Company should not be allowed to make any future claims for COVID-19 related uncollectible accounts expense or other COVID-19 related incremental expenses in future proceedings

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. While the Commission did not specify when utilities should discontinue tracking COVID-19 related expenses, the May 13, 2020 Secretarial Letter states, "[the creation of] a regulatory asset [is] for any incremental expenses incurred above those embedded in rates...".[49] In my opinion, the regulatory asset is intended so that utilities can defer extraordinary costs not previously embedded in rates at the time of the March 13 Emergency Order[50] so that those extraordinary costs could be recovered in the next proceeding following the March 13 Emergency Order, and the regulatory asset should only be tracked until the rate case is filed. In that instance, future rates would allow for recovery of the incremental COVID-19 related extraordinary expenses incurred since the issuance of the March 13 Emergency Order. Since the Company incurred no COVID-19 related expenses

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[49] COVID-19 Cost Tracking and Creation of Regulatory Asset, Docket No. M-2020-3019775 (Issued May 13, 2020), p. 2.

[50] Public Utility Service Termination Moratorium Proclamation of Disaster Emergency-COVID-19, Docket No. M-2020-3019244 (Emergency Order ratified March 26, 2020).

necessary for deferral treatment since 2020, no claim has been made in the instant proceeding. Any COVID-19 related expenses for the FPFTY should already be included in routine expense accounts and thus not require future requests for deferral treatment.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Zachari Walker

Professional and Educational Background

Experience:

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
March 2021 to Present:
Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement

Bridgestone Retail Operations, LLC, Nashville, Tennessee
December 2014 to July 2020:
Business Manager
Evaluated and validated accounting entry postings. Monitored, reconciled, and corrected daily transactions and accounts. Ensured accuracy of daily reports of business and researched inaccuracies. Utilized data analysis to determine key performance indicators and corresponding trends.

Education/Professional Development:

Bridging the Gap, Holly Ridge, North Carolina, 2021
Business Analyst Blueprint Training Program, 36 PD hours earned

Stevenson University, Stevenson, Maryland, 2014
Bachelor of Science, *magna cum laude*, Business Administration
Concentration in Finance

Professional Affiliations:

International Institute of Business Analysis (IIBA), Pickering, Ontario, Canada
Active Member 2021

Utility-Related Trainings & Other Courses/Webinars:

Pennsylvania Public Utility Commission Rate School 2022, January 18-February 8, 2022

Michigan State University IPU Accounting and Ratemaking Course 2021, September 14-16, 2021

NARUC Staff Subcommittee on Accounting & Finance, Spring 2021 Virtual Conference, April 6-8, 2021

Testimony Submitted:

R-2022-3032369	Citizens' Electric Company of Lewisburg, PA
R-2021-3030218	UGI Utilities, Inc. – Gas Division
R-2021-3026682	City of Lancaster – Bureau of Water
R-2021-3026116	Borough of Hanover – Hanover Municipal Water Works
R-2021-3025206	Community Utilities of Pennsylvania Inc. – Water Division
R-2021-3025207	Community Utilities of Pennsylvania Inc. – Wastewater Division

Casework Not Requiring Testimony:

R-2022-3032250	PECO Energy Co. – Gas Operations 1307(f)

I&E Exhibit No. 1
Witness: Zachari Walker

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

Zachari Walker

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

STATE INCOME TAX EXPENSE

CASH WORKING CAPITAL

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
THE YORK WATER COMPANY - WATER
DOCKET NO. R-2022-3031340

BUREAU OF INVESTIGATION AND ENFORCEMENT
INTERROGATORIES SET RE

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORY I&E-RE-7

Reference York Water Exhibit No. FIII-2-1, and York Water Exhibit No. FIII-2-1(a) concerning salaries and wages, provide the following:

A. The average salary, Company-wide, for both union and non-union employee positions for the period the twelve-month period ending 02/29/20;

B. Monthly vacancy rates for 2019, 2020, and 2021;

C. Monthly vacancy rates for 2022 year to date;

D. Benefit loading factor for 2019, 2020, and 2021;

E. List of the current vacant positions identified by union/non-union and specific job title; and

F. Total number of positions by month for 2019, 2020, 2021, and 2022 to date, broken down by full time, part time, etc.

RESPONDENT:

M. E. Poff
CFO

DATE:

July 12, 2022

RESPONSE:

A. The Company is interpreting the question as the twelve-month period ending 02/29/24 as opposed to 02/29/20.

PENNSYLVANIA PUBLIC UTILITY COMMISSION
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The average salary, company-wide, for the union employee positions, including overtime, is approximately $67,300. This is based on the twelve months ending February 29, 2024 earnings for all full time union employees.

The average salary, company-wide, for the non-union employee positions is approximately $88,700. This is based on the twelve months ending February 29, 2024 earnings for all full time non-union employees. Non-union employees range from the highest paid senior leadership positions to the lowest paid clerical positions.

B. In 2019, the Company had an average of three positions open for a vacancy rate of approximately 2.6%.

In 2020 and 2021, the Company had an average of five positions open for a vacancy rate of approximately 4.2%.

C. To date in 2022, the Company had an average of five positions open for a vacancy rate of approximately 4.4%.

D. The Company used a benefit loading factor of 29.3% in 2019, 28.4% in 2020, and 25.9% in 2021 to allocate fringe benefits from the water operations to the wastewater operations. This would include health insurance, workers compensation, payroll taxes and 401k match.

E. The Company currently has a vacancy for a union laborer, a non-union customer service representative, a non-union Oracle engineer, a non-union IT analyst, and a non-union fixed asset clerk.

F. The total number of positions by month is presented below. All positions included are full time positions. The Company does not have any part time positions. The Company employs between eight and ten temporary workers each year.

Month	No. of Positions
January 2019	109
February 2019	108
March 2019	108
April 2019	108
May 2019	108
June 2019	107

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August 2019	109
September 2019	110
October 2019	112
November 2019	113
December 2019	113
January 2020	111
February 2020	111
March 2020	111
April 2020	111
May 2020	112
June 2020	113
July 2020	113
August 2020	113
September 2020	113
October 2020	113
November 2020	113
December 2020	113
January 2021	113
February 2021	113
March 2021	114
April 2021	114
May 2021	115
June 2021	115
July 2021	115
August 2021	115
September 2021	115
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November 2021	114
December 2021	114
January 2022	114
February 2022	114
March 2022	114
April 2022	114
May 2022	116

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June 2022	116

KPMG

TaxNewsFlash

United States

No. 2022-193
July 11, 2022

Pennsylvania: Changes to corporate net income tax laws, other tax changes

House Bill 1342 was signed into law in Pennsylvania on July 8, 2022. The bill makes significant changes to the Commonwealth's corporate net income tax laws, as discussed below.

Corporate net income tax rate reduction

The Commonwealth's current corporate net income tax rate is 9.99%, which is one of the highest in the country. House Bill 1342 reduces that rate incrementally to 4.99%. These rate reductions are scheduled to occur automatically and are not contingent on state tax revenues meeting or exceeding specific thresholds.

The rate is first reduced to 8.99% for the 2023 tax year—the tax year beginning on or after January 1, 2023 through December 31, 2023. The rate is further reduced as follows:

- 8.49% for tax year 2024
- 7.99% for tax year 2025
- 7.49% for tax year 2026
- 6.99% for tax year 2027
- 6.49% for tax year 2028
- 5.99% for tax year 2029
- 5.49% for tax year 2030
- 4.99% for tax years beginning January 1, 2031 and thereafter

KPMG observation

Previous corporate net income rate reductions were included in bills that would also have adopted unitary combined reporting. However, unitary combined reporting is not included in this legislation.

Sales factor changes

Under current law, specific sourcing rules apply to receipts from sales of services and receipts from sales of tangible personal property. All other receipts are sourced under the statutory income-producing activity test and are included in the Pennsylvania sales factor numerator if the income-producing activity is performed in Pennsylvania, or if a greater proportion of the income-producing activity is performed in Pennsylvania, based on costs of performance. House Bill 1342 adopts comprehensive customer-based sourcing rules for a number of "other" types of receipts, including:

- Gross receipts from the lease or license of intangible property
- Gross receipts from sales of intangibles
- Gross receipts from the sale, redemption, maturity or exchange of securities held by a taxpayer primarily for sale to customers
- Gross receipts related to lending activities involving real property and tangible personal property
- Gross receipts received from interest, fees, and penalties from credit card holders
- Gross receipts received from interest not otherwise addressed in the revised law

Any gross receipts associated with intangible property that are not specifically addressed will be excluded from both the numerator and denominator of the sales factor. The state tax authority is directed to promulgate rules and regulations to implement the new sourcing rules, which are effective for tax years beginning after December 31, 2022.

KPMG observation

There is ongoing litigation in Pennsylvania over the application of the income-producing activity test as applied to service receipts. The *Synthes* case, currently pending before the Pennsylvania Supreme Court, involves the interpretation of the statutory income-producing activity test in years prior to 2014 before the legislature revised the law to provide that service receipts are sourced to the location where the services are delivered. In *Synthes*, the state tax authority and the taxpayer were on the same side and argued that the tax authority's market-based interpretation of the income-producing activity test, which resulted in a refund for Pennsylvania-based taxpayer, was entitled to deference. The Attorney General, however, disagreed that the tax authority's interpretation was entitled to deference. The Commonwealth Court held in favor of the taxpayer and the tax authority, the Attorney General appealed to the Pennsylvania Supreme Court, and oral arguments were held in March 2022. Although *Synthes* involves service receipts, the outcome may be instructive as to application of the income-producing activity test to other types of receipts for years prior to 2023.

Codification of economic nexus standards

House Bill 1342 codifies Corporation Tax Bulletin 2019-04, issued post-*Wayfair*, in which the state tax authority announced that for tax years beginning on or after January 1, 2020, corporations meeting an economic nexus standard would be required to file corporate net income tax returns (unless protected under Public Law 86-272). The bulletin set forth a rebuttable presumption that a corporate taxpayer without a physical presence in Pennsylvania that had $500,000 or more of direct or indirect gross receipts sourced to Pennsylvania from any combination of (1) gross receipts from the sale, rental, lease, or licensing of tangible personal property; (2) gross receipts from the sale of services; or (3) gross receipts from the sale or licensing of intangibles, including franchise agreements, would have a filing responsibility.

Effective for tax years beginning after December 31, 2022, House Bill 1342 codifies the rebuttable presumption that a corporation with $500,000 or more of receipts sourced to Pennsylvania will have substantial nexus with the Commonwealth, despite the lack of a physical presence. However, an exception applies to affiliated entities domiciled in foreign nations that have entered into comprehensive income tax treaties with the United States. The treaties must provide "for the allocation of all categories of income subject to taxation, or the withholding of tax, on royalties, licenses, fees and interest for the prevention of double taxation of the respective nations' residents and the sharing of information."

KPMG observation

It is important to consider the economic nexus standard in conjunction with the revised sourcing rules that apply beginning with the 2023 tax year. A taxpayer that previously sourced receipts under the income-producing activity test may not have had the requisite level of receipts sourced to the Commonwealth. However, that may no longer be the case when those receipts are sourced using the new customer-based rules.

Sales and use tax and other tax changes

Effective January 1, 2023, House Bill 1342 requires peer-to-peer car sharing marketplace facilitators (as defined) to collect sales and use tax on facilitated shared vehicle rentals. The up-to-$2 per day fee that applies to vehicle rentals is extended to vehicles rented as part of a peer-to-peer car sharing program. However, the Commonwealth's 2% vehicle rental tax does not apply to a shared vehicle that is rented through a peer-to-peer car sharing program. The bill also extends the computer data center sales tax exemption qualification period from 15 years to 25 years for qualified purchases of equipment installed in the computer data center.

For individual (personal) income tax purposes, effective for tax years beginning after December 31, 2022, the bill conforms the Commonwealth to the section 179 expensing provisions and the section 1031 deferral provisions. A new refundable tax credit is adopted for eligible taxpayers who receive the federal child and dependent care tax credit. Finally, the bill increases the annual cap for the research and development and film production tax credits and makes certain changes to the keystone opportunity zone provisions.

For more information, contact a KPMG State and Local Tax professional:

Mark Balistrieri | mbalistrieri@kpmg.com

Mark Achord | marchord@kpmg.com

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

53.53 V. Valuation

D. Water and Wastewater Utilities

8. Supply an exhibit supporting the claim for cash working capital requirement based on the lead-lag method.

Description (1)				Amount (2)
Pro Forma Operating Expenses and Taxes Less Uncollectible Accounts and Amortized Expenses			**23,356,568**	
Average DailyOperating Expenses 23,356,568 / 365			**63,991**	
Cash Working Capital Requirement				
63,991	x	54.4 days		**3,480,981**
Prepaid PUC, OCA, SBA and DPC Assessments				163,435
Builders Deposits and Water Revenues Paid In Advance				(263,818)
Interest Adjustment				(452,527)
Cash Working Capital				**2,928,071**

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT
LAG RELATIONSHIP BETWEEN OPERATING REVENUES AND
OPERATING EXPENSES AND TAXES FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

Item (1)	Amount (2)	Number of Days Lag (3)	Dollar Days (4)=(2)*(3)	Weighted Average Lag Days (5)
Pro Forma Operating Revenues Under Existing Rates (Sales of Water)				
Metered Repumped Residential	24,687,304	53.7	1,326,846,198	
Metered Gravity Residential	9,781,992	52.5	513,923,951	
Metered Repumped Commercial	6,957,041	53.7	373,913,784	
Metered Gravity Commercial	3,610,022	52.5	189,662,486	
Metered Repumped Industrial	3,223,353	53.7	173,242,655	
Metered Gravity Industrial	851,750	52.5	44,749,062	
Private Fire Service	2,019,336	53.7	108,531,425	
Public Fire Service	1,392,525	52.5	73,160,123	
Total Pro Forma Sales of Water	52,523,324		2,804,029,684	
Revenue Weighted Average Lag Days in Receipt of Revenues				53.4
Pro Forma Operating Expenses and Taxes Under Existing Rates Less Bad Debts and Amortized Expenses				
Payroll (a)	**9,202,715**	7.0	64,419,002	
Payroll (Payroll Tax Withholding) (c)	778,883	13.7	10,693,648	
Power Purchased (b)	1,171,058	26.6	31,199,859	
Insurance (b)	3,054,688	-74.3	(226,857,140)	
Other Goods and Services (b)	**7,770,228**	18.1	140,822,326	
Payroll Taxes (c)	**711,794**	13.7	9,772,546	
Other Taxes (d)	667,201	-80.5	(53,685,964)	
Income Taxes (e)	-	29.6	-	
Total Pro Forma Operating Expenses and Taxes Less				

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT
LAG RELATIONSHIP BETWEEN OPERATING REVENUES AND
OPERATING EXPENSES AND TAXES FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

Item (1)	Amount (2)	Number of Days Lag (3)	Dollar Days (4)=(2)*(3)	Weighted Average Lag Days (5)
Bad Debts and Amortized Expenses	**23,356,568**		(23,635,724)	
Expense Weighted Average Lag Days in Payment of Expenses				-1.0

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT
LAG RELATIONSHIP BETWEEN OPERATING REVENUES AND
OPERATING EXPENSES AND TAXES FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

Item (1)	Amount (2)	Number of Days Lag (3)	Dollar Days (4)=(2)*(3)	Weighted Average Lag Days (5)
Net Lag Days (Difference Between Weighted Average Lag Days in Receipt of Revenues and Weighted Average Lag Days in Payment of Expenses)				54.4

(a) Midpoint of payroll period to payday 7.0 days lag

(b) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(a), FV-8-1(b) and FV-8-1(c).

(c) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos.FV-8-1(d).

(d) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(e).

(e) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(f).

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BUREAU OF INVESTIGATION AND ENFORCEMENT
INTERROGATORIES SET RE

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORY I&E-RE-46

Reference the May 27, 2022 York Water Rate Case filing. Provide the following:

A. State if the Company is tracking COVID-19 related expenses;

B. If so, identify where the tracked expenses are reflecting in the referenced filing, the amount being tracked for each expense, and over what period each is being amortized; and

C. Supporting documentation for each of the COVID-19 related expenses.

RESPONDENT:

M. E. Poff
CFO

DATE:

July 12, 2022

RESPONSE:

A. The Company began tracking COVID-19 related expenses in 2020, but by the end of 2020 there were no COVID-19 related expenses incurred by the Company.

B.-C. No COVID-19 related expenses are included in this rate filing.

I&E Statement No. 2
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Direct Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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<u>INTRODUCTION</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

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

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

Q. WHAT IS YOUR EDUCATION AND EMPLOYMENT BACKGROUND?

A. An outline of my education and employment history is attached as Appendix A.

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

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

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to review the base rate filing of The York Water

Company (York Water or Company) and make recommendations regarding the Company's rate of return, including capital structure, cost of long-term debt, the cost of equity, and the overall fair rate of return for the fully projected future test year (FPFTY) ending February 29, 2024.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

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

BACKGROUND

Q. WHAT IS THE GENERAL DEFINITION OF RATE OF RETURN IN THE CONTEXT OF A BASE RATE CASE?

A. Rate of return is one of the components of the revenue requirement formula. Rate of return is the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time.

Q. WHAT IS THE REVENUE REQUIREMENT FORMULA?

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

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

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

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

Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.

A. In base rate proceedings, the overall rate of return is traditionally calculated using the weighted average cost of capital method. To calculate the weighted average cost of capital, a company's capital structure must first be determined by comparing the percentage of each capitalization component, which has financed rate base, to total capital. Next, the effective cost rate of each capital structure component must be determined. The historical component of the cost rate of debt can be computed accurately, and any future debt issuances are based on estimates. The cost rate of common equity is not fixed and is more difficult to measure. Because of this difficulty, a proxy group is used as discussed later in this testimony. Next, each capital structure component percentage is multiplied by its corresponding effective cost rate to determine the weighted capital component cost rate. The I&E table in the *"I&E Position"* section below demonstrates the interaction of each capital structure component and its corresponding effective cost rate. Finally, the sum of the weighted cost rates produces the overall rate of return. This overall rate of return is multiplied by the rate base to determine the return portion of a company's revenue requirement.

<u>COMPANY'S RATE OF RETURN CLAIM</u>

Q. WHO IS THE COMPANY'S RATE OF RETURN WITNESS?

A. York Water witness Paul R. Moul is the primary witness addressing rate of return (York Water Statement No. 107). Mr. Moul provided analysis for the claimed capital structures, long-term debt, and cost of common equity for York Water.

Q. PLEASE SUMMARIZE THE COMPANY'S RATE OF RETURN CLAIM.

A. Mr. Moul recommended the following rate of return for the Company for water and wastewater based on its FPFTY ending February 29, 2024 (York Water Exhibit No. FVII, Schedule 1, p. 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	<u>54.77%</u>	11.25%	<u>6.16%</u>
Total	<u>100.00%</u>		<u>7.93%</u>

Q. IS MR. MOUL UNCLEAR ABOUT THE WASTEWATER OPERATIONS CLAIM?

A. Yes. Other than his reference to wastewater utilizing the same proxy group as water, Mr. Moul does not specifically address wastewater nor identify the wastewater docket number in his provided testimony. However, in reviewing the wastewater cost of service study at proposed rates (York Water Exhibit No. FVIII-WA, Schedule C), the rate of return utilized is the same as water operations, so I am assuming that it was Mr. Moul's intent to recommend the same return on equity, debt costs, and rate of return for wastewater that he provided in the referenced water operations testimony.

<u>I&E POSITION</u>

Q. PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATION.

A. I recommend the following rate of return for the Company (I&E Exhibit No. 2, Schedule 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	<u>54.77%</u>	8.59%	<u>4.70%</u>
Total	<u>100.00%</u>		<u>6.47%</u>

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 similar traits of risk in comparison 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. Therefore, a proxy group has the effect of smoothing out potential anomalies associated with a single company.

Q. DO ANY OF THE CRITERIA YOU USE IN SELECTING YOUR PROXY GROUP REQUIRE THAT THE COMPANIES SELECTED ARE WASTEWATER UTILITIES?

A. No. Few, if any, publicly held 'wastewater only' utilities exist because most water companies have diversified their business to include wastewater operations. Accordingly, this type of criterion produces an insufficient sample of companies for my proxy group, adversely affecting the calculation of a fair cost of equity for the subject utility. Additionally, as listed as one of my criteria below, Value Line does not specifically cover the wastewater industry. Therefore, as is common practice for wastewater utility cost of equity analyses, my proxy group consists of regulated water utility companies.

Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR WATER INDUSTRY PROXY GROUP?

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

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

4. The company must not be currently involved/targeted in an announced material merger or acquisition.
5. The company must have four consecutive years of historic earnings data.

Q. WHAT CRITERIA DID MR. MOUL USE IN SELECTING HIS WATER PROXY GROUP COMPANIES?

A. Mr. Moul used the following criteria to screen utility companies for his proxy group (York Water Statement No. 107. p. 11, lines 20-25):

1. The company must be listed in the 'Water Utility Industry' section (basic and expanded) of the Value Line Investment Survey; and
2. The company's stock must be publicly traded.

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

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

American Water Works	AWK
American States Water Co.	AWR
California Water Services Group	CWT
Middlesex Water Co.	MSEX
SJW Group	SJW
Essential Utilities	WTRG
York Water Company	YORW

Q. WHAT PROXY GROUP DID MR. MOUL USE IN HIS ANALYSIS?

A. Mr. Moul utilized the following eight companies in his Water Group (York Water Exhibit No. FVII, Schedule 3, p. 2):

Artesian Resources Corp.	ARTNA
American Water Works	AWK
American States Water Co.	AWR
California Water Services Group	CWT
Middlesex Water Co.	MSEX
SJW Group	SJW
Essential Utilities	WTRG
York Water Company	YORW

Q. DO YOU AGREE WITH MR. MOUL'S WATER PROXY GROUP?

A. Not entirely. While Mr. Moul's Water Group included all seven of the companies in my proxy group, I have excluded one of the companies he uses.

Q. PLEASE LIST THE COMPANY MR. MOUL HAS INCLUDED THAT YOU DO NOT AND EXPLAIN WHY YOU HAVE EXCLUDED THEM FROM YOUR PROXY GROUP.

A. The company Mr. Moul included in his Water Group that I have excluded from my proxy group is Artesian Resources Corporation. I excluded Artesian Resources Corporation because no Value Line report was available for this company; therefore, I could not measure its growth forecast and projected dividend yield.

CAPITAL STRUCTURE

Q. WHAT IS A CAPITAL STRUCTURE?

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

Q. WHAT IS THE COMPANY'S CLAIMED CAPITAL STRUCTURE?

A. The Company's claimed capital structure is summarized in the table below (York Water Statement No. 107, p. 2, line 4 and York Water Exhibit No. FVII, Schedule 1, p. 1):

Type of Capital	Ratio
Long-Term Debt	45.23%
Common Equity	54.77%
Total	100.00%

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

A. Mr. Moul stated that these capital structure ratios are the best approximation of the mix of capital the Company will employ to finance its rate base during the period that new rates are in effect (York Water Statement No. 107, p. 18, lines 19-21).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S CAPITAL STRUCTURE?

A. I recommend using the Company's claimed capital structure as presented in the table above.

Q. WHAT IS THE BASIS FOR YOUR CAPITAL STRUCTURE RECOMMENDATION?

A. Although I believe a capital structure of 50% long-term debt and 50% common equity is optimal when trying to balance the financial integrity of a utility as well as trying to control costs to ratepayers, in this proceeding, I recommend using the Company's claimed capital structure as it falls within the range of my proxy group's capital structures over the past five years. The average capital structure of my proxy group for the past five years consists of long-term debt ratios ranging from 41.50% to 57.60% and equity ratios ranging from 42.40% to 58.05%, with a five-year average of 48.08% for long-term debt and 51.85% for common equity (I&E Exhibit No. 2, Schedule 2).

Q. WHAT IS THE COST SAVINGS TO RATEPAYERS IF THE COMPANY WERE TO EMPLOY A 50/50 CAPITAL STRUCTURE COMPARED TO THE COMPANY'S FILED CAPITAL STRUCTURE?

A. The example below shows the cost savings to ratepayers if the Company were to employ a 50% long-term debt and 50% common equity capital structure in its cost of capital while maintaining its claimed return on equity and rate base:

The York Water Company			
As Filed Capital Structure			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	54.77%	11.25%	6.16%
Total	100.00%		7.93%
50/50 Optimal Capital Structure			
Type of Capital	**Ratio**	**Cost Rate**	**Weighted Cost Rate**
Long-Term Debt	50.00%	3.91%	1.96%
Common Equity	50.00%	11.25%	5.63%
Total	100.00%		7.59%
Difference in the Overall Rate of Return 7.93% - 7.59% = 0.34%			0.34%
Claimed Rate Base*			$350,621,590
Impact Prior to Gross Revenue Conversion Factor			**$1,192,113**
(0.0034 x $350,621,590)			
Gross Revenue Conversion Factor**			1.41366456
Total Impact			**$1,685,248**
1.41366456 x $1,192,113			
*(York Water Exhibit FV-1, p. 3)			
**(I&E Exhibit No. 2, Schedule 3)			

In this example, if the Company were to employ a 50/50 capital structure, the cost savings to ratepayers would be $1,685,248. While I understand achieving and maintaining an exact 50/50 capital structure is not truly feasible, this example is intended to demonstrate York Water's financial security as compared to its peers and show that Mr. Moul's various "add-ons" to his cost of equity calculations are unnecessary.

COST OF LONG-TERM DEBT

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

A. The Company's claimed long-term debt cost rate is 3.91% for the FPFTY (York Water Statement No. 107, p. 19, line 14).

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE COMPANY'S COST RATE OF LONG-TERM DEBT?

A. I recommend using the Company's long-term debt cost rate of 3.91%.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE COMPANY'S COST RATE OF LONG-TERM DEBT?

A. The Company's cost rate of long-term debt is reasonable, as it is representative of the industry. It falls within my proxy group's implied long-term debt cost range of 2.61% to 4.21%, with an average implied long-term debt cost of 3.67% (I&E Exhibit No. 2, Schedule 4). Therefore, I recommend the Company's cost rate of long-term debt be used.

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), 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 classical 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.

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 for 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 and, 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 group through the use of beta. The RP method does not measure the specific risk of a company.

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

A. The CE method utilizes the concept of "opportunity cost." This means that investors will likely dedicate their capital to the investment offering the highest return with similar risk to alternative investments. Unlike the DCF, CAPM, and the RP methods, the CE method is not market-based and relies upon historic accounting data. The most problematic issue with the CE method is determining what constitutes comparable companies.

Q. WHAT METHOD DO YOU RECOMMEND USING TO DETERMINE AN APPROPRIATE COST OF COMMON EQUITY FOR YORK WATER?

A. I recommend using the DCF method as the primary method to determine the cost of common equity. I provide the results of my CAPM as a comparison, and not as a check, to the DCF results. Although no one method can capture every factor that influences an investor, including the results of methods that are less reliable than the DCF does not make the end result more reliable or more accurate. My recommendation is also consistent with the methodology historically used by the Commission in base rate proceedings, even as recently as 2017, 2018, 2020, and 2021.[1]

Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE DCF AS THE PRIMARY METHOD IN YOUR ANALYSIS.

A. I have used the DCF as the primary method for several reasons. First, the DCF is appealing to investors as it is based upon the concept that the receipt of dividends in addition to the expected appreciation is the total return requirement determined by the market.[2] Second, the use of a growth rate and expected dividend yield are

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[1] *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company;* Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA;* Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.;* Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131.

[2] David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 151.

also strengths of the DCF, as this recognizes the time value of money and is forward-looking. Third, the use of the utilities' own, or in this case, the proxy group's stock prices and growth rates directly in the calculation also causes the DCF to be industry and company specific. Finally, the DCF, through the use of a spot stock price when determining the dividend yield and analysts who generate forecasted earnings growth rates, almost certainly takes current inflationary trends into consideration, therefore, it contains the most up-to-date projected information of any model. Therefore, the DCF method is the superior method for determining the rate of return for the current economic market because it measures the cost of equity directly.

Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE CAPM AS A COMPARISON IN YOUR ANALYSIS.

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

Q. EXPLAIN THE DISADVANTAGES OF THE CAPM.

A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give results that indicate to an investor what the equity cost rate should be if current economic and regulatory conditions are the same as those present during the historical period in which the risk premiums were determined. This is because beta, which is the only company-specific variable in the CAPM model, measures the *historical* volatility of a stock compared to the *historical* overall market return. Reliance on historical values is especially problematic now given the recent impact of the coronavirus on economic conditions. Although the CAPM and RP results can be useful to investors in making rational buy and sell decisions within their portfolios, the DCF method is the superior method for determining the rate of return for the current economic market and measuring the cost of equity directly. The CAPM and the RP methods are less reliable indicators because they measure the cost of equity indirectly and risk premiums vary depending on the debt and equity being compared. Also, regulators can never be certain that economic and regulatory conditions underlying the historical period during which the risk premiums were calculated are the same today or will be the same in the future.

Q. IS THERE ANY ACADEMIC EVIDENCE THAT QUESTIONS THE CREDIBILITY OF THE CAPM MODEL?

A. Yes. An article, "Market Place; A Study Shakes Confidence in the Volatile-Stock Theory," which appeared in the *New York Times* on February 18, 1992, summarized a CAPM study conducted by professors Eugene F. Fama and Kenneth R. French.[3] Their study examined the importance of beta, CAPM's risk factor, in explaining returns on common stock. In CAPM theory a stock with a higher beta should have a higher expected return. However, they found that the model did not do well in predicting actual returns and suggested the use of more elaborate multi-factor models.

A more recent article, "The Capital Asset Pricing Model: Theory and Evidence," which appeared in the *Journal of Economic Perspectives,* states that "the attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor - poor enough

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

to invalidate the way it is used in applications."[4] As a result, I conclude that the CAPM's relevance to the investment decision making process does not carry over into the regulatory rate setting process.

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

A. The RP method is excluded because it is a simplified version of the CAPM and is subject to the same faults listed above. Additionally, unlike the CAPM, the RP method does not recognize 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. Moreover, its historical usage in this regulatory forum has been minimal.

Q. ARE THERE ANY RECENT COMMISSION ORDERS THAT DEVIATE FROM THE USE OF THE DCF AS THE PRIMARY METHOD IN DETERMINING A COMPANY'S RETURN ON EQUITY?

A. Yes. The Commission indicated in the most recent Aqua Pennsylvania, Inc.

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

(Aqua) base rate case order that its method "for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies"[5] and that "I&E's DCF and CAPM produce a range of reasonableness for the ROE…",[6] which deviates from prior Commission practice of primarily relying on the DCF.

Q. SHOULD THE COMMISSION'S USE OF THE CAPM AS A CEILING FOR A "RANGE OF REASONABLENESS" APPLY IN THIS PROCEEDING?

A. No. First, Aqua's return on equity of 10.00% is above the Distribution System Improvement Charge (DSIC) authorized by the Commission of 9.80% for water and wastewater utilities based on the year ended March 31, 2021, issued at the Public Meeting held August 4, 2022.[7] Second, in a report issued by <u>Regulatory Research Associates, a group within S&P Global Market Intelligence</u>,[8] the average return on equity for water utility base rate cases that have been completed during the first six months of 2022 was 9.73% and for the last twelve months ended June 30, 2022 was 9.57% which are well below the 10.00% return on equity authorized by the Commission for Aqua. This demonstrates the problem

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

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

7 PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2022, p. 27, approved at Public Meeting on August 4, 2022 at Docket No. M-2022-3033561.

8 Regulatory Research Associates, "Water ROE continues upward trend based on small dataset," *S&P Global Market Intelligence*, July 28, 2022.

associated with using the CAPM as a ceiling for determining a utility's return on equity.

Finally, as explained above, the CAPM should not be used as a primary method, and it should only be used as a comparison (not as a check of the DCF). Also, as demonstrated below, the use of the CAPM in this proceeding would result in a significant burden to ratepayers during a time of increasing levels of inflation and economic decline. Therefore, I disagree with providing the CAPM comparable weight to the DCF method.

<u>SUMMARY OF THE COMPANY'S RESULTS</u>

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

A. Mr. Moul used the DCF, CAPM, RP, and CE methods in analyzing the Company's cost of equity. He made several adjustments to his results, which include consideration for size, various claimed risk factors, leverage, and management performance. Ultimately, Mr. Moul opined that a cost of equity of 11.25% is warranted (York Water Statement No. 107, p. 6, line 4 through p. 7, line 9 and York Water Exhibit No. FVII, Schedule 1, p. 2).

I&E RECOMMENDATION

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

A. Based upon my analysis, I recommend a cost of common equity of 8.59% (I&E Exhibit No. 2, Schedule 1).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the use of the DCF method. As explained above, I used my CAPM result only to present to the Commission a comparison and not as a check to my DCF results. My DCF analysis uses a spot dividend yield, a 52-week dividend yield, and earnings growth forecasts.

DISCOUNTED CASH FLOW

Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.

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

$$K = D_1/P_0 + g$$

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 (I&E Exhibit No. 2, Schedule 5):

Seven-Company Proxy Group	Dividend Yield
Spot	2.10%
52-week average	1.90%
Average	2.00%

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

A. I have used five-year projected growth rate estimates from Value Line, Yahoo! Finance, Zacks, and Morningstar.

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

A. The expected average growth rates for my proxy group ranged from 2.10% to 14.00% with an overall average of 6.59% (I&E Exhibit No. 2, Schedule 6).

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

A. The results of my DCF analysis are calculated as follows (I&E Exhibit No. 2, Schedule 7):

$$K = D_1/P_0 + g$$
$$8.59\% = 2.00\% + 6.59\%$$

Q. DOES THE DCF ADEQUATELY FACTOR IN RECENT INFLATIONARY TRENDS?

A. Yes. My DCF calculation includes a spot stock price when determining the dividend yield and analysts who generate forecasted earnings growth rates almost certainly take inflation into consideration as well; therefore, it contains the most up-to-date projected information of any model. Thus, any potential concerns that the Commission should consider the overall economic climate and related inflation when deciding the merits of the Company's requested base rate increase are adequately covered by use of the DCF as a primary model for determining an appropriate return on equity.

CAPITAL ASSET PRICING MODEL

Q. PLEASE EXPLAIN YOUR CAPM ANALYSIS.

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

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

Where:

K	=	Cost of equity
R_f	=	Risk-free rate of return
R_m	=	Expected rate of return on the overall stock market
β	=	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 market.

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

A. In estimating an equity cost rate for my proxy group of seven water companies, I used the average of the betas for the companies as provided in the Value Line Investment Survey. The average beta for my proxy group is 0.78 (I&E Exhibit No. 2, Schedule 8).

Q. WHAT RISK-FREE RATE OF RETURN HAVE YOU USED FOR YOUR FORECASTED CAPM ANALYSIS?

A. I used the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Notes. While the yield on the short-term T-Bill is a more theoretically correct parameter to represent a risk-free rate of return, it can be extremely volatile. The volatility of short-term T-Bills is directly influenced by Federal Reserve policy. At the other extreme, the 30-year Treasury Bond exhibits more stability but is not risk-free. Long-term Treasury Bonds have substantial maturity risk associated with market risk and the risk of unexpected inflation. Long-term treasuries normally offer higher yields to compensate investors for these risks. As a result, I used the yield on the 10-year Treasury Note because it mitigates the shortcomings of the other two alternatives. Additionally, the Commission has recently recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[9]

The forecasted yield on the 10-year Treasury Note, as can be seen in Blue Chip Financial Forecasts, is expected to be between 3.10% and 3.40% from the third quarter of 2022 through the third quarter of 2023, and it is forecasted to be 3.50% from 2024-2028. For my forecasted CAPM analysis, I used 3.32%, which is the average of all the yield forecasts I observed (I&E Exhibit No. 2, Schedule 9).

Q. HOW DID YOU DETERMINE THE RETURN ON THE OVERALL STOCK MARKET 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 14.47% over the next three to five years based on a forecasted dividend yield of 2.00% and a yearly index appreciation of 60%. The S&P 500 index is expected to have an average yearly return of 14.35% over the next five years based upon Barron's forecasted dividend yield of 1.55% and Morningstar's average expected increase in the S&P 500 index of 12.70% (I&E Exhibit No. 2, Schedule 10).

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9 *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.

Q. WHAT IS THE EXPECTED RETURN ON THE OVERALL STOCK MARKET BASED ON YOUR FORECASTED ANALYSIS?

A. The expected return on the overall market is 14.41% for my forecasted analysis (I&E Exhibit No. 2, Schedule 10).

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

A. The result of my analysis is as follows (I&E Exhibit No. 2, Schedule 11):

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

$$11.97\% = 3.32\% + 0.78\ (14.41\% - 3.32\%)$$

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

A. Yes. As discussed earlier in my testimony, my recommended cost of equity is based upon my DCF analysis. I only present a CAPM analysis to the Commission as a comparison and not for recommendation purposes as the inputs are highly subjective, and other than beta, not company or industry specific. Again, it has traditionally been the preference of the Commission to view both the DCF and CAPM analysis in base rate proceedings.

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

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

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 338 BASIS POINTS TO THE COST OF EQUITY BASED ON THE DIFFERENCE IN RESULTS BETWEEN YOUR CAPM ANALYSIS (11.97%) AND YOUR DCF ANALYSIS (8.59%)?

A. The example below illustrates the impact of 338 additional basis points to the Company's cost of equity if the results of my CAPM analysis were applied to the Company's filed rate base used rather than my DCF results:

The York Water Company	
Claimed Equity Percentage of Capital Structure	54.77%
Difference in Rate on Equity between I&E CAPM and DCF Analysis (11.97% - 8.59% = 3.38%)	3.38%
Additional Basis Points to Calculated Cost of Equity	338
Claimed Rate Base*	$350,621,590
Impact Prior to Gross Revenue Conversion Factor (0.5477 x 0.0338 x $350,621,590)	**$6,490,798**
Gross Revenue Conversation Factor**	1.41366456
Total Impact (1.41366456 x $6,490,798)	**$9,175,811**

*(York Water Exhibit FV-1, p. 3)
**(I&E Exhibit No. 2, Schedule 3)

In this example, an addition of 338 basis points to the cost of equity would burden ratepayers to fund an additional amount of $9,175,811. In short, it is inappropriate to use the CAPM as the top end of a range as was done by the Commission in the recent Aqua rate case in determining a return on equity. Contrary to the 338-basis point spread in this proceeding as illustrated above, the spread between the DCF and the CAPM in the Aqua case was much less substantial at 99 basis points.[10] Any amount granted above the DCF (8.59% based on my recommendation) places an inappropriate burden on ratepayers.

[10] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

CRITIQUE OF MR. MOUL'S PROPOSED COST OF EQUITY

Q. DO YOU AGREE WITH MR. MOUL'S PROPOSED COST OF EQUITY?

A. No. I disagree with Mr. Moul's proposed cost of equity analysis for several reasons. First, I disagree with the weights given to the results of Mr. Moul's CAPM, RP, and CE analyses in his recommendation. Second, I disagree with certain aspects of Mr. Moul's discussion of York Water's risk. Third, I disagree with his application of the DCF including the forecasted growth rate and leverage adjustment he uses. Fourth, I disagree with his inclusion of a size adjustment, his reliance on the 30-year Treasury Bond for his risk-free rate, and the use of a double-adjusted beta in his CAPM analysis. Finally, Mr. Moul's request for an additional 25 basis points for "strong management performance" is unjustified.

WEIGHTS GIVEN TO THE CAPM, RP, AND CE METHODS

Q. DO YOU AGREE WITH MR. MOUL'S RELIANCE ON THE CAPM?

A. No. While I am not opposed to providing the Commission the results of the CAPM for a point of comparison to the results of the DCF calculation, I am opposed to giving the CAPM considerable weight. For the reasons discussed above, including my reference to recent Commission orders, it is not appropriate to give the CAPM similar weight to the DCF as Mr. Moul has done in creating his recommended cost of equity range (York Water Statement No. 107, p. 6, line 11).

As discussed above, the CAPM measures the cost of equity indirectly and can be manipulated by the time period chosen.

Q. DO YOU AGREE WITH MR. MOUL'S USE OF THE RP METHOD?

A. No. As explained above, the RP method is a simplified version of, and is subject to the same faults as the CAPM. Further, the RP method does not recognize company-specific risk through beta as does the CAPM.

Q. DO YOU AGREE WITH MR. MOUL'S USE OF THE CE METHOD?

A. No. The companies in Mr. Moul's analysis are not utilities, and, therefore, they are too dissimilar to be used in a CE analysis. The companies in Mr. Moul's CE proxy group are simply not comparable to water utilities in terms of their business risk or financial risk profile. Regulated water utility companies are monopolies. Due to this minimal competition, utilities in general have very low business risk and are able to maintain higher financial risk profiles by employing more leverage. Conversely, since the companies in Mr. Moul's CE proxy group operate in an unregulated competitive environment with a higher level of business risk, they must maintain lower financial risk profiles by employing a smaller amount of leverage. Furthermore, in his CE analysis, Mr. Moul stated, "I used 20% as the point where those returns could be viewed as highly profitable and should be excluded from the Comparable Earnings approach" (York Water Statement No. 107, p. 43, lines 9-10). It is my opinion the arbitrary use of 20% is unjustified as I am unaware of any water utility company that has been awarded or regularly earns a 20% return.

<u>RISK ANALYSIS</u>

Q. SUMMARIZE MR. MOUL'S CLAIMS REGARDING RISK FACTORS THE COMPANY FACES.

A. Mr. Moul described the Company's claimed risk factors in two different sub-sections. In the first section, labeled "Water Utility Risk Factors," he described the *qualitative* risk factors. In this section, Mr. Moul largely discussed the business risks associated with regulatory policies along with capital intensity and York Water's capital expenditure program (York Water Statement No. 107, p. 7, line 10 through p. 11, line 8). In the second section of his risk analysis, labeled "Fundamental Risk Analysis," he described the *quantitative* risk factors. In this section, Mr. Moul discussed the Company's credit quality, as well as many different financial metrics including size, market ratios, common equity ratio, return on book equity, operating ratios, pre-tax interest coverage, quality of earnings, internally generated funds, and betas (York Water Statement No. 107, p. 11, line 9 through p. 16, line 21).

Q. WHAT RISKS DOES YORK WATER FACE THAT MR. MOUL CLAIMS ARE ASSOCIATED WITH REGULATORY POLICIES?

A. Mr. Moul explained that the Safe Drinking Water Act (SDWA) Amendments of 1996 that re-authorized the SDWA for the second time since its original passage in 1974, institutes policies and procedures governing water quality. The 1996 amendments empower the Environmental Protection Agency (EPA), along with other interested parties, to develop a list of contaminants for possible regulation, which must be updated every five years. From that list, the EPA must select at least five contaminants and determine whether to regulate them. The EPA can bypass the process and develop interim regulations for contaminants posing an urgent health threat (York Water Statement No. 107, p. 7, line 11 through p. 8, line 5).

Q. WHAT IS YOUR OBSERVATION REGARDING MR. MOUL'S CLAIMED RISKS RESULTING FROM REGULATORY POLICIES?

A. York Water faces the same regulatory risk as its peers contained in both my proxy group and Mr. Moul's Water Group. In fact, Mr. Moul even stated that "most of these regulations affect the entire water industry in contrast with certain regulations issued pursuant to the Clean Air Act, which may impact only selected electric utilities" (York Water Statement No. 107, p. 8, lines 1-3). Additionally, the legislation Mr. Moul referenced was passed in 1996, so even though the legislation carries provisions that may change regulatory requirements every five years, by now, analysts and investors following the regulated water utility industry must certainly be well aware of this type of risk.

Q. WHAT ADDITIONAL BUSINESS RISKS DOES MR. MOUL CLAIM AFFECT THE COMPANY?

A. Mr. Moul indicated lead contamination has risen to prominence as a national concern because of the drinking water crisis that garnered news media attention in Flint, Michigan. He continued, enumerating additional environmental and regulatory issues such as the integrity of water supply sources, threats from terrorists, changing land use, and permissible levels of discharged contaminants established by state and federal agencies. Further, Mr. Moul claimed the high fixed costs of water utilities make earnings vulnerable to variation due to fluctuation with water usage in accordance with the weather, the economy, and conservation efforts (York Water Statement No. 107, p. 8, line 6 through p. 9, line 24).

Q. WHAT IS YOUR RESPONSE TO THE ISSUES CITED BY MR. MOUL IN TERMS OF HOW THEY AFFECT THE COMPANY'S BUSINESS RISK?

A. The issues referenced by Mr. Moul affect the entire water utility industry, therefore, York Water faces the same exposure to these issues as do all the other companies in our proxy groups. Investors voluntarily buy and hold shares of stocks in water utility companies, indicating they are aware of these risks and the returns. The cost of equity I present for York Water in this proceeding is adequately measured by my proxy group, and, therefore, adequately compensates investors for these risks.

Q. WHAT DOES MR. MOUL CLAIM REGARDING THE COMPANY'S CAPITAL EXPENDITURES?

A. According to Mr. Moul, the Company's net plant investment to revenue is 6.19x, compared with his Water Group, which is 4.50x. Additionally, Mr. Moul outlined York Water's projected capital expenditure plan for 2022-2026, which is expected to total $225,045,900. He claimed the capital expenditures over the next five years will represent approximately 59% of the total depreciated plant in service at December 31, 2021 (York Water Statement No. 107, p. 10, line 5 through p. 11, line 2).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S CLAIM REGARDING RISK CREATED BY THE COMPANY'S PROJECTED CAPITAL EXPENDITURES?

A. High levels of capital expenditures and high capital intensity are typical of the water utility industry, as every water utility faces the same issues of upgrading or replacing its aging infrastructure. Also, while York Water may have a higher net plant to revenue ratio than the Water Group as Mr. Moul suggested, it must be recognized that capital expenditures which are used to fund plant investment are passed on to ratepayers via base rates such as those claimed in the instant proceeding. So, as costs for replacing infrastructure increase, York Water, as well as any other company, has the option to file a base rate case at any time to address revenue inadequacy due to increasing costs, infrastructure replacement, or any associated issues. Base rate cases allow a utility to recover its costs and provide it the *opportunity* to earn a reasonable return on capital investments. The Commission also offers risk reducing mechanisms such as the Distribution System Improvement Charge (DSIC) and the FPFTY to help reduce any lag in recovery of infrastructure investment or other unforeseen expenditures. It is worth mentioning that these mechanisms were not designed to eliminate the need for base rate cases, but only to mitigate regulatory lag and support increasing infrastructure replacement needs.

Q. WHAT HAS MR. MOUL CLAIMED REGARDING QUANTITATIVE RISK FACTORS IN THE SECTION LABELED "FUNDAMENTAL RISK ANALYSIS?"

A. Mr. Moul stated that it is necessary to establish a company's relative risk position within its industry through an analysis of quantitative and qualitative factors. Mr. Moul used various financial metrics to compare York Water to the S&P Public Utilities Index and his Water Group (York Water Statement No. 107, p. 11, lines 12-18).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S "FUNDAMENTAL RISK ANALYSIS?"

A. Two of the points he discussed, size risk and betas, have been discussed and disputed elsewhere in my direct testimony. Throughout the remainder of his "fundamental risk analysis," Mr. Moul made several statements to indicate that the Company has no more of a risk than any other company in his Water Group. First, concerning common equity ratios, he stated, "The five-year average common equity ratios, based on permanent capital, were 55.2% for the Company, 51.8% for the Water Group, and 41.0% for the S&P Public Utilities" (York Water Statement No. 107, p. 14, lines 2-4). Mr. Moul continued by stating, "The Company is proposing a 54.77% common equity ratio for the purpose of calculating its weighted average cost of capital. This common equity ratio contains the same degree of financial risk than [sic] shown historically for the Company. Moreover, the Company's financial risk is not dissimilar to the Water Group" (York Water Statement No. 107, p. 14, lines 9-13). Second, concerning return on book equity, he stated, "For the five-year period, the coefficients of variation were 0.035 for the Company, 0.067 for the Water Group, and 0.051 for the S&P Public Utilities. The earnings variability for the Company was lower than the Water Group and S&P Public Utilities" (York Water Statement No. 107, p. 14, lines 17-21). Third, regarding operating ratios, Mr. Moul stated, "The five-year average operating ratios were 54.7% for the Company, 70.3% for the Water Group, and 79.8% for the S&P Public Utilities. The Company's lower operating ratio can be traced to its high capital intensity because a larger operating margin derives from the income taxes and return associated with a larger capital investment per dollar of revenue." (York Water Statement No. 107, p. 14, line 24 through p. 15, line 5). Finally, concerning coverage, he stated, "The five-year average interest coverage (excluding Allowance for Funds Used During Construction ("AFUDC")) was 4.28 times for the Company, 3.93 times for the Water Group, and 2.97 times for the S&P Public Utilities. The interest coverages were somewhat above, albeit fairly similar, for York Water and the Water Group" (York Water Statement No. 107, p. 15, lines 10-14). Therefore, York Water's coverage ratio would indicate slightly lower risk.

While some measures Mr. Moul discussed may imply a higher risk profile for the Company, he provided other more convincing measures that illustrate the Company has lower risk. Overall, through his own analysis and testimony, Mr. Moul substantiated that the Company has very similar risk as compared to that of his Water Group.

<u>COST OF EQUITY ADJUSTMENTS</u>

<u>INFLATED GROWTH RATES USED IN DCF ANALYSIS</u>

Q. WHAT GROWTH RATE HAS MR. MOUL USED IN HIS DCF ANALYSIS?

A. Mr. Moul used a growth rate of 7.50% (York Water Statement No. 107, p. 32, line 4).

Q. WHAT IS THE BASIS FOR MR. MOUL'S GROWTH RATE?

A. Mr. Moul stated, "Schedule 9 shows the prospective five-year earnings per share growth rates projected for the Water Group by IBES/First Call (6.00%), Zacks (7.10%), and Value Line (7.57%)" (York Water Statement No. 107, p. 26, lines 13-15). The average of the growth rates from Mr. Moul's sources resulted in an average growth rate of 6.89% ((6.00% + 7.10% + 7.57%) ÷ 3); however, Mr. Moul used a growth rate of 7.50% in his DCF analysis. Mr. Moul stated that growth rates should not be established by a mathematical formulation and his growth rate is reasonable as it is supported by continued infrastructure spending (York Water Statement No. 107, p. 27, lines 7-14).

Q. DO YOU AGREE WITH MR. MOUL'S GROWTH RATE ANALYSIS?

A. No. I disagree with Mr. Moul's belief that DCF growth rates *should not* be established by mathematical formulation. I believe that any alternative is subjective and introduces additional and unnecessary bias and should be avoided whenever possible. The use of a higher growth rate than the average of his proxy group ignores the fact that analysts making earnings per share growth forecasts are already aware of the economic conditions and the state of the water utility industry. The reasons Mr. Moul has given for choosing a growth rate above his calculated average are factors that are already included in the earnings per share growth forecasts. Therefore, choosing a growth rate higher than the average of his proxy group would account for the same factors twice.

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING THE RESULTS OF MR. MOUL'S PROJECTED GROWTH RATES?

A. Yes. While the five-year projected growth rates can be used in analyses, one must be aware that analysts' estimates may be biased. This bias has been observed in literature. An article written by Professors Ciciretti, Dwyer, and Hasan in 2009 observed strong support of earnings forecasts being higher than actual earnings.[11] In spring of 2010, McKinsey on Finance presented an article reporting that after a decade of stricter regulation analysts' forecasts are still overly optimistic.[12]

Analysts' estimates are an attempt to forecast future cash flows and thus expected earnings growth. However, it should be kept in mind that prudent judgment must be exercised as to the sustainability of forecasted growth rates with respect to the base earnings. If the base year earnings are abnormally high, the growth rates from which they are calculated will be biased downward. Similarly, if the base year earnings are abnormally low, the growth rates from which they are calculated will be biased upward. As a result, it is typically necessary to employ a methodology to smooth out the abnormally high or low base year earnings.

In summary, since analysts' projected growth forecasts are most often overly optimistic, there is no need to arbitrarily and non-formulaically increase the estimates used in a DCF analysis.

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[11] Ciciretti, Rocco; Dwyer, Gerald R; and Iftekhan Hasan. "Investment Analysts' Forecasts of Earnings" Federal Reserve Bank of St. Louis *Review*, September/October 2009, 91 (5, part 2) pp. 545-67.

[12] Goedhart, Marc J; Raj, Rishi; and Abhishek Saxena. "Equity analyst: Still too bullish" McKinsey On Finance Number 35 Spring 2010, pp. 14-17.

LEVERAGE ADJUSTMENT APPLIED TO DCF ANALYSIS

Q. HAS MR. MOUL MADE ANY ADDITIONAL ADJUSTMENTS TO THE RESULT OF HIS DCF ANALYSIS?

A. Yes. Mr. Moul proposed a 146-basis point "leverage" adjustment to the results of his DCF analysis to account for applying a market-determined cost of equity to a book value capital structure (York Water Statement No. 107, p. 28, lines 6-8).

Q. WHAT IS FINANCIAL LEVERAGE?

A. Financial leverage is the use of debt capital to supplement equity capital. A firm with significantly more debt than equity is considered to be highly leveraged.

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

A. A market-to-book ratio is used to evaluate a public firm's equity value by comparing the market value and book value of a company's equity. One way of doing this is to divide the current price per share of stock by the book value per share. A M/B result of above one (1) is desired.

Q. HAS MR. MOUL PROPOSED TO ADJUST THE RESULT OF HIS DCF ANALYSIS TO RECOGNIZE HOW THE COMPANY IS LEVERAGED?

A. No. Mr. Moul has not proposed to change the capital structure of the utility (a leverage adjustment), nor has he proposed to apply the market-to-book ratio to the DCF model (a market-to-book adjustment). Instead, Mr. Moul has proposed to make an adjustment to account for applying the market value cost rate of equity to the book value of the utility's equity. I am not aware of any term in academic journals, textbooks, or other literature that describes this type of adjustment.

Q. WHAT IS THE BASIS FOR MR. MOUL'S PROPOSED LEVERAGE ADJUSTMENT?

A. Mr. Moul stated that in order to make the DCF results relevant to a book value capital structure, the market-derived cost of equity needs to be adjusted to take into consideration the difference in financial risk (York Water Statement No. 107, p. 28, lines 9-12). Mr. Moul opined this is because market valuations of equity are based on market value capital structures, which in general have more equity, less debt, and, therefore, less risk than book value capital structures (York Water Statement No. 107, p. 28, lines 1-8).

Q. HOW HAS MR. MOUL ATTEMPTED TO JUSTIFY THE LEVERAGE ADJUSTMENT USED IN HIS ANALYSIS?

A. Mr. Moul simply stated:

> I know of no means to mathematically solve for the 1.46% leverage adjustment by expressing it in the terms of any particular relationship of market price to book value. The 1.46% adjustment is merely a convenient way to compare the 10.77% return computed using the Modigliani & Miller formulas to the 9.31% return generated by the DCF model based on a market value capital structure.[13]

[13] York Water Statement No. 107, p. 31, lines 10-16.

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 146 BASIS POINTS TO THE COST OF EQUITY?

A. The example below illustrates the impact of 146 additional basis points to the Company's cost of equity:

The York Water Company	
Claimed Equity Percentage of Capital Structure	54.77%
Additional Basis Points to Calculated Cost of Equity	146
Claimed Rate Base*	$350,621,590
Impact Prior to Gross Revenue Conversion Factor (0.5477 x 0.0146 x $350,621,590)	**$2,803,717**
Gross Revenue Conversation Factor**	1.41366456
Total Impact (1.41366456 x $2,803,717)	**$3,963,515**

*(York Water Exhibit FV-1, p. 3)
**(I&E Exhibit No. 2, Schedule 3)

In this example, an addition of 146 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of $3,963,515.

Q. DO YOU AGREE WITH MR. MOUL'S "LEVERAGE ADJUSTMENT" JUSTIFICATION?

A. No. Mr. Moul's adjustment is inappropriate for a couple of reasons, including the characterization of financial risk and Commission precedent.

Q. EXPLAIN HOW RATING AGENCIES ASSESS FINANCIAL RISK.

A. Rating agencies assess financial risk based upon a company's booked debt obligations and the ability of its cash flow to cover the interest payments on those obligations. The agencies use a company's financial statements for their analysis, not market capital structure. The income statement reflects the financial risk of a company because it represents the performance of the company over a certain period of time. A change in the market value of the stock is not reflected in the income statement nor is a change in market value capital structure reflected in the book value capital structure unless treasury stock is purchased. It is a company's financial statements that affect the market value of the stock, and, therefore, the financial statements and the book value capital structure that is relied upon in an analysis such as that done by rating agencies.

Q. HAS THE COMMISSION REJECTED THE USE OF A LEVERAGE ADJUSTMENT?

A. Yes. The following six cases are the most recent instances where the Commission has rejected the use of a "leverage adjustment."

First, in *Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc.*, at Docket No. R-00072711 (Order Entered July 31, 2008), p. 38, the Commission rejected the ALJ's recommendation for a leverage adjustment stating, "[t]he fact that we have granted leverage adjustments in the past does not mean that such adjustments are indicated in all cases."

Second, in *Pennsylvania Public Utility Commission, et al v. City of Lancaster – Bureau of Water*, at Docket No. R-2010-2179103 (Order Entered July 14, 2011), p. 79, the Commission agreed with the I&E position and stated, "any adjustment to the results of the market based DCF are unnecessary and will harm ratepayers. Consistent with our determination in *Aqua 2008* there is no need to add a leverage adjustment."

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

Fourth, in *Pennsylvania Public Utility Commission, et. al v. Columbia Gas of Pennsylvania, Inc.*, at Docket R-2020-3018835 (Order Entered February 19, 2021), pp. 137-141, the Commission adopted the ALJ's recommendation to use I&E's DCF methodology, which excludes the use of a leverage adjustment.

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

Finally, in the most recent case of *Pennsylvania Public Utility Commission, et. al v. Aqua Pennsylvania, Inc.*, at Docket R-2021-3027385 (Order Entered June 22, 2021), pp. 154-155, the Commission adopted the ALJ's recommendation to use I&E's DCF methodology, which excluded Aqua's application of a leverage adjustment.

Q. SUMMARIZE YOUR RECOMMENDATION REGARDING THE PROPOSED LEVERAGE ADJUSTMENT.

A. I recommend that Mr. Moul's proposed 146-basis point leverage adjustment be rejected because true financial risk is a function of the amount of interest expense, and capital structure information provided to investors through Value Line is that of book values, not market values. This demonstrates that investors base their decisions on book value debt and equity ratios for the regulated utilities, and therefore, no adjustment is needed. Mr. Moul's proposed adjustments serve only to manipulate the DCF's market-based methodology.

Q. DO YOU HAVE ANY FURTHER COMMENTS REGARDING MR. MOUL'S DCF CALCULATION?

A. Yes. While I am not directly disputing Mr. Moul's adjusted dividend yields, it is important to recognize that, as cited above, the Commission has recently agreed with I&E's DCF methodology which includes the appropriate calculation of dividend yields. Although it is acceptable to adjust historical dividend yields as Mr. Moul has done, it is preferable to use forecasted dividends to calculate the dividend yields when available, such as the ones offered by Value Line that I have employed.

Q. WHAT WOULD MR. MOUL'S DCF BE WITHOUT ANY ADJUSTMENTS?

A. Without Mr. Moul's use of an inflated growth rate and leverage adjustment, his DCF would consist of his calculated dividend yield of 1.81% and an average growth rate of 6.89% as shown above, resulting in an 8.70% cost of equity. This result is well below his claimed cost of equity of 11.25% and much closer to my recommended cost of equity of 8.59%.

<u>INFLATED BETAS USED IN CAPM ANALYSIS</u>

Q. HOW HAS MR. MOUL INFLATED THE BETAS EMPLOYED IN HIS CAPM ANALYSIS?

A. Mr. Moul has used the same logic for inflating his CAPM betas from 0.77 to 1.01 that he used to enhance his DCF returns, through a financial risk or "leverage" adjustment (York Water Statement No. 107, p. 37, lines 4-23). Such enhancements are unwarranted for beta in a CAPM analysis for the same reasons that enhancements are unwarranted for DCF results.

Also, if the unadjusted *Value Line* betas do not reflect an accurate investment risk as Mr. Moul contends, the question naturally arises as to why *Value Line* does not publish betas that are adjusted for leverage. Until this type of adjustment is demonstrated in the academic literature to be valid, such leverage adjusted betas in a CAPM model should be rejected. Furthermore, the Commission found no basis to add leverage adjusted betas in the most recent litigated Aqua Pennsylvania, Inc. base rate case.[14]

Finally, as described in my CAPM analysis above, 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. Due to being regulated and the monopolistic nature of utilities, very rarely do they have a beta equal to or greater than one. Therefore, in this case, to apply an adjusted beta of 1.01 to the entire industry or water proxy group is irrational.

SIZE ADJUSTMENT APPLIED TO CAPM ANALYSIS

Q. WHAT SIZE ADJUSTMENT HAS MR. MOUL PROPOSED?

A. Mr. Moul added 102 basis points to his CAPM indicated cost of common equity

[14] *Pa. PUC v. Aqua Pennsylvania, Inc.;* Docket No. R-2021-3027385 (Order Entered May 16, 2022). *See generally* Disposition of Leverage Adjustment and Management Performance, pp. 166-167.

because he opined that as the size of a firm decreases, its risk and required return increases (York Water Statement No. 107, p. 39, lines 25-26). Mr. Moul relied upon technical literature including Morningstar's Stocks, Bonds, Bills, and Inflation Yearbook, a Fama and French study entitled "The Cross-Section of Expected Stock Returns," and an article published in Public Utilities Fortnightly entitled "Equity and the Small-Stock Effect" (York Water Statement No. 107, p. 39, line 26 through p. 40, line 13).

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 102 BASIS POINTS TO THE COST OF EQUITY?

A. The example below illustrates the impact of 102 additional basis points to the Company's cost of equity:

The York Water Company	
Claimed Equity Percentage of Capital Structure	54.77%
Additional Basis Points to Calculated Cost of Equity	102
Claimed Rate Base*	$350,621,590
Impact Prior to Gross Revenue Conversion Factor (0.5477 x 0.0102 x $350,621,590)	**$1,958,762**
Gross Revenue Conversation Factor**	1.41366456
Total Impact (1.41366456 x $1,958,762)	**$2,769,032**

*(York Water Exhibit FV-1, p. 3)
**(I&E Exhibit No. 2, Schedule 3)

In this example, an addition of 102 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of $2,769,032.

Q. DO YOU AGREE WITH MR. MOUL'S SIZE ADJUSTMENT?

A. No. Mr. Moul's proposed size adjustment is unnecessary because the technical literature he cited supporting investment adjustments related to the size of a company is not specific to the utility industry; therefore, it has no relevance in this proceeding.

Q. IS THERE ACADEMIC EVIDENCE THAT SUPPORTS YOUR CONCLUSION THAT THE SIZE ADJUSTMENT FOR RISK IS NOT APPLICABLE TO UTILITY COMPANIES?

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

> The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for utility stocks. This implies that although the size phenomenon has been strongly documented for the industriales, the findings suggest that there is no need to adjust for the firm size in utility rate regulation.[15]

York Water has presented no evidence to support application of a non-utility study regarding a size adjustment for risk to a utility setting. Absent any credible article

[15] Dr. Annie Wong, "Utility Stocks and the Size Effect: An Empirical Analysis," *Journal of Midwest Finance Association* 1993, pp. 95-101.

to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results should be rejected. Additionally, and more importantly, the Commission has rejected the application of a size adjustment to the CAPM cost of equity calculation.[16]

Q. WHAT WOULD MR. MOUL'S CAPM RESULT BE WITHOUT THE SIZE ADJUSTMENT AND INFLATED BETAS?

A. Mr. Moul's CAPM result would be 10.88% without his size adjustment and inflated betas which is 348 basis points lower than his originally calculated CAPM result of 14.36%. The calculation is repeated below without Mr. Moul's adjustments:

Rf	+	ß	*	(Rm-Rf)	+	size	=	K
3.00%	+	0.77	*	10.24%	+	0.00%	=	10.88%

<u>MANAGEMENT PERFORMANCE</u>

Q. WHAT IS THE COMPANY'S CLAIM REGARDING MANAGEMENT PERFORMANCE.

A. Mr. Moul explains that his 11.25% cost of equity recommendation includes 25 basis points in consideration of the Company's exemplary management performance (York Water Statement No. 107, p. 6, line 17 through p. 7, line 4). He relies upon the direct testimony of Company witness Joseph T. Hand (York

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

Water Statement No. 1.)

Q. SUMMARIZE MR. HAND'S TESTIMONY REGARDING THE COMPANY'S MANAGEMENT PERFORMANCE.

A. Mr. Hand claims York Water is committed to providing safe, dependable, and high-quality water and wastewater services that meets or exceeds customer expectations (York Water Statement No. 1, p. 4, lines 13-16). He discusses the Company's various achievements and other efforts such as the Company's Cash Incentive Plan and recent acquisition activity (York Water Statement No. 1, p. 4, line 13 through p. 23, line 5). Ultimately, Mr. Hand concludes that York Water is superior in its overall effectiveness and provides exceptional service to its customers at an exceptional value, which should be recognized in the Company's return on equity (York Water Statement No. 1, p. 23, lines 7-11).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMS REGARDING AN ROE ADJUSTMENT FOR MANAGEMENT PERFORMANCE?

A. No. First, many of the topics presented by the Company witnesses fall within the categories of reliability, customer service obligation, and safety that are required of every public utility company under 66 Pa C.S.A. §1501. The Company passes capital expenditures to its ratepayers via base rates, or it can utilize a DSIC for capital expenditure recovery. Further, if the Company is effective at controlling operating and maintenance costs, those savings should flow through to ratepayers and/or investors. These savings would likely be offset by the addition of basis points for management performance as ratepayers would have to fund the additional costs. This defeats the purpose of any cost cutting measures to benefit ratepayers, and at the worst possible time when the impacts of the COVID-19 pandemic have combined with economic decline and inflation to create a perfect storm of hardship to ratepayers.

Q. ARE YOU AWARE OF ANY OTHER COMPANIES THAT HAVE RECEIVED ADDITIONAL BASIS POINTS IN RECOGNITION OF MANAGEMENT PERFORMANCE?

A. Yes. In the most recent litigated Aqua base rate case, the Commission awarded Aqua an addition of 25 basis points for its management performance efforts.[17] However, it is important to recognize that this addition was based specifically on Aqua rescuing troubled water and wastewater systems at the Commission's request. In this proceeding, the Commission stated the following: [18]

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

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

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

Q. DOES THE COMMISSION'S PAST ISSUANCE OF ADDITIONAL EQUITY POINTS TO RECOGNIZE MANAGEMENT PERFORMANCE MEAN THAT YORK WATER SHOULD ALSO RECEIVE AN ADJUSTED RETURN ON EQUITY?

A. No. The issuance of equity points to recognize management performance must always be done on a case-by-case basis. The situation in the Aqua case was very specific to the company rescuing troubled water and wastewater systems and preventing health and safety concerns regarding drinking water. While I understand the Commission's intention in that proceeding, I&E disagreed with awarding additional equity points to recognize management performance in that proceeding and disagree here for the reasons explained above.

Q. BASED ON THE COMPANY'S FILED RATE BASE AND CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN ADDITIONAL 25 BASIS POINTS TO THE COST OF EQUITY?

A. The example below illustrates the impact of 25 additional basis points to the Company's cost of equity:

The York Water Company	
Claimed Equity Percentage of Capital Structure	54.77%
Additional Basis Points to Calculated Cost of Equity	25
Claimed Rate Base*	$350,621,590
Impact Prior to Gross Revenue Conversion Factor (0.5477 x 0.0025 x $350,621,590)	**$480,089**
Gross Revenue Conversation Factor**	1.41366456
Total Impact (1.41366456 x $480,089)	**$678,685**

*(York Water Exhibit FV-1, p. 3)
**(I&E Exhibit No. 2, Schedule 3)

In this example, an addition of 25 basis points to the cost of equity would force ratepayers to fund an unwarranted additional amount of $678,685.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE CONSIDERATION OF 25 ADDITIONAL BASIS POINTS FOR THE COMPANY'S MANAGEMENT PERFORMANCE?

A. Ultimately, for any company, true management effectiveness is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. York Water, or any utility should not be awarded additional basis points for doing what they are required to do in order to provide adequate, efficient, safe, and reasonable service under 66 Pa C.S.A. §1501.

<u>OVERALL RATE OF RETURN RECOMMENDATION</u>

Q. WHAT IS THE COMPANY'S PROPOSED OVERALL RATE OF RETURN?

A. The Company's proposed overall rate of return is 7.93% (York Water Statement No. 107, p. 2, line 4).

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

A. I recommend an overall rate of return for the Company of 6.47% (I&E Exhibit No. 2, Schedule 1).

Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE COMPANY'S PROPOSED RETURN ON EQUITY?

A. Yes. First, a report issued by <u>Regulatory Research Associates, a group within S&P Global Market Intelligence</u>,[19] illustrates that while the return on equity for water utilities may be trending upward in 2022, York Water's 11.25% requested return on equity is a significant 168 basis points higher than the average return on equity of 9.57% of nationwide water utility rate cases for the past twelve months

[19] Regulatory Research Associates, "Water ROE continues upward trend based on small dataset," *S&P Global Market Intelligence*, July 28, 2022.

ended June 30, 2022 and 179 basis points higher than the average return on equity of 9.46% of nationwide water utility rate cases for 2021.

Second, when asked, Mr. Moul indicated he was unaware if any water utilities throughout the United States were granted a Commission authorized return of 11.25% or higher cost of common equity in the past two years (I&E Exhibit No. 2, Schedule 12).

Third, as discussed earlier in my testimony, York Water's requested return on common equity is 145 basis points higher than the Commission's approved DSIC rate of 9.80%[20] for water and wastewater companies. My understanding is that the DSIC rate is designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring the existing aging infrastructure closer to meeting safety and reliability requirements in between base rate filings. Additionally, the DSIC rate establishes a benchmark above which a utility company is considered "overearning." To recommend a cost of equity that is above the DSIC rate in this base rate proceeding is inappropriate and not in the public interest.

Finally, while I am aware of the rising costs of capital due to the after-effects of the pandemic and the increasing levels of inflation, I believe it is important not to overburden ratepayers. While the economy is in decline, York

[20] PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended December 31, 2021, p. 27, approved at Public Meeting on June 16, 2022 at Docket No. M-2022-3032405.

Water is requesting a record return on equity to apply to its equity heavy capital structure. As detailed in the various charts above, the effect of Mr. Moul's adjustments to the market-determined cost of common equity are an enormous burden to ratepayers and are completely unwarranted and unnecessary. Although they are not cumulative, the impact to ratepayers of each of the disputed adjustments is summarized as follows:

Adjustment	Total Impact
Leverage Adjustment	$3,963,515
Size Adjustment	$2,769,032
Management Adjustment	$678,685

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Professional and Educational Experience
Christopher Keller

Professional Experience

January 2014 to Present
Fixed Utility Financial Analyst
Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania
Bureau of Investigation & Enforcement

September 2008 to January 2014
Insurance Company Financial Analyst
Pennsylvania Insurance Department, Harrisburg, Pennsylvania
Bureau of Licensing & Financial Analysis

Education and Training

FAI Utility Finance and Accounting for Financial Professionals, Boston, MA
May 21-23, 2014

York College of Pennsylvania, York, Pennsylvania
Master of Business Administration, Finance Concentration, 2008
Bachelor of Science, Accounting, 2006

Testimony Submitted

I have testified and/or submitted testimony in the following proceedings:

- Docket No. R-2022-3032300 – Valley Energy, Inc. (ROR)
- Docket No. R-2022-3031704 – Borough of Ambler – Water Department (ROR)
- Docket No. R-2022-3032242 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2022-3031211 – Columbia Gas of Pennsylvania, Inc. (ROR)
- Docket No. A-2021-3026132 – Aqua Pennsylvania Wastewater, Inc. – Acquisition of the Wastewater Collection and Conveyance System Assets of East Whiteland Township (1329)
- Docket No. P-2021-3030012 – Metropolitan Edison Company (DSP)
- Docket No. P-2021-3030013 – Pennsylvania Electric Company (DSP)
- Docket No. P-2021-3030014 – Pennsylvania Power Company (DSP)
- Docket No. P-2021-3030021 – West Penn Power Company (DSP)
- Docket No. R-2021-3026116 – Borough of Hanover – Water (ROR)
- Docket No. R-2021-3025206 – Community Utilities of Pennsylvania – Water Division (ROR)
- Docket No. R-2021-3025207 – Community Utilities of Pennsylvania – Wastewater Division (ROR)
- Docket No. R-2021-3025652 – UGI Utilities, Inc. – Gas Division (1307(f))

Professional and Educational Experience
Christopher Keller

Testimony Submitted (Continued)

I have testified and/or submitted testimony in the following proceedings:

- Docket No. R-2021-3024750 – Duquesne Light Company (O&M and ROR)
- Docket No. R-2021-3024296 – Columbia Gas of Pennsylvania, Inc. (ROR)
- Docket No. R-2020-3018929 – PECO Energy Company – Gas Division (ROR)
- Docket No. P-2020-3020914 – Twin Lakes Utilities, Inc. (529 Proceeding)
- Docket No. R-2020-3018835 – Columbia Gas of Pennsylvania, Inc. (ROR)
- Docket No. R-2020-3019680 – UGI Utilities, Inc. (1307(f))
- Docket No. P-2020-3019356 – PPL Electric Utilities Corporation (DSP)
- Docket No. R-2019-3015162 – UGI Utilities, Inc. – Gas Division (ROR)
- Docket No. R-2019-3010955 – City of Lancaster – Sewer Fund (O&M)
- Docket No. R-2019-3009647 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2018-3006818 – Peoples Natural Gas Company LLC (O&M)
- Docket No. R-2018-3000124 – Duquesne Light Company (O&M)
- Docket No. R-2018-3001631 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2018-3001632 – UGI Penn Natural Gas, Inc. (1307(f))
- Docket No. R-2018-3001633 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2018-2645938 – Philadelphia Gas Works (1307(f))
- Docket No. P-2017-2637855 – Metropolitan Edison Company (DSP)
- Docket No. P-2017-2637857 – Pennsylvania Electric Company (DSP)
- Docket No. P-2017-2637858 – Pennsylvania Power Company (DSP)
- Docket No. P-2017-2637866 – West Penn Power Company (DSP)
- Docket No. R-2017-2602627 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2017-2602638 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2017-2586783 – Philadelphia Gas Works (O&M)
- Docket No. R-2017-2587526 – Philadelphia Gas Works (1307(f))
- Docket No. I-2016-2526085 – Delaware Sewer Company (529 Proceeding)
- Docket No. R-2016-2531550 – Citizens' Electric Company (O&M)
- Docket No. R-2016-2531551 – Wellsboro Electric Company (O&M)
- Docket No. R-2016-2537349 – Metropolitan Edison Company (CWC and CAP)
- Docket No. R-2016-2537352 – Pennsylvania Electric Company (CWC and CAP)
- Docket No. R-2016-2537355 – Pennsylvania Power Company (CWC and CAP)
- Docket No. R-2016-2537359 – West Penn Power Company (CWC and CAP)
- Docket No. R-2016-2543311 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2015-2518438 – UGI Utilities, Inc. – Gas Division (CWC and USP)
- Docket No. P-2015-2511333 – Metropolitan Edison Company (DSP)
- Docket No. P-2015-2511351 – Pennsylvania Electric Company (DSP)
- Docket No. P-2015-2511355 – Pennsylvania Power Company (DSP)

Professional and Educational Experience
Christopher Keller

<u>Testimony Submitted (Continued)</u>

- Docket No. P-2015-2511356 – West Penn Power Company (DSP)
- Docket No. R-2015-2468056 – Columbia Gas of Pennsylvania, Inc. (O&M)
- Docket No. P-2014-2404341 – Delaware Sewer Company (529 Investigation)
- Docket No. R-2014-2452705 – Delaware Sewer Company (O&M)
- Docket No. R-2014-2428304 – Borough of Hanover – Water (O&M)
- Docket No. R-2014-2419774 – Wellsboro Electric Company (Customer Choice Support Charge)
- Docket No. R-2014-2420279 – UGI Central Penn Gas, Inc. (1307(f))

<u>Assisted with the Following Cases</u>

- Docket No. R-2017-2631441 – Reynolds Water Company (ROR)
- Docket No. R-2016-2580030 – UGI Penn Natural Gas, Inc. (ROR)
- Docket No. R-2014-2462723 – United Water Pennsylvania (CWC)
- Docket No. R-2014-2428742 – West Penn Power Company (CWC)
- Docket No. R-2014-2428743 – Pennsylvania Electric Company (CWC)
- Docket No. R-2014-2428744 – Pennsylvania Power Company (CWC)
- Docket No. R-2014-2428745 – Metropolitan Edison Company (CWC)
- Docket No. R-2013-2397353 – Pike County Light & Power Company (Gas) (O&M)
- Docket No. R-2013-2397237 – Pike County Light & Power Company (Electric) (O&M)

I&E Exhibit No. 2
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Exhibit to Accompany

the

Direct Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

I&E Exhibit No. 2
Schedule 1

I&E
Summary of Cost of Capital

Type of Capital	Ratio	Cost Rate	Weighted Cost
The York Water Company			
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	54.77%	8.59%	4.70%
Total	100.00%		6.47%

I&E Exhibit No. 2
Schedule 2

Proxy Group Capital Structure

	2021		2020		2019		2018		2017		Average
American Water Works											
Long-term Debt	$ 10,424.000	58.82%	$ 9,414.000	59.33%	$ 8,733.000	58.79%	$ 7,576.000	56.37%	$ 6,498.000	54.68%	57.60%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	7,298.000	41.18%	6,454.000	40.67%	6,121.000	41.21%	5,864.000	43.63%	5,385.000	45.32%	42.40%
	17,722.000	100.00%	15,868.000	100.00%	14,854.000	100.00%	13,440.000	100.00%	11,883.000	100.00%	100.00%
American States Water Co											
Long-term Debt	595.596	46.47%	584.184	47.66%	492.735	45.03%	376.587	40.28%	321.039	37.73%	43.43%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	685.947	53.53%	641.673	52.34%	601.530	54.97%	558.223	59.72%	529.945	62.27%	56.57%
	1,281.543	100.00%	1,225.857	100.00%	1,094.265	100.00%	934.810	100.00%	850.984	100.00%	100.00%
California Water Service Group											
Long-term Debt	1,069.395	47.59%	794.968	46.32%	799.682	50.63%	710.027	49.30%	515.793	42.65%	47.30%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,177.594	52.41%	921.344	53.68%	779.906	49.37%	730.157	50.70%	693.462	57.35%	52.70%
	2,246.989	100.00%	1,716.312	100.00%	1,579.588	100.00%	1,440.184	100.00%	1,209.255	100.00%	100.00%
Middlesex Water Co											
Long-term Debt	310.887	45.67%	278.286	44.41%	236.509	42.05%	152.851	37.83%	139.045	37.51%	41.50%
Preferred Stock	2.084	0.31%	2.084	0.33%	2.084	0.37%	2.433	0.60%	2.433	0.66%	0.45%
Common Equity	367.726	54.02%	346.208	55.25%	323.792	57.57%	248.787	61.57%	229.175	61.83%	58.05%
	680.697	100.00%	626.578	100.00%	562.385	100.00%	404.071	100.00%	370.653	100.00%	100.00%
SJW Group											
Long-term Debt	1,492.935	59.07%	1,287.580	58.40%	1,283.597	59.05%	431.424	32.67%	431.092	48.20%	51.48%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,034.519	40.93%	917.160	41.60%	889.984	40.95%	889.312	67.33%	463.209	51.80%	48.52%
	2,527.454	100.00%	2,204.740	100.00%	2,173.581	100.00%	1,320.736	100.00%	894.301	100.00%	100.00%
Essential Utilities											
Long-term Debt	5,827.734	52.92%	5,563.386	54.29%	2,954.972	43.23%	2,398.464	54.41%	2,007.753	50.63%	51.10%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	5,184.450	47.08%	4,683.877	45.71%	3,880.860	56.77%	2,009.364	45.59%	1,957.621	49.37%	48.90%
	11,012.184	100.00%	10,247.263	100.00%	6,835.832	100.00%	4,407.828	100.00%	3,965.374	100.00%	100.00%
York Water Company											
Long-term Debt	138.869	47.64%	123.573	46.31%	94.535	41.33%	93.328	42.51%	90.098	43.01%	44.16%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	152.622	52.36%	143.252	53.69%	134.185	58.67%	126.195	57.49%	119.405	56.99%	55.84%
	291.491	100.00%	266.825	100.00%	228.720	100.00%	219.523	100.00%	209.503	100.00%	100.00%

Five-Year Average Capital Structure					
Long-term Debt	48.08%	**Maximum**	57.60%	**Minimum**	41.50%
Preferred Stock	0.06%				
Common Equity	51.85%	**Minimum**	42.40%	**Maximum**	58.05%
	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)

I&E Exhibit No. 2
Schedule 3

The York Water Company

Gross Revenue Conversion Factor

			Filing
1	Operating Revenue	1	
2	Less: Uncollectibles	0.0052	Exhibit No. FIII-2-18
3	Income Before State Taxes	0.9948	Line 1 - Line 2
4	State Income Tax Effect Rate	0.0999	Exhibit No. FIV-17-10
5	Less: State Income Tax	0.09938052	Line 3 x Line 4
6	Income Before Federal Taxes	0.89541948	Line 3 - Line 5
7	Federal Income Tax Effect Rate	0.21	Exhibit No. FIV-17-10
8	Less: Federal Tax @ 21%	0.18803809	Line 6 x Line 7
9	Adjusted Operating Income	0.70738139	Line 1 - (Line 2 + Line 5 + Line 8)
10			
11	Gross Revenue Convestion Factor	**1.41366456**	1 + ((1 - Line 9) / Line 9)

I&E Exhibit No. 2
Schedule 4

	2021		
	Interest Charges	**Long-Term Debt**	**Debt Cost**
American Water Works	$ 413.00	$ 10,424.00	3.96%
American States Water Co	22.83	595.60	3.83%
California Water Service Group	44.98	1,069.40	4.21%
Middlesex Water Co	8.11	310.89	2.61%
SJW Group	58.76	1,492.94	3.94%
Essential Utilities	207.71	5,827.73	3.56%
York Water Company	4.93	138.87	3.55%
	Range:	**Low**	**2.61%**
		High	**4.21%**
		Average	**3.67%**

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

I&E Exhibit No. 2
Schedule 5

Dividend Yields of Seven Company Proxy Group

Company	American Water Works	American States Water Co	California Water Service Group	Middlesex Water Co	SJW Group	Essential Utilities	York Water Company
Symbol	*AWK*	*AWR*	*CWT*	*MSEX*	*SJW*	*WTRG*	*YORW*
Div	2.80	1.65	1.08	1.25	1.52	1.25	0.83
52-wk low	142.36	74.77	49.84	80.48	57.17	42.03	38.10
52-wk high	189.65	103.77	72.08	121.43	73.69	53.93	53.77
Spot Price	150.56	78.64	53.88	83.41	61.88	45.75	40.26
Spot Div Yield	1.86%	2.10%	2.00%	1.50%	2.46%	2.73%	2.06%
52-wk Div Yield	1.69%	1.85%	1.77%	1.24%	2.32%	2.61%	1.81%
Average	**1.77%**	**1.97%**	**1.89%**	**1.37%**	**2.39%**	**2.67%**	**1.93%**

	Average
Spot Div Yield	**2.10%**
52-wk Div Yield	**1.90%**
Average	**2.00%**

Source:	Barrons	June 10, 2022
	Value Line	April 8, 2022

I&E Exhibit No. 2
Schedule 6

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

Company	Symbol	Yahoo	Zacks	Morningstar	Value Line	Average
		Source				
American Water Works	AWK	8.30%	8.10%	7.80%	7.50%	7.93%
American States Water Co	AWR	4.40%	NA	4.40%	5.50%	4.77%
California Water Service Group	CWT	11.70%	NA	2.10%	6.50%	6.77%
Middlesex Water Co	MSEX	2.70%	NA	NA	4.50%	3.60%
SJW Group	SJW	9.80%	NA	7.90%	14.00%	10.57%
Essential Utilities	WTRG	6.80%	6.10%	7.20%	10.00%	7.53%
York Water Company	YORW	4.90%	NA	NA	5.00%	4.95%
Average						**6.59%**

Sources date:
(From Internet)
June 10, 2022 and April 8, 2022

I&E Exhibit No. 2
Schedule 7

Expected Market Cost Rate of Equity

Using Data for the Proxy Group of Seven Water Companies

5-Year Forecasted Growth Rates

	Time Period		Adjusted Dividend Yield (1)	Growth Rate (2)	Expected Return on Equity (3=1+2)
(1)	**52-Week Average**		1.90%	6.59%	8.49%
	Ending:	June 10, 2022			
(2)	**Spot Price**		2.10%	6.59%	8.69%
	Ending:	June 10, 2022			
(3)	**Average:**		**2.00%**	**6.59%**	**8.59%**

Sources: Value Line April 8, 2022
Barrons June 10, 2022

Company	Beta
American Water Works	0.85
American States Water Co	0.65
California Water Service Group	0.65
Middlesex Water Co	0.70
SJW Group	0.80
Essential Utilities	0.95
York Water Company	0.85
Average beta for CAPM	**0.78**

Source:
Value Line
April 8, 2022

I&E Exhibit No. 2
Schedule 9

Risk-Free Rate

Treasury note 10-yr Note	**Yield**
3Q 2022	3.10
4Q 2022	3.20
1Q 2023	3.30
2Q 2023	3.40
3Q 2023	3.40
2024-2028	3.50
Average	**3.32**

Source:
Blue Chip
June 1, 2022

I&E Exhibit No. 2
Schedule 10

Required Rate of Return on Market as a Whole Forecasted

	Dividend Yield	+	Growth Rate	=	Expected Market Return
Value Line Estimate	2.00%		12.47%	(a)	14.47%
S&P 500	1.65%	(b)	12.70%		14.35%
Average Expected Market Return				=	**14.41%**

(a) ((1+60%)^.25) -1) Value Line forecast for the 3 to 5 year index appreciation is 60%
(b) S&P 500 dividend yield multiplied by half the S&P 500 growth rate
(b) 1.55% * ((1+12.70%/2)) = 1.65%

Sources:

S&P 500 Growth Rate (Morningstar)	6/10/2022	12.70%
S&P 500 Dividend Yield (Barrons)	6/3/2022	1.55%
Value Line Dividend Yield	6/10/2022	2.00%
Value Line Appreciation Yield	6/10/2022	60.00%

I&E Exhibit No. 2
Schedule 11

CAPM with Forecasted Return

Re	Required return on individual equity security
Rf	Risk-free rate
Rm	Required return on the market as a whole
Be	Beta on individual equity security

Re = Rf+Be(Rm-Rf)

Rf =	3.32
Rm =	14.41
Be =	0.78
Re =	**11.97**

Sources:	Value Line	April 8, 2022
	Blue Chip	June 1, 2022

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
THE YORK WATER COMPANY - WATER
DOCKET NO. R-2022-3031340

I&E Exhibit No. 2
Schedule 12

BUREAU OF INVESTIGATION AND ENFORCEMENT
INTERROGATORIES SET RR

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORY I&E-RR-6-D

Reference York Water Statement No. 107, page 43, lines 18-19:

A. State whether Mr. Moul is aware of any water utilities throughout the United States that have been granted a Commission authorized 11.25% or higher cost of common equity in the past two years.

B. If the response to Part A is yes, state which company/companies have been authorized such cost of common equity and in what jurisdiction.

RESPONDENT:

P. R. Moul
P. Moul & Associates

DATE:

June 27, 2022

RESPONSE:

A. Mr. Moul has not researched this issue.

B. See the response to (A) above.

I&E Statement No. 3
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket Nos. R-2022-3031340 and R-2022-3032806

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Cost Allocation
Rate Design
Scale back of Rates

TABLE OF CONTENTS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

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

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

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?

A. An outline of my education and employment experience is attached as Appendix A.

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

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

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to evaluate the York Water Company's ("York Water" or "Company") request for an annual increase in operating revenue of approximately $18,853,738 in water rates and $1,456,792 in wastewater rates and an allocation of $2,670,856 from wastewater customers to water customers in the Fully Projected Future Test Year ("FPFTY") ending February 29, 2024 (York Water Ex. FII-2, p. 10). My testimony will address issues related to the cost allocation and rate design of the water and wastewater operations of the Company.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. I&E Exhibit No. 3 contains schedules relating to my testimony.

ACT 11 ALLOCATION

Q. IS YORK WATER PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. Yes. York Water is proposing to allocate $2,670,856 of its wastewater revenue requirement to water customers (York Water Ex. No. FVIII-WA, Sch. A).

Q. DOES THE PUBLIC UTILITY CODE PERMIT YORK WATER TO PRESENT ITS REVENUE REQUIREMENT ON A COMBINED WATER AND WASTEWATER BASIS AND TO ALLOCATE A PORTION OF THE WASTEWATER REVENUE REQUIREMENT TO ITS COMBINED WATER AND WASTEWATER CUSTOMERS?

A. Yes. However, York Water may only do so if allocating a portion of the wastewater revenue requirement to its combined water and wastewater customers is in the public interest. Historically, Section 1311(c) of the Code required a utility that provides more than one type of utility service segregate the property used and useful in providing each type of service for ratemaking purposes. However, Act 11, which was signed into law by Governor Tom Corbett on February 14, 2012, amended that section of the Code and now exempts a utility that provides water and wastewater service from this requirement. Section 1311(c) of the Code states:

> Segregation of property. --When any public utility furnishes more than one of the different types of utility service, the commission shall segregate the property used and useful in furnishing each type of such service, and shall not consider the property of such public utility as a unit in determining the value of the rate base of such public utility for the purpose of fixing base rates. A utility that provides water and wastewater service shall be exempt from this subsection upon petition of a utility to combine water and wastewater revenue requirements. The commission, when setting base rates, after notice and an opportunity to be heard, may allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if in the public interest.

Q. DOES ACT 11 SPECIFY HOW RATES SHOULD BE DETERMINED OR WHAT PORTION OF A COMPANY'S WASTEWATER REVENUE REQUIREMENT SHOULD BE ALLOCATED TO ITS COMBINED WATER AND WASTEWATER CUSTOMERS?

A. No. Act 11 does not specify how the Commission should determine rates or dictate the amount of revenue that should be allocated or shifted, leaving the

Commission wide latitude in applying this provision of Act 11. However, it is important to remember that Section 1311(c) does state that it must be in the public interest for the utility to allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base.

Q. WHY IS YORK WATER PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. York Water indicated on pages 10-11 of York Water Statement No. 103 that it believes that a 99.2% increase to wastewater customers is not reasonable at this time and that it instead limited the increase to wastewater customers to 35% and allocated the remaining revenue requirement of $2.7 million to water customers.

Q. WHAT IS THE RATE IMPACT OF THE COMPANY'S PROPOSED ALLOCATION OF THE WASTEWATER OPERATIONS' REVENUE REQUIREMENT TO WATER OPERATIONS CUSTOMERS?

A. The Company states that the allocation of $2.7 million will increase the average residential water bill by approximately 4.8% (York Water St. No. 103, p. 11).

Q. DID THE COMPANY PROVIDE ANY SUPPORT FOR WHY IT LIMITED THE WASTEWATER INCREASE TO 35%?

A. The Company indicated on pages 10-11 of York Water Statement No. 103 that the

35% increase is more than the increase for the water customers and will move wastewater customers toward cost of service.

Q. DO YOU AGREE THAT DISTRIBUTING A PORTION OF THE REVENUE REQUIREMENT FOR WASTEWATER OPERATIONS ACROSS WATER CUSTOMERS IS PERMISSIBLE IN THIS PROCEEDING?

A. In general, yes as this allocation is consistent with Act 11. However, I do not agree that the amount of wastewater operations revenue requirement the Company has proposed to allocate to the water operations is either in the public interest or that it represents a reasonable approach.

Q. WHY DO YOU DISAGREE WITH THE AMOUNT OF REVENUE REQUIREMENT THAT THE COMPANY PROPOSES TO ALLOCATE FROM WASTEWATER OPERATIONS TO WATER OPERATIONS?

A. In its response to I&E-RS-1-D (WW), attached as I&E Ex. No. 3, Sch. 1, the Company indicated that it limited the increase to wastewater rates to 35% to avoid rate shock but did not provide any studies, analysis, supporting back-up information, nor any Commission Orders to support its proposal.

Q. WHAT WASTEWATER OPERATIONS REVENUE REQUIREMENT ALLOCATION ARE YOU RECOMMENDING?

A. I am recommending a wastewater operations revenue requirement allocation of $844,015. The $844,015 allocation is the difference between the $6,338,475 in revenues generated by my rate proposals, as discussed below and shown on I&E Exhibit No. 3, Schedule 7, and I&E's total recommended revenue level as described by Zachari Walker on page 7 of I&E Statement No. 1.

Q. BY RECOMMENDING A REDUCTION TO THE AMOUNT OF SUBSIDY, ARE YOU PRIORITIZING THE PUBLIC INTEREST OF A SINGLE GROUP OVER THE WHOLE?

A. Not at all. I am recommending a limit to the amount of subsidy, not remove it completely. Therefore, wastewater operations customers continue to benefit from a lower increase in rates which continues the promotion of positive public policies by no increasing wastewater rates to a level that would recover the full cost of providing wastewater service. Additionally, my rate recommendation significantly moves wastewater rates towards consolidation into a single tariff which aligns with the Commission's policy of consolidation and regionalization. Therefore, my recommended reduction in wastewater operations revenue requirement allocation is reasonable and in the public interest.

WASTEWATER OPERATIONS

Q. PLEASE DESCRIBE THE WASTEWATER OPERATIONS.

A. As described on p. 4 of York Water Statement No. 1, York Water provides wastewater services in the Boroughs of East Prospect, Felton, Jacobus, and West York, in the Townships of East Manchester, Lower Windsor, and West Manheim in York County, Pennsylvania, in the Township of Letterkenny in Franklin County, Pennsylvania, and in the Township of Straban in Adams County, Pennsylvania.

Q. WHERE ARE THE WASTEWATER OPERATIONS RATES SUMMARIZED?

A. The present York Water WW Operations rates are summarized on York Water Exhibit FVIII-WA, Schedule G.

Q. WHAT RATE STRUCTURE CHANGES AND RATE INCREASES ARE PROPOSED BY THE COMPANY?

A. The Company's proposed rate structure changes and rate increases are described in its response to OCA-VI-3 (I&E Ex. No. 3, Sch. 2). York Water's present and proposed rates are shown on York Water Exhibit FVIII-WA, Schedule F. First, the Company is proposing to maintain the 4,000-gallon minimum allowance in the minimum charge for all customers other than West Manheim customers. It is proposing to consolidate Minimum Charge 1, currently $62.50 per month and

Minimum Charge 2, currently $55.00 per month and increase those rates to $80.55 per month. York Water is proposing to consolidate usage rates 1 and 2 and increase those usage rates to $0.7012 per hundred gallons. Finally, the Company has four unmetered rates under present rates and is proposing to consolidate Unmetered Rate 1, Unmetered Rate 3, and Unmetered Rate 4 and increase those rates to $80.55 per month. Unmetered Rate 2 is not being consolidated as this monthly charge is paid by West York customers who were recently acquired, and rates were capped at two times the average increase, or 70%, which resulted in an increase to $55.61 per month for residential customers and $68.71 per month for commercial customers (York Water St. No. 108, p. 15).

Q. DID THE COMPANY PROVIDE A COSS FOR THE WASTEWATER OPERATIONS IN THIS FILING?

A. Yes. The Company provided a Wastewater Operations Cost of Service Study ("COSS") attached as York Water Exhibit FVIII-WA. The Company also provided a COSS for wastewater operations excluding West Manheim, as was required in the Company's acquisition order, as York Water Exhibit FVIII-WB.

Q. HOW MUCH IS YORK WATER PROJECTING THAT IT WILL COST TO PROVIDE SERVICE FOR THE TOTAL WASTEWATER OPERATIONS IN THE FPFTY?

A. The Company claims it will incur approximately $8,289,886 to operate the total

Wastewater Operations (York Water Ex. FVIII-WA, Sch. A).

Q. BASED UPON THE COMPANY'S PROPOSED RATES, HOW MUCH REVENUE IS GENERATED UNDER PROPOSED RATES IN THE WASTEWATER OPERATIONS IN THE FPFTY?

A. Under FPFTY proposed rates, the Company will receive $5,619,009 million in proposed revenue from the Wastewater Operations (York Water Ex. FVIII-WA, Sch. A).

Q. WHAT IS THE DIFFERENCE BETWEEN THE COST TO PROVIDE SERVICE AND THE REVENUE THAT IS PRODUCED UNDER PROPOSED RATES IN THE FPFTY?

A. The difference is $2,670,877 ($8,289,886 – $5,619,009). The $2,670,877 is approximately the amount the Company is proposing to recover from water customers described above.

Q. WHAT DO YOU RECOMMEND THAT WILL PARTIALLY ELIMINATE THE REVENUE SHORTFALL?

A. My recommended rates and rate structure for the wastewater operations are shown on I&E Ex. No. 3, Sch. 3, column D. My recommendations regarding the West Manheim rates are described further below. Regarding the Wastewater Operations rates, I recommend that the minimum charges be transitioned to a more traditional customer charge, consolidated from Minimum Charges 1 and 2 into a single customer charge, and set at $62.50 per month. I recommend that the 4,000-gallon allowance be eliminated and the Consumption Rates 1 and 2 be consolidated and increased to $0.6000 per hundred gallons. I recommend the Flat Rate Charges 1, 3, and 4 be consolidated and increased to $99.00 per month. Finally, I recommend the Flat Rate Charge 2 be increased to $56.00 per month for residential customers and $69.00 per month for commercial customers.

Q. HAS THE COMMISSION TRANSITIONED AWAY FROM A WATER ALLOWANCE WHEN DESIGNING WATER AND WASTEWATER RATES?

A. Yes. As early as 1993, at which time I&E was known as the Office of Trial Staff ("OTS"), OTS recommended that the Lemont Water Company's water allowance and minimum charge should be reduced and eventually totally eliminated. The Commission agreed with this recommendation.[1] More recently in the 2007 Total Environmental Solutions, Inc. – Treasure Lake Water Division ("TESI") case,[2] OTS made a similar recommendation to remove TESI's monthly water allowance in its next base rate case, and the Commission adopted that recommendation.

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1 *Pennsylvania Public Utility Commission v. Lemont Water Co., 1994 WL 175097, at *26-28 (Pa.P.U.C.,1993).*

2 *Pennsylvania Public Utility Commission v. Total Environmental Solutions, Inc. – Treasure Lake Water Division*, Docket No. R-00072495, et al., Order entered July 30, 2008, pp. 110-113.

Therefore, my recommendation to remove the usage allowance is consistent with Commission precedent.

Q. IN ADDITION TO PRIOR COMMISSION DECISIONS, ARE THERE POLICY REASONS WHY YORK WATER SHOULD TRANSITION FROM ITS MINIMUM CHARGE?

A. Yes. York Water's current rate structure requires customers to pay for a defined number of gallons of water, regardless of whether they use water or not. This can be a detriment to low usage customers and a disincentive to conservation efforts because if a customer uses less than the allowance in any month, that customer's wastewater bill is based upon the full allowance amount, and not the wastewater produced. In contrast, billing customers' usage through volumetric rates allows customers to fully reap the benefits of any conservation measures they choose to implement and gives low usage customers a better means of controlling their bills. In this way, customers are not only given clear and direct price signals, but they are also empowered to respond to those signals by controlling their usage.

Q. HOW MUCH DOES THE AVERAGE BILL FOR RESIDENTIAL CUSTOMER INCREASE UNDER YOUR RATE PROPOSAL?

A. My recommended usage rate proposal increases the present average residential bill for a Minimum Rate 1 Wastewater customer from $62.50 per month to $98.43 per month, which is an increase of $35.93 per month or 57.5% from York Water's present rates (I&E Ex. No. 3, Sch. 4, line 5). My recommended usage rate proposal increases the present average residential bill for a Minimum Rate 2 Wastewater customer from $62.50 per month to $98.85 per month, which is an increase of $36.35 per month or 58.2% from York Water's present rates (I&E Ex. No. 3, Sch. 5, line 6).

Q. WHY DO YOU RECOMMEND A USAGE RATE OF $0.6000 PER HUNDRED GALLONS?

A. As I stated above, I am recommending that the 4,000-gallon usage allowance be eliminated. As a result, customers at the 4,000-gallon per month usage level or less will experience a higher percentage increase to their average bills than if the allowance is maintained and the proposed usage rate is approved. Therefore, my recommended usage rate of $0.6000 per hundred gallons, which is less than the Company's proposed usage rate of $0.7012, reduces the total bill for all customers including low usage customers.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED FLAT RATES?

A. My recommended $99.00 per month flat rate for the consolidated Flat Rates 1, 3, and 4 was determined by rounding the average bill for a Minimum Charge 2, or $98.85 per month, customer to the nearest dollar. My recommended Flat Rate Charge 2 rates of $56.00 per month for residential customers and $69.00 per month for commercial customers are simply the Company's proposed rates, rounded to the nearest dollar for simplicity and ease of understanding on the customer bills.

Q. DOES YOUR RECOMMENDATION ALLOW FOR OTHER RATE ZONES TO BE COMBINED WITH RATE ZONE 1?

A. Yes. As I describe below, if the Commission approves my rates and rate structure recommendations, the customer charge and first block usage rate for the West Manheim customers will be equal to the rates paid by a Minimum Charge 2 wastewater customers.

<u>WEST MANHEIM TOWNSHIP WASTEWATER OPERATIONS</u>

Q. WHEN DID YORK WATER REQUEST APPROVAL TO PURCHASE THE WEST MANHEIM TOWNSHIP SYSTEM?

A. York Water completed the acquisition of the West Manheim Township ("West Manheim") on December 30, 2021 and began operating the system on January 2, 2022 (York Water Statement No. 1, p. 20).

Q. WHAT ARE THE PRESENT RATES AND AVERAGE BILL FOR A WEST MANHEIM NON-LOW-INCOME CUSTOMER?

A. Under present rates, the average West Manheim non-low-income residential customers that uses 3,335 gallons per month is $62.00 per month (I&E Ex. No. 3, Sch. 6, line 6). All bills are based upon a customer charge of $55.00 per month and a three-block usage rate of $0.2000 per hundred gallons for the first 3,500 gallons, $1.000 per hundred gallons for the next 3,500 gallons, and $1.2500 per hundred gallons for all usage over 7,000 gallons (York Water, Ex. FVIII-WA, Sch. F).

Q. WHAT INCREASE DID THE COMPANY PROPOSE WITH RESPECT TO WEST MANHEIM RATES?

A. The Company proposed to decrease the West Manheim customer charge to $52.50 per month and increase the first block usage charge to $0.7012 per hundred gallons while maintaining usage rates for the next two usage blocks (York Water, Ex. FVIII-WA, Sch. F).

Q. WHAT RATES AND ALLOWANCE DO YOU RECOMMEND FOR WEST MANHEIM?

A. I recommend that the West Manheim residential customer charge be increased to $71.00 per month (I&E Ex. No. 3, Sch. 3, col. D, line 3). I further recommend that first block usage rate be increased to $0.6000 per hundred gallons, which is equal to the consolidated total wastewater usage rate described above. I agree that the second block usage rate should remain at $1.000 per hundred gallons. However, I recommend the third block usage rate be reduced from $1.2500 per hundred gallons to $1.000 per hundred gallons and eliminated (I&E Ex. No. 3, Sch. 3, col. D, lines 11-13). My recommendation moves the West Manheim rates to or closer to the total Wastewater rates and will generate revenue to reduce the overall subsidy needed to operate the wastewater systems. Finally, this recommendation will make it easier to consolidate wastewater rates in York Water's next base rate case.

Q. WHAT WILL BE THE AVERAGE INCREASE FOR THE WEST MANHEIM NON-LOW-INCOME CUSTOMERS?

A. Under my proposed rates, the average bill for a non-low-income customer will increase from $62.00 per month to $91.01 per month which is an increase of $29.01 per month or 46.79% (I&E Ex. No. 3, Sch. 6, line 6).

Q. DID THE COMMISSION RECENTLY DETERMINE THAT IT IS REASONABLE TO INCREASE THE RATES AND THE AVERAGE BILL FOR CUSTOMERS ACQUIRED THROUGH THE SECTION 1329 PROCESS GREATER THAN THE COMPANY PROPOSED FOR THAT SYSTEM?

A. Yes. In Aqua's 2021 base rate case, the Commission adopted I&E's rate design recommendation that produced such a result. In its Order, the Commission expressly acknowledged that factors other than affordability and gradualism should be considered in rate design. The Commission indicated that business challenges, required repairs and investments in distribution systems (including newly acquired water and wastewater distribution systems) and the high costs of maintaining a distribution system necessary to provide safe, and reliable water and wastewater service were among the many other factors reflected in the rate increase. Importantly, the Commission also recognized the need to consider cost causation, as in its rejection of Aqua's rate design proposal, the Commission noted that it did not bear a "reasonable relationship" to Aqua's cost of serving wastewater customers (PA PUC v. Aqua, R-2021-3027385 et al., pp. 264-265 (Order entered May 16, 2022).

Q. SHOULD THE BENEFITS TO WEST MANHEIM BALANCE THE HIGHER PERCENTAGE INCREASE FOR THESE CUSTOMERS THAN THE COMPANY PROPOSED IN WEST MANHEIM?

A. Yes. Though the West Manheim system was not acquired through the Section 1329 process, the principles espoused by the Commission regarding acquired systems still apply. Specifically, the benefits to the West Manheim customers balance the large increase customers will experience to recover the investment in West Manheim by York Water.

Q. WHAT LEVEL OF SUBSIDY WILL WASTEWATER OPERATIONS RECEIVE IF YOUR RATE RECOMMENDATIONS ARE APPROVED BY THE COMMISSION?

A. As I described above, increasing the Wastewater operations rates to the levels I recommend reduces the subsidy coming from York Water Operations by approximately $719,566 from approximately $2,670,856 million to approximately $1,951,290 (I&E Ex. No. 3, Sch. 7, col. B, line 5). This does not include the additional reduction to the subsidy based on I&E's adjustments to the Company's requested revenue requirement.

CUSTOMER COST ANALYSIS

Q. WHAT IS A CUSTOMER COST ANALYSIS AND HOW IS IT USED?

A. A customer cost analysis is a part of a cost of service study that is used to determine the appropriate fixed customer charges for the various classes and meter sizes. It includes customer costs only.

Q. WHY IS IT NECESSARY TO PERFORM A CUSTOMER COST ANALYSIS?

A. A fixed customer charge represents the revenue that the Company is guaranteed to receive each month, regardless of the level of usage. As acknowledged in the seventh edition of the American Water Works Association M1 Manual, there is a tradeoff between revenue stability from a high customer charge, and affordability and conservation from a low customer charge and higher usage rates.[3]

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[3] AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees, Charges, Seventh Edition. pp. 154-155.

<u>WATER OPERATIONS – CUSTOMER COSTS</u>

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 York Water Exhibit FVIII, RS1-j Attachment. The results of first cost analysis, shown on page 1 of 9 of the attachment, includes all costs being allocated to the customer cost function and results in a unit cost of $30.76 per month.

Additionally, the Company 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 $20.71 per month per customer in the FPFTY (York Water Ex. FVIII, RS1-j, Attachment, p. 1 of 9).

Q. WHICH CUSTOMER COST ANALYSIS DID YORK WATER USE TO DETERMINE ITS PROPOSED CUSTOMER CHARGES?

A. The proposed 5/8-inch customer charge is $20.71 which is equal to the monthly cost determined in the direct customer cost analysis (York Water Ex. FVIII, Sch. I).

Q. DO YOU AGREE THAT CUSTOMER CHARGES SHOULD BE DETERMINED BASED ON THE RESULTS OF THE DIRECT CUSTOMER COST ANALYSIS?

A. Yes. The Commission has traditionally relied on customer cost analyses based on direct cost allocations. Therefore, it is reasonable to continue to reject the "fully allocated" customer cost analysis provided by Ms. Heppenstall and base the customer charges instead on the direct cost customer cost analysis provided by the Company.

WATER CUSTOMER CHARGES

Q. IS YORK WATER PROPOSING TO INCREASE ALL OF ITS CUSTOMER CHARGES?

A. Yes. The Company is proposing to increase the 5/8-inch customer charge from $16.25 per month to $20.71 per month, which is equal to an approximately 27.4% increase. The Company is also proposing to increase the customer charges for meter sizes larger than 5/8-inch by approximately the same percent increase as the 5/8-inch meter as shown on York Water FVIII, Schedule I.

Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSED $20.71 PER MONTH CUSTOMER CHARGE FOR A 5/8-INCH RESIDENTIAL CUSTOMER?

A. The basis for the $20.71 per month 5/8-inch customer charge is the Company's customer cost analysis, as described above.

Q. WHAT DO YOU RECOMMEND REGARDING THE COMPANY'S PROPOSED CUSTOMER CHARGE?

A. As I describe below, I recommend the proposed customer charges be included in any scale back of rates.

SCALE BACK OF RATES

Q. WHAT IS A SCALE BACK OF RATES?

A. If the Commission grants an increase less than the amount the Company requested, the Company's proposed rates would be reduced, or scaled back, to produce the revenue requirement allowed by the Commission.

Q. DID THE COMPANY INDICATE ITS PREFERRED SCALE BACK METHODOLOGY?

A. Yes. In its response to OCA-I-9, attached as I&E Exhibit No. 3, Schedule 8, the Company stated that "[w]ith the exception of Public Fire Protection, all classes' increases should be scaled-back proportionately to the originally proposed increases."

Q. DO YOU AGREE WITH THE COMPANY'S SCALE BACK PROPOSAL?

A. Generally, yes. I agree that all classes' increases should be scaled back proportionately to the originally proposed increases, apart from the Public Fire

Protection classes. However, as I describe below, additional steps are required to determine the appropriate scale back of rates.

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 OPERATIONS 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 THE WASTEWATER OPERATIONS?

A. I recommend that any scale back be netted against the subsidy the Commission determines for the Wastewater Operations. For example, under my rate structure recommendation, if the total Wastewater Operations scale back is $1.95 million, there would be no scale back to any Wastewater Operations rates because the Wastewater Operations are receiving a subsidy of $2.0 million (I&E Ex. No. 3, Sch. 7, Column B). However, if the scale back is $3.0 million, I recommend usage rates be reduced by approximately $1.0 million ($3.0 - $2.0) to account for the lower Wastewater Operation revenue requirement ordered by the Commission.

<u>WATER OPERATIONS RATE SCALE BACK</u>

Q. WHAT OVERALL PERCENTAGE INCREASES HAS THE COMPANY PROPOSED FOR EACH WATER CUSTOMER CLASS?

A. As shown on York Water Exhibit No. FVIII, Schedule A, the Company is proposing the following increases for each class in the FPFTY:

- Residential
  - Gravity 36.1%,
  - Repumped 32.7%,
- Commercial
  - Gravity 45.8%,
  - Repumped 43.7%,
- Industrial
  - Gravity 45.5%,
  - Repumped 40.5%,
- Private Fire
  - Gravity 35.7%,
  - Repumped 25.1%,

- Public Fire
    - Gravity 20.8%,
    - Repumped 18.2%.

Q. SHOULD THE CUSTOMER CHARGES BE INCLUDED IN ANY SCALE BACK?

A. Yes. The customer charges should be included in any scale back of rates.

Q. WHY DO YOU RECOMMEND THAT THE CUSTOMER CHARGES BE INCLUDED IN ANY SCALE BACK?

A. Because the $20.71 per month 5/8th inch customer charge proposed by the Company is based upon the direct customer cost, any reduction in any of the ratemaking inputs by the Commission would reduce the inputs used in the customer cost analysis that was used to determine the $20.71 per month 5/8th inch customer charge. To be consistent, I also recommend the other larger meter sized customer charges be scaled back since the Company proposed that they be increased the same 27.4%.

Q. WHAT DO YOU RECOMMEND IF THE COMMISSION GRANTS AN INCREASE THAT IS LESS THAN THE FULLY REQUESTED INCREASE FOR WATER OPERATIONS AND REDUCES THE CUSTOMER CHARGES?

A. If the Commission grants an increase less than the fully requested increase, I recommend the customer charges and usage rates be decreased proportional to the increase proposed by the Company so that the increase by class is proportional to what the Company proposed to produce the revenue level the Commission approves.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

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 R-2018-3002647
64. 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
65. Implementation of Chapter 32 of the Public Utility Code Regarding Pittsburgh Water and Sewer Authority, Docket Nos. M-2018-2640802 and M-2018-2640803
66. Philadelphia Gas Works 1307(f), Docket No. R-2019-3007636
67. People Natural Gas Company, LLC, Docket No. R-2018-3006818
68. Application of Pennsylvania American Water Company Acquisition of the Steelton Borough Authority, Docket No. A-2019-3006880
69. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the Township of Cheltenham, Docket No. A-2019-3006880
70. Philadelphia Gas Works, Docket No. R-2019-3009016
71. Wellsboro Electric Company, Docket No. R-2019-3008208
72. Valley Energy, Inc., Docket No. R-2019-3008209
73. Citizens' Electric Company of Lewisburg, Pa, Docket Non. R-2019-3008212
74. Application of Aqua America, Inc. et al., Acquisition of the Wastewater System Assets of the East Norriton Township, Docket No. A-2019-3009052

75. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2020-3017850
76. Peoples Gas Company, LLC 1307(f), Docket No. R-2020-3017846
77. Philadelphia Gas Works, Docket No. R-2020-3017206
78. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 et al.
79. Columbia Gas of Pennsylvania, Docket No. R-2020-3018835
80. Pennsylvania America Water Company, Docket Nos. R-2020-3019369 and R-2020-3019371
81. PECO Energy Company – Gas Division, Docket No. R-2020-3019829
82. PGW 1307(f), Docket No. R-2021-3023970
83. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2021-3023965
84. Peoples Gas Company, LLC 1307(f), Docket No. R-2021-3023967
85. UGI Utilities, Inc. – Electric Division, Docket No. R-2021-3023618
86. Columbia Gas of Pennsylvania, Inc., Docket No. R-2021-3024926
87. Duquesne Light Company, Docket No. R-2021-3024750
88. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2021-3025652
89. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773 et al.
90. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of Lower Makefield Township, Docket No. A-2021-3024267
91. Aqua Pennsylvania Water, Inc. and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385 and R-2021-3027386
92. 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
93. City of Lancaster – Bureau of Water, Docket No. R-2021-3026682
94. Application of Aqua America Wastewater, Inc. et al., Acquisition of the Wastewater System Assets of East Whiteland Township, Docket No. A-2021-30246132
95. UGI Utilities, Inc. – Gas Division, Docket No. R-2021-3030218
96. Peoples Natural Gas Company, LLC 1307(f), Docket No. R-2022-3030661
97. Columbia Gas of Pennsylvania, Inc., Docket No. R-2022-3031211
98. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2022-3032242
99. Pennsylvania American Water Company, Docket Nos. R-2022-3031672 and R-2022-3031673

I&E Exhibit No. 3
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket Nos. R-2022-3031340 and R-2022-3032806

Exhibit to Accompany

the

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Cost Allocation
Rate Design
Scale back of Rates

PENNSYLVANIA PUBLIC UTILITY COMMISSION
v.
THE YORK WATER COMPANY - WASTEWATER
DOCKET NO. R-2022-3032806

BUREAU OF INVESTIGATION AND ENFORCEMENT
INTERROGATORIES SET RS

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORY I&E-RS-1-D

Reference York Exhibit FII-2, page 10 showing present and proposed revenue for both water and wastewater. Provide the following:

A. An explanation as to why the increase to wastewater customers is limited to 35%.

B. All studies, analysis, or supporting back-up information that 35% is the highest increase that should apply to wastewater revenue.

C. Any Commission order or prior specific agreements approved by the Commission that limits the increase to 35%.

RESPONDENT:

M. E. Poff
CFO

DATE:

June 29, 2022

RESPONSE:

A. The increase to wastewater customers was established at 35% to move the rates toward reflecting full cost of service but limiting it to avoid rate shock that would be associated with reflecting full cost of service.

B. The Company has no studies, analysis, or supporting back-up information to provide.

C. The Company is not aware of any orders or agreements that limits the increase to 35%.

Pennsylvania Public Utility Commission
v.
The York Water Company
Docket Nos. R-2022-3031340 (Water)
R-2022-3032806 (Wastewater)

Office of Consumer Advocate
Interrogatories Set VI

OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET VI, NO. 3

Reference Exhibit No. FV111-WA, Schedule G:

a. Please explain why York is not consolidating Minimum Charge 1 and Minimum Charge 2 customers;

b. Please explain why York is not proposing to reduce the Rate 1 and Rate 2 minimum allowances;

c. Please explain why York is not proposing movement toward the consolidation of Customer Charge, Rate 1, and Rate 2 customer rates; and

d. Please explain why York is proposing to maintain 4 separate unmetered rates.

RESPONDENT:

M. E. Poff
CFO

DATE:

July 14, 2022

RESPONSE:

a. Minimum Charge 1 and Minimum Charge 2 customers have been consolidated for tariff purposes.

b. The existing tariff has a 4,000 gallon minimum for Rate 1 and Rate 2, and the Company does not believe that needs to be reduced.

c. The proposed rate structure has made considerable progress towards consolidation of various customer rates and will continue to be evaluated for further consolidation in future base rate cases.

Pennsylvania Public Utility Commission
v.
The York Water Company
Docket Nos. R-2022-3031340 (Water)
R-2022-3032806 (Wastewater)

Office of Consumer Advocate
Interrogatories Set VI

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d. They are listed as four rates, but there are only two different rates. Unmetered Rate 1, Unmetered Rate 3, and Unmetered Rate 4 have been consolidated for tariff purposes. Unmetered Rate 2 has not been consolidated, as the rates adopted by the Company were low and raising them to match the other unmetered rate would create a significantly high increase.

THE YORK WATER COMPANY
WASTEWATER OPERATIONS
COMPARISON OF PRESENT AND PROPOSED BASE RATES
R-2022-3032806

	Charges	Present Base Rate Per Month	Increase	Proposed Base Rate Per Month	I&E Proposed Allowance	Percent Increase
	(A)	(B)	(C)	(D)	(E)	(F)
	FIXED CHARGES					
1	Minimum Charge 1	$62.50	$18.05	$80.55	-	28.9%
2	Minimum Charge 2	$55.00	$25.55	$80.55	-	46.5%
3	Customer Charge - WM	$55.00	$16.00	$71.00	-	29.1%
4	Flat Rate Charge 1	$62.50	$36.50	$99.00		58.4%
5	Flat Rate Charge 2 - Res.	$32.71	$23.29	$56.00		71.2%
6	Flat Rate Charge 2 - Com.	$40.42	$28.58	$69.00		70.7%
7	Flat Rate Charge 3	$79.50	$19.50	$99.00		24.5%
8	Flat Rate Charge 4	$45.00	$54.00	$99.00		120.0%

CONSUMPTION CHARGES:

	Rate Block, 100 Gallons Per Month	Present Rate Per 100 gallons		Proposed Rate Per 100 gallons		
	(1)	(2)		(3)		
9	Over 4,000 Gallons - Rate 1	$0.2500	$0.3500	$0.6000		140.0%
10	Over 4,000 Gallons - Rate 2	$0.5000	$0.1000	$0.6000		20.0%
11	First 3,500 gallons - WM	$0.2000	$0.4000	$0.6000		200.0%
12	Next 3,500 gallons - WM	$1.0000	$0.0000	$1.0000		0.0%
13	Over 7,000 gallons - WM	$1.2500	-$0.2500	$1.0000		-20.0%

I&E Exhibit No. 3
Schedule 4

THE YORK WATER COMPANY
WASTEWATER OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
MINIMUM CHARGE 1 - MONTHLY
MINIMUM CONSUMPTION UNDER PROPOSED RATES

Line No.	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
	(A)	(B)	(C)	(D)	(E)
1	0	$62.50	$80.55	$18.05	28.9%
2	1,000	$62.50	$86.55	$24.05	38.5%
3	2,000	$62.50	$92.55	$30.05	48.1%
5	**2,980**	**$62.50**	**$98.43**	**$35.93**	**57.5%**
6	3,000	$62.50	$98.55	$36.05	57.7%
7	4,000	$62.50	$104.55	$42.05	67.3%
8	5,000	$65.00	$110.55	$45.55	70.1%
9	6,000	$67.50	$116.55	$49.05	72.7%
10	7,000	$70.00	$122.55	$52.55	75.1%
11	8,000	$72.50	$128.55	$56.05	77.3%
12	9,000	$75.00	$134.55	$59.55	79.4%
13	10,000	$77.50	$140.55	$63.05	81.4%
14	11,000	$80.00	$146.55	$66.55	83.2%
15	12,000	$82.50	$152.55	$70.05	84.9%
16	13,000	$85.00	$158.55	$73.55	86.5%
17	14,000	$87.50	$164.55	$77.05	88.1%
18	15,000	$90.00	$170.55	$80.55	89.5%
19	16,000	$92.50	$176.55	$84.05	90.9%
20	17,000	$95.00	$182.55	$87.55	92.2%
21	18,000	$97.50	$188.55	$91.05	93.4%
22	19,000	$100.00	$194.55	$94.55	94.5%
23	20,000	$102.50	$200.55	$98.05	95.7%
24	30,000	$127.50	$260.55	$133.05	104.4%
25	40,000	$152.50	$320.55	$168.05	110.2%
26	50,000	$177.50	$380.55	$203.05	114.4%
27	60,000	$202.50	$440.55	$238.05	117.6%
28	70,000	$227.50	$500.55	$273.05	120.0%
29	80,000	$252.50	$560.55	$308.05	122.0%
30	90,000	$277.50	$620.55	$343.05	123.6%
31	100,000	$302.50	$680.55	$378.05	125.0%

*Average residential monthly consumption of 2,980 gallons.

THE YORK WATER COMPANY
WASTEWATER OPERATIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
MINIMUM CHARGE 2 - MONTHLY
MINIMUM CONSUMPTION UNDER PROPOSED RATES

Line No.	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
	(A)	(B)	(C)	(D)	(E)
1	0	$62.50	$80.55	$18.05	28.9%
2	1,000	$62.50	$86.55	$24.05	38.5%
3	2,000	$62.50	$92.55	$30.05	48.1%
4	3,000	$62.50	$98.55	$36.05	57.7%
6	**3,050**	**$62.50**	**$98.85**	**$36.35**	**58.2%**
7	4,000	$62.50	$104.55	$42.05	67.3%
8	5,000	$67.50	$110.55	$43.05	63.8%
9	6,000	$72.50	$116.55	$44.05	60.8%
10	7,000	$77.50	$122.55	$45.05	58.1%
11	8,000	$82.50	$128.55	$46.05	55.8%
12	9,000	$87.50	$134.55	$47.05	53.8%
13	10,000	$92.50	$140.55	$48.05	51.9%
14	11,000	$97.50	$146.55	$49.05	50.3%
15	12,000	$102.50	$152.55	$50.05	48.8%
16	13,000	$107.50	$158.55	$51.05	47.5%
17	14,000	$112.50	$164.55	$52.05	46.3%
18	15,000	$117.50	$170.55	$53.05	45.1%
19	16,000	$122.50	$176.55	$54.05	44.1%
20	17,000	$127.50	$182.55	$55.05	43.2%
21	18,000	$132.50	$188.55	$56.05	42.3%
22	19,000	$137.50	$194.55	$57.05	41.5%
23	20,000	$142.50	$200.55	$58.05	40.7%
24	30,000	$192.50	$260.55	$68.05	35.3%
25	40,000	$242.50	$320.55	$78.05	32.2%
26	50,000	$292.50	$380.55	$88.05	30.1%
27	60,000	$342.50	$440.55	$98.05	28.6%
28	70,000	$392.50	$500.55	$108.05	27.5%
29	80,000	$442.50	$560.55	$118.05	26.7%
30	90,000	$492.50	$620.55	$128.05	26.0%
31	100,000	$542.50	$680.55	$138.05	25.4%

*Average residential monthly consumption of 3,050 gallons.

THE YORK WATER COMPANY

COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
ALL CUSTOMER CLASSES - MONTHLY
MINIMUM CONSUMPTION UNDER PROPOSED RATES

Line No.	CONSUMPTION GALLONS	BILLS UNDER PRESENT RATES*	BILLS UNDER PROPOSED RATES	INCREASE AMOUNT	INCREASE PERCENT
	(A)	(B)	(C)	(D)	(E)
1	0	$55.00	$71.00	$16.00	29.09%
2	1,000	$57.00	$77.00	$20.00	35.09%
3	2,000	$59.00	$83.00	$24.00	40.68%
4	3,000	$61.00	$89.00	$28.00	45.90%
6	**3,335**	**$62.00**	**$91.01**	**$29.01**	**46.79%**
7	4,000	$67.00	$97.00	$30.00	44.78%
8	5,000	$77.00	$107.00	$30.00	38.96%
9	6,000	$87.00	$117.00	$30.00	34.48%
10	7,000	$97.00	$127.00	$30.00	30.93%
11	8,000	$109.50	$137.00	$27.50	25.11%
12	9,000	$122.00	$147.00	$25.00	20.49%
13	10,000	$134.50	$157.00	$22.50	16.73%
14	11,000	$147.00	$167.00	$20.00	13.61%
15	12,000	$159.50	$177.00	$17.50	10.97%
16	13,000	$172.00	$187.00	$15.00	8.72%
17	14,000	$184.50	$197.00	$12.50	6.78%
18	15,000	$197.00	$207.00	$10.00	5.08%
19	16,000	$209.50	$217.00	$7.50	3.58%
20	17,000	$222.00	$227.00	$5.00	2.25%
21	18,000	$234.50	$237.00	$2.50	1.07%
22	19,000	$247.00	$247.00	$0.00	0.00%
23	20,000	$259.50	$257.00	-$2.50	-0.96%
24	30,000	$384.50	$357.00	-$27.50	-7.15%
25	40,000	$509.50	$457.00	-$52.50	-10.30%
26	50,000	$634.50	$557.00	-$77.50	-12.21%
27	60,000	$759.50	$657.00	-$102.50	-13.50%
28	70,000	$884.50	$757.00	-$127.50	-14.41%
29	80,000	$1,009.50	$857.00	-$152.50	-15.11%
30	90,000	$1,134.50	$957.00	-$177.50	-15.65%
	100,000	$1,259.50	$1,057.00	-$202.50	-16.08%

*Average residential monthly consumption of 3,335 gallons.

I&E Exhibit No. 3
Schedule 7

THE YORK WATER COMPANY
WASTEWATER OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED FEBRUARY 29, 2024

Line No.	Customer Classification	Cost of Service				Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
		Amount (Schedule B)	Contrib. From Water Rates	Amount to be Recovered Under Proposed Rates	Percent	Amount	Percent	Amount	Percent	Amount	Percent Increase
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(10)	(11)
1	Residential	$ 6,934,645	$ 1,252,102	$ 5,682,543	89.7%	$ 3,713,704	89.3%	$ 5,682,543	89.7%	$ 1,968,839	53.0%
2	Non-Residential	1,350,380	$ 699,288	$ 651,092	10.3%	443,699	10.7%	651,071	10.3%	207,372	46.7%
3	Total Sales	8,285,025	1,951,390	6,333,635	100.0%	4,157,403	100.0%	6,333,614	100.0%	2,176,211	52.3%
4	Other Revenues	4,861	0	4,861		4,861		4,861		0	0.0%
5	Total	$ 8,289,886	$ 1,951,390	$ 6,338,496		$ 4,162,264		$ 6,338,475		$ 2,176,211	52.3%

Pennsylvania Public Utility Commission
v.
The York Water Company
Docket Nos. R-2022-3031340 (Water)
R-2022-3032806 (Wastewater)

Office of Consumer Advocate
Interrogatories Set I

OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET I, NO. 3

What is the Company's proposal with respect to the scale-back of rates in the event that the Commission authorizes an increase that is less than the requested increase?

RESPONDENT:

M. E. Poff
CFO

DATE:

June 23, 2022

RESPONSE:

With the exception of Public Fire Protection, all classes' increases should be scaled-back proportionately to the originally proposed increases.

I&E Statement No. 1-SR
Witness: Zachari Walker

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Surrebuttal Testimony

of

Zachari Walker

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

STATE INCOME TAX EXPENSE

CASH WORKING CAPITAL

TABLE OF CONTENTS

INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Zachari Walker, and my business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

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

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

Q. ARE YOU THE SAME ZACHARI WALKER WHO SUBMITTED I&E STATEMENT NO. 1 AND I&E EXHIBIT NO. 1?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of The York Water Company (York Water or Company) witness Matthew E. Poff (York Water Statement No. 3-R).

Q. DOES YOUR SURREBUTTAL TESTMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. Yes. I&E Exhibit No. 1-SR accompanies this surrebuttal testimony. Additionally, I refer to my direct testimony and its accompanying exhibit (I&E Statement No. 1 and I&E Exhibit No. 1).

Q. WHAT ARE THE TEST YEARS USED BY YORK WATER IN THIS PROCEEDING?

A. The Company uses the year ended December 31, 2021, as the historic test year (HTY), the year ending December 31, 2022, as the future test year (FTY), and the year ending February 29, 2024, as the fully projected future test year (FPFTY) in the instant proceeding.

<u>SUMMARY OF COMPANY'S REQUEST</u>

Q. PLEASE SUMMARIZE THE COMPANY'S UPDATED REQUESTED REVENUE INCREASE.

A. In rebuttal testimony, York Water updated its requested revenue increase to 20,201,429[1] for the FPFTY for water and wastewater operations.

This represents a $16,047,841[2] requested increase to claimed water operations present rate revenues of $53,642,460.[3] Combined with the claimed allocated wastewater operations revenues per the Act 11 provision of $2,696,796, this results in proposed revenues of $72,387,097 for water operations.[4]

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1 York Water Statement No. 3-R, p. 23.
2 York Water Exhibit No. MEP-1R, p. 1.
3 York Water Exhibit No. MEP-1R, p. 2.
4 York Water Exhibit No. MEP-1R, p. 1.

Additionally, the total requested increase represents a $4,153,588[5] requested increase to claimed wastewater operations present rates revenues of $4,162,262.[6] Applying the proposed Act 11 allocation, a decrease for wastewater operations of $2,696,796, produces proposed revenues of $5,619,054 for wastewater operations.[7]

Q. PLEASE SUMMARIZE YOUR RECOMMENDED O&M ADJUSTMENTS TO THE COMPANY'S REBUTTAL POSITION.

A. The following table summarizes my recommended adjustments:

Water Operations:

	Company Updated Claim	**I&E Recommended Allowance**	**I&E Updated Adjustment**
O&M Expenses:			
General Price Level Adjustment	$1,383,543	$0	($1,383,543)
Total O&M Expense Adjustments			**($1,383,543)**
Rate Base Adjustments:			
Cash Working Capital	$2,994,755	$2,861,089	($133,666)
Total Rate Base Adjustments			**($133,666)**

[5] York Water Exhibit No. MEP-1R, p. 1.
[6] York Water Exhibit No. MEP-1R, p. 1.
[7] York Water Exhibit No. MEP-1R, p. 1.

Wastewater Operations:

	Company Updated Claim	I&E Recommended Allowance	I&E Updated Adjustment
O&M Expenses:			
General Price Level Adjustment	$404,886	$0	($404,886)
Total O&M Expense Adjustments			**($404,886)**

SUMMARY OF I&E OVERALL UPDATED POSITION

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT FOR WATER OPERATIONS PRIOR TO THE ACT 11 ALLOCATION?

A. I&E's total recommended revenue requirement for the Company's water operations is $61,065,324. This recommended revenue requirement represents an increase of $7,422,864 to the Company's claimed present rate revenues of $53,642,460 prior to the Act 11 allocation. This total recommended allowance incorporates my adjustments made in this testimony and those made in the testimony of I&E witness Christopher Keller.[8]

An updated calculation of the I&E recommended revenue requirement is

[8] I&E Statement No. 2-SR.

shown in the table below:

York Water Company - Water Operations		TABLE 1A			
R-2022-3031340		INCOME	SUMMARY		
	2/29/24	INVESTIGATION & ENFORCEMENT			
	Proforma	[--			]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	53,642,460	0	53,642,460	7,422,864	61,065,324
Deductions:					
O&M Expenses	23,337,034	-1,383,542	21,953,492	38,599	21,992,091
Depreciation	12,960,981	0	12,960,981		12,960,981
Taxes, Other	1,353,880	0	1,353,880	49,849	1,403,729
Income Taxes:					
Current State	-364,844	124,802	-240,042	659,364	419,322
Current Federal	-638,456	265,318	-373,138	1,401,761	1,028,623
Deferred Taxes	211,523	0	211,523		211,523
ITC	-39,126	0	-39,126		-39,126
Total Deductions	36,820,992	-993,422	35,827,570	2,149,573	37,977,143
Income Available	16,821,468	993,422	17,814,890	5,273,291	23,088,181
Measure of Value	350,485,422	-133,666	350,351,756	0	350,351,756
Rate of Return	4.80%		5.08%		6.59%

Q. WHAT IS I&E'S TOTAL UPDATED RECOMMENDED REVENUE REQUIREMENT FOR WASTEWATER OPERATIONS PRIOR TO THE ACT 11 ALLOCATION?

A. I&E's total recommended revenue requirement for the Company's wastewater operations is $7,223,362. This recommended revenue requirement represents an increase of $3,061,100 to the Company's claimed present rate revenues of $4,162,262 prior to the Act 11 allocation. This total recommended allowance incorporates my adjustments made in this testimony and those made in the testimony of I&E witness Christopher Keller.[9]

[9] I&E Statement No. 2-SR.

An updated calculation of the I&E recommended revenue requirement is shown in the table below:

York Water Company - Wastewater Operations		TABLE 1B			
R-2022-3032806		INCOME	SUMMARY		
	2/29/24	INVESTIGATION & ENFORCEMENT			
	Proforma	[---			-]
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	4,162,262	0	4,162,262	3,061,100	7,223,362
Deductions:					
O&M Expenses	4,229,013	-404,897	3,824,116	0	3,824,116
Depreciation	933,718	0	933,718		933,718
Taxes, Other	43,491	0	43,491	20,557	64,048
Income Taxes:					
Current State	-249,775	36,418	-213,357	273,345	59,988
Current Federal	-529,576	77,423	-452,153	579,683	127,530
Deferred Taxes	15,937	0	15,937		15,937
ITC	0	0	0		0
Total Deductions	4,442,808	-291,056	4,151,752	873,585	5,025,337
Income Available	-280,546	291,056	10,510	2,187,515	2,198,025
Measure of Value	33,353,950	0	33,353,950	0	33,353,950
Rate of Return	-0.84%		0.03%		6.59%

Q. PLEASE SHOW THE COMPUTATION FOR THE UPDATED I&E PROPOSED WASTEWATER REVENUE ALLOCATION AS SUPPORTED BY I&E WITNESS ETHAN CLINE IN I&E STATEMENT NO. 3-SR.

A. The updated I&E proposed allocation adjustment as discussed by I&E witness Ethan Cline[10] is summarized below in Table 2:

[10] I&E Statement No. 3-SR.

I&E Table 2

York Water Company
Revenue Summary
As Recommended by I&E in Surrebuttal Testimony

	Total Company		Water		Wastewater	
Present Rate Revenues (1)	$	57,804,722	$	53,642,460	$	4,162,262
Company Claimed DSIC & STAS (2)		2,121,928		2,121,928		-
Total Present Rate Revenues	$	59,926,650	$	55,764,388	$	4,162,262
Additional Revenue Requirement (3)	$	20,201,429	$	16,047,841	$	4,153,588
Company Claimed Proposed Revenues	$	80,128,079	$	71,812,229	$	8,315,850
Wastewater Revenue Allocation (3)		-		2,696,796		(2,696,796)
Company Proposed Revenues (3)	$	78,006,151	$	72,387,097	$	5,619,054
I&E Recommended Revenues - Prior to Allocation (4)	$	68,288,686	$	61,065,324	$	7,223,362
Company Claimed DSIC & STAS (2)		2,121,928		2,121,928		-
Subtotal	$	70,410,614	$	63,187,252	$	7,223,362
I&E Wastewater Revenue Allocation (5)		-		868,217		(868,217)
I&E Recommended Revenues	$	68,288,686	$	61,933,541	$	6,355,145

(1) York Water Exhibit No. MEP-1R
(2) York Water Exhibit No. FII-2, p. 9.
(3) York Water Exhibit No. MEP-1R. Excludes DSIC and STAS revenues.
(4) I&E Table 1A and Table 1B.
(5) Per I&E Statement No. 3-SR.

PAYROLL EXPENSE - WATER OPERATIONS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PAYROLL EXPENSE.

A. I recommended an allowance of $8,812,433, or a reduction of $364,150 ($9,176,583 - $8,812,433) to the Company's water operations claim. My recommended vacancy adjustment was based on a weighted-average employee vacancy rate of 3.67%, calculated five vacant positions for the FPFTY, and the average annual payroll of $72,830.[11] I recommended this adjustment to account for the Company not being able to fill and maintain 100% full staffing of the 126

[11] I&E Statement No. 1, pp. 9-11.

budgeted FPFTY positions based on its own historic vacancy records for 2019, 2020, and 2021.[12]

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff agrees with my vacancy recommendation, in part.[13]

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states the Company agrees that an employee vacancy adjustment should be added to its claim. However, he suggests the Company's adjustment should be applied to the water operations based on the actual claim for payroll for the five unfilled positions. In further explanation, he opines that my recommendation is skewed higher due to the inclusion of senior management position salaries that are unlikely to be vacant and proposes a $285,826 adjustment to the Company's payroll expense.[14]

Q. DO YOU ACCEPT MR. POFF'S UPDATED CLAIM FOR PAYROLL EXPENSE?

A. Yes. Upon examination of the details outlined in Mr. Poff's rebuttal testimony as summarized above, I accept the Company's proposed $285,826 adjustment to

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[12] I&E Statement No. 1, pp. 10-11.
[13] York Water Statement No. 3-R, p. 2.
[14] York Water Statement No. 3-R, pp. 3-4.

payroll expense as calculated in York Water Exhibit MEP-2R.

EMPLOYEE BENEFITS - WATER OPERATIONS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR EMPLOYEE BENEFITS.

A. I recommended an allowance of $2,265,177, or a reduction of $86,299 ($2,351,476 - $2,265,177) to the Company's water operations claim based on applying an employee vacancy adjustment as noted in the payroll expense section above to the Company's claim for employee benefits.[15]

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff agrees that an adjustment should be made to reflect the employee vacancy adjustment to the Company's payroll claim.

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states that the Company agrees a corresponding adjustment to employee benefits should be made in accordance with the adjustment made to payroll expense; however, unlike my recommendation made in direct testimony, it should exclude adjustments to the pension plan, 401k administration, and other employee benefits as those costs do not correlate to the costs associated with the vacant

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[15] I&E Statement No. 1, p. 13.

positions. Accounting for these details, he proposes a reduction of $72,734 for employee benefits expense.[16]

Q. DO YOU ACCEPT MR. POFF'S UPDATED CLAIM FOR EMPLOYEE BENEFITS EXPENSE?

A. Yes. Upon consideration of the information provided in rebuttal testimony, I accept Mr. Poff's calculated reduction of $72,734 to the Company's claim.[17]

PAYROLL TAXES - WATER OPERATIONS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PAYROLL TAXES.

A. I recommended an allowance of $958,349, or a reduction of $39,583 ($997,932 - $958,349) to the Company's FPFTY claim based on applying the Company's payroll tax rate of 10.87% to my recommended total payroll expense adjustment of $364,150 as stated in the payroll expense section above and as shown in my direct testimony.[18]

Q. DID ANY WITNESS ADDRESS YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff agrees with my recommendation, in as

[16] York Water Statement 3-R, p. 5.
[17] York Water Exhibit MEP-2R.
[18] I&E Statement No. 1, p. 14.

much as he agrees in part with my recommendation for a payroll vacancy adjustment.

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states that a corresponding decrease in payroll taxes should be made in accordance with the decrease in payroll expense due to the employee vacancy adjustment. He proposes to adjust payroll taxes by the specified amount for the five unfilled positions as calculated in York Water Exhibit MEP-2R resulting in a decrease of $25,115 to the Company's payroll tax expense claim.[19]

Q. DO YOU ACCEPT MR. POFF'S UPDATED CLAIM FOR PAYROLL TAXES?

A. Yes. As stated above, I have accepted the modified calculation to account for the probable vacant positions excluding senior management positions and therefore the subsequent payroll tax adjustment of $25,115 to the Company's payroll tax claim.

GENERAL PRICE LEVEL ADJUSTMENT

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR GENERAL PRICE LEVEL ADJUSTMENT.

A. For water operations, I recommended disallowance of the entire general price level

[19] York Water Statement No. 3-R, p. 4.

adjustment of $1,383,543 ($360,236 + $1,023,307) claimed in the FTY and FPFTY for unadjusted total O&M expense claims.[20]

For wastewater operations, I recommended disallowance of the entire general price level adjustment of $404,886 ($106,523 + $298,363) claimed in the FTY and FPFTY for unadjusted total O&M expense claims.[21]

These recommendations were based on the Company's failure to support its claim by relying on an unsupported general price level adjustment, the fact that application of a general price level adjustment to the FTY and FPFTY total unadjusted O&M expense claims is unreasonable and unsupported when there are several categories of expenses (that may include sub-categories of expenses) within the main expense category, and the application of blanket inflation rates of 6.40% across the unadjusted expenses in all cost elements of unadjusted total O&M expenses which is inappropriate and unreasonably overstates the expense claims and inappropriately impacts customers' rates. I provided further support for the removal of the general price level adjustments citing two recent rate case decisions in my direct testimony.[22]

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff disagrees with my recommendation.

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[20] I&E Statement No. 1, p. 16.
[21] I&E Statement No. 1, p. 17.
[22] I&E Statement No. 1, pp. 17-19.

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states that the Company has not based its ratemaking claims for O&M expenses upon a budget, but rather uses a build-up approach starting with its HTY actual expenses. The proposed adjustment, he opines, is not a blanket generalized inflation adjustment, but reflects the anticipated effects of inflation only on operating expenses not specifically adjusted in the rate case filing. In addition, he states, the adjustment is consistent with adjustments made in prior cases and is conservative based on current economic conditions. He then provides a 2002 Philadelphia Suburban Water Co. case as support stating the Commission accepted the utility's general inflation adjustment in that proceeding.[23]

He further supports the general inflation adjustment citing the Company has proposed a lower rate than the rate that historical expenses have grown, such as operating materials and supplies, operating outside services, and wastewater purchased treatment expense. Following this, he asserts that my recommendation does not take into consideration any historical data or present economic conditions and that I fail to mention recent actual inflation rates or projected future inflation rates.[24]

Additionally, Mr. Poff opines that my recommendation creates divergent precedent to the Company's 1992 base rate case regarding the Company's general price level adjustment for these types of expenses. Finally, he infers that the cases

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[23] York Water Statement No. 3-R, pp. 16-17.
[24] York Water Statement No. 3-R, pp. 17-18.

cited as support to my recommendation do not illustrate the Commission's disapproval of blanket inflation adjustments.[25]

Q. WHAT IS YOUR RESPONSE TO MR. POFF'S ASSERTIONS?

A. As shown in my direct testimony, there are recent Commission decisions that support my recommendation to disallow the Company's claim for a blanket inflation increase including in Aqua Pennsylvania's 2021 base rate case Commission statements such as:

> Apply[ing] a general inflation adjustment to a block of expenses could incentivize less accurate tracking of expenses and a less rigorous approach to controlling costs for those expenses."[26]

The referenced 2019 Wellsboro Electric Company base rate case[27] and 2021 Aqua Pennsylvania base rate case[28] demonstrate recent historic precedent based on the respective companies failing to meet their burden to demonstrate the claims would meet the "known and measurable" standard, which York Water has also failed to do.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR THE GENERAL PRICE LEVEL ADJUSTMENT?

A. No. Considering the Commission's Orders, the Company did not meet its burden

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25 York Water Statement No. 3-R, pp. 16-18.

26 I&E Statement No. 1, pp. 19-20 and Pa. PUC v. Aqua Pennsylvania, Inc. at Docket No. R-2021-3027385 (Order entered April 29, 2020), p. 40.

27 Pa. PUC v. Wellsboro Electric Company at Docket No. R-2019-3008208 (Order entered April 29, 2020).

28 Pa. PUC v. Aqua Pennsylvania, Inc. at Docket No. R-2021-3027385 (Order entered on May 16, 2022).

in demonstrating that its proposed blanket inflation adjustment to all line items of expenses contained in the service company other costs claim would meet the "known and measurable" standard for increasing each expense line item in the FTY and FPFTY expense claims. Therefore, I continue to recommend a disallowance of the entire general price level adjustment of $1,383,543 for water operations and $404,886 for wastewater operations.

STATE INCOME TAX EXPENSE

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR STATE INCOME TAX EXPENSE.

A. I recommended an allowance of $369,185 or a reduction of $826,990 ($1,196,175 - $369,185) to the Company's claim for water operations. Additionally, I recommend an allowance of $59,403 or a reduction of $76,690 ($136,093 - $59,403) to the Company's claim for wastewater operations. These recommendations were based on a weighted Pennsylvania income tax rate of 8.91% due to the recent enactment of Act 53 of 2022.[29]

Q. DID ANY WITNESS ADDRESS YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff disagrees with my recommendation.

[29] I&E Statement No. 1, pp. 20-22.

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states the Company recognizes the changes to the Pennsylvania income rate adopted on July 8, 2022, and that the new corporate income tax rates should be applied. Therefore, he asserts the Company will modify their claim to reflect the 2023 income tax rate change to 8.99% while recognizing this does not incorporate the decrease to 8.49% for the final two months of the FPFTY. He further states that the Company proposes to use the State Tax Adjustment Surcharge (STAS) mechanism to account for the decrease through 2031. Mr. Poff opines this will allow alignment of the STAS with the change after the end of the FPFTY.[30]

Q. DO YOU ACCEPT MR. POFF'S UPDATED STATE INCOME TAX EXPENSE CLAIM?

A. Yes. I acknowledge the benefit of simplicity suggested by the Company,[31] and recognize that the difference between the Company's rebuttal position and my recommendation in direct testimony is immaterial.

Q. HOW HAS THIS CHANGE BEEN REFLECTED IN I&E'S OVERALL REVENUE REQUIREMENT RECOMMENDATION?

A. I have accepted the Company's modification to its base rate case position using the

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[30] York Water Statement No. 3-R, p. 19.
[31] York Water Statement No. 3-R, pp. 19-20.

income tax rate of 8.99% that will go into effect in 2023. This change is reflected in my recommended revenue requirement in Table 1A for water operations and Table 1B for wastewater operations above[32] and incorporates the state income tax effect of my other recommended adjustments and those of I&E witness Christopher Keller.[33]

CASH WORKING CAPITAL

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CWC.

A. I recommended an allowance of $2,928,071 or a reduction of $142,886 ($3,070,957 - $2,928,071) to the Company's claim.[34] My recommendation included modification of the Company's claim based on my recommended adjustments to O&M expenses as discussed in I&E's direct testimony.

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff disagrees with my CWC recommendation based on the Company's disagreement with my recommended adjustments to individual O&M expenses.

[32] I&E Statement No. 1-SR, pp. 5-6.
[33] I&E Statement No. 2.
[34] I&E Statement No. 1, p. 23.

Q. WHAT IS THE COMPANY'S UPDATED CWC CLAIM?

A. York Water updated its FPFTY CWC claim from $3,070,957 to $2,994,755.[35]

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

A. No. However, I have an update to my recommendation for CWC based on the changes described above to my O&M expense recommendations. As stated in my direct testimony, all O&M adjustments that are cash-based expense claims are included in determining the Company's overall CWC requirement. Therefore, CWC was adjusted to reflect these recommended adjustments. To reflect my recommended adjustments, I modified the Company's electronic CWC file as shown on York Water Exhibit No. FV-8, p. 2 and York Water Exhibit No. FV-8-1, p. 3.[36]

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

A. No. I disagree with the Company's CWC claim in as much as I disagree with the O&M expense claims as discussed above.

Q. WHAT IS YOUR RECOMMENDED ALLOWANCE FOR CWC?

A. I recommend an allowance of $2,861,089[37] or a reduction of $133,666 ($2,994,755 - $2,861,089) to the Company's claim.

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[35] York Water Exhibit No. MEP-1R, p. 4.
[36] I&E Exhibit No. 1-SR, Schedule 1, pp. 1-3.
[37] I&E Exhibit No. 1-SR, Schedule 1, p. 1.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation includes modification of the Company's claim based on my recommended adjustments to O&M expenses as discussed previously in this testimony as explained below.

Q. HOW DO YOUR PROPOSED ADJUSTMENTS, DISCUSSED ABOVE, IMPACT YOUR RECOMMENDATION FOR CWC?

A. All O&M adjustments that are cash-based expense claims are included in determining the Company's overall CWC requirement. Therefore, CWC was adjusted to reflect these recommended adjustments. To reflect my recommended adjustments, I modified the Company's electronic CWC file as shown on York Water Exhibit No. FV-8, p. 2 and York Water Exhibit No. FV-8-1, p. 3.[38]

Q. SUMMARIZE WHERE EACH OF THE I&E RECOMMENDED O&M EXPENSE ADJUSTMENTS ARE REFLECTED IN THE CWC COMPUTATION.

A. **<u>Expense Lag Days – Other Goods and Services</u>:**

I recommended an expense adjustment of $1,383,543 in the Expense Lag – Other Goods and Services, which is reflected as a reduction to the Other Goods and

[38] I&E Exhibit No. 1-SR, Schedule 1, pp. 1-3.

Services (b) line of the Company's Exhibit No. FV-8-1, p. 3 as shown in I&E modified Exhibit No. FV-8-1, p. 3.[39]

Other Expenses	Reduction
General Price Level Adjustment	$1,383,543
Total	**$1,383,543**

Q. BASED ON THE ABOVE TESTIMONY, WHAT IS YOUR UPDATED RECOMMENDED ALLOWANCE FOR CWC?

A. Based on reflecting the recommended adjustments as discussed above, my updated recommendation for CWC is an allowance of $2,861,089, or a reduction of $133,666 ($2,994,755 - $2,861,089) to the Company's updated claim.

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

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

[39] I&E Exhibit No. 1-SR, Schedule 1, p. 2.

COVID-19 RELATED EXPENSES

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR COVID-19 RELATED EXPENSES.

A. I recommended the Company should not be allowed to make any future claims for COVID-19 related uncollectible accounts expense or other COVID-19 related incremental expenses in future proceedings. The Company has made no claim in this proceeding for COVID-19 related deferrals, and any COVID-19 related expenses for the FPFTY should already be included in routine expense accounts and thus not require future requests for deferral treatment.[40]

Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?

A. Yes. York Water witness Matthew Poff disagrees with my recommendation.

Q. SUMMARIZE MR. POFF'S RESPONSE.

A. Mr. Poff states that while the Company did not incur COVID-19 related expenses necessary for deferral treatment since 2020, it cannot rule out that it will not incur COVID-19 related expenses in the future and that the Company wishes to reserve the right to make future claims for COVID-19 related expenses in future proceedings should the need arise.[41]

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[40] I&E Statement No. 1, pp. 26-27.
[41] York Water Statement No. 3-R, p. 22.

Q. DO YOU AGREE WITH MR. POFF'S ASSERTIONS?

A. No.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?

A. No. However, I have a clarification to my recommendation. I continue to recommend the Company should not be allowed to make any future claims for COVID-19 related uncollectible accounts expense or other COVID-19 related incremental expenses in future proceedings. The exception would be that any future claim for similar costs should be based on Commission action occurring after the effective date of the new rates in the instant proceeding.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Exhibit No. 1-SR
Witness: Zachari Walker

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Exhibit to Accompany

the

Surrebuttal Testimony

of

Zachari Walker

Bureau of Investigation and Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

STATE INCOME TAX EXPENSE

CASH WORKING CAPITAL

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

53.53 V. Valuation

D. Water and Wastewater Utilities

8. Supply an exhibit supporting the claim for cash working capital requirement based on the lead-lag method.

Description (1)		Amount (2)
Pro Forma Operating Expenses and Taxes Less Uncollectible Accounts and Amortized Expenses	**23,052,403**	
Average DailyOperating Expenses 23,052,403 / 365	**63,157**	
Cash Working Capital Requirement 63,157 x 54.5 days		**3,443,465**
Prepaid PUC, OCA, SBA and DPC Assessments		163,435
Builders Deposits and Water Revenues Paid In Advance		(263,818)
Interest Adjustment		(481,993)
Cash Working Capital		**2,861,089**

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT
LAG RELATIONSHIP BETWEEN OPERATING REVENUES AND
OPERATING EXPENSES AND TAXES FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

Item (1)	Amount (2)	Number of Days Lag (3)	Dollar Days (4)=(2)*(3)	Weighted Average Lag Days (5)
Pro Forma Operating Revenues Under Existing Rates (Sales of Water)				
Metered Repumped Residential	24,687,304	53.7	1,326,846,198	
Metered Gravity Residential	9,781,992	52.5	513,923,951	
Metered Repumped Commercial	6,957,041	53.7	373,913,784	
Metered Gravity Commercial	3,610,022	52.5	189,662,486	
Metered Repumped Industrial	3,223,353	53.7	173,242,655	
Metered Gravity Industrial	851,750	52.5	44,749,062	
Private Fire Service	2,019,336	53.7	108,531,425	
Public Fire Service	1,392,525	52.5	73,160,123	
Total Pro Forma Sales of Water	52,523,324		2,804,029,684	
Revenue Weighted Average Lag Days in Receipt of Revenues				53.4
Pro Forma Operating Expenses and Taxes Under Existing Rates Less Bad Debts and Amortized Expenses				
Payroll (a)	9,281,039	7.0	64,967,270	
Payroll (Payroll Tax Withholding) (c)	778,883	13.7	10,693,648	
Power Purchased (b)	1,171,058	26.6	31,199,859	
Insurance (b)	3,054,688	-74.3	(226,857,140)	
Other Goods and Services (b)	**7,412,854**	18.1	134,345,523	
Payroll Taxes (c)	726,262	13.7	9,971,184	
Other Taxes (d)	627,618	-80.5	(50,500,939)	
Income Taxes (e)	-	29.6	-	
Total Pro Forma Operating Expenses and Taxes Less Bad Debts and Amortized Expenses	**23,052,403**		(26,180,596)	
Expense Weighted Average Lag Days in Payment of Expenses				-1.1

THE YORK WATER COMPANY
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION
CASH WORKING CAPITAL REQUIREMENT
LAG RELATIONSHIP BETWEEN OPERATING REVENUES AND
OPERATING EXPENSES AND TAXES FOR TWELVE MONTHS ENDING FEBRUARY 29, 2024

Item (1)	Amount (2)	Number of Days Lag (3)	Dollar Days (4)=(2)*(3)	Weighted Average Lag Days (5)
Net Lag Days (Difference Between Weighted Average Lag Days in Receipt of Revenues and Weighted Average Lag Days in Payment of Expenses)				54.5

(a) Midpoint of payroll period to payday 7.0 days lag

(b) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(a), FV-8-1(b) and FV-8-1(c).

(c) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos.FV-8-1(d).

(d) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(e).

(e) Based on an analysis of invoices paid during the period January 1, 2021 through December 31, 2021 (Refer to Exhibit Nos. FV-8-1(f).

I&E Statement No. 2-SR
Witness: Christopher Keller

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket No. R-2022-3031340 (Water)
&
Docket No. R-2022-3032806 (Wastewater)

Surrebuttal Testimony

of

Christopher Keller

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

TABLE OF CONTENTS

<u>INTRODUCTION OF WITNESS</u>

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Christopher Keller. My business address is Pennsylvania Public Utility Commission, Commonwealth Keystone Building, 400 North Street, Harrisburg, PA 17120.

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

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

Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made by The York Water Company (York Water or Company) witness Paul R. Moul (York Water Statement No. 107-R) and Office of Consumer Advocate (OCA) witness Dr. David S. Habr (OCA Statement No. 3R) in their rebuttal testimony regarding rate of return topics including the cost of common equity and the overall fair rate of return, which will be applied to the Company's rate base. I will also address the Company's management performance claim discussed by Mr. Moul and Company witness Joseph T. Hand (York Water Statement No. 1-R).

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT.

A. No, however, I will refer to my direct testimony and exhibit in this surrebuttal testimony (I&E Statement No. 2 and I&E Exhibit No. 2).

Q. DID THE COMPANY PROVIDE AN UPDATE TO ITS RATE OF RETURN CLAIM?

A. Yes. The Company provided an update to its cost of long-term debt. The Company is now requesting a cost of long-term debt of 4.18% to reflect the cost of new issues of long-term debt in the future test year (FTY) and the fully projected future test year (FPFTY) (York Water Statement No. 107-R, p. 12, lines 20-22). The Company's update to its cost of long-term debt produces an increase of 0.27% (4.18% - 3.91%) to its initial claim of 3.91% (York Water Statement No. 107-R, p. 12, lines 23-25). Below is the Company's updated rate of return claim (York Water Statement No. 107-R, p. 12, lines 25-26):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.23%	4.18%	1.89%
Common Equity	54.77%	11.25%	6.16%
Total	100.00%		8.05%

SUMMARY OF MR. MOUL'S REBUTTAL TESTIMONY

Q. SUMMARIZE MR. MOUL'S RESPONSE TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. Mr. Moul disputes my recommendations regarding my reliance on and application of the DCF method and the disallowance of his leverage adjustments to the DCF and beta of his CAPM. Further, Mr. Moul disagrees with the appropriate risk-free rate to use and my exclusion of a size adjustment in my CAPM analysis, my disagreement with his use of the Risk Premium (RP) and Comparable Earnings (CE) methods, and my recommended disallowance of additional basis points for management performance. Finally, Mr. Moul compares the DSIC rate determined by the Commission in the Quarterly Earnings Reports (QERs) to the rates calculated using market data.

DSIC RATE

Q. SHOULD THE COMMISSION CONSIDER THE AUTHORIZED DSIC RATE ESTABLISHED IN THE QUARTERLY EARNINGS SUMMARY REPORTS AS AN APPROPRIATE MEASURE TO DETERMINE THE COST OF EQUITY IN THIS PROCEEDING?

A. No. Mr. Moul's comparison between the I&E recommended return on equity in this proceeding and the Company's DSIC rate (York Water Statement No. 107-R, p. 4) is misguided. The DSIC rate is designed to encourage its use and to incentivize accelerated pipeline replacement and infrastructure upgrades to bring the existing aging infrastructure closer to meeting safety and reliability requirements in between base rate filings. To suggest the cost of equity must be at or above the DSIC rate in this base rate proceeding is inappropriate and not in the public interest. Additionally, the DSIC rate establishes a benchmark above which a utility company is considered "overearning." As such, the DSIC rate does not serve as a proper measurement of a subject utility's cost of equity in a rate case proceeding since the DSIC rate is routinely higher than any return on equity approved in such base rate proceedings. In fact, 66 Pa. C.S. § 1358(b)(3) states the following:

> The distribution system improvement charge shall be reset at zero if, in any quarter, data filed with the commission in the utility's most recent annual or quarterly earnings report show that the utility will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the distribution system improvement charge.

Finally, the DSIC mechanism serves to lower a utility's risk because it reduces the lag time in the recovery of a company's capital outlays. DSIC spending requires preapproval of eligible plant via a Long-Term Infrastructure Improvement Plan so there is little question as to the prudence of those expenditures.

Q. ARE THERE ANY INSTANCES YOU ARE AWARE OF WHERE THE COMMISSION GRANTED A RETURN ON EQUITY THAT WAS HIGHER THAN THE MOST RECENTLY PUBLISHED DSIC RATE?

A. Yes. In the recent Aqua Pennsylvania, Inc. (Aqua) base rate case the Commission awarded that company a return on equity of 10.00%,[1] which was higher than the most recently published DSIC rate for water and wastewater utilities of 9.80%.[2] This was due to the Commission granting 25 basis points for management effectiveness,[3] which caused the return on equity to go from 9.75% to 10.00%.

Q. ARE THERE ANY POTENTIAL PROBLEMS WITH AWARDING A RETURN ON EQUITY THAT IS EQUAL TO OR HIGHER THAN THE DSIC RATE?

A. Yes. First, it removes incentive for utilities to use the DSIC mechanism between rate filings and may encourage the more frequent filing of base rate cases. Second, it may encourage litigation as opposed to settlement of cases, since companies may improperly believe this is the new norm. Finally, it may set companies up to quickly land in an over-earnings status and preclude them from being able to utilize the DSIC mechanism at all.

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[1] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

[2] PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2022, approved at Public Meeting on August 4, 2022 at Docket No. M-2022-3033561.

[3] *Pa. PUC v. Aqua Pennsylvania, Inc.,* Docket Nos. R-2021-3027385 & R-2021-3027386, pp. 178 (Order entered May 16, 2022).

Therefore, in my opinion, the DSIC rate should generally be an incentive rate that is higher than a return on equity percentage granted in a rate proceeding, and I am anticipating that the recent Commission decision is not indicative of "the new normal."

CAPITAL STRUCTURE

Q. SUMMARIZE DR. HABR'S REBUTTAL TESTIMONY REGARDING YOUR CAPITAL STRUCTURE RECOMMENDATION.

A. Dr. Habr disagrees with my acceptance of the Company's capital structure and asserts that his capital structure recommendation of 52% common equity and 48% debt should be used because the Company's debt ratio has decreased from 49.0% to 36.8%. Dr. Habr states this is due to the Company using the issuance of common stock in April 2022 to pay off $29.32 million in long-term debt as opposed to refinancing its long-term debt by issuing new long-term debt, which would have maintained its debt to equity capital structure. Dr. Habr believes that customers should not have to pay higher rates due to excess common equity in its capital structure based on the Company's choice to pay off long-term debt through the issuance of more costly common stock. Finally, Dr. Habr references the Company's second quarter 10-Q where it notes that its debt ratio is between 46% and 50% which has been historically acceptable by the Commission (OCA Statement No. 3R, p. 1, line 10 through p. 2, line 7).

Q. WHAT IS YOUR RESPONSE TO DR. HABR'S REBUTTAL TESTIMONY REGARDING CAPITAL STRUCTURE?

A. My position remains unchanged from the arguments made in my direct testimony. The Company's claimed capital structure falls within the range of my proxy group's capital structure over the past five years, which differs from Dr. Habr's proxy group since he excluded the Company from his proxy group. The average capital structure of my proxy group for the past five years consists of long-term debt ratios ranging from 41.50% to 57.60% and equity ratios ranging from 42.40% to 58.05%, with a five-year average of 48.08% for long-term debt and 51.85% for common equity (I&E Exhibit No. 2, Schedule 2). I would note that although I accepted the Company's claimed capital structure based on comparison to my proxy group, I did discuss the substantial cost to ratepayers resulting from the Company's equity heavy capital structure (I&E Statement No. 2, pp. 12-14).

DISCOUNTED CASH FLOW

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR DCF ANALYSIS.

A. Mr. Moul agrees that the results of a DCF analysis should be given weight but disagrees with my approach. Mr. Moul also disagrees with my results based on the outcomes of certain individual companies and my recommendation to reject his leverage adjustment (York Water Statement No. 107-R, pp. 13-24).

<u>EXCLUSIVE USE OF THE DCF</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE DCF.

A. Mr. Moul explains that the use of more than one method provides a superior foundation for the cost of equity determination. Mr. Moul claims that the use of more than one method will capture the multiplicity of factors that motivate investors to commit their capital to a particular enterprise. Finally, Mr. Moul states that my comparison of my DCF results to my CAPM results when determining the impact to ratepayers is not relevant and proceeds to recalculate the impact to ratepayers by using the average of my DCF and CAPM results and comparing this to my DCF results as he asserts that if there was to be a comparison, it would be between the average of my DCF results and my CAPM results being compared to my DCF results (York Water Statement No. 107-R, pp. 13-16).

Q. WERE ANY METHODS OTHER THAN THE DCF EMPLOYED IN YOUR ANALYSIS?

A. Yes. Although my recommendation was based on the results of my DCF analysis, I also employed the CAPM as a comparison. For the reasons discussed in my direct testimony, the DCF method is the most reliable (I&E Statement No. 2, pp. 17-19). Although no one method can capture every factor that influences an investor, including the results of methods less reliable than the DCF does not make the end result more reliable or more accurate. As a result, I stand by my method of using the DCF with a CAPM comparison, which is consistent with the methodology historically used by the Commission in base rate proceedings, even as recently as 2017, 2018, 2020, and 2021.[4]

Q. DOES THE DCF ADEQUATELY FACTOR IN RECENT INFLATIONARY TRENDS?

A. Yes. As stated in my direct testimony, my DCF calculation includes a spot stock price when determining the dividend yield and analysts who generate forecasted earnings growth rates almost certainly take inflation into consideration as well; therefore, it contains the most up-to-date projected information of any model. In other words, the inputs of the DCF capture all known economic factors, including inflation. Thus, any potential concerns that the Commission should consider the overall economic climate and related inflation when deciding the merits of the Company's requested base rate increase are adequately covered by use of the DCF as a primary model for determining an appropriate return on equity (I&E Statement No. 2, p. 26, lines 12-19).

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[4] *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division;* Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company;* Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA;* Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.;* Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131. *Pa. PUC v. PECO Energy Company – Gas Division*; Docket No. R-2020-3018929 (Order Entered June 22, 2021). *See generally* Disposition of Return of Rate on Common Equity, p. 171.

Q. DO YOU AGREE WITH USING THE AVERAGE OF YOUR DCF AND CAPM RESULTS TO DETERMINE THE IMPACT TO RATEPAYERS?

A. No. My calculation was to demonstrate the impact to ratepayers of using the CAPM as the top end of a range in determining a return on equity because the Commission used I&E's CAPM results as a ceiling for a "range of reasonableness" in determining the return on equity in the 2021 Aqua base rate case.[5] Additionally, Mr. Moul's average of my DCF and CAPM results of 10.28% is still inappropriate as it is above the recently published DSIC rate authorized by the Commission of 9.80%[6] for water and wastewater utilities based on a period ended March 31, 2022. This demonstrates the problem associated with using the CAPM in determining a utility's return on equity and would result in a significant burden to ratepayers during a time of increasing levels of inflation and economic decline. Therefore, I believe that the CAPM should not be used as a primary method, and it should only be used as a comparison to the DCF (and not as a check of the DCF) for the reasons I have stated in this testimony and in my direct testimony.

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

6 PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended March 31, 2022, approved at Public Meeting on August 4, 2022 at Docket No. M-2022-3033561.

EVALUATING THE DCF BASED ON INDIVIDUAL RESULTS

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING THE RESULTS OF YOUR DCF.

A. Mr. Moul explains that when some results are unreasonable on their face, the reliability of or the witness' application of that method must be questioned. He points to the results of three companies in my proxy group and claims that they fall into the category of unreasonableness. Mr. Moul attempts to support his theory by arguing that the spread between the cost of debt and the cost of equity is 6.75% (York Water Statement No. 107-R, p. 16).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ATTEMPT TO DISAGGREGATE YOUR RESULTS?

A. Mr. Moul derives his suggested 6.75% spread from his RP analysis (York Water No. 107, p. 36, lines 3-5). However, I have refuted the use of the RP method both in my direct testimony (I&E Statement No. 2, p. 15, line 2 through p. 23, line 8), and again in this surrebuttal testimony, as it is an inferior method for calculating the cost of common equity. Further, the 8.59% result of my DCF analysis offers a 4.41% margin over the claimed 4.18% cost of debt (8.59% - 4.18% = 4.41%). My recommended cost of equity is more than double, or 206% higher that the Company's cost of debt, which I certainly believe satisfies Mr. Moul's statement that, "It is a fundamental tenet of finance that the cost of equity must be higher than the cost of debt by a meaningful margin to compensate for the higher risk associated with a common equity investment" (York Water Statement No. 107-R, p. 16, lines 10-12).

<u>LEVERAGE ADJUSTMENT</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING HIS RECOMMENDED LEVERAGE ADJUSTMENT.

A. First, Mr. Moul clarifies that his "leverage adjustment" is not a traditional "market-to-book" ratio adjustment. Next, he states that credit rating agencies do not measure the market-required cost of equity for a company, nor are they concerned with how it is applied in the rate-setting context. Instead, credit rating agencies are only concerned with the interests of lenders and the timely payment of interest and principal by utilities. Mr. Moul then questions two of the six prior Commission Orders that I reference in my direct testimony. Finally, Mr. Moul disagrees with my assertion that investors base their decisions on book value capitalization (York Water Statement No. 107-R, pp. 20-22).

Q. HAVE YOU CLAIMED THAT MR. MOUL'S ADJUSTMENT IS A MARKET-TO-BOOK RATIO ADJUSTMENT?

A. No. As I stated in my direct testimony, Mr. Moul does not propose to change the capital structure of the utility (a leverage adjustment), nor does he propose to apply the market-to-book ratio to the DCF model (a market-to-book adjustment) (I&E Statement No. 2, p. 44, line 20 through p. 45, line 3).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S REBUTTAL TESTIMONY CONCERNING CREDIT RATING AGENCIES?

A. Mr. Moul has supported my argument that his proposed leverage adjustment is not needed by stating that the credit rating agencies are only concerned with the timely payment of interest and principal by utilities (York Water Statement No. 107-R, p. 21). Mr. Moul's stated need for the leverage adjustment is based on his assertion that the difference between the book value capital structure and his market value capital structure causes a financial risk difference (York Water Statement No. 107, p. 28).

Financial risk does relate to the capital structure of a company, but it is created by the financing decisions (the use of debt or equity) and the amount of leverage or debt a company chooses to finance its assets. Financial risk and the book value capital structure of a company are represented in the income statement, part of what is evaluated by rating agencies. Mr. Moul agrees with me that credit rating agencies use a company's financial statements in their analysis to assess financial risk and determine creditworthiness (York Water Statement No. 107-R, p. 20).

Q. SUMMARIZE MR. MOUL'S RESPONSE TO YOUR REFERENCING PRIOR COMMISSION ORDERS.

A. Mr. Moul refers to the discussion in my direct testimony where I point to six recent cases (Aqua Pennsylvania, Inc.'s 2007 base rate case, City of Lancaster –

Bureau of Water's 2010 base rate case, UGI Utilities, Inc. – Electric Division's 2017 base rate case, Columbia's 2020 base rate case, PECO Energy Company – Gas Division's 2020 base rate case, and Aqua Pennsylvania, Inc.'s 2021 base rate case) where the Commission has rejected a "leverage adjustment." Mr. Moul addresses only two of the six recent cases I discussed in my direct testimony. He claims that the adjustment proposed in the City of Lancaster case was much different than what he is proposing in this proceeding. Additionally, Mr. Moul explains that even though the Commission declined to make a "leverage adjustment" in the 2007 Aqua Pennsylvania case, it does not invalidate its use. Further, Mr. Moul states, "Notably, the Commission did not repudiate the leverage adjustment in the Aqua case, but instead arrived at an 11.00% return on equity for Aqua by including a separate return increment for management performance." (York Water Statement No. 107-R, p. 21).

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE REFERENCED PRIOR COMMISSION ORDERS IN YOUR DIRECT TESTIMONY?

A. In this proceeding, Mr. Moul is recommending a 146-basis point "leverage adjustment." To be clear, the Commission did in fact refuse to accept the leverage adjustment in the 2007 Aqua base rate case by stating "…we reject the ALJ's recommendation to allow a 65 basis point leverage adjustment."[7] The management performance points awarded to Aqua in the 2007 base rate case were case-specific and in no way related to the proposed leverage adjustment. Regarding the City of Lancaster case, the Commission did not reject the leverage adjustment based on the manner in which it was calculated, but rather, the Commission stated, "…the ALJ's recommendation is in error as any adjustment to the results of the market based DCF as we have previously adopted are unnecessary and will harm ratepayers."[8]

Q. WHAT IS YOUR RESPONSE TO MR. MOUL'S ASSERTION THAT INVESTORS DO NOT BASE THEIR DECISIONS ON BOOK VALUE, BUT RATHER THE RETURN THEY WILL EARN ON THE DOLLARS THEY INVEST?

A. Mr. Moul's assertion that an investor is concerned with the return earned on dollars invested and "not some accounting value of little relevance to them," (York Water Statement No. 107-R, p. 22) is unsupported. Clearly an investor takes financial risk into consideration when determining a required return. In addition, the market capitalization information included in Value Line's reports and discussed by Mr. Moul is not the same as market value capital structure (York Water Statement No. 107-R, p. 22). Market capitalization refers to the number of

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[7] *Pa. PUC v. Aqua Pennsylvania, Inc.*; Docket No. R-00072711, pp. 38-39 (Order entered July 31, 2008).
[8] *Pa. PUC v. City of Lancaster – Bureau of Water*; Docket No. R-2010-2179103, p. 79 (Order entered July 14, 2011).

shares outstanding multiplied by the current price. A market value capital structure refers to the ratio of market debt to market equity, which is not included in Value Line's reports. Therefore, Mr. Moul's contention that Value Line includes market capitalization data does not offer any support for his leverage adjustment.

Q. HAS MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY CONCERNING HIS PROPOSED LEVERAGE ADJUSTMENT CAUSED YOU TO CHANGE YOUR RECOMMENDATION?

A. No. For the reasons discussed above, I continue to recommend that Mr. Moul's leverage adjustment be rejected.

CAPITAL ASSET PRICING MODEL

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE CAPM.

A. Mr. Moul opines that my CAPM analysis understates the cost of equity for several reasons, including my use of the yield on 10-year Treasury Notes for my risk-free rate, my alleged use of geometric mean to calculate my total market return, failure to use leverage adjusted betas, and rejection of his size adjustment (York Water Statement No. 107-R, p. 24). Each of these topics are discussed in more detail below.

RISK-FREE RATE

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR USE OF THE YIELD ON THE 10-YEAR U.S. TREASURY NOTE.

A. Mr. Moul claims that by using the 10-year Treasury Note, I introduced a systematic understatement of CAPM returns that can be traced to extraordinary monetary policy actions to deal with the recession created by the pandemic. He opines that his use of the yield on a 30-year U.S. Treasury Bond is more appropriate than my use of the yield on a 10-year Treasury Note because 30-year bonds are "more a reflection of investor sentiment of their required returns…" and are also less susceptible to Federal policy actions (York Water Statement No. 107-R, p. 24, line 23 through p. 25, line 9).

Q. DO YOU AGREE WITH MR. MOUL THAT USING THE YIELD OF A 30-YEAR U.S. TREASURY BOND IS MORE APPROPRIATE DUE TO A LONGER-TERM BOND BEING LESS SUSCEPTIBLE TO FEDERAL POLICY ACTIONS?

A. No. As stated in my direct testimony, I chose the 10-year Treasury Note which balances the shortcomings of the short-term T-Bill and the 30-year Treasury Bond. Although long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with the market risk. In addition, long-term Treasury Bonds bear the risk of unexpected inflation. As such, my choice of a 10-year Treasury Note is more appropriate (I&E Statement

No. 2, pp. 28-29). Further, as also pointed out in my direct testimony, the Commission has agreed with I&E and recognized the 10-year Treasury Note as the superior measure of the risk-free rate of return.[9]

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR RISK-FREE RATE USED IN THE CAPM FORMULA.

A. Mr. Moul opines that I have incorrectly given weight to the yield on the 10-year Treasury Note for the third quarter of 2022 as I do for the entire five-year period encompassing 2024 to 2028. Then, Mr. Moul incorrectly recalculates the risk-free rate by averaging the 10-year treasury yield forecasts by year from 2022 through 2028 to inflate my calculated risk-free rate of 3.32% to 3.40% (York Water Statement No. 107-R, p. 25, lines 10-20).

Q. DO YOU AGREE WITH MR. MOUL'S ANALYSIS OF YOUR RISK-FREE RATE?

A. No. Mr. Moul's new calculation proposes to give equal weight to each separate year from 2022 to 2028. The flaw with this approach is that the further out into the future one forecasts, the less reliable and more speculative the estimates become; therefore, to give the less reliable estimates equal weight would not be prudent. It is more appropriate to weight the quarters and years as I have done in

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

my direct testimony (I&E Exhibit No. 2, Schedule No. 9). My calculation provides a more accurate estimation of the risk-free rate during the FPFTY, as the further out one forecasts, the less reliable the information becomes.

<u>**FORECASTED MARKET RETURN**</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING YOUR RECOMMENDED FORECASTED MARKET RETURN.

A. Mr. Moul simply mentions my "use of historical geometric means to calculate total market return…" (York Water Statement No. 107-R, p. 24).

Q. DID YOU USE THE HISTORICAL GEOMETRIC MEAN TO CALCULATE YOUR TOTAL MARKET RETURN?

A. No. I did not use historical performance of the market, nor did I use the geometric mean to calculate my appropriate market return. As stated in my direct testimony, 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 14.47% over the next three to five years based on a forecasted dividend yield of 2.00% and a yearly index appreciation of 60%. The S&P 500 index is expected to have an average yearly return of 14.35% over the next five years based upon Barron's forecasted dividend yield of 1.55% and Morningstar's average expected increase in the S&P 500 index of 12.70%

which resulted in an arithmetic mean of 14.41% (I&E Statement No. 2, p. 29, lines 10-19 and I&E Exhibit No. 2, Schedule 10).

LEVERAGED BETAS

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE USE OF LEVERAGE-ADJUSTED BETAS.

A. Mr. Moul simply mentions my "failure to use leverage adjusted betas…" (York Water Statement No. 107-R, p. 24). He does not offer an explanation beyond what he argued in his direct testimony.

Q. IS THE USE OF LEVERAGE-ADJUSTED BETAS IN CAPM ANALYSES APPROPRIATE?

A. No. As stated in my direct testimony, Mr. Moul's adjustment only serves to inflate the result of his CAPM analysis. Enhancements such as leverage adjusted betas are unwarranted in CAPM analyses for the same reasons that enhancements are unwarranted for DCF results. Until this type of adjustment is demonstrated in academic literature to be valid, such leverage-adjusted betas in a CAPM should be rejected. Furthermore, the Commission found no basis to add leverage adjusted betas in the most recent litigated Aqua Pennsylvania, Inc. base rate case.[10] Finally, a stock with a price movement that is greater than the overall stock market

[10] *Pa. PUC v. Aqua Pennsylvania, Inc.;* Docket No. R-2021-3027385 (Order Entered May 16, 2022). *See generally* Disposition of Leverage Adjustment and Management Performance, pp. 166-167.

will have a beta that is greater than one and would be described as having more investment risk than the market. Due to being regulated and the monopolistic nature of utilities, very rarely do they have a beta equal to or greater than one. Therefore, in this case, to apply an adjusted beta of 1.00 to the entire industry or water proxy group is irrational (I&E Statement No. 2, pp. 50-51).

<u>**SIZE ADJUSTMENT**</u>

Q. SUMMARIZE YOUR DIRECT TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. In direct testimony, I stated that Mr. Moul's 102 basis point CAPM size adjustment is unnecessary because none of the technical literature he cited in his direct testimony supporting investment adjustments related to the size of a company is specific to the utility industry. I also presented an article by Dr. Annie Wong that demonstrated there is no need to make an adjustment for the size of a company in utility rate regulation. Finally, I noted that the Commission has rejected the application of a size adjustment to the CAPM cost of equity calculation where it agreed that the same literature the Company cites is not specific to the utility industry (I&E Statement No. 2, pp. 51-54).

Q. SUMMARIZE MR. MOUL'S RESPONSE IN REBUTTAL TESTIMONY REGARDING A SIZE ADJUSTMENT.

A. Mr. Moul states that enormous changes have occurred in the industry since the article “Utility Stocks and the Size Effect: An Empirical Analysis” by Dr. Annie Wong was published. He also references the Fama/French study, “The Cross-Section of Expected Stock Returns,” to illustrate that his size adjustment is a separate factor from beta that helps explain systematic risk and returns. Additionally, Mr. Moul opines that external factors, such as loss of larger customers and unexpected changes in expenses, can affect the financial performance of a small company (York Water Statement No. 107-R, pp. 26-27).

Q. DOES THE FAMA/FRENCH STUDY REFUTE DR. WONG’S ARTICLE?

A. No. As stated in my direct testimony, Dr. Wong’s article presents evidence that although a size effect may exist for industrial stocks, it does not exist for utility stocks (I&E Statement No. 2, pp. 53-54). As the Fama/French study is not specific to utility stocks, it does not adequately demonstrate that a size effect exists in the utility industry. In addition, the size effect that exists for industrial stocks varies to such an extent that it is difficult to predict. The difficulty in predicting the effect of size is demonstrated in the variance from year to year of the measurement of difference between the annual returns on the large and small-capitalization stocks of the NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*. As stated on page 100 of the SBBI Yearbook,

> While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference

> between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.

Page 109 states,

> In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.

Page 112 states,

> Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks.

Q. DOES THE TIME WHICH HAS ELAPSED SINCE AN ARTICLE WAS WRITTEN NECESSARILY INVALIDATE ITS RESULTS?

A. No. Although Mr. Moul states that enormous changes have occurred in the industry since the 1960s, he presents no evidence that these "changes" have caused the need for a size adjustment. To the contrary, Dr. Wong's study demonstrated that one does *not* need to be made in the regulated utility industry. As stated in my direct testimony, absent any credible article to refute Dr. Wong's findings, Mr. Moul's size adjustment to his CAPM results should be rejected.

Q. ARE MR. MOUL'S CONCERNS REGARDING THE IMPACT OF LOSING LARGE CUSTOMERS OR UNEXPECTED INCREASES IN EXPENSES VALID?

A. No. Regulated utility companies have the option to file a base rate case to address declining revenues and to recover the increasing costs of doing business in addition to emergency rate relief provisions for large unforeseen impacts. In contrast, non-utility businesses that may be significantly impacted by events of this nature due to small operating size do not have these opportunities. Additionally, while a smaller utility may pay higher prices for services and materials just due to volume buying power, the actual costs are part of the revenue requirement presented by that company, so to increase the return to account for the potential size disadvantage would only further unfairly burden ratepayers who are already likely paying higher utility bills to recover the higher operating costs.

Q. MR. MOUL HAS RECALCULATED YOUR CAPM RESULTS. DO YOU AGREE WITH HIS RECALCULATION?

A. No. Mr. Moul's recalculation is incorrect for a couple of reasons. He used an inaccurate risk-free rate and an unnecessary size adjustment, as stated in both my direct testimony and above. Because of these factors, a recalculation of my CAPM results is imprudent and any recalculation provided by Mr. Moul of my CAPM results is unreliable and unnecessary.

Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. MOUL'S SIZE ADJUSTMENT?

A. I continue to recommend that his use of the 1.02% size adjustment be disallowed in calculating the CAPM.

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

A. Yes. My recommended cost of equity is primarily based upon my DCF analysis for the reasons explain above and in my direct testimony. I present a CAPM analysis to the Commission for comparison, not recommendation purposes as the inputs are highly subjective, and other than beta, not company or industry specific. Again, it has traditionally been the preference of the Commission to view both the DCF and CAPM analysis in base rate proceedings.

<u>RISK PREMIUM</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE RP METHOD.

A. Mr. Moul opines that the RP approach should be given serious consideration because it is straight-forward, understandable, and uses a company's own borrowing rate. He claims it provides a direct and complete reflection of a utility's risk and return. Mr. Moul also states that I make an unfounded assertion that the RP method does not measure the current cost of equity as directly as the DCF (York Water Statement No. 107-R, pp. 30-32).

Q. DO YOU AGREE WITH MR. MOUL THAT THE RP METHOD PROVIDES A DIRECT AND COMPLETE REFLECTION OF A UTILITY'S RISK AND RETURN?

A. No. The RP method produces an indirect measure when compared to the DCF method.

Q. PLEASE COMMENT ON THE INDIRECT MEASURE OF THE RP METHOD VERSUS THE MORE DIRECT MEASURE OF THE DCF METHOD.

A. Mr. Moul claims that my statement that the RP method does not measure the current cost of equity as directly as the DCF is without foundation. In my direct testimony, I have clearly illustrated how the two measures are different (I&E Statement No. 2, p. 14, line 1 through p. 23, line 8). The main reason is that the RP method determines the rate of return on common equity indirectly by observing the cost of debt and adding to it an equity risk premium. The DCF measures equity more directly through the stock information (using equity information), whereas the RP method measures equity indirectly using debt information.

<u>COMPARABLE EARNINGS</u>

Q. SUMMARIZE MR. MOUL'S REBUTTAL TESTIMONY REGARDING THE CE METHOD.

A. Mr. Moul claims that using the CE method satisfies the comparability standard established in the *Hope* case (York Water Statement No. 107-R, p. 32, lines 17-18). Additionally, he states, "…the financial community has expressed the view that the regulatory process must consider the returns that are being achieved in the non-regulated sector to ensure that regulated companies can compete effectively in the capital markets" (York Water Statement No. 107-R, p. 32, lines 18-21).

Q. DO YOU AGREE THAT COMPANIES USED BY MR. MOUL IN HIS CE METHOD ARE COMPARABLE TO YORK WATER?

A. No. As stated in my direct testimony, the companies in Mr. Moul's analysis are not utilities, and therefore, are too disparate to use in a CE analysis (I&E Statement No. 2, pp. 34-35). For example, the criteria Mr. Moul uses to choose the companies in his CE group results in the selection of companies such as Altria Group Inc., Hanover Insurance Group Inc., Motorola Solutions Inc., Quest Diagnostics, and Western Union Company. All these companies operate in industries very different from a utility company and operate under varying degrees of regulation. Also, most, if not all, of the companies Mr. Moul uses in his analysis are not monopolies in the sense that utilities are. This means that they have significantly more competition and would require a higher return for the added risk. Further, the CE method should be excluded because it is entirely subjective as to which companies are comparable and it is debatable whether historic accounting returns are representative of the future.

MANAGEMENT PERFORMANCE POINTS

Q. SUMMARIZE MR. MOUL'S AND MR. HAND'S REBUTTAL TESTIMONY REGARDING MANAGEMENT PERFORMANCE POINTS.

A. Mr. Moul continues to advocate for an unspecified amount of additional basis points to the cost of equity by relying on the testimony of Mr. Hand. Mr. Moul also provides an unspecified West Penn Power's rate case, Aqua's 2007 base rate case, PPL Electric's 2012 rate case, UGI Electric's 2017 rate case, and Aqua's 2021 rate case as examples of when the Commission granted increases for management performance (York Water Statement No. 107-R, p. 33, lines 8-22).

Mr. Hand lists a variety of York Water's performance indicators such as the acquisition of troubled water and wastewater systems, addressing customer-owned lead service lines, exemplary customer service, and their assistance to its low-income residential customers. Similar to Mr. Moul, Mr. Hand also provides PPL Electric's 2012 rate case and UGI Electric's 2017 rate case as examples of when the Commission granted increases for management performance (York Water Statement No. 1-R, pp. 8-11).

Q. WHAT IS YOUR RESPONSE TO THE COMPANY'S REBUTTAL TESTIMONY REGARDING THE CONSIDERATION OF ADDITIONAL BASIS POINTS FOR MANAGEMENT PERFORMANCE?

A. As discussed in greater detail in my direct testimony, I maintain that York Water, or any utility company for that matter, should not reap additional rewards for programs funded by ratepayers or for meeting their obligations under 66 Pa C.S.A. §1501 (I&E Statement No. 2, p. 54, line 15 through p. 59, line 2).

Also, while I am aware that under 66 Pa C.S.A. §523 the Commission shall consider a utility's performance, it is not mandatory that the Commission grant additional points. Moreover, I continue to assert that for any company, true strong management performance is earning a higher return through its efficient use of resources and cost cutting measures. The greater net income resulting from cost savings and true efficiency in management and operations is available to be passed on to shareholders. Additionally, it is nonsensical to support the idea that since ratepayers fund the initiatives and accomplishments Mr. Hand mentions, ratepayers should then in turn fund a higher equity return for York Water's investors. Therefore, I continue to recommend that any addition of basis points to the cost of equity for management performance be disallowed.

Q. DOES THE COMMISSION'S PAST ACCEPTANCE OF ADDITIONAL EQUITY POINTS TO RECOGNIZE MANAGEMENT PERFORMANCE MEAN THAT YORK WATER SHOULD ALSO RECEIVE AN ADJUSTED RETURN ON EQUITY?

A. No. West Penn Power's, Aqua's 2007, and PPL Electric's 2012 rate cases were more than ten years ago, and obviously should have no bearing on the current proceeding. The 2017 UGI Electric rate case and the 2021 Aqua base rate case are irrelevant to the determination of whether York Water should be granted additional basis points to its cost of equity for management performance as management performance is something that is very specific to each individual utility. Therefore, what the Commission has historically decided in this regard, and the management performance of other utilities, has no bearing on whether York Water should receive a higher return on equity to recognize its management performance.

Q. HAS YOUR RECOMMENDATION REGARDING THE COMPANY'S REQUEST FOR ADDITIONAL BASIS POINTS REGARDING ITS MANAGEMENT PERFORMANCE CHANGED?

A. No. I continue to recommend that any additional basis points for management performance be rejected.

OVERALL RATE OF RETURN

Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION CHANGED FROM YOUR DIRECT TESTIMONY?

A. Yes. While I continue to support each recommendation made in I&E Statement No. 2 regarding the Company's return on equity, I am updating my recommendation to reflect the Company's update to its cost of long-term debt from 3.91% to 4.18% (York Water Statement No. 107-R, p. 12), which results in a weighted cost of debt of 1.89% or an increase of 0.12% (1.89% - 1.77%) to the Company's original claim.

Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION?

A. I recommend the following rate of return for the Company for water and wastewater:

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.23%	4.18%	1.89%
Common Equity	54.77%	8.59%	4.70%
Total	100.00%		6.59%

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Statement No. 3-SR
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket Nos. R-2022-3031340 and R-2022-3032806

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Cost Allocation
Rate Design
Scale back of Rates

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Ethan H. Cline. My business address is Pennsylvania Public Utility Commission, 400 North Street, Harrisburg, PA 17120.

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

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

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 3 AND I&E EXHIBIT NO. 3 ON AUGUST 19, 2022?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony submitted on behalf of York Water Company ("York Water" or "Company") by Constance E. Heppenstall (York Water St. No. 108-R). I will also address the rebuttal testimony submitted on behalf of the Office of Small Business Advocate ("OSBA") by witness Brian Kalcic (OSBA St. No. 1-R) and the rebuttal testimony submitted on behalf of the Office of Consumer Advocate ("OCA") by witness Jerome Mierzwa (OCA St. No. 4R).

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

A. Yes. My exhibit for this testimony is attached as I&E Exhibit No. 3-SR, but I will also refer to my direct testimony and exhibits as identified above.

CORRECTIONS

Q. WERE THERE ANY ERRORS IDENTIFIED IN YOUR DIRECT TESTIMONY?

A. Yes. As indicated by York Water witness Heppenstall, there were two errors in my direct testimony and one error in the supporting spreadsheet to my Exhibit that was provided in discovery. Specifically, Ms. Heppenstall referenced two inconsistencies between the customer charge listed on pages 10 and 13 of I&E St. No. 3 and a miscalculation of a volumetric rate in the documentation provided in support of I&E Ex. No. 3.

Q. PLEASE IDENTIFY THE CORRECTIONS TO YOUR DIRECT TESTIMONY.

A. First, the customer charge listed on page 10 of I&E St. No. 3 should be $80.55 per month, not $62.50 per month, to match the $80.55 per month shown on I&E Ex. No. 3, Sch. 3. Second, on page 12 of I&E St. No. 3, only the first block usage rate for the West Manheim will match I&E's recommended usage rate for the main division. Third, I have provided a corrected revenue summary which increases the non-residential revenue under proposed rates by $16,638 from $207,372 to

$224,010 (I&E Ex. No. 3-SR, Sch. 1). This schedule replaces I&E Ex. No. 3, Sch. 7 provided with my direct testimony. I will discuss how this correction affects my proposed wastewater rate structure and Act 11 allocation below.

ACT 11 ALLOCATION

Q. IS YORK WATER PROPOSING TO SHIFT SOME OF THE WASTEWATER REVENUE REQUIREMENT FROM WASTEWATER CUSTOMERS TO WATER CUSTOMERS IN THIS FILING?

A. Yes. York Water is proposing to allocate $2,670,856 of its wastewater revenue requirement to water customers (York Water Ex. No. FVIII-WA, Sch. A).

Q. DOES THE PUBLIC UTILITY CODE PERMIT YORK WATER TO PRESENT ITS REVENUE REQUIREMENT ON A COMBINED WATER AND WASTEWATER BASIS AND TO ALLOCATE A PORTION OF THE WASTEWATER REVENUE REQUIREMENT TO ITS COMBINED WATER AND WASTEWATER CUSTOMERS?

A. Yes. However, York Water may only do so if allocating a portion of the wastewater revenue requirement to its combined water and wastewater customers is in the public interest (I&E St. No. 3, pp. 2-3).

Q. DID YOU DISAGREE WITH THE AMOUNT OF REVENUE REQUIREMENT THAT YORK WATER PROPOSES TO ALLOCATE FROM WASTEWATER OPERATIONS TO WATER OPERATIONS?

A. Yes. I disagreed with the Company's proposed allocation of $2,670,856 in revenue requirement from wastewater operations to water operations. The Company indicated that it limited the increase to wastewater rates to 35% to avoid rate shock but did not provide any studies, analysis, supporting back-up information, nor any Commission Orders to support its 35% limit (I&E St. No. 3, p. 5).

Q. WHAT WASTEWATER OPERATIONS REVENUE REQUIREMENT ALLOCATION DID YOU RECOMMEND?

A. I recommended a wastewater operations revenue requirement allocation of $844,015 (I&E St. No. 3, p. 5).

Q. DO YOU WISH TO REVISE YOUR RECOMMENDATION CONCERNING THE SUBSIDY BEING PROVIDED TO WASTEWATER OPERATIONS?

A. Yes. Based on the updated I&E recommended revenue requirement for wastewater operations of $7,223,362, discussed by I&E witness Walker in I&E St. No. 1-SR, and the corrections described above I am recommending that the wastewater operations revenue requirement allocation be increased by $24,202 from $844,015 to $868,217.

WASTEWATER OPERATIONS

Q. PLEASE DESCRIBE THE WASTEWATER OPERATIONS.

A. As described on page 4 of York Water Statement No. 1, York Water provides wastewater services in the Boroughs of East Prospect, Felton, Jacobus, and West York, in the Townships of East Manchester, Lower Windsor, and West Manheim in York County, Pennsylvania, in the Township of Letterkenny in Franklin County, Pennsylvania, and in the Township of Straban in Adams County, Pennsylvania.

Q. WHERE ARE THE WASTEWATER OPERATIONS RATES SUMMARIZED?

A. The present York Water WW Operations rates are summarized on York Water Exhibit FVIII-WA, Schedule G.

Q. WHAT RATE STRUCTURE CHANGES AND RATE INCREASES ARE PROPOSED BY THE COMPANY?

A. The Company's proposed rate structure changes and rate increases are described in its response to OCA-VI-3 (I&E Ex. No. 3, Sch. 2). York Water's present and proposed rates are shown on York Water Exhibit FVIII-WA, Schedule F. First, the Company is proposing to maintain the 4,000-gallon minimum allowance in the minimum charge for all customers other than West Manheim customers. It is proposing to consolidate Minimum Charge 1, currently $62.50 per month and Minimum Charge 2, currently $55.00 per month and increase those rates to $80.55 per month. York Water is proposing to consolidate usage rates 1 and 2 and increase those usage rates to $0.7012 per hundred gallons. Finally, the Company has four unmetered rates under present rates and is proposing to consolidate Unmetered Rate 1, Unmetered Rate 3, and Unmetered Rate 4 and increase those rates to $80.55 per month. Unmetered Rate 2 is not being consolidated as this monthly charge is paid by West York customers who were recently acquired, and rates were capped at two times the average increase, or 70%, which resulted in those unmetered rates increasing to $55.61 per month for residential customers and $68.71 per month for commercial customers (York Water St. No. 108, p. 15).

Q. DID THE COMPANY PROVIDE A COSS FOR THE WASTEWATER OPERATIONS IN THIS FILING?

A. Yes. The Company provided a Wastewater Operations Cost of Service Study ("COSS") attached as York Water Exhibit FVIII-WA. The Company also provided a COSS for wastewater operations excluding West Manheim, as was required in the Company's acquisition order, as York Water Exhibit FVIII-WB.

Q. WHAT IS THE DIFFERENCE BETWEEN THE COST TO PROVIDE SERVICE AND THE REVENUE THAT IS PRODUCED UNDER PROPOSED RATES IN THE FPFTY?

A. The difference is $2,670,877 ($8,289,886 – $5,619,009). The $2,670,877 is approximately the amount the Company is proposing to recover from water customers described above.

Q. WHAT DID YOU RECOMMEND THAT WILL PARTIALLY ELIMINATE THE REVENUE SHORTFALL?

A. My recommended rates and rate structure for the wastewater operations are shown on I&E Ex. No. 3, Sch. 3, column D. My recommendations regarding the West Manheim rates are described further below. Regarding the Wastewater Operations rates, I recommended that the minimum charges be transitioned to a more traditional customer charge, consolidated from Minimum Charges 1 and 2 into a single customer charge, and set at $80.55[1] per month. I recommended that the 4,000-gallon allowance be eliminated and the Consumption Rates 1 and 2 be consolidated and increased to $0.6000 per hundred gallons. I recommend the Flat Rate Charges 1, 3, and 4 be consolidated and increased to $99.00 per month. Finally, I recommend the Flat Rate Charge 2 be increased to $56.00 per month for

[1] Per the correction described above.

residential customers and $69.00 per month for commercial customers (I&E St. No. 3, pp. 9-10).

Q. DID ANY PARTIES OPPOSE YOUR PROPOSED RATE RECOMMENDATION?

A. Yes. York Water witness Heppenstall and OCA witness Mierzwa each opposed my proposed rate recommendation for wastewater customers for similar reasons. First, both parties raised concerns regarding rate shock and the percent increase of my proposed rates. Both parties also raised concerns regarding my proposal to remove the 4,000-gallon usage allowance for Consumption Rates 1 and 2.

Q. WHAT SUPPORT DID MS. HEPPENSTALL PROVIDE THAT YOUR RECOMMENDED WASTEWATER RATE INCREASE WOULD CAUSE RATE SHOCK?

A. The only support provided by Ms. Heppenstall is the fact that my recommended increase in rates is higher than the Company's proposed increase and is also larger than the overall increase (York Water St. No. 108-R, p. 5).

Q. DO YOU AGREE THAT YOUR PROPOSED RATE RECOMMENDATION WOULD CAUSE RATE SHOCK TO WASTEWATER CUSTOMERS?

A. No. While it is true that my proposed rate recommendation is higher than what the Company proposed, Ms. Heppenstall provided no support for her claim that my recommendation will cause rate shock. Furthermore, as stated in my direct testimony, the Commission recently recognized the need to consider cost causation. In its rejection of Aqua's rate design proposal in its 2021 base rate case, the Commission noted that it did not bear a "reasonable relationship" to Aqua's cost of serving wastewater customers (I&E St. No. 3, pp. 15-16). My recommendation regarding the wastewater rates moves those customers more fully towards recovering their cost of service.

Q. WHAT IS THE BASIS FOR MR. MIERZWA'S OPPOSITION TO YOUR WASTEWATER PROPOSED RATE RECOMMENDATION?

A. The basis for Mr. Mierzwa's opposition to my proposed wastewater rate recommendation is based on the comparison of the increase for residential customers compared to the increase for non-residential customers as shown on I&E Exhibit No. 3, Schedule 7, column 11 (OCA St. No. 4R, pp. 7-8).

Q. PLEASE RESPOND TO MR. MIERZWA'S CONCERNS REGARDING YOUR RECOMMENDATION.

A. As described above, the 46.7% increase shown for the non-residential customers on I&E Exhibit No. 3, Schedule 7, column 11 was incorrect. The corrected increases shown on I&E Exhibit No. 3-SR, Schedule 1, column 11 are a 53.0% increase for the residential customers and a 50.5% increase for non-residential customers. Since the corrected percentages increase are now comparable, I believe that this correction will address Mr. Mierzwa's above stated concerns.

Q. DO YOU WANT TO CHANGE YOUR RECOMMENDATION REGARDING THE PROPOSED WASTEWATER RATES AND ACT 11 ALLOCATION?

A. No. I continue to recommend an updated Act 11 allocation increase of $868,217 and the proposed rates shown on I&E Exhibit No. 3, Schedule 3.

<u>WEST MANHEIM TOWNSHIP WASTEWATER OPERATIONS</u>

Q. WHAT ARE THE PRESENT RATES AND AVERAGE BILL FOR A WEST MANHEIM NON-LOW-INCOME CUSTOMER?

A. Under present rates, the average West Manheim non-low-income residential customers that uses 3,335 gallons per month is $62.00 per month (I&E Ex. No. 3, Sch. 6, line 6). All bills are based upon a customer charge of $55.00 per month and a three-block usage rate of $0.2000 per hundred gallons for the first 3,500 gallons, $1.000 per hundred gallons for the next 3,500 gallons, and $1.2500 per hundred gallons for all usage over 7,000 gallons (York Water, Ex. FVIII-WA, Sch. F).

Q. WHAT INCREASE DID THE COMPANY PROPOSE WITH RESPECT TO WEST MANHEIM RATES?

A. The Company proposed to decrease the West Manheim customer charge to $52.50 per month and increase the first block usage charge to $0.7012 per hundred gallons while maintaining usage rates for the next two usage blocks (York Water, Ex. FVIII-WA, Sch. F).

Q. WHAT RATES AND ALLOWANCE DID YOU RECOMMEND FOR WEST MANHEIM?

A. I recommended that the West Manheim residential customer charge be increased to $71.00 per month. I further recommended that first block usage rate be increased to $0.6000 per hundred gallons, which is equal to the consolidated total wastewater usage rate described above. I agree that the second block usage rate should remain at $1.000 per hundred gallons. However, I recommended the third block usage rate be reduced from $1.2500 per hundred gallons to $1.000 per hundred gallons and eliminated. My recommendation moves the West Manheim rates to or closer to the total wastewater rates and will generate revenue to reduce the overall subsidy needed to operate the wastewater systems. Finally, this recommendation will make it easier to consolidate wastewater rates in York Water’s next base rate case (I&E St. No. 3, pp. 14-15).

Q. WHAT WILL BE THE AVERAGE INCREASE FOR THE WEST MANHEIM NON-LOW-INCOME CUSTOMERS?

A. Under my proposed rates, the average bill for a non-low-income customer will increase from $62.00 per month to $91.01 per month which is an increase of $29.01 per month or 46.79% (I&E Ex. No. 3, Sch. 6, line 6).

Q. DID ANY PARTIES RESPOND TO YOUR RECOMMENDATION REGARDING WEST MANHEIM RATES?

A. Yes. Ms. Heppenstall agreed that a rate structure without an allowance is preferable, and Mr. Mierzwa stated that he believes the minimum allowance should eventually be eliminated. However, both parties indicated that it may be more appropriate to eliminate the allowance over several rate proceedings for reasons of avoiding rate shock and appropriate movement towards cost of service rates (York Water St. No. 108-R, p. 5, and OCA St. No. 4-R, pp. 8-9).

Q. DID MR. MIERZWA OR MS. HEPPENSTALL PROVIDE ANY ALTERNATE PROPOSALS TO PARTIALLY ELIMINATE THE 4,000-GALLON USAGE ALLOWANCE?

A. No. While I&E may not be opposed to eliminating the usage allowance over several rate cases, neither party provided any definitive proposal including the impact to revenue and average bills regarding a partial elimination of the 4,000-gallon usage allowance.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION REGARDING THE WEST MANHEIM OPERATIONS WASTEWATER RATES AND USAGE ALLOWANCE?

A. No. As no proposal has been provided to consider, I will therefore continue to recommend the entire 4,000-gallon allowance be eliminated in this case as the parties have agreed it should be the goal.

<u>WATER OPERATIONS – CUSTOMER COSTS</u>

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 York Water Exhibit FVIII, RS1-j Attachment. The results of first cost analysis, shown on page 1 of 9 of the attachment, includes all costs being allocated to the customer cost function and results in a unit cost of $30.76 per month.

Additionally, the Company 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 $20.71 per month per customer in the FPFTY (York Water Ex. FVIII, RS1-j, Attachment, p. 1 of 9).

Q. WHICH CUSTOMER COST ANALYSIS DID YORK WATER USE TO DETERMINE ITS PROPOSED CUSTOMER CHARGES?

A. The proposed 5/8-inch customer charge is $20.71, which is equal to the monthly cost determined in the direct customer cost analysis (York Water Ex. FVIII, Sch. I).

Q. DID YOU AGREE THAT CUSTOMER CHARGES SHOULD BE DETERMINED BASED ON THE RESULTS OF THE DIRECT CUSTOMER COST ANALYSIS?

A. Yes. The Commission has traditionally relied on customer cost analyses based on direct cost allocations. Therefore, it is reasonable to continue to reject the "fully allocated" customer cost analysis provided by Ms. Heppenstall and base the customer charges instead on the direct cost customer cost analysis provided by the Company. (I&E St. No. 3, pp. 18-19).

Q. DID ANY PARTIES RESPOND TO YOUR POSITION REGARDING THE CUSTOMER COST ANALYSIS?

A. Yes. Mr. Mierzwa disagreed with my position regarding the Company's customer cost analysis based on changes to that analysis that he proposed in his direct testimony and summarized on page 9 of OCA Statement No. 4R.

Q. DO YOU OPPOSE MR. MIERZWA'S POSIITON REGARDING THE COMPANY'S CUSTOMER COST ANALYSIS?

A. No. I do not oppose Mr. Mierzwa's position regarding the Company's customer cost analysis. My recommendation is that the Company's water customer charges be based upon the direct cost customer cost analysis that is approved by the Commission.

<u>SCALE BACK OF RATES</u>

Q. WHAT IS A SCALE BACK OF RATES?

A. If the Commission grants an increase less than the amount the Company requested, the Company's proposed rates would be reduced, or scaled back, to produce the revenue requirement allowed by the Commission.

Q. DID THE COMPANY INDICATE ITS PREFERRED SCALE BACK METHODOLOGY?

A. Yes. In its response to OCA-I-9, attached as I&E Exhibit No. 3, Schedule 8, the Company stated that "[w]ith the exception of Public Fire Protection, all classes' increases should be scaled-back proportionately to the originally proposed increases."

Q. DID YOU AGREE WITH THE COMPANY'S SCALE BACK PROPOSAL?

A. Generally, yes. I agreed that all classes' increases should be scaled back proportionately to the originally proposed increases, apart from the Public Fire Protection classes. However, as I describe below, additional steps are required to determine the appropriate scale back of rates (I&E St. No. 3, pp. 20-21).

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 (I&E St. No. 3, p. 21).

Q. WHAT DID YOU RECOMMEND IF THE COMMISSION GRANTS LESS THAN THE FULL INCREASE FOR THE WASTEWATER OPERATIONS?

A. I recommended that any scale back be netted against the subsidy the Commission determines for the Wastewater Operations (I&E St. No. 3, p. 21).

<u>WATER OPERATIONS RATE SCALE BACK</u>

Q. DID YOU RECOMMEND THAT THE CUSTOMER CHARGES BE INCLUDED IN ANY SCALE BACK?

A. Yes. The customer charges should be included in any scale back of rates (I&E St. No. 3, p. 23).

Q. WHY DID YOU RECOMMEND THAT THE CUSTOMER CHARGES BE INCLUDED IN ANY SCALE BACK?

A. Because the $20.71 per month 5/8th inch customer charge proposed by the Company is based upon the direct customer cost, any reduction in any of the ratemaking inputs by the Commission would reduce the inputs used in the customer cost analysis that was used to determine the $20.71 per month 5/8th inch customer charge. To be consistent, I also recommended the other larger meter sized customer charges be scaled back since the Company proposed that they be increased the same 27.4% (I&E St. No. 3, p. 23).

Q. WHAT DID YOU RECOMMEND IF THE COMMISSION GRANTS AN INCREASE THAT IS LESS THAN THE FULLY REQUESTED INCREASE FOR WATER OPERATIONS AND REDUCES THE CUSTOMER CHARGES?

A. If the Commission grants an increase less than the fully requested increase, I recommended the customer charges and usage rates be decreased proportional to the increase proposed by the Company so that the increase by class is proportional to what the Company proposed to produce the revenue level the Commission approves. (I&E St. No. 3, pp. 23-24).

Q. DID ANY PARTIES AGREE WITH YOUR SCALE BACK RECOMMENDATIONS?

A. Yes. The Company agreed with my scale back recommendations (York Water St. No. 108-R, pp. 5-6).

Q. DID THE OSBA DISAGREE WITH YOUR SCALE BACK RECOMMENDATION?

A. OSBA witness Kalcic disagreed with my scale back recommendation because it does not treat the Act 11 allocation revenue and the water revenue requirement separately. Mr. Kalcic instead indicated that PAWC's approved Act 11 revenue requirement should be allocated to water service classes based on wastewater class contributions to the Company's Act 11 revenue requirement shortfall (OSBA St. No. 1-R, pp. 13-14).

Q. DO YOU OPPOSE OSBA'S SCALE BACK RECOMMENDATION?

A. No. Mr. Kalcic's scale back recommendation considers the Act 11 allocation to and from specific classes, which adds additional steps to a scale back. I do not believe Mr. Kalcic's proposals are unreasonable and, therefore, I do not oppose his recommendation.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Exhibit No. 3-SR
Witness: Ethan H. Cline

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

THE YORK WATER COMPANY

Docket Nos. R-2022-3031340 and R-2022-3032806

Exhibit to Accompany

the

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Cost Allocation
Rate Design
Scale back of Rates

THE YORK WATER COMPANY
WASTEWATER OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES
FOR THE TWELVE MONTHS ENDED FEBRUARY 29, 2024

Line No.	Customer Classification	Cost of Service: Amount (Schedule B) (A)	Cost of Service: Contrib. From Water Rates (B)	Cost of Service: Amount to be Recovered Under Proposed Rates (C)	Cost of Service: Percent (D)	Revenues, Present Rates: Amount (E)	Revenues, Present Rates: Percent (F)	Revenues, Proposed Rates: Amount (G)	Revenues, Proposed Rates: Percent (H)	Proposed Increase: Amount (10)	Proposed Increase: Percent Increase (11)
1	Residential	$ 6,934,645	$ 1,252,102	$ 5,682,543	89.7%	$ 3,713,704	89.3%	$ 5,682,575	89.5%	$ 1,968,871	53.0%
2	Non-Residential	1,350,380	$ 699,288	$ 651,092	10.3%	443,699	10.7%	667,709	10.5%	224,010	50.5%
3	Total Sales	8,285,025	1,951,390	6,333,635	100.0%	4,157,403	100.0%	6,350,284	100.0%	2,192,881	52.7%
4	Other Revenues	4,861	0	4,861		4,861		4,861		0	0.0%
5	Total	$ 8,289,886	$ 1,951,390	$ 6,338,496		$ 4,162,264		$ 6,355,145		$ 2,192,881	52.7%

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3031340
	:	
The York Water Company – Water	:	

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3032806
	:	
The York Water Company – Wastewater	:	

VERIFICATION OF ZACHARI WALKER

I, **Zachari Walker**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 1, 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 29th day of September, 2022.

Zachari Walker

Zachari Walker

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3031340
	:	
The York Water Company – Water	:	

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3032806
	:	
The York Water Company – Wastewater	:	

VERIFICATION OF CHRISTOPHER KELLER

I, **Christopher Keller**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 2, I&E Exhibit No. 2** and **I&E Statement No. 2-SR,** were prepared by me or under my direct supervision and control.

Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same 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 New Cumberland, Pennsylvania, this 6th day of October, 2022.

/s/ Christopher Keller ____________________
Christopher Keller

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3031340
	:	
The York Water Company – Water	:	

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3032806
	:	
The York Water Company – Wastewater	:	

VERIFICATION OF ETHAN H. CLINE

I, **Ethan H. Cline**, on behalf of the Bureau of Investigation and Enforcement, hereby verify that **I&E Statement No. 3, I&E Exhibit No. 3, I&E Statement No. 3-SR,** and **I&E Exhibit 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 5th day of October, 2022.

*/s/ Ethan H. Cline*_______________
Ethan H. Cline

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No.: R-2022-3031340 (W)
	:	R-2022-3032806 (WW)
The York Water Company	:	

CERTIFICATE OF SERVICE

I hereby certify that I am serving the foregoing **I&E Pre-Served Testimony, Exhibits and Verification Statements** dated October 27, 2022, in the manner and upon the persons listed below:

Served via Electronic Mail Only

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