

COMMONWEALTH OF PENNSYLVANIA



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November 8, 2022

Rosemary Chiavetta, Secretary  
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)

Dear Secretary Chiavetta:

Consistent with 52 Pa. Code Section 5.412a of the Commission's regulations, which requires the electronic submission of pre-served testimony, and were admitted at the evidentiary hearing on October 6, 2022. Enclosed for electronic filing please find the following Pre-Served Testimony, Exhibits and Schedules, and Verifications on behalf of the Office of Consumer Advocate ("OCA") in the above-referenced proceedings.

**Office of Consumer Advocate's Direct Testimony**

OCA Statement 1 (Revised) - Direct Testimony of Mark E. Garrett – Appendix A, Exhibits MEG-1 through MEG-13, and Verification

OCA Statement 2 -- Direct Testimony of Morgan N. DeAngelo – Appendix A and Verification

OCA Statement 3 – Direct Testimony of David S. Habr – Exhibits DSH-1 through DSH-15 and Verification

OCA Statement 4 – Direct Testimony of Jerome D. Mierzwa – Schedules JDM-1 through JDM-3 and Verification

OCA Statement 5 – Direct Testimony of Barbara R. Alexander – Exhibits BA-1 through BA-13 and Verification

OCA Statement 6 – Direct Testimony of Terry L. Fought – Appendix A, Exhibits TLF-1 through TLF-4, and Verification

Rosemary Chiavetta, Secretary  
November 8, 2022  
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**Office of Consumer Advocate's Rebuttal Testimony**

OCA Statement 3R – Rebuttal Testimony of David S. Habr and Verification

OCA Statement 4R – Rebuttal Testimony of Jerome D. Mierzwa and Verification

**Office of Consumer Advocate's Surrebuttal Testimony**

OCA Statement 1SR – Surrebuttal Testimony of Mark E. Garrett – Exhibits MEG-1 through MEG-13 and Verification

OCA Statement 2SR -- Surrebuttal Testimony of Morgan N. DeAngelo and Verification

OCA Statement 3SR – Surrebuttal Testimony of David S. Habr and Verification

OCA Statement 4SR – Surrebuttal Testimony of Jerome D. Mierzwa – Schedules JDM-1SR through JDM-2SR and Verification

OCA Statement 5SR – Surrebuttal Testimony of Barbara R. Alexander and Verification

OCA Statement 6SR – Surrebuttal Testimony of Terry L. Fought and Verification

All testimony is accompanied by a witness verification. The OCA's submission also addresses the requirements of the Commission's January 10, 2013 Implementation Order at Docket M-2012-2331973, which requires electronic access to pre-served testimony.

All parties and the presiding officer have been served previously with the testimony and exhibits and copies have been served per the attached Certificate of Service.

Respectfully submitted,

/s/ Christy M. Appleby  
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Enclosures:

cc: The Honorable Katrina L. Dunderdale (Cover Letter & Certificate of Service only – **via email only**)  
Certificate of Service

\*337452

CERTIFICATE OF SERVICE

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

I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate’s Letter Re: Pre-Served Testimony, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 8<sup>th</sup> day of November 2022.

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Dated: November 8, 2022  
\*337451



**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	)	
	)	
v.	)	Docket No. R-2022-3031340 (Water)
	)	Docket No. R-2022-3032806 (Wastewater)
The York Water Company	)	
	)	
	)	

**Direct Testimony of  
Mark E. Garrett**

On Behalf of:  
Office of Consumer Advocate

August 19, 2022

**REVISED SEPTEMBER 12, 2022**

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**I. INTRODUCTION AND PURPOSE OF TESTIMONY**

1 **Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A: My name is Mark Garrett. My business address is 4028 Oakdale Farm Circle, Edmond,  
3 OK 73013.

4

5 **Q: HOW ARE YOU EMPLOYED?**

6 A: I am the President of Garrett Group Consulting, Inc., a consulting firm specializing in  
7 public utility regulation and litigation.

8

9 **Q: PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
10 **PROFESSIONAL EXPERIENCE.**

11 A: I am a licensed attorney and a certified public accountant. I work as a consultant in public  
12 utility regulation. I received my bachelor's degree from the University of Oklahoma and  
13 completed post-graduate hours at Stephen F. Austin State University and at the University  
14 of Texas at Arlington and Pan American. I received my juris doctorate degree from  
15 Oklahoma City University Law School and was admitted to the Oklahoma Bar in 1997. I  
16 am a Certified Public Accountant licensed in the States of Texas and Oklahoma with a  
17 background in public accounting, private industry, and utility regulation.

18 In public accounting, as a staff auditor for a firm in Dallas, I primarily audited  
19 financial institutions in the State of Texas. In private industry, as controller for a mid-  
20 sized (\$300 million) corporation in Dallas, I managed the Company's accounting function,  
21 including general ledger, accounts payable, financial reporting, audits, tax returns,

1 budgets, projections, and supervision of accounting personnel. In utility regulation, I  
2 served as an auditor in the Public Utility Division of the Oklahoma Corporation  
3 Commission from 1991 to 1995. In that position, I managed the audits of major gas and  
4 electric utility companies in Oklahoma.

5 Since my departure from the Oklahoma Corporation Commission, I have worked  
6 on numerous rate cases and other regulatory proceedings on behalf of various consumers,  
7 consumer groups, public utility commission staffs and offices of attorneys general. I have  
8 provided testimony before the public utility commissions in the states of Alaska, Arizona,  
9 Arkansas, Colorado, Florida, Indiana, Massachusetts, Nevada, Oklahoma, Pennsylvania,  
10 Texas, Utah, and Washington. My clients include industrial customers and groups of  
11 customers, hospitals and hospital groups, universities, municipalities, and large  
12 commercial customers. I have also testified on behalf of the commission staff in Utah and  
13 the offices of attorneys general in Oklahoma, Indiana, Washington, Nevada and Florida.  
14 I have also served as a presenter at the NARUC subcommittee on Accounting and Finance  
15 on the issue of incentive compensation, and as a regular instructor at the New Mexico  
16 State University's Center for Public Utilities course on basic utility regulation. I have  
17 attached Appendix A which contains a more complete description of my qualifications  
18 and a list of the regulatory proceedings in which I have been involved.

19  
20 **Q: HAVE YOUR QUALIFICATIONS BEEN ACCEPTED BY THIS COMMISSION?**

21 A: Yes. I previously filed testimony in Philadelphia Gas Works' general rate case, Docket  
22 No. R-2020-3017206. A description of my qualifications and a list of the proceedings in

1 which I have been involved are included at the end of my testimony as Appendix A.

2

3 **Q: ON WHOSE BEHALF ARE YOU APPEARING IN THESE PROCEEDINGS?**

4 A: I am appearing on behalf of the Office of Consumer Advocate (“OCA”). I was retained  
5 by the OCA to assist in the review and evaluation of the general rate case filing submitted  
6 by The York Water Company (“York or “Company”).

7

8 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

9 A: In my testimony I support several adjustments to the Company’s proposed operating  
10 expense levels. I also sponsor the OCA revenue requirement schedules which include the  
11 adjustments recommended by other OCA witnesses.

## **II. OVERVIEW OF YORK’S REQUESTED RELIEF**

12 **Q: PLEASE PROVIDE AN OVERVIEW OF THE COMPANY’S REQUEST TO**  
13 **INCREASE WATER AND WASTEWATER RATES.**

14 A: In its current filing, York has submitted applications for its water and wastewater utilities.  
15 The combined rate increase for both utilities is \$20,310,530.<sup>1</sup> This is comprised of  
16 \$18,853,737 for the water utility, a 33.8% increase,<sup>2</sup> and \$1,456,793 for the wastewater

---

<sup>1</sup> Calculated as follows: (\$18,853,737 + \$1,456,793 = \$20,310,530).

<sup>2</sup> The 33.8% increase includes the impact of the Distribution System Improvement Charge of \$2,121,928 which will be rolled into base rates. The requested increase in base rates is 35.1% (\$18,853,737 / \$53,642,460 \* 100 = 35.1%).

1 utility, a 35.0% rate increase. These balances also reflect York's requested revenue  
2 allocation to shift \$2,670,856 of its wastewater revenue deficiency to the water utility.<sup>3</sup>

3 The Company is requesting water utility rate base of \$350,621,590 and a revenue  
4 requirement of \$69,825,341.<sup>4</sup> It is requesting a wastewater rate base of \$33,353,950 with  
5 a revenue requirement of \$8,289,911<sup>5</sup> before the revenue allocation shift. These requests  
6 are based on a requested return on equity of 11.25%, inclusive of a 25 basis point  
7 management adder, and an overall rate of return of 7.93%.<sup>6</sup> The Company's projected  
8 additions of \$117,200,230 in new and replacement plant for the two utilities between  
9 December 31, 2021 and February 29, 2024<sup>7</sup> is a major component of the requested  
10 increases, as well as the high return on equity.

### 11 **III. SUMMARY OF ADJUSTMENTS**

12 **Q: PLEASE SUMMARIZE YOUR REVENUE REQUIREMENT  
13 RECOMMENDATIONS.**

14 A: In my testimony, I propose several adjustments to the Company's projected expense  
15 levels, I incorporate the acquisition adjustment recommendations of Morgan N.  
16 DeAngelo, and the cost of capital recommendations of Dr. David S. Habr. The impact on  
the Company's requested revenue requirement is set forth below:

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<sup>3</sup> Exhibit No. FII-2, p, 10.

<sup>4</sup> Exhibit No. FV-1, pp. 3, 6.

<sup>5</sup> Exhibit FV-1W, pp. 3, 6.

<sup>6</sup> Direct Testimony of Paul R. Moul, p. 2.

<sup>7</sup> Direct Testimony of Mark A. Wheeler, p. 17, lines 19-22 and p. 18, lines 13-16.

<b>Table 1: Summary of OCA Adjustments</b>		
	Water	Wastewater
York's Requested Increase in Base Rates	\$18,853,737	\$1,456,793
<b>OCA Adjustments</b>		
Cash Working Capital	\$(27,488)	
Acquisition Adjustments	(6,341)	\$(46,634)
ROE 25 Basis Point Reduction <sup>8</sup>	(683,661)	(63,800)
Capital Structure at 52% Equity	(1,136,823)	(106,089)
Return on Equity Adjustment	(7,944,800)	(741,415)
Payroll Expense Adjustments	(382,591)	(17,296)
Short Term Incentive Compensation	(123,754)	(5,595)
Long Term Incentive Compensation	(238,146)	(10,766)
Board of Directors' Compensation	(213,825)	N/A
Payroll Taxes	(37,287)	(1,686)
Inflation Adjustment	(1,023,307)	(298,363)
Acquisition Adjustment Amortization	(6,789)	(57,718)
Indirect Impacts (Bad Debts, Late Charges, Other Taxes)	(27,402)	(2,646)
Net OCA Adjustments	\$(11,852,215)	\$(1,352,007)
Recommended Change to Base Rates	\$7,001,522	\$104,786

1 **Q: THE ADJUSTMENT SUMMARY ABOVE INCLUDES AN AMOUNT**  
2 **IDENTIFIED AS INDIRECT IMPACTS. PLEASE DESCRIBE THIS ITEM AND**  
3 **EXPLAIN WHY IT IS NOT SHOWN AS A LINE ITEM ON THE REVENUE**  
4 **REQUIREMENT EXHIBIT.**

5 **A:** The line item above labeled 'Indirect Impacts' reflects the combined indirect impacts  
6 resulting from the adjustments that the OCA is proposing. These indirect impacts consist  
7 of the related late charges, bad debt expense, and the utility assessment adjustment that are  
8 required as result of the OCA's other adjustments. These items are included as a  
9 component of the revenue conversion factor in York's exhibits and on the revenue  
10 requirement schedule.

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<sup>8</sup> A 25-basis point increase to ROE would increase revenue requirement by \$683,661 for Water and \$62,871 for Wastewater as shown on OCA Errata Exhibit MEG-3, and as discussed in the testimony of OCA witness Dr. Habr.

1 **Q: WHAT TEST YEARS DID YORK USE IN THIS CASE?**

2 A: York presents the following test periods in its filing:

- 3 ● The historic test year (“HTY”) ended December 31, 2021
- 4 ● The future test year (“FTY”) December 31, 2022
- 5 ● The fully projected future test year (“FPFTY”) February 29, 2024.

6 The requested revenue requirement is based on the FPFTY ending February 29, 2024.

**IV. EXPENSE ADJUSTMENTS**

7 **Q: WHAT ADJUSTMENTS DO YOU MAKE TO THE FPFTY EXPENSE LEVELS?**

8 A: I propose adjustments and recommendations related to the following projected operating  
9 expense levels:

- 10 A. Payroll Costs
- 11 B. Short Term Incentive Compensation
- 12 C. Long Term Incentive Compensation
- 13 D. Board of Directors Compensation
- 14 E. Inflation Adjustment
- 15 F. Cash Working Capital and Income Tax Adjustments

**A. PAYROLL COSTS**

16 **Q: PLEASE DISCUSS THE COMPANY’S PAYROLL COSTS REQUESTED IN THIS**  
17 **APPLICATION.**

18 A: The Company’s payroll calculation begins with payroll expense levels as of the historical  
19 test year ended December 31, 2021 (“HTY”). The Company then proposes various  
20 adjustments to increase estimated payroll costs as of the Fully Projected Future Test Year  
21 (“FPFTY”). The Company’s adjustments are made for both the water and wastewater  
22 companies, but all of the Company’s calculations were included in the water company  
23 workpapers.



1           The Company's proposed payroll increases are based on two types of adjustments:  
2           (1) estimated pay increases for the projected year ended December 31, 2022, and again for  
3           the future test year ended February 29, 2024, and (2) the proposed addition of ten new  
4           employee positions in 2022. The estimated pay increases include escalations for union  
5           and non-union employees based on regular time pay, premium time pay, cash incentives,  
6           and stock incentives, as applicable. For purposes of this discussion, I will address payroll  
7           escalation rates, pay increases, and employee headcount in this section. I will address  
8           incentive compensation issues in subsequent sections of testimony.

9  
10 **Q: DID THE COMPANY USE THE SAME ESTIMATED PAY INCREASES AND**  
11 **ESCALATION RATE FOR ITS UNION AND NON-UNION EMPLOYEES?**

12 A: No. The Company's adjustments reflected union pay increases that are effective in May  
13 of each year and estimated non-union pay increases anticipated in October of each year.<sup>9</sup>  
14 The Company's projected 2022 pay increases for non-union employees are estimated at  
15 over twice the rate of the union employees' actual increases.<sup>10</sup> For 2023, the estimated  
16 increase for union employees is approximately 70% of the estimated non-union increase.<sup>11</sup>

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<sup>9</sup> See York's response to OCA IV-22.

<sup>10</sup> See Exhibit FIII-5, p. 2.

<sup>11</sup> *Id.*

1 **Q: IS THE DISCREPANCY BETWEEN UNION AND NON-UNION PAY RAISES A**  
2 **CAUSE FOR CONCERN?**

3 A: Yes. The fact that the Company's estimates for non-union pay increases are significantly  
4 higher than the arms-length negotiated union pay increases is a cause for concern because  
5 it indicates that the projected non-union pay increases may be overstated in the Company's  
6 calculation. The union pay increases of 3.5% reflect market-based rates,<sup>12</sup> while the non-  
7 union estimates may be escalated at higher rates, causing the Company's projected payroll  
8 cost to be overstated. For this reason, I propose an adjustment to establish the Company's  
9 annual payroll escalation rate at 3.5% per year for all employees.

10

11 **Q: IS THERE OTHER EVIDENCE THAT AN ADJUSTMENT TO LIMIT THE**  
12 **COMPANY'S PAYROLL ESCALATION RATE TO 3.5% FOR ALL**  
13 **EMPLOYEES IS REASONABLE AT THIS TIME?**

14 A: Yes. Mercer, a widely-recognized compensation firm, published on its website 2022  
15 compensation survey results which indicate that merit increase budgets were tracking at  
16 3.2%, while only 27% of companies were planning merit increases of 3.5% or greater.<sup>13</sup>  
17 Similarly, a recent Forbes article addressed employer compensation survey data which  
18 indicated that, despite higher inflation rates, the average budgeted salary increase for 2022  
19 was only 3.4%. The article addressed the complexities of payroll escalation and indicated

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<sup>12</sup> *Id.*

<sup>13</sup> See [Compensation is going up. But, is it enough? Compensation planning survey results | Mercer.US](#)

1 that pay raises are based on numerous factors and adjust more gradually than projected  
2 inflation rates. York's proposed escalation rates for its union employees are consistent  
3 with these benchmarks in the range of 3.5% per year, however, its estimated non-union  
4 and management pay rate increases are well above these levels, and should be reduced for  
5 rate-setting purposes.<sup>14</sup> In the context of an estimated FPFTY more than two years beyond  
6 the HTY, York's escalated pay increases in excess of 3.5% are not warranted.

7  
8 **Q: WHAT IS THE ANNUAL PAYROLL INCREASE YOU RECOMMEND?**

9 A: I recommend that the Commission approve projected pay increases for 2022 and 2023 at  
10 3.5% per year for all employees. This recommendation does not result in any reduction  
11 in the pay levels for union positions, because it is in line with the amount requested by the  
12 Company. This adjustment, however, brings the projected pay increases for non-union  
13 and managerial positions in line with the 3.5% market-based levels projected for York's  
14 union employees.

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<sup>14</sup> See Exhibit FIII-5, p. 2.; Forbes, [Why Salary Increases Do Not Keep Pace With Inflation](https://www.forbes.com/sites/johnbremen/2022/04/07/why-salary-increases-do-not-keep-pace-with-inflation/?sh=7162d3b17533), April 7, 2022;  
<https://www.forbes.com/sites/johnbremen/2022/04/07/why-salary-increases-do-not-keep-pace-with-inflation/?sh=7162d3b17533>

1 **Q: THE COMPANY'S PAYROLL CALCULATIONS ALSO INCLUDE AN**  
2 **INCREASE IN THE NUMBER OF NON-UNION POSITIONS. HAVE YOU**  
3 **PROPOSED AN ADJUSTMENT TO REMOVE THE ADDITIONAL TEN (10)**  
4 **NON-UNION EMPLOYEE POSITIONS FROM THE REVENUE**  
5 **REQUIREMENT?**

6 **A:** No. In this filing, the Company projects it will add ten (10) additional non-union  
7 employees for 2022 through February 2024. I have *not* proposed an adjustment to remove  
8 these positions.

9 **Q: HOW DOES THE COMPANY'S PROJECTED INCREASE IN EMPLOYEE**  
10 **POSITIONS COMPARE WITH PRIOR YEARS?**

11 **A:** The Company had 109 employees in January 2019, which grew to 113 employees by the  
12 end of 2020. As of its 2021 annualized payroll, the Company's headcount remained at 113  
13 full time employees. As such, the projected headcount increase is a significant increase.

14  
15 **Q: IN ADDITION TO THE TEN NEW PROJECTED POSITIONS, DOES THE**  
16 **COMPANY ALSO SEEK TO INCLUDE UNFILLED POSITIONS IN THE**  
17 **REVENUE REQUIREMENT?**

18 **A:** Yes. The Company identified four (4) vacant non-union positions and one (1) union  
19 position that it has included in pro forma payroll cost.<sup>15</sup> These are in addition to the ten  
20 new positions the Company identified.

---

<sup>15</sup> See Response to OCA Set X, No. 2.

1 **Q: SHOULD THESE UNFILLED POSITIONS BE INCLUDED IN THE REVENUE**  
2 **REQUIREMENT?**

3 A: No. Unfilled positions should not be included in the revenue requirement. In my  
4 experience, utilities regularly maintain some level of unfilled positions and therefore these  
5 positions are typically excluded from the revenue requirement. Utility companies, like  
6 most companies, experience ongoing attrition and replacement of employee positions, and  
7 it is appropriate to exclude these vacant positions to avoid overstating the revenue  
8 requirement.

9  
10 **Q: IS AN ADJUSTMENT TO REMOVE THE FOUR UNFILLED NON-UNION**  
11 **POSITIONS REASONABLE?**

12 A: Yes. It is reasonable to remove a utility's unfilled employee positions for ratemaking  
13 purposes. This is especially true where, as here, the Company has proposed significant  
14 growth in projected headcount which will be included in the revenue requirement.

15  
16 **Q: WHAT IS THE AMOUNT OF THE ADJUSTMENT NECESSARY TO LIMIT**  
17 **NON-UNION PAY INCREASES TO 3.5% AND TO EXCLUDE THE VACANT**  
18 **POSITIONS FROM THE COMPANY'S REVENUE REQUIREMENT?**

19 A: The adjustment to reduce the non-union pay increases to 3.5% per year for 2022 and 2023,  
20 and to exclude the four vacant non-union positions reduces the payroll expense by  
21 \$382,591 for the water company and \$17,296 for the wastewater company. This  
22 adjustment is found on Exhibit MEG-4.

**B. ANNUAL CASH INCENTIVE PLAN**

1 **Q: PLEASE SUMMARIZE THE INCENTIVE AND BONUS COMPENSATION**  
2 **YORK HAS INCLUDED IN REVENUE REQUIREMENT.**

3 A: York includes three types of bonus payments and incentive compensation for its  
4 employees: (1) annual bonuses paid to all employees in an equal annual amount per  
5 employee; (2) annual short-term cash incentive compensation for salaried employees; and  
6 (3) long-term stock incentives employees at senior managerial levels. The annual bonuses  
7 paid in equal dollar amounts to all permanent employees are reasonable in amount, and I  
8 have not proposed any adjustments related to these bonuses. The short-term annual cash  
9 incentives and the long-term stock incentive payments are discussed in the sections below.

10  
11 **Q: WHAT AMOUNT HAS YORK INCLUDED IN REVENUE REQUIREMENT**  
12 **RELATED TO ITS ANNUAL SHORT TERM INCENTIVE COMPENSATION**  
13 **PLANS?**

14 A: In this application, York seeks to include in rates \$287,026 for its annual cash incentive  
15 expense, comprised of \$247,508 for the water utility, and \$11,189 for the wastewater  
16 utility.<sup>16</sup> York has 43 salaried employees eligible for short term incentive compensation  
17 which ranges from 5% of the employee's base salary for managers, 7.5% for vice-  
18 presidents, to 10% for C-Suite employees.<sup>17</sup>

---

<sup>16</sup> See Response to OCA IV-14, with expense allocation between utilities based on Exhibit FIII-2-40(b).

<sup>17</sup> See Response to OCA IV-12.

1 **Q: WHAT IS THE COMMISSION’S POLICY REGARDING THE INCLUSION OF**  
2 **INCENTIVE COMPENSATION IN THE REVENUE REQUIEMENT?**

3 A: The Commission’s policy is to allow recovery of incentive compensation in rates so long  
4 as the utility shows that the overall amount of compensation is reasonable and that the plan  
5 provides benefits to ratepayers.<sup>18</sup> The Commission does require, however, that the utility  
6 show: (1) measurable performance objectives, (2) studies or other data to support the  
7 necessity of the incentive compensation plan, and (3) evidence supporting a claim of the  
8 utility’s inability to retain competent management personnel.<sup>19</sup>

9

10 **Q: PLEASE DESCRIBE YORK’S CASH INCENTIVE PLAN.**

11 A: York’s cash incentive compensation plan is a formal written plan approved by the  
12 Compensation Committee of York’s Board of Directors. According to Company witness  
13 Joseph T. Hand, the Cash Incentive Plan (the “Cash Plan”) was approved by the  
14 Company’s Compensation Board of Directors on January 26, 2003.<sup>20</sup> The plan establishes  
15 a two-tiered approach for awarding annual cash incentives. First, the plan sets forth  
16 “Terms of Awards,” which provide the business criteria which the Committee may use in  
17 making annual cash incentive awards.<sup>21</sup> The plan states:

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<sup>18</sup> *Pa. Pub. Util. Comm’n v. Aqua Pennsylvania*, Docket No. R-2021-3027385, 2022 PA. PUC LEXIS 161 (May 16, 2022), pp. 96-101.

<sup>19</sup> See *Pa. Pub. Util. Comm’n v. Philadelphia Gas Works*, Docket No. R-00061931, Order Entered September 28, 2007, page 48.

<sup>20</sup> See Direct Testimony of Joseph T. Hand, Exhibit No. FIII-22 (Cash Incentive Plan attachment).

<sup>21</sup> See Direct Testimony of Joseph T. Hand, Exhibit No. FIII-22 at 2(Cash Incentive Plan attachment).

1 One or more of the following business criteria or other measures of  
2 performance may be used by the Committee in establishing Annual  
3 Incentive Awards: (1) growth in revenues or assets; (2) earnings from  
4 operations; (3) net income or net income per common share; (4) return on  
5 investment or return on equity; (5) stock price or shareholder return and (6)  
6 strategic business criteria, consisting of meeting specified water quality  
7 standards, environmental or safety standards, affordability of rates and  
8 customer satisfaction standards.<sup>22</sup>

9 It is noteworthy that five out of the six criteria set forth are financial metrics.

10 The Company's plan states, "the Committee may exercise its *discretion* to eliminate, to  
11 reduce or increase the amounts payable as Annual Incentive Awards, subject to such  
12 business criteria or other measures of performance."<sup>23</sup>

13 The second component of York's Cash Incentive Plan are the "Performance  
14 Measures."<sup>24</sup> This section of the plan explains that the Committee will approve an annual  
15 list Performance Objectives which require an overall score of seventy-five (75) percent  
16 achievement for the cash awards to be distributed in a given year.<sup>25</sup> The Company  
17 provided copies of its 2021 and 2022 Cash Incentive Plan Performance Objectives, which  
18 set forth lists of 17 objectives, as well as the annual Earnings Per Share("EPS") target of  
19 \$1.12 for each year.<sup>26</sup>

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<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> See Direct Testimony of Joseph T. Hand, Exhibit No. FIII-22 (Performance Objectives attachments).



1 **Q: DID YORK APPLY THE TWO-TIERED CRITERIA—AS DESCRIBED ABOVE—**  
2 **IN AWARDING A CASH INCENTIVE PAYMENT FOR 2021?**

3 A: Yes. The Company’s cash incentive award for 2021 was based upon (1) achieving the  
4 Earnings Per Share (“EPS”) target and (2) exceeding the 75% of the Performance  
5 Objectives for the year. Specifically, the Company stated:

6 For 2021, management achieved 94% of the 2021 performance objectives  
7 and the earnings per share target set for 2021. As a result, the full eligible  
8 award for 2021 was issued.<sup>27</sup>  
9

10 **Q: DO YORK’S ANNUAL PERFORMANCE OBJECTIVES MEET THE**  
11 **COMMISSION’S CRITERIA?**

12 A: It is unclear based on the evidence the Company has presented thus far. Although the  
13 Company provides a general statement in support of the incentive compensation plan in  
14 the testimony of Joseph T. Hand,<sup>28</sup> it is unclear from the materials provided that the  
15 incentive compensation plans are beneficial for ratepayers. Most of plan’s business  
16 criteria, and many of its performance objectives include financial metrics which are  
17 designed to benefit shareholders. Based upon my review, further evidence is necessary  
18 for the Company to demonstrate that its Cash Incentive Plan is beneficial for ratepayers.

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<sup>27</sup> See response to OCA Interrogatory Set IV, No. 16.

<sup>28</sup> See Direct Testimony of Joseph T. Hand, p. 11, lines 2-7.

1 **Q: DO YOU AGREE WITH THE COMMISSION’S POLICY THAT PLAN COSTS**  
2 **ARE RECOVERABLE SO LONG AS THE PLAN PROVIDES ANY CUSTOMER**  
3 **BENEFIT?**

4 A: Not entirely. While I generally agree with this requirement, I would point out that in utility  
5 ratemaking, a standard that requires benefits to customers actually means that a ‘net  
6 benefit’ to customers is required. In other words, a showing of ratepayer benefit at any  
7 cost is not sufficient. Instead, the utility has the burden of showing that the cost incurred  
8 provides a *net* benefit to ratepayers. I do not agree that if a utility shows *any* benefit to  
9 ratepayers, no matter how small, the entirety of its incentive compensation plan costs  
10 should be included in rates. Moreover, I support the view that the costs of incentive  
11 compensation plans may be shared or allocated between shareholders and ratepayers  
12 where the objectives of the plan, particularly financial metrics, are designed to benefit  
13 shareholders.

14  
15 **Q: DO FINANCIAL PERFORMANCE MEASURES COMPRISE A SIGNIFICANT**  
16 **COMPONENT OF THE COMPANY’S INCENTIVE COMPENSATION PLAN?**

17 A: Yes. York’s plan is a discretionary plan that is tied to the Company’s financial  
18 performance. York’s Cash Incentive Plan is conditioned on the EPS target as its business  
19 criterion.”<sup>29</sup> As Mr. Hand explains, “the business criterion is established to ensure that  
20 cash incentives are paid only when the Company’s financial profile warrants such a

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<sup>29</sup> Direct Testimony of Joseph T. Hand, p. 10 lines 15-16.

1 payout.”<sup>30</sup> As such, York’s plan has an EPS funding trigger. If the EPS target is not met,  
2 the plan will not be funded. In other words, even though the Company’s performance  
3 measures include both financial and non-financial factors, the actual *funding* trigger for  
4 incentive compensation is directly tied to the financial performance of the Company.

5 Under the Company’s plan, regardless of how well the employees, or the  
6 Company, may perform in a nonfinancial performance measure such as safety, if the EPS  
7 is below the stated threshold, the funding for the plan could be 0%.<sup>31</sup> Thus, the Company’s  
8 earnings level is the controlling factor in determining whether the incentive compensation  
9 will be paid and to what extent. York’s management establishes the earnings (EPS)  
10 threshold and has discretion to eliminate the annual incentive payments.<sup>32</sup> Moreover, the  
11 plan itself states that an EPS target of \$1.12 would “protect *shareholders* from any  
12 significant downside risk. . .”<sup>33</sup>

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<sup>30</sup> *Id.*, p. 10, lines 18-19.

<sup>31</sup> Direct Testimony of Joseph T. Hand, Exhibit NO FIII-22 (2021 Performance Objectives and 2022 Performance Objectives).

<sup>32</sup> *Id.*

<sup>33</sup> Direct Testimony of Joseph T. Hand, Exhibit No. FIII-22.

1 **Q: PLEASE DISCUSS THE RATIONALE FOR SHARING INCENTIVE**  
2 **COMPENSATION COSTS BETWEEN SHAREHOLDERS AND RATEPAYERS**  
3 **WHEN THE COMPANY’S PLAN IS BASED ON BOTH OPERATIONAL AND**  
4 **FINANCIAL PERFORMANCE MEASURES.**

5 A: Such sharing arrangements are widely accepted. In my experience, excluding financially-  
6 based short-term compensation costs is the majority view among regulatory commissions.  
7 An Incentive Compensation Survey of the 24 Western States conducted by the Garrett  
8 Group in 2007, and updated in 2009, 2011, 2015 and 2018, shows that a clear majority of  
9 the states surveyed follow the financial-performance rule, in which a portion of incentive  
10 payments associated with financial performance are excluded from rates.<sup>34</sup> While some  
11 states disallow incentive pay using other criteria, none of the jurisdictions surveyed allow  
12 full recovery of incentive compensation through rates as a general rule. The table below  
13 provides a summary of the survey results:

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<sup>34</sup> The Garrett Group Incentive Compensation Survey is a telephonic survey of the regulatory commission staff for the in each of the states west of the Mississippi.

<b>Table 2: Garrett Group, LLC -- 24 Western State Incentive Survey Results</b>			
<b>Incentives Not Allowed in Rates</b>	<b>Financial Performance Rule Followed</b>	<b>Other Sharing Approach</b>	<b>Incentives Not at Issue</b>
Hawaii			
	Arizona		
	Arkansas		
	California		
	Idaho		
	Kansas		
	Louisiana		
	Minnesota		
	Missouri		
	Nebraska		
	Nevada		
	New Mexico		
	North Dakota		
	Oklahoma		
	Oregon		
	South Dakota		
	Texas		
	Utah		
	Washington		
	Wyoming		
		Alaska <sup>35</sup>	
		Colorado <sup>36</sup>	
			Iowa
			Montana

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<sup>35</sup> Incentive compensation has not been an issue in the past, partly because most utilities in Alaska are municipalities and COOPs. In one recent case, however, the Commission approved incentives in rates, which may turn out to be an anomaly.

<sup>36</sup> Colorado followed the financial performance rule in the past. In one recent case, however, the Commission approved another approach, which may turn out to be an anomaly.

1 **Q: WHEN REGULATORS EXCLUDE THE PORTION OF A UTILITY'S**  
2 **INCENTIVE PLAN TIED TO FINANCIAL PERFORMANCE MEASURES, DOES**  
3 **THE UTILITY STOP OFFERING INCENTIVE COMPENSATION TO HELP**  
4 **ACHIEVE ITS FINANCIAL GOALS?**

5 A. No. Even though regulators generally disallow incentive compensation tied to financial  
6 performance for ratemaking purposes, utilities continue to include financial performance  
7 as a key component of their plans. In my opinion, utilities continue to tie incentive  
8 payments to financial performance because by doing so they achieve the primary objective  
9 of the incentive plans: to increase corporate earnings and, thereby, earnings per share  
10 (EPS). However, since the utility retains the increased earnings that these plans help  
11 achieve, payments for these plans should be made from a portion of these increased  
12 earnings and these plans should not be subsidized by ratepayers.

13  
14 **Q: PLEASE IDENTIFY SOME OF THE JURISDICTIONS THAT USE A *SHARING***  
15 ***APPROACH* FOR ANNUAL INCENTIVE PLANS SIMILAR TO THE 50/50**  
16 **APPROACH YOU RECOMMEND.**

A: As shown in the table above, many regulatory commissions disallow a portion of incentive  
compensation costs where the incentive plans contain both financial and operational  
measures. Some of the jurisdictions that use a sharing approach to allocate costs between  
shareholders and ratepayers include Arizona, Arkansas, Kansas, Oklahoma, Oregon, and  
Texas, as summarized below:

1           •       **Arizona:** The Arizona commission on numerous occasions has shared the  
2 cost of annual incentive plans on a 50/50 split between shareholders and ratepayers.<sup>37</sup>

3           •       **Arkansas:** The Arkansas commission in Docket No. 13-028-U stated:

4                   The Commission finds that EAI and Staff have failed to  
5 show that EAI's short-term, long-term and stock based  
6 incentive compensation provide ratepayer benefits to justify  
7 100% inclusion in rates. The Commission agrees with both  
8 the AG and HHEG witnesses *that most, if not all, of the*  
9 *short-term incentive costs are indirectly tied to financial*  
10 *performance through the EAM funding mechanism and,*  
11 *therefore, the Commission finds that ratepayers should bear*  
12 *no more than 50% of the costs.* The Commission finds that  
13 \$48,087,877 in annual short-term incentive costs, and all  
14 other related payroll costs, should be removed from EAI's  
15 operating expenses in this proceeding.<sup>38</sup>

16           •       **Kansas:** The Kansas commission generally disallows plans based on  
17 financial measures and allocates a 50% sharing for plans using a balance of financial and  
18 operational measures.<sup>39</sup>

19           •       **Oklahoma:** The Oklahoma Commission has consistently disallowed  
20 financial-based incentive pay for more than 25 years.<sup>40</sup>

21           •       **Oregon:** The Oregon commission has a history of disallowing 50% of  
22 operational plans and 75% of financial plans.<sup>41</sup>

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<sup>37</sup> See e.g., Ariz. Corp. Comm'n, Ariz. Pub. Svc. 2008 rate case, Decision 70360; Southwest Gas 2008 rate case, Decision 70665 and UNS Gas 2008 rate case, Decision 70011.

<sup>38</sup> See e.g., Ark. Pub. Serv. Comm'n Docket No. 13-028-U, Order No. 21, p.54 (Emphasis added).

<sup>39</sup> See e.g., Kan. Corp. Comm'n, Docket No. 10 KCPE-415-RTS, Order issued Nov. 22, 2010, pp. 46-51.

<sup>40</sup> See e.g., Okla. Corp. Comm'n, Oklahoma Natural Gas, Docket No. PUD 91-1190, Order p.145.

<sup>41</sup> See e.g., Oregon Pub. Util. Comm'n, Portland General Elec. Co., Docket No. UE 197, Order No. 09-020, issued Jan. 22, 2009, pp. 12-13.

1 • **Texas:** The Texas commission disallows 100% of short-term incentives  
2 directly tied to financial performance measures and 50% of the remaining incentives if  
3 they are indirectly tied to financial performance through an earnings-per-share funding  
4 mechanism.<sup>42</sup> In applying this approach in the most recent Southwestern Electric Power  
5 Company (SWEPCO) case, in Docket No. 46449, the Texas commission made the  
6 following finding:

7 **194.** The Commission has repeatedly ruled that a utility  
8 cannot recover the cost of financially-based incentive  
9 compensation because financial measures are of more  
10 immediate benefit to shareholders and financial measures  
11 are not necessary or reasonable to provide utility  
12 services.<sup>43</sup>

13 This finding articulates the Public Utility Commission of Texas' longstanding precedent.

14  
15 **Q: WHAT IS THE GENERAL RATIONALE FOR EXCLUDING INCENTIVE**  
16 **COMPENSATION TIED TO FINANCIAL PERFORMANCE?**

17 A: In most jurisdictions, the cost of incentive plans which are tied to financial performance  
18 measures are excluded for ratemaking purposes. When the costs associated with these  
19 plans are excluded, the rationale used by the regulators is often based on one or more of  
20 the following reasons:

21 **(1) Payment is uncertain.** Often, payment of incentive compensation is conditioned  
22 upon meeting some predetermined financial goal such as achieving a certain

---

<sup>42</sup> See Pub. Util. Comm'n of Tex., SPS Docket No. 43695, Order on Rehearing at pp. 5-6. Also see, SWEPCO Docket No. 46495, and Docket No 46449.

<sup>43</sup> See *Application of Southwestern Electric Power Company for Authority to Change Rates*, Docket No. 46449, Finding No. 194, Order on Rehearing at p. 34 (March 19, 2018). (Emphasis added).



1 increase in earnings, reaching a targeted stock price or meeting budget objectives.  
2 If the predetermined goals are not met, the incentive payment is not made, or  
3 payment is made at some lesser amount. Therefore, one cannot know from year to  
4 year what the level of the payment may be or whether the payment will be made  
5 at all. It is generally considered inappropriate to set rates to recover a tentative  
6 level of expense.<sup>44</sup>

7 **(2) Earnings-based incentive plans can discourage conservation.** When incentive  
8 payments are based on earnings, employees may not support conservation  
9 programs designed to reduce usage if they perceive these programs could adversely  
10 impact incentive payment levels. To the extent that earnings-based incentive plans  
11 discourage conservation these plans may not serve the public interest.

12 **(3) The utility and its shareholders assume none of the financial risks associated**  
13 **with incentive payments.** Ratepayers assume the risk that the utility will instead  
14 retain the amounts collected through rates for incentive payments whenever  
15 targeted increases are not reached. Employees assume the risk that the incentive  
16 payments will not be made in a given year. The utility and its shareholders,  
17 however, assume no risk associated with these payments. Instead, the company's  
18 only responsibility is to decide who gets the money, the shareholders or the  
19 employees.<sup>45</sup>

20 **(4) Incentive payments based on financial performance measures should be made**  
21 **out of increased earnings.** Whatever the targets or goals may be that trigger an  
22 incentive payment, when the plan is based in whole or in part on financial  
23 performance measures the company always obtains a financial benefit from  
24 achieving these objectives. This financial benefit should provide ample funds from  
25 which to make the payment. If not, the incentive plan was poorly conceived in the  
26 first place. As such, employees should be compensated out of the increased  
27 earnings, and not through rates.

28 **(5) Incentive payments embedded in rates shelter the utility against the risk of**  
29 **earnings erosion through attrition.** When utilities are allowed to embed amounts  
30 for incentive payments in rates, that money is available to the utility not only to  
31 pay the incentive payment when financial performance goals are met but also to

---

<sup>44</sup> A good example of this problem occurred in the 2008 Oklahoma rate case proceeding of Public Service Company of Oklahoma, PUD 08-144. In 2009, PSO's below target EPS reduced the funding available for incentive compensation payments by 76.9%. Although in the Company's 2008 rate case, the Commission had included more than \$4 million in rates for incentives, the Company chose not to use all of that money to pay incentives, but instead retained some of those funds for its shareholders to help bolster the Company's lower earnings that year.

<sup>45</sup> *Id.*

1 supplement earnings in those years when the company does not perform well. In  
2 those years when financial performance measures are met, the increased earnings  
3 of the company provide ample additional funds from which to make the incentive  
4 payments to employees, and the incentive payment amount embedded in rates is  
5 not needed. In those years when financial performance measures are not met and  
6 the incentive payments are not made, the amount embedded in rates for incentive  
7 payments acts as a financial hedge to shelter the poor financial performance of the  
8 company.

9 **Q: ARE YOU RECOMMENDING THAT THE COMPANY ELIMINATE ITS**  
10 **SHORT-TERM INCENTIVES FOR ITS EMPLOYEES?**

11 A: No. The question for ratemaking purposes is not whether the utility should offer short-  
12 term incentives to its employees; the question is, who should pay for them. The consensus  
13 is that financial-based incentives benefit the shareholders more than do the ratepayers, and,  
14 as a result, should be paid for by the shareholders.

15  
16 **Q: WHAT ARE YOU RECOMMENDING WITH RESPECT TO THE COMPANY'S**  
17 **INCENTIVE EXPENSE?**

18 A: Based on the information the Company has provided, York's plan is tied to the Company's  
19 financial performance and its metrics are designed to benefit shareholders as well as  
20 ratepayers. For this reason, I am recommending, at a minimum, a 50/50 sharing of these  
21 costs between shareholders and ratepayers. This recommendation is based on the  
22 recognition that the Company's EPS funding mechanism causes at least 50% of the  
23 Company's incentive compensation plan goals to be related to financial performance  
24 measures, while a smaller percentage relates to customer satisfaction and reliability.  
25 Because ratepayers receive at least some benefit from these customer-related goals, some  
26 portion of the plan costs can be included in rates. Accordingly, I propose adjustments to

1 reduce the requested level of annual incentive expense by 50% to reflect the fact that the  
2 plan is partially tied to financial performance measures. This requires an adjustment of  
3 \$(123,754) for the water utility and \$(5,595) for the wastewater utility, as set forth on  
4 Exhibit MEG-5.

**C. LONG-TERM STOCK INCENTIVE PLAN**

5 **Q: WHAT HAS THE COMPANY PROPOSED WITH RESPECT TO LONG-TERM**  
6 **STOCK INCENTIVE PLAN COSTS FOR SENIOR MANAGEMENT AND**  
7 **EXECUTIVES?**

8 A: The Company is proposing to recover long-term incentive plan costs of \$276,170,<sup>46</sup> with  
9 \$238,146 attributable to the water utility expense, and \$10,776 attributable to the  
10 wastewater utility expense.<sup>47</sup>

11  
12 **Q: PLEASE DESCRIBE THE COMPANY'S LONG-TERM COMPENSATION**  
13 **PLANS.**

14 A: In addition to the annual incentive plans discussed above, the Company offers a Long-  
15 Term Incentive Plan ("LTIP") for eligible officers, Board members, non-employee Board  
16 members, and key employees designated by the Committee.<sup>48</sup> The Company indicated that  
17 the LTIP covers 17 employees of the Company.<sup>49</sup> The long-term incentive plan includes

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<sup>46</sup> See OCA IV-9,

<sup>47</sup> See Exhibit MEG-6.

<sup>48</sup> See Direct Testimony of Joseph T. Hand, Exhibit No. FIII-22 (Long Term Incentive Plan Attachment), p.1.

<sup>49</sup> See OCA IV-8

1 the following purpose statement:

2 “The purpose of the Plan is to give participants an ownership interest in  
3 York and to create an incentive for them to contribute to York’s growth,  
4 thereby benefiting York’s stockholders, and aligning the economic interest  
5 of the participants with those of York’s stockholders.”<sup>50</sup>  
6

7 Because the long-term stock compensation plan is designed to align the interests of  
8 Company executives and senior management with the interests of shareholders, the  
9 shareholders rather than ratepayers should be responsible for paying these costs.

10

11 **Q: WHAT IS THE RATIONALE FOR EXCLUDING FINANCIALLY-BASED**  
12 **LONG-TERM INCENTIVE COMPENSATION EXPENSE?**

13 A: Incentive compensation payments to officers, executives, and key employees of a utility  
14 are generally excluded for ratemaking purposes. Since officers of any corporation have  
15 fiduciary duties of loyalty and care to the corporation itself and not to the customers of the  
16 company, these individuals are required to put the interests of the company first.  
17 Undoubtedly, the interests of the company and the interests of the customer are not always  
18 the same, and at times, can be quite divergent. This natural divergence of interests creates  
19 a situation where not every cost associated with executive compensation is presumed to  
20 be a necessary cost of providing utility service. Many regulators are inclined to exclude  
21 executive bonuses, incentive compensation and supplemental benefits from utility rates,  
22 understanding that these costs would be better borne by the utility shareholders.

---

<sup>50</sup> See Exhibit No. FIII-22 (The York Water Long-Term Incentive Plan) at 1. (Emphasis added).

1 Further, long-term executive incentive plans are specifically designed to tie  
2 management compensation to the financial performance of the company. This is done to  
3 further align the interest of the employee with those of the shareholder. Since the  
4 compensation of the employee is tied over a long period of time to the company's stock  
5 price, it motivates employees to make business decisions from the perspective of long-  
6 term shareholders. This intentional alignment of employee and shareholder interests  
7 means the costs of these plans should be borne solely by the shareholders. It would be  
8 inappropriate to require ratepayers to bear the costs of incentive plans designed to  
9 encourage employees to put the interests of the shareholders first.

10  
11 **Q: HOW ARE LONG-TERM INCENTIVE COMPENSATION COSTS TREATED IN**  
12 **PENNSYLVANIA?**

13 A: The Commission has, in the past, excluded long-term incentive compensation where  
14 management bonuses are primarily based on financial metrics to determine payouts.<sup>51</sup> In  
15 more recent decisions, however, the Commission has allowed recovery of stock-based  
16 incentive compensation where the utility provides evidence linking the stock-based plan  
17 with benefits to customers and improved operational efficiency.<sup>52</sup>

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<sup>51</sup> See *Pa. Pub. Util. Comm'n v. Roaring Creek Water Co.*, 81 Pa. PUC 285 (1994).

<sup>52</sup> See *Pa. Pub. Util. Comm'n v. Aqua Pennsylvania, Inc.*, Docket No R-2021-3027385. Public Meeting May 12, 2022, Opinion and Order, pp.100-101.

1 **Q: HOW IS LONG-TERM INCENTIVE COMPENSATION TREATED IN OTHER**  
2 **JURISDICTIONS?**

3 A: The results of the Garrett Group Incentive Compensation Survey, discussed in the previous  
4 section of this testimony, show that many jurisdictions follow the general rule that  
5 incentive pay associated with financial performance is not allowed in rates. This means  
6 that long-term, stock-based incentives are not recovered in rates in most if not every  
7 jurisdiction in the 24 states surveyed. In the synopsis of the incentive survey results from  
8 each state that was included in the prior section of this testimony, the treatment of long-  
9 term stock-based incentives in each state was underlined.

10 According to the survey, 20 of the 24 western states tend to exclude all or virtually  
11 all long-term stock-based incentive pay, either through an outright ban on stock-based  
12 incentives or through applying the *financial performance* rule, which has the effect of  
13 excluding long-term earnings-based and stock-based awards. These states include  
14 Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Kansas, Louisiana, Minnesota,  
15 Missouri, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas,  
16 Utah, Washington and Wyoming. In the other four states, Alaska, Iowa, Montana and  
17 Nebraska, the issue just has not been addressed.

18  
19 **Q: DO YOU KNOW HOW LONG-TERM INCENTIVES ARE TREATED IN**  
20 **EASTERN STATES?**

21 A: In addition to our survey of the western states, we also conducted a telephone survey of  
22 four eastern states: Illinois, Kentucky, Michigan and Wisconsin. According to

1 commission-staff personnel contacted in these states, the general rule in these jurisdictions  
2 is that financial-based incentives are not included in rates. The regulatory treatment in these  
3 states is set forth below, and the treatment of long-term incentives is underlined:

4 **Illinois:** The general approach of the Illinois Commerce Commission has been that  
5 incentives based on financial goals are not allowed while those with operational goals are  
6 allowed in rates.<sup>53</sup> These criteria have been consistently applied by the Commission to  
7 short-term, long-term and executive incentive compensation. Long-term incentives are  
8 more often financially based and therefore more often disallowed. This treatment is the  
9 Commission's general practice, but it is also codified in the statute governing the formula  
10 rate plans for the state's two largest utilities (Ameren Illinois and Commonwealth Edison).  
11 Statute §220ILCS5/16-108.5c¶4(A) states:

12 Recovery of incentive compensation expense that is based on the  
13 achievement of operational metrics, including metrics related to budget  
14 controls, outage duration and frequency, safety, customer service,  
15 efficiency and productivity, and environmental compliance. Incentive  
16 compensation expense that is based on net income or an affiliate's earnings  
17 per share shall not be recoverable under the performance-based formula  
18 rate.

19 **Kentucky:** Any incentive compensation related to financial metrics is disallowed  
20 100%. This treatment is applied to short-term, long-term and executive incentives. This  
21 treatment is not proscribed by regulation or statute but has been the longstanding practice  
22 of the Commission. This treatment is set forth in the recent Kentucky American rate case  
23 18-00358 (20190627 PSC Order 01, pp 41-44)<sup>54</sup>. In this case, 100% of the long-term  
24 incentives were disallowed while 50% of the short-term incentives were allowed. Even  
25 though the short-term plan had a funding mechanism based on earnings per share, the  
26 plan's performance measures were 50% financial and 50% non-financial. There have been  
27 no recent changes to this treatment.

28 **Michigan:** Incentive compensation based on financial metrics are excluded from  
29 rates. Incentives with non-financial metrics which have a demonstrable benefit to  
30 ratepayers are allowed in rates. This treatment is used for all incentive compensation and  
31 can produce a different result for short-term versus long-term and executive plans which  
32 are often stock-based plans which are not included in rates. There are no statutes requiring

---

<sup>53</sup> See Commonwealth Edison, Docket No. 05-0597, pp. 95-97 (affirmed on appeal); North Shore Gas/Peoples Gas, Docket Nos. 09-0166 and 09-0167, (affirmed on appeal); and Illinois-American Water Co., Order No. 16-0093, p. 37.

<sup>54</sup> See also KPC 14-00396 20150622\_PSC\_ORDER (pp 24-26)

1 this treatment, but it is the Commission’s well-established policy based on consistent  
2 precedent. This treatment is set forth recently in Consumers Energy Company Electric  
3 Rate Case U-18322 and DTE Electric Rate Case U-20162.<sup>55</sup>

4 **Wisconsin:** Incentive compensation based on financial metrics are excluded from  
5 rates, as the commission has found that such plans do not reasonably provide benefits to  
6 ratepayers when tied to financial metrics.<sup>56</sup> In the Wisconsin Public Service 2013 rate  
7 case, the commission stated:

8 The Commission is not persuaded it should change its practice of excluding  
9 incentive compensation from revenue requirements of the major investor-  
10 owned utilities in Wisconsin. WPSC has not demonstrated that the plans  
11 provide substantial ratepayer benefit with enough quantified permanent  
12 savings to ratepayers to warrant inclusion of the costs in revenue  
13 requirement. With the majority of executive incentive performance  
14 measures still tied to meeting earnings per share criteria, and the non-  
15 executive incentive performance measures that weigh heavily on measures  
16 tied to the shareholders benefit, the Commission finds it is reasonable to  
17 exclude all incentive compensation costs from the revenue requirement.<sup>57</sup>

18 **Q: DO YOU KNOW HOW LONG-TERM STOCK INCENTIVES ARE TREATED IN**  
19 **ANY OTHER EASTERN STATES?**

20 **A:** Yes. I am aware that in **Indiana**, the commission looks at incentives on a case-by-case  
21 basis and in the past it has both allowed and disallowed stock-based awards.<sup>58</sup>

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<sup>55</sup> In the U-20162 Order, the Commission cites Staff’s Initial Brief (pp67-68) in which Staff lists 11 prior cases in which the Commission disallowed financially-based incentive compensation which does not benefit ratepayers.

<sup>56</sup> See Northern States Power Co., Docket 4220-UR-123, issued December 21, 2017, p. 16.

<sup>57</sup> Wisconsin Public Service, Docket 6690-UR-122, issued December 18, 2013, p. 24. Emphasis added.

<sup>58</sup> See decision in Indiana Michigan rate case Cause No. 45235 (allowed). See also, American Indiana Water Co. rate case, Cause No. 44022 (disallowed).



1 **Q: WHEN UTILITIES SEEK TO RECOVER LONG-TERM INCENTIVE**  
2 **COMPENSATION IN RATES, WHAT RATIONALE IS GENERALLY**  
3 **PROVIDED?**

4 A: Generally, utilities argue that long-term incentives are part of an overall compensation  
5 package that is designed to attract and retain qualified personnel. Since other utilities offer  
6 incentive plans to their executives, a company would run the risk of not being able to  
7 compete for key personnel if it did not offer a comparable plan.

8  
9 **Q: IS THIS ARGUMENT PLAUSIBLE?**

10 A: No. The problem with the argument is that when utilities, such as York, compete with  
11 other utilities for qualified executives, and the long-term incentive compensation plans of  
12 those other utilities are not being recovered through rates, York is not placed at a  
13 competitive disadvantage when its long-term incentive compensation is excluded as well.  
14 The fact that other utilities offer long-term incentive plans is not relevant; what is relevant  
15 is the fact that other utilities are not recovering the costs of those plans in rates. In an order  
16 disallowing Nevada Power's long-term incentive plan, the Nevada Commission  
17 articulated this important ratemaking concept as follows:

18 Therefore, the Commission accepts BCP's and SNHG's  
19 recommendations to disallow recovery of expenses associated with  
20 LTIP. Both parties provide a valid argument that this type of  
21 incentive plan is mainly for the benefit of shareholders. Further, both  
22 BCP and SNHG provide examples of numerous other jurisdictions  
23 that do not allow the recovery of these costs and, therefore,

1 disallowance in this instance would not place NPC in a competitive  
2 disadvantage.<sup>59</sup>

3 Further, the problem with the “total compensation package” argument is that when an  
4 incentive payment is paid based on the achievement of financial performance goals, there  
5 should be sufficient financial benefit to the company as the result of achieving these  
6 goals. This financial benefit should provide ample additional funds from which to make  
7 the incentive payments. If not, the plan was poorly conceived. Thus, a utility is not placed  
8 at a competitive disadvantage when incentive payments tied to financial performance are  
9 not collected through rates, because the funding for these payments should come out of  
10 the additional earnings the incentive plans help achieve.

11  
12 **Q: WHAT OTHER RATIONALE DO UTILITIES TYPICALLY PROVIDE FOR**  
13 **INCLUDING LONG-TERM STOCK-BASED INCENTIVES IN RATES?**

14 A: Companies claim that long-term incentives are *necessary* costs, and, as such, they should  
15 be included in rates. When tested, however, this assertion does not prove to be true. Much  
16 of the water in this country is provided by *municipalities* none of which pay long-term  
17 stock-based incentives, yet they are able to attract talent sufficient to deliver safe and  
18 reliable service. So, if municipalities can provide service without the use of long-term  
19 incentive compensation, I believe it is inaccurate to say that long-term incentives are  
20 *necessary* for the provision of water service for an investor-owned system.

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<sup>59</sup> See *In re Nevada Power Co.*, Docket No. 08-12002, Final Order, p. 139, ¶549, (Nev. Pub. Util. Comm’n Jun. 24, 2009) (Emphasis added).

1 **Q: WHAT ADJUSTMENTS DO YOU RECOMMEND FOR THE LONG-TERM**  
2 **STOCK INCENTIVE PLAN COMPENSATION?**

3 A: I know that this Commission has in the past allowed stock-based compensation in rates.  
4 However, I respectfully request that the Commission reevaluate its position going forward  
5 and allocate the costs of stock-based incentives to shareholders, since shareholders are the  
6 primary beneficiaries of these plans.

7 As a result, I recommend that shareholders bear the cost of the long-term stock  
8 incentive plan. Accordingly, I recommend that the February 29, 2024 pro forma water  
9 company expenses be reduced by \$238,146 and the wastewater expense be reduced by  
10 \$10,766. These adjustments can be found on Exhibit MEG-6.

11  
12 **Q: DO THE ADJUSTMENTS TO PAYROLL COSTS AND THE INCENTIVE PLANS**  
13 **AFFECT THE PAYROLL TAX EXPENSE?**

14 A: Yes. The adjustments to payroll cost and the incentives do impact the payroll tax liability.  
15 I reviewed the adjusted payroll costs and limited the payroll adjustment for salaries and  
16 incentives that exceeded the taxable compensation limits. I then calculated the appropriate  
17 payroll tax adjustments for the water and wastewater utilities.

18  
19 **Q: WHAT ARE THE AMOUNTS OF THE ADJUSTMENTS TO PAYROLL TAX**  
20 **EXPENSE?**

21 A: These adjustments reduce the water company payroll tax expense by \$37,287 and the  
22 wastewater tax expense by \$1,686. These adjustments are found on Exhibit MEG-7.

**D. BOARD OF DIRECTORS' COMPENSATION**

1 **Q: HAS THE COMPANY INCLUDED BOARD OF DIRECTORS' COMPENSATION**  
2 **COSTS IN ITS REVENUE REQUIREMENT?**

3 A: Yes, as shown in Exhibit FIII-2-48, York included \$427,649 in its revenue requirement  
4 for directors' compensation. I propose an adjustment to remove a portion of these costs  
5 from the revenue requirement.

6  
7 **Q: WHAT IS THE ISSUE WITH RESPECT TO BOARD OF DIRECTORS' ("BOD")**  
8 **COMPENSATION?**

9 A: Regulators have recognized that an allocation of BOD compensation costs between  
10 shareholders and ratepayers is appropriate. Ratepayers should not be expected to bear the  
11 full amount of BOD compensation because officers and directors of any corporation have  
12 legal, fiduciary duties of loyalty and care to the corporation itself and not to its customers.  
13 These individuals are required by law to put the interests of the Company first.  
14 Undoubtedly, the interests of the Company and the interests of customers are not always  
15 the same, and at times, can be quite divergent. This natural divergence of interests creates  
16 a situation where not every compensation cost is presumed to be a necessary cost of  
17 providing utility service. Instead, a sharing of director compensation costs would  
18 recognize the fact that the costs of director fees provide a benefit to both shareholder and  
19 the ratepayers alike.

1 **Q: HAVE YOU TESTIFIED IN OTHER CASES IN WHICH BOARD OF**  
2 **DIRECTORS' COMPENSATION COSTS HAVE BEEN ALLOCATED**  
3 **BETWEEN SHAREHOLDERS AND RATEPAYERS?**

4 A: Yes. I recently testified on the issue of board of directors' fees before the Public Utility  
5 Commission of Nevada ("PUCN") and the Washington Utilities and Transportation  
6 Commission ("WUTC"). First, in the Southwest Gas Corp. ("SWG") rate case, the  
7 Nevada commission divided the cost of the BOD compensation equally between  
8 ratepayers and shareholders. The commission stated:

9 420. The Commission accepts Staffs proposal to disallow 50 percent of the  
10 BOD compensation costs in order to share the costs equally between  
11 ratepayers and shareholders. The Commission finds that the evidence on the  
12 record supports benefits to both ratepayers and shareholders. A competent  
13 BOD provides value to SWG through increased earning and market value,  
14 while ratepayers benefit from safe, reliable service. Accordingly, it is  
15 appropriate that the costs be shared between shareholders and ratepayers.<sup>60</sup>

16 Similarly, in the 2020 rate case of Cascade Natural Gas before the Washington  
17 commission, the customers' proposed adjustment to share board of directors' costs equally  
18 between shareholders and customers was uncontested and was accepted by the  
19 Washington commission.<sup>61</sup>

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<sup>60</sup> *In re Southwest Gas Corp.*, Docket No. 18-05031, (Nev. Pub. Util. Comm'n) Modified Final Order, at p. 138, ¶ 420 (Feb. 15, 2019).

<sup>61</sup> *In re Cascade Natural Gas Corp.*, Docket No. UG-200568 (Wash. Util. and Transport. Comm'n), Order No. 5, pp. 9-10 (May 18, 2021).

1 **Q: DO YOU HAVE OTHER CONCERNS REGARDING YORK'S BOARD OF**  
2 **DIRECTORS' COMPENSATION?**

3 A: Yes. In addition to the concern that York has requested that all of its board of directors'  
4 costs be recovered from ratepayers, I am also concerned that a portion of York's directors'  
5 compensation is paid in the form of *stock grants*.<sup>62</sup> As with executives and high-level  
6 managers, compensation in the form of stock awards provides undue incentives to increase  
7 shareholder earnings, rather than to balance the interests of shareholders and customers.  
8 For those reasons, I recommend the BOD cash compensation and expenses be shared  
9 equally between shareholders and ratepayers, and the stock compensation be borne by the  
10 shareholders.

11  
12 **Q: HOW IS YOUR ADJUSTMENT CALCULATED?**

13 A: As set forth in Exhibit FIII-2-48, York included a total of \$427,649 in its revenue  
14 requirement for directors' compensation. My proposed adjustment allocates the cash-  
15 based compensation evenly between ratepayers and shareholders, in the amount of  
16 \$213,825 each. The adjustment to remove the equity-based compensation and to allocate  
17 the BOD cash compensation and expenses equally between shareholders and ratepayers is  
18 \$213,825 for the water utility. This adjustment is set forth at Exhibit MEG-9.

19

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<sup>62</sup> See Direct Testimony of Joseph T. Hand, p. 10, line 21—p.11, line 7.

**E. INFLATION ADJUSTMENT**

1 **Q: PLEASE DISCUSS YORK'S REQUESTED INFLATION ADJUSTMENT.**

2 A: York proposes an inflation adjustment to both the water and the wastewater utilities based  
3 on a February 2021 to February 2022 increase in the CPI-U of 6.4%.<sup>63</sup> The adjustment is  
4 made for 2022, 2023, and 2 months of 2024. The adjustment is applied to all expenses that  
5 are not separately adjusted. In other words, the utility proposes a *blanket* inflation  
6 adjustment to all expense accounts not separately adjusted for projected increases through  
7 the end of the February 29, 2024 test year. The inflation adjustment increases water  
8 company expenses by \$1,023,307 and wastewater expenses by \$298,363.

9

10 **Q: DO YOU AGREE WITH YORK'S PROPOSED INFLATION ADJUSTMENT?**

11 A: No. In my opinion, blanket inflation adjustments do not pass the *known and measurable*  
12 standard for utility ratemaking. Even in a future test year situation, projected increases  
13 must be based on specific analysis for each requested increase. Moreover, blanket  
14 inflation adjustments for projected test years are poor ratemaking policy because they  
15 create a disincentive for utilities to control costs going forward.

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<sup>63</sup> See York Water Statement No. 103W, Direct Testimony of Matthew E. Poff, p. 21.

1 **Q: HAS THIS COMMISSION ADDRESSED THESE ISSUES BEFORE?**

2 A: Yes. In the recent Aqua Pennsylvania, Inc. rate case, Docket No. R-2021-3027385, the  
3 PUC found that Aqua’s general inflation adjustment to accounts not specifically analyzed  
4 and adjusted should be denied.

5 We agree with the ALJ that Aqua has not justified the use of a general price  
6 level adjustment to expenses not specifically adjusted in this case or not  
7 subject to inflation. R.D. at 70. We also agree that allowing Aqua to apply  
8 a general inflation adjustment to a block of expenses could incentivize less  
9 accurate tracking of expenses and a less rigorous approach to controlling  
10 costs for those expenses. The application of a General Price Adjustment to  
11 22% of expenses is neither targeted nor specific. We find the ALJ's  
12 recommendation to deny Aqua's use of a General Price Adjustment to be  
13 reasonable.<sup>64</sup>

14 **Q: HAS THE COMMISSION ALSO FOUND THAT GENERAL INFLATION**  
15 **ADJUSTMENTS ARE NOT KNOWN AND MEASURABLE?**

16 A: Yes. In the recent Pa PUC v. Wellsboro Electric Company (Order entered April 29, 2020),  
17 the Commission found that a blanket inflation adjustment does not meet the *known and*  
18 *measurable* test.

19 The ALJs explained that the Company has the burden of demonstrating that  
20 each FTY expense claim will increase in the FPFTY by some “known and  
21 measurable” change in the FPFTY. According to the ALJs, the Company  
22 did not demonstrate that the blanket three percent inflation adjustment to  
23 all expenses would meet the known and measurable change standard;  
24 specifically, the Company did not demonstrate that making this adjustment  
25 to each expense claim directly relates to the actual costs expected to be  
26 incurred in each expense account in the FPFTY. R.D. at 21-23.

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<sup>64</sup> See. *Pa. Pub. Util. Comm’n v. Aqua Pennsylvania*, Docket No. R-2021-3027385, Order and Opinion, May 12, 2022, at p. 117.



1 **Q: WHAT IS YOUR RECOMMENDATION REGARDING YORK’S PROPOSED**  
2 **INFLATION ADJUSTMENTS?**

3 A: I recommend that the Commission reject York’s proposed general inflation adjustments.  
4 The adjustments to reverse the proposed inflation adjustments reduce the water company  
5 expense by \$1,023,307 and the wastewater expense by \$298,363. These adjustments are  
6 found on Exhibit MEG-8.

7

**F. CASH WORKING CAPITAL AND INCOME TAX ADJUSTMENTS**

8 **Q: DO THE ADJUSTMENTS RECOMMENDED BY THE OCA AFFECT THE CASH**  
9 **WORKING CAPITAL ALLOWANCE?**

10 A: Yes. The adjustments reduce Cash Working Capital (“CWC”) required for O&M expenses  
11 and payroll taxes. The impact of each adjustment is based on the total cost, not just the  
12 expense component. York also included the total costs CWC calculation, not just the  
13 expense component. There are some minor deficiencies in York’s CWC study, such as  
14 using an assumed payroll lag of seven days for all payroll when there is a delay of a year  
15 or more for management’s incentive payment. I am ignoring those issues because I am  
16 recommending the elimination of those expenses so that the CWC correction would be  
17 fully offset by the CWC adjustment related to the exclusion of those costs. I am using  
18 York’s calculated expense lag days to calculate the CWC adjustment.

19

1 **Q: WHAT IS THE AMOUNT OF THE CWC ADJUSTMENT?**

2 A: The adjustment to Cash Working Capital related to the recommended adjustments to  
3 expenses is a reduction to this rate base item of \$259,943. This adjustment is found on  
4 Exhibit MEG-11.

5  
6 **Q: DO THE OCA ADJUSTMENTS IMPACT THE FEBRUARY 29, 2024 PRO  
7 FORMA INCOME TAX EXPENSE?**

8 A: Yes. The OCA recommends adjustments to rate base and the capital structure, the former  
9 reduces the available interest deduction and the later increases the interest deduction. The  
10 OCA is also recommending adjustments to operating income that impact taxable income.  
11 The impact of these adjustments results in a net increase to income tax expense for the  
12 water utility of \$477,284 and the wastewater utility of \$105,061. These adjustments are  
13 found on OCA Errata Exhibit MEG-12.

14

**V. OTHER OCA WITNESSES**

15 **Q: ARE THE RECOMMENDATIONS OF OTHER OCA WITNESSES INCLUDED  
16 IN YOUR EXHIBITS?**

17 A: Yes. My testimony and exhibits include the recommendations of Dr. Habr on the cost of  
18 capital adjustments, as well as acquisition adjustment recommendations of Ms. DeAngelo.

**VI. CONCLUSION**

19 **Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

20 A: Yes.

**MARK E. GARRETT**

**CONTACT INFORMATION:**

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**EDUCATION:**

Juris Doctor Degree, With Honors, Oklahoma City University Law School, 1997  
Post Graduate Hours in Accounting, Finance and Economics, 1984-85:  
University of Texas at Arlington; University of Texas at Pan American;  
Stephen F. Austin State University  
Bachelor of Arts Degree, University of Oklahoma, 1978

**CREDENTIALS:**

Member Oklahoma Bar Association, 1997, License No. 017629  
Certified Public Accountant in Oklahoma, 1992, Certificate No. 11707-R  
Certified Public Accountant in Texas, 1986, Certificate No. 48514

**WORK HISTORY:**

**GARRETT GROUP CONSULTING, INC. – Regulatory Consulting Practice (1996 - Present)**  
Participates as a consultant and expert witness in gas and electric regulatory proceedings and other matters before regulatory agencies in rate case proceedings to determine just and reasonable rates. Reviews management decisions of regulated utilities regarding the reasonableness of prices paid for electric plant, gas plant, purchased power, renewable energy projects, natural gas supplies and transportation, and coal supplies and transportation. Participates in legislative advisory role regarding regulated utilities. Participates as an Instructor at NMSU Center for Public Utilities and as a Speaker at NARUC Staff Subcommittee on Accounting and Finance.

**OKLAHOMA CORPORATION COMMISSION - Coordinator of Accounting and Financial Analysis (1991 - 1994)** Planned and supervised the audits of major public utility companies doing business Oklahoma for the purpose of determining revenue requirements. Presented both oral and written testimony as an expert witness for Staff in defense of numerous accounting and financial recommendations related to cost-of-service based rates. Audit work and testimony covered all areas of rate base and operating expense. Supervised, trained and reviewed the audit work of numerous Staff CPAs and auditors. Promoted from Supervisor of Audits to Coordinator in 1992.

**FREEDOM FINANCIAL CORPORATION - Controller (1987 - 1990)** Responsible for all financial reporting including monthly and annual financial statements, cash flow statements, budget reports, long-term financial planning, tax planning and personnel development. Managed the General Ledger and Accounts Payable departments and supervised a staff of seven CPAs and accountants. Reviewed all subsidiary state and federal tax returns and facilitated the annual independent financial audit and all state or federal tax audits. Received promotion from Assistant Controller in September 1988.

**SHELBY, RUCKSDASHEL & JONES, CPAs - Auditor (1986 - 1987)** Audited the financial statements of businesses in the state of Texas, with an emphasis in financial institutions.

## **Previous Experience Related to Cost-of-Service, Rate Design, Pricing and Energy-Related Issues**

1. **Oncor Electric Delivery Company (Texas), 2022 (PUC Docket No. 53601)** – Participating as an expert witness on behalf of the Steering Committee of Cities before the Texas Public Utility Commission in Oncor’s General Rate Case proceeding to provide testimony on various revenue requirement issues.
2. **The York Water Company (2022) (Pennsylvania), (Docket No. R-2022-3031340 and R-2022-3032806)** – Participating as an expert witness on behalf of Office of Consumer Advocate (“OCA”) before the Pennsylvania Public Utility Commission to address various revenue requirement issues in the York rate case.
3. **Sierra Pacific Power Company, 2022 (Nevada), (Docket No. 22-06)** – Participated as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various revenue requirement issues.
4. **NV Energy, 2022 (Nevada), (Docket No. 22-003028)** – Participating as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various issues in the merger application of Sierra Pacific Power Company and Nevada Power Company.
5. **Atmos MidTex (Texas), 2022 (Texas), (Dallas Annual Rate Review)** – Participating as an expert witness on behalf of the City of Dallas before the Texas Railroad Commission in Atmos’s Dallas Annual Rate Review (“DARR”) proceeding. Sponsoring recommendations on various revenue requirement issues.
6. **CenterPoint Energy Resources Corp., 2022 (Texas) (Docket No. 53442)** – Participating as an expert witness for the City of Houston before the Texas Public Utility Commission the Company’s Distribution Cost Recovery Factor sponsoring testimony on various cost recovery issues.
7. **Cascade Natural Gas, 2021 (Washington)** – Participating as an expert witness on behalf of Public Counsel in Cascade’s limited issue rate case application, sponsoring Public Counsel’s revenue requirement schedules and testimony to address various revenue requirement and tax issues.
8. **Oklahoma Gas and Electric Company, 2021 (Oklahoma), (Cause No. PUD 202100164)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”)<sup>1</sup> before the Oklahoma Corporation Commission in OG&E’s general rate case application addressing various revenue requirement and rate design issues.
9. **Southwestern Electric Power Company, 2021 (Texas), (PUC Docket No. 52397)** – Participating as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s application to recover Uri storm costs.
10. **Southwestern Public Service Co., 2021 (Texas) (Docket No. 52210)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) before the Texas Public Utility Commission in SWEPCO’s application to recover Uri storm costs.
11. **CenterPoint Energy Resources Corp., 2021 (Texas) (Docket No. OS—00007061)** – Participating as an expert witness for the City of Houston before the Texas Rail Road Commission in a

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<sup>1</sup> OIEC is an association of industrial manufacturing facilities in Oklahoma.

consolidated application from the large natural gas distribution utilities in Texas to securitize and recover URI storm costs from February 2021.

12. **Indiana Michigan Power, 2021 (Indiana), (Docket No. 45576)** – Participating as an expert witness on behalf of the Office of Utility Consumer Counselor in I&M’s rate case application, sponsoring testimony to address various revenue requirement and tax issues.
13. **Chugach Electric Association, 2021 (Alaska), (Docket No. U-21-059)** – Participating as an expert witness on behalf of Providence Health and Services before the Alaska Regulatory Commission. Sponsoring testimony to address Chugach’s application to address a shortfall in revenues after its acquisition of Municipal Light and Power.
14. **Southwestern Public Service Co., 2021 (Texas) (Docket No. 51802)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues.
15. **El Paso Electric Company, 2021 (Texas), (Docket No. 52195)** – Participating as an expert witness on behalf of the City of El Paso in the El Paso Electric Company general rate case to provide recommendations to the Texas Public Utility Commission regarding rate base and operating expense issues.
16. **NV Energy, 2021 (Nevada), (Docket No. 21-06001)** – Participating as an expert witness on behalf of the Southern Nevada Gaming Group (“SNGG”) before the Nevada PUC. Sponsoring written and oral testimony in the Nevada Power and Sierra Pacific Joint Integrated Resource Plan (“IRP”) to provide analysis of the proposed generation additions and cost allocations.
17. **Summit Utilities Arkansas (Arkansas), (Docket No. 21-060-U)** – Participating as an expert witness on behalf of Arkansas Gas Consumers and the Hospitals and Higher Education Group before the Arkansas Public Service Commission in Summit’s proposed acquisition of CenterPoint Energy’s Arkansas assets. Sponsoring testimony regarding the acquisition premium, ratepayer benefits and affiliate transactions.
18. **Doyon Utilities, 2021 Alaska (Regulatory Commission of Alaska)** – Participating as an expert witness on behalf of the Department of Defense to provide expert testimony in twelve rate case reviews for the utility systems of Fort Wainwright, Fort Greely and Joint Base Elmendorf-Richardson before the Regulatory Commission of Alaska.
19. **NV Energy, 2021 (Nevada), (Docket No. 21-03040)** – Participating as an expert witness on behalf of the Southern Nevada Gaming Group (“SNGG”) before the Nevada PUC to provide written and oral testimony in the Nevada Power and Sierra Pacific Joint Natural Disaster Protection Plan (“NDPP”).
20. **Public Service Company of Oklahoma, 2021 (Oklahoma) (Cause No. PUD 202100022)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
21. **Oklahoma Gas and Electric Company, 2021 (Oklahoma), (Cause No. PUD 202100072)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s application for securitization of its winter

storm costs.

22. **Southwestern Electric Power Company, 2021 (Arkansas), (Docket No. 19-008-U)** – Participating as an expert witness on behalf of Western Arkansas Large Energy Consumers (“WALEC”)<sup>2</sup> before the Arkansas Public Service Commission in SWEPCO’s Formula Rate Plan review and extraordinary winter storm cost recovery plan.
23. **Atmos MidTex (Texas), 2021 (Texas), (Dallas Annual Rate Review)** – Participating as an expert witness on behalf of the City of Dallas before the Texas Railroad Commission in Atmos’s Dallas Annual Rate Review (“DARR”) proceeding. Sponsoring recommendations on various revenue requirement issues.
24. **PNM Resources / Avangrid Merger, 2021 (New Mexico), (Case No. 20-00222-UT)** – Participating as an expert witness for the Albuquerque Bernalillo County Water Utility Authority (“ABCWUA”) before the New Mexico Public Regulation Commission to address various merger-related issues.
25. **Oklahoma Gas & Electric Co., 2020 (Arkansas) (Docket No. 18-046-FR)** – Participating as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”)<sup>3</sup> before the Arkansas Public Service Commission in OG&E’s Formula Rate Plan application to provide testimony on cost of service issues.
26. **Public Service Company of Oklahoma, 2020 (Oklahoma) (Cause No. PUD 202000097)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s application for approval of facilities proposed for Fort Sill to address cost recovery and rate design issues.
27. **El Paso Electric Company, 2020 (Texas), (Docket No. 51348)** – Participating as an expert witness on behalf of the City of El Paso in the El Paso Electric Company annual Distribution Cost Recovery Factor (“DCRF”) application to provide recommendations to the Texas Public Utility Commission regarding the Company’s requested DCRF increase.
28. **NV Energy, 2020 (Nevada), (Docket No. 20-07023)** – Participating as an expert witness on behalf of the Southern Nevada Gaming Group (“SNGG”) before the Nevada PUC. Sponsoring written and oral testimony in the Nevada Power and Sierra Pacific Joint Integrated Resource Plan (“IRP”) to provide analysis of the proposed transmission additions and cost allocations.
29. **Southwestern Electric Power Company, 2020 (Texas), (PUC Docket No. 51415)** – Participating as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s general rate case application to provide testimony on various revenue requirement issues.
30. **Dominion Energy South Carolina, 2020 (South Carolina), (Docket No. 2020-125-E)** – Participating as an expert witness on behalf of DOD/FEA in DESC’s rate case application, sponsoring testimony to address various revenue requirement, rate design and tax issues.
31. **Cascade Natural Gas, 2020 (Washington), (NG-UG-200568)** – Participating as an expert witness on behalf of Public Counsel in Cascade’s rate case application, sponsoring testimony to address various revenue requirement and tax issues.

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<sup>2</sup> WALEC is an association of industrial manufacturing facilities in Arkansas.

<sup>3</sup> ARVEC is an association of industrial manufacturing facilities in northwest Arkansas.

32. **Nevada Power Company, 2020 (Nevada) (Docket No. 20-06003)** – Participating as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various revenue requirement issues in the case.
33. **El Paso Electric Company, 2020 (New Mexico), (Docket RC-20-00104-UT)** – Participating as an expert witness on behalf of the City of Las Cruces and Dona Ana county in EPE’s rate case application, sponsoring testimony to address various revenue requirement and tax issues.
34. **Oklahoma Gas and Electric Company, 2020 (Oklahoma), (Cause No. PUD 202000021)** – Participating as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s Grid Enhancement Plan application. Sponsoring testimony to address the utility’s proposed cost recovery mechanism and cost of service allocations.
35. **Philadelphia Gas Works, 2020 (Pennsylvania), (Docket No. R-2020-3017206)** – Participating expert witness on behalf of Office of Consumer Advocate (“OCA”) before the Pennsylvania Public Utility Commission to address various revenue requirement issues in PGW’s rate case.
36. **Atmos MidTex (Texas), 2020 (Texas), (Dallas Annual Rate Review)** – Participating as an expert witness on behalf of the City of Dallas before the Texas Railroad Commission in Atmos’s Dallas Annual Rate Review (“DARR”) proceeding. Sponsoring recommendations on various revenue requirement issues.
37. **Southwest Gas Corporation, 2020 (Nevada) (Docket No. 20-02023)** – Participated as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various revenue requirement issues.
38. **El Paso Electric Company, 2019 (Texas), (Docket No. 49849)** – Participating as an expert witness on behalf of the City of El Paso in the merger of El Paso Electric Company with Sun Jupiter Holdings LLC and IIF US Holdings 2 LLP to provide recommendations to the Texas Public Utility Commission regarding the treatment of tax issues in the proposed merger agreement.
39. **Nevada Senate Bill 300 Rulemaking, 2019 (Nevada), (Docket No. 19-069008)** – Participating as an expert witness on behalf of the Southern Nevada Gaming Group before the Nevada PUC to assist with the development of alternative ratemaking regulations under SB 300.
40. **Entergy Arkansas, 2019 (Arkansas), (Docket No. 19-020-TF)** – Participating as an expert witness on behalf of the Arkansas industrial consumer group to review EAI’s application to allocate its perceived under-recovery of off-system sales margins to Arkansas customers.
41. **Public Service Company of Oklahoma, 2019 (Oklahoma) (Cause No. PUD 201900201)** – Participating as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s application for approval for the cost recovery of selected wind facilities.
42. **Oklahoma Gas & Electric Co., 2019 (Arkansas) (Docket No. 15-034-U)** – Participated as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in OG&E’s Act 310 Environmental Compliance Plan (“ECP”) Rider case to provide testimony on whether OG&E can apply for an ECP rider now that it has elected to utilize an annual Formula Rate Plan with a 4% annual cap.
43. **Oklahoma Gas & Electric Co., 2019 (Arkansas) (Docket No. 18-046-FR)** – Participating as an

expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in OG&E’s Formula Rate Plan application to provide testimony on various revenue requirement, cost of service and rate design issues.

44. **Southwestern Public Service Co., (“SPS”) 2019 (Texas), (Docket No. 49831)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsor the AXM Accounting Exhibits.
45. **Southwestern Electric Power Company, 2019 (Arkansas), (Docket No. 19-008-U)** – Participated as an expert witness on behalf of Western Arkansas Large Energy Consumers (“WALEC”) before the Arkansas Public Service Commission in SWEPCO’s rate case to address various revenue requirement and rate design issues.
46. **Anchorage Municipal Light and Power and Chugach Electric Association, 2019 (Alaska), (Docket No. U-19-020)** – Participating as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on pending acquisition of ML&P by Chugach to address the proposed acquisition premium and other issues associated with the public interest.
47. **Sierra Pacific Power Company, 2019 (Nevada), (Docket No. 19-06002)** – Participated as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various revenue requirement issues.
48. **Air Liquide Hydrogen Energy U.S., 2019 (Nevada), (704B Exit Application, Docket No. 19-02002)** – Participated as an expert witness on behalf of Air Liquide before the Nevada PUC. Sponsoring written and oral testimony in Air Liquide’s application to purchase energy and capacity from a provider other than NV Energy.
49. **Empire District Electric Company, 2019 (Oklahoma), (Cause No. PUD 201800133)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in Empire’s general rate case to address various revenue requirement, rate design and tax issues.
50. **Indiana Michigan Power, 2019 (Indiana), (Docket No. 45235)** – Participating as an expert witness on behalf of the Office of Utility Consumer Counselor in I&M’s rate case application, sponsoring testimony to address various revenue requirement and tax issues.
51. **Puget Sound Energy, 2019 (Washington), (Docket No. 190529-30)** – Participating as an expert witness on behalf of Public Counsel in PSE’s rate case application, sponsoring testimony to address various revenue requirement and tax issues.
52. **Anchorage Municipal Light and Power, 2019 (Alaska), (Docket No. U-18-102)** – Participating as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on the ratemaking treatment of ML&P’s acquired interest in the Beluga River Unit gas field with ratepayer funds.
53. **Oklahoma Gas and Electric Company, 2019 (Oklahoma), (Cause No. PUD 201800140)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s General Rate Case application. Sponsoring testimony to address the utility’s overall revenue requirement and rate design proposals.



54. **Cascade Natural Gas, 2019 (Washington) (Docket No. 190210)** – Participated as an expert witness on behalf of Public Counsel in Cascade’s rate case application. Sponsoring testimony to address various revenue requirement and tax issues.
55. **CenterPoint Energy Houston Electric, 2019 (Texas) (Docket No. 49421)** – Participated as an expert witness on behalf of City of Houston before the Public Utility Commission of Texas in CenterPoint Energy’s rate case application to provide testimony on various revenue requirement issues.
56. **Oklahoma Gas & Electric Co., 2018 (Arkansas) (Docket No. 18-046-FR)** – Participated as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in OG&E’s Formula Rate Plan application to provide testimony on various revenue requirement, cost of service and rate design issues.
57. **Southwest Gas Corporation, 2018 (Nevada) (Docket No. 18-05031)** – Participated as an expert witness on behalf of Bureau of Consumer Protection (“BCP”) before the Nevada Public Utility Commission to address various revenue requirement issues.
58. **Puget Sound Energy, 2018 (Washington) (Docket No. UE 18089)** - Participated as an expert witness on behalf of Public Counsel in PSE’s Emergency Rate Relief proceeding. Sponsoring testimony to address the application itself and various revenue requirement and TCJA issues.
59. **Public Service Company of Oklahoma, 2018 (Oklahoma) (Cause No. PUD 201800097)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
60. **Entergy Texas Inc., 2018 (Texas) (PUC Docket No. 48371)** – Participated as an expert witness on behalf of the Cities in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
61. **Atmos Energy Corp., Mid-Tex Division, 2018 (Texas) (Docket No. GUD No. 10779)** – Participated as an expert witness on behalf of the Atmos Texas Municipalities to review the utility’s requested revenue requirement including TCJA adjustments.
62. **CenterPoint Energy Houston Electric, LLC, 2018 (Texas) (Docket No. 48226)** – Participated as an expert witness on behalf of City of Houston before the Public Utility Commission of Texas in CenterPoint Energy’s application for approval to amend its distribution cost recovery factor (DCRF) to address the utility’s treatment of the Tax Cuts and Jobs Act of 2017 (“TCJA”).
63. **NV Energy, 2018 (Nevada) (Docket No. 17-10001)** – Participated as an expert witness on behalf of the Energy Choice Initiative (“ECI”) before the Governor’s Committee on Energy Choice, in an investigatory docket of an Issue of Public Importance Regarding the Pending Energy Choice Initiative and the Possible Restructuring of Nevada’s Energy Industry.
64. **Southwestern Electric Power Company, 2018 (Texas) (PUC Docket No. 48233)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPSCO’s application to implement base rate reductions as result of the Tax Cuts and Jobs Act of 2017 (“TCJA”).

65. **Oncor Electric Delivery Company (Texas), 2018 (PUC Docket No. 48325)** – Participated as an expert witness before the Texas Public Utility Commission in Oncor’s application for authority to decrease rates based on the Tax Cuts and Jobs Act of 2017 (“TCJA”).
66. **Public Service Company of Oklahoma (“PSO”) (Oklahoma), 2018 (Cause No. PUD 201800019)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s application regarding ADIT under the Tax Cuts and Jobs Act of 2017 (“TCJA”).
67. **Oklahoma Natural Gas Company, 2018 (Cause No. PUD 201800028)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission in ONG’s Performance Based Rate Change Tariff, to address issues involving the impacts of the Tax Cuts and Jobs Act of 2017 (“TCJA”).
68. **Oklahoma Gas & Electric Co. (Arkansas), 2018 (Docket No. 18-006-U** – Participated as an expert on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in the matter of an Investigation of the Effect on Revenue Requirements Resulting from Changes to Corporate Income Tax Rates under the Tax Cuts and Jobs Act of 2017 (“TCJA”).
69. **Texas Gas Service, 2018** – Participated as a consulting expert on behalf of the City of El Paso regarding implementation of rate changes related to the Tax Cuts and Jobs Act of 2017 (“TCJA”).
70. **Sierra Pacific Power Company (Nevada), 2018 (Docket No. 18-02011 and 18-02015)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers<sup>4</sup> before the Nevada PUC in SPPC’s application related to the Tax Cuts and Jobs Act of 2017 (“TCJA”).
71. **Nevada Power Company (Nevada), 2018 (Docket No. 18-02010 and 18-02014)** – Participated as an expert witness on behalf of the Southern Nevada Gaming Group before the Nevada PUC in NPC’s application related to the Tax Cuts and Jobs Act of 2017 (“TCJA”).
72. **Public Service Company of Oklahoma (“PSO”) (Oklahoma), 2017 (Cause No. PUD 201700572)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s application to examine the impacts of the Tax Cuts and Jobs Act of 2017 (“TCJA”).
73. **Empire District Electric Company (“EPE”) (Oklahoma), 2018 (Cause No. PUD 201700471)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in Empire’s application to add 800MW of wind. Sponsoring testimony to address the various ratemaking and tax issues.
74. **Oklahoma Gas and Electric Company (“OG&E”), (Oklahoma), 2018 (Cause No. PUD 201700496)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s General Rate Case application. Sponsoring testimony to address the utility’s overall revenue requirement and rate design proposals.
75. **Public Service Company of Oklahoma (“PSO”) (Oklahoma), 2017 (Cause No. PUD 201700276)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s Wind Catcher case to provide testimony on various ratemaking and tax issues.

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<sup>4</sup> The Northern Nevada Utility Consumers is a group of large commercial and industrial customers in the SPPC service territory.

76. **Southwestern Public Service Co. (“SPS”) (Texas), 2017 (PUCT Docket No. 47527)** – Participating as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsor the AXM Accounting Exhibits.
77. **Southwestern Electric Power Company, (“SWEPCO”) (Texas), 2017 (PUC Docket No. 47461)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s Wind Catcher case proceeding to provide testimony on various ratemaking and tax issues.
78. **Atmos MidTex (Texas), 2017 (Docket No. 10640)** – Participated as an expert witness on behalf of the City of Dallas before the Texas Railroad Commission in Atmos’s Dallas Annual Rate Review (“DARR”) proceeding. Sponsoring testimony on various revenue requirement issues.
79. **Avista Utilities (Washington), 2017 (Docket Nos. UE-170485/UG-170486)** – Participated as an expert witness on behalf of Public Counsel in Avista’s general rate case proceeding. Sponsoring testimony to address various revenue requirement issues and Avista’s requested attrition adjustments.
80. **Nevada Power Company (Nevada), 2017 (Docket No. 17-06003)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC in NPC’s general rate case proceeding. Sponsoring testimony on various revenue requirement, depreciation, and rate design issues.
81. **Anchorage Municipal Light and Power (Alaska), 2017 (Docket No. U-17-008)** – Participating as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony in ML&P’s General Rate Case on various revenue requirement and rate design issues.
82. **Public Service Company of Oklahoma (Oklahoma), 2017 (Cause No. PUD 201700151)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various revenue requirement and rate design issues.
83. **Oncor Electric Delivery Company (Texas), 2017 (PUC Docket No. 46957)** – Participated as an expert witness on behalf of the Steering Committee of Cities before the Texas Public Utility Commission in Oncor’s General Rate Case proceeding to provide testimony on various revenue requirement issues.
84. **EverSource (Massachusetts), 2017 (DPU Docket No. 17-05)** – Participated as an expert witness before the Massachusetts Department of Public Utilities EverSource’s General Rate Case application on behalf of Energy Freedom Coalition of America to provide testimony to address various revenue requirement issues.
85. **El Paso Electric Company (Texas), 2017 (PUC Docket No. 46831)** – Participated as an expert witness on behalf of the City of El Paso before the Texas Public Utility Commission in El Paso’s General Rate Case proceeding to provide testimony on various revenue requirement issues.
86. **Atmos Pipeline Texas (Texas), 2017 (Docket No. 10580)** – Participated as an expert witness on behalf of the City of Dallas before the Texas Railroad Commission in APT’s General Rate Case application, sponsoring testimony to address various revenue requirement proposals.
87. **Empire District Electric Company (Oklahoma), 2017 (Cause No. PUD 201600468)** – Participated

as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in Empire’s General Rate Case application. Sponsoring testimony to address the utility’s overall revenue requirement and rate design proposals.

88. **Caesars Enterprise Service, LLC (Nevada), 2016 (704B Exit Application)** – Participated as an expert witness on behalf of Caesars before the Nevada PUC. Sponsoring written and oral testimony in Caesar’s application to purchase energy and capacity from a provider other than Nevada Power.
89. **Southwestern Electric Power Company (Texas), 2016 (PUC Docket No. 46449)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s general rate case proceeding to provide testimony on various revenue requirement issues.
90. **CenterPoint Texas, 2016 (Docket No. 10567)** – Participated as an expert witness on behalf of City of Houston before the Texas Railroad Commission in CenterPoint’s general rate case application, sponsoring testimony to address the utility’s overall revenue requirement and various rate design proposals.
91. **Entergy Texas, Inc., 2016 (Docket No. 46357)** – Participated as an expert witness on behalf Cities Served by Applicant before the Texas PUC in ETI’s application to amend its Transmission Cost Recovery Factor.
92. **Anchorage Municipal Light and Power, 2016 (Docket No. U-16-060)** – Participated as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on the ratemaking treatment of ML&P’s acquired interest in the Beluga River Unit gas field with ratepayer funds.
93. **Arizona Public Service Company, 2016 (Docket No. E-01345A-16-0036)** – Participated as an expert witness before the Arizona Corporation Commission in APS’s General Rate Case application on behalf of Energy Freedom Coalition of America to provide written and oral testimony to address various revenue requirement issues.
94. **Oklahoma Gas & Electric Co. (Arkansas), 2016 (Docket No. 16-052-U)** – Participated as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in OG&E’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
95. **Sierra Pacific Power Company (Nevada), 2016 (Docket No. 16-06006)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers before the Nevada PUC in SPPC’s general rate case proceeding. Sponsored testimony on various revenue requirement, depreciation, and rate design issues.
96. **Tucson Electric Power, 2016 (Docket No. E-01933A-15-0322)** – Participated as an expert witness before the Arizona Corporation Commission in TEP’s General Rate Case application, on behalf of Energy Freedom Coalition of America providing written and oral testimony to address the utility’s cost of service study and rate design proposals.
97. **Texas Gas Service, 2016 (Docket No. 10506)** – Participated as an expert witness on behalf of El Paso before the Texas Railroad Commission in TGS’s General Rate Case application, sponsoring testimony to address the utility’s overall revenue requirement and various rate design proposals.

98. **Texas Gas Service, 2016 (Docket No. 10488)** – Participated as an expert witness on behalf of South Jefferson County Service Area (“SJCSA”) before the Texas Railroad Commission in TGS’s General Rate Case application, sponsoring testimony to address the utility’s overall revenue requirement and various rate design proposals.
99. **Oklahoma Gas and Electric Company, 2016 (Cause No. PUD 201500273)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) before the Oklahoma Corporation Commission in OG&E’s General Rate Case application. Sponsoring testimony to address the utility’s overall revenue requirement and rate design proposals.
100. **Oklahoma Gas & Electric Company, 2016 (Cause No. PUD 201500273)** – Participated as an expert witness on behalf of The Alliance for Solar Choice (“TASC”) before the Oklahoma Corporation Commission to address OG&E’s proposed Distributed Generation (“DG”) rates for solar DG customers.
101. **Anchorage Municipal Light and Power, 2016 (Docket No. U-13-097)** – Participated as an expert witness before the Regulatory Commission of Alaska on behalf of Providence Health and Services to provide testimony on rates and tariffs proposed for customer-owned combined heat and power plant generation.
102. **Oklahoma Natural Gas Company, 2015 (Cause No. PUD 201500213)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission in ONG’s General Rate Case application. Sponsored testimony to address the utility’s overall revenue requirement and rate design proposals.
103. **Oklahoma Gas & Electric Company, 2015 (Cause No. PUD 201500274)** – Participated as an expert witness on behalf of The Alliance for Solar Choice (“TASC”) before the Oklahoma Corporation Commission to address OG&E’s proposed Distributed Generation (“DG”) rates for solar DG customers.
104. **Nevada Power Company, 2015 (Docket No. 15-07004)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”)<sup>5</sup> before the Nevada PUC. Sponsoring written and oral testimony in NPC’s 2015 Integrated Resource Plan to provide analysis of the On Line transmission line allocation, the Siverhawk plant acquisition, and the Griffith contract termination.
105. **Oklahoma Gas & Electric Company, 2015 (Docket No. 15-034-U)** – Participated as an expert witness on behalf of the Arkansas River Valley Energy Consumers (“ARVEC”) before the Arkansas Public Service Commission in OG&E’s Act 310 application to implement a rider to recover environmental compliance costs.
106. **MGM Resorts, LLC, 2015 (Docket No. 15-05017)** – Participated as an expert witness on behalf of the MGM Resorts, LLC before the Nevada PUC. Sponsoring written and oral testimony in MGM’s application to purchase energy and capacity from a provider other than Nevada Power.
107. **Entergy Arkansas, 2015 (Docket No. 15-015-U)** – Participated as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in Entergy’s general rate case to provide testimony on various revenue requirement issues.

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<sup>5</sup> The Southern Nevada Hotel Group is comprised of Boyd Gaming, Caesars Entertainment, MGM Resorts, Station Casinos, Venetian Casino Resort, and Wynn Las Vegas.

108. **Public Service Company of Oklahoma, 2015 (Cause No. PUD 201500208)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
109. **Nevada Power Company, 2014 (Docket No. 14-05003)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC. Sponsored written and oral testimony in NPC environmental compliance case, called the Emissions Reduction and Capacity Replacement case. The main focus of our testimony was our recommendation to eliminate the \$438M Moapa solar project from the compliance plan.
110. **Nevada Power Company, 2014 (Docket No. 14-05004)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC to sponsor written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
111. **Oklahoma Gas and Electric Co., 2014 (Cause No. PUD 201400229)** – Participated as an expert witness on behalf of Oklahoma Industrial Energy Consumers (“OIEC”) in OG&E’s Environmental Compliance and Mustang Modernization Plan before the Oklahoma Corporation Commission to provide testimony addressing the economics and rate impacts of the plan.
112. **Sourcegas Arkansas, Inc., 2014 (Docket No. 13-079-U)** Participated as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”), an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in SGA’s general rate case to provide testimony on various revenue requirement issues.
113. **Anchorage Municipal Light and Power, 2014 (Docket No. U-13-184)** – Participated as an expert witness before the Alaska Regulatory Utility Commission on behalf of Providence Health and Services to provide testimony on various revenue requirement and cost of service issues.
114. **Public Service Company of Oklahoma, 2014 (Cause No. PUD 201300217)** – Participated as an expert witness on behalf of OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
115. **Entergy Texas Inc., 2013 (PUC Docket No. 41791)** – Participated as an expert witness on behalf of the Cities<sup>6</sup> in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
116. **MidAmerican/NV Energy Merger, 2013 (Docket No. 13-07021)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC. Sponsored testimony to address various issues raised in the proposed acquisition of NV Energy by MidAmerican Energy Holdings Company, including capital structure and acquisition premium recovery issues.
117. **Entergy Arkansas, 2013 (Docket No. 13-028-U)** – Participated as an expert witness on behalf of the Hospital and Higher Education Group (“HHEG”) an intervener group that includes the University of Arkansas and several hospitals before the Arkansas PSC in Entergy’s general rate case to provide

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<sup>6</sup> The Cities include Beaumont, Conroe, Groves, Houston, Huntsville, Orange, Navasota, Nederland, Pine Forest, Pinehurst, Port Arthur, Port Neches, Rose City, Shenandoah, Silsbee, Sour Lake, Vidor, and West Orange.

testimony on various revenue requirement issues.

118. **Sierra Pacific Power Company, 2013 (Docket No. 13-06002)** – Participated as an expert witness on behalf of the Northern Nevada Utility Customers<sup>7</sup> before the Nevada PUC in SPPC’s general rate case proceeding to provide testimony on various cost of service and revenue requirement issues. Sponsored written and oral testimony in the depreciation phase, the revenue requirement phase and the rate design phase of these proceedings.
119. **Gulf Power Company, 2013 (Docket No. 130140-EI)** – Participated as an expert witness on behalf of the Office of Public Counsel before the Florida Commission in Gulf Power’s general rate case proceeding to provide testimony on various revenue requirement issues.
120. **Public Service Company of Oklahoma, 2013 (Cause No. PUD 201200054)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission (“OCC”) to provide testimony in PSO’s application seeking Commission approval of its settlement agreement with EPA.
121. **Southwestern Electric Power Company, 2012 (PUC Docket No. 40443)** – Participated as an expert witness on behalf of Cities Advocating Reasonable Deregulation (“CARD Cities”) before the Texas Public Utility Commission in SWEPCO’s general rate case proceeding to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
122. **Doyon Utilities, 2012 Alaska Rate Case (Docket No. TA7-717)** – Participated as an expert witness consultant on behalf of the Department of Defense to provide expert testimony in twelve rate case reviews for the utility systems of Fort Wainwright, Fort Greely and Joint Base Elmendorf-Richardson before the Regulatory Commission of Alaska.
123. **University of Oklahoma, 2012** – Participated as an expert witness on behalf of the University of Oklahoma to provide expert testimony on various revenue requirement issues in the University’s general rate case with the Corix Group, which provides utility services to the University.
124. **Public Service Company of Oklahoma, 2012 (Cause No. PUD 201200079)** – Participated as an expert witness on behalf of the OIEC before the Oklahoma Corporation Commission to provide expert testimony addressing the utility’s request to earn additional compensation on a 510MW purchased power agreement with Exelon
125. **Centerpoint Energy Texas Gas, 2012 (Docket No. GUD 10182)** – Participated as an expert witness on behalf of the Steering Committee of Cities before the Texas Railroad Commission to provide expert testimony on various revenue requirement issues.
126. **Entergy Texas Inc., 2012 (PUC Docket No. 39896)** – Participated as an expert witness on behalf of the Cities in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
127. **Oklahoma Natural Gas Company, 2012 (Cause No. PUD 2012-029)** – Participated as an expert witness on behalf of the OIEC before the OCC in ONG’s Performance Based Rate (“PBR”) application seeking Commission approval of a requested rate increase based upon formula results for 2011.

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<sup>7</sup> The Northern Nevada Utility Consumers is a group of large commercial and industrial customers in the SPPC service territory.

128. **University of Oklahoma, 2012** – Assisted the University of Oklahoma with an audit of the costs associated with its six utility operations and its contract with the Corix Group to provide utility services to the university.
129. **Oklahoma Gas and Electric Company, 2012 (Cause No. PUD 2011-186)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking Commission approval of a special contract with Oklahoma State University and a wind energy purchase agreement in connection therewith.
130. **Empire Electric Company, 2011, (Cause No. PUD 11-082)** – Participated as an expert witness on behalf of Enbridge before the OCC in Empire’s rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
131. **Nevada Power Company, 2011, (Docket No. 11-04010)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC. Sponsored written and oral testimony to address proposed changes to the Company’s customer deposit rules.
132. **Nevada Power Company, 2011, (Docket No. 11-06006)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
133. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2011-106)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application seeking rider recovery of third party SPP transmission costs and fees.
134. **Oklahoma Gas and Electric Company, 2011 (Cause No. PUD 2011-087)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s rate case to provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
135. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-109-U)** – Participated as an expert witness on behalf of Gerdau Macsteel before the Arkansas Public Service Commission in OG&E’s application to recover Smart Grid costs to make recommendations regarding the allocation of the Smart Grid costs.
136. **Oklahoma Gas & Electric Company, 2011 (Cause No. PUD 2011-027)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking to include retiree medical expense in the Company’s pension tracker mechanism.
137. **Public Service Company of Oklahoma, 2011 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of OIEC before the Oklahoma Corporation Commission in AEP/PSO’s application to recover ice storm O&M expenses through a regulatory asset/rider mechanism to address tax impact and return issues in the proposed rider.
138. **Public Service Company of Colorado, 2011 (Docket No. 10AL-908E)** – Participated as an expert witness on behalf of the Colorado Retail Council (“CRC”) before the Colorado Public Utilities Commission providing written and live testimony to address PSCo’s proposed Environmental Tariff.



139. **Oklahoma Gas & Electric Company, 2011 (Docket No. 10-067-U)** – Participated as an expert witness on behalf of the Northwest Arkansas Industrial Energy Consumers (“NWIEC”)<sup>8</sup> before the Arkansas Public Service Commission in OG&E’s general rate case application to provide testimony on various revenue requirement, cost of service and rate design issues.
140. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-146)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking rider recovery of third party SPP transmission costs and SPP administration fees.
141. **Massachusetts Electric Co. & Nantucket Electric Co. d/b/a National Grid, 2010 (Docket No. DPU 10-54)** – Participated as an expert witness providing both written and live testimony before the Massachusetts Department of Public Utilities on behalf of the Associated Industries of Massachusetts (“AIM”) to address the Company’s proposed participation in the 438MW Cape Wind project in Nantucket Sound.
142. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-50)** – Participated as an expert witness on behalf of the OIEC before the OCC in AEP/PSO’s general rate case application to provide testimony on various cost-of-service issues and on the utility’s overall revenue requirement and rate design proposals.
143. **Texas-New Mexico Power Co., 2010 (Docket 38480)** – Participated as an expert witness on behalf of the Alliance of Texas Municipalities (“ATM”) before the Texas PUC in TMNP’s general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
144. **Southwestern Public Service Co., 2010 (PUCT Docket No. 38147)** – Participated as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application to provide testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsor the AXM Accounting Exhibits.
145. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-37)** – Participated as an expert witness on behalf of OIEC before the OCC to address the preapproval and ratemaking treatment of OG&E’s 220MW self-build wind project.
146. **Oklahoma Gas & Electric Company, 2010 (Cause No. PUD 2010-29)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking pre-approval of deployment of smart-grid technology and rider-recovery of the associated costs. Sponsored written testimony to address smart-grid deployment and time-differentiated fuel rates.
147. **Public Service Company of Oklahoma, 2010 (Cause No. PUD 2010-01)** – Participated as an expert witness on behalf of the OIEC before the OCC in the Company’s proposed Green Energy Choice Tariff. Sponsored testimony to address the pricing and ratemaking treatment of the Company’s proposed wind subscription tariff.
148. **Nevada Power Company, 2010 (Docket No. 10-02009)** – Participated as an expert witness on behalf of the Southern Nevada Hotel Group (“SNHG”) before the Nevada PUC to provide testimony in NPC’s Internal Resource Plan to address the ratemaking treatment of the proposed ON Line transmission line.

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<sup>8</sup> NWIEC is an association of industrial manufacturing facilities in northwest Arkansas.

149. **Entergy Texas Inc., 2010 (PUC Docket No. 37744)** – Participated as an expert witness on behalf of the Cities in ETI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
150. **El Paso Electric Company, 2010 (PUC Docket No. 37690)** – Participated as an expert witness on behalf of the City of El Paso in the EPI general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
151. **Public Service Company of Oklahoma, 2009 (Cause No. 09-196)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application for approval of DSM programs and cost recovery. Sponsored testimony to address program costs, lost revenue recovery, cost allocations and incentives.
152. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 09-230 and 09-231)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
153. **Oklahoma Gas and Electric Company, 2009 (Cause No. PUD 08-398)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s rate case. Provided testimony in both the revenue requirement and rate design phases of the proceedings to establish prospective cost-of-service based rates for the power company.
154. **Nevada Power Company, 2009, (Docket No. 08-12002)** - Participated as an expert witness on behalf of the Southern Nevada Hotel Group before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
155. **Public Service Company of Oklahoma, 2009 (Cause No. 09-031)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO’s application to add wind resources from two purchased power contracts. Sponsored written testimony to address the proper ratemaking treatment of the contract costs and the renewable energy certificates.
156. **Oklahoma Natural Gas Co., 2009 (Cause No. PUD 08-348)** – Participated as an expert witness on witness on behalf of the OIEC before the OCC in ONG’s application to establish a Performance Based Rate tariff. Sponsored both written and oral testimony to address the merits of the utility’s proposed PBR.
157. **Rocky Mountain Power, 2009 (Docket No. 08-035-38)** – Participated as an expert witness on behalf of the Division of Public Utilities (Staff) in PacifiCorp’s general rate case to provide testimony on various revenue requirement issues.
158. **Texas-New Mexico Power Co., 2008 (Docket 36025)** – Participated as an expert witness on behalf of the Alliance of Texas Municipalities (“ATM”) before the Texas PUC in TMNP’s general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
159. **Public Service Company of Oklahoma, 2008 (Cause No. 08-144)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s general rate case application to address revenue requirement and rate design issues to establish prospective cost-of-service based rates.

160. **Public Service Company of Oklahoma, 2008 (Cause No. 08-150)** – Participated as an expert witness on behalf of the OIEC before the OCC to address PSO’s calculation of its Fuel Clause Adjustment for 2008.
161. **Oklahoma Gas and Electric Company, 2008 (Cause No. PUD 08-059)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking authorization of its Demand Side Management (“DSM”) programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
162. **Entergy Gulf States, 2008 (PUC Docket No. 34800, SOAH Docket No. 473-08-0334)** – Participated as an expert witness on behalf of the Cities in EGSI’s general rate case to provide testimony on various cost of service issues and on the utility’s overall revenue requirement.
163. **Public Service Company of Oklahoma, 2008 (Cause No. 07-465)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application to recover the pre-construction costs of the cancelled Red Rock coal generation facility.
164. **Oklahoma Gas and Electric Company, 2008 (Cause No. 07-447)** – Participated as an expert witness on behalf of the OIEC before the OCC in OG&E’s application seeking authorization to recover the pre-construction costs of the cancelled Red Rock coal generation facility using proceeds from sales of excess SO<sub>2</sub> allowances.
165. **Rocky Mountain Power, 2008 (Docket No. 07-035-93)** – Participated as an expert witness on behalf of Division of Public Utilities (Staff) in PacifiCorp’s general rate case to provide testimony on various revenue requirement issues.
166. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-449)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application seeking authorization of its Demand Side Management (“DSM”) programs and the establishment of a DSM Rider to recover program costs, lost revenues and utility incentives.
167. **Public Service Company of Oklahoma, 2008 (Cause No. PUD 07-397)** – Participated as an expert witness on behalf of OIEC before the OCC in PSO’s application seeking authorization to defer storm damage costs in a regulatory asset account and to recover the costs using the proceeds from sales of excess SO<sub>2</sub> allowances.
168. **Oklahoma Gas & Electric Co., 2007 (Cause No. PUD 07-012)** – Participated as an expert witness on behalf of OIEC before the OCC in OG&E’s application seeking pre-approval to construct the Red Rock coal plant to address the Company’s proposed rider recovery mechanism.
169. **Oklahoma Natural Gas Co., 2007 (Cause No. PUD 07-335)** – Participated as an expert witness on behalf of the OIEC before the OCC in ONG’s application proposing alternative cost recovery for the Company’s ongoing capital expenditures through the proposed Capital Investment Mechanism Rider (“CIM Rider”). Sponsored testimony to address ONG’s proposal.
170. **Public Service Company of Oklahoma, 2007 (Cause No. PUD 06-030)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s application seeking a used and useful determination for its planned addition of the Red Rock coal plant to address the Company’s use of debt equivalency in the competitive bidding process for new resources.
171. **Public Service Company of Oklahoma, 2006 (Cause No. PUD 06-285)** – Participated as an expert

witness on behalf of the OIEC before the OCC in PSO's general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.

172. **Nevada Power Company, 2007, (Docket No. 07-01022)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
173. **Nevada Power Company, 2006, (Docket No. 06-11022)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
174. **Southwestern Public Service Co., 2006 (PUCT Docket No. 37766)** – Participated as an expert witness on behalf of the Alliance of Xcel Municipalities (“AXM”) in the SPS general rate case application. Provided testimony before the Texas Public Utility Commission regarding rate base and operating expense issues and sponsored the Accounting Exhibits on behalf of AXM.
175. **Atmos Energy Corp., Mid-Tex Division, 2006 (Texas GUD 9676)** – Participated as an expert witness in the Atmos Mid-Tex general rate case application on behalf of the Atmos Texas Municipalities (“ATM”). Provided written and oral testimony before the Railroad Commission of Texas regarding the revenue requirements of Mid-Tex including various rate base, operating expense, depreciation and tax issues. Sponsored the Accounting Exhibits for ATM.
176. **Nevada Power Company, 2006 (Docket No. 06-06007)** – Participated as an expert witness on behalf of the MGM MIRAGE in the Sinatra Substation Electric Line Extension and Service Contract case. Provided both written and oral testimony before the Nevada Public Utility Commission to provide the Commission with information as to why the application is consistent with the line extension requirements of Rule 9 and why the cost recovery proposals set forth in the application provide a least cost approach to adding necessary new capacity in the Las Vegas strip area.
177. **Public Service Co. of Oklahoma, 2006 (Cause No. PUD 05-00516)** - Participated as an expert witness on behalf of the OIEC to review PSO's application for a “used and useful” determination of its proposed peaking facility.
178. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 06-00041)** – Participated as an expert witness on behalf of the OIEC in OG&E's application to propose an incentive sharing mechanism for SO<sub>2</sub> allowance proceeds.
179. **Chermac Energy Corporation, 2006 (Cause No. PUD 05-00059 and 05-00177)** – Participated as an expert witness on behalf of the OIEC in Chermac's PURPA application. Sponsored written responsive and rebuttal testimony to address various rate design issues arising under the application.
180. **Oklahoma Gas and Electric Co., 2006 (Cause No. PUD 05-00140)** – Participated as an expert witness on behalf of the OIEC in OG&E's 2003 and 2004 Fuel Clause reviews. Sponsored written testimony to address the purchasing practices of the Company, its transactions with affiliates, and the prices paid for natural gas, coal and purchased power.
181. **Nevada Power Company, 2006, (Docket No. 06-01016)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written testimony in NPC's deferred energy docket to determine the level of prudent company expenditures for fuel and

purchased power.

182. **Oklahoma Gas and Electric Co., 2005 (Cause No. PUD 05-151)** – Participated as an expert witness on behalf of the OIEC in OG&E’s general rate case application. Sponsored both written and oral testimony before the OCC to address various revenue requirement and rate design issues for the purpose of setting prospective cost-of-service based rates.
183. **Oklahoma Natural Gas Co., 2005 (Cause No. PUD 04-610)** – Participated as an expert witness on behalf of the Attorney General of Oklahoma. Sponsored written and oral testimony to address numerous rate base, operating expense and depreciation issues for the purpose of setting prospective cost-of-service based rates.
184. **CenterPoint Energy Arkla, 2004 (Cause No. PUD 04-0187)** – Participated as an expert witness on behalf of the Attorney General of Oklahoma: Sponsored written testimony to provide the OCC with analysis from an accounting and ratemaking perspective of the Co.’s proposed change in depreciation rates from an Average Life Group to an Equal Life Group methodology. Addressed the Co.’s proposed increase in depreciation rates associated with increased negative salvage value calculations.
185. **Public Service Co. of Oklahoma, 2004 (Cause No. PUD 02-0754)** – Participated as an expert witness on behalf of the OIEC. Sponsored written testimony (1) making adjustments to PSO’s requested recovery of an ICR programming error, (2) correcting errors in the allocation of trading margins on off-system sales of electricity from AEP East to West and among the AEP West utilities and (3) recommending an annual rather than a quarterly change in the FAC rates.
186. **PowerSmith Cogeneration Project, 2004 (Cause No. PUD 03-0564)** - Participated as an expert witness on behalf of the OIEC to provide the OCC with direction in setting an avoided cost for the PowerSmith Cogeneration project under PURPA requirements. Provided both written and oral testimony on the provisions of the proposed contract under PURPA:
187. **Electric Utility Rules for Affiliate Transactions, 2004 (Cause No. RM 03-0003)** – Participated as a consultant on behalf of the OIEC to draft comments to assist the OCC in developing rules for affiliate transactions. Assisted in drafting the proposed rules. Successful in having the Lower of Cost or Market rule adopted for affiliate transactions in Oklahoma.
188. **Nevada Power Company, 2003, (Docket No. 03-10001)** - Participated as an expert witness on behalf of the MGM MIRAGE properties before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
189. **Nevada Power Company, 2003, (Docket No. 03-11019)** - Participated as an expert witness on behalf of the MGM MIRAGE before the Nevada PUC in Nevada Power Company’s deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power.
190. **Public Service Company of Oklahoma, 2003 (Cause No. PUD 03-0076)** – Participated as an expert witness on behalf of the OIEC before the OCC in PSO’s general rate case application to address various revenue requirement and rate design issues to establish prospective cost-of-service based rates.
191. **Oklahoma Gas & Electric Co., 2003 (Cause No. PUD 03-0226)** – Participated as an expert witness on behalf of the OIEC. Provided both written and oral testimony before the OCC to determine the appropriate level to include in rates for natural gas transportation and storage services acquired from

an affiliated company.

192. **Nevada Power Company, 2003 (Docket No. 02-5003-5007)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony to calculate the appropriate exit fee in MGM Mirage's 661 Application to leave the system.
193. **McCarthy Family Farms, 2003** – Participated as a consultant to assist McCarthy Family Farms in converting a biomass and biosolids composting process into a renewable energy power producing business in California.
194. **Bice v. Petro Hunt, 2003 (ND, Supreme Court No. 20030306)** - Participated as an expert witness in a class certification proceeding to provide cost-of-service calculations for royalty valuation deductions for natural gas gathering, dehydration, compression, treatment and processing fees in North Dakota.
195. **Nevada Power Company, 2003 (Docket No. 03-11019)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power. Provided written and oral testimony on the reasonableness of the cost allocations to the utility's various customer classes.
196. **Wind River Reservation, 2003 (Fed. Claims Ct. No. 458-79L, 459-79L)** – Participated as a consulting expert on behalf of the Shoshone and Arapaho Tribes to provide cost-of-service calculations for royalty valuation deductions for gathering, dehydration, treatment and compression of natural gas and the reasonableness of deductions for gas transportation.
197. **Oklahoma Gas & Electric Co., 2002 (Cause No. PUD 01-0455)** – Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored written and oral testimony on numerous revenue requirement issues including rate base, operating expense and rate design issues to establish prospective cost-of-service based rates.
198. **Nevada Power Company, 2002 (Docket No. 02-11021)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power and to make recommendations with respect to rate design.
199. **Nevada Power Company, 2002 (Docket No. 01-11029)** - Participated as a consulting expert on behalf of the MGM Mirage before the Nevada PUC in Nevada Power Company's deferred energy docket to determine the level of prudent company expenditures for fuel and purchased power included in the Company's \$928 million deferred energy balances.
200. **Nevada Power Company, 2002 (Docket No. 01-10001)** - Participated as an expert witness on behalf of the MGM Mirage before the Nevada PUC. Sponsored written and oral testimony in both the revenue requirement phase and the rate design phase of the proceedings to establish prospective cost-of-service based rates for the power company.
201. **Chesapeake v. Kinder Morgan, 2001 (CIV-00-397L)** - Participated as an expert witness on behalf of Chesapeake Energy in a gas gathering dispute. Sponsored testimony to calculate and support a reasonable rate on the gas gathering system. Performed necessary calculations to determine appropriate levels of operating expense, depreciation and cost of capital to include in a reasonable gathering charge and developed an appropriate rate design to recover these costs.

202. **Southern Union Gas Company, 2001** - Participated as a consultant to the City of El Paso in its review of SUG's gas purchasing practices, gas storage position, and potential use of financial hedging instruments and ratemaking incentives to devise strategies to help shelter customers from the risk of high commodity price spikes during the winter months.
203. **Nevada Power Company, 2001** - Participated as an expert witness on behalf of the MGM-Mirage, Park Place and Mandalay Bay Group before the Nevada Public Utility Commission to review NPC's Comprehensive Energy Plan (CEP) for the State of Nevada and make recommendations regarding the appropriate level of additional costs to include in rates for the Company's prospective power costs associated with natural gas and gas transportation, coal and coal transportation and purchased power.
204. **Bridenstine v. Kaiser-Francis Oil Co. et al., 2001 (CJ-95-54)** - Participated as an expert witness on behalf of royalty owner plaintiffs in a valuation dispute regarding gathering, dehydration, metering, compression, and marketing costs. Provided cost-of-service calculations to determine the reasonableness of the gathering rate charged to the royalty interest. Also provided calculations as to the average price available in the field based upon a study of royalty payments received on other wells in the area.
205. **Klatt v. Hunt et al., 2000 (ND)** - Participated as an expert witness and filed report in United States District Court for the District of North Dakota in a natural gas gathering contract dispute to calculate charges and allocations for processing, sour gas compression, treatment, overhead, depreciation expense, use of residue gas, purchase price allocations, and risk capital.
206. **Oklahoma Gas and Electric Co., 2000 (Cause No. PUD 00-0020)** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Generation Efficiency Performance Rider (GEPR). Provided a list of criteria with which to measure a utility's proposal for alternative ratemaking. Recommended modifications to the Company's proposed GEPR to bring it within the boundaries of an acceptable alternative ratemaking formula.
207. **Oklahoma Gas and Electric Co., 1999** - Participated as an expert witness on behalf of the OIEC before the OCC. Sponsored testimony on OG&E's proposed Performance Based Ratemaking (PBR) proposal including analysis of the Company's regulated return on equity, fluctuations in the capital investment and operating expense accounts of the Company and the impact that various rate base, operating expense and cost of capital adjustments would have on the Company's proposal.
208. **Nevada Power Company, 1999 (Docket No. 99-7035)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony addressing the appropriate ratemaking treatment of the Company's deferred energy balances, prospective power costs for natural gas, coal and purchased power and deferred capacity payments for purchased power.
209. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to unbundle the utility services of the NPC and to establish the appropriate cost-of-service allocations and rate design for the utility in Nevada's new competitive electric utility industry.
210. **Nevada Power Company, 1999 (Docket No. 99-4005)** - Participated as an expert witness on behalf of the Mirage, Park Place and Mandalay Bay Group before the Nevada PUC. Sponsored written and oral testimony to establish the cost-of-service revenue requirement of the Company.

211. **Nevada Power/Sierra Pacific Merger, 1998 (Docket No. 98-7023)** - Participated as an expert witness on behalf of the Mirage and MGM Grand before the Nevada PUC. Sponsored written and oral testimony to establish (1) appropriate conditions on the merger (2) the proper sequence of regulatory events to unbundle utility services and deregulate the electric utility industry in Nevada (3) the proper accounting treatment of the acquisition premium and the gain on divestiture of generation assets. The recommendations regarding conditions on the merger, the sequence of regulatory events to unbundle and deregulate, and the accounting treatment of the acquisition premium were specifically adopted in the Commission's final order.
212. **Oklahoma Natural Gas Company, 1998 (Cause No. PUD 98-0177)** - Participated as an expert witness in ONG's unbundling proceedings before the OCC. Sponsored written and oral testimony on behalf of Transok, LLC to establish the cost of ONG's unbundled upstream gas services. Substantially all of the cost-of-service recommendations to unbundle ONG's gas services were adopted in the Commission's interim order.
213. **Public Service Company of Oklahoma, 1997 (Cause No. PUD 96-0214)** - Audited both rate base investment and operating revenue and expense to determine the Company's revenue requirement and cost-of-service. Sponsored written testimony before the OCC on behalf of the OIEC.
214. **Oklahoma Natural Gas /Western Resources Merger, 1997 (Cause No. PUD 97-0106)** - Sponsored testimony on behalf of the OIEC regarding the appropriate accounting treatment of acquisition premiums resulting from the purchase of regulated assets.
215. **Oklahoma Gas and Electric Co., 1996 (Cause No. PUD 96-0116)** - Audited both rate base investment and operating income. Sponsored testimony on behalf of the OIEC for the purpose of determining the Company's revenue requirement and cost-of-service allocations.
216. **Oklahoma Corporation Commission, 1996** - Provided technical assistance to Commissioner Anthony's office in analyzing gas contracts and related legal proceedings involving ONG and certain of its gas supply contracts. Assignment included comparison of pricing terms of subject gas contracts to portfolio of gas contracts and other data obtained through annual fuel audits analyzing ONG's gas purchasing practices.
217. **Tenkiller Water Company, 1996** - Provided technical assistance to the Attorney General of Oklahoma in his review of the Company's regulated cost-of-service for the purpose of setting prospective utility rates.
218. **Arkansas Oklahoma Gas Company, 1995 (Cause No. PUD 95-0134)** - Sponsored written and oral testimony before the OCC on behalf of the Attorney General of Oklahoma regarding the price of natural gas on AOG's system and the impact of AOG's proposed cost of gas allocations and gas transportation rates and tariffs on AOG's various customer classes.
219. **Enogex, Inc., 1995 (FERC 95-10-000)** - Analyzed Enogex's application before the FERC to increase gas transportation rates for the Oklahoma Independent Petroleum Association and made recommendations regarding revenue requirement, cost-of-service and rate design on behalf of independent producers and shippers.
220. **Oklahoma Natural Gas Company, 1995 (Cause No. PUD 94-0477)** - Analyzed a portfolio of ONG's gas purchase contracts in the Company's Payment-In-Kind (PIC) gas purchase program and made recommendations to the OCC Staff on behalf of Terra Nitrogen, Inc. regarding the inappropriate profits made by ONG on the sale of the gas commodity through the PIC program



pricing formula. Also analyzed the price of gas on ONG's system, ONG's cost-of-service based rates, and certain class cross-subsidizations in ONG's existing rate design.

- 221. Arkansas Louisiana Gas Company, 1994 (Cause No. PUD 94-0354)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of the other auditors on the case. Sponsored cost-of-service testimony on cash working capital and developed policy recommendations on post test year adjustments.
- 222. Empire District Electric Company, 1994 (Cause No. PUD 94-0343)** - Planned and supervised the rate case audit for the OCC Staff and reviewed the workpapers and testimony of other auditors. Sponsored cost-of-service testimony on rate base investment areas including cash working capital.
- 223. Oklahoma Natural Gas Company, 1992 through 1993 (Cause No. PUD 92-1190)** - Planned and supervised the rate case audit of ONG for the OCC Staff. Reviewed all workpapers and testimony of the other auditors on the case. Sponsored written and oral testimony on numerous cost-of-service adjustments. Analyzed ONG's gas supply contracts under the Company's PIC program.
- 224. Oklahoma Gas and Electric Company, 1991 through 1992 (Cause No. PUD 91-1055)** - Audited the rate base, operating revenue and operating expense accounts of OG&E on behalf of the OCC Staff. Sponsored written and oral testimony on numerous revenue requirement adjustments to establish the appropriate level of costs to include for the purpose of setting prospective rates.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Summary Comparison of Revenue Requirement**

Line No.	Description	Ref.	York		OCA Recommendation		Difference		OCA Impact of Errata	
			Water	Wastewater	Water	Wastewater Errata	Water	Wastewater Errata	OCA Initial Wastewater	Impact of Errata
1	Rate Base		\$ 350,621,590	\$ 33,353,950	\$ 350,301,681	\$ 32,909,997	\$ (319,909)	\$ (443,953)	\$ 32,430,699	\$ 479,298
2	Rate of Return		7.93%	7.93%	6.01%	6.01%	-1.92%	-1.92%	6.01%	0.00%
3	Return Requirement		27,804,706	2,645,008	21,037,718	1,976,443	(6,766,988)	(668,565)	1,947,658	28,785
4	Adjusted Net Operating Income	<sup>v</sup>	\$ 16,450,949	\$ (270,366)	\$ 17,999,363	\$ 15,997	\$ 1,548,414	\$ 286,363	\$ 69,789	\$ (53,792)
5	Deficiency		11,353,757	2,915,374	3,038,355	1,960,446	(8,315,402)	(954,927)	1,877,869	(82,577)
6	Revenue Conversion Factor		0.701591	0.706304	0.701591	0.706304	0.000000	0.000000	0.706304	0.000000
7	Revenue Deficiency		\$ 16,182,881	\$ 4,127,649	\$ 4,330,666	\$ 2,775,642	\$ (11,852,215)	\$ (1,352,007)	\$ 2,658,728	\$ 116,915
8	Consolidated Allocation		2,670,856	(2,670,856)	2,670,856	(2,670,856)	-	-	(2,670,856)	-
9	Deficiency with Allocation		\$ 18,853,737	\$ 1,456,793	\$ 7,001,522	\$ 104,786	\$ (11,852,215)	\$ (1,352,007)	\$ (12,129)	\$ 116,915

Note 1 From Exhibit No. FI-2, p. 13.

**The York Water Company**  
**Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)**  
**Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024**  
**Office of Consumer Advocate - Revenue Requirement with OCA's Recommended Adjustments**

Line No.	Description	Ref.	Water			Waste Water Errata			Impact of Wastewater Errata	
			York	OCA	OCA	York	OCA Errata	OCA Errata	OCA Original	Difference
			Proposed Rates	Adjustment	Recommended	Proposed Rates	Adjustment	Recommended	Recommended	Original - Errata
			(A)	(B)	(C)	(A)	(B)	(C)		
<b>Rate Base</b>										
1	Plant in Service	<sup>1/</sup>	\$ 529,635,105		\$ 529,635,105	\$ 43,442,074		\$ 43,442,074	\$ 43,442,074	\$ -
2	Accumulated Depreciation	<sup>1/</sup>	(107,427,025)		(107,427,025)	(9,177,932)		(9,177,932)	(9,177,932)	-
3	Net Plant in Service	<sup>1/</sup>	\$ 422,208,080	\$ -	\$ 422,208,080	\$ 34,264,142	\$ -	\$ 34,264,142	\$ 34,264,142	\$ -
4	Materials and Supplies	<sup>1/</sup>	\$ 1,520,534		\$ 1,520,534	\$ -		\$ -	\$ -	\$ -
5	Cash Working Capital	<sup>1/</sup>	3,070,957	(259,943)	2,811,014			-	-	-
6	Utility Plant Acquisition Adjustments	<sup>1/</sup>	(68,018)	(59,966)	(127,984)	260,414	(443,953)	(183,539)	(662,837)	479,298
7	Taxes on Deposits and Advances	<sup>1/</sup>	1,403,563		1,403,563	18,347		18,347	18,347	-
8	Accumulated Deferred Income Tax	<sup>1/</sup>	(24,488,981)		(24,488,981)	(148,987)		(148,987)	(148,987)	-
9	Excess Accumulated Deferred Income Tax	<sup>1/</sup>	(13,371,592)		(13,371,592)	(6,782)		(6,782)	(6,782)	-
10	Contributions in Aid of Construction	<sup>1/</sup>	(33,721,565)		(33,721,565)	(1,033,184)		(1,033,184)	(1,033,184)	-
11	Customers' Advances for Construction	<sup>1/</sup>	(4,455,584)		(4,455,584)			-	-	-
12	Customers' Advances Not Expended	<sup>1/</sup>	(1,475,804)		(1,475,804)			-	-	-
13	Total Rate Base		\$ 350,621,590	\$ (319,909)	\$ 350,301,681	\$ 33,353,950	\$ (443,953)	\$ 32,909,997	\$ 32,430,699	\$ 479,298
14	Rate of Return	<sup>2/</sup>	7.930118%	-1.924518%	6.005600%	7.930118%	-1.924518%	6.005600%	6.005600%	0.000000%
15	Return Requirement		\$ 27,804,706	\$ (6,766,988)	\$ 21,037,718	\$ 2,645,008	\$ (668,565)	\$ 1,976,443	\$ 1,947,658	\$ 28,785
<b>Revenues</b>										
16	Sales of Water	<sup>3/</sup>	\$ 52,523,311		\$ 52,523,311	\$ 4,157,401		\$ 4,157,401	\$ 4,157,401	\$ -
17	Other Revenue	<sup>3/</sup>	1,119,149		1,119,149	4,861		4,861	4,861	-
18	Total Revenue		\$ 53,642,460	\$ -	\$ 53,642,460	\$ 4,162,262	\$ -	\$ 4,162,262	\$ 4,162,262	\$ -
<b>Expenses</b>										
19	Operating Expenses	<sup>4/</sup>	\$ 23,702,382	\$ (1,981,622)	\$ 21,720,760	\$ 4,229,014	\$ (332,020)	\$ 3,896,994	\$ 3,890,464	\$ 6,530
20	Depreciation	<sup>4/</sup>	12,960,981	(6,789)	12,954,192	933,718	(57,718)	876,000	803,226	72,774
21	Taxes Other Than Income Taxes	<sup>4/</sup>	1,378,995	(37,287)	1,341,708	43,491	(1,686)	41,805	41,805	-
22	Income Taxes	<sup>4/</sup>	(850,847)	477,284	(373,563)	(773,595)	105,061	(668,534)	(643,023)	(25,511)
23	Total Operating Expenses		\$ 37,191,511	\$ (1,548,414)	\$ 35,643,097	\$ 4,432,628	\$ (286,363)	\$ 4,146,265	\$ 4,092,473	\$ 53,793
24	Net Operating Income		\$ 16,450,949	\$ 1,548,414	\$ 17,999,363	\$ (270,366)	\$ 286,363	\$ 15,997	\$ 69,789	\$ (53,793)
25	Return (Sufficiency) Deficiency		\$ 11,353,757	\$ (8,315,402)	\$ 3,038,355	\$ 2,915,374	\$ (954,927)	\$ 1,960,446	\$ 1,877,869	\$ 82,578
26	Revenue Conversion Factor	<sup>5/</sup>	0.70159058	0.70159058	0.70159058	0.706303677	0.706303677	0.706303677	0.706303677	0
27	Revenue (Sufficiency) Deficiency	<sup>6/</sup>	\$ 16,182,881	\$ (11,852,215)	\$ 4,330,666	\$ 4,127,649	\$ (1,352,007)	\$ 2,775,642	\$ 2,658,727	\$ 116,915
28	Wastewater Revenue Allocation	<sup>6/</sup>	2,670,856		2,670,856	(2,670,856)		(2,670,856)	(2,670,856)	-
29	Total Increase in Rates	<sup>6/</sup>	\$ 18,853,737	\$ (11,852,215)	\$ 7,001,522	\$ 1,456,793	\$ (1,352,007)	\$ 104,786	\$ (12,129)	\$ 116,915
30	Percent of Requested Increase				37%			7%		

Note 1 From Exhibit No. FV-1, p. 3.

Note 2 See the Direct Testimony of Paul R. Moul, p. 2, lines 23 through 25.

Note 3 From Exhibit FII-2, p. 9.

Note 4 From Exhibit No. FI-2, pp 11, 13. Also see FV-1.pg5, column 7.

Note 5 From HV-1.wp1, factor for total revenue requirements.

Note 6 From Exhibit FII-2, p. 10.

From Exhibit No. FV-1W (tab FV-1W.pg3)

See the Direct Testimony of Paul R. Moul, p. 1.

From Exhibit No. FII-2W, page 9 (tab FII-2W.pg9) and

Exhibit No. FV-1W (tab FV-1W.pg6).

From HV-1W.wp1.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Summary of Recommendations

Line No.	Description	Witness	Water			Errata Wastewater			Impact of Wastewater Errata	
			Rate Base	Pre-Tax Return	Revenue Deficiency	Rate Base	Pre-Tax Return	Revenue Deficiency	OCA Original Recommended	Difference Original - Errata
1	York Requested Increase Amounts		\$ 350,621,590		\$ 18,853,737	\$ 33,353,950		\$ 1,456,793	\$ 1,456,793	\$ -
	<u>Rate Base Adjustments</u>									
2	Cash Working Capital	Garrett	\$ (259,943)	10.57%	\$ (27,488)		10.50%	\$ -	\$ -	\$ -
3	Acquisition Adjustments	DeAngelo	(59,966)	10.57%	(6,341)	(443,953)	10.50%	(46,634)	(96,980)	50,347
4	Total Rate Base Adjustments		\$ (319,909)		\$ (33,830)	\$ (443,953)		\$ (46,634)	\$ (96,980)	\$ 50,347
	<u>Rate of Return Adjustments</u>									
5	25 Basis Point Reduction in ROE		\$ 350,301,681	-0.20%	(683,661)	\$ 32,909,997	-0.19%	(63,800)	(62,871)	(929)
6	Capital Structure	Habr	350,301,681	-0.32%	(1,136,823)	32,909,997	-0.32%	(106,089)	(104,544)	(1,545)
7	Return on Equity	Habr	350,301,681	-2.27%	(7,944,800)	32,909,997	-2.25%	(741,415)	(730,617)	(10,798)
8	Total Rate of Return Adjustments				(9,765,284)			(911,304)	(898,031)	(13,272)
	<u>Operating Income Adjustments</u>									
9	Payroll Expense	Garrett			\$ (382,591)			\$ (17,296)	\$ (17,296)	\$ -
10	Cash Incentives	Garrett			(123,754)			(5,595)	(5,595)	-
11	Stock Incentives	Garrett			(238,146)			(10,766)	(17,296)	6,530
12	Payroll Taxes	Garrett			(37,287)			(1,686)	(1,686)	-
13	Cost Escalation	Garrett			(1,023,307)			(298,363)	(298,363)	-
14	Board of Directors Expenses	Garrett			(213,825)			-	-	-
15	Acquisition Adjustment Amortization	DeAngelo			(6,789)			(57,718)	(130,492)	72,775
16	Rate Adjustment Impacts (Note 1)	Garrett			(27,402)			(2,646)	(3,183)	537
17	Total Operating Income Adjustments				(2,053,101)			(394,070)	(473,911)	79,841
18	Total Adjustments				(11,852,215)			(1,352,007)	(1,468,922)	116,915
19	OCA Recommended Increase(Decrease)				\$ 7,001,522			\$ 104,786	\$ (12,129)	\$ 116,915

Note 1 The impact of OCA's adjustments on late charges, bad debts, and assessments are accounted for here. The adjustment of these costs are a component of the revenue gross up factor on the Revenue Requirement Exhibit.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Payroll Expense Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Pro Forma Hourly Payroll Excluding Bonuses and Vacant Positions 12/31/2021	<sup>1/</sup>	\$ 2,007,650	
2	Pro Forma Salary Payroll Excluding Bonuses and Vacant Positions 12/31/2021	<sup>1/</sup>	3,563,364	
3	Total Non-Union Payroll 12/31/2021		<u>\$ 5,571,014</u>	
4	OCA Recommended 2022 Increase Factor		<u>103.50%</u>	
5	2022 Adjusted Amount		\$ 5,765,999	
6	2022 Additional Hourly and Salaried Positions	<sup>2/</sup>	<u>606,243</u>	
7	OCA Adjusted 2022 Hourly and Salaried Payroll		\$ 6,372,242	
8	OCA Recommended 2023 Increase Factor		<u>103.50%</u>	
9	February 29, 2024 Adjusted Non-Union Payroll		\$ 6,595,271	
10	February 29, 2024 Requested Union Payroll, Excluding Unfilled Positions	<sup>3/</sup>	<u>2,479,100</u>	
11	OCA Recommended Payroll Expense (without Bonuses)		\$ 9,074,371	
12	Requested 2/29/2024 Payroll (without Bonuses)	<sup>4/</sup>	<u>9,518,048</u>	
13	Gross Payroll Adjustment Before Expense Allocation		\$ (443,677)	\$ (443,677)
14	Expense Factor	<sup>5/</sup>	<u>0.862317798</u>	<sup>6/</sup> <u>0.038983417</u>
15	Adjustment to Payroll Expense		<u>\$ (382,591)</u>	<u>\$ (17,296)</u>

- Note 1 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab HIII-2-4(b).pg1, cells G10-I147 and M10-O147 excluding rows 92 and 134 for hourly positions.
- Note 2 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-1(c).pg1, total of cells G10-I19 and M10-O19 excluding rows 21 and 83 for salaried positions.
- Note 3 Derived from CONFIDENTIAL File OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, total of cells G1 147I and M10-O147 for union positions.
- Note 4 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, total of cells G1 147I and M10-O147.
- Note 5 From FIII-2-40(b).pg1, Total of Accounts 6011000 through 60180003 / Pro Forma Company Labor.
- Note 6 From FIII-2-40(b).pg1, Total of Accounts 7015000 through 7018000 / Pro Forma Company Labor.

The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cash Incentive Award Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Cash Incentive Awards - 2/29/2024 Pro Forma	<sup>1/</sup>	\$ 287,026	\$ 287,026
2	Expense Factor	<sup>2/</sup>	<u>0.862317798</u> <sup>3/</sup>	<u>0.038983417</u>
3	Amount Included in Operating Expenses		\$ 247,508	\$ 11,189
4	Ratepayer Share		<u>50.00%</u>	<u>50.00%</u>
5	Amount Recommended for Recovery		<u>\$ 123,754</u>	<u>\$ 5,595</u>
6	OCA Recommended Adjustment		<u>\$ (123,754)</u>	<u>\$ (5,595)</u>

Note 1 See OCA IV-14 and CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, cell Q167.

Note 2 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G21-G51 / G61.

Note 3 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G52-G57 / G61.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Long-Term Incentive Plan Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Long-Term Stock Awards - 2/29/2024 Pro Forma	<sup>1/</sup>	\$ 276,170	\$ 276,170
2	Expense Factor	<sup>2/</sup>	<u>0.862317798</u> <sup>3/</sup>	<u>0.038983417</u>
3	Long-Term Incentive Expense		\$ 238,146	\$ 10,766
4	OCA Recommended Adjustment to Long-Term Incentives		<u>\$ (238,146)</u>	<u>\$ (10,766)</u>

Note 1 See OCA IV-9 and CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, cell R167.

Note 2 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G21-G51 / G61.

Note 3 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G52-G57 / G61.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Payroll Tax Recommendations

Line No.	Description	Water		
		Payroll	Cash Incentive	Stock Incentive
1	Expense Adjustment	\$ (382,591)	\$ (123,754)	\$ (238,146)
2	Adjustments to Wages Over \$147K	(58,581)	(54,124)	(204,490)
3	Adjustment Subject to OASDI Tax	\$ (324,010)	\$ (69,630)	\$ (33,656)
4	Adjustment to Medicare Taxes	\$ (5,548)	\$ (1,794)	\$ (3,453)
5	Adjustment to OASDI Tax	\$ (20,089)	\$ (4,317)	\$ (2,087)
6	Tax Adjustment Totals	<u>\$ (25,636)</u>	<u>\$ (6,111)</u>	<u>\$ (5,540)</u>
7	Total Water Employment Tax Adjustment			<u>\$ (37,287)</u>
8	Payroll Tax Effective Rate			5.01%
		Wastewater		
		Payroll	Cash Incentive	Stock Incentive
9	Expense Adjustment	\$ (17,296)	\$ (5,595)	\$ (10,766)
10	Adjustments to Wages Over \$147K	(2,648)	(2,447)	(9,245)
11	Adjustment Subject to OASDI Tax	\$ (14,648)	\$ (3,148)	\$ (1,522)
12	Adjustment to Medicare Taxes	\$ (251)	\$ (81)	\$ (156)
13	Adjustment to OASDI Tax	\$ (908)	\$ (195)	\$ (94)
14	Tax Adjustment Totals	<u>\$ (1,159)</u>	<u>\$ (276)</u>	<u>\$ (250)</u>
15	Total Wastewater Employment Tax Adjustment			<u>\$ (1,686)</u>

Note 1 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, selected amounts times the appropriate expense factor.



The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Inflation Adjustment Recommendations

Line No.	Description	Ref.	Water	Wastewater
<u>Requested Inflation Adjustments</u>				
1	Adjustment December 2021 - December 2022	<sup>1/</sup>	\$ 360,236	<sup>3/</sup> \$ 106,523
2	Pro Forma Adjustment, December 2022 - February 2024	<sup>2/</sup>	<u>663,071</u>	<sup>4/</sup> <u>191,840</u>
3	Total Requested		\$ 1,023,307	\$ 298,363
4	OCA Adjustment		<u>\$ (1,023,307)</u>	<u>\$ (298,363)</u>

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Note 1 FIII-2.pg2, J239.  
 Note 2 FIII-2-37.pg1, cell H54.  
 Note 3 FIII-2W.pg2, J89.  
 Note 4 FIII-2-28W.pg1, cell H38.

The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Board of Directors Fees Recommendations**

Line No.	Description	Ref.	Amount
1	Requested Board of Directors Compensation	<sup>1/</sup>	\$ 427,649
2	OCA Recommended Ratepayer Share (50%)		<u>213,825</u>
3	OCA Recommended Board of Directors Fee Adjustment		<u>\$ (213,825)</u>

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Note 1 Exhibit FIII-2-48.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Acquisition Adjustment Recommendations

Line No.	Description	Ref	Water	Errata Ref.	Wastewater	Impact of Wastewater Errata	
						OCA Original Wastewater	Difference Original - Errata
<b>Rate Base</b>							
1	Wrightsville Acquisition Adjustment at 2/29/2024	<sup>1/</sup>	\$ 59,966				
2	Felton Acquisition Adjustment at 2/29/2024			<sup>2/</sup>	\$ 260,414	\$ 260,414	\$ -
3	Acquisition Adjustments Requested		\$ 59,966		\$ 260,414	\$ 260,414	\$ -
4	Jacobus Acquisition Adjustment at 2/29/24			<sup>3/</sup>	\$ (183,538.55)	\$ (183,538.55)	\$ -
5	Letterkenny Acquisition Adjustment at 2/29/2024			<sup>3/</sup>		(479,298.79)	479,298.79
6	Negative Acquisition Adjustments Not Requested				\$ (183,538.55)	\$ (662,837.34)	\$ 479,298.79
7	Adjustment to Remove Wrightsville and Felton Acquisition Adjustments		\$ (59,966)		\$ (260,414)	\$ (260,414)	\$ -
8	Adjustment to Add the Jacobus and Letterkenny Acquisition Adjustments				\$ (183,539)	\$ (662,837)	\$ 479,299
9	Total Rate Base Adjustments		\$ (59,966)		\$ (443,953)	\$ (923,251)	\$ 479,299
<b>Amortization</b>							
10	Wrightsville Acquisition Adjustment at 2/29/2024	<sup>4/</sup>	\$ 6,789				
11	Felton Acquisition Adjustment at 2/29/2024			<sup>5/</sup>	\$ 29,481	\$ 29,481	\$ -
12	Amortization of Acquisition Adjustments Requested		\$ 6,789		\$ 29,481	\$ 29,481	\$ -
13	Jacobus Acquisition Adjustment Amortization			<sup>6/</sup>	\$ (28,237)	\$ (28,237)	\$ -
14	Letterkenny Acquisition Adjustment Amortization			<sup>6/</sup>		(72,775)	72,775
15	Amortization of Omitted Negative Amortization Adjustments				\$ (28,237)	\$ (101,011)	\$ 72,775
16	Adjustment to Remove Amortization of Wrightsville and Felton Acq. Adj.		\$ (6,789)		\$ (29,481)	\$ (29,481)	\$ -
17	Adjustment to Add Amortization of Jacobus and Letterkenny Acq. Adj.				\$ (28,237)	\$ (101,011)	\$ 72,775
18	Total Amortization Adjustments		\$ (6,789)		\$ (57,718)	\$ (130,492)	\$ 72,775

Note 1 Exhibit No. FV-1-9, page 1.

Note 2 Exhibit No. FV-1-2W, page 1.

Note 3 See the Direct Testimony of Morgan N. DeAngelo, page 8, net of amortization beginning at date of acquisition.

Note 4 Exhibit No. FIII-2-22, page 1.

Note 5 Exhibit No. FIII-2W.

Note 6 Based on the ten year amortizations recommended by Morgan N. DeAngelo.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cash Working Capital

Line No.	Description	-1220697.523 Amount	Lag Days	Dollar Days
1	Payroll Expense Adjustments	\$ (1,159,663)	7.0	\$ (8,117,639)
2	Payroll Tax Withholding	(61,035)	13.7	(837,976)
3	Payroll Taxes	(61,035)	13.7	(837,976)
4	Inflation Adjustment	<u>(1,023,307)</u>	18.1	<u>(18,545,719)</u>
5	Totals	\$ (2,305,039)	12.3	\$ (28,339,309)
6	Revenue Lag		<u>53.4</u>	
7	Cash Working Capital Expense Adjustments	\$ (6,315)	41.1	<u>\$ (259,502)</u>
8	Rate Base Adjustments	\$ (319,909)		
9	Long-Term Debt Component of Capital	1.77%		
10	Interest Adjustment	\$ (5,658)		
11	Daily Interest Adjustment	\$ (16)	28.4	<u>(440)</u>
12	Cash Working Capital Adjustment			<u>\$ (259,943)</u>

The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Income Tax Expense**

Line No.	Description	Rate Base	Weighted Interest Cost	Errata Amount	Impact of Wastewater Errata	
					OCA Original Wastewater	Difference Original - Errata
<u>Water</u>						
1	Rate Base Adjustments	\$ (319,909)	-1.77%	\$ 5,658		
2	York Weighted Interest Cost		1.77%			
3	OCA Weighted Interest Cost		<u>1.88%</u>			
4	Difference	\$ 350,301,681	-0.11%	\$ (379,401)		
5	Operating Income Adjustments			<u>\$ 2,025,699</u>		
6	Total			\$ 1,651,955		
7	Combined Effective Tax Rate			<u>28.89210%</u>		
8	Adjustment to February 29, 2024 Income Tax Expense			<u>\$ 477,284</u>		
<u>Wastewater</u>						
9	Rate Base Adjustments	\$ 443,953	1.77%	\$ 7,851	\$ 16,328	\$ (8,477)
10	York Weighted Interest Cost		1.77%			
11	OCA Weighted Interest Cost		<u>1.88%</u>			
12	Difference	\$ 32,909,997	-0.11%	\$ (35,644)	\$ (35,125)	\$ (519)
13	Operating Income Adjustments			<u>\$ 391,423</u>	<u>\$ 470,728</u>	<u>\$ (79,305)</u>
14	Total			\$ 363,631	\$ 451,931	\$ (88,300)
15	Combined Effective Tax Rate			<u>28.89210%</u>	<u>28.89210%</u>	<u>0.00000%</u>
16	Adjustment to February 29, 2024 Income Tax Expense			<u>\$ 105,061</u>	<u>\$ 130,572</u>	<u>\$ (25,512)</u>

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cost of Capital

Line No.	Description	Capital	Ratio	Rate	ROR Component	Water		Waste Water		
						Conversion Factor <sup>3</sup>	Pre-Tax ROR	Conversion Factor <sup>3</sup>	Pre-Tax ROR	
1	Long-Term Debt <sup>1/</sup>	\$ 174,870,000	45.23% <sup>2/</sup>	3.91%	1.77%	0.986656	1.79%	0.993284	1.78%	
2	Equity <sup>1/</sup>	\$ 211,777,106	54.77% <sup>2/</sup>	11.25%	6.16%	0.701591	8.78%	0.706304	8.72%	
3		\$ 386,647,106	100.00%		7.93%		10.57%		10.50%	
4	OCA Recommended:									
5	<u>25 Basis Point Reduction to Return on Equity</u>									
6	Long-Term Debt <sup>4/</sup>		45.23% <sup>4/</sup>	3.91%	1.77%	0.986656	1.79%	0.993284	1.78%	
7	Equity <sup>4/</sup>		54.77% <sup>4/</sup>	11.00%	6.02%	0.701591	8.59%	0.706304	8.53%	
8			100.00%		7.79%		10.38%		10.31%	
9	25 Basis Point ROE Adjustment						-0.20%		-0.19%	
10	<u>Capital Structure</u>									
11	Long-Term Debt <sup>4/</sup>		48.00% <sup>4/</sup>	3.91%	1.88%	0.986656	1.90%	0.993284	1.89%	
12	Equity <sup>4/</sup>		52.00% <sup>4/</sup>	11.00%	5.72%	0.701591	8.15%	0.706304	8.10%	
13			100.00%		7.60%		10.06%		9.99%	
14	Capital Structure Adjustment						-0.32%		-0.32%	
15	<u>Return on Equity</u>									
16	Long-Term Debt <sup>4/</sup>		48.00% <sup>4/</sup>	3.91%	1.88%	0.986656	1.90%	0.993284	1.89%	
17	Equity <sup>4/</sup>		52.00% <sup>4/</sup>	7.94%	4.13%	0.701591	5.88%	0.706304	5.85%	
18			100.00%		6.01%		7.79%		7.74%	
19	ROE Adjustment						-2.27%		-2.25%	

Note 1 From Exhibit No. FVII-1, WP 1.

Note 2 From Exhibit No. FVII-1, WP 2, HV-1.pg3 and Moul Direct, page 2.

Note 3 From HV-1.wp1, factors for total revenue requirements.

Note 4 See the Responsive Testimony of Dr. David S. Habr.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Mark E. Garrett, hereby state that the facts set forth in my Direct Testimony, OCA Statement 1, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 19, 2022  
\*334093

Signature:

  
\_\_\_\_\_  
Mark E. Garrett

Consultant Address: Garrett Group Consulting, Inc.  
4028 Oakdale Farm Circle  
Edmond, Oklahoma 73013

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission : Docket Nos. R-2022-3031340  
Office of Consumer Advocate : C-2022-3032868  
Office of Small Business Advocate : C-2022-3032902

v.

The York Water Company – Water Division

Pennsylvania Public Utility Commission : Docket Nos. R-2022-3032806  
Office of Consumer Advocate : C-2022-3032869  
Office of Small Business Advocate : C-2022-3033016

v.

The York Water Company – Wastewater  
Division

Direct Testimony of  
**Morgan N. DeAngelo**

On Behalf of  
Pennsylvania Office of Consumer Advocate

August 19, 2022



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1 **Introduction:**

2 **Q. Please state your name, business address and occupation.**

3 **A.** My name is Morgan N. DeAngelo. My business address is 555 Walnut Street, 5<sup>th</sup> Floor,  
4 Forum Place, Harrisburg, Pennsylvania 17101. I am currently employed as a Regulatory  
5 Analyst by the Pennsylvania Office of Consumer Advocate (OCA).

6 **Q. Please describe your educational background and qualifications to provide testimony**  
7 **in this case.**

8 **A.** I have a Master's degree in Business Administration and a Bachelor of Business  
9 Administration Degree, with a concentration in Finance and a minor in Accounting from  
10 Wilkes University. My educational background and qualifications are described in  
11 Appendix A.

12 **Q. On whose behalf are you testifying in this proceeding?**

13 **A.** I am testifying on behalf of the Office of Consumer Advocate.

14 **Purpose of Direct Testimony:**

15 **Q. Please describe the purpose of your Direct Testimony.**

16 **A.** The purpose of my Direct Testimony is to address the York Water Company (York)'s  
17 request for acquisition adjustments related to assets purchased since 2018. In York Direct  
18 Testimony Statement No. 1, Mr. Joseph T. Hand identifies positive acquisition  
19 adjustments to the Wrightsville Municipal Authority (Wrightsville), Felton Borough  
20 (Felton), and West Manheim Township (West Manheim), and negative acquisition  
21 adjustments to the Jacobus Borough Sewer Authority (Jacobus) and Letterkenny  
22 Municipal Authority (Letterkenny).

1 **Q. Were there additional acquisitions since York's 2018 rate case that are not**  
2 **addressed in its current filing?**

3 **A.** Yes. Since York's last rate case, I am aware that York has filed several applications to  
4 acquire additional water and wastewater system assets, including for example, the  
5 Letterkenny Industrial Development Authority water and wastewater system assets at  
6 Docket Nos. A-2021-3029704 and A-2021-3029945. Since York did not identify any  
7 adjustments related to these acquisitions in this base rate filing, I will not be addressing  
8 them in my Direct Testimony.

9 **Positive Acquisition Adjustments:**

10 **Q: What is a positive acquisition adjustment?**

11 **A:** Ordinarily, when a public utility purchases another entity's assets and seeks to include the  
12 assets in its rate base, it may only include the value of assets at original cost of the  
13 property when first devoted to the public service less applicable accrued depreciation.  
14 However, there is an exception to this rule permitted when a public utility purchases  
15 water or wastewater assets at a cost in excess of the original cost less accrued  
16 depreciation if the public utility can meet the factors stated in Section 1327(a) of the  
17 Public Utility Code. The difference in price between net original cost and purchase price  
18 is the amount of the positive acquisition adjustment.

19 **Q. Did York claim an acquisition adjustment for West Manheim?**

20 **A.** No. In his Direct Testimony, Mr. Hand stated that York's net cost to acquire the West  
21 Manheim wastewater collection system was \$3,124 greater than the original cost of the  
22 property, less applicable depreciation. (York Statement No. 1, p. 21, ln. 6-9). He also

1 stated, “Due to the immaterial amount, the Company is not requesting amortization of the  
2 \$3,124 positive acquisition adjustment.”. (York Statement No. 1, p. 22, ln. 1-2).

3 **Q. Do you agree with York’s proposed treatment of the West Manheim acquisition?**

4 **A.** Yes. York has not provided evidence to support a positive acquisition adjustment.  
5 Further, as Mr. Hand recognizes, the difference between the purchase price and  
6 depreciated original cost was not material.

7 **Q. What positive acquisition adjustments did York claim in this rate case?**

8 **A.** York acquired Wrightsville and Felton at amounts greater than the net book value. The  
9 following table summarizes the Purchase Price compared to the Depreciated Original  
10 Cost of each system identified as a proposed positive acquisition adjustment in York’s  
11 base rate filing.

<b><u>Systems Acquired for More than the Depreciated Original Cost</u></b>					
<b>Acquisition</b>	<b>System</b>	<b>Date Acquired</b>	<b>Purchase Price</b>	<b>Depreciated Original Cost</b>	<b>Difference</b>
<b>Wrightsville</b>	Water	2/15/2018	\$113,113	\$45,227	\$67,886
<b>Felton</b>	Wastewater	12/28/2018	\$913,679	\$618,871	\$294,808

12  
13 **Q. Please discuss York’s claim in regard to the acquisition of system assets of the  
14 Wrightsville water system and the Felton wastewater system.**

15 **A.** On February 15, 2018, York completed the acquisition of Wrightsville’s water assets, an  
16 expansion of its territory and the provision of water service to Eastern York School  
17 District (District), which are in York County. The system assets were purchased for  
18 \$113,113, which is \$67,886 more than the Depreciated Original Cost of \$45,227. (York  
19 Exh. No. FV-1-9). York is requesting that the amortization reflecting the difference  
20 between the purchase price and depreciated original cost of the \$67,886 positive

1 acquisition adjustment be permitted over a 10-year period. (York Statement No. 1, p. 14,  
2 ln. 10-12).

3 On April 9, 2020, York completed the acquisition of Felton's wastewater assets, which  
4 are located in York County. The system assets were purchased for \$913,679, which is  
5 \$294,808 more than the Depreciated Original Cost of \$618,871. (York Statement No.  
6 4W, p. 8, ln. 9-12). York is requesting that the amortization reflecting the difference  
7 between the purchase price and depreciated original cost of the \$294,808 positive  
8 acquisition adjustment be permitted over a 10-year period. (York Exh. No. HIII-2-1W).

9 **Q. Does the Public Utility Code contain requirements that must be met by a utility in**  
10 **order to reflect a positive acquisition adjustment in rates?**

11 **A.** Yes. As noted above, Subsection (a) of Section 1327 of the Public Utility Code outlines  
12 nine criteria, all of which must be met by a utility in order to add an acquisition adjustment  
13 to rate base. These criteria are:

- 14 (1) The property acquired is used and useful in providing service;
- 15 (2) The acquired utility had 3,300 or fewer customer connections or was non-viable in  
16 the absence of the acquisition;
- 17 (3) The acquired entity was not, at the time of acquisition, furnishing and maintaining  
18 adequate, efficient, safe and reasonable service and facilities, evidence of which  
19 shall include, but not be limited to, any one or more of the following:
  - 20 (i) violation of statutory or regulatory requirements of the Department of  
21 Environmental Resources or the commission concerning the safety,  
22 adequacy, efficiency or reasonableness of service and facilities;
  - 23 (ii) a finding by the commission of inadequate financial, managerial or  
24 technical ability of the small water or sewer utility;
  - 25 (iii) a finding by the commission that there is a present deficiency concerning  
26 the availability of water, the palatability of water or the provision of water  
27 at adequate volume and pressure;
  - 28 (iv) a finding by the commission that the small water or sewer utility, because  
29 of necessary improvements to its plant or distribution system, cannot  
30 reasonably be expected to furnish and maintain adequate service to its  
31 customers in the future at rates equal to or less than those of the acquiring  
32 public utility;

- 1 (v) any other facts, as the commission may determine, that evidence the  
2 inability of the small water or sewer utility to furnish or maintain adequate,  
3 efficient, safe and reasonable service and facilities;
- 4 (4) reasonable and prudent investments will be made to assure that the customers  
5 served by the property will receive adequate, efficient, safe and reasonable service;
- 6 (5) the public utility...is in agreement with the acquisition and the negotiations which  
7 led to the acquisition were conducted at arm's length;
- 8 (6) the actual purchase price is reasonable;
- 9 (7) neither the acquiring nor the selling public utility, municipal corporation or person  
10 is an affiliated interest of the other;
- 11 (8) the rates charged by the acquiring public utility to its preacquisition customers will  
12 not increase unreasonably because of the acquisition; and
- 13 (9) the excess of the acquisition cost over the depreciated original cost will be added  
14 to the rate base to be amortized as an addition to expense over a reasonable period  
15 of time with corresponding reductions in the rate base.

16 **Wrightsville Water System**

17 **Q. Has York met all nine of the Section 1327(a) criteria to support its proposed**  
18 **acquisition adjustment related to Wrightsville?**

19 **A.** No. York has not met all nine criteria necessary to support a positive acquisition  
20 adjustment associated with Wrightsville in this case. In particular, York has not met the  
21 criteria under Section 1327(a)(3).

22 **Q. Section 1327(a)(3) requires that, in order for a utility to recognize an acquisition**  
23 **adjustment in rates, the acquired company must not, at the time of acquisition, be**  
24 **providing and maintaining adequate, efficient, safe and reasonable service and**  
25 **facilities. Has York provided any information to show that Wrightsville was not**  
26 **providing adequate service to its customers at the time of acquisition?**

27 **A.** No. York has not shown that, as to Wrightsville, it can meet any of the requirements  
28 outlined in Section 1327(a)(3) to show that Wrightsville was not providing adequate  
29 service to its customers at the time of acquisition.

1 **Q. Do you agree with York that the Company should receive a positive acquisition**  
2 **adjustment for its acquisition of Wrightsville?**

3 **A.** No. The desire of the former owner to sell the assets is not in and of itself a reason for  
4 ratepayers to reimburse York for its business decision to pay more than depreciated  
5 original cost. As such, I recommend that York’s proposal for a positive acquisition  
6 adjustment should be rejected. The removal of this adjustment is reflected in the  
7 testimony and schedules of OCA witness Mark Garrett in OCA Statement 1.

8 **Felton Wastewater System**

9 **Q. Has York met all nine of the Section 1327(a) criteria to support its proposed**  
10 **acquisition adjustment related to Felton?**

11 **A.** No. York has not met all nine criteria necessary to support an acquisition adjustment for  
12 the Felton wastewater system assets. In particular, York has not met the criteria under  
13 Section 1327(a)(3).

14 **Q. Has York provided evidence that Felton was not providing adequate service to its**  
15 **customers at the time of acquisition?**

16 **A.** No. Mr. Hand states that Felton received a Notice of Violation (NOV) from the  
17 Department of Environmental Protection (DEP) in 2018. (York Statement No. 1, p. 16,  
18 ln. 19-21). No information is provided regarding the type or severity of violation, whether  
19 the violation concerned the “safety, adequacy, efficiency or reasonableness of service and  
20 facilities,” and whether Felton corrected the problem. Mr. Hand also states that Felton  
21 identified Inflow and Infiltration problems with the collection system in its 2018 Chapter

1 94 report, however, that report indicated the treatment plant is projected to have adequate  
2 hydraulic and organic capacity for the next five years.<sup>1</sup>

3 **Q. Do you agree with York that the Company should receive a positive acquisition**  
4 **adjustment for its acquisition of Felton?**

5 **A.** No. This acquisition does not meet the requirements of Section 1327(a) of the Public  
6 Utility Code because York has not provided sufficient information to show, in particular,  
7 that Felton was a troubled system and was not furnishing and maintaining adequate,  
8 efficient, safe and reasonable service and facilities at the time of the acquisition. The  
9 desire of the former owner to sell the assets is not a valid reason for ratepayers to  
10 reimburse York for its business decision. As such, based on the information that Aqua  
11 provided in support of its claim, I recommend that York's proposal for a positive  
12 acquisition adjustment should be rejected. The removal of this adjustment is reflected in  
13 the testimony and schedules of OCA witness Mark Garrett in OCA Statement 1.

14 **Q. Are the Wrightsville and Felton systems addressed in any other OCA testimony?**

15 **A.** Yes. OCA witness Mr. Terry L. Fought addresses both systems in OCA Statement 6.

16 **Negative Acquisition Adjustments:**

17 **Q. What negative acquisition adjustments did York claim in the current rate case?**

18 **A.** York proposes to make a negative acquisition adjustment related to two systems that it  
19 purchased at amounts less than the net book values. These systems are Jacobus Borough  
20 Sewer Authority (Jacobus) and Letterkenny Township Municipal Authority. The

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<sup>1</sup> Order, p. 6. Docket No. A-2019-3013113.



1 following table summarizes the Purchase Price compared to the Depreciated Original  
2 Cost of the Jacobus system, which I will be addressing.

<b>Acquisitions Acquired for Less than the Depreciated Original Cost</b>					
<b>Acquisition</b>	<b>System</b>	<b>Date Acquired</b>	<b>Purchase Price</b>	<b>Depreciated Original Cost</b>	<b>Difference</b>
<b>Jacobus</b>	Wastewater	8/29/2020	\$2,100,000	\$2,382,367	<b>(\$282,367)</b>

3

4 **Q. Please discuss York’s claim for the Jacobus system.**

5 **A.** On August 29, 2019, York completed the acquisition of Jacobus’s wastewater assets,  
6 which are located in York County. The system assets were purchased for \$2,100,000,  
7 which is \$282,367 less than the Depreciated Original Cost of \$2,382,367. York stated,  
8 “No amortization of pass-through of the difference between the acquisition cost and the  
9 depreciated original cost is appropriate because this acquisition involves a matter of  
10 substantial public interest.” (York Statement No. 1, p. 15-16, ln. 22-23, 1-2).

11 **Q. Does the Public Utility Code contain requirements that must be met by a utility in  
12 order to reflect a negative acquisition adjustment in rates?**

13 **A.** Yes. Subsection (e) of Section 1327 of the Public Utility Code states criteria which must  
14 be met by a utility in order to make a negative acquisition adjustment (not just pass  
15 through to customers the benefit of the difference between acquisition cost and the  
16 depreciated original cost). The statute states the following:

17 If a public utility acquires property from another public utility, a municipal  
18 corporation or a person at a cost which is lower than the original cost of the  
19 property when first devoted to the public service less the applicable accrued  
20 depreciation and the property is used and useful in providing water or sewer  
21 service, that difference shall, absent matters of a substantial public interest,  
22 be amortized as an addition to income over a reasonable period of time or  
23 be passed through to the ratepayers by such other methodology as the  
24 commission may direct. Notice of the proposed treatment of an acquisition

1 cost lower than depreciated original cost shall be given to the Director of  
2 Trial Staff and the Consumer Advocate.

3 **Q. Has York met this criterion of Section 1327(e) to support omitting its amortization**  
4 **of the pass-through of the difference between acquisition cost and the depreciated**  
5 **original cost?**

6 **A.** No, York has not. York identified that Jacobus Borough did not wish to continue  
7 providing wastewater service to its residents due to increasing costs and challenges of  
8 meeting regulatory oversight and reporting requirements. (York Statement No. 1, p. 14,  
9 ln. 20-22). Further, Mr. Hand stated that no immediate successor for the Jacobus  
10 contracted operator, who was retiring, was available. There was no showing why another  
11 operator could not be contracted to fill the position. The statements by Mr. Hand do not  
12 show there is a “substantial public interest” for York’s customers to be denied the  
13 \$282,367 benefit of York acquiring the system at less than depreciated original cost.

14 Additionally, the Commission Order stated, “At the time of filing its next base rate case,  
15 which proposes the assets of this acquisition in rate base, The York Water Company –  
16 Wastewater shall specifically reference Docket No. A-2019-3007355 and justify any  
17 amount claimed as an acquisition adjustment pursuant to Section 1327 of the Public  
18 Utility Code, 66 Pa. C.S. § 1327.”<sup>2</sup> Ultimately, York has not justified its failure to pass  
19 through the difference to ratepayers because it has not met the standard of Section  
20 1327(e).

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<sup>2</sup> Order, p. 13, Paragraph No. 9. Docket No. A-2019-3007355.

1 **Q. What adjustments are you recommending?**

2 **A.** I recommend that York amortize the difference between the purchase price and  
3 depreciated original cost of the assets, as an addition to income over ten years, consistent  
4 with the number of years used by York for its proposed Positive Acquisition  
5 Adjustments. My recommended adjustments are provided on the schedules of OCA  
6 witness Mark Garrett.

7 **Q. Did the OCA address the Jacobus system in any other testimony?**

8 **A.** Yes. Mr. Fought also addressed the Jacobus system in OCA Statement 6.

9 **Conclusion:**

10 **Q. Does this conclude your Direct Testimony?**

11 **A.** Yes. However, I reserve the right to modify if needed.



**QUALIFICATIONS OF  
MORGAN N. DEANGELO**

**Education:**

2020 M.B.A., Wilkes University

2018 B.B.A. concentration in Finance, minor in Accounting, Wilkes University

**Positions:**

June 2020 – Present      Regulatory Analyst, Pennsylvania Office of Consumer Advocate

2018 – 2020              Graduate Assistant, Office of Student Development,  
Wilkes University

**Experience:**

I am currently employed by the Pennsylvania Office of Attorney General, Office of Consumer Advocate (OCA) as a Regulatory Analyst. In this position, my responsibilities of reviewing utility company filings with the Pennsylvania Public Utility Commission (Commission) and analyzing the financial, economic, rate of return, and policy issues that are relevant to the filings. Additionally, I am tasked with preparing recommendations for the OCA's involvement in utility filings with the PA PUC, writing testimony and presenting oral testimony on behalf of the OCA.

**Relevant Training:**

IPU Regulatory Studies - Intermediate Course, August 2020

IPU Accounting and Ratemaking Course, February 2021

**Previous Cases where testimony was submitted:**

- Petition of Twin Lakes Utilities, Inc., P-2020-3020914
- Application of Pennsylvania American Water Company, A-2020-3019634
- PaPUC v. UGI Utilities, Inc. – Electric Division, R-2021-3023618
- PaPUC v. Pittsburgh Water and Sewer Authority, R-2021-3024773, R-2021,3024774, R-2021-3024779
- PaPUC v. Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., R-2021-3027285, R-2021-3027186
- PaPUC v. City of Lancaster – Water Department, R-2021-3026682
- Application of Aqua Pennsylvania Wastewater, Inc., A-2021-3027268
- PaPUC v. Borough of Ambler – Water, R-2022-3031704

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Morgan N. DeAngelo, hereby state that the facts set forth in my Direct Testimony, OCA Statement 2, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 19, 2022  
\*334091

Signature: Morgan N. DeAngelo  
Morgan N. DeAngelo

Consultant Address: Office of Consumer Advocate  
555 Walnut Street  
5<sup>th</sup> Floor, Forum Place  
Harrisburg, PA 17101-1923

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission** :  
: **v.** : **Docket Nos. R-2022-3031340 (Water)**  
: **R-2022-3032806 (WW)**  
**York Water Company** :

**DIRECT TESTIMONY OF  
DR. DAVID S. HABR  
ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE**

**August 19, 2022**

1 **Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A: David S. Habr, 213 Cornuta Way, Nipomo, CA.

3 **Q: BY WHOM ARE YOU EMPLOYED?**

4 A: I am the owner of Habr Economics, a consulting firm I founded in January 2009.  
5 The firm focuses on cost of capital and mergers and acquisitions.

6 **Q: PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR EDUCATION**  
7 **AND EXPERIENCE.**

8 A: I received a Bachelor of Arts (1968) and a Master of Arts (1969) degree in  
9 economics from the University of Nebraska – Lincoln. I received a Ph.D. degree  
10 in economics from Washington State University in 1976.

11 I began my career in utility regulation when I joined the Iowa State  
12 Commerce Commission (n/k/a the Iowa Utilities Board) in 1981. My first rate of  
13 return testimony was filed in a Northwestern Bell case in 1983 and I have  
14 continued to testify on rate of return since then. In 1987, I was hired by the Iowa  
15 Office of Consumer Advocate to establish and develop their testifying staff as well  
16 as continue to testify on rate of return and other financial and economic matters. I  
17 remained in that position until the end of 2008. Since starting Habr Economics, I  
18 have filed rate of return testimony in Hawaii, Maine, Maryland, and Pennsylvania  
19 and testimony in merger cases in Maine and Maryland. I also prepared rate of  
20 return testimony for the Utah Office of Consumer Services and filed testimony in  
21 Iowa on the impact of holding company strategic decisions on the efficiency of  
22 utility company operations.



1 Prior to joining the Iowa State Commerce Commission staff, I had a private  
2 consulting practice, worked for a small consulting firm, and served six years as a  
3 member of the economics faculty at Drake University. My vita, Exhibit DSH-1,  
4 contains a more detailed account of my previous activities.

5 **Q: WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**  
6 **PROCEEDING?**

7 A: The purpose of my testimony is to determine the appropriate return on common  
8 equity and overall cost of capital to use in this proceeding. I also have comments  
9 on various aspects of Mr. Moul's testimony.

10 **Q: HAVE YOU PREPARED ANY EXHIBITS TO ACCOMPANY YOUR**  
11 **TESTIMONY?**

12 A: Yes, I have prepared Exhibits DSH-1 through DSH-18. A brief description of  
13 each exhibit follows:

14 DSH-1 – Habr Vita.

15 DSH-2 thru 4 – DCF costs based on analyst's forecasts only.

16 DSH-5 thru 7 – DCF costs including GDP growth, FERC method.

17 DSH-8 thru 10 – DCF costs including GDP growth, 2-Stage DCF.

18 DSH-11 – Historical Risk Premium.

19 DSH-12 thru 13 – CAPM results.

20 DSH-14 thru 15 – CAPM/Risk Premium results.

1 **Q: WHAT RECOMMENDATIONS CONCERNING THE COST OF CAPITAL**  
2 **ARE YOU PROPOSING?**

3 A: I am accepting York Water's 3.91% embedded cost of debt, recommending a  
4 hypothetical capital structure consisting of 52% common equity and 48% long  
5 term debt be used in this proceeding and recommending that York Water be given  
6 the opportunity to earn 7.94% on its common equity. Combining York Water's  
7 3.91% embedded long-term debt with my recommended capital structure and  
8 7.94% common equity cost will provide York Water to earn an overall rate of  
9 return of 6.01%.

10 My proposed adjustments are reflected in the table below.

	<b>Ratio</b>	<b>Cost Rate</b>	<b>Weighted Cost</b>
Common Equity	52.00%	7.94%	4.13%
Long Term Debt	48.00%	3.91%	1.88%
Total	100.00%		6.01%

11  
12 The details supporting my proposed adjustments are discussed further in my  
13 testimony.

1 **Q: HOW DO YOUR RECOMMENDATIONS COMPARE TO COMPANY**  
2 **WITNESS MOUL’S RECOMMENDATIONS?**

3 A: Mr. Moul proposes a return on equity of 11.00% and a management performance  
4 adder of 0.25%, for a total return on equity of 11.25%<sup>1</sup> Mr. Moul’s  
5 recommendation is based on his analysis of the Capital Asset Pricing Model  
6 (CAPM), Discounted Cash Flow (DCF) Model, and other models. A summary of  
7 Mr. Moul’s positions are shown in figure below.<sup>2</sup>

	<b>Ratios</b>	<b>Cost Rate</b>	<b>Weighted Cost Rate</b>
Long-Term Debt	45.23%	3.91%	1.77%
Common Equity	54.77%	11.25%	6.16%
Total	100.00%		7.93%

8

9 **Q: WHY DO YOU DISAGREE WITH MR. MOUL’S ANALYSIS?**

10 A: I outline my full DCF and CAPM analysis below to show why my inputs are more  
11 reasonable than those chosen by Mr. Moul. This is because several of Mr. Moul’s  
12 key assumptions and inputs to these models violate fundamental, widely accepted  
13 tenets in finance and valuation. I find several aspects of Mr. Moul’s approach and  
14 resulting recommendations to be problematic, including the growth rates used in  
15 his DCF models and his inflated estimate for the equity risk premium used in his

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<sup>1</sup> Moul, St. No. 107, at 6-7.

<sup>2</sup> Moul, St. No. 107, at 2.

1 CAPM analysis. In addition, Mr. Moul adds a leverage adjustment to the results  
2 of his models, which inappropriately inflate the results. The Commission has  
3 previously rejected Mr. Moul's proposed leverage adjustment.<sup>3</sup> Finally, Mr. Moul  
4 inappropriately adds a premium to his cost of equity estimate for management  
5 performance, which further inflates a figure that is already overestimated.

6 Regarding capital structure, Mr. Moul proposes a 45.23% long-term debt  
7 ratio when the Company had long-term debt ratios of 46% in 2020 and 49% in  
8 2021.<sup>4</sup> The Company's proposed capital structure should be rejected for several  
9 reasons as discussed more fully below.

10 I recommend that the Commission should also consider the burden on  
11 consumers if the Commission increased the ROE and implemented the Company's  
12 proposed capital structure and management performance bonus. As expressed in  
13 OCA witness Mark Garrett's testimony (OCA Statement 1), under my proposed  
14 52% equity, the proposed water revenues would be decreased by \$1,171,648 for  
15 water and \$110,791 for wastewater.<sup>5</sup>

16 The inclusion of a 25-basis point increase to ROE is also not warranted for  
17 the reasons outlined by OCA Witness Barbara Alexander. Removing this

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<sup>3</sup> *Pa. PUC v. PPL Elec. Util. Corp.*, Docket No. R-2012-2290597, Order at 52 (Dec. 28, 2012).

<sup>4</sup> York Water 2021 Annual Report to Shareholder, page 8.

<sup>5</sup> Mark Garrett Direct Testimony, OCA Statement 1, page 7. Assuming all else equal, a 25-basis point increase to ROE (7.93% Habr ROE + 0.25= 8.18%) would add approximately \$1,282,439 to the total water and wastewater revenue requirement. Impact on water and wastewater operations is \$689,689 and \$62,781, respectively.

1 unwarranted adder decreases York Water's overall revenue requirement by  
2 \$683,689 for water and \$62,781 for wastewater.<sup>6</sup>

3 **Q: IS A MANAGEMENT PERFORMANCE BONUS INCLUDED IN YOUR**  
4 **7.94% COMMON EQUITY COST?**

5 A: No, for the reasons set forth below in my testimony, it is not appropriate to include  
6 a management performance bonus in the cost of common equity. In addition,  
7 OCA witness Alexander (OCA Statement 5) presents evidence that the Company's  
8 performance is not "superior" as concluded by York Water witnesses Hand and  
9 Moul.<sup>7</sup>

10 **Q: WHY IS IT NECESSARY TO DETERMINE THE COST OF COMMON**  
11 **EQUITY FOR A REGULATED UTILITY COMPANY?**

12 A: Regulated prices are based on all the costs of producing utility services including  
13 borrowing costs and the money paid to common stockholders (the cost of common  
14 equity or fair profit rate) for the use of the funds they provide. All the products or  
15 services used in the production of utility services have an explicit cost associated  
16 with them, including the interest cost associated with borrowing money and the  
17 dividend rate for preferred stock. Common equity is the only resource used by a  
18 utility company that does not have a contractual or defined cost associated with it.  
19 Rather, the return available to common shareholders is the residual that remains  
20 after all of the company's financial obligations have been met.

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<sup>6</sup> Mark Garrett Direct Testimony, OCA Statement 1, page 7.

<sup>7</sup> Hand, Statement 1, page 23; Moul, Statement 107, pages 6-7.

1           The cost of common equity is an important cost for utility companies and  
2 utility customers. It determines the amount of profit the utility will be allowed to  
3 earn. Profits for the provision of utility services are regulated because the services  
4 are produced under conditions that approximate a natural monopoly, a situation  
5 where the largest firm has the lowest cost and is able to produce enough for  
6 everyone at that cost. Of course, in the absence of regulation, a monopolistic  
7 utility is also big enough to keep out competitors, charge higher prices, and earn  
8 higher profits than it would be able to if it had viable competitors for all of its  
9 services. Thus, the role of regulation is to ensure that services that are most  
10 efficiently provided under a monopolistic structure – such as the provision of  
11 water and wastewater treatment and services – are provided in a manner that can  
12 reasonably be expected in a competitive environment.

13 **Q: ARE THERE LEGAL STANDARDS REGARDING THE RATE OF**  
14 **RETURN ON EQUITY A UTILITY IS ALLOWED TO EARN?**

15 A: Yes, there are two U. S. Supreme Court cases, *Bluefield Water Works* and *Hope*  
16 *Natural Gas* that provide general guidance for establishing the return on equity. In  
17 *Bluefield* the court held, in part, that:

18           A public utility is entitled to such rates as will permit it to earn a  
19 return on the value of the property which it employs for the  
20 convenience of the public equal to that generally being made at the  
21 same time and in the same general part of the country on  
22 investments in other business undertakings which are attended by  
23 corresponding, risks and uncertainties, **but it has no constitutional**  
24 **right to profits such as are realized or anticipated in highly**  
25 **profitable enterprises or speculative ventures.** The return should  
26 be reasonably sufficient to assure confidence in the financial

1 soundness of the utility, and should be adequate, under efficient and  
2 economical management, to maintain and support its credit and  
3 enable it to raise the money necessary for the proper discharge of its  
4 public duties. **A rate of return may be reasonable at one time  
5 and become too high or too low by changes affecting  
6 opportunities for investment, the money market, and business  
7 condition generally.**<sup>8</sup>  
8

9 In *Hope*, the Court held, in part that:

10 The ratemaking process under the Act, [Federal Power Act] *i.e.*, the  
11 fixing of ‘just and reasonable’ rates, involves a balancing of the  
12 investor and consumer interests. Thus, we stated in the *Natural Gas  
13 Pipeline Co.* case that ‘regulation does not insure that the business  
14 shall produce net revenues.’ [Cite omitted.] But, such  
15 considerations aside, the investor interest has a legitimate concern  
16 with the financial integrity of the company whose rates are being  
17 regulated. From the investor or company point of view, it is  
18 important that there be enough revenue not only for operating  
19 expenses, but also for the capital costs of the business. These  
20 include service on the debt and dividends on the stock. **By that  
21 standard, the return to the equity owner should be  
22 commensurate with returns on investment in other enterprises  
23 having corresponding risks.** That return, moreover, should be  
24 sufficient to assure confidence in the financial integrity of the  
25 enterprise, so as to maintain its credit and to attract capital.<sup>9</sup>  
26

27 In both cases, the Court indicated that utilities should be allowed to earn a  
28 return close to the returns on businesses with similar risks. Two analytical  
29 methods, the discounted cash flow (DCF) model and the capital asset pricing  
30 modeling (CAPM), were developed after these decisions were written that make it  
31 possible to use financial market data to estimate the return common stockholders  
32 expect to earn on their investment in utility common stock.

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<sup>8</sup> Bluefield Waterworks & Improvement Co. v. Public Service Comm’n. Of West Virginia, 262 U.S. 679, 692-3, 43 S.Ct. 675,679 (1923) (emphasis added).

<sup>9</sup> Federal Power Comm’n. v. Hope Natural Gas Co., 320 U.S. 591, 603, 64 S. Ct. 281, 288 (1944). (Citations omitted, emphasis added.)

1 **Q: ARE YOU AWARE OF ANY STATEMENTS THE UNITED STATES**  
2 **SUPREME COURT HAS MADE CONCERNING THE IMPACT OF**  
3 **RATEMAKING ON PROPERTY VALUES?**

4 A: Yes. In the above-mentioned *Hope* case, the Supreme Court stated that:

5 **The fixing of prices, like other applications of the police power,**  
6 **may reduce the value of the property which is being regulated.**  
7 But the fact that the value is reduced does not mean that the  
8 regulation is invalid. It does, however, indicate that ‘fair value’ is  
9 the end product of the process of ratemaking, not the starting point,  
10 as the Circuit Court of Appeals held. The heart of the matter is that  
11 rates cannot be made to depend upon ‘fair value’ when the value of  
12 the going enterprise depends on earnings under whatever rates may  
13 be anticipated.<sup>10</sup>  
14

15 **Q: WHAT RELATIONSHIP DOES THIS STATEMENT HAVE TO DO WITH**  
16 **THE COST OF COMMON EQUITY FOR A UTILITY COMPANY**  
17 **DETERMINED DURING A REGULATORY PROCEEDING?**

18 A: This statement recognizes that cost of common equity determined through the  
19 regulatory process may have an impact on the value of the utility company’s  
20 property. In today’s world, this change in value would be reflected in the market  
21 value of the utility company’s common stock or, in the case of a utility holding  
22 company, the parent company’s common stock.  
23

---

<sup>10</sup> *Hope*, 320 U.S. at 601, 64 S. Ct. at 287. (Citations and footnote omitted; emphasis added.)



1 **Q: WHAT PROXY GROUP DO YOU USE IN YOUR ANALYSIS?**

2 A: Except for York Water, I have utilized Mr. Moul's proxy group.

3 **Q: WHAT IS THE PURPOSE OF A PROXY GROUP?**

4 A: The fact of the matter is that sufficient York Water information exists to estimate  
5 York Water's cost of common equity on a stand-alone basis. The proxy group in  
6 this case provides a range of individual company common equity cost rates that  
7 provide a framework for establishing the reasonableness of York Water's common  
8 equity cost.

9 **Q: WHY ISN'T YORK WATER INCLUDED IN YOUR PROXY GROUP?**

10 A: The purpose of the proxy group is to provide cost of common equity information  
11 about companies similar to York Water. Including York Water in the proxy group  
12 is effectively, in part, comparing York Water to itself and distorts the purpose of  
13 using the proxy group.

14 **Q: DOES MR. MOUL'S METHODOLOGY ALLOW THIS COMPARISON  
15 TO TAKE PLACE?**

16 A: No. Mr. Moul combines the dividend yields, growth rates, betas for all the proxy  
17 group members into group averages thus losing the individual variation of each  
18 proxy group member including York Water.

19 **Q: DID YOU ALSO CONSIDER YORK WATER IN YOUR ANALYSIS?**

20 A: Yes. I performed a complete DCF and CAPM analysis on York Water.

1 **Q: WHAT METHOD DO YOU USE TO DETERMINE THE COST OF**  
2 **COMMON EQUITY?**

3 A: I rely primarily on the DCF model. This model is straight forward and provides  
4 reliable results when the growth rate used in the model is consistent with the  
5 model's assumptions.

6 The model begins with the proposition that the market price for a share of  
7 common stock that an investor is *willing to pay under any market conditions* is  
8 equal to the present value of the stock's expected dividend (income) stream. The  
9 present value of an expected income stream is determined by discounting the  
10 stream with a rate that reflects, among other items, the investor's perception of the  
11 asset's inherent and relative riskiness compared to similar or other companies the  
12 investor may be considering. In this manner, the economic principle of  
13 opportunity cost finds expression in the DCF method.

14 In my experience, the discount rate will also tend to track general capital  
15 market conditions. That is, the discount rate, being similar to an interest rate, will  
16 tend to move up when interest rates in general rise and it will tend to move down  
17 when interest rates in general decline.

18 From the investor's point of view, *this discount rate reflects the rate of*  
19 *return the investor expects to earn on his or her investment in the asset.* For an  
20 asset like a utility company common stock that is freely traded in the market, the  
21 market price conceptually represents the present value of the expected income

1 stream for investors who are willing and able to buy that asset instead of another  
2 asset.

3 If the expected dividend growth remains unchanged, the price an investor  
4 would be willing to pay for the stock is given by equation (1). The numerator  
5 reflects a perpetual dividend stream growing at the rate “g” and the denominator  
6 reflects the cost of equity (discount rate) “k” used to determine the present value  
7 of the dividend stream. This equation only has a finite solution if “k” is greater  
8 than “g.” A value of “g” greater than “k” would imply a share price that is  
9 infinitely large.

$$10 \quad P_0 = \int_0^{\infty} \frac{D_0 e^{(g)t}}{e^{(k)t}} dt \quad (1)$$

- 11  $P_0$  = the current market price of the stock.
- 12  $D_0$  = the current indicated annual dividend.
- 13  $k$  = the cost of common equity.
- 14  $g$  = the long-term sustainable growth rate.
- 15  $e$  = the base for natural logarithms.
- 16  $t$  = time.
- 17  $dt$  = the differential of time

18 The solution to equation (1) is:

$$19 \quad P_0 = \frac{D_0}{k - g} \quad (2)$$

20 Equation (2) can be rearranged to the familiar dividend yield plus growth  
21 format used to find the implied value of  $k$  based on observed values of  $D_0$ ,  $P_0$ , and  
22  $g$ :

$$23 \quad k = \frac{D_0}{P_0} + g \quad (3)$$

1           In the constant growth version of the model, the expected growth rate is a  
2 rate that could be economically/financially sustained by the company “forever” (or  
3 infinitely from the mathematical point of view). This constant growth assumption  
4 puts an implicit upper limit on the magnitude of the dividend growth rate.

5           If the magnitude of the dividend growth rate used exceeds the magnitude of  
6 the expected long-term growth in Gross Domestic Product (GDP), the results of  
7 the model become unrealistic. A company with a perpetual, sustainable growth  
8 rate greater than the economy will eventually exceed the economy as a whole in  
9 size. That is, the company would become the economy, a quite unlikely real-  
10 world outcome. For this reason, one must be very careful when using analysts’  
11 growth forecasts that exceed GDP growth forecasts because the use of these  
12 forecasts results in an overestimate of a given utility’s cost of common equity.

13           The forecasts reported by Yahoo and Zack’s are 5-year forecasts while  
14 *Value Line*’s forecasts are 3- to 5-year forecasts. By definition, they do not match  
15 the time horizon contemplated in the constant growth version of the DCF model  
16 and may or may not reflect a company’s sustainable long-term growth rate.

17 **Q: IS THERE ANY WAY THE DCF MODEL CAN BE MODIFIED TO TAKE**  
18 **INTO ACCOUNT THE FACT THAT AN INDIVIDUAL COMPANY**  
19 **CANNOT GROW FASTER THAN THE ECONOMY AS A WHOLE IN**  
20 **PERPETUITY?**

21 **A:** Yes. A weighted average of the analysts’ growth forecasts and the long-term GDP  
22 growth rate forecast can be used for “g” in the standard dividend yield plus growth

1 DCF model to temper the impact of short-term growth rate forecasts that are not  
2 sustainable in the long run.

3 FERC has been using a weighted average growth rate in the DCF model in  
4 natural gas and oil pipeline cases since the mid-1990's and has adopted the same  
5 methodology in regulated utility cases. (See FERC Opinions 569 and 569-A).<sup>11</sup>  
6 FERC currently gives 80% weight to the earnings growth forecasts and 20%  
7 weight to the GDP growth forecast. This tempers the impact of unsustainably high  
8 earnings growth forecasts on DCF cost estimates. A DCF model with two growth  
9 periods or stages can also be used to estimate a weighted average growth rate.

10 **Q: WHAT DOES A DCF MODEL WITH TWO GROWTH STAGES LOOK**  
11 **LIKE?**

12 **A:** The following equation is a general version for two-stage DCF model. Basically,  
13 the constant growth version of the model shown in equation (1) is divided into two  
14 parts, a high growth initial period followed by the long-term sustainable growth  
15 period.

$$16 \quad P_0 = \int_0^a \frac{D_0 e^{(g_1)t}}{e^k} dt + \int_a^\infty \frac{D_0 e^{(g_2)t}}{e^k} dt \quad (4)$$

17 In this model,  $g_1$  is the growth rate for the first “ $a$ ” years and  $g_2$  is the sustainable  
18 growth rate for the remaining time. For analysts’ 5-year forecasts, “ $a$ ” takes a  
19 value of “5.” In my application of this model, I allowed the analysts’ forecasts to

---

<sup>11</sup> *Association of Businesses advocating Tariff Equity, et al. v. Midcontinent Independent System Operator, Inc., et al.*, 169 FERC ¶ 61,129 and 171 FERC ¶ 61,154 respectively.

1 continue for 20 years (“a” = 20) to make sure the analysts’ forecasts had time to  
2 run their course. To obtain the average growth rate estimate, it is first necessary to  
3 estimate the cost of equity.<sup>12</sup>

4 **Q: HOW IS THE TWO-STAGE GROWTH MODEL COST OF COMMON**  
5 **EQUITY CALCULATED?**

6 A: It is calculated through an iterative process using the following solution to the  
7 above equation.

$$8 \quad P_0 = D_0 \left( \frac{1}{g_1 - k} \right) (e^{(g_1 - k)a} - 1) - D_0 \left( \frac{1}{g_2 - k} \right) e^{(g_2 - k)a} \quad (5)$$

9 Different values for “k” are inserted in the righthand side of the equation until the  
10 calculated value of  $P_0$  is equal to the current observed value of the stock price.

11 **Q: HOW IS THE WEIGHTED AVERAGE GROWTH RATE FOUND ONCE**  
12 **THE COST OF COMMON EQUITY HAS BEEN ESTIMATED?**

13 A: The weighted average growth rate is found by first subtracting the dividend yield  
14 from the cost of common equity estimate. Because the resulting growth is a  
15 continuously compounded growth rate, it next needs to be converted to an  
16 annually compounded growth rate for use in the standard “dividend yield plus  
17 growth model.”

---

<sup>12</sup> It should be noted that all the growth rates in equation (4) are continuously compounding growth rates as opposed to the annually compounding growth rates reported by Yahoo!, Zack’s, and *Value Line*. Annually compounding growth rates can be converted to continuously compounding growth rates and vice versa.

1 **Q: WHAT TIME PERIOD DID YOU USE IN YOUR ANALYSIS?**

2 A: I used period May 2, 2022 through July 19, 2022. This period reflects any impact  
3 the recent Federal Reserve interest rate increases have had on York Water’s and  
4 the proxy groups common stock prices.

5 **Q: HOW DID YOU ARRIVE AT THE GDP GROWTH VALUE USED IN**  
6 **YOUR DCF ANALYSIS?**

7 A: I reviewed three growth rates, two based on forecast information in the 2022  
8 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors  
9 Insurance and Federal Disability Insurance Trust Funds (OASID Annual Trustees’  
10 Report)<sup>13</sup> and EIA’s 2022 Annual Outlook while the third is based on historical  
11 GDP growth. The growth rates are presented in Table – 1 below. The OASID and  
12 EIA growth rates are based on information released this spring prior to the Federal  
13 Reserve interest rate increases. While I do not expect that those interest rate  
14 increases would have an impact on the content of those reports, out of an  
15 abundance of caution, I chose to rely on the 5.07% GDP growth rate in my DCF  
16 analysis.

**TABLE 1 -- GDP FUTURE GROWTH RATES**

---

<b>Historical Compound GDP Growth, 1983 -- 2021</b>	5.07%
<b>OASDI Trustee's Report -- Intermediate Forecast Growth, 2028--2096</b>	4.10%
<b>EIA Annual Outlook Forecast Growth, 2028--2050</b>	4.35%
<b>Average:</b>	<b>4.51%</b>

---

<sup>13</sup> This report assesses the costs various Social Security program need. See, <https://www.ssa.gov/OACT/TR/2022/>

1 **Q: WHAT ARE THE RESULTS OF YOUR PROXY GROUP DCF**  
 2 **ANALYSIS?**

3 **A:** The overall results of my DCF are presented in Table 2 below.

**TABLE 2 -- PROXY GROUP DCF METHODS COST OF COMMON EQUITY RESULTS<sup>14</sup>**

Company	DCF			FERC 2-Step DCF			Two-Stage DCF			Individual Company Average	Individual Company Median
	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates	Yahoo! Growth Rates	Zacks Growth Rates	Value Line Growth Rates		
American States Water	6.30%		7.41%	6.43%		7.32%	6.93%		6.99%	6.90%	6.96%
American Water Works Co.	10.16%	9.93%	4.81%	9.51%	9.33%	5.22%	7.11%	7.09%	6.80%	8.14%	8.22%
Artesian Resources Corp.	6.34%			6.55%			7.34%			6.74%	6.55%
California Water Service Group	13.69%		8.44%	12.36%		8.15%	7.67%		7.08%	9.56%	8.29%
Essential Utilities, Inc.	9.25%	8.58%	12.49%	8.90%	8.37%	11.50%	7.66%	7.59%	8.13%	9.16%	8.58%
Middlesex Water Company	4.06%		5.87%	4.53%		5.98%	6.38%		6.42%	6.16%	6.18%
SJW Corporation	12.28%		16.53%	11.34%		14.75%	8.09%		9.27%	11.15%	11.34%
<b>Proxy Group Average</b>	<b>9.67%</b>	<b>9.26%</b>	<b>8.55%</b>	<b>9.18%</b>	<b>8.85%</b>	<b>8.82%</b>	<b>7.31%</b>	<b>7.34%</b>	<b>7.45%</b>		
<b>Proxy Group Median</b>	<b>9.70%</b>	<b>9.26%</b>	<b>7.92%</b>	<b>9.21%</b>	<b>8.85%</b>	<b>7.74%</b>	<b>7.34%</b>	<b>7.34%</b>	<b>7.03%</b>		

Combined Proxy Group DCF		Combined Proxy Group FERC 2-Step Growth DCF		Combined Proxy Group Two-Stage Growth DCF	
Maximum:	13.69%	Maximum:	14.75%	Maximum:	9.27%
Minimum:	5.87%	Minimum:	5.22%	Minimum:	6.38%
Median:	8.91%	Median:	8.63%	Median:	7.11%
Average:	9.23%	Average:	8.98%	Average:	7.37%

Combined DCF, FERC 2-Step, and 2-Stage Median: 7.67%

Combined DCF, FERC 2-Step, and 2-Stage Average: 8.26%

4  
 5 The common equity cost estimates clearly decline when the unsustainable analysts'  
 6 forecasts are tempered by forecast GDP growth. The DCF results based on  
 7 weighted average growth from the 2-Stage growth are the lowest even though the  
 8 analysts' forecast growth was assumed to last 20 years rather than five.

<sup>14</sup> Three extremely low and one extremely high DCF values (in red) have been eliminated from consideration.



1 **Q: DO YOU INCLUDE INDIVIDUAL PROXY GROUP COMPANY RESULTS**  
2 **IN YOUR EXHIBITS?**

3 A: Yes. The individual proxy group company results based on analysts' forecasts  
4 only are in Exhibits DSH-2 through DSH-4. The results based on the FERC  
5 weighting of analysts' forecasts and GDP growth are found in DSH-5 through  
6 DSH-7. Results based on the 2-stage growth model are found in Exhibits DSH-8  
7 through DSH-10. Each of these exhibits also includes the results for York Water.

8 **Q: HOW DO YOU INTERPRET THE RESULTS OF YOUR DCF ANALYSIS?**

9 A: Of the three DCF models, the two-stage growth model results are most reflective  
10 of the impact of stable growth over the DCF model's infinite time horizon. For  
11 example, the impact of *Value Line's* SJW Corporation's 14% earnings growth  
12 forecast that generated 16.53% DCF result is reduced enough in the two-stage  
13 growth to yield a 9.27% equity cost estimate.

14 In this case, the DCF model using only analysts' forecasts provides extreme  
15 DCF estimates<sup>15</sup>, some of which are not consistent with the model's infinite time  
16 horizon. The results, at best, can be looked at as providing a ceiling above which  
17 the allowed common equity should not go.

18 The FERC 2-step method falls in between the DCF model and the 2-stage  
19 growth model. It provides a consistent means of giving less weight to GDP  
20 growth than does the 2-stage growth model. As I see it, the FERC 2-step model

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<sup>15</sup> Two extremely low and one extremely high DCF values (in red) in the DCF category have been eliminated from consideration.

1 provides some “give” in the full impact of long-term growth demonstrated in the  
2 two-stage growth model. Both the FERC 2-step and the two-stage growth model  
3 clearly demonstrate why unsustainable analysts’ forecasts need to be restrained to  
4 obtain meaningful common equity cost estimates.

5 **Q: WHAT ARE THE RESULTS THE DCF ANALYSIS YOU CONDUCTED**  
6 **ON YORK WATER?**

7 A: York Water’s DCF results based on analysts’ forecasts are as follows:

8 Yahoo! 4.9% Growth; DCF 6.89%, FERC 6.93%, 2-Stage 7.05%.

9 Zack’s 5.0% Growth; DCF 6.99%, FERC 7.01%, 2-Stage 7.06%.<sup>16</sup>

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<sup>16</sup> The calculations that generate these results are found on exhibits DSH-2 through DSH-10.

1 **Q: DID YOU PERFORM ANY OTHER DCF ANALYSIS OF YORK WATER?**

2 A: Yes, I did. I reviewed York Water’s historical performance to see how historical  
3 earnings growth compared to the analysts’ forecasts. Specifically, I reviewed  
4 York Water’s earnings, dividend, and book value growth for the period 2003 –  
5 2021. I found earnings growth of 5.94%, dividend growth of 4.10%, and book  
6 value of 6.04%<sup>17</sup>. Using the 5.94% earnings growth in the DCF model yields a  
7 7.94% common equity cost for York water.<sup>18</sup>

8 **Q: HOW DOES THIS 7.94% COMMON EQUITY COST FIT IN WITH THE**  
9 **OVERALL RESULTS OF YOUR PROXY GROUP RESULTS?**

10 A: The 7.94% is 27 basis points above the 7.67% median of the combined DCF  
11 results and 32 basis points below the 8.26% average of the combined DCF results  
12 so the 7.94% is higher than half of the observations but lower than the average of  
13 the observations. Roughly, it is somewhere in the middle of all the observations.

14 **Q: MR. MOUL’S DCF ANALYSIS YIELDED A NOTABLY HIGHER**  
15 **RESULT. DID YOU FIND ANY PROBLEMS WITH HIS ANALYSIS?**

16 A: Yes. Mr. Moul’s DCF Model produced a cost equity result of 10.77%, which  
17 includes a “leverage adjustment” of 1.46%.<sup>19</sup> As stated earlier, the results of Mr.  
18 Moul’s DCF are overstated primarily because of a fundamental error regarding his  
19 growth rate inputs and the inappropriate “leverage adjustment” he included in both  
20 his DCF model and his Capital Asset Pricing Model (CAPM).

---

<sup>17</sup> See Habr Electronic workpapers Habr York Water Company Rate of Return, Tab York DCF.

<sup>18</sup>  $7.94\% = (1 + .5 \times 5.94) / 40.07 + 5.94$

<sup>19</sup> Moul, Statement 107, at 32.

1 **Q: WHAT COMMENTS DO YOU HAVE ABOUT HIS DISCUSSION OF THE**  
2 **GORDON, GORDON, AND GOULD ARTICLE ON PAGE 27 OF HIS**  
3 **TESTIMONY?**

4 A: Mr. Moul is trying to use this article to support the contention that analysts'  
5 earnings forecasts are the "best" earnings forecasts. After careful review of the  
6 entire article, I believe that Mr. Moul's statement at lines 2-3 that Professor  
7 Gordon "concluded that the *best* measure of growth in the DCF model is a forecast  
8 of earnings per share growth" (emphasis added) is completely incorrect. The  
9 following quote summarizes the authors' view concerning analysts' forecasts.

10 Before closing, we have three observations to make. First, the  
11 superior performance by KFRG [analysts forecasts] should come as  
12 no surprise. All four estimates of growth rely upon past data, but in  
13 the case of KFRG a larger body of past data is used, filtered through  
14 a group of security analysts who adjust for abnormalities that are not  
15 considered relevant for future growth. We assume this is done by  
16 any analyst who develops retention growth estimates of yield for a  
17 firm. *If we had done this for all seventy-five firms in our utility*  
18 *sample, it is likely that the correlations would have been as good or*  
19 *better than those obtained with the analyst forecasts of growth.*<sup>20</sup>  
20

21 Basically, the authors say two things. First, the analysts' forecasts had superior  
22 performance compared to the three other growth rates used in the study.<sup>21</sup> Second,  
23 the authors believe they can develop growth estimates that are just as good, or  
24 better than the analysts' forecasts. Hence, they were not saying the analysts'  
25 forecasts were "best" as Mr. Moul claims.

---

<sup>20</sup> Gordon, David A., Myron J. Gordon, and Lawrence I. Gould, "Choice among methods of estimating share yield," *The Journal of Portfolio Management*, Spring, 1989, pp. 54-55.

<sup>21</sup> The three other growth rates were 5-year historical earning, dividend, and book value growth. *Id.*, p. 51.

1 **Q: WHAT OTHER METHODS HAVE YOU USED TO ESTIMATE THE**  
2 **COST OF COMMON EQUITY?**

3 A: I use the CAPM and a risk premium method that is based on the CAPM as checks  
4 to my DCF analysis. The basic CAPM is represented by the equation:

5 
$$k_e = R_f + \beta_e(R_m - R_f)$$

6 where:

7  $k_e$  = company's market cost of common equity.

8  $R_f$  = risk free rate of return.

9  $R_m$  = market rate of return.

10  $\beta_e$  = the company's common stock beta.

11 The CAPM, like the DCF, is a market-based model. Beta, a measure of  
12 risk, reflects the principle that rational investors expect higher returns for incurring  
13 higher risk. The core problem with the basic CAPM is that the closest measure  
14 there is for a "true" risk free rate,<sup>22</sup> the rate on short duration T-bills, is highly  
15 influenced by Federal Reserve monetary policy and thus does not reflect a market  
16 determined risk free rate.

17 The basic risk premium model consists of a bond yield plus a risk premium,  
18 that is:

19 
$$k_e = k_b + (k_e - k_b)$$

20 The core problem with the risk premium model is obvious; the cost of  
21 common equity must be estimated somehow to come up with the risk premium to  
22 be added to the bond yield,  $k_b$ , to determine the cost of common equity. Going

---

<sup>22</sup> The "true" risk free rate has neither default risk nor interest rate risk.

1 through this process adds nothing to the information already contained in the  
2 original common equity cost estimate.

3 These two problems can be solved recognizing that it is conceptually  
4 possible to estimate bond yields using the CAPM. That is:

$$5 \quad k_b = R_f + \beta_b(R_m - R_f)$$

6 where  $k_b$  is the bond yield and  $\beta_b$  is the company's bond beta. A risk premium  
7 that can be added to the company's bond yield can now be calculated as:

$$8 \quad k_e - k_b = (\beta_e - \beta_b)(R_m - R_f)$$

9 That is, the equity risk premium to be added to the company's bond yield is  
10 equal to difference between equity and bond betas times the market risk premium.

11 The risk premium model now takes the form:

$$12 \quad k_e = k_b + (\beta_e - \beta_b)(R_m - R_f)$$

13 Thus, we have a model that combines positive aspects of the risk premium model  
14 and the CAPM. From the risk premium model, we have the observable bond  
15 yield,  $k_b$ , and, from the CAPM we have empirically estimated values for the betas  
16 and the market risk premium. Even if bond betas are not available, this model can  
17 be used to estimate maximum values for CAPM common equity costs by  
18 assigning a value of zero to the bond beta. That is what I have done in the current  
19 analysis.

1 **Q: PLEASE DESCRIBE THE INPUTS YOU USE IN YOUR CAPM**  
2 **ANALYSIS?**

3 A: I wanted to match my CAPM analysis time frame with the time frame I used in my  
4 DCF analysis. To that end, I calculated betas for the Proxy Group companies and  
5 York Water based on the New York Stock Exchange Index using daily holding  
6 period returns for the period May 2, 2022 through July 19, 2022. The calculated  
7 betas were then adjusted using *Value Line's* adjustment formula: adjusted beta =  
8  $0.35 = 0.67(\text{calculated beta})$ .

9 Likewise, the interest rates in the analysis, the one month and 30-year  
10 constant maturity treasuries along with Moody's "A" and "Baa" rated utility  
11 bonds, covered that same period. Companies with split ratings were given bond  
12 yields equal to the average of the "A" and "Baa" yields.

13 **Q: WHAT MARKET RISK PREMIUM DID YOU USE IN YOUR CAPM**  
14 **ANALYSIS?**

15 A: I used two different estimates of the market risk premium. The first, 6.98%, is a  
16 historical risk premium based on total return data for Large Capitalization Stocks  
17 and U.S. Treasury Bills found in Appendices B-1 and B-9 in the 2022 edition of  
18 the *SBBI Yearbook*. The second, 7.92%, is based on a DCF cost estimate for the  
19 S&P 500.

1 **Q: HOW IS YOUR HISTORICAL RISK PREMIUM CALCULATED?**

2 A: My historical risk premium is the average of the annual difference between annual  
3 holding period returns (continuously compounded) for Large Capitalization Stock  
4 and the annual holding period returns (continuously compounded) for U.S.  
5 Treasury Bills. For the period 1926 through 2022, that average is 6.74%, which I  
6 converted to the annual compounding equivalent, 6.98%, for use in the CAPM  
7 models. (See Exhibit DSH-12.)

8 **Q: WHY DO YOU INCLUDE AN HISTORICAL RISK PREMIUM IN YOUR**  
9 **ANALYSIS?**

10 A: Whether making a hiring decision or a decision to buy a common stock, the  
11 rational decision maker will look at past accomplishments as well as current and  
12 future potentials. Past performance provides a reality check; it tells us what the  
13 experience has been relative to the expectations for the future.

14 **Q: HOW DID YOU ARRIVE AT THE 7.92% S&P 500 RISK PREMIUM?**

15 A: The 7.92% S&P 500 risk premium was calculated by first estimating the DCF cost  
16 for S&P 500 index. The June 2022 annualized dividend paid was \$61.02 per  
17 share. Combining that dividend with average S&P 500 closing price for the May  
18 2, 2022 through July 19, 2022 period, \$3,943.06 gives a 1.62% dividend yield.

19 My S&P earnings growth rate is based on the historical S&P earnings  
20 record developed by Professor Robert Shiller of Yale University. Table 3 below  
21 shows S&P loglinear growth rates over various time periods.

22



**Table 3**  
**S&P 500 Earnings Growth; Shiller Data**

Average Growth 1871 – 2022	4.31%
Average Growth 1929 - 2022	6.18%
Average Growth 1950 – 2022	6.04%
Average Growth 1982 – 2022	6.24%
Average Growth 2002 – 2022	7.24%

1 I have used the more recent 7.24 growth to arrive at my 8.93% DCF cost  
 2 rate for the S&P 500.<sup>23</sup> I then subtracted the May 2, 2022 through July 19, 2022  
 3 average one-month constant maturity yield, 1.01%, to arrive at my 7.92% risk  
 4 premium.

5 **Q: WHAT ARE THE RESULTS OF YOUR PROXY GROUP CAPM**  
 6 **ANALYSIS?**

7 A: The overall results of my CAPM analysis are presented in Table 4 below.

**TABLE 4 -- PROXY GROUP CAPM RESULTS SUMMARIZED  
 BY ESTIMATION METHOD**

Risk Premium	CAPM/Risk Premium				CAPM			
	High	Low	Median	Avg.	High	Low	Median	Avg.
Historical	11.28%	9.12%	9.57%	9.94%	9.59%	7.08%	7.87%	8.16%
S&P 500 Index	12.15%	9.69%	10.21%	10.62%	10.45%	7.61%	8.51%	8.84%
Combined	12.15%	9.12%	9.97%	10.28%	10.45%	7.08%	8.27%	8.50%

8  
9

<sup>23</sup> 8.93% = 1.62% x (1+7.24 x 0.5) + 7.24%

1 **Q: WHAT DO THE RESULTS OF YOUR CAPM ANALYSIS SHOW?**

2 A: These results show two important points. First, as I noted earlier, the 10.28%  
3 combined average CAPM/Risk Premium is an extreme estimate of equity because  
4 bond betas have been assumed to be zero in its calculation. This suggests that Mr.  
5 Moul's 14.36% average CAPM cost of equity estimate is completely out of line  
6 for the reasons set forth below.

7 Second, the 8.50% combined average CAPM cost rate shown in Table 4  
8 above is in very close proximity to the 8.26% combined average DCF rate shown  
9 at the very bottom of my Table 2.

10 **Q: WHAT ARE THE RESULTS OF YOUR YORK CAPM ANALYSIS?**

11 A: The CAPM result using the historical risk premium is 7.10% while the CAPM  
12 result using the S&P 500 risk premium is 7.63%. Both results are at the lower end  
13 of the corresponding proxy group CAPM range and fall in the Two-Stage DCF  
14 range.

15 **Q: WHAT ARE THE RESULTS OF YOUR YORK CAPM/RISK PREMIUM**  
16 **ANALYSIS?**

17 A: The CAPM/Risk Premium result using the historical risk premium 8.80% while  
18 the CAPM/Risk Premium result using the S&P 500 risk premium is 9.33%. Both  
19 results are lower than the low end of the respective proxy group range and fall in  
20 the FERC 2-Step range.

1 **Q: MR. MOUL’S CAPM ANALYSIS YIELDS NOTABLY HIGHER RESULTS.**  
2 **DID YOU FIND SPECIFIC PROBLEMS WITH MR. MOUL’S CAPM**  
3 **ASSUMPTIONS AND INPUTS?**

4 A: Yes, I did. Mr. Moul’s estimated 14.36% CAPM cost of equity is driven by  
5 leverage and size adjustments he used in his CAPM analysis. Specifically, Mr.  
6 Moul’s leverage adjustment increased the proxy group’s average beta from 0.77 to  
7 1.01. Multiplying the 0.24 beta difference by his 10.24% risk premium yields a  
8 2.46% adder to the unadjusted proxy group 10.87%<sup>24</sup> CAPM cost of equity. His  
9 size adjustment added another 1.02% to his CAPM cost of equity.

10 **Q: WHAT IS THE REVENUE IMPACT OF ADDING 2.46% TO THE COST**  
11 **OF COMMON EQUITY IN THIS PROCEEDING?**

12 A: Mr. Garrett has informed me that the 2.46% adder would increase the water  
13 revenue requirement by \$6.727 million and the waste water revenue requirement  
14 by \$619 thousand.

15 **Q: DID MR. GARRETT INFORM YOU WHAT THE 1.02% SIZE**  
16 **ADJUSTMENT WOULD ADD TO THE REVENUE REQUIREMENT?**

17 A: Yes, he did. This adjustment adds \$2.789 million the water revenue requirement  
18 and \$257 thousand to the waste water revenue requirement.

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<sup>24</sup> 10.87% = 3.0% + 0.77 x 10.24%.

1 **Q: MR. MOUL MADE WHAT HE CALLED LEVERAGE ADJUSTMENTS**  
2 **TO HIS DCF AND CAPM COST ESTIMATES TO REFLECT THE**  
3 **DIVERGENCE BETWEEN MARKET VALUE AND BOOK VALUE**  
4 **CAPITAL STRUCTURES. HAS THIS DIVERGENCE LED YOU TO**  
5 **MAKE ANY ADJUSTMENTS TO YOUR DCF AND CAPM COSTS?**

6 A: No. Even if leverage adjustments may be relevant to studies of non-regulated  
7 industries, they are not relevant to the regulated utility industry; their use in the  
8 regulated utility industry results in double counting an existing risk.

9 **Q: WHY DO YOU SAY THEIR USE RESULTS IN DOUBLE COUNTING AN**  
10 **EXISTING RISK?**

11 A: When we talk about the market value capital structure exceeding the book value  
12 capital structure, we are really talking about situations where the market price of a  
13 share of a utility's common stock exceeds the book value per share of common  
14 stock. This divergence is the result of expected earnings exceeding the cost of  
15 common equity. The equation below which is derived from the standard DCF  
16 demonstrates this relationship.

17 
$$\frac{P}{B} = \frac{r - br}{k - br}$$

18 In this equation, “*r*” is the expected earned return, “*k*” is the cost of  
19 common equity, and “*br*” is the growth rate. For the unregulated firm, “*r*” is  
20 related to its competitive position in the markets in which it operates. For the  
21 regulated firm, “*r*” is ultimately related to the prices established by the regulatory

1 authority. Sustained earned returns that exceed the cost of common equity can be  
2 reduced or eliminated at any time through regulatory action.

3 Thus, in the regulatory arena, any divergence between the market value  
4 capital structure and the book value capital structure is ultimately related to  
5 regulatory risk. That regulatory risk is already reflected in the price investors are  
6 willing to pay for the utility's common stock. Mr. Moul's proposed adjustments  
7 would result in investors being compensated twice for the same risk and therefore  
8 must be rejected.

9 **Q: HAS THE COMMISSION REJECTED MR. MOUL'S LEVERAGE**  
10 **ADJUSTMENT IN PRIOR CASES?**

11 A. Yes.<sup>25</sup> In PPL's 2012 rate case, Mr. Moul proposed a substantially similar leverage  
12 adjustment. The Commission found that "[f]or the reasons developed by the OCA  
13 and I&E, the Company's leverage adjustment should be denied."<sup>26</sup> In Columbia's  
14 2020 base rate case and PECO Gas's 2020 base rate case, the Commission allowed  
15 ROEs based upon dividend yield and growth inputs, without leverage  
16 adjustments.<sup>27</sup> In Aqua PA's most recent base rate case, the Commission denied  
17 Aqua PA's request to include a leverage adjustment as contrary to the public  
18 interest.<sup>28</sup>

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<sup>25</sup> *Pa. PUC v. PPL Elec. Util. Corp.*, Docket No. R-2012-2290597, Order at 52 (Dec. 28, 2012).

<sup>26</sup> *Id.* at 52.

<sup>27</sup> *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket No. R-2020-3018835, Order at 141 (Feb. 19, 2021)(*Columbia 2020 Order*); *Pa. PUC v. PECO Energy Co. – Gas Div.*, Docket No. R-2020-3018929, Order at 160-161 (June 22, 2021) (*PECO Gas 2020 Order*).

<sup>28</sup> *Pa. PUC v. Aqua Pennsylvania, Inc., et al.*, Docket Nos. R-2021-3027385, R-2021-3027386, Order at 166-167 (May 16, 2022)(*Aqua 2021 Order*).

1 **Q: MR. MOUL MADE A SIZE ADJUSTMENT IN HIS CAPM ANALYSIS; DO**  
2 **YOU AGREE WITH THIS ADJUSTMENT?**

3 A: No, I do not. The 1.02% size adjustment shown on his Schedule 1, page 2 comes  
4 from Schedule 13, page 3. The 1.02% size premium is associated with a size  
5 group that has a beta of 1.12. All the firms in Mr. Moul's proxy group have Value  
6 Line betas less than one as do the vast majority of utility companies. Thus, I do  
7 not believe that the size premium scale applies to regulated utility companies.  
8 Given their less than one betas, if any value in the size applies to them, it is the -  
9 0.35% associated with the largest decile, the only group that has a beta less than  
10 one.

11 **Q: WHAT FURTHER COMMENTS DO YOU HAVE ON MR. MOUL'S**  
12 **LEVERAGE AND SIZE ADJUSTMENTS?**

13 A: I want to point out the impact of his leverage adjustment on his DCF equity cost  
14 range and his leverage and size adjustments on his CAPM range. On page 32 of  
15 Mr. Moul's testimony, he shows a 10.77% DCF cost rate. Without the leverage  
16 adjustment, his DCF cost rate would be 9.31% (=1.81% + 7.50%).

17 On that same page, he shows a 14.36% CAPM cost rate. Without his  
18 leverage and size adjustments, his CAPM cost rate would be 10.87%  
19 (=3.00%+.769 x 10.24%). Without the leverage adjustment, Mr. Moul must rely  
20 on his risk premium and comparable earnings analysis to justify his 11.00%  
21 recommended cost of common equity. As noted below, neither of those two

1 methods provides information as to the market cost of common equity for a utility  
2 company.

3 **Q: DOES MR. MOUL ALSO UTILIZE A RISK PREMIUM ANALYSIS?**

4 A: Yes. Mr. Moul describes the Risk Premium approach as follows: “the cost of  
5 equity capital is determined by corporate bond yields plus a premium to account  
6 for the fact that common equity is exposed to greater investment risk than debt  
7 capital.” The result of his Risk Premium analysis is 11.00%.<sup>29</sup>

8 **Q; WHAT COMMENTS DO YOU HAVE CONCERNING MR. MOUL’S RISK  
9 PREMIUM METHOD?**

10 A: I have reviewed Mr. Moul’s risk premium method and have found that the risk  
11 premium he uses does not reflect the difference between government bond returns  
12 and the returns on utility common stock. Rather, his equity risk premium is based  
13 on the large corporate stocks returns shown on Schedule 12, page 1 of his Exhibit  
14 No. FYII. Hence, his presentation contains no credible information about the cost  
15 of common equity for a utility company because there is no company information  
16 in his analysis.

17 **Q: DOES MR. MOUL ALSO PRESENT A COMPARABLE EARNINGS  
18 ANALYSIS?**

19 A: Yes. Mr. Moul describes the comparable earnings analysis as an estimate of “a fair  
20 rate of return on equity by comparing returns realized by non-regulated companies

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<sup>29</sup> Moul, Statement 107, at 32.

1 to returns that a public utility with similar risk characters would need to realize in  
2 order to compete for capital.”<sup>30</sup> Mr. Moul calculates a Comparable Earnings result  
3 of 12.15%.<sup>31</sup>

4 **Q: WHAT COMMENTS DO YOU HAVE CONCERNING MR. MOUL’S**  
5 **COMPARABLE EARNINGS ANALYSIS?**

6 A: Without saying it directly, Mr., Moul’s comparable earnings analysis appears to be  
7 based on the comparable earnings language in *Bluefield* and *Hope*. As an  
8 economist, I believe the comparable earnings language in *Bluefield* and *Hope* is  
9 best met using market based common equity cost estimation methods such as the  
10 DCF model. In making their purchase decisions, knowledgeable investors  
11 compare the earnings potential of all the companies they consider purchasing and  
12 reflect any important differentials in the price they are willing to pay for the  
13 company’s common stock. In other words, investors perform their own  
14 comparable earnings standard when they purchase a utility company’s common  
15 stock. Mr. Moul’s comparable earnings analysis provides no substantive  
16 information as to the proper cost of common equity to use in this proceeding. Nor,  
17 do the earned returns that Mr. Moul refers to provide any indication of what  
18 investors expect to earn on their investment in the utility company’s common  
19 stock.

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<sup>30</sup> Moul, Statement 107, at 40.

<sup>31</sup> Moul, Statement 107, at 43, Sch. 1, page 2.



1 **Q: WHAT RETURN ON COMMON EQUITY ARE YOU RECOMMENDING**  
2 **YORK WATER BE GIVEN AN OPPORTUNITY TO EARN?**

3 A: I am recommending York Water be given the opportunity to earn 7.94% on its  
4 common equity. This recommendation is based on my DCF analysis of York  
5 Water and is consistent with the results of my York Water CAPM analysis.

6 **Q: TURNING NOW TO YORK WATER'S CAPITAL STRUCTURE, WHAT**  
7 **CAPITAL STRUCTURE ARE YOU RECOMMENDING FOR USE IN**  
8 **THIS PROCEEDING?**

9 A: I am recommending hypothetical capital consisting of 52.0% common equity and  
10 48.0% long-term debt.

11 **Q: WHY ARE YOU PROPOSING A HYPOTHETICAL CAPITAL**  
12 **STRUCTURE?**

13 A: York Water's capital structure is quite fluid at this time. In April 2022 York  
14 Water issued 1,121,940 common shares with net proceeds of \$43.97 million of  
15 which \$29.32 million was used to pay down long-term debt. This resulted York  
16 Water's long-term debt ratio falling from 49.0% on 12-31-2021 to 36.8% on 6-30-  
17 2022.<sup>32</sup> Company also indicated it expects to issue additional long-term debt for its  
18 future financing needs which will allow the debt percentage to "trend upward."<sup>33</sup>  
19 In this environment, Mr. Moul is proposing a 45.23% long-term debt ratio when  
20 Company had long-term debt ratios of 46% in 2020 and 49% in 2021.<sup>34</sup>

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<sup>32</sup> York Water 2021 Annual Report to Shareholder, page 8.

<sup>33</sup> York Water 2021 Annual Report to Shareholder, page 8.

<sup>34</sup> York Water 2021 Annual Report to Shareholder, page 8.

1           There is no reason for customers to bear the burden of an equity heavy capital  
2           structure while waiting for the debt ratio to trend upward. My recommended 48%  
3           debt ratio lifts this burden. and is consistent with York Water’s year-end long-term  
4           debt ratios of 46% in 2020 and 49% in 2021.<sup>35</sup>

5   **Q:   WHAT IS THE DOLLAR VALUE OF THE IMPACT OF YOUR**  
6   **PROPOSED 48% DEBT RATIO?**

7   A:   Mr. Garrett has indicated that my proposed 48% debt ratio lowers the water  
8       revenue requirement by \$1,171,648 and the wastewater revenue requirement by  
9       \$110,791.

10 **Q:   WHAT LONG-TERM DEBT COST ARE YOU PROPOSING IN THIS**  
11 **PROCEEDING?**

12 A:   I am accepting Mr. Moul’s 3.91% long-term debt cost. As is shown in in Table 5  
13       below, combining Mr. Moul’s 3.91% long-term debt cost with my 7.94%  
14       recommended allowed return on common equity yields a 6.01% overall rate of return.

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<sup>35</sup> York Water 2021 Annual Report to Shareholder, page 8.

**TABLE 5 -- OVERALL RATE OF RETURN**

	<b>Ratio</b>	<b>Cost Rate</b>	<b>Weighted Cost</b>
Common Equity	52.00%	7.94%	4.13%
Long Term Debt	48.00%	3.91%	1.88%
Total	100.00%		6.01%

**Q: AT PAGE SEVEN, LINES 2 THROUGH 4 OF HIS TESTIMONY, MR. MOUL OPINES THAT YORK WATER SHOULD BE GIVEN A 25 BASIS POINT ADDITION TO COST OF COMMON EQUITY IN “RECOGNITION OF THE EXEMPLARY PERFORMANCE OF THE COMPANY’S MANAGEMENT.”**

**A:** For several reasons, no. First, “recognition” does not have a dollar value. In the regulatory process, customers are not required to pay for something whose value is unknown. Second, neither Mr. Moul nor any other Company witness has offered evidence as to what the value is. Third, regulated utilities are expected to operate efficiently and should not be given a reward for doing what is expected. Fourth, OCA witness Barbara Alexander has found customer service deficiencies such as declining call center performance and identification of disputes and complaints. Fifth, the allowed rate of return should reflect the cost of common equity only.

1 **Q: IS IT APPROPRIATE TO INCLUDE A MANAGEMENT PERFORMANCE**  
2 **BONUS IN YOUR 7.94% COMMON EQUITY COST?**

3 A: No. Mr. Moul inappropriately adds a premium to his cost of equity estimate for  
4 management performance, which further inflates a figure that is already  
5 overestimated for the reasons I set forth below. Such a premium is completely  
6 unrelated to York Water's cost of equity estimate.

7 **Q: HAVE YOU QUANTIFIED THE FINANCIAL IMPACT TO**  
8 **RATEPAYERS THAT MR. MOUL'S PERFORMANCE PREMIUM**  
9 **WOULD HAVE?**

10 A: Yes. As addressed in the Direct Testimony of Mark Garrett (OCA Statement 1), an  
11 increase of 0.25% to the ROE for Mr. Moul's management performance premium  
12 would increase the water and wastewater revenue requirements by \$746,560.

13 **Q: PLEASE DESCRIBE YOUR OVERALL COST OF CAPITAL**  
14 **RECOMMENDATION TO THE COMMISSION.**

15 A: I recommend the Commission reject the Company's proposed ROE and capital  
16 structure. Instead, the Commission should award York Water with a 7.94% cost of  
17 common equity. The Commission should also impute a ratemaking capital  
18 structure consisting of 52.0% common equity and 48.0% long-term debt. The  
19 Commission should reject the Company's request for a 25-basis point  
20 management performance bonus. My overall weighted average awarded return  
21 recommendation is 6.01%.

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

2 A: Yes. I reserve the right to supplement this testimony should additional  
3 information become available.

**DAVID S. HABR**

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**SUMMARY**

Ph.D. economist with over thirty five years of applied economic and financial experience in utility regulation. Has special expertise in rate of return, mergers, and asset transactions. Was instrumental in determining the methodology used in class cost of service and rate design. Solid technical background with testimony that is very clear and defensible under cross examination. Recognized by the Governor of Iowa for his knowledge and understanding of public utilities' operations and his fair and balanced judgment.

**PROFESSIONAL EXPERIENCE**

**Habr Economics . . . . . January 2009 – Present**

Habr Economics established in January 2009 after a successful career in public utility regulation. The firm specializes in rate of return, mergers, asset transactions, and general policy issues.

**Consumer Advocate Division,  
Iowa Department of Justice . . . . . November 1987 – December 2008**

**Chief, Technical Bureau . . . . . July 1989 – December 2008**

Leader of the Consumer Advocate Division's technical staff. Staff's expertise includes accounting, economics, finance, and electrical engineering. Members testify on matters ranging from the cost of capital, rate design, and transmission line location to optimal programs for demand side management. Disputed amounts have ranged from \$1 million to over \$100 million.

- Testified as an expert witness in over 45 cases on the cost of common equity, the overall cost of capital, and other economic and financial matters including utility mergers, asset acquisitions, and competitive market analysis. Testimony successfully defended under strenuous cross examination.
- Initiated studies on electric restructuring which demonstrated that electric deregulation could cost Iowa customers a minimum of \$200 million per year. These un-refuted results helped the efforts which lead to restructuring being rejected in Iowa.
- Achieved consensus in settlement negotiations, represented the Office in public forums, Public Consumer Advocate Sector representative on Midwest Independent System Operator Advisory Committee, drafted legislation, and prepared and managed the OCA's \$3 million annual budget.
- Identified and hired the professional staff needed to expand from a six to a 17 person technical staff in 1989. Staff educational level ranges from B.A.'s to Ph.D.'s. At December 31, 2008 staff's average time with the Office was 19 years.

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Head, Technical Section . . . . . November 1987 – July 1989  
Hired to establish the Consumer Advocate's initial six person technical staff and advise the Consumer Advocate and legal staff on economic matters. Staff's main goal was to provide the attorneys with technical assistance on accounting, economics, engineering, financial, and rate design matters.

- Testified as an expert witness on the cost of common equity, the overall cost of capital, and other economic or financial matters.
- Integrated the use of bond betas to develop a “risk premium” method of estimating common equity cost rates based on the Capital Asset Pricing Model.

**Utilities Division,  
Iowa Department of Commerce . . . . . September 1981 – November 1987**

Utility Specialist . . . . . September 1981 – November 1987

- Determined cost of common equity and overall cost of capital for various utility companies. Presented the analysis as written testimony and was subject to cross-examination on the testimony.
- Completed article integrating brokerage fees and flotation cost in the discounted cash flow model which was accepted for publication in the January 1988 issue of the National Regulatory Research Institute Quarterly Bulletin. Presented a paper on the use of double leverage in determining the cost of capital for utility subsidiaries of a holding company to the Economics and Finance Subcommittee at the 1987 Winter Meeting of the National Association of Regulatory Utility Commissioners.
- Refined and improved the accuracy of the computer program used to calculate the weighted cost of capital for rate case presentation.

**Private Consulting Practice . . . . . September 1980 – September 1981**

- Estimated damages in two antitrust cases; helped develop a brief in a third antitrust case.
- Testified on a telephone rate design issue before the Iowa State Commerce Commission and on alternative benefit payment methods before the Iowa Industrial Commission.

**Mitchell & Mitchell Economists, Ltd. . . . . October 1979 – August 1980**

- Organized and developed the economics group. Secured and completed contract with Northwestern Bell to develop a revenue forecasting model. Secured and completed contract with City of Des Moines to conduct a feasibility study for the Neighborhood Business Revitalization Program.

**Drake University . . . . . September 1973 – June 1979**

- Taught graduate and undergraduate courses in the economics program. Courses included Managerial Economics (M.B.A. Program), Government Regulation of Business, Public Utilities, and Transportation.
- Served on University Business Affairs Committee for four years; committee chair 1978-79. Faculty advisor, local chapter of Omicron Delta Epsilon (economics honor society) 1973-79.

**EDUCATION**

**Ph.D.** (Economics) . . . . . Washington State University

Dissertation: "The Returns to Advertising: An Analysis of the Relationship Between Advertising and Liquor Sales in the State of Washington"

**M.A.** (Economics) . . . . . University of Nebraska – Lincoln

**B.A.** (Economics) . . . . . University of Nebraska – Lincoln

**PROFESSIONAL ACTIVITIES**

**Activities and Memberships:** Developed and taught an antitrust economics class at the Drake Law School Fall 1981 and taught the macroeconomics class in the Drake M.B.A. program Spring and Fall 1987. Member of the National Association of State Utility Consumer Advocates' Economics and Finance Committee 1990 – 2008 and the NARUC Ad Hoc Committee on Diversification (1986 – 1987).



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**Regulatory Proceedings in Which Dr. Habr Has Filed Testimony**

1. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-81-40, Direct January 1982), Cost of equity issues.
2. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-82-49, Direct March 1983), Rate of Return.
3. MCI Telecommunications Corporation (Iowa State Commerce Commission Docket No. RPU-84-2, Direct 1984), Competitiveness of Long Distance Markets.
4. Northwestern Bell Telephone Company (Iowa State Commerce Commission Docket No. RPU-84-7, Direct June 1984), Rate of Return.
5. INVESTIGATION INTO COMPETITION IN COMMUNICATIONS SERVICES AND FACILITIES (Iowa State Commerce Commission Docket No. INU-84-6, October 1984), Workable Competition and Cost Allocation.
6. Peoples Natural Gas Company (Iowa State Commerce Commission Docket No. RPU-84-42, Direct December 1984), Capital Structure.
7. Union Electric Company (Iowa State Commerce Commission Docket No. RPU-85-9, Direct August 1985), Flotation Costs.
8. Iowa Public Service Company -- Gas (Iowa State Commerce Commission Docket No. RPU-85-14, Direct September 1985), Rate of Return.
9. INVESTIGATION INTO COMPETITION IN MTS, WATS, AND PL SERVICES (Iowa State Commerce Commission Docket No. INU-83-3, October 1985), Workable Competition.
10. Iowa Electric Light and Power Company – Gas (Iowa State Commerce Commission Docket No. RPU-85-31, Direct February 1986), Rate of Return.
11. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-86-7, Direct July 1986), Capital Structure.
12. Peoples Natural Gas Company, A Division of Utilicorp United, Inc. (Iowa Utilities Board Docket No. RPU-86-11, Direct September 1986), Rate of Return.
13. Great River Gas Company (Iowa Utilities Board Docket No. RPU-86-12, Direct September 1986), Rate of Return.
14. Iowa Power and Light Company – Electric (Iowa Utilities Board Docket No. RPU-87-2, Direct, June 1987, Rebuttal, October 1987), Capital Structure.

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15. Iowa Public Service Company – Gas (Iowa Utilities Board Docket No. RPU-87-3, Direct December 1987), Rate of Return.
16. Iowa Public Service Company – Electric (Iowa Utilities Board Docket No. RPU-87-6, Direct April 1988, Rebuttal August 1988), Rate of Return, Weather Normalization.
17. Iowa Southern Utilities Company and Ottumwa Water Works (Iowa Utilities Board Docket No. AEP-88-1, Direct May 1989, Rebuttal May 1989), Capacity and Energy Rates for a Small Hydro.
18. DEREGULATION OF INTERLATA INTEREXCHANGE MESSAGE TELECOMMUNICATIONS SERVICES (MTS), WIDE AREA TELECOMMUNICATIONS SERVICE (WATS), CHANNEL SERVICE (PRIVATE LINE), AND CUSTOM NETWORK SERVICE (Iowa Utilities Board Docket No. INU-88-2, September 1988), Strength of Competitive Market Forces.
19. Iowa Southern Utilities Company (Iowa Utilities Board Docket No. RPU-89-7, Direct February 1990, Rebuttal April 1990), Rate of Return.
20. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-89-9, Direct April 1990, Rebuttal May 1990), Cost of Common equity, Double Leverage.
21. Iowa Resources, Inc. and Midwest Energy Company (Iowa Utilities Board Docket No. SPU-90-5, Direct June 1990, Rebuttal June 1990), Utility Holding Company Merger.
22. Iowa Electric Light and Power Company – Gas (Iowa Utilities Board Docket No. RPU-90-7, November 1990), Cost of Common Equity, Double Leverage.
23. Iowa Southern Utilities Company – Electric (Iowa Utilities Board Docket No. RPU-90-8, Direct August 1990, Rebuttal January 1991), Rate of Return.
24. Rochester Telephone Co. et al (Iowa Utilities Board Docket No. SPU-91-3, Direct June 1991, Rebuttal June 1991), Merger Analysis.
25. Midwest Gas, a Division of Iowa Public Service Company (Iowa Utilities Board Docket No. RPU-91-5, Direct October 1995, Rebuttal of Intervenor November 1991, Rebuttal December 1991), Cost of Common Equity, Acquisition Adjustment.
26. Iowa Public Service Company – Electric (Iowa Utilities Board Docket No. RPU-91-6, Direct August 1991, Rebuttal January 1992), Cost of Common Equity.
27. Iowa Southern Utilities Company – Electric (Iowa Utilities Board Docket No. RPU-91-8, Direct September 1991, Rebuttal February 1992, Additional Rebuttal April 1992), Cost of Common Equity.

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28. Iowa Electric Light and Power Company – Electric (Iowa Utilities Board Docket No. RPU-91-9, Direct January 1992, Rebuttal of Intervenor February 1992, Rebuttal March 1992), Cost of Common Equity.
29. Iowa Electric Light and Power Company and Union Electric Company (Iowa Utilities Board Docket No. SPU-92-7, Direct April 1992), Asset Purchase Analysis.
30. Iowa Power, Inc. – Electric (Iowa Utilities Board Docket No. RPU-92-2, Direct June 1992, Direct June 1992, Rebuttal of Intervenor July 1992), Cost of Common Equity.
31. Peoples Natural Gas Company, A Division of UtiliCorp United, Inc. (Iowa Utilities Board Docket No. RPU-92-6, Direct August 1992), Cost of Common Equity.
32. Iowa Southern Utilities Company – Gas (Iowa Utilities Board Docket No. RPU-92-8, Direct October 1992), Cost of Common Equity.
33. Iowa Electric Light and Power Company – Gas (Iowa Utilities Board Docket No. RPU-92-9, Direct October 1992, Rebuttal of Intervenor November 1992), Cost of Common Equity.
34. ENERGY POLICY ACT OF 1992 (Iowa Utilities Board Docket No. INU-93-1, Rebuttal July 1993, Surrebuttal, July 1993), Purchase Power and the Cost of Capital, Financial Leverage Used by EWGs.
35. Interstate Power Company (Iowa Utilities Board Docket No. ECR-93-1, Direct September 1993, Rebuttal October 1993), Rate of Return for Unrecovered Energy Efficiency Expenditures, Cost of Capital for Avoided Cost Calculations.
36. Midwest Power Systems (Iowa Utilities Board Docket No. ECT-93-2, Direct November 1993, Rebuttal January 1994), Rate of Return for Unrecovered Energy Efficiency Expenditures, Appropriate Method for Determining the Annualized Recovery of the Expenditures.
37. Interstate Power Company – Electric (Iowa Utilities Board Docket No. RPU-93-6, Direct November 1993, Rebuttal January 1994), Cost of Common Equity.
38. U S West Communications, Inc. (Iowa Utilities Board Docket No. RPU-93-9, Direct August 1993, Rebuttal February 1994), Rate of Return.
39. IES Utilities, Inc. – Electric and Gas (Iowa Utilities Board Docket No. ECR-94-2, Direct October 1994), Rate of Return to Apply to Deferred Unamortized Energy Efficiency Balances.

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40. IES Utilities, Inc. – Electric (Iowa Utilities Board Docket No. RPU-94-2, Direct October 1994, Rebuttal of Intervenor, November 1994, Rebuttal December 1994, Rebuttal Related to Duane Arnold Depreciation, January 1995, Supplemental January 1995), Cost of Common Equity, Acquisition Adjustment, Economic Depreciation for Duane Arnold, Decommissioning Expenditures for Duane Arnold.
41. Midwest Gas (Iowa Utilities Board Docket No. RPU-94-3, Direct November 1994, Rebuttal of Intervenor, December 1994, Rebuttal January 1995), Cost of Common Equity.
42. Midwest Power (Iowa Utilities Board Docket No. RPU-94-4, Direct January 1995, Rebuttal of Intervenor January 1995, Rebuttal March 1995), Cost of Common Equity.
43. Iowa-Illinois Gas & Electric –Gas (Iowa Utilities Board Docket No. TF-94-640, Direct February 1995), Proper Policy for Rates That are Less Than Full Cost.
44. MidAmerican Energy Company (Iowa Utilities Board Docket No. P-831, Direct July 1995), Cost/Benefit Analysis of Proposed Pipeline.
45. Midwest Wind Developers v. Iowa Electric Light and Power Company et al; and Windustries, Inc. v. Iowa Electric Light and Power Company et. al (Iowa Utilities Board Docket No. AEP-95-1 thru 4, Direct September 1995, Rebuttal December 1995), Develop Appropriate kW and kWh rates.
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47. McLeod Telemanagement v. U S WEST Communications, Inc. (Iowa Utilities Board Docket No. FCU-96-1/FCU-96-3, Direct April 1996), Competitive Impact of Not Offering Centrex Plus to New Customers.
48. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-96-8, Direct August 1996, Rebuttal November 1996), Cost of Common Equity.
49. Lost Nation-Elwood Telephone Company (Iowa Utilities Board Docket No. TCU-96-9, Direct August 1996), Facilities Based Competition.
50. GTE Midwest Incorporated (Iowa Utilities Board Docket No. RPU-96-6, Direct September 1996), Proper Cost Recovery for intraLATA Equal Access.
51. MidAmerican Energy Company (Iowa Utilities Board Docket No. APP-96-1, Direct September 1996, Rebuttal November 1996), Causes of High Payout Ratio and Stranded Costs.

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52. South Slope Cooperative Telephone Company (Iowa Utilities Board Docket No. TCU-96-12, Direct September 1996), Facilities Based Competition.
53. IES Utilities (Iowa Utilities Board Docket No. ECR-96-3, Direct February 1997), Pretax Return for Levelized Recovery of Deferred Energy Efficiency Expenditures.
54. U S WEST Communications, Inc. (Iowa Utilities Board Docket No. RPU-96-9, Direct April 1997, Rebuttal July 1997), Rate of Return.
55. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. TF-97-229, Direct October 1997), Can Other Utility Companies be Forced to Join a Pilot Project.
56. CalEnergy Company and MidAmerican Energy Holdings Company (Iowa Utilities Board Docket No. SPU-98-8, Direct November 1998, Rebuttal December 1998), Merger Analysis.
57. MidAmerican Energy Holdings Company, MidAmerican Energy Company, Teton Formation L.L.C., and Teton Acquisition Corporation (Iowa Utilities Board Docket No. SPU-99-32, Direct January 2000), Merger Analysis.
58. Qwest Corporation (Iowa Utilities Board Docket No. TF-00-250, Direct February 2001), Price Plan Review.
59. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-01-9, Direct February 2002), Implicit Excess Return on Common Equity.
60. Interstate Power Company – Electric (Iowa Utilities Board Docket No. RPU-02-3, Direct July 2002, Rebuttal of Intervenor August 2002, Rebuttal November 2002), Cost of Common Equity, Duane Arnold Decommissioning Cost, Nature and Purpose of Test Year.
61. Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom (Iowa Utilities Board Docket No. RPU-02-4, Direct August 2002), Appropriateness of Using Forward Looking Cost Models to Establish Retail Rates.
62. Aquila, Inc. d/b/a Aquila Networks (Iowa Utilities Board Docket No. RPU-02-5, Direct September 2002, Rebuttal November 2002), Cost of Common Equity.
63. Interstate Power and Light Company – Gas (Iowa Utilities Board Docket No. RPU-02-7, Direct October 2002, Rebuttal of Intervenor November 2002, Rebuttal January 2003), Cost of Common Equity.
64. MidAmerican Energy Company – Electric (Iowa Utilities Board Docket No. RPU-02-10, Direct March 2003), Cost of Common Equity Issues.

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65. Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom (Iowa Utilities Board Docket No. SPU-04-10, Direct May 2006), Analysis of Proposed Initial Public Offering.
66. Qwest Communications Corporation (Iowa Utilities Board Docket No. TCU-03-13, Rebuttal August 2004), Appropriateness of a Telecommunications Company Competing with an Affiliate.
67. Interstate Power and Light Company and FPL Energy Duane Arnold, LLC (Iowa Utilities Board Docket No. SPU-05-15, Direct September 2005, Rebuttal October 2005), Analysis of Proposed Sale of Nuclear Power Plant.
68. Interstate Power and Light Company and ITC Midwest, LLC (Iowa Utilities Board Docket No. SPU-07-11, Direct June 2007, Rebuttal July 2007), Analysis of Proposed Sale of Electric Transmission System.
69. Interstate Power and Light Company (Iowa Utilities Board Docket No. RPU-08-1, Rebuttal October 2008, Additional Supplemental October 2008), Energy Forecast Analysis.
70. Interstate Power and Light Company (Iowa Utilities Board Docket No. RPU-2009-0002, Direct July 2009, Rebuttal September 2009), Impact of Strategic Decisions on Efficiency of Utility Operations.
71. Bangor Hydro Electric Company, Maine Public Service Company, et. al (Maine Public Utilities Commission Docket No. 2010-89, Direct June 2010, Surrebuttal August 2010), Analysis of the Impact of Proposed Merger on Retail Customers.
72. FirstEnergy Corporation and Allegheny Energy, Inc. (Maryland Public Service Commission Case No. 9233, Direct October 2010, Surrebuttal November 2010), Analysis of the Impact of Proposed Merger on Retail Customers.
73. Bangor Gas Company and Maine Public Service Company (Maine Public Utilities Commission Docket No. 2013-00443, Direct March 2014), Rate of Return.
74. Columbia Gas Maryland, Inc. (Maryland Public Service Commission Case No. 9417, Direct June 2016, Rebuttal and Surrebuttal July 2016), Rate of Return.
75. Philadelphia Gas Works (Pennsylvania Public Utility Commission Docket No. R-2017-2586783, Direct May 2017, Surrebuttal June 2017), Proper Margin for a Municipal Gas Utility.
76. The Gas Company, LLC d/b/a Hawai'i Gas (Hawaii Public Utilities Commission Docket No. 2017-0150), Direct March 2018, Rate of Return.

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77. Duquesne Light Company (Pennsylvania Public Utility Commission Docket No. R-2018-3000124), Direct June 2018, Surrebuttal July 2018, Rate of Return.
78. PECO Energy Company (Pennsylvania Public Utility Commission Docket No. R-2018-3000164), Direct June 2018, Surrebuttal July 2018, Rate of Return.
79. PJM Interconnection, L.L.C. & PECO Energy Company (Federal Energy Regulatory Commission Docket No. ER17-1519-001), Direct & Answering August 2018, Return on Equity.
80. Hawai'i Electric Light Company (Hawaii Public Utilities Commission Docket No. 2019-0368), Direct July 2019, Rate of Return.
81. Citizens' Electric Company, Wellsboro Electric Company, and Valley Energy Company (Pennsylvania Public Utility Commission Docket Nos. R-2019-3008212, R-2019-3008208, and R-2019-3008209 respectively), Direct October 2019, Surrebuttal December 2019, Rate of Return.
82. Philadelphia Gas Works (Pennsylvania Public Utility Commission Docket No. R-2020-30172060), Direct June 2020, Surrebuttal July 2020, Proper Margin for a Municipal Gas Utility.
83. Pittsburg Water and Sewer Authority (Pennsylvania Public Utility Commission Docket Nos. R-2020-3017951 and R-2020-3017970), Direct July 2020, Surrebuttal September 2020, Proper Margin for a Municipal Water and Waste Water Utility.
84. Bangor Natural Gas Company (Maine Public Utilities Commission, Docket No. 2021-00024) Direct June 2021, Surrebuttal October 2021, Rate of Return.
85. Pittsburg Water and Sewer Authority (Pennsylvania Public Utility Commission Docket Nos. R-2021-3024773, R-2021-3024774, and R-2021-3024779), Direct July 2021, Surrebuttal August 2021, Proper Margin for a Municipal Water and Waste Water Utility.

## PROXY GROUP DCF -- YAHOO GROWTH FORECASTS

Number	Company	SYM	Price	Dividend	Dividend Yield	Adjusted Dividend Yield	Yahoo (IBES) Growth	DCF Cost Rate
1	American States Water	AWR	78.65	1.46	1.86%	1.90%	4.40%	6.30%
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.86%	8.30%	10.16%
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%	2.34%	4.00%	6.34%
4	California Water Service Group	CWT	53.32	1.00	1.88%	1.99%	11.70%	13.69%
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.45%	6.80%	9.25%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%	1.36%	2.70%	<del>4.06%</del>
7	SJW Corporation	SJW	60.81	1.44	2.37%	2.48%	9.80%	12.28%
<b>IBES Average Growth</b>				<b>6.81%</b>				
						<b>Maximum:</b>		<b>13.69%</b>
						<b>Median:</b>		<b>9.70%</b>
						<b>Mean:</b>		<b>9.67%</b>
						<b>Minimum:</b>		<b>6.30%</b>
<b>York Water Company</b>		<b>YORW</b>	<b>40.07</b>	<b>0.78</b>	<b>1.95%</b>	<b>1.99%</b>	<b>4.90%</b>	<b>6.89%</b>



## PROXY GROUP DCF -- ZACKS GROWTH FORECASTS

Number	Company	SYM	Price	Dividend	Dividend	Adjusted	Zacks	DCF Cost
					Yield	Dividend		
1	American States Water	AWR	78.65	1.46	1.86%		N.A.	
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.85%	8.08%	9.93%
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%		N.A.	
4	California Water Service Group	CWT	53.32	1.00	1.88%		N.A.	
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.44%	6.14%	8.58%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%		N.A.	
7	SJW Corporation	SJW	60.81	1.44	2.37%		N.A.	
<b>Zacks Average Growth</b>				<b>7.11%</b>				
						<b>Maximum:</b>		<b>9.93%</b>
						<b>Median:</b>		<b>9.26%</b>
						<b>Mean:</b>		<b>9.26%</b>
						<b>Minimum:</b>		<b>8.58%</b>

PROXY GROUP DCF -- VALUE LINE GROWTH FORECASTS

Number	Company	SYM	Price	Dividend	Dividend Yield	Adjusted Dividend Yield	Value Line Growth	DCF Cost Rate
1	American States Water	AWR	78.65	1.46	1.86%	1.91%	5.50%	7.41%
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.81%	3.00%	<del>4.81%</del>
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%		N.A.	
4	California Water Service Group	CWT	53.32	1.00	1.88%	1.94%	6.50%	8.44%
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.49%	10.00%	12.49%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%	1.37%	4.50%	5.87%
7	SJW Corporation	SJW	60.81	1.44	2.37%	2.53%	14.00%	<del>16.53%</del>
<b>VL Average Growth</b>				<b>7.25%</b>			<b>Maximum:</b>	<b>12.49%</b>
							<b>Median:</b>	<b>7.92%</b>
							<b>Mean:</b>	<b>8.55%</b>
							<b>Minimum:</b>	<b>5.87%</b>
	<b>York Water Company</b>	<b>YORW</b>	<b>40.07</b>	<b>0.78</b>	<b>1.95%</b>	<b>1.99%</b>	<b>5.00%</b>	<b>6.99%</b>

## PROXY GROUP FERC 2-STEP DCF CALCULATION -- YAHOO GROWTH

Number	Company	SYM	Price	Dividend	Dividend Yield	Adjusted Dividend Yield	Yahoo (IBES) Growth	Long-term GDP Growth	Combined Growth	DCF Cost Rate
1	American States Water	AWR	78.65	1.46	1.86%	1.90%	4.40%	5.07%	4.53%	6.43%
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.86%	8.30%	5.07%	7.65%	9.51%
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%	2.34%	4.00%	5.07%	4.21%	6.55%
4	California Water Service Group	CWT	53.32	1.00	1.88%	1.99%	11.70%	5.07%	10.37%	12.36%
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.45%	6.80%	5.07%	6.45%	8.90%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%	1.36%	2.70%	5.07%	3.17%	4.53%
7	SJW Corporation	SJW	60.81	1.44	2.37%	2.48%	9.80%	5.07%	8.85%	11.34%

**Maximum: 12.36%**

**Median: 8.90%**

**Mean: 8.52%**

**Minimum: 6.43%**

York Water Company	YORW	40.07	0.78	1.95%	1.99%	4.90%	5.07%	4.93%	6.93%
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## PROXY GROUP FERC 2-STEP DCF CALCULATION --ZACKS GROWTH

Number	Company	SYM	Price	Dividend	Dividend Yield	Adjusted Dividend Yield	Zacks Growth	Long-term GDP Growth	Combined Growth	DCF Cost Rate
1	American States Water	AWR	78.65	1.46	1.86%		N.A.	5.07%		
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.85%	8.08%	5.07%	7.48%	9.33%
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%		N.A.	5.07%		
4	California Water Service Group	CWT	53.32	1.00	1.88%		N.A.	5.07%		
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.44%	6.14%	5.07%	5.93%	8.37%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%		N.A.	5.07%		
7	SJW Corporation	SJW	60.81	1.44	2.37%		N.A.	5.07%		

**Maximum: 9.33%**

**Median: 8.85%**

**Mean: 8.85%**

**Minimum: 8.37%**

**PROXY GROUP FERC 2-STEP DCF CALCULATION -- VALUE LINE GROWTH**

<b>Number</b>	<b>Company</b>	<b>SYM</b>	<b>Price</b>	<b>Dividend</b>	<b>Dividend Yield</b>	<b>Adjusted Dividend Yield</b>	<b>Value Line Growth</b>	<b>Long-term GDP Growth</b>	<b>Combined Growth</b>	<b>DCF Cost Rate</b>
1	American States Water	AWR	78.65	1.46	1.86%	1.91%	5.50%	5.07%	5.41%	7.32%
2	American Water Works Co.	AWK	146.97	2.62	1.78%	1.81%	3.00%	5.07%	3.41%	5.22%
3	Artesian Resources Corp.	ARTNA	47.57	1.09	2.29%		N.A.	5.07%		
4	California Water Service Group	CWT	53.32	1.00	1.88%	1.94%	6.50%	5.07%	6.21%	8.15%
5	Essential Utilities, Inc.	WTRG	45.31	1.07	2.37%	2.49%	10.00%	5.07%	9.01%	11.50%
6	Middlesex Water Company	MSEX	86.59	1.16	1.34%	1.37%	4.50%	5.07%	4.61%	5.98%
7	SJW Corporation	SJW	60.81	1.44	2.37%	2.53%	14.00%	5.07%	12.21%	14.75%

**Maximum: 14.75%**

**Median: 7.74%**

**Mean: 8.82%**

**Minimum: 5.22%**

<b>York Water Company</b>	<b>YORW</b>	<b>40.07</b>	<b>0.78</b>	<b>1.95%</b>	<b>1.99%</b>	<b>5.00%</b>	<b>5.07%</b>	<b>5.01%</b>	<b>7.01%</b>
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**PROXY GROUP DCF COST BASED ON TWO STAGE DCF WEIGHTED AVERAGE OF YAHOO! EARNINGS**

No.	Company	Price (1)	Calculated Price (2)	Annualized Dividend (3)	Dividend Yield (4)	Continuous Yahoo! Growth 1 (5)	Continuous g-GDP Growth g-2 (6)	Years in Stage One "a" (7)	Continuous Two-Stage DCF "k" (8)	Weighted	Weighted	Adjusted	Discrete DCF Cost (10) + (11)
										Average Continuous Growth (8) - (4) (9)	Average Annual Compound Growth (10)	Dividend Yield (4)x((1+.0 5)x(10)) (11)	
1	American States Water	\$78.65	\$78.65	\$1.46	1.86%	4.31%	4.94%	20	6.76%	4.91%	5.03%	1.90%	6.93%
2	American Water Works Co.	\$146.97	\$146.97	\$2.62	1.78%	7.97%	4.94%	20	6.93%	5.14%	5.28%	1.83%	7.11%
3	Artesian Resources Corp.	\$47.57	\$47.57	\$1.09	2.29%	3.92%	4.94%	20	7.16%	4.87%	4.99%	2.35%	7.34%
4	California Water Service Group	\$53.32	\$53.32	\$1.00	1.88%	11.06%	4.94%	20	7.46%	5.58%	5.74%	1.93%	7.67%
5	Essential Utilities, Inc.	\$45.31	\$45.31	\$1.07	2.37%	6.58%	4.94%	20	7.46%	5.10%	5.23%	2.43%	7.66%
6	Middlesex Water Company	\$86.59	\$86.59	\$1.16	1.34%	2.66%	4.94%	20	6.22%	4.88%	5.00%	1.37%	6.38%
7	SJW Corporation	\$60.81	\$60.81	\$1.44	2.37%	9.35%	4.94%	20	7.87%	5.51%	5.66%	2.43%	8.09%

**Maximum: 8.09%**

**Median: 7.34%**

**Mean: 7.31%**

**Minimum: 6.38%**

<b>York Water Company</b>	<b>\$40.07</b>	<b>\$40.07</b>	<b>\$0.78</b>	<b>1.95%</b>	<b>4.78%</b>	<b>4.94%</b>	<b>20</b>	<b>6.88%</b>	<b>4.93%</b>	<b>5.05%</b>	<b>1.99%</b>	<b>7.05%</b>
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## PROXY GROUP DCF COST BASED ON TWO STAGE DCF WEIGHTED AVERAGE OF ZACKS EARNINGS

No.	Company	Price (1)	Calculated Price (2)	Annualized Dividend (3)	Dividend Yield (4)	Continuous Zacks Growth g-1 (5)	Continuous GDP Growth g-2 (6)	Years in Stage One "a" (7)	Continuous Two-Stage DCF "k" (8)	Weighted	Weighted	Adjusted	Discrete DCF Cost (10) + (11)
										Average Growth (8) - (4) (9)	Average Compound Growth (10) (11)	Dividend Yield (4)x((1+0.05)x(10)) (11)	
1	American States Water	\$78.65	#VALUE!	\$1.46	1.86%	N.A.	4.94%	20	7.18%	5.32%	5.47%	1.91%	
2	American Water Works Co.	\$146.97	\$146.97	\$2.62	1.78%	7.77%	4.94%	20	6.91%	5.13%	5.26%	1.83%	7.09%
3	Artesian Resources Corp.	\$47.57	#VALUE!	\$1.09	2.29%	N.A.	4.94%	20	8.07%	5.77%	5.94%	2.36%	
4	California Water Service Group	\$53.32	#VALUE!	\$1.00	1.88%	N.A.	4.94%	20	8.14%	6.26%	6.47%	1.94%	
5	Essential Utilities, Inc.	\$45.31	\$45.31	\$1.07	2.37%	5.96%	4.94%	20	7.40%	5.03%	5.16%	2.43%	7.59%
6	Middlesex Water Company	\$86.59	#VALUE!	\$1.16	1.34%	N.A.	4.94%	20	6.37%	5.03%	5.16%	1.37%	
7	SJW Corporation	\$60.81	#VALUE!	\$1.44	2.37%	N.A.	4.94%	20	8.59%	6.23%	6.42%	2.44%	

Maximum: 7.59%

Median: 7.34%

Mean: 7.34%

Minimum: 7.09%

**PROXY GROUP DCF COST BASED ON TWO STAGE DCF WEIGHTED AVERAGE OF VALUE LINE**

No.	Company	Price (1)	Calculated Price (2)	Annualized Dividend (3)	Dividend Yield (4)	Continuous Value Line Growth 1 (5)	Continuous g-GDP Growth g-2 (6)	Years in Stage One "a" (7)	Continuous Two-Stage DCF "k" (8)	Weighted	Weighted	Adjusted	Discrete DCF Cost (10) + (11)
										Average Continuous Growth (8) - (4) (9)	Average Annual Compound Growth (10)	Dividend Yield (4)x((1+0 5)x(10)) (11)	
1	American States Water	\$78.65	\$78.65	\$1.46	1.86%	5.35%	4.94%	20	6.82%	4.96%	5.09%	1.90%	6.99%
2	American Water Works Co.	\$146.97	\$146.97	\$2.62	1.78%	2.96%	4.94%	20	6.64%	4.86%	4.97%	1.83%	6.80%
3	Artesian Resources Corp.	\$47.57		\$1.09	2.29%	N.A.	4.94%	20	7.53%	5.23%	5.37%	2.36%	
4	California Water Service Group	\$53.32	\$53.32	\$1.00	1.88%	6.30%	4.94%	20	6.90%	5.02%	5.15%	1.92%	7.08%
5	Essential Utilities, Inc.	\$45.31	\$45.31	\$1.07	2.37%	9.53%	4.94%	20	7.91%	5.54%	5.70%	2.43%	8.13%
6	Middlesex Water Company	\$86.59	\$86.59	\$1.16	1.34%	4.40%	4.94%	20	6.26%	4.92%	5.05%	1.37%	6.42%
7	SJW Corporation	\$60.81	\$60.81	\$1.44	2.37%	13.10%	4.94%	20	8.97%	6.60%	6.82%	2.45%	9.27%

**Maximum: 9.27%**  
**Median: 7.03%**  
**Mean: 7.45%**  
**Minimum: 6.42%**

<b>York Water Company</b>	<b>\$40.07</b>	<b>\$40.07</b>	<b>\$0.78</b>	<b>1.95%</b>	<b>4.88%</b>	<b>4.94%</b>	<b>20</b>	<b>6.88%</b>	<b>4.94%</b>	<b>5.06%</b>	<b>1.99%</b>	<b>7.06%</b>
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<u>Year</u>	<u>Common Stock Total Return Index For Year Ended</u>	<u>Discrete Common Stock Annual Return</u>	<u>Continuous Common Stock Annual Return</u>	<u>T-Bill Total Return Index For Year Ended</u>	<u>Discrete T-Bill Annual Return</u>	<u>Continuous T-Bill Annual Return</u>	<u>T-Bill Realized Discrete Risk Premium</u>	<u>T-Bill Realized Continuous Risk Premium</u>
1925	1.000			1.000				
1926	1.116	11.600%	10.975%	1.033	3.300%	3.247%	8.300%	7.728%
1927	1.535	37.545%	31.878%	1.065	3.098%	3.051%	34.447%	28.827%
1928	2.204	43.583%	36.174%	1.103	3.568%	3.506%	40.015%	32.668%
1929	2.018	-8.439%	-8.817%	1.155	4.714%	4.607%	-13.154%	-13.423%
1930	1.516	-24.876%	-28.603%	1.183	2.424%	2.395%	-27.300%	-30.998%
1931	0.859	-43.338%	-56.806%	1.196	1.099%	1.093%	-44.437%	-57.899%
1932	0.789	-8.149%	-8.500%	1.207	0.920%	0.916%	-9.069%	-9.416%
1933	1.214	53.866%	43.091%	1.211	0.331%	0.331%	53.534%	42.760%
1934	1.197	-1.400%	-1.410%	1.213	0.165%	0.165%	-1.565%	-1.575%
1935	1.767	47.619%	38.946%	1.215	0.165%	0.165%	47.454%	38.782%
1936	2.367	33.956%	29.234%	1.217	0.165%	0.164%	33.791%	29.070%
1937	1.538	-35.023%	-43.114%	1.221	0.329%	0.328%	-35.352%	-43.442%
1938	2.016	31.079%	27.063%	1.221	0.000%	0.000%	31.079%	27.063%
1939	2.008	-0.397%	-0.398%	1.221	0.000%	0.000%	-0.397%	-0.398%
1940	1.812	-9.761%	-10.271%	1.221	0.000%	0.000%	-9.761%	-10.271%
1941	1.602	-11.589%	-12.318%	1.222	0.082%	0.082%	-11.671%	-12.400%
1942	1.927	20.287%	18.471%	1.225	0.245%	0.245%	20.042%	18.226%
1943	2.427	25.947%	23.069%	1.229	0.327%	0.326%	25.621%	22.743%
1944	2.906	19.736%	18.012%	1.233	0.325%	0.325%	19.411%	17.687%
1945	3.965	36.442%	31.073%	1.237	0.324%	0.324%	36.117%	30.749%
1946	3.645	-8.071%	-8.415%	1.242	0.404%	0.403%	-8.475%	-8.818%
1947	3.853	5.706%	5.550%	1.248	0.483%	0.482%	5.223%	5.068%
1948	4.065	5.502%	5.356%	1.258	0.801%	0.798%	4.701%	4.558%
1949	4.829	18.795%	17.223%	1.272	1.113%	1.107%	17.682%	16.116%
1950	6.360	31.704%	27.539%	1.287	1.179%	1.172%	30.525%	26.367%
1951	7.888	24.025%	21.531%	1.306	1.476%	1.466%	22.549%	20.066%
1952	9.336	18.357%	16.854%	1.328	1.685%	1.671%	16.672%	15.183%
1953	9.244	-0.985%	-0.990%	1.352	1.807%	1.791%	-2.793%	-2.781%
1954	14.108	52.618%	42.277%	1.364	0.888%	0.884%	51.730%	41.393%
1955	18.561	31.564%	27.432%	1.385	1.540%	1.528%	30.024%	25.904%
1956	19.778	6.557%	6.351%	1.419	2.455%	2.425%	4.102%	3.926%
1957	17.646	-10.780%	-11.406%	1.464	3.171%	3.122%	-13.951%	-14.528%
1958	25.298	43.364%	36.022%	1.486	1.503%	1.492%	41.861%	34.530%
1959	28.322	11.954%	11.291%	1.530	2.961%	2.918%	8.993%	8.373%
1960	28.455	0.470%	0.469%	1.571	2.680%	2.644%	-2.210%	-2.176%
1961	36.106	26.888%	23.814%	1.604	2.101%	2.079%	24.787%	21.735%

<u>Year</u>	<u>Common Stock Total Return Index For Year Ended</u>	<u>Discrete Common Stock Annual Return</u>	<u>Continuous Common Stock Annual Return</u>	<u>T-Bill Total Return Index For Year Ended</u>	<u>Discrete T-Bill Annual Return</u>	<u>Continuous T-Bill Annual Return</u>	<u>T-Bill Realized Discrete Risk Premium</u>	<u>T-Bill Realized Continuous Risk Premium</u>
1962	32.954	-8.730%	-9.135%	1.648	2.743%	2.706%	-11.473%	-11.841%
1963	40.469	22.805%	20.542%	1.700	3.155%	3.107%	19.649%	17.436%
1964	47.139	16.482%	15.256%	1.760	3.529%	3.469%	12.952%	11.788%
1965	53.008	12.450%	11.734%	1.829	3.920%	3.846%	8.530%	7.889%
1966	47.674	-10.063%	-10.606%	1.916	4.757%	4.647%	-14.819%	-15.253%
1967	59.104	23.975%	21.491%	1.997	4.228%	4.141%	19.748%	17.351%
1968	65.642	11.062%	10.492%	2.101	5.208%	5.077%	5.854%	5.415%
1969	60.059	-8.505%	-8.889%	2.239	6.568%	6.362%	-15.074%	-15.250%
1970	62.375	3.856%	3.784%	2.385	6.521%	6.317%	-2.665%	-2.533%
1971	71.295	14.301%	13.366%	2.490	4.403%	4.308%	9.898%	9.058%
1972	84.838	18.996%	17.392%	2.585	3.815%	3.744%	15.180%	13.647%
1973	72.376	-14.689%	-15.887%	2.764	6.925%	6.695%	-21.614%	-22.582%
1974	53.220	-26.467%	-30.744%	2.986	8.032%	7.726%	-34.499%	-38.470%
1975	73.033	37.228%	31.648%	3.159	5.794%	5.632%	31.435%	26.016%
1976	90.508	23.928%	21.453%	3.319	5.065%	4.941%	18.863%	16.512%
1977	84.029	-7.158%	-7.428%	3.489	5.122%	4.995%	-12.281%	-12.423%
1978	89.551	6.572%	6.365%	3.740	7.194%	6.947%	-0.622%	-0.582%
1979	106.216	18.610%	17.067%	4.128	10.374%	9.871%	8.235%	7.196%
1980	140.741	32.505%	28.145%	4.592	11.240%	10.652%	21.264%	17.492%
1981	133.812	-4.923%	-5.049%	5.267	14.699%	13.715%	-19.623%	-18.763%
1982	162.643	21.546%	19.512%	5.822	10.537%	10.018%	11.009%	9.494%
1983	199.328	22.556%	20.339%	6.335	8.811%	8.445%	13.744%	11.895%
1984	211.833	6.274%	6.085%	6.959	9.850%	9.395%	-3.576%	-3.310%
1985	279.041	31.727%	27.556%	7.496	7.717%	7.433%	24.010%	20.123%
1986	330.124	18.307%	16.811%	7.958	6.163%	5.981%	12.143%	10.830%
1987	348.511	5.570%	5.420%	8.393	5.466%	5.322%	0.104%	0.098%
1988	406.392	16.608%	15.365%	9.926	6.351%	6.157%	10.258%	9.208%
1989	535.162	31.686%	27.525%	9.673	8.369%	8.037%	23.317%	19.488%
1990	518.549	-3.104%	-3.153%	10.429	7.816%	7.525%	-10.920%	-10.679%
1991	676.529	30.466%	26.594%	11.012	5.590%	5.440%	24.876%	21.155%
1992	728.077	7.619%	7.343%	11.398	3.505%	3.445%	4.114%	3.898%
1993	801.457	10.079%	9.602%	11.728	2.895%	2.854%	7.183%	6.748%
1994	812.040	1.320%	1.312%	12.186	3.905%	3.831%	-2.585%	-2.519%
1995	1,117.187	37.578%	31.902%	12.868	5.597%	5.446%	31.981%	26.456%
1996	1,373.695	22.960%	20.669%	13.538	5.207%	5.076%	17.753%	15.593%
1997	1,832.006	33.363%	28.791%	14.25	5.259%	5.126%	28.104%	23.665%
1998	2,355.568	28.579%	25.137%	14.942	4.856%	4.742%	23.722%	20.395%

<u>Year</u>	<u>Common Stock Total Return Index For Year Ended</u>	<u>Discrete Common Stock Annual Return</u>	<u>Continuous Common Stock Annual Return</u>	<u>T-Bill Total Return Index For Year Ended</u>	<u>Discrete T-Bill Annual Return</u>	<u>Continuous T-Bill Annual Return</u>	<u>T-Bill Realized Discrete Risk Premium</u>	<u>T-Bill Realized Continuous Risk Premium</u>
1999	2,851.215	21.042%	19.096%	15.641	4.678%	4.572%	16.363%	14.524%
2000	2,591.629	-9.104%	-9.546%	16.563	5.895%	5.728%	-14.999%	-15.273%
2001	2,283.593	-11.886%	-12.654%	17.197	3.828%	3.756%	-15.714%	-16.410%
2002	1,778.907	-22.101%	-24.975%	17.480	1.646%	1.632%	-23.746%	-26.607%
2003	2,289.178	28.685%	25.219%	17.659	1.024%	1.019%	27.660%	24.201%
2004	2,538.287	10.882%	10.330%	17.871	1.201%	1.193%	9.682%	9.136%
2005	2,662.966	4.912%	4.795%	18.403	2.977%	2.933%	1.935%	1.862%
2006	3,083.563	15.794%	14.665%	19.287	4.804%	4.692%	10.991%	9.973%
2007	3,252.973	5.494%	5.348%	20.186	4.661%	4.556%	0.833%	0.793%
2008	2,049.443	-36.998%	-46.200%	20.509	1.600%	1.587%	-38.598%	-47.788%
2009	2,591.818	26.465%	23.479%	20.529	0.098%	0.097%	26.367%	23.382%
2010	2,982.233	15.063%	14.031%	20.553	0.117%	0.117%	14.946%	13.914%
2011	3,045.211	2.112%	2.090%	20.562	0.044%	0.044%	2.068%	2.046%
2012	3,532.551	16.003%	14.845%	20.574	0.058%	0.058%	15.945%	14.787%
2013	4,676.679	32.388%	28.057%	20.579	0.024%	0.024%	32.364%	28.032%
2014	5,316.847	13.689%	12.829%	20.583	0.019%	0.019%	13.669%	12.810%
2015	5,390.422	1.384%	1.374%	20.586	0.015%	0.015%	1.369%	1.360%
2016	6,035.113	11.960%	11.297%	20.628	0.204%	0.204%	11.756%	11.093%
2017	7,352.672	21.832%	19.747%	20.792	0.795%	0.792%	21.037%	18.955%
2018	7,030.306	-4.384%	-4.483%	21.173	1.832%	1.816%	-6.217%	-6.299%
2019	9,243.896	31.486%	27.373%	21.629	2.154%	2.131%	29.333%	25.242%
2020	10,944.659	18.399%	16.889%	21.726	0.448%	0.447%	17.950%	16.441%
2021	14,086.369	28.705%	25.236%	21.735	0.041%	0.041%	28.664%	25.194%
Average 1926-- 2021:	Common Stock Return Less T-Bill Return	12.329% <u>3.304%</u>	9.951% <u>3.207%</u>		3.304%	3.207%	9.025% 19.974%	<b>6.744%</b> 19.239%
	Risk Premium	9.025%	6.744%		<b>Annual Compounding T-Bill Risk Premium:</b>		<b>6.98%</b>	

**PROXY GROUP CAPM -- S&P 500 INDEX RISK PREMIUM**

<b>Number</b>	<b>Company</b>	<b>SYM</b>	<b>Risk Free Rate 30-Yr Constant Maturity</b>	<b>Habr Beta</b>	<b>S&amp;P Index Risk Premium</b>	<b>CAPM Common Equity Cost</b>
1	American States Water	AWR	3.15%	0.637	7.92%	8.19%
2	American Water Works Co.	AWK	3.15%	0.922	7.92%	10.45%
3	Artesian Resources Corp.	ARTNA	3.15%	0.563	7.92%	7.61%
4	California Water Service Group	CWT	3.15%	0.677	7.92%	8.51%
5	Essential Utilities, Inc.	WTRG	3.15%	0.873	7.92%	10.06%
6	Middlesex Water Company	MSEX	3.15%	0.744	7.92%	9.04%
7	SJW Corporation	SJW	3.15%	0.612	7.92%	7.99%

**Maximum: 10.45%**  
**Median: 8.51%**  
**Mean: 8.84%**  
**Minimum: 7.61%**

**York Water Company**                      **YORW**      **3.15%**      **0.566**      **7.92%**      **7.63%**



**PROXY GROUP CAPM/ RISK PREMIUM -- S&P 500 INDEX RISK PREMIUM**

<b>Number</b>	<b>Company</b>	<b>SYM</b>	<b>Moody's/S &amp;P Rating</b>	<b>Utility Bond Yield</b>	<b>Habr Betas</b>	<b>S&amp;P Dividend Index Risk Premium</b>	<b>CAPM/Risk Premium Common Equity Cost</b>
1	American States Water	AWR	A2/A+	4.85%	0.637	7.92%	9.89%
2	American Water Works Co.	AWK	A3/A	4.85%	0.922	7.92%	12.15%
3	Artesian Resources Corp.	ARTNA		5.23%	0.563	7.92%	9.69%
4	California Water Service Group	CWT	A+	4.85%	0.677	7.92%	10.21%
5	Essential Utilities, Inc.	WTRG	Baa2/A	5.04%	0.873	7.92%	11.95%
6	Middlesex Water Company	MSEX	A2/A	4.85%	0.744	7.92%	10.74%
7	SJW Corporation	SJW	A-	4.85%	0.612	7.92%	9.69%
						<b>Maximum:</b>	<b>12.15%</b>
						<b>Median:</b>	<b>10.21%</b>
						<b>Mean:</b>	<b>10.62%</b>
						<b>Minimum:</b>	<b>9.69%</b>
	<b>York Water Company</b>	<b>YORW</b>	<b>A-</b>	<b>4.85%</b>	<b>0.566</b>	<b>7.92%</b>	<b>9.33%</b>

**PROXY GROUP CAPM/ RISK PREMIUM -- HISTORICAL RISK PREMIUM**

<b>Number</b>	<b>Company</b>	<b>SYM</b>	<b>Moody's/ S&amp;P Rating</b>	<b>Utility Bond Yield</b>	<b>Habr Betas</b>	<b>Historical Risk Premium</b>	<b>CAPM/Risk Premium Common Equity Cost</b>
1	American States Water	AWR	A2/A+	4.85%	0.637	6.98%	9.29%
2	American Water Works Co.	AWK	A3/A	4.85%	0.922	6.98%	11.28%
3	Artesian Resources Corp.	ARTNA		5.23%	0.563	6.98%	9.16%
4	California Water Service Group	CWT	A+	4.85%	0.677	6.98%	9.57%
5	Essential Utilities, Inc.	WTRG	Baa2/A	5.04%	0.873	6.98%	11.13%
6	Middlesex Water Company	MSEX	A2/A	4.85%	0.744	6.98%	10.04%
7	SJW Corporation	SJW	A-	4.85%	0.612	6.98%	9.12%
						<b>Maximum:</b>	<b>11.28%</b>
						<b>Median:</b>	<b>9.57%</b>
						<b>Mean:</b>	<b>9.94%</b>
						<b>Minimum:</b>	<b>9.12%</b>
	<b>York Water Company</b>	<b>YORW</b>	<b>A-</b>	<b>4.85%</b>	<b>0.566</b>	<b>6.98%</b>	<b>8.80%</b>

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, David S. Habr, hereby state that the facts set forth in my Direct Testimony, OCA Statement 3, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 19, 2022  
\*334092

Signature:



David S. Habr

Consultant Address: Habr Economics  
213 Cornuta Way  
Nipomo, CA 93444-5020



BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY	)	
COMMISSION	)	
	)	DOCKET NOS. R-2022-3031340 (WATER)
v.	)	R-2022-3032806 (WASTEWATER)
	)	
THE YORK WATER COMPANY	)	

DIRECT TESTIMONY OF  
JEROME D. MIERZWA

ON BEHALF OF THE  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

AUGUST 19, 2022

1 **I. INTRODUCTION**

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

4 A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter  
5 Associates, Inc (“Exeter”). My business address is 10480 Little Patuxent Parkway,  
6 Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-  
7 related consulting services.

8 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND  
9 EXPERIENCE.

10 A. I graduated from Canisius College in Buffalo, New York, in 1981 with a Bachelor of  
11 Science Degree in Marketing. In 1985, I received a Master’s Degree in Business  
12 Administration with a concentration in finance, also from Canisius College. In July  
13 1986, I joined National Fuel Gas Distribution Corporation (“NFG Distribution”) as a  
14 Management Trainee in the Research and Statistical Services Department (“RSS”).  
15 I was promoted to Supervisor RSS in January 1987. While employed with NFG  
16 Distribution, I conducted various financial and statistical analyses related to the  
17 Company’s market research activity and state regulatory affairs. In April 1987, as part  
18 of a corporate reorganization, I was transferred to National Fuel Gas Supply  
19 Corporation’s (“NFG Supply”) rate department where my responsibilities included  
20 utility cost of service and rate design analysis, expense and revenue requirement  
21 forecasting and activities related to federal regulation. I was also responsible for  
22 preparing NFG Supply’s Federal Energy Regulatory Commission (“FERC”) Purchase  
23 Gas Adjustment (“PGA”) filings and developing interstate pipeline and spot market  
24 supply gas price projections. These forecasts were utilized for internal planning

1 purposes as well as in NFG Distribution's Section 1307(f) purchased gas cost  
2 proceedings.

3 In April 1990, I accepted a position as a Utility Analyst with Exeter. In  
4 December 1992, I was promoted to Senior Regulatory Analyst. Effective April 1, 1996,  
5 I became a principal of Exeter. Since joining Exeter, I have specialized in utility class  
6 cost of service and rate design analysis, evaluating the gas purchasing practices and  
7 policies of natural gas utilities, sales and rate forecasting, performance-based incentive  
8 regulation, revenue requirement analysis, the unbundling of utility services, and the  
9 evaluation of customer choice natural gas transportation programs.

10 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY  
11 PROCEEDINGS ON UTILITY RATES?

12 A. Yes. I have provided testimony on approximately 400 occasions in proceedings before  
13 FERC, utility regulatory commissions in Arkansas, Delaware, Georgia, Illinois,  
14 Indiana, Louisiana, Maine, Maryland, Massachusetts, Montana, Nevada, New  
15 Hampshire, New Jersey, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas,  
16 Utah, and Virginia, as well as before the Pennsylvania Public Utility Commission  
17 ("Commission").

18 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

19 A. On May 27, 2022, The York Water Company ("York" or "the Company") filed an  
20 application to increase rates for water utility service by \$18.9 million, or 35.1%, and to  
21 increase rates for wastewater service by \$1.5 million, or 35.0%. Exeter was retained by  
22 the Pennsylvania Office of Consumer Advocate ("OCA") to review and analyze the  
23 Company's water and wastewater cost of service ("COS") studies and the rate design  
24 proposals included in York's application. My testimony addresses the Company's COS  
25 studies and rate design proposals.

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

3 A. Yes, I have. Schedules JDM-1 through JDM-3 are attached to my testimony.

4 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

- 5 • The systemwide and customer class specific base-extra capacity factors  
6 utilized in the Company's water COS study are out of date,  
7 unreasonable and should be modified;
- 8 • The water revenue increase authorized by the Commission in this  
9 proceeding should be distributed to the various customer  
10 classifications based on the OCA's COS study results;
- 11 • The monthly water service Residential customer charge for a customer  
12 with a 5/8-inch meter should remain at \$16.25 unless based on an  
13 analysis of direct customer costs, the increase authorized by the  
14 Commission is sufficient to justify a higher charge; and
- 15 • York's proposal pursuant to Section 1311(c) of the Public Utility Code  
16 to collect \$2.67 million of the costs associated with providing  
17 wastewater service through the rates for water utility service should be  
18 revised and reduced to \$2.05 million, and subsequently scaled-back to  
19 reflect the wastewater revenue requirement authorized by the  
20 Commission in this proceeding. The allocation of the wastewater  
21 costs to the various water customer classes should also be modified.

22 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

23 A. The remainder of my testimony is divided into six additional sections. The second  
24 section of my testimony describes and evaluates the Company's water COS study. The  
25 third section presents my recommended distribution of the water revenue increase  
26 authorized by the Commission in this proceeding. The next section addresses York's  
27 proposed water service Residential customer charge. The fifth section of my testimony  
28 addresses York's proposal to recover \$2.67 million of the costs associated with  
29 providing wastewater service through the rates for water utility service pursuant to  
30 Section 1311(c) of the Public Utility Code. The final section of my testimony address  
31 York's wastewater COS study, revenue allocation, and rate design proposals.

32

1 **II. WATER COST OF SERVICE STUDY**

2 Q. WHAT IS THE OBJECTIVE OF A COST OF SERVICE STUDY?

3 A. A cost of service study is conducted to assist a utility or commission in determining the  
4 level of costs properly recoverable from each of the various classes of customers to  
5 which the utility provides service. Allocation of recoverable costs to each class of  
6 service is generally based on cost causation principles.

7 Q. WHAT ARE THE PRIMARY COST OF SERVICE STUDY  
8 METHODOLOGIES UTILIZED FOR WATER UTILITIES?

9 A. The two most commonly used and widely recognized methods of allocating costs  
10 to customer classes for water utilities are the base-extra capacity method and the  
11 commodity-demand method. Both of these methods are set forth in the American Water  
12 Works Association’s (“AWWA”) Manual, M1, *Principles of Water Rates, Fees, and*  
13 *Charges* (“AWWA Manual”).

14 Q. WHAT METHODOLOGY HAS THE COMPANY UTILIZED FOR ITS  
15 WATER COST OF SERVICE STUDY?

16 A. York has utilized the base-extra capacity method in preparing its water cost of service  
17 studies. Under the base-extra capacity method, investment and costs are first classified  
18 into four primary functional cost categories: base or average capacity, extra capacity,  
19 customer, and fire protection. Once investment and costs are classified to these  
20 functional categories, they are allocated to the various customer classes. York’s water  
21 cost of service study and subsequently discussed wastewater cost of service studies are  
22 sponsored by Constance E. Heppenstall of Garnett Fleming Valuation and Rate  
23 Consultants, LLC.

1 Q. PLEASE DESCRIBE IN GREATER DETAIL THE FOUR PRIMARY  
2 FUNCTIONAL COST CATEGORIES AND HOW THEY ARE  
3 ALLOCATED TO THE VARIOUS CUSTOMER CLASSES UNDER THE  
4 BASE-EXTRA CAPACITY METHOD.

5 A. **Base or Average Costs** are costs that tend to vary with the quantity of water used, plus  
6 costs associated with supplying, treating, pumping, and distributing water to customers  
7 under average load conditions. Base costs were allocated to customer class on the basis  
8 of average daily usage in York's cost of service study.

9 **Extra Capacity Costs** are costs associated with meeting usage requirements in  
10 excess of base or average usage. This includes operating and capital costs for additional  
11 plant and system capacity beyond that required for average usage. Extra capacity costs  
12 in the Company's study have been subdivided into costs necessary to meet maximum  
13 day extra demand and maximum hour extra demand. These extra capacity costs were  
14 allocated to customer class on the basis of each class's maximum day and maximum  
15 hour usage in excess of average usage. Extra capacity costs related to fire protection  
16 service are allocated directly to the fire protection classifications.

17 **Customer Costs** are costs associated with serving customers regardless of their  
18 usage or demand characteristics. Customer costs include the operating costs related to  
19 meters and services, meter reading costs, and billing and collection costs. Customer  
20 costs were allocated on the basis of capital cost of meters and services and the number  
21 of customer bills.

22 **Fire Protection Costs** are costs associated with providing the facilities to meet  
23 the potential peak demand of fire protection service. In the Company's study, fire  
24 protection costs have been subdivided into the costs associated with meeting Public  
25 Fire Protection and Private Fire Protection demands. The extra capacity costs assigned

1 to fire protection were allocated to Public and Private Fire Protection on the basis of  
2 the total relative demands of hydrants and fire service lines. In accordance with 66 Pa.  
3 C.S. § 1328(b) of the Public Utility Code, public fire costs exceeding 25% of the public  
4 fire cost of service were reallocated to other classifications.

5 Q. WHAT CUSTOMER CLASSES HAS THE COMPANY IDENTIFIED IN  
6 ITS WATER COST OF SERVICE STUDY?

7 A. The Company has separately identified the cost of serving five customer classes in its  
8 study: Residential; Commercial; Industrial; Private Fire Protection; and Public Fire  
9 Protection. Within each of these classes a separate cost of service has been determined  
10 for the gravity and re-pumped service areas.

11 Q. DO YOU AGREE WITH THE FUNCTIONALIZATION AND  
12 ALLOCATION OF COSTS IN YORK'S WATER COST OF SERVICE  
13 STUDY?

14 A. I generally agree with York's use of the base-extra capacity methodology. However, I  
15 believe that modifications to the systemwide and customer class specific maximum day  
16 and maximum hour extra capacity factors utilized to allocate functionalized costs to the  
17 various customer classifications are necessary.

18 Q. PLEASE DESCRIBE IN GREATER DETAIL YORK'S ALLOCATION OF  
19 MAXIMUM DAY AND MAXIMUM HOUR EXTRA CAPACITY COSTS  
20 UNDER THE BASE-EXTRA CAPACITY METHOD TO THE VARIOUS  
21 CUSTOMER CLASSES.

22 A. Under the method set forth in the AWWA Manual, maximum day and maximum hour  
23 extra capacity costs are allocated to customer class based on the excess of each class's  
24 non-coincident maximum day and maximum hour demands over average day and  
25 average hour demands, respectively.

1           For example, in York’s cost of service study, the average daily demand of  
2 Residential customers in the gravity and re-pumped service areas is 84,206,000 gallons  
3 and the non-coincident maximum day demand of Residential customers is estimated to  
4 be 210,515,000 gallons (Exhibit No. FVIII, Schedule E, page 3).<sup>1</sup> Thus, the maximum  
5 day extra capacity demand of Residential customers is estimated to be 126,309,000  
6 gallons (210,515,000 minus 84,206,000) and this serves as the basis to allocate  
7 maximum day extra capacity costs to Residential customers. The maximum day extra  
8 capacity factor, which I discuss later in my testimony, is the ratio obtained by dividing  
9 maximum day extra capacity demands by average daily demands. In this instance, the  
10 maximum day extra capacity factor for Residential customers is 2.5  
11 (210,515,000/84,206,000).

12           In the Company’s water cost of service study, the average hourly demand of  
13 Residential customers in the gravity and re-pumped service areas is 3,508,600 gallons,  
14 and the non-coincident maximum hour demand of Residential customers is estimated  
15 to be 15,788,700 gallons (Exhibit No. FVIII, Schedule E, pages 7 and 9). Thus, the  
16 maximum hour extra capacity demand of Residential customers is estimated to be  
17 12,280,100 gallons (15,788,700 minus 3,508,600), and this serves as the basis for  
18 allocating maximum hour extra capacity costs to Residential customers. In this  
19 instance, the maximum hour extra capacity factor of Residential customers is 4.5  
20 (15,788,700/3,508,600).

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<sup>1</sup> Average demands of the various customer classes are based on actual meter readings and, therefore, known with relative certainty. Maximum day and maximum hour demands must be estimated because consumption meters are not read on a daily or hourly basis.



1 Q. THE BASE-EXTRA CAPACITY UTILIZES NON-COINCIDENT PEAK  
2 DEMANDS TO ALLOCATE EXTRA CAPACITY COSTS TO THE  
3 VARIOUS CUSTOMER CLASSES. IS THIS SIMPLY THE DEMANDS OF  
4 EACH CUSTOMER CLASSIFICATION AT THE TIME OF SYSTEM  
5 PEAK DAY AND PEAK HOUR DEMANDS?

6 A. No. Non-coincident peak demands represent the maximum demands of the individual  
7 customer classifications regardless of when those demands occur. Thus, the sum of  
8 each customer class's non-coincident demands will exceed the system coincident peak  
9 demand. The ratio obtained by dividing non-coincident demands by coincident  
10 demands is referred to as the system diversity ratio in the AWWA Manual.

11 Q. WHY ARE NON-COINCIDENT DEMANDS UTILIZED UNDER THE  
12 BASE-EXTRA CAPACITY METHOD?

13 A. The basis for using non-coincident maximum day and minimum hour demands is set  
14 forth in the AWWA Manual:

15 It is important that the reader understand the rationale  
16 of using the non-coincident demands in distributing  
17 the functionally allocated costs to each class. The  
18 rationale for supporting the use of non-coincident  
19 peaking factors is that the benefits of diversity in  
20 customer class consumption patterns should accrue  
21 to all classes in proportion to their use of the system,  
22 and not be allocated primarily to a particular class  
23 that happens to peak at a time different from other  
24 users of the system. The concept is illustrated  
25 through the following example: Assume that a utility  
26 was going to build a *separate system* (source of  
27 supply, treatment, pumping, transmission and  
28 distribution, etc.) for *each of the customer classes*  
29 served by the utility. These separate water systems  
30 would need to be sized to meet the base, maximum-  
31 day extra capacity, and maximum-hour extra  
32 capacity demands related to each class. The sum of  
33 those systems would compose the overall water  
34 system, and the costs associated with each of the

1 individual systems would be allocable to each class  
2 (based on their respective non-coincidental demands  
3 that were the basis for sizing the individual  
4 components of the system).

5 Assume that a concept is developed that efficiencies,  
6 economies of scale, and reduction in the overall size  
7 of the “system” could be achieved if the system is an  
8 integrated, diversified system. With this concept in  
9 mind, recognizing the diversities of demands of the  
10 various classes and using the coincidental demands  
11 of all classes to size the plant, a smaller system could  
12 be built. Total fixed capital costs and most operation  
13 and maintenance expenses, except perhaps for power  
14 and chemical costs, would be reduced in sizing the  
15 overall system facilities on the basis of the  
16 coincidental demands of all the classes of customers.

17 The question at hand is, considering that there is a  
18 smaller, more efficient, and less costly system, how  
19 should the cost savings of that system be allocated  
20 among the individual customer classes? One  
21 appropriate manner to allocate these costs, and have  
22 each customer class share equitably in the overall  
23 cost savings, is to allocate the total new, smaller  
24 system costs on the basis of the non-coincidental  
25 demands of each customer class. In this manner, all  
26 classes share proportionately in the economies of  
27 scale and cost savings of this smaller, integrated, and  
28 diverse system.

29 AWWA Manual, Appendix A, pages 374 - 375, 7<sup>th</sup>  
30 Edition (2017).

31 Q. HOW DID THE COMPANY DETERMINE THE MAXIMUM DAY AND  
32 MAXIMUM HOUR DEMANDS OF THE VARIOUS CUSTOMER CLASS  
33 REFLECTED IN ITS COST OF SERVICE STUDY?

34 A. The maximum day and maximum hour demands reflected in the Company’s water cost  
35 of service study were developed based on a combination of judgment, a customer  
36 demand study conducted on the York system during 1976 and 1977, and studies by  
37 other Pennsylvania water utilities.

1 Q. WHAT ARE YOUR CONCERNS WITH THE SYSTEMWIDE AND  
2 CUSTOMER CLASS SPECIFIC MAXIMUM DAY AND MAXIMUM  
3 HOUR DEMAND FACTORS USED IN THE COMPANY'S STUDY?

4 My concern with the systemwide and customer specific demand factors used by the  
5 Company is that they are outdated. The systemwide maximum day extra capacity factor  
6 used in York's cost of service study was experienced in 2010, and the systemwide  
7 maximum day extra capacity factor was experienced in 2006. The customer demand  
8 study conducted by York relied upon for the customer class specific demand factors is  
9 45 years old. Thus, changes in customer demands and/or mix are not reflected in the  
10 Company's systemwide and customer specific demand factors. For example, Exhibit  
11 No. FVIII. RS1-c Attachment, page 9 of the Company's filing identified the Industrial  
12 customers included in the Company's 1976 – 1977 customer demand study. Of the 19  
13 customer accounts identified there, York no longer provides water utility service to five  
14 of those locations. In the 1976 – 1977 customer demand study, of the 14 accounts still  
15 served by York, the average daily consumption of those customers was 1,649,989  
16 gallons. The average daily consumption of those 14 customers during 2021 was only  
17 321,008 gallons, a decline of over 80%. Clearly, customer demands have changed  
18 significantly since the 1976 – 1977 demand study.

19 Q. WHAT DO YOU RECOMMEND WITH RESPECT TO THE  
20 SYSTEMWIDE AND CLASS SPECIFIC CUSTOMER DEMAND  
21 FACTORS WHICH SHOULD BE USED IN THE COMPANY'S COST OF  
22 SERVICE STUDY?

23 A. Based on the maximum day and maximum hour usage ratio to average day usage ratio  
24 recently experienced by York which are presented on Exhibit No. FVIII, Schedule F, I  
25 recommend that a systemwide maximum day demand factor of 1.35 be utilized in the

1 Company's cost-of-service study, and that a maximum hour demand factor of 1.65 be  
2 utilized.

3 For customer class specific demand factors, Appendix A of the AWWA Manual  
4 presents a procedure that can be used to develop customer demand factors from system  
5 demand data and customer billing records. I recommend that this procedure be used to  
6 develop customer demand factors. This will provide for the development of customer  
7 demand factors which are based on recent data and the current usage characteristics of  
8 York's customers.

9 Q. HAVE YOU DEVELOPED CUSTOMER DEMAND FACTORS BASED  
10 ON THE PROCEDURES DESCRIBED IN THE AWWA MANUAL?

11 A. Yes. I have calculated customer demand factors using the procedures described in the  
12 AWWA Manual. These demand factors are developed on Schedule JDM-1. To develop  
13 these factors, I examined annual system demand and monthly customer billing records  
14 for the most recent three year period for which data was available and provided by  
15 York, and developed customer demand factors for each of those years. I selected to  
16 utilize the demand factors calculated for the most recent annual period (June 2021 –  
17 May 2022) because the AWWA Manual prescribes that the year with the highest ratio  
18 of system maximum day to system average day demand for a representative number of  
19 recent years should be used in the analysis. I would note that, however, the resulting  
20 customer demand factors would not vary significantly if data from any of the past three  
21 years had been utilized.

22 Q. HOW DO YOUR RECOMMENDED SYSTEMWIDE EXTRA CAPACITY  
23 FACTORS COMPARE TO THOSE USED BY YORK?

24 A. York has used a systemwide maximum day demand factor of 1.52, and a maximum  
25 hour demand factor of 1.84 in its cost of service study. I recommended that, based on

1 more recent usage characteristics of York’s customers, a maximum day demand factor  
2 of 1.35 and a maximum hour demand factor of 1.65 should be utilized.

3 Q. HOW DO THE CUSTOMER CLASS SPECIFIC DEMAND FACTORS  
4 WHICH YOU DEVELOPED BASED ON THE PROCEDURES  
5 RECOMMENDED IN THE AWWA MANUAL COMPARE TO THOSE  
6 USED BY THE COMPANY?

7 A. A comparison of the customer demand factors which I developed and those used by the  
8 Company is presented in Table 1.

<b>Table 1. Comparison of Customer Extra Capacity Demand Factors</b>				
<b>Class</b>	<b>Maximum Day</b>		<b>Maximum Hour</b>	
	<b>AWWA</b>	<b>Company</b>	<b>AWWA</b>	<b>Company</b>
Residential	1.70	2.50	2.80	4.50
Commercial	1.50	1.60	2.50	3.30
Industrial	1.45	1.50	1.95	2.70

9 Q. HAVE YOU PREPARED A WATER COST OF SERVICE STUDY THAT  
10 INCORPORATES YOUR RECOMMENDED DEMAND FACTORS?

11 A. Yes. Schedule JDM-2 presents a summary of a cost of service study incorporating my  
12 recommended systemwide and customer class specific demand factors. The study  
13 presented in Schedule JDM-2 also reflects my recommendation to reduce the  
14 wastewater revenue requirement to be recovered from water service customers by  
15 \$625,000, from \$2,670,856 to \$2,045,856, and my proposed modifications to the  
16 allocation of the wastewater revenue requirement to the various customer classes.  
17 These recommendations and modifications to the wastewater revenue requirement to  
18 be recovered from water service customers are addressed in Section V of my testimony.

1 Q. HOW DO THE RESULTS OF YOUR STUDY COMPARE WITH THE  
2 RESULTS OF THE COMPANY'S STUDY?

3 A. A comparison of the unitized rates of return<sup>2</sup> at the Company's proposed rates based  
4 on the Company's and my cost-of-service studies is presented in Table 2. I would note  
5 that the OCA unitized rates of return reflected in Table 2 are the same with and without  
6 my proposed recommendations and modifications to the assignment and allocation of  
7 a portion of the wastewater revenue requirement to water service.

<b>Table 2.</b>		
<b>Unitized Rates of Return at Proposed Rates</b>		
<b>Customer Class</b>	<b>Company</b>	<b>OCA</b>
<u>Gravity System</u>		
Residential	1.00	1.08
Commercial	1.00	0.90
Industrial	1.00	0.89
Private Fire	1.00	0.92
Public Fire	1.00	0.98
<u>Repumped System</u>		
Residential	1.00	1.08
Commercial	1.00	0.90
Industrial	1.00	0.91
Private Fire	1.00	0.91
Public Fire	1.00	0.98

8 As shown above in Table 2, at the revenue increase proposed by the Company  
9 for each class, my study indicates the Residential class would be paying more than its  
10 indicated cost of service, while the Commercial, Industrial, and Private Fire classes  
11 would be paying modestly less than their indicated cost of service. In contrast, under

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<sup>2</sup> The unitized rate of return is calculated by dividing the rate of return of a particular customer class by the Company's overall rate of return. A unitized rate of return of 1.0 would indicate that a customer class is contributing revenues equal to its cost of service. Unitized rates of return greater than 1.0 indicate that a customer class is contributing revenues in excess of its cost of service, while unitized rates of return less than 1.0 indicate that a customer class is contributing revenues insufficient to cover that class's cost of service.

1           the OCA's proposed revenue distribution discussed in the next section of my testimony  
2           has been allocated so that the unitized rate of return for each class would be 1.00.  
3

**III. WATER REVENUE DISTRIBUTION**

- 1
- 2 Q. PLEASE SUMMARIZE THE COMPANY’S PROPOSED DISTRIBUTION
- 3 OF THE RATE INCREASE IT IS REQUESTING IN THIS PROCEEDING.
- 4 A. York’s proposed distribution of the water revenue increase is presented in Table 3.

<b>Table 3.</b>				
<b>Company Proposed Distribution of Water Revenue Increase</b>				
<b>Class</b>	<b>Present Rates</b>	<b>Proposed Rates</b>	<b>Increase</b>	<b>Percent</b>
<b><u>Residential</u></b>				
Gravity	\$9,781,992	\$13,311,230	\$3,529,238	36.1%
Repumped	\$24,687,304	\$32,762,201	\$8,074,897	32.7%
<b>Total:</b>	<b>\$34,469,296</b>	<b>\$46,073,431</b>	<b>\$11,604,135</b>	<b>33.7%</b>
<b><u>Commercial</u></b>				
Gravity	\$3,610,022	\$5,264,408	\$1,654,386	45.8%
Repumped	\$6,957,041	\$9,997,650	\$3,040,609	43.7%
<b>Total:</b>	<b>\$10,567,063</b>	<b>\$15,262,058</b>	<b>\$4,694,995</b>	<b>44.4%</b>
<b><u>Industrial</u></b>				
Gravity	\$851,750	\$1,238,985	\$387,235	45.5%
Repumped	\$3,223,353	\$4,528,700	\$1,305,347	40.5%
<b>Total:</b>	<b>\$4,075,104</b>	<b>\$5,767,685</b>	<b>\$1,692,581</b>	<b>41.5%</b>
<b><u>Private Fire</u></b>				
Gravity	\$673,909	\$914,517	\$240,608	35.7%
Repumped	\$1,345,427	\$1,683,139	\$337,712	25.1%
<b>Total:</b>	<b>\$2,019,336</b>	<b>\$2,597,656</b>	<b>\$578,320</b>	<b>28.6%</b>
<b><u>Public Fire</u></b>				
Gravity	\$268,062	\$323,794	\$55,732	20.8%
Repumped	\$1,124,463	\$1,329,176	\$204,713	18.2%
<b>Total:</b>	<b>\$1,392,525</b>	<b>\$1,652,970</b>	<b>\$260,445</b>	<b>18.7%</b>
<b>Grand Total:</b>	<b>\$52,523,324</b>	<b>\$71,353,800</b>	<b>\$18,830,476</b>	<b>35.9%</b>

5



1 Q. HOW DID THE COMPANY DISTRIBUTE THE PROPOSED INCREASE  
2 TO THE VARIOUS CUSTOMER CLASSES?

3 A. York has proposed rates for each customer class equal to the indicated cost of service.

4 Q. WHAT IS YOUR PROPOSAL WITH RESPECT TO THE DISTRIBUTION  
5 OF THE WATER REVENUE INCREASE AWARDED IN THIS  
6 PROCEEDING?

7 A. I recommend that the increase authorized in this proceeding be distributed based on the  
8 cost of service indicated by my study. A distribution based on the Company's requested  
9 increase is presented in Table 4. To the extent the Commission awards York less than  
10 the amount of the revenue increase requested, rates for each class should be scaled back  
11 proportionately.

**Table 4.  
OCA Proposed Distribution of Water Revenue Increase**

<b>Class</b>	<b>Present Rates</b>	<b>Proposed Rates</b>	<b>Increase</b>	<b>Percent</b>
<b><u>Residential</u></b>				
Gravity	\$9,781,992	\$12,744,179	\$2,962,187	30.3%
Repumped	\$24,687,304	\$31,383,981	\$6,696,677	27.1%
<b>Total:</b>	<b>\$34,469,296</b>	<b>\$44,128,160</b>	<b>\$9,658,863</b>	<b>28.0%</b>
<b><u>Commercial</u></b>				
Gravity	\$3,610,022	\$5,435,061	\$1,825,039	50.6%
Repumped	\$6,957,041	\$10,358,665	\$3,401,624	48.9%
<b>Total:</b>	<b>\$10,567,063</b>	<b>\$15,793,726</b>	<b>\$5,226,663</b>	<b>49.5%</b>
<b><u>Industrial</u></b>				
Gravity	\$851,750	\$1,345,427	\$493,677	58.0%
Repumped	\$3,223,353	\$4,893,536	\$1,670,182	51.8%
<b>Total:</b>	<b>\$4,075,104</b>	<b>\$6,238,963</b>	<b>\$2,163,859</b>	<b>53.1%</b>
<b><u>Private Fire</u></b>				
Gravity	\$673,909	\$985,430	\$311,521	46.2%
Repumped	\$1,345,427	\$1,834,049	\$488,622	36.3%
<b>Total:</b>	<b>\$2,019,336</b>	<b>\$2,819,479</b>	<b>\$800,143</b>	<b>39.6%</b>
<b><u>Public Fire</u></b>				
Gravity	\$268,062	\$340,696	\$72,634	27.1%
Repumped	\$1,124,463	\$1,404,746	\$280,283	24.9%
<b>Total:</b>	<b>\$1,392,525</b>	<b>\$1,745,442</b>	<b>\$352,917</b>	<b>25.3%</b>
<b>Grand Total:</b>	<b>\$52,523,324</b>	<b>\$70,725,769</b>	<b>\$18,202,445</b>	<b>34.7%</b>

1

1 **IV. RESIDENTIAL WATER CUSTOMER CHARGE**

2 Q. WHAT IS YORK PROPOSING WITH RESPECT TO THE RESIDENTIAL  
3 CUSTOMER CHARGE FOR WATER CUSTOMERS?

4 A. York is proposing to increase the current customer charge for a Residential customer  
5 with a 5/8-inch meter from \$16.25 to \$20.71. Similar percentage increases are proposed  
6 for customers with larger meters. The \$20.71 is based on analysis of what the Company  
7 claims are direct customer costs presented in RS1-J Attachment.

8 Q. WHAT COSTS HAS YORK INCLUDED IN ITS CALCULATION OF  
9 DIRECT CUSTOMER COSTS?

10 A. York has included operation and maintenance (“O&M”) expenses, depreciation  
11 expense and the return and taxes associated with meters and services and related  
12 supplies, customer accounting O&M expenses and bad debt expense in its calculation  
13 of direct customers. The Company has also included what it claims are directly related  
14 O&M costs such as pensions and benefits.

15 Q. IS YORK’S CALCULATION OF DIRECT CUSTOMER COSTS  
16 REASONABLE?

17 A. No. Only those costs that change directly with the addition or subtraction of a customer  
18 should be included in the calculation of a customer charge. York has included bad debt  
19 expense in its calculation which is not a direct customer cost, and office building and  
20 furniture and equipment related investment costs which are also not direct customer  
21 costs. Finally, York has included the investment costs associated with its Enterprise  
22 Software which do not change with the addition or subtraction of a customer<sup>3</sup>.

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<sup>3</sup> Per the response to OCA Set IX, No. 1, Enterprise Software is the software system which manages and integrates most accounting, billing, customer service, purchasing, human resource, and operational functions of the Company within a single system.

1 Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO YORK'S  
2 MONTHLY RESIDENTIAL CUSTOMER CHARGES FOR WATER  
3 CUSTOMERS?

4 A. York claims that, based on the Company's requested increase, a cost-based customer  
5 charge would be \$20.71. As discussed above, the Company's calculation improperly  
6 includes bad debt expense, office building and furniture and equipment related  
7 investment costs, Enterprise Software investment costs, and should be reduced  
8 accordingly. Finally, at the revenue increase authorized by the Commission in this  
9 proceeding, a cost-based charge would certainly be further reduced. For example,  
10 adjusting York's overall requested pre-tax rate of return of 9.01% to reflect the OCA's  
11 recommended pre-tax return of 7.94% would further reduce the calculated customer  
12 charge. A calculation adjusting the Company's calculated direct customer charge to  
13 remove the improperly included costs, eliminate bad debt expense, and to reflect the  
14 OCA's recommended rate of return is presented on Schedule JDM-3. As shown there,  
15 these adjustments reduce the calculated charge to \$19.30. Other adjustments to York's  
16 revenue requirement claim are likely to further reduce the calculated customer charge.  
17 Therefore, I recommend that the existing \$16.25 monthly charge for Residential  
18 customers with a 5/8-inch meter be maintained, unless the increase authorized by the  
19 Commission is sufficient to justify a higher charge.

20 **V. RECOVERY OF WASTEWATER SERVICE COSTS FROM WATER SERVICE**

21 Q. PLEASE DESCRIBE YORK'S PROPOSAL IN THIS PROCEEDING WITH  
22 RESPECT TO ITS WASTEWATER OPERATIONS.

23 A. York is proposing to recover a portion of the revenue requirement associated with  
24 wastewater operations from its water operations and is proposing to allocate a portion  
25 of the wastewater revenue requirement to the water revenue requirement of Residential

1 and Commercial customers. York's proposal is pursuant to one of the amendments to  
2 the Public Utility Code made by Act 11 of 2012. York is proposing to increase rates  
3 for its average wastewater customer by 35%, or \$1.5 million. The unrecovered  
4 wastewater revenue requirement to be allocated to water utility service is \$2,670,856.  
5 Absent an allocation of any portion of the wastewater revenue requirement to water  
6 revenue requirement, rates to wastewater customers would need to be increased by  
7 approximately 100%, based on York's filed-for claim.

8 Q. ON WHAT PROVISION OF ACT 11 OF 2012 DOES YORK RELY ON TO  
9 SUPPORT ITS REQUEST TO RECOVER A PORTION OF THE  
10 WASTEWATER REVENUE REQUIREMENT THROUGH THE WATER  
11 UTILITY REVENUE REQUIREMENT?

12 A. The particular provision of Act 11 on which York relies is an amendment to Section  
13 1311 of the Public Utility Code, 66 Pa. C.S. § 1311. The Act amended subsection (c)  
14 and added a new subsection (e) of that section. The relevant portions of Section 1311  
15 now read as follows:

16 § 1311 Valuation of and return on the property of a  
17 public utility.

18 \* \* \*

19 (c) Segregation of property. When any public utility  
20 furnishes more than one of the different types of  
21 utility service, the commission shall segregate the  
22 property used and useful in furnishing each type of  
23 such service, and shall not consider the property of  
24 such public utility as a unit in determining the value  
25 of the rate base of such public utility for the purpose  
26 of fixing base rates. A utility that provides water and  
27 wastewater service shall be exempt from this  
28 subsection upon petition of a utility to combine water  
29 and wastewater revenue requirements. The  
30 commission, when setting base rates, after notice and  
31 an opportunity to be heard, may allocate a portion of

1 the wastewater revenue requirement to the combined  
2 water and wastewater customer base if in the public  
3 interest.

4 \* \* \*

5 (e) Definition. As used in this section, the term  
6 “utility that provides both water and wastewater  
7 service” shall include separate companies that  
8 individually provide water and wastewater service so  
9 long as the companies are wholly owned by a  
10 common parent company.

11 66 Pa. C.S. § 1311 (effective April 16, 2012).  
12

13 Q. DOES YORK QUALIFY AS A UTILITY THAT PROVIDES BOTH  
14 WATER AND WASTEWATER SERVICE?

15 A. Yes.

16 Q. HOW HAS YORK ALLOCATED THE WASTEWATER COSTS  
17 ASSIGNED TO WATER CUSTOMERS TO EACH OF THE CUSTOMER  
18 CLASSES INCLUDED IN THE COMPANY’S COST OF SERVICE  
19 STUDY?

20 A. York has assigned the wastewater costs to the Residential and Commercial classes  
21 based on the cost of providing water service as indicated by its water study. None of  
22 the costs have been assigned to the Industrial class. York has also not assigned any of  
23 the wastewater revenue requirement to the Private or Public Fire Protection classes. For  
24 Public Fire Protection, this is consistent with the requirement of Section 1328 of the  
25 Public Utility Code which limits Public Fire Protection charges to 25% of the indicated  
26 cost of service.

1 Q. HAS THE COMMISSION ISSUED ANY ORDERS, RULEMAKINGS,  
2 POLICY STATEMENTS OR OTHER GUIDANCE ON HOW IT SHOULD  
3 BE DETERMINED WHETHER RECOVERING A PORTION OF THE  
4 COSTS ASSOCIATED WITH PROVIDING WASTEWATER SERVICE  
5 THROUGH RATES FOR WATER SERVICE IS IN THE PUBLIC  
6 INTEREST?

7 A. Yes. In Aqua Pennsylvania, Inc. (“Aqua”) Docket No. R-2021-3027385, Aqua  
8 proposed to recover approximately 30% of its wastewater revenue requirement from  
9 water customers.<sup>4</sup> In its Order in that proceeding, the Commission found Aqua’s  
10 proposal to assign 30% of its wastewater revenue requirement to water customers not  
11 to be in the public interest.<sup>5</sup> In that proceeding, the Commission reduced the subsidy  
12 based on a proposal presented by the Bureau of Investigation and Enforcement..

13 Q. IS YORK’S PROPOSAL TO ALLOCATE A PORTION OF THE  
14 WASTEWATER REVENUE REQUIREMENT TO WATER CUSTOMERS  
15 REASONABLE, AND IS THE PROPOSED ALLOCATION TO THE  
16 WATER CUSTOMER CLASSES REASONABLE?

17 A. For the reasons subsequently discussed, I recommend that York’s proposed assignment  
18 of the wastewater revenue requirement to water customers should be modified.  
19 Wastewater service costs may only be assigned to water customers if doing so is in the  
20 public interest. If the Commission determines in this proceeding that it is appropriate  
21 to assign a portion of the wastewater revenue requirement to water customers, the  
22 Company’s proposed allocation to the various water customer classes based on the cost  
23 of water service is generally reasonable with the exception that Industrial and Public  
24 Fire Protection customers should be included in an allocation based on their indicated

---

<sup>4</sup> Order entered May 16, 2022, at 226.

<sup>5</sup> *Id.*, at 227.

1 cost of service. There is no basis to exclude Industrial and Private Fire Protection  
2 customers from such an allocation.

3 Q. PLEASE EXPLAIN WHY AND HOW YOU ARE RECOMMENDING  
4 THAT YORK'S PROPOSED ASSIGNMENT OF THE WASTEWATER  
5 REVENUE REQUIRED TO WATER SERVICE BE MODIFIED.

6 A. In this proceeding, York is proposing to increase both water and wastewater rates by  
7 35%. Under this proposal, the rates assessed to water customers will be more than  
8 sufficient to recover the indicated cost of water service, but the rates assessed to  
9 wastewater customers will be less than sufficient to recover the indicated cost of  
10 wastewater service. Therefore, a larger percentage increase is warranted for wastewater  
11 service than is warranted for water service.

12 Any shift of wastewater revenue requirement to water customers should be a  
13 fact specific inquiry and a determination of how much, if any, is in the public interest  
14 to shift should be made on a case-by-case basis. However, we also know that in Aqua  
15 Docket No. R-2021-3027385, the Commission found Aqua's proposal to assign 30%  
16 of its wastewater revenue requirement to water customers not be in the public interest  
17 and reduced the shifted revenue. In this proceeding, where York is proposing to allocate  
18 32% of its wastewater revenue requirement to water customers and the proposed shift  
19 would result in an equal increase to water and wastewater rates, the proposed subsidy  
20 is not reasonable. I recommend that the allocation of the wastewater revenue  
21 requirement assigned to water customers be reduced 25%, or \$625,000. This results in  
22 a shift of the wastewater revenue requirement to water customers of slightly less than  
23 25%, increases the recovery of the wastewater revenue requirement from wastewater  
24 customers, and continues to provide for mitigation of the rate increase which would  
25 otherwise be experienced by wastewater customers absent any revenue requirement



1 shift to water customers. The Company's proposal as well as my recommended  
 2 adjustments to that proposal are presented in Table 5.

<b>Table 5. OCA Adjustment to Company Assignment of Wastewater Revenue Requirement to Water Service</b>								
Class	Cost of Service	Revenue Requirement Assignment to Water Service			Present Revenues	Proposed Revenues	Increase	Percent
		Company	OCA Adjustment	OCA Assignment				
Residential	\$6,934,645	\$1,978,386	(\$462,957)	\$1,515,429	\$3,713,704	\$5,419,216	\$1,705,512	45.9%
Non-Residential	\$1,350,380	\$692,470	(\$162,043)	\$530,427	\$443,699	\$819,953	\$376,254	84.8%
<b>Total Sales</b>	<b>\$8,285,025</b>	<b>\$2,670,856</b>	<b>(\$625,000)</b>	<b>\$2,045,856</b>	<b>\$4,157,403</b>	<b>\$6,239,169</b>	<b>\$2,081,766</b>	<b>50.1%</b>

3 **VI. WASTEWATER COST OF SERVICE STUDIES, REVENUE ALLOCATION,**  
 4 **AND RATE DESIGN**

5 Q. HOW MANY WASTEWATER COST OF SERVICE STUDIES DID THE  
 6 COMPANY PRESENT?

7 A. York presented two wastewater studies. York prepared one study for its total  
 8 wastewater operations (Exhibit No. FVIII-WA) and prepared a separate study for its  
 9 total wastewater operations exclusive of its West Manheim acquisition (Exhibit No.  
 10 FVIII-WB). The study exclusive of West Manheim was prepared in compliance with  
 11 the Company's West Manheim acquisition Order in Docket No. A-2021-3025720.

12 Q. WHICH WASTEWATER COST OF SERVICE STUDY DOES YORK  
 13 UTILIZE TO DEVELOP ITS PROPOSED ALLOCATION OF ITS  
 14 REQUESTED REVENUE INCREASE?

15 A. York utilizes the cost of service study for its total wastewater operations inclusive of  
 16 West Manheim to develop its proposed revenue distribution.

17 Q. WHAT METHODOLOGY DID THE COMPANY UTILIZE IN  
 18 PREPARING ITS WASTEWATER COST OF SERVICE STUDIES?

19 A. Ms. Heppenstall used the functional cost allocation methodology described in  
 20 *Financing and Charges for Wastewater Systems; Manual of Practice No. 27* published

1 by the Water Environment Federation (“Manual of Practice No. 27”). This method  
2 allocates the cost of providing wastewater service to customer classifications in  
3 proportion to each classification’s use of the service provider’s facilities and services.  
4 Costs are assigned to cost components using predominant operational purposes as cost-  
5 causative factors. The functional cost allocation method is generally accepted as a  
6 sound method for allocating the cost of wastewater service.

7 Q. PLEASE IDENTIFY THE CUSTOMER CLASSES INCLUDED IN YORK'S  
8 WASTEWATER STUDIES.

9 A. Each wastewater cost of service study includes two customer classes: Residential and  
10 Non-Residential.

11 Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE  
12 WASTEWATER COST OF SERVICE STUDIES PREPARED BY YORK?

13 A. I am not recommending any adjustments directly to the Company’s wastewater studies.  
14 However, as previously explained, I am proposing to modify the Company’s proposal  
15 to recover 32% of its wastewater cost of service, or revenue requirement, from water  
16 service customers.

17 Q. OTHER THAN REDUCING THE WASTEWATER REVENUE  
18 REQUIREMENT ASSIGNED TO WATER SERVICE, ARE YOU  
19 PROPOSING ANY CHANGES TO YORK'S PROPOSED REVENUE  
20 ALLOCATIONS?

21 A. No.

1 Q. HOW SHOULD THE WASTEWATER RATES PROPOSED BY YORK BE  
2 ADJUSTED TO REFLECT YOUR PROPOSED REVENUE  
3 ALLOCATION?

A. I recommend that the rates proposed by York for each class be proportionately increased to reflect the reduction in the wastewater revenue requirement assigned to water customers.

4 Q. IF THE COMMISSION AUTHORIZES A TOTAL WASTEWATER  
5 REVENUE REQUIREMENT THAT IS LESS THAN THE \$8.3 MILLION  
6 REVENUE REQUIREMENT REQUESTED BY YORK, HOW SHOULD  
7 THAT REDUCTION BE ALLOCATED AND REFLECTED IN THE  
8 DESIGN OF RATES?

9 A. If the Commission authorizes a total wastewater revenue requirement that is less than  
10 the revenue requirement requested by York, I recommend that the reduction first be  
11 applied to proportionately reduce by class the wastewater revenue requirement  
12 assigned to water customers, and only if there is an amount remaining should it then be  
13 proportionately applied to reduce the wastewater revenue requirement not assigned to  
14 water customers. I also recommend that the rates proposed by York be proportionately  
15 scaled back to reflect the final revenue requirement of each class.

16 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

17 A. Yes, it does; however, I reserve the right to update this testimony as may be necessary.

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITIES COMMISSION**

<b>PENNSYLVANIA PUBLIC UTILITY</b>	)	
<b>COMMISSION</b>	)	
	)	<b>DOCKET NOS. R-2022-3031340 (WATER)</b>
<b>v.</b>	)	<b>R-2022-3032806 (WASTEWATER)</b>
	)	
<b>THE YORK WATER COMPANY</b>	)	

**SCHEDULES ACCOMPANYING THE  
DIRECT TESTIMONY OF  
JEROME D. MIERZWA**

**ON BEHALF OF THE  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

**AUGUST 19, 2022**

**THE YORK WATER COMPANY**  
**Calculation of Class Maximum Day and Maximum Hour Extra Capacity Factors**  
**Period June 2019 through May 2022**

	Period	Commercial &		
		Residential	Wholesale	Industrial
<b>MAXIMUM DAY SUMMARY</b>				
	June 2019 - May 2020	1.49	1.48	1.37
	June 2020 - May 2021	1.68	1.41	1.44
	June 2021 - May 2022	1.68	1.51	1.46
	Period Maximum Use	1.68	1.51	1.46
	Company	1.70	1.50	1.45
		2.50	1.60	1.50
<b>MAXIMUM HOUR SUMMARY</b>				
	June 2019 - May 2020	2.48	2.46	1.83
	June 2020 - May 2021	2.78	2.33	1.91
	June 2021 - May 2022	2.79	2.50	1.94
	Period Maximum Use	2.79	2.50	1.94
	Company	2.80	2.50	1.95
		4.50	3.30	2.70

**THE YORK WATER COMPANY**  
**Calculation of Class Maximum Day and Maximum Hour Extra Capacity Factors**  
**Period June 2019 through May 2020**

MONTHLY SALES	Commercial & Wholesale			Total
	Residential	Industrial	Commercial & Wholesale	
May 2020	261,683,300	68,031,400	127,355,800	457,070,500
Apr 2020	237,226,000	57,726,800	117,126,100	412,078,900
Mar 2020	228,693,100	63,144,500	139,979,400	431,817,000
Feb 2020	217,779,100	66,324,800	142,550,900	426,654,800
Jan 2020	235,422,900	70,774,600	145,234,800	451,432,300
Dec 2019	236,136,500	72,231,600	150,155,900	458,524,000
Nov 2019	231,008,900	73,693,200	152,393,000	457,095,100
Oct 2019	241,863,700	77,834,400	157,976,400	477,674,500
Sep 2019	259,746,600	80,468,800	182,246,300	522,461,700
Aug 2019	256,464,900	83,409,800	180,210,700	520,085,400
Jul 2019	247,439,200	81,831,900	169,011,600	498,282,700
Jun 2019	251,510,400	76,921,500	164,254,100	492,686,000
<b>Total</b>	<b>2,904,974,600</b>	<b>872,393,300</b>	<b>1,828,495,000</b>	<b>5,605,862,900</b>

**MAXIMUM DAY EXTRA CAPACITY FACTOR**

Annual Daily Average	7,958,835	5,009,575	2,390,119	15,358,528		
Maximum Month	May	261,683,300	September	August	83,409,800	527,339,400
Average Day Maximum Month	May	8,441,397	September	August	2,690,639	17,206,912
Maximum Month/Average Day Factor		1.06			1.13	

System Maximum Month	September	522,461,700	September	17,415,390	24%	23,002,361
System Average Day in Maximum Month			30			24,000,000
Non-Revenue Producing Water Adjustment						1.04
Adjusted Average Day in Maximum Month						1.04
Actual Maximum Day						1.17
System Maximum Day/Maximum Month Day Ratio						1.48

**Weekly Usage Adjustment**

Calculated Maximum Day Extra Capacity Factor	1.49	1.48	1.37
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**MAXIMUM HOUR EXTRA CAPACITY FACTOR**

Estimated Maximum Hour to Maximum Day Ratio	1.66	1.66	1.33
Calculated Maximum Hour Extra Capacity Factor	2.48	2.46	1.83

**THE YORK WATER COMPANY**  
**Calculation of Class Maximum Day and Maximum Hour Extra Capacity Factors**  
**Period June 2020 through May 2021**

MONTHLY SALES	Commercial & Wholesale			Industrial	Total
	Residential	Wholesale	Industrial		
May 2021	255,454,800	165,411,400	76,810,200	497,676,400	
Apr 2021	255,728,400	161,570,600	78,117,100	495,416,100	
Mar 2021	223,128,000	138,281,500	64,457,700	425,867,200	
Feb 2021	247,390,900	148,249,200	71,293,600	466,933,700	
Jan 2021	241,150,100	130,302,000	70,012,200	441,464,300	
Dec 2020	244,371,600	138,449,001	65,698,300	448,518,901	
Nov 2020	242,755,200	147,925,100	72,738,200	463,418,500	
Oct 2020	246,084,800	155,675,900	75,150,600	476,911,300	
Sep 2020	251,931,400	158,809,900	69,495,300	480,236,600	
Aug 2020	277,482,800	169,408,400	82,462,000	529,353,200	
Jul 2020	288,922,400	174,956,400	86,312,400	550,191,200	
Jun 2020	290,835,000	154,244,200	77,648,600	522,727,800	
<b>Total</b>	<b>3,065,235,400</b>	<b>1,843,283,601</b>	<b>890,196,200</b>	<b>5,798,715,201</b>	

**MAXIMUM DAY EXTRA CAPACITY FACTOR**

Annual Daily Average	8,397,905	5,050,092	2,438,894	15,886,891			
Maximum Month	June	290,835,000	July	174,956,400	July	86,312,400	552,103,800
Average Day Maximum Month	June	9,694,500	July	5,643,755	July	2,784,271	18,122,526
Maximum Month/Average Day Factor		1.15		1.12		1.14	

System Maximum Month	July	550,191,200	July	17,748,103	23%	23,002,700	24,730,000
System Average Day in Maximum Month							
Non-Revenue Producing Water Adjustment							
Adjusted Average Day in Maximum Month							
Actual Maximum Day							
System Maximum Day/Maximum Month Day Ratio		1.08		1.08		1.08	

Weekly Usage Adjustment

Weekly Usage Adjustment	1.35	1.17	1.17	
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Calculated Maximum Day Extra Capacity Factor

Calculated Maximum Day Extra Capacity Factor	1.68	1.41	1.44	
--	------	------	------	--

**MAXIMUM HOUR EXTRA CAPACITY FACTOR**

Estimated Maximum Hour to Maximum Day Ratio	1.66	1.66	1.66	1.33
Calculated Maximum HourDay Extra Capacity Factor	2.78	2.33	2.33	1.91

**THE YORK WATER COMPANY**  
**Calculation of Class Maximum Day and Maximum Hour Extra Capacity Factors**  
**Period June 2021 through May 2022**

MONTHLY SALES	Residential		Commercial & Wholesale		Industrial	Total
May 2022	234,287,604	155,431,400	75,726,200	465,445,204		
Apr 2022	248,006,200	164,664,800	76,620,000	489,291,000		
Mar 2022	236,058,320	155,787,689	72,340,300	464,186,309		
Feb 2022	227,646,958	145,024,100	66,906,000	439,577,058		
Jan 2022	245,606,222	145,217,911	69,778,100	460,602,233		
Dec 2021	252,801,700	164,009,200	78,074,600	494,885,500		
Nov 2021	237,187,000	154,527,000	73,135,100	464,849,100		
Oct 2021	249,876,200	169,562,900	84,177,000	503,616,100		
Sep 2021	235,057,700	157,315,900	73,910,100	466,283,700		
Aug 2021	277,729,400	186,786,400	84,551,300	549,067,100		
Jul 2021	269,508,400	176,836,000	85,959,100	532,303,500		
Jun 2021	261,777,400	162,089,000	77,344,601	501,211,001		
<b>Total</b>	<b>2,975,543,104</b>	<b>1,937,252,300</b>	<b>918,522,401</b>	<b>5,831,317,805</b>		

**MAXIMUM DAY EXTRA CAPACITY FACTOR**

Annual Daily Average	8,152,173	5,307,541	2,516,500	15,976,213			
Maximum Month	August	277,729,400	August	186,786,400	July	85,959,100	550,474,900
Average Day Maximum Month	August	8,959,013	August	6,025,368	July	2,772,874	17,757,255
Maximum Month/Average Day Factor	1.10	1.14	1.10				

System Maximum Month	August	549,067,100	17,711,842	21%
System Average Day in Maximum Month				
Non-Revenue Producing Water Adjustment				
Adjusted Average Day in Maximum Month				
Actual Maximum Day				
System Maximum Day/Maximum Month Day Ratio	1.13	1.13	1.13	1.13

Weekly Usage Adjustment	1.35	1.17	1.17	
<b>Calculated Maximum Day Extra Capacity Factor</b>	<b>1.68</b>	<b>1.51</b>	<b>1.46</b>	

**MAXIMUM HOUR EXTRA CAPACITY FACTOR**

Estimated Maximum Hour to Maximum Day Ratio	1.66	1.66	1.33	
<b>Calculated Maximum Hour Extra Capacity Factor</b>	<b>2.79</b>	<b>2.50</b>	<b>1.94</b>	



**THE YORK WATER COMPANY  
WATER OPERATIONS  
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION  
UNDER PROPOSED RATES**

Item (1)	Cost of Service (2)	Gravity System					Repumping System					
		Residential (3)	Commercial (4)	Industrial (5)	Fire Protection		Residential (8)	Commercial (9)	Industrial (10)	Fire Protection		
					Private (6)	Public (7)				Private (11)	Public (12)	
1. Revenues From Sales	\$70,728,799	\$13,115,410	\$5,189,388	\$1,278,888	\$943,743	\$323,794	\$9,856,339	\$4,673,835	\$1,737,534	\$1,329,176		
2. Other Revenues	1,142,025	194,144	83,025	20,899	15,874	22,612	155,201	77,201	29,578	93,418		
3. Total Operating Revenues	71,870,824	13,309,554	5,272,413	1,299,787	959,618	346,406	10,011,540	4,751,036	1,767,113	1,422,594		
4. Less: Operating Expenses	40,280,974	8,484,101	3,243,590	769,271	476,906	(505,423)	5,810,083	2,566,720	795,878	(2,103,122)		
5. Return And Income Taxes (Ln 3 - Ln 4)	31,589,850	4,825,453	2,028,823	530,517	482,712	851,829	4,201,458	2,184,316	971,234	3,525,716		
6. Less: Taxable Exclusions (Factor 24)	6,200,718	874,301	446,452	117,194	102,932	170,520	923,287	471,875	209,584	706,882		
7. Taxable Income	25,389,132	3,951,152	1,582,372	413,323	379,780	681,309	3,278,171	1,712,441	761,650	2,818,834		
8. Less: Income Taxes (Tax. Inc.)	3,769,035	586,551	234,904	61,358	56,379	101,141	486,647	254,213	113,068	418,458		
9. Net Return (Line 5 - Line 8)	27,820,815	4,236,902	1,793,919	469,159	426,333	750,688	3,714,811	1,930,103	858,166	3,107,258		
10. Original Cost Measure Of Value	350,621,588	49,427,873	25,228,634	6,614,842	5,831,852	9,639,712	52,216,339	26,690,145	11,866,115	39,987,732		
11. Rate Of Return, Percent	7.93	8.58	7.11	7.09	7.31	7.79	7.11	7.23	7.23	7.77		
12. Relative Rate Of Return	1.00	1.08	0.90	0.89	0.92	0.98	0.90	0.91	0.91	0.98		

THE YORK WATER COMPANY  
WATER OPERATIONS

CALCULATION OF DIRECT CUSTOMER COSTS FOR A 5/8-INCH METER PER MONTH

Cost Function (1)	Direct Cost of Service* (2)	Number of Units (3)		Direct Cost Per Unit (4)	Direct Cost Per Unit Per Month (5)
Meters	\$ 2,650,167	88,340	5/8-inch Equivalents	\$ 30.00	\$ 2.50
Services	7,768,312	75,193	3/4-inch Equivalents	103.31	8.61
Billing and Collecting & Meter Reading	<u>2,779,080</u>	854,579	Bills	3.25	<u>3.25</u>
Subtotal	13,197,559				14.36
Unrecovered Public Fire	<u>5,236,326</u>	88,340	5/8-inch Equivalents	59.27	<u>4.94</u>
Total	<u><u>\$ 18,433,885</u></u>				<u><u>\$ 19.30</u></u>

THE YORK WATER COMPANY  
WATER OPERATIONS  
ANALYSIS OF DIRECT CUSTOMER COSTS

Description (1)	Total Account (2)	Allocated to Customer Costs		
		Meters (3)	Services (4)	Billing, Collecting & Meter Reading (5)
<u>Operation and Maintenance Expenses</u>				
<u>Direct Labor:</u>				
Operation of Meters	\$ 135,526	\$ 135,526		
Operation of Services	344,635		344,635	
Maintenance of Meters	58,737	58,737		
Maintenance of Services	137,734		\$ 137,734	
<u>Supplies and Expenses</u>				
Operation of Meters	38,021	38,021		
Operation of Services	98,856		98,856	
Maintenance of Meters	38,020	38,020		
Maintenance of Services	989,253		989,253	
<u>Customer Accounting</u>				
Billing and Collecting Labor	1,107,624			\$ 1,107,624
Meter Reading Labor	67,137			67,137
Billing and Collecting Supplies	897,385			897,385
Meter Reading Supplies	44,833			44,833
Bad Debt Expense	358,011			
<u>Other Directly Related O&amp;M Costs</u>				
T & D Operations & Supervision	682,399	195,972	486,427	
T & D Maintenance Supervision	176,811	50,777	126,034	
Pensions and Benefits	362,247	49,883	145,890	166,475
Worker's Compensation	63,345	8,723	25,511	29,111
Load Growth Adjustment - Customer	42,330			42,330
General Price Level Adj.	452,302	48,505	204,968	198,829
Subtotal O & M Expenses	6,095,206	624,163	2,559,309	2,553,724
<u>Depreciation Expense</u>				
Meters	955,891	955,891		
Services	1,790,837		1,790,837	
<u>Other Directly Related Facilities</u>				
Office Buildings	-			
Stores, Shop & Garage	-			
Furniture & Equipment	-			
Enterprise Software	-			
Transportation Equipment	141,417	15,166	64,086	62,166
Subtotal Depreciation	2,888,145	971,057	1,854,922	62,166
<u>Taxes, Other Than Income</u>				
PUC & OCA Assessments	122,429	21,725	67,031	33,674
Payroll Taxes	284,754	39,212	114,681	130,862
Total Taxes, Other Than Income	407,184	60,937	181,711	164,536
<u>Rate Base:</u>				
Meters	13,891,033	13,891,033		
Services	44,384,467		44,384,467	
<u>Other Directly Related Facilities</u>				
Office Buildings	-			
Stores, Shop & Garage	-			
Furniture & Equipment	-			
Enterprise Software	-			
Transportation Equipment	374,848	40,199	169,869	164,781
Deferred Taxes	(6,193,990)	(1,412,199)	(4,600,060)	(181,731)
Subtotal	52,456,358	12,519,032	39,954,276	(16,950)
Return & Income Taxes, as a Percent of Rate Base @	7.94%	4,165,035	994,011	3,172,370
				(1,346)
Total O & M, Depreciation, Return and Taxes	\$ 13,555,570	\$ 2,650,167	\$ 7,768,312	\$ 2,779,080

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts set forth in my Direct Testimony, OCA Statement 4, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 19, 2022  
\*334089

Signature: \_\_\_\_\_

Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc.  
10480 Little Patuxent Parkway  
Suite 300  
Columbia, MD 21044-3575

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

DIRECT TESTIMONY  
OF  
BARBARA R. ALEXANDER  
Barbara Alexander Consulting LLC  
ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE

August 22, 2022

1 **I. INTRODUCTION**

2  
3 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

4 A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander  
5 Consulting LLC. My address is 83 Wedgewood Dr., Winthrop, ME 04364. I appear in  
6 this case as a witness on behalf of the Office of Consumer Advocate (OCA).

7 Q. PLEASE DESCRIBE YOUR BACKGROUND AND QUALIFICATIONS.

8 A. I have a 30-year experience as an expert in consumer protection, service quality, and low  
9 income programs for public utilities and the regulation of retail alternative energy  
10 suppliers in markets that have adopted restructuring for electric and/or natural gas supply  
11 service. I was the Director of the Consumer Assistance Division for the Maine Public  
12 Utilities Commission from 1986-1996 and have operated my own consulting practice for  
13 public advocates and consumers since that time. I have testified in over 30 U.S. and  
14 Canadian jurisdictions, including testimony before the Pennsylvania Public Utility  
15 Commission in many proceedings. My C.V. attached to this testimony as Exhibit BA-1  
16 lists all my publications and testimony associated with my consulting practice.

17 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PENNSYLVANIA  
18 PUBLIC UTILITY COMMISSION?

19 A. Yes. I have filed testimony on behalf of the OCA in many investigations, base rate  
20 proceedings, mergers and acquisitions, and default service proceedings on issues relating  
21 to customer service, service quality and reliability of service, low income programs, and  
22 retail market programs. In particular, I have filed testimony as an expert witness on  
23 behalf of the OCA in many recent base rate and regulatory compliance proceedings by

1 Pennsylvania water and wastewater utilities, including Pittsburgh Water and Sewer  
2 Authority, Aqua Pennsylvania, and Pennsylvania American Water Company.

3 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY REGARDING YORK WATER?

4 A. No.

5 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

6 A. I am filing Testimony on behalf of the OCA to address issues relating to the adequacy  
7 and reasonableness of certain aspects of York Water Company's ("York Water")  
8 customer service performance, compliance with the Commission's consumer protection  
9 requirements, and its low income programs. My testimony addresses York Water's water  
10 and wastewater services. These issues are important by themselves, but particularly so in  
11 this case given the magnitude of York Water's proposed rate increases for water and  
12 wastewater services.

13 Q. PLEASE SUMMARIZE YORK WATER'S RATE INCREASE PROPOSALS.

14 A. York Water provides water service to more than 70,440 customers and wastewater  
15 service to 3,357 customers. The Company provides water service in parts of York and  
16 Adams Counties and wastewater service in parts of York, Franklin, and Adams Counties.  
17 Under the Company's rate proposal, the typical monthly water bill for residential gravity  
18 customers using 4,525 gallons per month would increase from \$40.54 to \$53.02 per  
19 month, or by 30.8%. The typical water bill for residential repumped customers using  
20 3,784 gallons of water per month would increase from \$48.89 to \$62.27 per month, or by  
21 27.4%. According to the customer notices included in York's filing, under the  
22 Company's proposal, the typical wastewater bill for residential customers would increase  
23 as follows:

1  
2

Area	Usage	Present Rate	Proposed Rate	\$ Increase	% Increase
Asbury Pointe Subdivision, East Prospect Borough, and Lower Windsor Area	3,586 gallons per month	\$62.50	\$80.55	\$18.05	28.9%
Felton Borough	Per month per dwelling unit	\$79.50	\$80.55	\$1.05	1.3%
Jacobus Borough	3,570 gallons per month	\$55.00	\$80.55	\$25.55	46.5%
Letterkenny Township	Per month per dwelling unit	\$45.00	\$80.55	\$35.55	79.0%
Straban Township Area	3,465 gallons per month	\$62.50	\$80.55	\$18.05	28.9%
West Manheim Township	3,333 gallons per month	\$61.67	\$75.87	\$14.20	23.0%
West York Borough	Per month per dwelling unit	\$32.71	\$55.61	\$22.90	70.0%

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York also proposes to increase the 5/8-inch water customer charge (for gravity and repumped customers) from \$16.25 to \$20.71 per month, which is an increase of 27.4%.

Q. DID YORK WATER PROPOSE ANY CUSTOMER SERVICE PERFORMANCE STANDARDS AS PART OF ITS BASE RATE CASE?

A. No. York Water did not propose any specific performance standards for customer service with its proposed rate increase. Nor did York Water link its proposal for a higher rate of return to any specific customer service performance measurement.



1 Q. DID YORK WATER DESCRIBE OR DISCUSS ITS CUSTOMER SERVICE  
2 PERFORMANCE IN ITS BASE RATE FILING?

3 A. Yes. Mr. Hand’s testimony referred to “exceptional customer service” in support of York  
4 Water’s base rate filing.<sup>1</sup> Mr. Hand justified this description based on the customer  
5 complaint rates published by the Commission’s Bureau of Consumer Services as  
6 compared to other water utilities, the low rates charged by York Water compared to other  
7 water utilities, and its acquisition of troubled water and wastewater utilities. In addition,  
8 Mr. Hand referenced a Customer Attitude Survey that measures customer satisfaction and  
9 other metrics.<sup>2</sup>

10 Q. DOES YORK WATER SEEK A HIGHER RATE OF RETURN AS A REWARD FOR  
11 “EXEMPLARY PERFORMANCE?”

12 A. Yes. The Company’s proposed rate of return includes 0.25% in recognition of the  
13 performance of its management.<sup>3</sup>

14 Q. PLEASE DESCRIBE HOW YOUR TESTIMONY IS ORGANIZED.

15 A. My testimony will examine certain aspects of York Water’s quality of service and  
16 customer service performance as part of the Company’s proposed rate increase.<sup>4</sup> My  
17 review and testimony also address the program design and implementation of York  
18 Water’s low income bill payment assistance programs. I will then make  
19 recommendations for improvement and reforms in several areas that should be ordered as  
20 part of this base rate case. I recommend that the Commission require York Water to meet

---

<sup>1</sup> York Water Statement No. 1, page 8, lines 3-4 and page 23, lines 9-10.

<sup>2</sup> York Water Response to OCA-III-2.

<sup>3</sup> York Water Response to OCA-III-28.

<sup>4</sup> My testimony does not address issues relating to York Water’s water quality regulated by Pennsylvania’s Department of Environmental Protection or the design and operation of the water distribution and sewer collection system and whether the water and wastewater service meet the technical and operational standards required by the Commission.

1 and/or gradually improve its quality of service and customer service performance by  
2 establishing specific expectations and reporting requirements. I also provide my review  
3 of compliance with the Commission’s customer service regulations found at 52 Pa. Code  
4 § 56.1 *et seq.* (“Chapter 56”) and consumer protection issues as reflected in customer  
5 complaint records and York Water’s internal training materials, and give my opinion as  
6 to how these conclusions and recommendations should be considered in light of York  
7 Water’s request for a reward component for its rate of return. Finally, I will recommend  
8 program design reforms and increased participation metrics for York Water’s low income  
9 programs.

10 **II. YORK WATER’S CUSTOMER SERVICE PERFORMANCE**

11  
12 Q. WHAT ISSUES WILL YOU EXAMINE WITH RESPECT TO YORK WATER’S  
13 QUALITY OF SERVICE AND CUSTOMER SERVICE PERFORMANCE?

14 A. I will present information on York Water’s performance in the following areas:

- 15 ▪ Call Center Performance
- 16 ▪ Customer Complaint Response
- 17 ▪ Compliance with Chapter 56’s Payment Arrangement policies
- 18 ▪ Compliance with Chapter 56’s Termination of Service policies
- 19 ▪ Low Income program design and expenditures
- 20 ▪ York Water’s Current Tariffs

21 Q. WHAT IS THE SOURCE OF YOUR DATA ON THE ABOVE INDICATORS FOR  
22 CUSTOMER SERVICE PERFORMANCE?

23 A. My information concerning York Water’s low income programs, and customer service  
24 performance is based on York Water’s base rate case filing, its responses to data requests

1 in this proceeding, and the Commission's publications on customer service performance  
2 and compliance with the applicable credit and collection regulations found in Chapter 56.

3 Q. PLEASE DISCUSS THE PERFORMANCE OF YORK WATER'S CUSTOMER CALL  
4 CENTER.

5 A. The operation of its call center is crucial to the Company's ability to deliver a reasonable  
6 level of customer service and to offer the consumer protections and complaint handling  
7 requirements reflected in the Commission's regulations. York Water relies on a small  
8 customer call center as the main method by which customers can communicate  
9 individually with York Water. There is only one office, located in downtown York,  
10 where customers can conduct business in person.<sup>5</sup> Customers can pay bills via the U.S.  
11 Mail, the York Water online web portal, or via the interactive voice response system,<sup>6</sup>  
12 however, only 14% of its customers are enrolled in automatic bill pay.<sup>7</sup> The staffing  
13 level consists of 10 full time customer service representatives.<sup>8</sup>

14 Q. PLEASE DISCUSS THE PERFORMANCE RESULTS OF THE YORK WATER CALL  
15 CENTER FOR PENNSYLVANIA CUSTOMERS.

16 A. I attach the York Water customer call center data with York Water's calculations of the  
17 annual average results as Exhibit BA-2.<sup>9</sup>

18 These results reflect extremely poor performance in terms of the Company's  
19 ability to answer calls in a timely manner and avoid a significant abandonment rate (the  
20 percentage of calls in the queue to be answered by a customer service representative that

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<sup>5</sup> York Water Response to OCA-III-27.

<sup>6</sup> York Water Response to OCA-III-26 states that customers are not charged additional fees when paying their bills in any manner.

<sup>7</sup> York Water Response to OCA-III-24.

<sup>8</sup> York Water Response to OCA-III-11.

<sup>9</sup> York Water Response to OCA-III-10 and attachments.

1 are abandoned due to a long wait time). This level of performance has generally  
2 deteriorated in recent years. The following is a summary of the key indicators:

3

Year	Percent Calls Answered in 30 Seconds	Abandonment Rate	Average Speed of Answer (minutes)
2020	66.83%	4.94%	1:03
2021	29.47%	14.57%	4:28
2022 (Jan. through May)	19.87%	18.13%	6:29

4

5 These results are not reasonable and significantly below what is reported by  
6 Pennsylvania gas and electric utilities, where the typical performance is to answer 80% of  
7 the calls within 30 seconds with an abandonment rate at or below 4%.<sup>10</sup> Most  
8 importantly, these results reflect a continuing deterioration of service quality performance  
9 beginning in 2021 and continuing through 2022 to date.

10 Furthermore, the annual averages mask a dramatic swing in call center  
11 performance. For example, in 2022 from January through May, 54% of the calls were  
12 not answered within 241 seconds (4 minutes). In September 2020 the abandonment rate  
13 was 10.80% of all calls. The same pattern was repeated in September 2021 when the  
14 abandonment rate was 20.62% and over 50% of the calls were not answered within 240  
15 seconds.

16 The key variable in predicting reasonable versus unreasonable call center  
17 performance is the volume of calls and the number of available call center representatives

---

<sup>10</sup> The Commission publishes an annual report on service quality performance by Pennsylvania gas and electric utilities. The typical performance is to answer over 80% of calls within 30 seconds and experience an annual abandonment rate of 4% or less as reflected in the data for 2020. This data is not published for water utilities regulated by the Commission. See, [https://www.puc.pa.gov/media/1658/customer\\_service\\_performance\\_report2020.pdf](https://www.puc.pa.gov/media/1658/customer_service_performance_report2020.pdf)

1 on hand to answer the calls. Performance can be improved with better prediction of call  
2 volume and ensuring sufficiently trained personnel are available to respond to call  
3 volume at predicted high call volume days and times.

4 Q. DOES YORK WATER HAVE INTERNAL PERFORMANCE OBJECTIVES FOR ITS  
5 CALL CENTER?

6 A. No. When asked how the Company monitors call center performance with internal  
7 performance standards or targets, the response stated that the utility “strives to answer all  
8 customer calls in a timely manner.”<sup>11</sup> Nor has York Water conducted an evaluation of its  
9 call center performance.<sup>12</sup>

10 Q. HAS YORK WATER PROVIDED ANY REASON FOR THE POOR PERFORMANCE  
11 OF ITS CALL CENTER?

12 A. Yes. York Water blames this deterioration in performance “in part” on its agreement to  
13 collect the City of York wastewater and refuse bills, a policy that was terminated as of  
14 July 2022: “Therefore, the Company expects the call volume and hold time figures to  
15 improve going forward.”<sup>13</sup> However, York Water did not provide any other explanation  
16 beyond the stated reason for its poor call center performance. I attach York Water’s  
17 response to OCA-VII-13 as Exhibit BA-3.

18 Q. IS THIS A REASONABLE RESPONSE TO THE DETERIORATION IN CALL  
19 CENTER PERFORMANCE?

20 A. No. While it is entirely possible that the call center performance reflects the Company’s  
21 decision to collect non-York Water bills (and I acknowledge a 1,500 increase in calls in

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<sup>11</sup> York Water Response to OCA-VII-14.

<sup>12</sup> York Water Response to OCA-III-14.

<sup>13</sup> York Water Response to OCA-VII-13.

1 2021 compared to 2020), it is York Water's obligation to take the necessary steps to  
2 ensure a reasonable level of service quality performance. Certainly, jurisdictional water  
3 and wastewater customers should not suffer significant deterioration of customer service  
4 because of the Company's decision to bill for and collect non-jurisdictional services.  
5 Over the period of January 2021 through May 2022 there is no indication of the  
6 necessary changes to halt the obvious trend in deterioration of performance. And, the  
7 lack of any internal performance standards or measures of reasonable performance, I  
8 cannot accept this response as sufficient.

9 Q. WHAT DO YOU RECOMMEND?

10 A. I recommend that York Water be required to significantly improve its call center  
11 performance to meet the standard performance results of answering 80% of the calls with  
12 30 seconds and meeting an abandonment rate of 4% or less. This improvement should be  
13 monitored for compliance as a condition of any rate increase.

1 Q. TURNING TO HOW YORK WATER HANDLES CUSTOMER COMPLAINTS,  
2 PLEASE DISCUSS THE REGULATORY BASIS FOR YOUR ANALYSIS.

3 A. Every Pennsylvania public utility is required to educate customers about how to register  
4 informal and formal complaints filed with the Commission as a result of a customer's  
5 dissatisfaction with the utility's response to billing and other customer service disputes.<sup>14</sup>  
6 Informal complaints are handled by the Commission's Bureau of Consumer Services  
7 (BCS) and formal complaints are addressed by the Commission's Office of  
8 Administrative Law Judge. Utilities also receive "disputes" directly from customers and  
9 are obligated to investigate and respond to those issues or indications of dissatisfaction.  
10 Customer complaints typically form a hierarchy or pyramid from a large volume of  
11 disputes to a smaller group of informal complaints to the BCS and a relatively smaller  
12 number of formal complaints filed with the Commission. Tracking and evaluating  
13 disputes handled by the utility and informal or formal complaints handled by BCS are  
14 key to ensuring ongoing improvements in customer service because that evaluation is  
15 likely to spot the "red flag" that indicates a systemic issue or concern that requires  
16 management's attention and, in some cases, a change in policy or procedure. In addition,  
17 of course, this type of evaluation may also identify violations of the Commission's  
18 regulations. Public utilities are required to keep records of customer disputes.<sup>15</sup>

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<sup>14</sup> York Water's Customer Rights and Responsibility Notice is available on its website and includes the required information about disputing bills or service:

You have the right to question or dispute any billing or service action of the company. You should tell the company of the problem as soon as it occurs. This gives the company the opportunity to resolve the matter with you. If you do not contact the company first, the Commission may instruct you to do so before accepting an informal complaint from you. See, <https://www.yorkwater.com/wp-content/uploads/knowyourrights.pdf>

<sup>15</sup> 52 Pa. Code § 56.432. **Record maintenance.**

A public utility shall preserve for a minimum of 4 years written or recorded disputes and complaints, keep the records accessible within this Commonwealth at an office located in the territory served by it, and make the records

1           The Commission’s Bureau of Consumer Services publishes a quarterly Consumer  
2           Activities and Report Evaluation for Pennsylvania electric, gas, telephone, and water  
3           utilities.<sup>16</sup> These reports typically include historical information to allow for a trend  
4           analysis.

5   Q.   HOW DOES YORK WATER MONITOR AND RESPOND TO CUSTOMER  
6           COMPLAINT TRENDS AND THESE BCS REPORTS?

7   A.   York Water does not keep a data base or log of customer disputes<sup>17</sup> and has never done a  
8           root cause analysis of customer complaints.<sup>18</sup> When asked how customer disputes and  
9           complaints are monitored or evaluated to determine trends or issues that need attention,  
10          the Company states, “Trends in internal customer complaints and disputes are monitored  
11          daily by management. Management reviews incoming customer emails and checks in  
12          frequently with call center staff to identify and address potential issues.”<sup>19</sup> However,  
13          York Water is unable to identify any specific review process or action taken.

14   Q.   DO YORK WATER’S TRAINING MATERIALS INCLUDE ANY INFORMATION  
15          ON HOW TO RECOGNIZE A CUSTOMER DISPUTE OR TAKE ACTION IN  
16          RESPONSE TO A DISPUTE?

17   A.   No. These materials include a table of contents and an outline of the training topics that

---

available for examination by the Commission or its staff. Information to be maintained includes the following:

- (1) The payment performance of each of its customers.
- (2) The number of payment agreements made by the public utility company and a synopsis of the terms, conditions and standards upon which agreements were made.
- (3) The number of service terminations and reconnections.
- (4) Communications to or from individual customers regarding interruptions, discontinuances, terminations and reconnections of service, including the name and address of the customer, the date and character of the dispute or complaint and the adjustment or disposal made of the matter.

<sup>16</sup> [http://www.puc.state.pa.us/filing\\_resources/consumer\\_activities\\_report\\_evaluation.aspx](http://www.puc.state.pa.us/filing_resources/consumer_activities_report_evaluation.aspx). This link provides access to the historical annual and quarterly reports cited in my testimony.

<sup>17</sup> York Water Response to OCA-VII-25.

<sup>18</sup> York Water Response to OCA-III-36.

<sup>19</sup> York Water Response to OCA-III-6.



1 does not identify disputes or complaints as a training topic.<sup>20</sup> I attach these documents as  
2 Exhibit BA-4.

3 Q. DOES YORK WATER HAVE ANY INTERNAL COMPLAINT (DISPUTE)  
4 PERFORMANCE STANDARDS?

5 A. No. York Water relies on its low incidence of BCS complaints and violations as  
6 compared to larger Pennsylvania water utilities.

7 Q. PLEASE DISCUSS YORK WATER'S COMMUNICATIONS FROM BCS.

8 A. York Water was the subject of a Final Order in response to a Formal Complaint filed by a  
9 customer that resulted in a civil penalty of \$1,000 due to their failure to provide  
10 reasonable service in violation of Section 1501 of the Public Utility Code.<sup>21</sup> This  
11 complaint found that York Water failed to provide adequate service in responding to a  
12 customer's leak report. In June 2022, York Water was notified by BCS of a verified  
13 infraction of Chapter 56.191(c)(2)(i) in which a customer was required to make payment  
14 in full as a condition of restoration without the criteria associated with prior payment  
15 plans being met to justify such a demand.<sup>22</sup> When asked to describe the internal actions  
16 undertaken in response to the BCS notice, York Water stated that it conducted a review  
17 of its internal policies and agreed to make certain reforms going forward with regard to  
18 implementing the criteria of Chapter 56 with regard to restoration of service and

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<sup>20</sup> York Water Response to OCA=III-12, Attachments CS-01 CSR Training Binder Order of Contents and CS-01 Customer Service Training Outline. The other training materials provide specific information on Sewer, Payments (the Company's payment portal), Payment Agreements, Oracle (the database used to record customer information), Miscellaneous, Meter Info, How Tos, Collections, Billing, and Apps and Forms. None of these materials address how to identify a customer dispute or complaint.

<sup>21</sup> York Water Response to OCA-III-8, Attachment A.

<sup>22</sup> York Water Response to OCA-III-8, Attachment B.

1 communicate with customers about the reduced restoration terms.<sup>23</sup> York Water's  
2 current training materials reflect this obligation for reduced restoration terms.

3 Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO CUSTOMER  
4 COMPLAINT HANDLING IN THIS RATE CASE?

5 A. I recommend that York Water be required to adopt revised and updated training materials  
6 and revisions to its database to ensure that disputes and complaints are identified, tracked,  
7 and evaluated on a regular basis. In addition to the Complaint Log that OCA witness  
8 Terry Fought recommends, York Water should revise its current database system to  
9 identify a dispute and track its resolution through the process of management review and  
10 resolution. Customer service representatives should be trained to recognize a dispute and  
11 identify it in the database for tracking and resolution. The fact that York Water's policies  
12 are deficient in identifying customer disputes and complaints may explain why York  
13 Water's complaint ratio is lower compared to other Pennsylvania water utilities.

14 Q. WHAT IS THE STATUS OF THE TRAINING OF CUSTOMER REPRESENTATIVES  
15 FOR PENNSYLVANIA-SPECIFIC REGULATIONS AND CUSTOMER  
16 PROTECTIONS?

A. York Water's training programs do not include many key details that are important to  
ensure that residential customers are provided with the rights and remedies set forth in  
Chapter 56. For example, the training materials for payment agreements are primarily  
aimed at filling in the proper fields in the database and lack any substantive discussion on  
engaging the customer in a discussion of the individual circumstances that would lead to  
a negotiated payment plan that is workable or affordable. While one page of the training

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<sup>23</sup> York Water Response to OCA-VII-11.

includes a chart showing four “levels” of payment agreements based on income and other life circumstances, there is no training on how to solicit this information from customers or enter the information in the database. In fact, York Water is not able to distinguish the various type of payment plans it has granted and has never done an analysis of whether its payment plan policies are effective.<sup>24</sup> I attach these data responses as Exhibit BA-5. Another example is that the training materials do not include any discussion of a customer’s rights when they are covered by a Protection from Abuse Order even though the termination notices include this customer information.

1 Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO YORK WATER’S  
2 INTERNAL TRAINING MATERIALS AND OVERSIGHT RESPONSIBILITIES TO  
3 ENSURE COMPLIANCE WITH CHAPTER 56?

4 A. I recommend that York Water undertake a review and reform of its training materials and  
5 oversight policies to ensure a proper level of detail to inform customer service  
6 representatives and customers about the rights, remedies, and responsibilities set forth in  
7 Chapter 56. The current training program is insufficient and inadequate, particularly  
8 when considered in light of the failure to properly identify, track and resolve customer  
9 disputes and complaints.

10 Q. HAVE YOU REVIEWED YORK WATER’S TERMINATION PROCEDURES?

11 A. Yes. The volume of termination notices by York Water increased dramatically in  
12 2021 and again recorded a significant increase in 2022 compared to 2021.<sup>25</sup> I attach this  
13 data response as Exhibit BA-6. It is reasonable to assume that this trend in 2021 is due in  
14 part to the end of the COVID 19 pandemic protections. However, the Company alleges

---

<sup>24</sup> York Water Response to OCA-III-38 and OCA-III-40.

<sup>25</sup> York Water Response to OCA-III-21, Attachment.

1 that this increased trend toward terminations in late 2021 and early 2022 is due in part to  
2 York Water’s agreement to bill and collect charges for the City of York for wastewater  
3 and refuse service.<sup>26</sup> York Water states that the volume of termination notices did not  
4 result in actual terminations due to the “direction of the City of York.”<sup>27</sup> I attach these  
5 data responses as Exhibit BA-7. In fact, while over 4,500 notices were issued in January  
6 through May 2022, less than 40 actual terminations of service occurred during this  
7 timeframe. This pattern raises a number of serious concerns.

8 Q. PLEASE EXPLAIN YOUR CONCERNS ABOUT YORK WATER’S ISSUANCE OF  
9 TERMINATION NOTICES ON BEHALF OF THE CITY OF YORK.

10 A. I understand that the Pennsylvania Water Services Act allows a water utility to collect  
11 unpaid bills for wastewater or sewer service provided by a municipality.<sup>28</sup> This statute  
12 also requires the billing agent, York Water, to separately set forth the charges from the  
13 municipality on its bills, a requirement that is not clear that York Water has implemented.  
14 However, there is no authority for any water utility to collect “refuse” charges on behalf  
15 of a municipality,<sup>29</sup> and, critically, the Commission’s regulations prohibit termination of  
16 service for non-basic charges such as these.<sup>30</sup> These potential legal matters should be  
17 investigated further by the Commission. Second, the pattern of issuing thousands of

---

<sup>26</sup> York Water Response to OCA-VII-8.

<sup>27</sup> Ibid.

<sup>28</sup> Act of Apr. 14, 2006, P.L. 85, No. 28.

<sup>29</sup> York Water’s website contains the following notice:

We are aware of the inactive account number message City of York refuse customers are receiving when attempting to pay their refuse bill online or over the phone. We are working to correct this for customers and we apologize for this inconvenience. If you would like to make a payment immediately, we are able to process checks in person and accept cash in person at our Downtown York headquarters at 130 East Market Street. City of York refuse customers can also be set up on automatic payments through our TAP program, which will use banking details to process the amount due on the due dates.

<https://www.yorkwater.com/city-of-york-refuse-payments/> [Site visited 8/10/2022]

<sup>30</sup> 52 Pa Code § 56.83(3).

1 notices threatening termination of regulated water service every month and not pursuing  
2 termination based on the “direction of the City of York,” raises the potential for  
3 noncompliance with a Chapter 56 directive that prohibits the issuance of termination  
4 notices when termination is not intended to occur.<sup>31</sup>

5 Q. HAS YORK WATER HALTED ITS AGREEMENT TO BILL AND COLLECT FOR  
6 CITY OF YORK WASTEWATER AND REFUSE CHARGES?

7 A. Yes. York Water states that they terminated this arrangement as of July 2022.<sup>32</sup>  
8 Although, York Water’s website still references payment options for City of York refuse  
9 service as noted above.

10 Q. DOES YORK WATER ANALYZE ITS TERMINATION AND RECONNECTION  
11 TRENDS?

12 A. No. York Water does not track whether its termination notices are resolved with  
13 payment or payment plan and does not track the notices not resolved but which remain  
14 eligible for termination.<sup>33</sup> I attach this data response as Exhibit BA-8.

15 Q. HAVE YOU REVIEWED YORK WATER’S POLICIES TO IMPLEMENT THE  
16 RIGHTS OF TENANTS WHEN THE PROPERTY OWNER OR LANDLORD FAILS  
17 TO PAY THE BILL?

18 Q. Yes. I have several concerns. First, when asked to document the policies and procedures  
19 required to be implemented pursuant to the Discontinuance of Services to Leased  
20 Premises Act and the Chapter 56 requirements governing termination of service to leased

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<sup>31</sup> 52 Pa. Code § 56.99. **Use of termination notice solely as collection device prohibited.**

A public utility may not threaten to terminate service when it has no present intent to terminate service or when actual termination is prohibited under this chapter. Notice of the intent to terminate shall be used only as a warning that service will in fact be terminated in accordance with the procedures under this chapter, unless the customer or occupant remedies the situation which gave rise to the enforcement efforts of the public utility.

<sup>32</sup> York Water Response to OCA-VII-8.

<sup>33</sup> York Water Response to OCA-III-21.

1 premises, York Water’s responses generally reflect these requirements.<sup>34</sup> However, there  
2 are no training materials that summarize these requirements,<sup>35</sup> and thus no indication that  
3 these policies are being properly implemented. Nor do the York Water tariffs reflect any  
4 rules and regulations in this area. I attach York Water’s response to this data request as  
5 Exhibit BA-9. As a result, it is not clear how the responses to the data requests can be  
6 verified as being implemented by the customer call center on a day-to-day basis. Second,  
7 throughout these data responses York Water states that it “is in the process of reviewing  
8 its existing practices,” or states that revisions of its practices are being implemented.<sup>36</sup> I  
9 attach these data responses as Exhibit BA-10. Finally, I am concerned about the policies  
10 that are being implemented to determine if a property is vacant or not when a landlord  
11 seeks to terminate service since, again, there is a lack of any explicit directive to  
12 customer call center employees to require this information as a condition of pursuing  
13 termination.

14 Q. HAVE YOU REVIEWED YORK WATER’S TRAINING MATERIALS TO  
15 IMPLEMENT THE OBLIGATION TO ATTEMPT PERSONAL CONTACT  
16 “IMMEDIATELY PRIOR” TO TERMINATION OF SERVICE?

17 A. No. I am unable to do so since the request for this information directs me to the customer  
18 service training materials that do not address field operations or how the technicians  
19 handle personal contact with the customer or responsible adult prior to the termination of  
20 service.

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<sup>34</sup> York Water Responses to OCA set XI included questions 1 through 16 relating to York Water’s implementation of these requirements.

<sup>35</sup> York Water Response to OCA-XI-1.

<sup>36</sup> York Water Response to OCA-XI-5, XI-6, and XI-11.

1 Q. IN LIGHT OF THE DEFICIENCIES IN YORK WATER’S TRAINING MATERIALS,  
2 WHAT DO YOU RECOMMEND?

3 A. I recommend that York Water develop training materials that correct these deficiencies  
4 and submit updated and revised training materials as a condition of a rate increase  
5 ordered in this proceeding.

6 **III. YORK WATER’S ASSISTANCE PROGRAMS FOR LOW INCOME**  
7 **CUSTOMERS NEED SIGNIFICANT REFORM**

8  
9 Q. PLEASE EXPLAIN YORK WATER’S LOW INCOME BILL PAYMENT  
10 ASSISTANCE PROGRAMS.

11 A. York Water has operated a CARES program that consists of a one-time bill credit of up  
12 to \$200 for eligible low income customers since 2019. Customers must apply through  
13 one of two social service agencies who then evaluate the customer’s unpaid and current  
14 bill amounts and decides on a grant amount up to \$200. The current budget for this  
15 program is \$20,000 and York Water has refused payments when the funding is exhausted  
16 as occurred in October 2021.<sup>37</sup> I attach this data response as Exhibit BA-11. The  
17 Company has proposed an increased budget for this program in its rate case filing to  
18 \$40,000. York Water states that it also operates a small arrears forgiveness program that  
19 is designed to reduce water usage.<sup>38</sup> However, there is no information about this program  
20 on the Company’s web portal where the CARES and other federally funded assistance  
21 programs are referenced.

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<sup>37</sup> York Water Response to OCA-VII-1.

<sup>38</sup> York Water Response to OCA-VII-2.

1 Q. THE CARES PROGRAM WAS APPROVED AS A “PILOT.” HAS YORK WATER  
2 EVALUATED THE IMPACT OF THIS PROGRAM?

3 A. No. York Water has not conducted any analysis of the sufficiency or this program or its  
4 impact on bill payment or bill affordability. As a result, the nomenclature of this  
5 program as a “pilot” is incorrect since normally a “pilot” is a program that is being  
6 implemented to determine whether its impact contributes to the overall intent of the  
7 program design. York Water does not track monthly enrollment, number of customers  
8 denied enrollment, the number who successfully complete the program, the number who  
9 fail to meet the program’s terms for regular payments, or the arrears balances of  
10 customers upon entering the program.<sup>39</sup> I attach this data response as Exhibit BA-12.

11 Q. HAS YORK WATER CONDUCTED ANY STUDIES OF ITS CUSTOMER BASE  
12 CONCERNING AFFORDABILITY OF ESSENTIAL UTILITY SERVICES AND/OR  
13 WATER AND SEWER SERVICE?

14 A. No. York Water has not conducted any studies of the demographics of its customer base  
15 or the affordability of water and sewer service based on household income or age.<sup>40</sup> I  
16 attach these data responses as Exhibit BA-13.

17 Q. IS THIS PROGRAM A REASONABLE APPROACH TO ADDRESS THE NEEDS OF  
18 YORK’S LOW INCOME CUSTOMERS?

19 A. Not entirely. The program does assist low income customers who have a large unpaid  
20 bill and who are facing a shut-off. I do not object to a program that provides additional  
21 assistance to such customers. This program, however, is limited to those individuals who  
22 can appear in person at only one of two social service agencies in York Water’s service

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<sup>39</sup> York Water Response to OCA-III-37.

<sup>40</sup> York Water Response to OCA-III-31 through OCA-III-35.



1 territory, thus creating a significant barrier to participation. Furthermore, this type of  
2 program does not respond to ongoing unaffordability of essential water and sewer  
3 services, particularly given the significant rate increase proposed in this proceeding. In  
4 other words, the CARES program would be a useful supplement to an ongoing program  
5 to reduce monthly bills, but it is not a substitute for a program that addresses the  
6 continuing mismatch between income and payments for essential water and sewer  
7 services. Programs that rely on “crisis” funding do not contribute to incentives to enable  
8 vulnerable customers to make regular affordable monthly payments.

9 Q. WHAT DO YOU RECOMMEND?

10 A. I recommend that York Water be required to implement a bill discount program similar to  
11 that in effect for Community Utilities of Pennsylvania. That program provides a 35%  
12 monthly discount on the rate for the metered consumption charge.<sup>41</sup> This program is  
13 easily programmed into the utility’s billing system. The applications for participation in  
14 this program should be available on York Water’s website. Customers who can provide  
15 evidence of participation in existing means-tested income programs, such as Low Income  
16 Heating Assistance, Low Income Water Assistance, Medicaid, Food Stamps (SNAP), or  
17 participation in the applicable electric and natural gas Customer Assistance Programs  
18 should be automatically enrolled. My recommended approach to enrollment will reduce  
19 the barrier associated with in-person appointments and the eliminate the duplication  
20 required to show proof of income.

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<sup>41</sup> Community Utilities of Pennsylvania tariffs, available at: [https://www.uiwater.com/docs/default-source/pennsylvania/cupa-water-tariff-january-27-2022.pdf?sfvrsn=c2e52f5b\\_0](https://www.uiwater.com/docs/default-source/pennsylvania/cupa-water-tariff-january-27-2022.pdf?sfvrsn=c2e52f5b_0)

1 Q. HAVE YOU ESTIMATED THE COSTS FOR THIS PROGRAM?

2 Q. No. I am unable to do so given the lack of demographic information maintained by York  
3 Water. However, I recommend that York Water consult with the available agencies and  
4 utilities with knowledge of its service territory and propose a budget for this program in  
5 its Rebuttal Testimony.

6 Q. DOES YORK WATER PARTICIPATE AS AN AUTHORIZED VENDOR FOR ALL  
7 AVAILBALE FEDERAL OR STATE FUNDED PROGRAMS THAT PROVIDE  
8 GRANTS TO ELIGIBLE LOW INCOME CUSTOMERS?

9 A. I am not sure. While York Water has indicated that it participates in the Low Income  
10 Water Assistance Program and the Emergency Rental Assistance Program, both of which  
11 provide funding to help pay unpaid bills incurred by low income water and sewer  
12 customers, it is not clear whether York Water participates as an authorized vendor in the  
13 Pennsylvania Homeowners Assistance Program. All these programs are funded via the  
14 American Rescue Plan Act and all of them provide potential assistance on unpaid water  
15 and sewer bills. The Homeowners Assistance Program has only recently been initiated  
16 and can provide homeowners who have trouble in paying their mortgage and utility bills  
17 a grant to the homeowner's utility companies.<sup>42</sup> Payment of utility bills up to \$8,000 is  
18 authorized by this program. York Water should take advantage of all available programs  
19 to enable its customers to avoid unpaid debt, late fees, and termination of service, and  
20 help all ratepayers from unpaid debt expense.

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<sup>42</sup> <https://pahaf.org/whats-covered/>

1 **IV. YORK WATER'S TARIFFS NEED REFORM TO COMPLY WITH**  
2 **CONSUMER PROTECTION REQUIREMENTS AND COMMISSION**  
3 **POLICY**

4  
5 Q. HAVE YOU REVIEWED YORK WATER'S CURRENT WATER AND  
6 WASTEWATER TARIFFS?

7 A. Yes. York Water did not propose any changes to its tariffs with regard to consumer  
8 protections addressed by Chapter 56. However, my review indicates that York Water's  
9 water and wastewater tariffs are deficient in identifying essential consumer protections.  
10 While the tariffs correctly state that Chapter 56 is incorporated by reference, the actual  
11 tariff language concerning payments and termination of service contain language that  
12 does not reference customer rights for payment arrangements, dispute resolution, medical  
13 emergency, Protection from Abuse Orders, or any of the essential provisions of  
14 applicable landlord/tenant law and policies.<sup>43</sup> The lack of details on these same issues in  
15 the Company's training materials also supports the need for including the rights and  
16 remedies of Chapter 56 in the Company's tariffs.

17 Q. WHAT DO YOU RECOMMEND?

18 A. I recommend that York Water revise its tariffs to reflect the essential consumer  
19 protections included in Chapter 56. York Water may find the tariff provisions of  
20 Pennsylvania American Water Company a useful model in this regard.

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<sup>43</sup> For example, York Water's Water Tariff at Section 10.2 does not reference any of the established rights to avoid termination and states:

10.2 The termination notice shall be mailed to the Customer and shall advise the Customer that payment of the Past-Due Amount must be made, in full, within the time period allowed by current P.U.C. regulations for such payment, or water service will be terminated. If the Past-Due Amount shall not be paid in full, at the principal office of the Company within the allotted time and following the prescribed steps per current P.U.C. regulations, the Company shall dispatch an employee either: (1) to collect the Past-Due Amount in full, or (2) to terminate water service. In default of payment of the Past-Due Amount, in full, water service will be terminated.

1 **V. YORK WATER'S CUSTOMER SERVICE PERFORMANCE IS DIRECTLY**  
2 **RELATED TO THIS RATE CASE AND THE REQUEST FOR A REWARD**  
3 **FACTOR IN THE RATE OF RETURN**

4  
5 Q. WHAT IS THE CONNECTION BETWEEN YOUR DISCUSSION OF SERVICE  
6 QUALITY AND CUSTOMER SERVICE PERFORMANCE, AND THE RATE  
7 INCREASE PROPOSED BY YORK WATER?

8 A. Any public utility must justify its rates in part based on its ability to perform its essential  
9 quality of service and customer service functions at a reasonable performance level. It is  
10 appropriate to compare the performance of the utility seeking a significant rate increase  
11 to other Pennsylvania utilities.

12 My analysis and findings should inform the Commission on the reasonableness of  
13 York Water's significant rate increase proposals. In other words, if York Water seeks a  
14 rate increase but there are deficiencies in its customer service performance, the  
15 Commission should order improvements in specific areas as a condition of any rate  
16 increase or consider reducing the rate increase until reforms have been adopted. This  
17 approach is mandated by the statutory guidelines governing public utility rate cases in  
18 which the Commission must evaluate the "efficiency, effectiveness, and adequacy of  
19 service."<sup>44</sup>

20 Q. DOES YOUR ANALYSIS IMPACT YORK WATER'S PROPOSAL TO INCLUDE A  
21 REWARD FOR EXEMPLARY MANAGEMENT PERFORMANCE IN ITS RATE  
22 PROPOSAL?

23 Q. Yes. I object to York Water's proposal to provide itself with a reward for outstanding  
24 performance by its management, through the Commission approving a higher rate of

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<sup>44</sup> 66 Pa. C.S. § 523.

1 return. The Company's proposal does not link its reward to any evidence of superior  
2 customer service performance. In addition, the basis for my conclusion is the poor  
3 performance of the York Water call center and certain findings I have made with respect  
4 to York Water's training and consumer protection compliance, particularly with respect  
5 to the Company's policies and training relating to disputes, payment arrangements,  
6 landlord/tenant protections, and Protection from Abuse Orders. Finally, York Water's  
7 questionable billing and termination practices for unpaid charges related to the City of  
8 York's wastewater and refuse services also support my recommendation.

9 **VI. CONDITIONS THAT SHOULD BE ATTACHED TO ANY RATE**  
10 **INCREASE**

11  
12 Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR YORK WATER'S  
13 CUSTOMER SERVICE PERFORMANCE AS A CONDITION OF ANY RATE  
14 INCREASE.

15 A. My analysis indicated that there are certain areas that need to be addressed as requiring  
16 improvement and reform as conditions for allowing York Water to increase its rates:

- 17 ■ York Water should be required to take steps to improve the monthly performance of  
18 its call center. Specific performance standards should be implemented, which include  
19 objectives for Average Speed of Answer and Abandonment Rate that are designed to  
20 achieve (over a reasonable number of years) that 80% of the customer calls that enter  
21 the queue to speak to a customer service representative to be answered within 30  
22 seconds and that the call abandonment rate be 4% or less. The Commission should  
23 mandate significant progress in quarterly reports from York Water as a condition of  
24 any rate increase.

- 1           ▪ York Water should take steps to identify, track, evaluate, and respond to customer  
2           disputes and complaints. The training materials are seriously deficient in identifying  
3           and responding to customer disputes and complaints. I recommend that York Water  
4           be required to submit a plan that adopts explicit training for identification, tracking,  
5           monitoring, and evaluating customer complaints. This complaint analysis should also  
6           include the payment arrangement disputes that are an essential component of  
7           adequate and reasonable service, particularly in light of my discussion of York  
8           Water’s inadequate internal payment arrangement training and policies. The  
9           Commission should require quarterly reports that document improved complaint  
10          handling and analysis as a condition of any rate increase.
- 11          ▪ York Water should be required to reform its customer training programs with regard  
12          to payment arrangement negotiations with customers to undertake a more  
13          individualized approach based on the customer’s circumstances and needs. This  
14          reform should be undertaken immediately and documented in a compliance filing as a  
15          condition of any rate increase.
- 16          ▪ York Water should be required to create and implement internal training programs  
17          relating to Landlord/Tenant rights, obligations and policies governing Protection from  
18          Abuse Orders, and the policies that will be implemented when personal contact is  
19          initiated immediately prior to termination of service. In addition, the training regime  
20          itself needs reform to document how training is conducted and how ongoing  
21          compliance is audited.
- 22          ▪ In light of my findings concerning the poor performance of the call center, the lack of  
23          uniform and complete training of customer representatives on Pennsylvania rights and

1 remedies, and the lack of connection between complaint analysis and changes to  
2 address underlying root causes, I recommend that the Commission undertake an audit  
3 of York Water’s customer service operations. The Commission should establish a  
4 timetable for this audit as a condition of any rate increase.

- 5 ■ York Water should implement a low income discount program similar to that  
6 implemented by Community Utilities of Pennsylvania. Such a program would  
7 provide a modest discount on the consumption charge for eligible low income  
8 customers, most of whom could be enrolled based on their participation in existing  
9 means-tested social welfare programs. The CARES program should continue at a  
10 proposed budget of \$40,000. York Water should document its participation in the  
11 various programs funded through the American Rescue Plan Act and publicize the  
12 available of funding to help pay for overdue water and sewer bills in order to obtain  
13 the maximum funding to assist its low income customers and avoid unnecessary bad  
14 debt expense paid by all ratepayers.
- 15 ■ York Water’s water and wastewater tariffs should be amended to include the essential  
16 consumer protections set forth in Chapter 56, similar to, for example, the tariff  
17 provisions of Pennsylvania American Water Co.

18 Q. WHAT SHOULD OCCUR IF YORK WATER FAILS TO SATISFY THESE  
19 CONDITIONS AND IMPROVE ITS CALL CENTER, TRAINING OBLIGATIONS,  
20 AND COMPLAINT HANDLING PERFORMANCE?

21 A. I propose that while the rates established in this proceeding are in effect, York Water  
22 submit quarterly reports to the Commission and the parties that include the progress in

1 meeting my proposed commitments. At a minimum, the Commission should open an  
2 investigation of persistent failure to meet reasonable performance standards.



1 Q. DO YOU HAVE AN ADDITIONAL RECOMMENDATION WITH RESPECT TO  
2 YORK WATER'S USE OF ITS BILLING AND TERMINATION RIGHTS FOR  
3 UNPAID CITY OF YORK WASTEWATER AND REFUSE CHARGES?

4 A. I recommend that this policy, which is no longer in effect, be separately investigated by  
5 the Commission to determine the appropriate enforcement action, if any, that is  
6 necessary.

7 Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY AT THIS TIME?

8 A. Yes.

# **EXHIBIT BA-1**

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### Recent Clients:

AARP  
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Pennsylvania Office of Consumer Advocate  
Public Counsel Unit, Attorney General, Washington  
Arkansas Attorney General  
The Public Utility Project of New York  
Ohio Office of Consumer Counsel  
District of Columbia Office of People's Counsel  
Delaware Division of Public Advocate  
Maryland Office of People's Counsel

### Areas of Expertise:

- Default Service, Consumer Protection, Service Quality, and Universal Service policies and programs associated with the alternative rate plans and mergers;
- Consumer Protection and Service Quality policies and programs associated with the regulation of competitive energy and telecommunications providers;
- The regulatory policies associated with the regulation of Credit, Collection, Consumer Protection, Low Income, and Service Quality programs and policies for public utilities;
- Customer Education and Rate design and pricing policies applicable to residential customers; and
- Advanced Metering Infrastructure and Grid Modernization costs and benefits, time-based pricing proposals, and performance standards.

### Prior Employment

DIRECTOR

*Consumer Assistance Division*

1986-96

*Maine Public Utilities Commission*

*Augusta, Maine*

One of five division directors appointed by a three-member regulatory commission and part of commission management team. Direct supervision of 10 employees, oversight of public utility consumer complaint function, appearance as an expert witness on customer services, consumer protection, service quality and low income policy issues before the PUC. Chair, NARUC Staff Subcommittee on Consumer Affairs.

SUPERINTENDENT

1979-83

*Bureau of Consumer Credit Protection  
Department of Professional and Financial Regulation*

*Augusta, Maine*

Director of an independent regulatory agency charged with the implementation of Maine Consumer Credit Code and Truth in Lending Act. Investigations and audits of financial institutions and retail creditors, enforcement activities, testimony before Maine Legislature and U.S. Congress.

## Education

JURIS DOCTOR

1973-76

*University of Maine School of Law*

*Portland, Maine*

Admitted to the Bar of the State of Maine, September 1976. Currently registered as “inactive.”

B.A. (WITH DISTINCTION) IN POLITICAL SCIENCE  
*University of Michigan*

1964-68

*Ann Arbor, Michigan*

## Publications and Testimony

“How to Construct a Service Quality Index in Performance-Based Ratemaking”, The Electricity Journal, April, 1996

“The Consumer Protection Agenda in the Electric Restructuring Debate”, William A. Spratley & Associates, May, 1996

Direct Testimony on behalf of the Telecommunications Workers Union, Telecom Public Notice 96-8, Price Cap Regulation and Related Issues, Canadian Radio-Television and Telecommunications Commission, September, 1996. [Analysis of and recommendations concerning the need to regulate service quality in move to price cap regulation]

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Direct Testimony on behalf of the Maryland Office of People’s Counsel, Universal Service Issues, Case No. 8745, before the Maryland Public Service Commission, November 20, 1998.

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Testimony on Proposed Interim Rules (Consumer Protection, Customer Enrollment, Code of Conduct, Supplier Licensing) on behalf of the New Jersey Division of Ratepayer Advocate before the New Jersey BPU, May 1999.

Direct Testimony on behalf of AARP, West Virginia PUC Investigation into Retail Electric Competition (consumer protection, universal service, Code of Conduct), June 15, 1999.

Direct and Surrebuttal Testimony on behalf of the Pennsylvania OCA, Natural Gas Restructuring proceedings (8 natural gas utilities): consumer protection; consumer education; code of conduct, before the Pennsylvania PUC, October 1999-April 2000.

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Direct Testimony on behalf of AARP, Universal Service Programs and Funding of low-income programs for electric and natural gas service, before the New Jersey Board of Public Utilities, Docket No. EX000200091, July, 2000.

Comments (on behalf of NASUCA and AARP) on Uniform Business Practices Reports, May and September 2000.

Direct Testimony on behalf of the Pennsylvania OCA, Verizon-Pennsylvania Structural Separation Plan on service quality, customer service and consumer protection issues [Docket No. M-00001353] before the Pennsylvania PUC, October 2000.

Direct and Rebuttal Testimony on behalf of the Maine Office of Public Advocate, Verizon-Maine Alternative Form of Regulation on service quality issues [Docket No. 99-851] before the Maine PUC, January and February 2001.

Direct and Rebuttal Testimony on behalf of the Citizens Utility Board, Nicor Gas Customer Select Pilot Program, on consumer protection and regulation of competitive natural gas suppliers [Docket Nos. 00-0620 and 00-0621] before the Illinois Commerce Commission, December 2000 and February 2001.

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate on consumer protection and service quality issues associated with the pending merger between GPU Energy and FirstEnergy, before the Pennsylvania PUC, Docket Nos. A-110300F0095 and A-110400F.0040 (February and March, 2001)

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Direct and Surrebuttal Testimony on behalf of the New Jersey Division of Ratepayer Advocate on service quality, consumer protection, and universal service issues associated with the pending merger between Conectiv and Pepco, before the New Jersey Board of Public Utilities, BPU Docket No. EM101050308 (September and November 2001).

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Direct Testimony on behalf of AARP before the Oklahoma Corporation Commission, In The Matter Of The Application of Oklahoma Gas And Electric Company, For An Order Of The Commission Authorizing Applicant To Modify Its Rates, Charges, And Tariffs For Retail Electric Service In Oklahoma, Cause No. PUD 201100087 (November 9, 2011 and November 16, 2011) (revenue requirement and rate design)

Comments on behalf of AARP before the Maryland Public Service Commission, Proposed Revisions to Reliability and Customer Service Regulations, RM 43 (November 16, 2011) (reliability performance standards and customer call center standards)

Direct Testimony on behalf of AARP before the Public Service Commission of the District of Columbia, In the Matter of The Application for Potomac Electric Power Co. for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service, Formal Case No. 1087 (December 14, 2011) (AMI cost recovery, Reliability Infrastructure Mechanism surcharge, customer care costs)

Direct Testimony on behalf of AARP and the People of the State of Illinois before the Illinois Commerce Commission, Commonwealth Edison Company, Approval of Multi-Year Performance Metrics Pursuant to Section 16-108(f) and (f-5) of the Public Utilities Act, Docket No. 11-0772 (January 30, 2012) (Performance Metrics relating to AMI deployment; remote disconnection of service)

Direct, Rebuttal, and Surrebuttal Testimony on behalf of Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company, West Penn Power Company, Approval of Default Service Programs, Docket Nos. P-2011-2273650, et al. (February, March and April 2012) (Retail Opt-in Auction, Customer Referral Programs)

Direct Testimony on behalf of the Massachusetts Office of the Attorney General before the Massachusetts Department of Public Utilities, Western Massachusetts Electric Co. 2011 Winter Storm Investigation, Docket No. D.P.U. 11-119-C (March 9, 2012) (Analysis of communications with customers and state and local officials in storm restoration)

Direct Testimony on behalf of AARP and the People of the State of Illinois before the Illinois Commerce Commission, Ameren Utilities, Approval of Multi-Year Performance Metrics Pursuant to Section 16-108(f) and (f-5) of the Public Utilities Act, Docket No. 12-0089 (March 19, 2012) (Performance Metrics for AMI Deployment; remote disconnection of service)

Direct and Rebuttal Testimony on behalf of the Massachusetts Office of the Attorney General before the Massachusetts Department of Public Utilities, National Grid 2012 Smart Grid Pilot Proposal, Docket No. D.P.U. 11-129 (April and May 2012) [Analysis of proposed smart meter and dynamic pricing pilot proposal]

Comments on behalf of AARP before the Maryland Public Service Commission, Dynamic Pricing Implementation Working Group Report, Case Nos. 9207 and 9208 (May 14, 2012) [Design and implementation of Peak Time Rebate programs for Pepco and BGE]

Comments on behalf of AARP before the Public Service Commission of the District of Columbia, Notice of Proposed Rulemaking, Major Event Outage Restoration Plans, Formal Case No. 766, 982, 991, and 1002 (May 29, 2012) [Regulatory reporting requirements for major event outage restoration plans]

Direct Testimony on behalf of The Utility Reform Network (TURN) before the Public Utilities Commission of the State of California, In the Matter of the Application of Pacific Gas and Electric Company Smart Grid Pilot Deployment Project, Application 11-11-017 (May 16, 2012) [Analysis of proposed customer education pilot]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy Co. for Approval of its Default Service Program, Docket No. P-2012-2283641 (April and May 2012) [Retail Opt-In Auction and Customer Referral Programs]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Equitable Gas Co. Request for Approval of Tariffs, Docket Nos. R-2012-2304727, R-2012-2304731, and R-2012-2304735 (July 25, 2012) [Purchase of Receivables Program]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities, Inc. for Approval of a Default Service Program and Procurement Plan for the Period June 1, 2013 through May 31, 2015, Docket No. P-2012-2302074 (July and August 2012) [Retail Opt-In Auction and Customer Referral Programs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Co. for Approval of Default Service Plan for the Period June 1, 2013 through May 31, 2015, Docket No. P-2012-2301664 (July, August, and September 2012) [Retail Opt-In Auction and Customer Referral Programs]

Affidavit and Expert Report on behalf of Plaintiffs, Bellermann v. Fitchburg Gas & Electric Co., Commonwealth of Massachusetts, Civil Action No. 09-00023 (August 23, 2012) [Analysis of utility storm restoration response]

Direct Testimony on behalf of the Public Utility Law Project (New York) before the New York State Public Service Commission, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Niagara Mohawk Power Corporation For Electric and Gas Service, Case No. 12-E-0201 and 12-G-0202 (August 31, 2012) [Rate case: low income programs, credit and collection policies, service quality]

Comments on behalf of AARP before the Maryland Public Service Commission, In the Matter of the Electric Service Interruptions in the State of Maryland due to the June 29, 2012 Derecho Storm, Case No. 9298 (September 10, 2012) [Analysis of customer communications in major storm restoration for Pepco and BGE]

Comments on behalf of the Ohio Partners for Affordable Energy before the Ohio Public Utility Commission, In the Matter of the Commission's Review of its Rules for Competitive Retail Natural Gas Service, Case No. 12-925-GA-ORD, and In the Matter of the Commission's Review of its Rules for Competitive Retail Electric Service, Case No. 12-1924-EL-ORD (January 2013) [retail market regulations, consumer protections, licensing, disclosures]

Direct and Cross Rebuttal Testimony on behalf of Texas Legal Services Center and Texas Ratepayers' Organization to Save Energy before the Public Utility Commission of Texas, Petition by Homeowners United for Rate Fairness to Review Austin Rate Ordinance No. 20120607-055, PUC Docket No. 40627 (February 2013) [low income programs]

Testimony on behalf of AARP before the Connecticut Senate Finance Revenue and Bonding Committee in opposition to proposal for auction of electric customers to retail suppliers, SB 843 (March 4, 2013)

Comments and Reply Comments on behalf of AARP before the Ohio Public Utility Commission, In the Matter of the Commission's Investigation of the Retail Electric Service Market, Case No. 12-3151-EL-COI (March and April 2013) [retail market reforms, default service, and consumer protections]

Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of UGI Utilities, Inc.—Electric Division for Approval of a Default Service Plan and Retail Market

Enhancement Programs for 2014-2017, Docket Nos. P-2013-235703 (June 2013) [Retail Market Enhancement programs; referral program]

Direct Testimony on behalf of the Government of the District of Columbia before the District of Columbia Public Service Commission, In the Matter of the Application of the Potomac Electric Power Co. for Authority to Increase Existing Retail Rates and Charges for Electric Distribution Service, Formal Case No. 1103 (August 2013) [low income discount program]

Comments and Reply Comments on behalf of AARP before the Arizona Corporation Commission, Generic, In The Matter of The Commission's Inquiry Into Retail Electric Competition, Docket No. E-00000W-13-0135 (July and August 2013) [implementation of retail electric competition]

Comments on behalf of AARP before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (September 2013) [consumer protection regulations for retail electric competition]

Direct Testimony on behalf of AARP before the New Jersey Board of Public Service, In the Matter of the Petition of Public Service Electric and Gas Co. for Approval of the Energy Strong Program, Docket No. EO13020155 and GO13020156 (October 2013) [reliability programs; cost recovery mechanism]

Direct Testimony on behalf of Canadian Office and Professional Employee's Union, Local 378, before the British Columbia Utilities Commission, Re: Fortis BC Energy, Inc. Application for Approval of a Multi-Year Performance Based Ratemaking Plan for 2014 through 2018, Project No. 3698719 (December 2013) [Service Quality Index]

Direct Testimony on behalf of Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Corp. for Approval of a New Pilot Time-of-Use Program, Docket No. P-2013-2389572 (January 2014) [Design of pilot TOU program; bid out to competitive energy supplier]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of FirstEnergy Companies (Met-Ed, Penelec, Penn Power, and West Penn) for Approval of a Default Service Programs, Docket Nos. P-2013-2391368, et al. (January-March 2014) [Retail market enhancement programs, referral program]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities for Approval of a Default Service Program and Procurement Plan for June 2013-May 2015, Docket No. P-2013-2389572 (January-May 2014) [Retail market enhancement programs, referral program]

Direct and Rebuttal Testimony on behalf of AARP before the Corporation Commission of Oklahoma, Application of Public Service Company of Oklahoma for Adjustment to Rates and Charges and Terms and Conditions of Service for Electric Service in the State of Oklahoma, Cause No. PUD-201300217 (March and May 2014) [AMI cost/benefit analysis and cost recovery; riders and surcharges; customer charge; low income program]

Direct and Reply Testimony on behalf of the District of Columbia Government through its Department of Environment before the Public Service Commission of the District of Columbia, In the Matter into the Investigation into the Issues Regarding the Implementation of Dynamic Pricing in the District of Columbia, Formal Case No. 1114 (April and May 2014) [Dynamic pricing policies and programs for residential customers]

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Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Company for Approval of Default Service Plan For the Period June 1,

2015 through May 31, 2017, Docket No. P-2014-2418242 (July and August 2014) [retail market enhancement programs, referral program]

Direct and Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy Co. for Approval of its Default Service Plan for the Period June 1, 2015 through May 31, 2017, Docket No. P-2014-2409362 (June 2014) [retail market enhancement programs, referral program]

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Comments on behalf of Delaware Division of the Public Advocate before the Delaware Public Service Commission, Rulemaking for Retail Electric Competition, PSC Regulation Docket No. 49 (Revised) (January 2015) [consumer protection regulations for retail electric competition]

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Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. IDT Energy, Inc., Docket No. C-2014-2427657 (April 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Affidavit of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (June 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

Direct Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission, on behalf of the Pennsylvania Office of Consumer Advocate and Bureau of Consumer Protection, Attorney General, Commonwealth of Pennsylvania by Attorney General Kathleen Kate, through the Bureau of Consumer Protection and Tanya McCloskey, Acting Consumer Advocate v. Blue Pilot Energy, LLC, Docket No. C-2014- 2427655 (September 2015) [unfair and deceptive practices; compliance with PA statutes and regulations for electric generation supplier]

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Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Joint Petition of Metropolitan Edison Company, Pennsylvania Electric Co., Pennsylvania Power Co., and West Penn Power Co. [FirstEnergy] for Approval of their Default Service Program and Procurement Plan for the Period June 1, 2017 through May 31, 2019, Docket Nos. P-2015-2511333, et. al. (January-February 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

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Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of PECO Energy Co. for Approval of its Default Service Program for the Period from June 1, 2017 through May 31, 2019, Docket No. P-2016-2534980 (June-July 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

Direct, Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utility Commission on behalf of the Office of Consumer Advocate, Petition of Duquesne Light Co. for Approval of Default Service Plan for the Period June 1, 2017 through May 31, 2021, Docket No. P-2016-2543140 (July-August 2016) [Retail Market Enhancement Programs: standard offer program and shopping for low income customers]

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Direct Testimony of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (May 2017) [Response to proposal for new surcharge for certain distribution grid investments]

Alexander, Barbara, Analysis and Evaluation of PEPCO's Root-Cause Analysis Report: District of Columbia Customer Satisfaction, prepared for the District of Columbia Office of People's Counsel and submitted to the D.C. Public Service Commission in Formal Case No. 1119 (May 2017)

Direct Testimony of Barbara Alexander before the Arkansas Public Service Commission on behalf of the Attorney General of Arkansas, Application of Entergy Arkansas, Inc. for an Order to find Advanced Metering Infrastructure to be in the Public Interest, Docket No. 16-06-U (June 2017) [Analysis of AMI business case; consumer protection policies]

Rebuttal Testimony of Barbara Alexander before the Pennsylvania Public Utilities Commission on behalf of the Office of Consumer Advocate, Pennsylvania PUC, et al., v. Philadelphia Gas Works, Docket No. R-2017-2586783 (June 2017) [Purchase of Receivables Program, customer shopping issues]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of People's Counsel, In the Matter of the Application of Potomac Electric Power Co. for Adjustments to its Retail Rates for the Distribution of Electric Energy, Case No. 9443 (June and August 2017) [Service Quality and Reliability of Service]

Direct Testimony of Barbara Alexander before the Washington Utilities and Transportation Commission, on behalf of the Washington State Office of Attorney General, Public Counsel Unit, W.U.T.C. v. Puget Sound Energy, Dockets UE-170033 and UG\_170034 (June 2017) [Base Rate Case: Service Quality Index; customer services]

Direct and Surrebuttal Testimony of Barbara Alexander before the Maryland Public Service Commission on behalf of the Office of Peoples Counsel, In the Matter of the Merger of AltaGas Ltd. And WGL Holdings, Inc., Case No. 9449 (August and September 2017) [Merger: conditions for service quality and reliability of service]

Supplemental Testimony in Opposition to Joint Stipulation and Recommendations of Barbara Alexander before the Public Utilities Commission of Ohio on behalf of the Office of Consumer Counsel, In the Matter of the Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case No. 16-1852-EL-SSO (October 11, 2017) [Response to Stipulation approving new surcharge for certain distribution grid investments]

Direct and Rebuttal Testimony of Barbara Alexander on behalf of The Public Utility Project of New York, before the New York Public Service Commission, Case 15-M-0127 In the Matter of Eligibility Criteria for Energy Service Companies, Case 12-M-0476 Proceeding on Motion of the Commission to Assess Certain Aspects of the Residential and Small Non-residential Retail Energy Markets in New York State, and Case 98-M-1343 In the Matter of Retail Access Business Rules (November and December 2017) [Analysis of New York retail energy market for residential customers; recommendations for reform]

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Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Utility Commission, Joint Petition of Metropolitan Edison Company Pennsylvania Electric Company, Pennsylvania Power Company, and West Penn Power Company For Approval of their Default Service Program and Procurement Plan for the Period June 1, 2019 Through May 31, 2023, Docket Nos. P-2017-2637855, et seq. (February, March, and April 2018) [Retail Market Enhancement Programs in a default service proceeding]

Direct Testimony of Barbara Alexander on behalf of the Arizona Corporation Commission Staff, before the Arizona Corporation Commission, In the Matter of the Application of Brooke Water, LCC for increase in water rates, Docket No. W-03039A-17-0295 (May 15, 2018) [Analysis of customer service, call center performance, and compliance with prior Commission orders]

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Direct Testimony of Barbara Alexander in Opposition to the Joint Stipulation and Recommendation on behalf of the Office of the Ohio Consumers’ Counsel, before the Public Utility Commission of Ohio, Case No. 17-0032-EL-AIR et seq. (June 15, 2018) [Analysis of the prudence of Duke Energy Ohio’s Advanced Metering Infrastructure Deployment and request for inclusion of costs in rate base]

Alexander, Barbara, “Time to End the Retail Energy Market Experiment for Residential Customers,” Harvard Electricity Policy Group (June 2018)

Rebuttal Testimony of Barbara Alexander on behalf of the Office of Consumer Advocate, before the Pennsylvania Public Utility Commission, PUC v. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577 (July 3, 2018) [Analysis of gas utility billing policies for non-commodity services and retail natural gas suppliers]

Direct Testimony of Barbara Alexander on behalf of TURN and Center for Accessible Technology before the California Public Utility Commission, 2018 Rate Design Window, Docket No. A.17-12-011, et al. (October 26, 2018) [Consumer Protections to Accompany the Transition to Default Time of Use Rates for residential customers; analysis of customer education and messaging]

Direct and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Utility Commission, PUC vs. Pittsburgh Water and Sewer Authority, Docket Nos. R-2018-3002645, R-2018-3002647 (September and October 2018) [Analysis of compliance with Pennsylvania consumer protection and service quality performance of a large water and sewer utility; base rate case]

Direct Testimony of Barbara Alexander on behalf of TURN before the California Public Utility Commission, Southern California Edison Charge Ready 2 Infrastructure and Market Education Programs, Docket No. A.18-06-015 (November 30, 2018) [Analysis of proposed mass market customer education proposal]

Direct, Surrebuttal and Supplemental Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Implementation of Chapter 32 of The Public Utility Code Regarding Pittsburgh Water and Sewer Authority – Stage 1, Docket Nos. M-2018-2640802 and M-2018-2640803 (April, May and August 2019) [Analysis of consumer protection, customer service, and customer education programs of large water and wastewater utility]

Direct, Rebuttal, and Surrebuttal Testimony of Barbara Alexander on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company, LLC and Peoples Gas Company, LLC for all of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company, LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC’s Membership Interests by Aqua America, Inc., Docket Nos. A-2018-3006061, A-2018-3006062, and A-2018-3006063 (April and May 2019) [Customer Service, Consumer Protection, and Universal Service conditions for merger]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers’ Council, before the Ohio Public Utilities Commission, In the Matter of the Commission’s Investigation of PALMco Power OH, LLC dba Indra Energy and PALMco Energy OH, LLC dba Indra Energy, Case No. 19-957-GE-COI (September 4, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Testimony in Opposition to Settlement on behalf of The Office of the Ohio Consumers’ Council, before the Ohio Public Utilities Commission, In the Matter of the Commission’s Investigation of Verde Energy USA Ohio LLC, Case No. 19-0958-GE-COI (October 2, 2019) [Analysis of proposed settlement for consumer protections and customer remedies]

Direct Testimony and Supplemental Direct Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of Their Involuntary Remote Disconnect Procedures, Docket No. P-2019-3013979 et al. (March 20, 2020 and July 15, 2022) [Criteria for remote disconnection of service with AMI]

Rebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Interstate Gas Supply, Inc., Direct Energy Services LLC and Shipley Choice LLC v. Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co., West Penn Power Co., Docket Nos. C-2019-30138-5 et al. (May 2020) [Complaint by retail suppliers seeking to bill non-basic services on utility bill]

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Direct and Supplemental Testimony, Rebuttal Testimony, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PPL Electric Utilities Corporation for Approval of a Default Service Program for the Period of June 1, 2021 through May 31, 2025, Docket No. P-2020-3019356 (June-August 2020) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of PECO Energy for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019290 (June-July 2020), ) [Standard Offer Program and low income shopping program for retail market programs]

Direct, Rebuttal, and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Petition of Duquesne Light Co. for Approval of Default Service Program for the Period June 1, 2021 through May 31, 2025, Docket No. P-2020-3019522 (July-September 2020), [Standard Offer Program and low income shopping program for retail market programs]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2020-3017951 (water), C-2020-3019348, R-2020-3017970 (wastewater), C-2020-3019349 (July-September 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Affidavit of Barbara R. Alexander, Analysis of Washington Gas Light Co. Root Cause Analysis Report, on behalf of the Office of the People’s Counsel of the District of Columbia, submitted to the Public Service Commission in Formal Case No. 1142 (October 2020).

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pennsylvania American Water Co, Docket R-2020-3019369, et al., (September-October 2020) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony, on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Pittsburgh Water and Sewer Authority, Docket Nos. R-2021-3024773, et al. (July-September 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]

Direct and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Pennsylvania Public Utility Commission v. Aqua Pennsylvania, Inc, Docket Nos. R-2021-3027385 et al. (November-December 2021) [Base rate case; analysis of customer service and consumer protection programs and policies]



Direct, Rebuttal, and Surrebuttal Testimony on behalf of the Pennsylvania Office of Consumer Advocate before the Pennsylvania Public Utility Commission, Joint Petition of Metropolitan Edison Co., Pennsylvania Electric Co., Pennsylvania Power Co. and West Penn Power Co. for Approval of their Default Service Programs, Docket Nos. P-2021-3030012 et al. (February, March, and April 2022) [Standard Offer program; retail market policies; Time of Use rate option; low income consumer protections]

## **Presentations and Training Programs:**

- Presentation on Consumer Protection Policies for Solar Providers, New Mexico Public Regulatory Commission, Santa Fe, NM, January 2017
- Presentation on Residential Rate Design Policies, National Energy Affordability and Energy Conference, Denver, CO., June 2016
- Presentation on “Regulatory-Market Arbitrage: From Rate Base to Market and Back Again,” before the Harvard Electricity Policy Group, Washington, D.C., March 2016.
- Presentation on Residential Rate Design and Demand Charges, NASUCA, November 2015.
- Alexander, Barbara, “Residential Demand Charges: A Consumer Perspective,” presentation for Harvard Electricity Policy Group, Washington, D.C., June 2015.
- Presentation on “Future Utility Models: A Consumer Perspective,” for Kleinman Center for Energy Policy, U. of Pennsylvania, August 2015.
- Presentation, EUCI Workshop on Demand Rates for Residential Customers, Denver, CO [May 2015]
- Presentation, Smart Grid Future, Brookings Institute, Washington, DC [July 2010]
- Participant, Fair Pricing Conference, Rutgers Business School, New Jersey [April 2010]
- Presentation on Smart Metering, National Regulatory Conference, Williamsburg, VA [May 2010]
- Presentation on Smart Metering, Energy Bar Association Annual Meeting, Washington, DC [November 2009]
- Presentation at Workshop on Smart Grid policies, California PUC [July 2009]
- National Energy Affordability and Energy Conference (NEAUC) Annual Conference
- NARUC annual and regional meetings
- NASUCA annual and regional meetings
- National Community Action Foundation’s Annual Energy and Community Economic Development Partnerships Conference
- Testimony and Presentations to State Legislatures: Virginia, New Jersey, Texas, Kentucky, Illinois, and Maine
- Training Programs for State Regulatory Commissions: Pennsylvania, Georgia, Kentucky, Illinois, New Jersey
- DOE-NARUC National Electricity Forum
- AIC Conference on Reliability of Electric Service
- Institute of Public Utilities, MSU (Camp NARUC) [Instructor 1996-2006]
- Training Programs on customer service and service quality regulation for international regulators (India and Brazil) on behalf of Regulatory Assistance Project
- Georgia Natural Gas Deregulation Task Force [December 2001]
- Mid Atlantic Assoc. of Regulatory Utility Commissioners [July 2003]
- Illinois Commerce Commission’s Post 2006 Initiative [April 2004]
- Delaware Public Service Commission’s Workshop on Standard Offer Service [August 2004]

# **EXHIBIT BA-2**

**(YORK WATER COMPANY RESPONSE TO OCA SET III, NO. 10)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 10**

With regard to the York Water's customer call center(s) that serve Pennsylvania residential customers, provide the following monthly information in an Excel spreadsheet with formulas intact for the period January 2020 through the current month and update this information during the pendency of this proceeding:

- a. Volume of calls to the voice response menu;
- b. Volume of calls seeking to speak to a customer service representative (those who enter the queue);
- c. Percentage of calls in (b) answered within 30 seconds;
- d. Average Speed of Answer for (b);
- e. Abandonment rate for (b);
- f. Average talk time for (b); and
- g. Busy Rate for (a).

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

- a.-g. See Attachment OCA III-10 for the requested phone statistics.

## 2018 Call Center Statistics

										<i>Time to Answer : Intervals</i>			
	# Inbound Calls	# Answered	# Abandoned	# Redirected	# Disc	% Answered	% Abandoned	To Vmail Total	% To Vmail	Avg. Time to Answer	< 24 sec.	25-120 sec.	> 120 sec.
January	5930	4815	596	512	4	81.20%	10.05%	460	7.76%	2:29	39.88%	21.43%	39.04%
February	4978	4204	470	302	2	84.45%	9.44%	300	6.03%	2:11	44.79%	21.29%	34.18%
March	4632	4250	261	120	1	91.75%	5.63%	119	2.57%	1:15	59.22%	20.80%	20.26%
April	3631	3352	179	100	0	92.32%	4.93%	100	2.75%	1:00	63.57%	20.97%	15.69%
May	5020	4717	200	103	0	93.96%	3.98%	103	2.05%	0:52	65.97%	20.71%	13.59%
June	5002	4739	172	91	0	94.74%	3.44%	91	1.82%	0:44	68.24%	20.85%	11.08%
July	5640	5006	411	223	0	88.76%	7.29%	223	3.95%	1:24	55.33%	22.03%	22.91%
August	5616	4983	403	230	0	88.73%	7.18%	230	4.10%	1:36	51.43%	21.29%	27.59%
September	4693	4108	377	208	0	87.53%	8.03%	208	4.43%	1:50	47.78%	21.23%	31.26%
October	5644	4843	502	299	0	85.81%	8.89%	299	5.30%	2:13	41.83%	20.71%	37.45%
November	4506	4274	166	66	0	94.85%	3.68%	64	1.42%	0:40	75.32%	14.86%	9.83%
December	3812	3628	138	46	0	95.17%	3.62%	46	1.21%	0:37	76.68%	14.39%	8.93%
<b>TOTALS</b>	<b>59104</b>	<b>52919</b>	<b>3875</b>	<b>2300</b>	<b>7</b>	<b>89.94%</b>	<b>6.35%</b>	<b>2243</b>	<b>3.62%</b>	<b>1:24</b>	<b>57.50%</b>	<b>20.05%</b>	<b>22.65%</b>

## 2019 Call Center Statistics

										<i>Time to Answer : Intervals</i>				
	# Inbound Calls	# Answered	# Abandoned	# Redirected	# Disc	% Answered	% Abandoned	To Vmail Total	% To Vmail	Avg. Time to Answer	< 24 sec.	25-120 sec.	121-240 sec.	> 241 sec
<b>January</b>	4878	4609	187	82	0	94.49%	3.83%	82	1.68%	0:43	76.31%	13.50%	5.47%	4.73%
<b>February</b>	3945	3623	235	87	0	91.84%	5.96%	87	2.21%	1:03	66.63%	16.59%	8.87%	7.90%
<b>March</b>	4542	4260	195	87	0	93.79%	4.29%	87	1.92%	0:55	68.78%	16.50%	8.26%	6.46%
<b>April</b>	4730	4388	235	107	0	92.77%	4.97%	107	2.26%	0:58	67.73%	15.95%	8.91%	7.41%
<b>May</b>	4795	4321	324	150	0	90.11%	6.76%	150	3.13%	1:21	60.73%	18.65%	10.04%	10.58%
<b>June</b>	4493	3997	343	153	0	88.96%	7.63%	153	3.41%	1:23	57.79%	20.24%	11.23%	10.73%
<b>July</b>	5168	4340	556	271	1	83.98%	10.76%	264	5.11%	2:15	44.22%	21.66%	13.43%	20.69%
<b>August</b>	5421	4492	603	325	1	82.86%	11.12%	325	6.00%	2:19	46.97%	18.86%	13.45%	20.73%
<b>September</b>	4852	4339	337	175	1	89.43%	6.95%	175	3.61%	1:27	57.52%	19.89%	10.49%	12.10%
<b>October</b>	5132	4629	347	122	0	90.20%	6.76%	156	3.04%	1:20	63.25%	17.87%	8.86%	10.93%
<b>November</b>	4311	4016	201	93	1	93.16%	4.66%	93	2.16%	0:55	66.14%	18.50%	9.64%	5.73%
<b>December</b>	4262	3885	248	129	0	91.15%	5.82%	129	3.03%	1:04	63.40%	19.05%	9.45%	8.11%
<b>TOTALS</b>	<b>56529</b>	<b>50899</b>	<b>3811</b>	<b>1781</b>	<b>4</b>	<b>90.04%</b>	<b>6.63%</b>	<b>1808</b>	<b>3.13%</b>	<b>1:18</b>	<b>61.62%</b>	<b>18.11%</b>	<b>9.84%</b>	<b>10.51%</b>

## 2020 Call Center Statistics

	# Inbound Calls	# Answered	# Abandoned	# Redirected	# Disc	% Answered	% Abandoned	To Vmail Total	% To Vmail	<i>Time to Answer : Intervals</i>				
										Avg. Time to Answer	< 24 sec.	25-120 sec.	121-240 sec.	> 241 sec
<b>January</b>	3677	3442	154	80	1	93.61%	4.19%	80	2.18%	0:52	68.88%	17.20%	8.28%	5.64%
<b>February</b>	2999	2719	176	101	3	90.66%	5.87%	101	3.37%	1:13	61.09%	18.76%	10.89%	9.27%
<b>March</b>	3870	3421	304	143	2	88.40%	7.86%	143	3.70%	1:40	51.51%	21.02%	13.24%	14.26%
<b>April</b>	2667	2480	126	61	0	92.99%	4.72%	61	2.29%	1:01	66.57%	16.49%	9.44%	7.50%
<b>May</b>	2927	2814	85	26	2	96.14%	2.90%	26	0.89%	0:24	83.83%	11.80%	2.91%	1.46%
<b>June</b>	3266	3132	100	33	1	95.90%	3.06%	33	1.01%	0:25	83.11%	11.97%	3.35%	1.56%
<b>July</b>	3674	3475	139	58	2	94.58%	3.78%	58	1.58%	0:45	71.42%	16.98%	7.31%	4.29%
<b>August</b>	3639	3432	146	61	0	94.31%	4.01%	61	1.68%	0:50	69.14%	19.03%	6.47%	5.36%
<b>September</b>	5483	4481	592	409	1	81.73%	10.80%	409	7.46%	2:36	45.35%	20.15%	12.03%	22.49%
<b>October</b>	4254	3981	163	109	1	93.58%	3.83%	109	2.56%	1:00	66.79%	17.91%	7.96%	7.33%
<b>November</b>	3689	3507	126	56	0	95.07%	3.42%	56	1.52%	0:41	74.02%	16.54%	5.85%	3.59%
<b>December</b>	4093	3768	199	123	3	92.06%	4.86%	123	3.01%	1:09	60.30%	22.88%	8.12%	8.70%
<b>TOTALS</b>	<b>44238</b>	<b>40652</b>	<b>2310</b>	<b>1260</b>	<b>16</b>	<b>91.89%</b>	<b>4.94%</b>	<b>1260</b>	<b>2.60%</b>	<b>1:03</b>	<b>66.83%</b>	<b>17.56%</b>	<b>7.99%</b>	<b>7.62%</b>

### 2021 Call Center Statistics

	# Inbound Calls	# Answered	# Abandoned	# Redirected	# Disc	% Answered	% Abandoned	To Vmail Total	% To Vmail	<i>Time to Answer : Intervals</i>				
										Avg. Time to Answer	< 30 sec.	31-120 sec.	121-240 sec.	> 241 sec
<b>January</b>	4735	4030	408	295	2	85.11%	8.62%	295	6.23%	2:31	41.02%	22.73%	15.58%	20.69%
<b>February</b>	5229	4097	665	463	4	78.35%	12.72%	463	8.85%	3:44	35.59%	17.79%	13.77%	32.85%
<b>March</b>	5081	4326	475	280	0	85.14%	9.35%	280	5.51%	2:25	44.06%	18.59%	14.82%	22.54%
<b>April</b>	5448	4096	827	524	1	75.18%	15.18%	524	9.62%	4:18	31.27%	17.77%	15.31%	35.64%
<b>May</b>	5207	3601	933	673	0	69.16%	17.92%	673	12.92%	5:57	24.47%	12.33%	14.38%	48.82%
<b>June</b>	5574	4189	812	571	2	75.15%	14.57%	569	10.21%	4:32	27.93%	15.73%	15.21%	41.13%
<b>July</b>	5319	3765	947	607	0	70.78%	17.80%	603	11.34%	5:25	24.44%	12.93%	15.14%	47.49%
<b>August</b>	4724	3915	488	320	1	82.87%	10.33%	315	6.67%	2:59	39.69%	17.88%	15.17%	27.25%
<b>September</b>	5398	3605	1113	680	0	66.78%	20.62%	678	12.56%	6:21	18.92%	12.18%	14.84%	54.06%
<b>October</b>	4887	3404	877	605	1	69.65%	17.95%	605	12.38%	6:01	19.71%	13.87%	14.95%	51.47%
<b>November</b>	4529	3401	664	463	1	75.09%	14.66%	463	10.22%	4:54	23.73%	15.20%	15.29%	45.78%
<b>December</b>	3995	3022	605	363	5	75.64%	15.14%	363	9.09%	4:34	22.80%	14.82%	18.46%	43.91%
<b>TOTALS</b>	<b>60126</b>	<b>45451</b>	<b>8814</b>	<b>5844</b>	<b>17</b>	<b>75.59%</b>	<b>14.57%</b>	<b>5831</b>	<b>9.63%</b>	<b>4:28</b>	<b>29.47%</b>	<b>15.99%</b>	<b>15.24%</b>	<b>39.30%</b>

2022 Call Center Statistics

	# Inbound Calls	# Answered	# Abandoned	# Redirected	# Disc	% Answered	% Abandoned	To Vmail Total	% To Vmail	Time to Answer : Intervals				
										Avg. Time to Answer	< 30 sec.	31-120 sec.	121-240 sec.	> 241 sec
January	4970	3709	740	508	13	74.63%	14.89%	508	10.22%	5:00	19.65%	14.69%	17.36%	48.29%
February	4476	3173	767	536	0	70.89%	17.14%	536	11.97%	6:05	17.46%	11.53%	16.01%	55.00%
March	4762	3586	697	477	2	75.30%	14.64%	476	10.00%	4:32	29.25%	15.20%	15.62%	39.93%
April	6392	3650	1608	1133	1	57.10%	25.16%	1133	17.73%	9:36	15.07%	7.84%	10.58%	66.52%
May	5402	3565	1017	818	2	65.99%	18.83%	817	15.12%	7:16	17.90%	8.53%	13.77%	59.80%
June														
July														
August														
September														
October														
November														
December														
<b>TOTALS</b>	<b>26002</b>	<b>17683</b>	<b>4829</b>	<b>3472</b>	<b>18</b>	<b>68.78%</b>	<b>18.13%</b>	<b>3470</b>	<b>13.01%</b>	<b>6:29</b>	<b>19.87%</b>	<b>11.56%</b>	<b>14.67%</b>	<b>53.91%</b>



# **EXHIBIT BA-3**

**(YORK WATER COMPANY RESPONSE TO OCA SET VII, NO. 13)**

**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 VII**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET VII, NO. 13**

With regard to the phone center stats provided in response to OCA-III-10, please provide York Water's internal review of the trends reflected in this multi-year performance and what steps are being taken, if any, to improve performance.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 2, 2022

**RESPONSE:**

The Company recognized that the call volume and hold time increased since 2020 in part due to City of York wastewater and refuse customers. When appropriate, additional resources were used to address the increase in caller traffic. Further, as noted in response to OCA-VII-8, York Water stopped providing billing services for the City of York wastewater customers in July 2022. Therefore, the Company expects the call volume and hold time figures to improve going forward.

# **EXHIBIT BA-4**

**(YORK WATER COMPANY RESPONSE TO OCA SET VII, NO. 12)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 12**

Provide the training materials currently in effect for customer service representatives who serve Pennsylvania customers.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

The training materials currently in effect for customer service representatives who serve Pennsylvania customers is attached.

## CSR TRAINING BINDER ORDER OF CONTENTS

- Customer service training outline
- Areas of Service
- Oracle
  - Basics of Oracle
    - Account search
    - Front page
    - Private fire
    - Customer Flags/Password accounts
    - Tap info (line material, etc.)
- Apps/Forms
  - Online app steps
  - Add new customer in Paymentus
  - Paper app
  - Creating account from paper app
  - Moving customer from one address to another
  - Continuous service
- Billing/Pas
  - Billing history
  - Individual bill
  - Payment agreement info sheet
  - Fixed amount sheet
  - PA account

- PA page
- PA view activity
- TAP front page
- TAP form
- Rates
- Consumption Calls
- Meter info
- How To (steps)
  - Creating a WO
  - Editing a WO
  - Debit/Credit
  - Promise to Pay/Correspondence Notes
  - Creating a PA
  - Setting up paperless billing in Paymentus
  - Paperless billing in Oracle
  - Attaching Docs in Oracle account
  - Verifying doc is attached
- Sewer
  - Municipal Agreements
  - Sanitary sewer Emergency (YWC owned)
  - Jacobus smartsheet
  - WY, EP, AP, Felton, & Letterkenny smartsheet
  - York City sewer info (FAQs, emails, etc.)
  - SGT smartsheet

- WMT smartsheet
- YNS smartsheet
- Sewer acct in Oracle (YWC billing agent)
  - Sewer bill
- YWC owned and operated sewer acct
  - Flat rate (rental prop) vs on water bill
  - Bills of each
- Meters
  - Meter test form
  - Meter reading info sheet
  - How to read your meter
    - ARB vs ECODER (w/ pics)
- Collections/Past due
  - Turn on fee
  - YWC Cares
  - Medical certificate
  - CAP
- Miscellaneous
  - SLPP form/app
  - Lead service line?
  - FAQs about water quality
- Miscellaneous (in front pouch)
  - Who to call & when
  - Municipality contact numbers

- WO mapping
- YWC employee contact info



## Customer Service Training Outline

### Our Company

#### **A. Intro to Customer Service**

- a. Front Office Staff
  - i. CSR's (Ana, Colton, Elisabetta, Fabiola, Jocelyn, Lindsey, Lydia, Nancy, Susan, Valerie)
  - ii. Cashier (Jean)
  - iii. Customer Service Lead (Savannah)
- b. Meter Reading Department (Dean, Don, Luis, Michele, Colton, Lindsey, Lydia)
- c. Collections (Elisabetta, Jocelyn)
- d. Mail Room (Lona)
- e. Billing Department (Linda & Nancy)
- f. IT Department (Mark, Andy, Nadh, Chris)

#### **B. Intro to Management**

- a. Vice President of Human Resources (Natalee Colon)
- b. President and CEO (JT Hand)
- c. CFO (Matt Poff)
- d. Vice President of Customer Service (Vernon Bracey)
- e. COO (Mark Wheeler)

#### **C. Quick Review and Exposure of Company**

- a. Shadow Meter Reading/Collectors
  - i. Terminations, Postings, starts/finals, turn offs, complaint orders, etc.
- b. Shadow w/ Distribution
  - i. Meter exchanges, Turn on's, main cleaning-relining, Main extensions, etc.

### Overview

#### **A. Tools Training**

- a. Overview of Oracle
- b. Overview of Paymentus
- c. Overview of Neptune Software
  - i. Fixed Collectors/On demand reads
- d. Overview of MXIE software/phone system

#### **B. Rules & Regulations**

- a. Overview of Chapter 14 & 56 (will read in free time)

### Department Specific Training

#### **A. Main Duties**

- a. Phone calls

- b. Emails, voicemails, applications – 1 day priority

**B. Phone Calls**

- a. Collections: extensions, amount due, shut off date
- b. Start/stop service: current customers, new customers (multi vs single; continuous service)
- c. Low pressure
- d. High consumption: leaks/toilets
- e. Refund checks
- f. Water quality
- g. Settlement companies

**C. Payment Options**

- a. Paymentus: One time & scheduled payments
- b. TAP (Timely Automatic Payments)
- c. Overnight Drop box
- d. Online banking/corner store payments

**D. Work Orders**

- a. Service requests (all types of work orders)

**E. Application Process**

- a. Online & in person
- b. Oracle Entry
- c. ID & lease/deed verification
- d. Searching for previous accounts & balances

**F. Email Training**

- a. Online application process
- b. Voicemails
- c. Other customer service emails

**G. Collections**

- a. Multi vs single unit postings
- b. Terminations
- c. Promise to Pay
- d. User w/o contract
- e. Write offs
- f. In Collections
- g. Medical Certificates
- h. Social Services (St Matts, Salvation Army, etc.)

**H. Payment Agreements**

- a. One-time vs ongoing
- b. Eligibility
- c. CIC PA
- d. Delinquent PA customer

**I. York Water Programs**

- a. Service Line Protection Plan (SLPP)
- b. Customer Assistant Program (CAP)
- c. York Water Cares (w/ Salvation Army)

**J. Sewer**

- a. Owned and Operated by YWC vs Billing agent

**Where to find in My Computer**

**A. Customer Service (I) drive:**

- a. Shut off list
- b. Scanned applications
- c. Blank applications
- d. Medical certificates
- e. Leases

**B. Shared (W) drive:**

- a. Turn on schedule
- b. Meter schedule

**C. Payment Agreement (J) drive:**

- a. If a PA customer has received a shut off notice
- b. How much their shut off notice is

**Where do I go when a customer asks/says...**

- A. What is my balance?
- B. What is the minimum I can pay?
- C. I would like to end my service.
- D. I would like to start service.

E. I think my pipes are lead.

F. I need to get my water turned on.

# **EXHIBIT BA-5**

**(YORK WATER COMPANY RESPONSE TO  
OCA SET III, NOS. 38 AND 40)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 38**

Please provide a the “pilot low income program” implementation plan and any analysis of this plan undertaken since its inception.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

The pilot low-income program implementation plan information is attached as Attachment OCA-III-38, A and B.

## Guidelines

### For agencies distributing York Water Cares funds for The York Water Company

1. The person receiving assistance must be a residential water or sewer customer of The York Water Company.
2. The assistance must be for the customer's primary residence (may be rented or owned).
3. The customer must provide a current shut-off notice from York Water when applying for York Water Cares funds. Exceptions to this guideline need to be approved by York Water.
4. The customer needs to show the agency proof (recent bill, cashed check, or receipt) that they have made a payment of at least 25% of the amount due in the past 90 days and may also be required to have a payment arrangement on the balance past due before York Water Cares funds will be released by the agency.

Customers may receive a maximum of \$200 per calendar year and must receive the total amount at one time. Distribution of York Water Cares funds to a customer will be one time during the calendar year.

5. There will be no carryover of funds for an account from one year to the next.
6. York Water Cares funds are not to be used for security deposits, connection fees, and prior uncollectibles from a previous address. The funds are for water or sewer use only.
7. The distribution of York Water Cares funds should not be based strictly on income level of the customer, however, proof of income for all adults in the household for a minimum of the past 60 days should be provided. Other factors the agency could include:
  - 55 years of age or older
  - Resident who does not exceed 200% poverty level
  - On a disabled or handicapped income
  - Veteran with a verified need
  - Able to demonstrate a certified medical emergency
  - Experienced a verifiable, recent loss of income
  - Receiving unemployment benefits
8. Customers may only receive York Water Cares funds from an agency serving the county in which they live.
9. The agency distributing York Water Cares funds will determine the need of each customer, since it specializes in these decisions.
10. The agency will track the amount of York Water Cares funds given to each customer during the calendar year.
11. When sending the check from your agency to York Water, please include the following information:
  - Name of customer
  - York Water account number
  - Amount of assistance per customer
12. The agency will send a monthly report to The York Water Customer Service Department by the end of the first week of the next month. The information should include:
  - Name of the agency
  - Address of the agency
  - Month the activity occurred
  - Beginning balance
  - Check amount deposited by The York Water Company
  - Amount paid out to customers that month
  - Ending balance

- Number of applicants granted assistance and number of requests that could not be fulfilled because the agency did not have sufficient funds.
- List of customers receiving help, including:
  - Date assistance was approved
  - Name of customer
  - Customer's estimated household income and # of residents (if that is used to determine eligibility)
  - Customer's York Water account number
  - Total amount of assistance per customer (all assistance given by the agency from any funding source)
  - Amount of assistance per customer that came from York Water Cares funds

13. When the agency's monthly report shows an ending balance of \$2,000 or less, York Water will send a check to the agency only if funds are available to replenish the fund. Agencies should be careful not to draw funds down below a zero balance, in the event that funds are not available to replenish an overdrawn amount.

**These are guidelines. Leniency is encouraged in specific extraordinary circumstances upon the recommendation of the agency or the recommendation of York Water.** If you have any questions or feel a need to deviate from the guidelines in special cases, please call the VP of Customer Service, Vernon Bracey at 717-718-2943 or [vernonb@yorkwater.com](mailto:vernonb@yorkwater.com).





## York Water Cares (YWC)

Low Income Customer  
Assistance Program

York

ter

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## OVERVIEW

York Water Cares (YWC) is a program, which provides limited funding - payable thru community agencies to those who need help paying their water bill.

Although this program is designed to help low income customers, it may also be helpful to customers who have a short term challenge in making ends meet and need assistance paying their water bill. Please give us a call or an email to (717)845-3601 or [customer.service@yorkwater.com](mailto:customer.service@yorkwater.com) and ask about our Low Income Customer Assistance Program.

This program is only available one time per year for a customer that qualifies. Please read this handout for details.



“That good York water”

SINCE 1816

**Need help paying your  
water bill?**

We have a program to assist customers who may need a helping hand if they get behind in paying their water bills.

This program is a partnership with local charities that will provide guidance to our customers and help them pay a water bill if they are having difficulties.



The York Water Company  
130 E. Market St.  
York, PA 17401  
(717)845-3601

[Customer.service@yorkwater.com](mailto:Customer.service@yorkwater.com)

## Who can apply?

### To receive assistance:

1. You must be a residential water or sewer customer of York Water (you can either rent or own the home you live in).
2. You must be unable to pay your full water bill.
3. You must be at risk of being shut-off due to non-payment.

## Will this pay my whole water bill?

Probably not. You'll have to show the agency that you can pay or have paid 25% of the past due amount. You can bring your most recent water bill to show how much is past due, and how much you've paid towards the bill.

Once you've done that, the agency may be able to pay up to \$200 towards your water bill.

## How does it work?

### If you meet the requirements:

1. You should contact our Customer Service at (717)845-3601 or [customer.service@yorkwater.com](mailto:customer.service@yorkwater.com) and ask about our Low Income Customer Assistance Program. We'll let you know if an area agency is participating and if they have funds available.
2. Contact the agency and set up an appointment. They may want you to bring a current water bill or shut-off notice and proof of income for the past 2 months.
3. The agency will review your payment history, proof of income, and how much you owe on your water bill. The agency may also discuss water saving tips and other ways to reduce future water bills.
4. If approved by the agency and if funds are available, they may make a contribution of up to \$200 towards your water bill's past due amount.
5. The agency will notify us if they choose to make a payment (which will pause any shut-offs) and then the agency will send us the money directly.
6. This program can only be used one time per year.

## Do I need to be a low income customer?

This program is generally for low-income customers, but is also available if a customer has a short term difficulty in paying their water bill, such as an emergency expense, a medical issue, recent loss of a job, an unusually high water bill that they cannot afford to pay, etc.

## Is there always money available?

No, an agency may run out of assistance funds. If they do then we can check to see if another agency has any funds available.

## How do I get started?

Stop in our office at 130 E. Market Street, or contact our Customer Service at (717)845-3601 or [customer.service@yorkwater.com](mailto:customer.service@yorkwater.com) and ask about our **Low Income Customer Assistance Program**.

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 40**

Has York Water evaluated the completion rate for its payment plans to determine the basis or criteria for success or failure? If so, provide such analysis.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

The Company has not evaluated the completion rate for its payment agreements.

# **EXHIBIT BA-6**

**(YORK WATER COMPANY RESPONSE TO OCA SET III, NO. 21)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 21**

Provide the following monthly and annual information in electronic spreadsheet format concerning Pennsylvania residential customers for the period January 1, 2020 through the current month and continuing through this proceeding:

- a. Termination Notices issued;
- b. Termination Notices resolved with payment;
- c. Termination Notices resolved with payment plan;
- d. Termination Notices not resolved and eligible for termination of service;
- e. Termination of Service; and
- f. Reconnection of Service within 30 days.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

- a. The number of notices issued is included in the attached spreadsheet OCA III-21;
- b. The Company does not track the number of notices resolved with payment;
- c. The Company does not track the number of notices resolved with payment plan;
- d. The Company does not track notices not resolved and eligible for termination;
- e. The number of service terminations is included in the attached spreadsheet;
- f. The Company does not track the number of reconnections within 30 days.

OCA Set III, No. 21

Month	Termination notices	Termination of service
Jan-20	4963	73
Feb-20	4086	55
Mar-20	1331	51
Apr-20	0	0
May-20	0	0
Jun-20	0	0
Jul-20	0	0
Aug-20	0	0
Sep-20	0	0
Oct-20	0	0
Nov-20	0	0
Dec-20	0	0
Jan-21	4087	0
Feb-21	2389	54
1-Mar	3099	67
Apr-21	3657	63
May-21	2905	75
Jun-21	3443	29
Jul-21	3184	18
Aug-21	3458	45
Sep-21	3267	44
Oct-21	3740	29
Nov-21	783	41
Dec-21	3137	30
Jan-22	5179	24
Feb-22	4707	20
Mar-22	3766	23
Apr-22	6543	15
May-22	4223	19

# **EXHIBIT BA-7**

**(YORK WATER COMPANY RESPONSE TO OCA SET VII, NO. 8)**

**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 VII**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET VII, NO. 8**

The response to OCA-III-21 shows a significant disparity between the volume of termination notices issued and the actual terminations of service. Please identify the basis for deciding what customers will be terminated and further explain why York Water has issued termination notices that are not acted upon.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 2, 2022

**RESPONSE:**

From 2020 until May 2022, York Water served as the third-party billing agent for the City of York wastewater customers. York Water issued its final City of York wastewater bills on May 26, 2022, with a due date of June 20, 2022. Effective July 1, 2022, York Water ceased providing billing agent services to City of York wastewater customers. Also, since 2020, York Water has served as the third-party billing agent for the City of York refuse customers. Both the wastewater and refuse billing services include issuing termination notices for delinquent City of York wastewater and refuse customers. The totals referenced in response to OCA-III-21 include delinquent York Water customers and delinquent City of York wastewater and refuse customers. While the majority of the shut off notices generated were for City of York customers, few shut offs occurred at the direction of the City of York.



# **EXHIBIT BA-8**

**(YORK WATER COMPANY RESPONSE TO OCA SET III, NO. 21)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 21**

Provide the following monthly and annual information in electronic spreadsheet format concerning Pennsylvania residential customers for the period January 1, 2020 through the current month and continuing through this proceeding:

- a. Termination Notices issued;
- b. Termination Notices resolved with payment;
- c. Termination Notices resolved with payment plan;
- d. Termination Notices not resolved and eligible for termination of service;
- e. Termination of Service; and
- f. Reconnection of Service within 30 days.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

- a. The number of notices issued is included in the attached spreadsheet OCA III-21;
- b. The Company does not track the number of notices resolved with payment;
- c. The Company does not track the number of notices resolved with payment plan;
- d. The Company does not track notices not resolved and eligible for termination;
- e. The number of service terminations is included in the attached spreadsheet;
- f. The Company does not track the number of reconnections within 30 days.

OCA Set III, No. 21

Month	Termination notices	Termination of service
Jan-20	4963	73
Feb-20	4086	55
Mar-20	1331	51
Apr-20	0	0
May-20	0	0
Jun-20	0	0
Jul-20	0	0
Aug-20	0	0
Sep-20	0	0
Oct-20	0	0
Nov-20	0	0
Dec-20	0	0
Jan-21	4087	0
Feb-21	2389	54
1-Mar	3099	67
Apr-21	3657	63
May-21	2905	75
Jun-21	3443	29
Jul-21	3184	18
Aug-21	3458	45
Sep-21	3267	44
Oct-21	3740	29
Nov-21	783	41
Dec-21	3137	30
Jan-22	5179	24
Feb-22	4707	20
Mar-22	3766	23
Apr-22	6543	15
May-22	4223	19

# **EXHIBIT BA-9**

**(YORK WATER COMPANY RESPONSE TO OCA SET XI, NO. 1)**

**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 XI**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET XI, NO. 1**

What are York Water's procedures and policies related to adherence to the Discontinuance of Services to Leased Premises Act (DSLPA), 66 Pa. C.S. § 1521, et seq.? Please provide a copy of York Water's written policies, training materials, and other written documents which describe the policies and procedures related to the Discontinuance of Services to Leased Premises Act.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 5, 2022

**RESPONSE:**

The Company adheres to the Act through the correct notification to landlords and tenants for delinquent accounts, compiling tenant information during the delinquent posting process, and allowing payment from a tenant for current charges. The Company does not have written documents describing the policies and procedures related to Discontinuance of Services to Leased Premises Act.

# **EXHIBIT BA-10**

**(YORK WATER COMPANY RESPONSE TO  
OCA SET XI, NOS. 5, 6, AND 11)**

**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 XI**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET XI, NO. 5**

When a tenant exercises his/her right to continued service pursuant to DSLPA 66 Pa. C.S. § 1527:

- a. Is the tenant required to put the account in his/her name?
- b. What is the initial amount they need to pay to continue service?
- c. How does York Water determine the future monthly payments required to continue service?
- d. How is the tenant notified of the monthly amount they must pay?

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 5, 2022

**RESPONSE:**

- a. The tenant is not required to place service in their name.
- b. The amount to continue services for a tenant is the amount equal to the bill for the affected account of the landlord ratepayer for the billing month preceding the notice to the tenants.
- c. York Water determines the future monthly payments required to continue service pursuant to its Commission-approved tariff.
- d. A tenant is notified via a delinquent posting to the property where notification of tenant charges is provided. York Water is in the process of revising its practices, such that it will send the tenant(s) a notice in the second and each succeeding billing month of the total amount of the bill that they must pay to continue service.

**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 XI**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET XI, NO. 6**

Provide a copy of the notice or notices used by York Water to notify tenants of the amount due for each succeeding period after they elect to continue or resume service and make an initial payment. How often is this notice issued?

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 5, 2022

**RESPONSE:**

As explained in response to OCA-XI-5(d), York Water is in the process of revising its practices, such that it will send the tenant(s) a notice in the second and each succeeding billing month of the total amount of the bill that they must pay to continue service. This includes developing a notice to send to tenants in the second and each succeeding billing month.



**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 XI**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET XI, NO. 11**

Provide York Water’s policies concerning the process tenants must follow to apply to have utility service continued or resumed to a property in which service was discontinued, including any documentation required to be provided by the tenant. Identify whether or how this process differs from when the landlord requests termination of service compared to when the landlord fails to pay the bill.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 5, 2022

**RESPONSE:**

York Water interprets this interrogatory’s use of “discontinuance” as meaning a voluntary relinquishment of service, as defined by Section 1521 of the Public Utility Code. With that understanding, the Company answers as follows:

For a single unit residential building, the tenant would submit an application for service online on the Company’s website, in person, or by mail. Generally, the only documentation required is the application for service. This process is the same for a “discontinuance” of service at the request of the landlord ratepayer and a “termination” of service for the landlord ratepayer’s non-payment.

For a multi-unit residential building or mobile home park that is not individually metered, the Company is updating its practices, such that a tenant can continue or resume service by paying the amounts specified in Section 1527 of the Public Utility Code. Alternatively, the tenant has the “right to agree to subscribe for future service individually if this can be accomplished without a major revision of distribution facilities or additional right-of-way acquisitions.” 66 Pa. C.S. § 1527(d). This process is the same for a “discontinuance” of service at the request of the landlord ratepayer and a “termination” of service for the landlord ratepayer’s non-payment.

# **EXHIBIT BA-11**

**(YORK WATER COMPANY RESPONSE TO OCA SET VII, NO. 1)**

**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 VII**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET VII, NO. 1**

With regard to the “Guidelines for agencies distributing York Water Cares funds for The York Water Company,” provided in response to OCA-III-38, Attachment A, please provide the following information:

- a. When were these guidelines created by York Water?
- b. To whom were the guidelines distributed (identifying each “agency”) and when?
- c. The total amount of York Water Cares program funds distributed by agency in calendar year 2021 and 2022 to date;
- d. The monthly reports received by York Water pursuant to these guidelines from each agency for the calendar year 2021 and 2022 to date.
- e. Any compilation of the monthly reports received by York Water, such as spreadsheets, year-end totals, internal analysis of the program, etc.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 2, 2022

**RESPONSE:**

- a. The guidelines for agencies distributing CARES funds were created in March 2019.
- b. The guidelines were distributed to The Salvation Army on November 12, 2019, and to the Community Progress Council on July 13, 2020.
- c. In 2021, the Salvation Army disbursed \$8,822.06, and the Community Progress Council disbursed \$23,465.34. In 2022, the Community Progress Council has disbursed \$967.31. No funds have been disbursed by the Salvation Army to date in 2022. See Attachments OCA-VII-1 2021 Salvation Army-YWC spreadsheet, OCA-VII-1 2021 CPC-YWC spreadsheet, and OCA-VII-1 2022 CPC-YWC spreadsheet.
- d. See the attachments provided in response to part c.
- e. See the attachments provided in response to part c.

# **EXHIBIT BA-12**

**(YORK WATER COMPANY RESPONSE TO OCA SET III, NO. 37)**

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 37**

Please provide the following monthly information for its low income program since its inception:

- a. Number of participating customers enrolled;
- b. Number of customers denied enrollment;
- c. Number of customers who successfully completed the program;
- d. Number of customers who were terminated or failed to complete the program;
- e. Arrears balance at entry;
- f. Arrears balance at either termination or completion of the program;
- g. Dollar amount of arrears forgiveness awarded; and
- h. The percentage of customers enrolled who successfully completed the program.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

The Company does not track the information requested.

# **EXHIBIT BA-13**

**(YORK WATER COMPANY RESPONSE TO  
OCA SET III, NOS. 31 THROUGH 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 III**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 31**

Provide any research and associated report or other internal document that reflects an analysis of affordability for water and wastewater services prepared by or relied upon by York Water in the development of its low income program since 2018.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

The Company does not have any research, associated reports, or internal documents that reflect an analysis of affordability for water and wastewater services that was used in the development of its low income program.

**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 32**

Has York Water undertaken any evaluation of affordability of its proposed rates if approved in this base rate case? If so, please provide such analysis.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

Assuming this question concerns service to low-income customers, the Company has not undertaken any evaluation of affordability of its proposed rates if approved in this base rate case.



**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 III**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 33**

In evaluating affordability, did York Water consider only household income information?  
If not, identify other criteria used to evaluate affordability of York Water services.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

Assuming this question concerns service to low-income customers, the Company has not undertaken any evaluation of affordability of its proposed rates if approved in this base rate case.

**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 III**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 34**

Does York Water's analysis of affordability reflect the average payments required to maintain electricity and natural gas service by its customers? If not, why not?

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

Assuming this question concerns service to low-income customers, the Company has not undertaken any evaluation of affordability of its proposed rates if approved in this base rate case.

**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 III**

---

**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET III, NO. 35**

In evaluating affordability did York Water conduct any customer surveys? Analysis of bill payment experience? Payment plan experience?

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

June 23, 2022

**RESPONSE:**

Assuming this question concerns service to low-income customers, the Company has not undertaken any evaluation of affordability of its proposed rates if approved in this base rate case.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts set forth in my Direct Testimony, OCA Statement 5, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 22, 2022  
\*334308

Signature: Barbara R. Alexander  
Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC  
83 Wedgewood Drive  
Winthrop, Maine 04364

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	Docket No. R-2022-3031340
	:	(WATER)
v.	:	
	:	
	:	Docket No. R-2022-3032806
	:	(WASTEWATER)
YORK WATER COMPANY	:	

DIRECT TESTIMONY  
OF  
TERRY L. FOUGHT

ON BEHALF OF  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

AUGUST 19, 2022



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

2 A. Terry L. Fought, 780 Cardinal Drive, Harrisburg, Pennsylvania, 17111.

3

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

5 A. I am a self-employed consulting engineer retained by the Office of Consumer  
6 Advocate (OCA) for the purposes of providing testimony in this proceeding.

7

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

9 A. Appendix A, which is attached to this testimony, describes my educational  
10 background and applicable experience.

11

12 **Q. WHAT ISSUES HAVE YOU BEEN ASKED TO INVESTIGATE REGARDING  
13 THIS YORK WATER COMPANY (YWC) RATE CASE?**

14 A. The OCA requested that I investigate: (1) quality of service issues, (2) customer  
15 complaints and (3) acquisition adjustments.

16

17 **Q. WHAT DID YOUR INVESTIGATION CONSIST OF?**

18 A. My investigation included: (1) reviewing portions of YWC's filing applicable to  
19 Quality of Service; (2) reviewing informal and formal complaints filed by YWC  
20 customers with the PUC; (3) reviewing customer complaints received by YWC; (4)  
21 reviewing the Direct Testimony of YWC witness Joseph T. Hand, York Water  
22 Statement No. 1; (5) reviewing YWC's responses to the OCA's interrogatories  
23 regarding quality of service issues; (6) reviewing the 2021 York Water Company

1 Management and operations Audit<sup>1</sup>; (7) attending the Public Input Hearing on  
2 August 17 via telephone; (8) reviewing records from the application proceedings  
3 for each of the acquired systems; and (9) reviewing the following statutes and  
4 regulations addressing acquisitions:

- 5 • 66 Pa. C.S. § 1327. Acquisition of Water and Sewer Utilities.
- 6 • 52 Pa. Code § 69.701. Viability of small water systems.
- 7 • 52 Pa. Code § 69.711. Acquisition Incentives.
- 8 • 52 Pa. Code § 69.721. Water and wastewater system acquisitions.

9  
10 **YWC'S WATER SUPPLY & WASTEWATER SYSTEMS**

11 **Q. BRIEFLY DESCRIBE YWC'S WATER AND WASTEWATER OPERATIONS.**

12 A. The Company is engaged in the business of furnishing water and wastewater  
13 service to over 75,000 customers pursuant to certificates of public convenience  
14 and necessity issued by the Commission. York Water provides direct water service  
15 in the City of York, in the Boroughs of East Prospect, Hallam, Jacobus, Jefferson,  
16 Loganville, Manchester, Mount Wolf, New Salem, North York, Railroad, Seven  
17 Valleys, Spring Grove, West York, York Haven and Yorkana, and in the Townships  
18 of Codorus, Conewago, East Manchester, Hellam, Hopewell, Jackson, Lower  
19 Windsor, Manchester, Newberry, North Codorus, North Hopewell, Paradise,  
20 Shrewsbury, Springettsbury, Springfield, Spring Garden, West Manchester, West  
21 Manheim, Windsor and York in York County, Pennsylvania and the Boroughs of  
22 Abbottstown and Carroll Valley and Townships of Berwick, Cumberland, Oxford,

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<sup>1</sup> PA PUC Bureau of Audits, Docket No D-2020-3021861



1 Hamilton, Reading, Mount Pleasant, Union, and Straban in Adams County,  
2 Pennsylvania. The Company also provides wholesale service to the Boroughs of  
3 Glen Rock, New Freedom, and Stewartstown and to Dover Township.

4 In addition, York Water provides wastewater service in the Boroughs of East  
5 Prospect, Felton, Jacobus, and West York, in the Townships of East Manchester,  
6 Lower Windsor, and West Manheim in York County, Pennsylvania, in the Township  
7 of Letterkenny in Franklin County, Pennsylvania, and in the Township of Straban  
8 in Adams County, Pennsylvania.<sup>2</sup>

9  
10 **Q. WHAT QUALITY OF SERVICE ISSUES ARE INCLUDED IN YOUR TESTIMONY**  
11 **REGARDING THE WATER AND WASTEWATER SYSTEMS?**

12 A. My testimony addresses customer complaint logs, pressures and pressure  
13 surveys, fire hydrants, and customer complaints, including formal complaints and  
14 testimony at the August 17<sup>th</sup> Public Input Hearing. Unless otherwise indicated, my  
15 recommendations below apply to both the water and wastewater systems.

16  
17 **CUSTOMER COMPLAINT LOGS**

18 **Q. WHAT ARE THE PUC'S REQUIREMENTS FOR CUSTOMER COMPLAINTS?**

19 A. According to 52 Pa. Code § 65.3. Complaints:

20 (a) *Investigations.* A public utility shall make a full and prompt investigation of  
21 complaints made by the Commission or by others, including customers,  
22 relating to service or facilities.

23 (b) *Records of complaints.* A public utility shall preserve for a period of at least 5  
24 years, written service complaints showing the name and address of the  
25 complainant, the date and character of the complaint and the final  
26 disposition of the complaint.

---

<sup>2</sup> York Water Statement No. 1, p.4.

1 **Q. WHAT INFORMATION HAS YWC SUBMITTED CONCERNING WATER AND**  
2 **WASTEWATER CUSTOMER COMPLAINTS?**

3 A. In response to OCA-Set-VIII-1, YWC stated that the Company does not maintain  
4 a customer complaint log for all customer complaints received. See Exhibit TLF-  
5 1.

6 In response to OCA-Set-II-6, YWC provided a listing of 176 informal/formal  
7 mediations and complaints filed with the PUC regarding its water systems received  
8 during the calendar year 2019 through May 23, 2022.

9 In response to OCA-Set-II-18, YWC provided a listing of one informal/formal  
10 mediations and complaints filed with the PUC regarding its wastewater systems  
11 received during the calendar year 2019 through May 18, 2022. YWC also  
12 submitted an Excel spreadsheet listing twenty-two other wastewater customer  
13 complaints from 2019 through June 6, 2022, that were not filed with the PUC.

14  
15 **Q. DID YWC'S LISTING OF COMPLAINTS INCLUDE THE CHARACTER AND**  
16 **DISPOSITION OF THE COMPLAINTS?**

17 A. Not entirely. Although the character of the complaint was included for most of the  
18 water complaints filed with the PUC, the final disposition only noted when the PUC  
19 case was closed. The 176 water system complaints filed with the PUC included  
20 two pressure complaints and one YWC service line leak complaint.

21 Regarding the twenty-two wastewater complaints not filed with the PUC, sixteen  
22 were determined to be the responsibility of the customers and other utilities. The  
23 remaining six complaints were sewer backups: three located in YWC's Amblebrook

1 System; two located in the West York System; and one in the Letterkenny System.  
2 YWC adequately responded to these six complaints.

3  
4 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING YWC SUBMITTING**  
5 **A LISTING OF CUSTOMER COMPLAINTS IN FUTURE RATE CASES?**

6 A. Yes, with the understanding that the PUC requires that records of complaints be  
7 preserved for five years so that OCA and other parties can easily review the  
8 adequacy of the public utilities responses, YWC should submit a complaint log  
9 that: (1) includes all complaints or records of customer disputes received by phone,  
10 online, and in writing, (not just those filed with the Commission), and (2) submit the  
11 listing of complaints in live Excel format, including providing more specific details  
12 of the complaints as discussed above, and also indicating the final disposition of  
13 the complaint.

14 Regarding the water system, I suggest the complaint listing include the following  
15 categories so that the data can be sorted by date and location: date, location, and  
16 the nature of complaint categorized as dirty water, rusty water, water taste, odor,  
17 or color, staining (of laundry or plumbing fixtures), request for water testing,  
18 customer property damage, incomplete surface restoration, and health issues.

19 Regarding the wastewater system, I suggest the complaint listing include the  
20 following categories: date, location, and the nature of complaint categorized as  
21 odor, sewer backups, pump station alarms, grinder pumps, sewer main breaks,  
22 customer property damage, and incomplete surface restoration.

23

1 **PRESSURES AND PRESSURE SURVEYS**

2 **Q. WHAT ARE THE PUC’S REQUIREMENTS FOR PRESSURES AND PRESSURE**  
3 **SURVEYS?**

4 A. According to 52 Pa. Code § 65.6. Pressures:

5 (a) *Variations in pressure.* The utility shall maintain normal operating pressures of  
6 not less than 25 p.s.i.g. nor more than 125 p.s.i.g. at the main, except that during  
7 periods of peak seasonal loads the pressures at the time of hourly maximum  
8 demand may be not less than 20 p.s.i.g. nor more than 150 p.s.i.g. and that during  
9 periods of hourly minimum demand the pressure may be not more than 150 p.s.i.g.  
10 A utility may undertake to furnish a service which does not comply with the  
11 foregoing specifications where compliance with such specifications would prevent  
12 it from furnishing adequate service to any customer or where called for by good  
13 engineering practices. The Company of the Commission to require service  
14 improvements incorporating standards other than those set forth in this subsection  
15 when, after investigation, it determines that such improvements are necessary is  
16 not hereby restricted.

17 (b) *Pressure gauges.* Within 2 years after the effective date of this section, each  
18 utility shall obtain one or more recording pressure gauges for each separately  
19 operated pressure zone for the purpose of making pressure surveys as required  
20 by this section. These gauges shall be able to record the pressure experienced on  
21 the zones and shall be able to record a continuous 24-hour test. Each utility serving  
22 1,000 or more customers or 1,000 or more customers in any separately operated  
23 zone of a multi-zone utility shall maintain one or more of these recording pressure  
24 gauges in service at some representative point or points in each of the pressure  
25 zones of the utility.

26 (c) *Telemetry.* An utility may make the pressure surveys required by this  
27 section by means of telemetered information electronically transferred to printed  
28 copy instead of using recording pressure gauges.

29 (d) *Pressure surveys.* At regular intervals, but not less than once each year, each  
30 utility shall make a survey of pressures in its distribution system of sufficient  
31 magnitude to indicate the pressures maintained at representative points on its  
32 system. The surveys should be made at or near periods of maximum and minimum  
33 usage. Records of these surveys shall show the date and time of beginning and  
34 end of the test and the location at which the test was made. Records of these  
35 pressure surveys shall be maintained by the utility for a period of at least three  
36 years and shall be made available to representatives, agents, or employes of the  
37 Commission upon request.

38 **Notes of Decisions**

39 *Adequate Pressure*

40 The 25 p.s.i.g. minimum expressed in subsection (a) is not intended to restrict the  
41 Company of the PUC to order improvements where service is inadequate;  
42 therefore, the PUC has the power to order needed improvements notwithstanding

1 that the pressure in a utility's main meets the standard of the regulation. *Barone v.*  
2 *Pennsylvania Public Utility Commission*, 485 A.2d 519 (Pa. Cmwlth. 1984).  
3

4 **Q. WHAT ARE DEP'S REQUIREMENTS FOR SYSTEM PRESSURES?**

5 A. According to DEP's Public Water Supply Manual, Part II, Community System  
6 Design Standards:

7 1. Pressure<sup>3</sup>

8 All water mains, including those not designed to provide fire protection, shall be  
9 sized after a hydraulic analysis based on flow demands and pressure  
10 requirements. The pipe system and its appurtenances shall be designed to  
11 maintain a minimum pressure of 20 pounds per square inch, gauge (psig) at  
12 ground level at all points in the distribution system under all conditions of flow. The  
13 normal working pressure in the distribution system should be approximately 60  
14 psig.  
15

16 **Q. WHAT ARE THE DIFFERENCES BETWEEN THE PUC AND DEP PRESSURE**  
17 **REQUIREMENTS?**

18 A. The PUC has a maximum and minimum pressure criterion while DEP has a  
19 minimum and normal working pressure criterion. The PUC has a minimum  
20 criterion of 25 psi at the main while DEP's minimum criteria is 20 psi at ground  
21 level. Assuming the main is buried 4.5 feet below ground, the DEP minimum  
22 criteria is equivalent to 22 psi at the main.

23 Instead of having a pressure survey requirement for all water systems, DEP  
24 imposes a pressure survey requirement on specific systems with known pressure  
25 problems.  
26

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<sup>3</sup> Public Water Supply Manual, Part II, Community System Design Standards, May 6, 2006, p. 186.

1 **Q. WHAT ARE THE REPRESENTATIVE POINTS ON THE SYSTEM WHERE**  
2 **PRESSURE SURVEYS SHOULD BE CONDUCTED?**

3 A. In general, the representative points are highest and lowest ground elevations of  
4 each distribution system in each pressure zone.

5  
6 **Q. HOW HAVE PRESSURE SURVEYS CHANGED SINCE 1984?**

7 A. The latest modification to 52 Pa. Code § 65.6. Pressures occurred in 1984 when  
8 the typical technology consisted of either: (1) installing one or more recording  
9 pressure gauges in each separately operated pressure zone, or (2) transferring  
10 electronic telemetered pressure information to printed copy. In both options, it was  
11 intended that the highest and lowest pressures experienced by a customer in each  
12 pressure zone would be determined by recording the pressures at representative  
13 points. Generally, the highest pressures will be located in the portion of the  
14 pressure zone with a water main at the lowest ground elevation, and the lowest  
15 pressures will be located in the portion of the pressure zone with a water main at  
16 the highest ground elevation<sup>4</sup>.

17 YWC, like most water supply utilities, now has Supervisory Control and Data  
18 Acquisition (SCADA) systems and hydraulic computer models capable of checking  
19 pressures throughout its distribution systems. The OCA has accepted utility-  
20 provided pressures at fire hydrants from hydraulic models and/or SCADA data in  
21 lieu of “pressure surveys” if there haven’t been any customer complaints that  
22 indicate non-compliance with 52 Pa. Code § 65.6. Having utilities provide this data

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<sup>4</sup> This statement may not consider low pressures due to pressure drops in mains with pipe sizes under 4-inches.

1 is more cost effective than conducting pressure surveys, assuming the utility  
2 provides a complete Customer Complaint Log that includes all customer  
3 complaints regarding pressure.

4 For example, if the complaint log shows that a customer has complained  
5 about water pressure, the pressure taken at a nearby fire hydrant can be used to  
6 determine compliance with 52 Pa. Code § 65.6 by adjusting the pressure for the  
7 difference in ground elevation. If the change in elevation estimated by on-line  
8 mapping indicates a possible violation, a field survey can resolve the issue.

9  
10 **Q. HAS YWC PROVIDED INFORMATION REGARDING CUSTOMER PRESSURES**  
11 **AND PRESSURE COMPLAINTS?**

12 A. Yes, in the Filing, Exhibit FIX-2, YWC states that “The Company is in compliance  
13 with Commission regulations regarding normal operating pressure standards and  
14 pressure surveys at regular intervals”. YWC also indicated that some customers  
15 have ordinary pressures exceeding 125 psi. See Exhibit TLF-2.

16  
17 **Q. IS THE INFORMATION PROVIDED BY THE YWC SUITABLE TO REPLACE**  
18 **PRESSURE SURVEYS?**

19 A. No, YWC has not provided the following: (1) a complete log of all customer  
20 complaints that includes all pressure complaints, (2) a statement that it did not  
21 receive any other pressure complaints than the two filed with the PUC, and (3) the  
22 details and final dispositions of the two pressure complaints filed with the PUC.

23

1 **Q. HAS DEP ORDERED THE YWC TO ADDRESS HIGH PRESSURES?**

2 A. No. DEP does not have a criterion for high pressure.

3

4 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING HIGH PRESSURES?**

5 A. Yes, I have the following recommendations for cases when a utility increases  
6 pressures to existing customers to serve new customers. Some existing  
7 customers that previously did not need pressure reducing valves (PRV) may not  
8 be able to install a PRV without excessive expense after a pressure increase. This  
9 is because their property and homes were not designed to include a PRV  
10 installation. If a utility increases normal operating pressures to exceed 125 psi in  
11 its existing mains in order to serve new customers, the utility should be required to  
12 protect the existing customers service lines by either: (1) providing pressure  
13 reducing valves approved for water supply with the applicable pressure, or (2)  
14 where possible, reducing the pressures in the existing mains to less than 125 psi  
15 by installing dual lines or a booster pump station to serve the new customers.

16

17 **FIRE HYDRANTS**

18 **Q. WHAT ARE DEP'S REQUIREMENTS FOR FIRE HYDRANTS?**

19 A. According to DEP's Public Water Supply Manual, Part II, Community System  
20 Design Standards, the minimum size permitted for a water main connected to a  
21 fire hydrant is 6 inches. See Exhibit TLF-3.

22



1 **Q. WHAT IS YOUR RECOMMENDATION CONCERNING YWC'S PUBLIC FIRE**  
2 **HYDRANTS?**

3 A. All of the fire hydrants that cannot provide the minimum fire flow of 500 gallons per  
4 minute (gpm) at 20 pounds per square inch should be marked so that they will only  
5 be used for flushing and blow-offs. Any fire hydrants connected to less than 6-inch  
6 water mains should also be marked so that they will only be used for flushing and  
7 blow-offs unless YWC can document that they can provide the minimum fire flow.  
8 This is important because it is generally accepted that (1) at least 500 gpm can be  
9 pumped from every fire hydrant and (2) if a fire company pumps 500 gpm or more  
10 from a hydrant that cannot provide that minimum fire flow, it may cause negative  
11 pressures that contaminate other portions of the distribution system.

12

13 **POSITIVE ACQUISITION ADJUSTMENTS (ACQUISITION PREMIUMS)**

14 **Q. WHAT IS THE OCA'S POSITION REGARDING YWC'S CLAIM THAT IT MET**  
15 **THE STATUTORY REQUIREMENT TO MAKE A POSITIVE ADJUSTMENT FOR**  
16 **THE WRIGHTSVILLE, FELTON AND THE WEST MANHEIM TOWNSHIP**  
17 **ACQUISITIONS?**

18 A. **West Manheim Township.** As explained by Ms. DeAngelo, OCA Statement No.  
19 2, YWC did not claim an acquisition adjustment for the West Manheim Township  
20 acquisition and that she agrees with YWC's proposed treatment of that acquisition.

21 **Wrightsville and Felton Systems.** In regard to the Wrightsville and Felton  
22 acquisitions, it is OCA's position that YWC has not met all nine criteria necessary  
23 to support a positive adjustment because it has not met Section 1327(a)(3) (the

1 systems were not providing adequate service at the time of acquisition). Ms.  
2 DeAngelo explains the requirements that must be met by a utility to reflect a  
3 positive acquisition adjustment in rates.<sup>5</sup>

4 **Wrightsville Water System.** YWC acquired a portion of the Wrightsville water  
5 system that served one customer – an educational campus of the Eastern York  
6 School District. YWC did not provide any documentation that Wrightsville was not  
7 providing and maintaining adequate, efficient, safe and reasonable service and  
8 facilities at the time of the acquisition. Following the acquisition, Mr. Hand did  
9 testify that (1) YWC installed an emergency interconnect to provide water to the  
10 remaining Wrightsville Water System in case of a failure of its system using the  
11 Susquehanna River and (2) YWC replaced the acquired 90,000 gallon tank with a  
12 310,000 gallon finished water standpipe to provide the necessary water for the  
13 expanding educational campus of the School District.<sup>6</sup> However, he did not  
14 provide any documentation that the interconnect was required by the Department  
15 of Environmental Protection (DEP) because of concern about the reliability of  
16 Wrightsville’s Susquehanna River water treatment facilities nor was replacing the  
17 90,000 gallon tank identified in the estimated additional capital requirements in  
18 York’s application filing.<sup>7</sup> Therefore, neither the emergency interconnect nor  
19 replacement of the 90,000 gallon tank were considered necessary to provide  
20 adequate service at the time of acquisition.

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<sup>5</sup> OCA Statement 2, pp. 3-7.

<sup>6</sup> York Water Statement No. 1, pp. 11-14.

<sup>7</sup> Docket No. A-2017-2611372, Order, pp. 8-9.

1        **Felton Borough Wastewater System.** According to Mr. Hand, Felton Borough  
2        did not want to continue to provide wastewater service to its customers due to  
3        increasing costs, regulatory oversight, reporting requirements and concerns about  
4        maintaining the system and providing reliable service in future years. Mr. Hand  
5        also noted a 2018 DEP Notice of Violation (NOV) that included an effluent violation  
6        in August 2017 and a 2018 Chapter 94 Report that identified an inflow/infiltration  
7        problems.<sup>8</sup>

8        The above NOV and effluent violation do not, standing alone, indicate that Felton  
9        was providing inadequate service because it is not unusual for wastewater  
10       systems to get an NOV that includes an effluent violation. Also, the  
11       inflow/infiltration problems are a non-issue since the 2020 Chapter 94 Report  
12       includes the following reasonable explanation: “The hydraulic overload status  
13       identified in the 2019 Felton Borough Chapter 94 Report was not found in the 2020  
14       review of data. Referencing the 2019 report, the former operator suspected a  
15       defect in the housing of the flow meter ultrasonic transducer as the primary cause  
16       of continuous higher than permitted flows observed at the facility during the 2019  
17       report year. The review of the 2020 Operational data indicates that no hydraulic or  
18       organic overloads are projected for the next 5 years. The YWC continues to pursue  
19       investigation and removal of all identified I/I sources.” See Exhibit TLF-4.

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<sup>8</sup> York Water Statement No. 1, pp. 16-17.

1 **Q. HAS YWC SUBMITTED SUFFICIENT DOCUMENTATION THAT INDICATES**  
2 **THAT IT MET THE CRITERIA UNDER SECTION 1327(a)(3) FOR A POSITIVE**  
3 **ACQUISITION ADJUSTMENT FOR THE WRIGHTSVILLE WATER SYSTEM**  
4 **AND FELTON BOROUGH WASTEWATER SYSTEM?**

5 A. Not in my opinion.

6  
7 **NEGATIVE ACQUISITION ADJUSTMENTS**

8 **Q. WHAT IS THE OCA'S POSITION REGARDING YWC'S CLAIM THAT IT MET**  
9 **THE STATUTORY REQUIREMENT TO MAKE A NEGATIVE ADJUSTMENT**  
10 **FOR THE JACOBUS ACQUISITION?**

11 A. As explained by Ms. DeAngelo, OCA Statement No. 2, YWC needs to show that  
12 YWC's acquisition of the Jacobus wastewater system was a matter of substantial  
13 public interest in accordance with Section 1327(e). I agree with Ms. DeAngelo that  
14 Mr. Hand's testimony indicating that Jacobus Sewer Authority: (1) did not wish to  
15 continue providing wastewater service to its residents due to increasing costs and  
16 challenges of meeting regulatory oversight and reporting requirements and (2) had  
17 no immediate successor for the Jacobus contracted operator (who was retiring) do  
18 not show that YWC's acquisition was a matter substantial public interest. Also, the  
19 Commission noted in its Order that based on inquiries by YWC and the  
20 Commission to DEP regarding compliance history, the Jacobus system had no  
21 current or previous violations, consent orders or corrective action plans.<sup>9</sup>

22  
23 **Q HAS YWC JUSTIFIED ITS POSITION THAT ITS ACQUISITION OF THE**  
24 **JACOBUS SYSTEM MET THE CRITERIA FOR A NEGATIVE ACQUISITION**  
25 **ADJUSTMENT UNDER SECTION 1327(e)?**

26 A. Not in my opinion.

27  

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<sup>9</sup> Docket No. A-2019-3007355, Order, pp. 11.

1 **RECENT CUSTOMER COMPLAINTS – INFORMAL, FORMAL, PIH**

2 **Q. ARE YOU AWARE OF OTHER QUALITY OF SERVICE COMPLAINTS?**

3 A. Not at this time.

4 **Q. DOES THIS COMPLETE YOUR WRITTEN DIRECT TESTIMONY?**

5 A. Yes, at this time. I reserve the right to supplement this testimony either in writing  
6 or orally if additional relevant information is received.

BACKGROUND AND QUALIFICATIONS

TERRY L. FOUGHT, P.E.

## Education

Cleveland State University, Cleveland, Ohio, Bachelor of Civil Engineering, 1967

## Professional Registrations

Professional Engineer, Pennsylvania, PE-023343-E, 1975

Professional Engineer, New Jersey, GE 25392, 1978 (Inactive)

Professional Engineer, Virginia, 10850, 1979 (Inactive)

Professional Land Surveyor, Pennsylvania, SU-000194-A, 1980 (Inactive)

## Employment

From March 1983 to date, I have been a self-employed consulting engineer engaged in providing consulting engineering services to water and wastewater utilities, both private and municipal.

From May 1969 to March 1983, I was employed by E. H. Bourquard & Associates, Inc. as a project engineer to water and wastewater clients. At the time I left the firm I was a vice-president.

From 1962 to 1969, I was employed by the State of Ohio, Department of Highways and the Geauga County Ohio Sanitary Engineers Office as an engineer's assistant to assistant sanitary engineer with breaks in employment to attend college and 1½ years active duty military service.

## Experience

I have prepared studies related to and designed water supply, treatment, transmission, distribution and storage facilities. I have provided services to the following private and municipal water suppliers: Amber Hill Mobile Home Park, Brockway Borough Municipal Authority, Dallas Water Company, Eastern Gas and Water Investment Company, Haddonfield Hills Development, Halifax Borough, Langhorne Spring Water Company, Mifflintown Municipal Authority, Neshaminy Water Resources Authority, Newberry Water Company, Pleasant View Mobil Home Park, H. B. Reese Candy Company, Shavertown Water Company, Smethport Water Company, Tunkhannock Water Company, and Watts Business Center.

I have prepared studies related to and designed wastewater collection and interceptor sewers, pumping stations and force mains, and treatment plants. I have provided services to the following private and municipal sewerage utilities: Brockway Glass Company, Central Dauphin School District, Clean Waste Technologies, Inc., Dauphin Borough, Dauphin Borough Municipal Authority, Halifax Area School District, Halifax Municipal Authority, Mercersburg Borough, Middle Paxton Township, Newberry Sewer Company, Newberry Township Municipal Authority, Park-a-way Park Family Campground, Reading Township Municipal Authority, Reynoldsville Borough, Saint Thomas Township, and Watts Business Center.

I have prepared over 100 stormwater management and drainage plans for land development and subdivision plans in Cumberland, Dauphin, and York Counties. Most of these plans included the design of storm sewer collection systems.

List of Public Utility cases which I have testified or provided substantial assistance:

**NEW JERSEY BUREAU OF PUBLIC UTILITIES**

<u>Docket Number</u>	<u>Company Name</u>
7712-1140	City of Trenton
787-847	Hackensack Water Company
814-119	City of Trenton
8310-862	City of Trenton

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

<u>Docket Number</u>	<u>Company Name</u>
C-2010-2175673	Pennsylvania-American Water Company
C-2011-2259004	Endsley v PAWC
C-2012-2332951	Tschachler v UGI
C-2014-2447138	Hidden Valley Utility Services - Water
C-2014-2447169	Hidden Valley Utility Services - Wastewater
C-2018-2644592	Winola Water Company
C-2020-3022354	McKercher v Borough of Hanover
F-2011-2280415	Lynette Lugo Lopez v PGW
F-2012-2311590	Belinda Lyles v Aqua
F-2012-2330753	Scott v PGW
I-840377	Pennsylvania Gas and Water Company
I-00050109	PAWC High Fluoride Incident
I-00072313	WP Water & Sewer Co.
I-2009-2109324	Clean Treatment Sewer Company
I-2016-2526085	Delaware Sewer Company
P-2008-2075142	Pennsylvania-American Water Company
P-2014-2404341	Delaware Sewer Company
P-2017-2584953	Aqua Pennsylvania, Inc.
P-2017-2594725	Newtown Artesian Water Company
P-2017-2585707	Pennsylvania-American Water Company
P-2017-2589724	Suez Water Pennsylvania, Inc.
P-2020-3020914	Twin Lakes Utilities, Inc.
R-00850174	Philadelphia Suburban Water Company
R-00932785	Meadows Water Company
R-00963708 (Sewer)	Wynnewood Water & Sewer Corporation
R-00963709 (Water)	Wynnewood Water & Sewer Corporation
R-00984257	Consumers Pa. Water Company
R-00984334	National Utilities, Inc.
R-00984375	City of Bethlehem
R-00994672	Superior Water Company
R-00005031	Penn Estates Utilities, Inc.
R-00005050	Emporium Water Company
R-00005212 (Sewer)	Pennsylvania-American Water Company
R-00005997	Jackson Sewer Corporation
R-00027982 (Sewer)	Pennsylvania-American Water Company
R-00049862	City of Lancaster – Sewer Fund
R-00050607	Glendale Yearound Sewer Co.
R-00050659	Wonderview Water Co.
R-00050673	Pocono Water Co.
R-00050678	Mesco, Inc.



**PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)**

<u>Docket Number</u>	<u>Company Name</u>
R-00050814	Marietta Gravity Water Co.
R-00051030	Aqua Pennsylvania, Inc.
R-00051167	City of Lancaster – Water Fund
R-00061297	Emporium Water Co.
R-00061492	Reynolds Disposal Co.
R-00061496	Columbia Water Co.
R-00061617	Allied Utilities Services
R-00061618	Imperial Point Water Co.
R-00061625	Phoenixville Sewer Fund
R-00061645	Eaton Water Co.
R-00062017	Borough of Ambler Water Department
R-00072074 (Sewer)	Aqua PA, Little Washington Division
R-00072075 (Sewer)	Aqua PA, Chesterdale/Williamstown Division
R-00072351	Village Water Company
R-00072491	Clarendon Water Company
R-00072492	City of Bethlehem, Bureau of Water
R-00072493 (Water)	Total Environmental Solutions, Inc., Treasure Lake
R-00072711	Aqua PA
R-2008-2020729	Blue Knob Water Company
R-2008-2020873	Warwick Drainage Company
R-2008-2020885	Warwick Water Works, Inc.
R-2008-2032689	PAWC Coatesville Wastewater Operations
R-2008-2039261	Superior Water Company
R-2008-2045157	Columbia Water Company
R-2008-2047291	Rock Spring Water Company
R-2008-2079310	AQUA, PA
R-2008-2081738	Little Washington Wastewater Company
R-09-2097323	Pennsylvania-American Water Company
R-2009-2102464	Reynoldsville Water Company
R-2009-2103937	PA Utility Company, Inc (Water)
R-2009-2103980	PA Utility Company, Inc (Sewer)
R-2009-2105601	Fryburg Water Company
R-2009-2110093	Birch Acres Water Company
R-2009-2115743	Lake Spangerberg Water Company
R-2009-2116908	Hanover Borough Water
R-2009-2117289	Utilities Inc, Westgate (Water)
R-2009-2117532	Penn Estates Utilities Inc (Water)
R-2009-2117750	Newtown Artesian Water Company
R-2009-2121928	Clean Treatment Sewage Company
R-2009-2122887	United Water Pennsylvania, Inc
R-2009-2132019	AQUA, PA
R-2010-2157062	Tri-Valley Water Supply Company, Inc
R-2010-2166208	Pennsylvania American Water Company (Wastewater)
R-2010-2171339	Reynolds Disposal Company
R-2010-2171918	TESI, Treasure Lake, Water Division
R-2010-2171924	TESI, Treasure Lake, Sewer Division
R-2010-2174643	City of Lock Haven
R-2010-2179103	City of Lancaster Water Department
R-2010-2191376	Superior Water Company
R-2010-2194499	Dear Haven Water Company
R-2010-2194577	Dear Haven Sewer Company

**PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)**

<u>Docket Number</u>	<u>Company Name</u>
R-2010-2207833	Little Washington Waste Water, Masthope Division
R-2010-2207853	Little Washington Waste Water, SE Consolidated Division
R-2011-2218562	CMV Sewage Company, Inc.
R-2011-2232243	Pennsylvania-American Water Company
R-2011-2232985	United Water Company
R-2011-2244756	City of Bethlehem- Bureau of Water
R-2011-2246415	Twin Lakes Utilities, Inc.
R-2011-2248531	Wonderview Sanitary Facilities
R-2011-2248937	Fairview Sanitation Company
R-2011-2251181	Borough of Quakertown, Water
R-2011-2255159	Penn Estates Utility Inc - Water
R-2012-2286118	Audubon Water Company
R-2012-2330887	North Heidelberg Sewer Company
R-2012-2310366	City of Lancaster Sewer Fund
R-2012-2311725	Borough of Hanover - Sewer
R-2012-2315536	Imperial Point Water Company
R-2012-2336662	Rock Springs Water Company
R-2013-2350509	City of DuBois, Bureau of Water
R-2013-2355276	Pennsylvania-American Water Company
R-2013-2360798	Columbia Water Company
R-2013-2370455	Penn Estates Utilities, Inc. - Sewer Division
R-2013-2367108	Fryburg Water Company
R-2013-2367125	Cooperstown Water Company
R-2013-2390244	City of Bethlehem – Bureau of Water
R-2014-2400003	Borough of Ambler – Water Department
R-2014-2420204	Pocono Waterworks Company, Inc. (Water)
R-2014-2420211	Pocono Waterworks Company, Inc. (Sewer)
R-2014-2402324	Emporium Water Company
R-2014-2430945	Plumer Water Company
R-2014-2428304	Borough of Hanover Water Department
R-2014-2410003	City of Lancaster-Bureau of Water
R-2014-2427035	Venango Water Company
R-2014-2427189	B E Rhodes Sewer Company
R-2014-2447138	Hidden Valley Utilities Services - Water
R-2014-2447169	Hidden Valley Utilities Services – Sewer
R-2014-2452705	Delaware Sewer Company
R-2015-2462723	United Water Pennsylvania
R-2015-2470184	Borough of Schuylkill Haven Water Department
R-2015-2479962	Corner Water Supply
R-2015-2506337	Twin Lakes Utilities, Inc.
R-2016-2538600	Community Utilities of Pennsylvania, Inc.
R-2016-2554150	City of DuBois – Bureau of Water
R-2017-2595853	Pennsylvania-American Water Company
R-2017-2598203	Columbia Water Company
R-2017-2631441	Reynolds Water Company
R-2018-3000022	York Water Company
R-2018-3000834	Suez Water Company
R-2018-3002645 (Water)	Pittsburgh Water & Sewer Authority
R-2018-3002645 (Sewer)	Pittsburgh Water & Sewer Authority
R-2018-3001306 (Water)	Hidden Valley Utility Services
R-2018-3001307 (Sewer)	Hidden Valley Utility Services

**PENNSYLVANIA PUBLIC UTILITY COMMISSION (Continued)**

<u>Docket Number</u>	<u>Company Name</u>
R-2019-3008947 (Water)	Community Utilities of PA
R-2019-3008948 (Sewer)	Community Utilities of PA
R-2019-3010955	City of Lancaster Sewer Fund
R-2019-3010958	Twin Lakes Utilities, Inc.
R-2020-3017951	Pittsburgh Water and Sewer Authority
R-2020-3017970	Pittsburgh Water and Sewer Authority
R-2020-3019369	Pennsylvania-American Water Company
R-2020-3020256	City of Bethlehem
R-2020-3020917	Audubon Water Company
R-2020-3026116	Hanover Borough Water Department
R-2020-3024773	Pittsburgh Water and Sewer Authority (W)
R-2020-3024774	Pittsburgh Water and Sewer Authority (WW)
R-2020-3024779	Pittsburgh Water and Sewer Authority (SW)
R-2021-3025206	Community Utilities of Pennsylvania, Inc. (W)
R-2021-3025207	Community Utilities of Pennsylvania, Inc. (WW)
R-2021-3026682	City of Lancaster Water Department
R-2021-3027385	Aqua Water Company (W) (WW)



**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 VIII**

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**OFFICE OF CONSUMER ADVOCATE INTERROGATORY OCA SET VIII, NO. 1**

Reference: Company's response to OCA Set II-6.

- a. Please provide a key to the column "TYPE" in Attachments A thru D.
- b. Does the Company maintain a customer complaint log for all customer complaints received by the Company? If yes, please provide a copy in Excel format similar to the "Customer Incident Spreadsheet" submitted in response to OCA Set II-18.

**RESPONDENT:**

M. A. Wheeler  
Chief Operating Officer

**DATE:**

August 5, 2022

**RESPONSE:**

- a. **PAR** – payment arrangement request  
**Billing dispute** – customer believes the billing is incorrect  
**PAR dispute** – customer disagrees with the terms of their payment arrangement request  
**Off dispute** – customer filed a complaint because service was terminated for non-payment  
**CIC** – customer has a change in circumstance  
**Legislative Referral** – elected official filed an informal complaint with the BCS on behalf of a constituent  
**Denial of service** – customer attempts to establish service at another location but the request is denied until payment on an arrearage from a previous location is satisfied  
**People-Delivered Service** – Customer filed an informal complaint related to service delivery  
**Svc. Line leak** – customer filed an informal complaint after the Company informed them of the requirement to repair the customer-owned portion of the service line

**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 VIII**

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**Infraction** – BCS imposed an infraction against the Company for failing to follow all Chapter 56, Chapter 14 regulations

**On PAR** – customer filed an informal complaint in dispute of current billing charges.

**OFF PAR** – service was terminated for non-payment

**Payment** – customer filed complaint due to threat of shut off for non-payment

**Off/Svc. Off** – customer at a new location did not apply for service in their name then filed a complaint because service to property was off

**Line extension** – customer currently not served by York Water and wanted to connect. Filed an informal complaint to dispute line extension cost.

**Low Pressure** – customer disputed low pressure inside home

**Mtr. Exchange Dispute** – customer disputed shut off notice he received for failure to schedule meter exchange appointment

**PAR w/Dispute** – complaint filed because customer felt that bills were out of line

**Not a Cust.** – complaint filed from an individual disputing York Water's intent to purchase the water and wastewater assets of a mobile home park

**Billing/Refund** – customer filed a complaint over an overpayment and requested a refund

**Other, meter charge** – complaint filed over receiving termination notices for a required meter exchange & high bill complaint

**Service (Pressure)** – complaint filed over perceived higher than normal pressure

- b. The Company does not maintain a customer complaint log for all customer complaints received.



THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE SDWA VIOLATIONS

53.53 IX. Quality of Service

D. Water and Wastewater Utilities

1

Indicate whether the company is in violation of any provision of the Pennsylvania Safe Drinking Water Act (SDWA) or any rule, regulation or order, or any condition of any permit, variance or exemption granted by the Department of Environmental Protection (DEP), or its predecessor.

- a. Provide information indicating whether the company is in compliance with SDWA provisions at the 25 Pa. Code, § 109.401 regarding general public notification requirements.
  - (i) Provide a copy of each public notification given in accordance with this section, since the last rate proceeding.
  - (ii) Provide a detailed explanation of all actions taken to remedy an acute violation, and/or to comply with the requirements prescribed by a variance or exemption.
  - (iii) State whether any fines or penalties were assessed by DEP, and indicate the amounts paid by the company.
- b. Provide the most recent copies of all annual consumer confidence reports issued pursuant to SDWA Amendments of 1996 since the last rate proceeding.
  - (i) Provide any annual consumer confidence reports which reflect violations of state and federal safe drinking water requirements.
  - (ii) Explain how these violations were resolved.

Response: The Company is not in violation of any provision of the Pennsylvania Safe Drinking Water Act or any rule, regulation or order, or any condition of any permit, variance or exemption granted by the Department of Environmental Protection.

The Company is under a Consent Order and Agreement with the Department of Environmental Protection due to its exceedance of the Lead and Copper Rule in 2016.

The Company is in compliance with Safe Drinking Water Act provisions regarding general public notification requirements. No public notifications have been given since the last rate proceeding.

A summary of all violations, and actions taken to remedy, is attached to Exhibit No. HIX-1. There have been no fines or penalties assessed by DEP.

A copy of the annual consumer confidence reports issued since the last rate proceeding is attached to Exhibit No. HIX-1.

No annual consumer confidence report has reflected a violation of state and federal safe drinking water requirements.



THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE OPERATING PRESSURE STANDARDS

53.53 IX. Quality of Service

D. Water and Wastewater Utilities

2. Indicate whether the company is in compliance with 52 Pa. Code, § 65.5 regarding normal operating pressure standards, and with 52 Pa. Code, § 65.6(d) regarding pressure surveys at regular intervals.
  - a. Provide details on any major water pressure problems which had occurred since the last rate proceeding in any part of the water distribution system.
  - b. Describe any action taken on a temporary basis, and the long term solutions developed to address any major water pressure problems.

Response: The Company is in compliance with Commission regulations regarding normal operating pressure standards and pressure surveys at regular intervals.

No major water pressure problems have occurred since the last rate proceeding.

The ordinary range of pressure in the distribution system is 30 psi to 130 psi. System pressures are maintained by the hydraulic grade that is established by the level of water in various tanks and reservoirs and by pumping.

THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE SERVICE INTERRUPTIONS

53.53 IX. Quality of Service

D. Water and Wastewater Utilities

3. Provide support to demonstrate that water service is being furnished on a continuous basis by supplying a summary of the company records of each service interruption greater than 24 hours since the last rate proceeding.

Response: The Company has not had a service interruption greater than 24 hours since the last rate case proceeding.

THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE CUSTOMER COMPLAINTS

53.53 IX. Quality of Service

- D. Provide a discussion of the company's policy, or provide a copy of the policy if in written form, on tracking and responding to customer complaints.
  - 4. a. Provide a summary report demonstrating the company's compliance with 52 Pa. Code, § 65.3 regarding the full and prompt investigation of service or facility complaints and the record keeping requirements of such complaints.

Response: The company responds to informal and formal PUC complaints in accordance with the requirements of 52 Pa. Code 65.3

The company receives complaints and/or inquiries via telephone, email, in-person interaction and social media platforms. In most cases, complaints are resolved at the customer service employee level, and notes are entered in the Company's customer information system as part of the customer's history file. Complaints regarding service or facilities that require additional intervention are escalated to a supervisor for follow-up. When necessary, the Company will issue a Company Report to the customer.

All inquiries are tracked for action taken prior to being closed out, and if the inquiry requires action by someone outside of the customer service department, a customer work order will be created to track the activity until completion.

In addition, the Company established a special link on its web page through which customers can submit complaints or inquiries directly to the customer service department. The President and Chief Executive Officer and the Chief Operating Officer are both copied on all of these inquiries. The VP of Customer Service monitors the activity of any complaints and inquiries several times each day and coordinates the appropriate company response to the inquiry. In an effort to gauge customer satisfaction, the Company also conducts telephone surveys of randomly selected customers whose homes were recently visited in response to a service-related issue. Customer service representatives administer the surveys and the VP-Customer Service reviews the results.

The Company has a VoIP telephone system. The telephone system has a call back feature. Each call is returned in a timely fashion.

Complaints or inquiries requiring some action on the part of the Company are logged into the Company's customer information system as part of the customer's history file.

THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE DISTRIBUTION SYSTEM MAPPING

53.53 IX. Quality of Service

D. Water and Wastewater Utilities

5. Indicate whether the company is in compliance with 52 Pa. Code, § 65.4(b) regarding complete and current mapping of the entire distribution system.

Response: The Company keeps complete maps, plans and records of its entire distribution system for its water service showing the size, character and location of each main, street valve and service line, as well as its collection systems for wastewater service showing the size, character and location of each sewer line, manhole, and lateral.

53.53 IX. Quality of Service

D. Water and Wastewater Utilities

6. Provide a summary report demonstrating the company's efforts in water conservation, since the last rate proceeding, pursuant to 52 Pa. Code, § 65.20.

Response: Education - The Company and its employees undertake an active role in the community to stress the need for water conservation. Speakers are provided to local organizations to explain the need for water conservation. The Company provides text books and a film to local school and scout groups on water conservation. The Company has also sponsored and provided instruction for the Boy Scout merit badge on Water and Soil Conservation.

Water Audit For Large Users - The Company has assigned a team of employees to complete the water audit process in a continuous improvement effort.

Efficiency Plumbing Fixtures - Most municipalities in which the Company serves have building code provisions which require the installation of water saving plumbing fixtures.

Unaccounted For Water - Refer to Exhibit No. HXI-5, the Company's water audit team also is involved with this process.

Leak Detection - Leak detection and repair is one of the Company's highest priorities. The Company has an employee whose sole responsibility is leak detection. During calendar year 2021, the Company's Leak Detection Coordinator detected 166 leaks throughout the Company's service territory.

In 2021, the Company also invested in mobile leak detection equipment to continue to search for water leaks in the distribution system.

Our Distribution Department Superintendent periodically contacts municipal street crew superintendents, police and fire officials in the municipalities served by The York Water Company to remind and encourage them to contact the Company if they observe any unusual water flows in the streets or at valve boxes or hydrants. All such reports are promptly investigated.

Metering - The Company meters all customer usage with the exception of fire service. All meter readings are checked during the billing process to make sure that the most recent consumption is consistent with the historical average. If the reading is abnormal, before billings are mailed, a telephone call is placed to the customer to tell them about the abnormal reading and to encourage them to investigate whether they have any leaking fixtures. The Company has received high praise from its customers for the validation procedure.

Conservation Plan - The Company seeks to encourage cost-effective water conservation in all of its contacts with the citizens of York and Adams Counties. Each year our customers receive bill inserts that describe ways to conserve water. In addition, a brochure that the Company provides to all new customers contains a section on water conservation. Also, the Company's Consumer Confidence Report (Refer to Exhibit No. HIX-1) contains water conservation information.

The Company has a Drought Contingency Plan, approved by the Commission and the Department of Environmental Protection, filed as a part of its Tariff.

The York Water Company became a partner of EPA's Water Sense program in 2008. The Company provides information on its website and through a bill insert regarding this program. The program seeks to educate Americans about saving water and protecting the environment.

THE YORK WATER COMPANY  
DATA REQUIREMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION  
QUALITY OF SERVICE METER TESTING

53.53 IX. Quality of Service

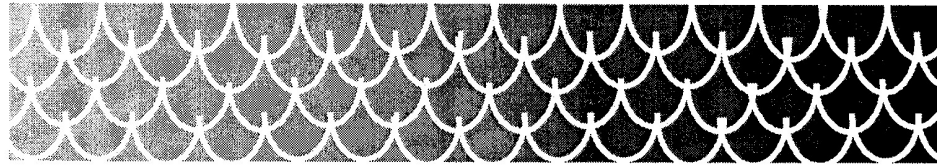
D. Water and Wastewater Utilities

7. Provide a discussion of the company's policy regarding meter requirements, replacements and testing. State if the company's procedures are in compliance with 52 Pa. Code, § 65.8(b).
- a. Provide meter test records as required in 52 Pa. Code, § 65.8(c) for the 50 meters most recently removed from service.
  - b. Provide a discussion of the company's policy and history of compliance with 52 Pa. Code, § 65.9 regarding adjustment of bills for meter error within the last year.

Response: The Company's policies regarding meter requirements, replacements and testing and adjustment of bills for meter error are in compliance with 52 Pa. Code, Paragraphs 65.8 and 65.9.

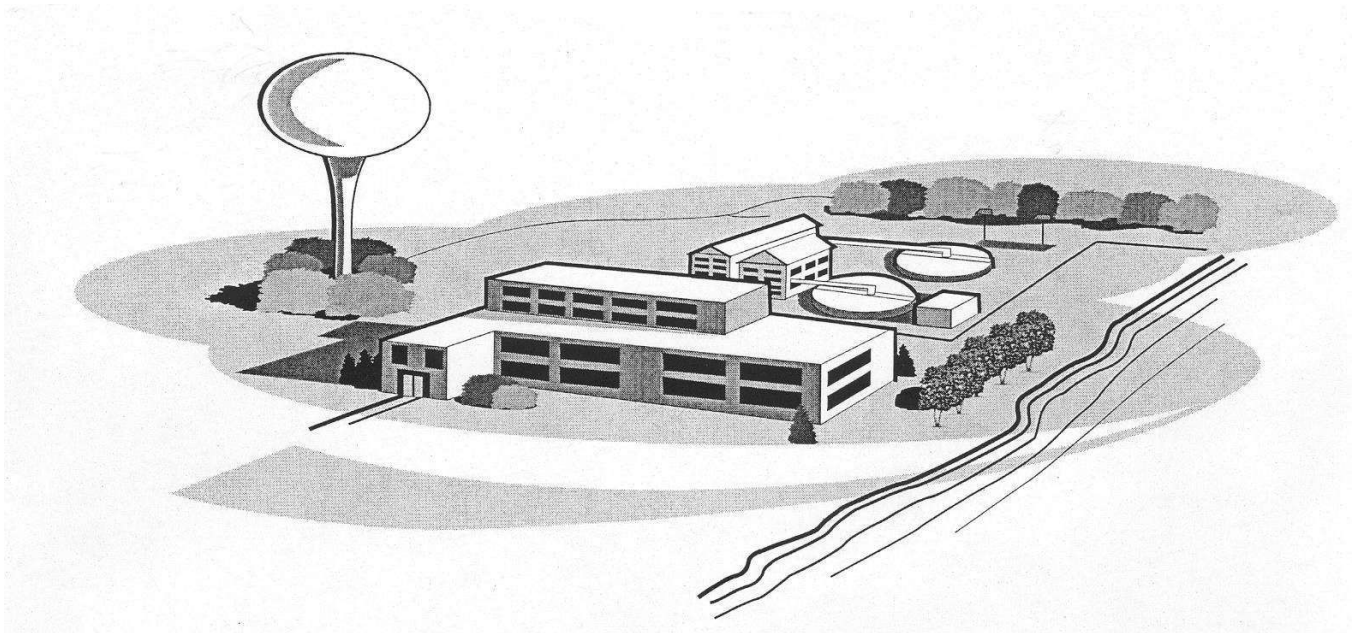
Meter test records for the meters removed from service thus far in 2022 are attached to Exhibit No. HIX-7.





# Public Water Supply Manual

383-2125-108



## PART II COMMUNITY SYSTEM DESIGN STANDARDS



COMMONWEALTH OF PENNSYLVANIA  
Department of Environmental Protection

For more information, visit DEP's Web site  
at [www.depweb.state.pa.us/](http://www.depweb.state.pa.us/), Keyword: "Drinking Water."



conditions of flow. The normal working pressure in the distribution system should be approximately 60 psig.

2. Diameter

The minimum size of water main which provides for fire protection and serving fire hydrants shall be 6-inch diameter. Larger sized mains will be required if necessary to allow the withdrawal of the required fire flow while maintaining the minimum residual pressure of 20 psig.

The minimum size of water main in the distribution system where fire protection is not to be provided should be a minimum of 3-inch diameter. Any departure from minimum requirements shall be justified by hydraulic analysis and future water use, and can be considered only in special circumstances.

3. Fire Protection

When fire protection is to be provided, system design should be such that fire flows and facilities are in accordance with the requirements of the State Insurance Services Office.

4. Dead Ends

Dead ends shall be minimized by looping all mains whenever practical. Where dead end lines are necessary in the first stage of construction of a distribution system, the lines shall be provided with the appropriate flushing devices as outlined in Section VIII.B.5.

5. Flushing

Where dead end mains occur, they shall be provided with an approved blow-off or flushing hydrant for flushing purposes. Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. Fire hydrants may be used for this purpose provided they comply with all of DEP's requirements on fire hydrant installation. No flushing device shall be directly connected to any sewer.

**C. Shut-Off Valves**

A sufficient number of valves shall be provided on water mains to minimize inconvenience and sanitary hazards will be minimized during repairs. Valves should be located at not more than 500 foot intervals in commercial districts and at not more than one block or 800 foot intervals in other areas of the distribution system.

**D. Hydrants**

Where freezing temperatures prevail, hydrants of the dry barrel type are preferred. Hydrants of this type should comply with the criteria set forth in AWWA's Standard





# The York Water Company

March 24, 2021

*Via Digital Submission*

Pennsylvania Department of Environmental Protection  
Southcentral Regional Office  
Clean Water Program  
909 Elmerton Avenue  
Harrisburg, PA 17110-8200

Reference: 2020 Chapter 94 Municipal Wasteload Management Annual Report  
For Felton Wastewater Treatment Plant (NPDES PA0088579 A-1)

The York Water Company is digitally submitting the 2020 Municipal Wasteload Management Report governing the existing Felton WWTP, located in Felton Borough, York County.

If you have any questions, please feel free to contact me at (717) 654-1326, or [jackl@yorkwater.com](mailto:jackl@yorkwater.com).

Sincerely,

John M. Longstreet  
Asst. Supt. Wastewater Division

## Felton Borough Sewer System Discussion

The York Water Company (YWC) acquired the Felton Borough wastewater treatment plant and collection system on April 9, 2020 and began operations of the system on April 16, 2020. The NPDES Permit # PA0088579 and WQM Part II Permit were transferred to the York Water Company, in February 2021, after PaDEP approved the Felton Borough Act 537 Plan Special Study. The Act 537 Plan Special Study was required to identify the York Water Company as the owner/operator of the Felton Borough sewerage system.

The Felton sanitary sewer collection system was constructed in 2004-2005. The gravity collection system is comprised of 59 sanitary manholes and 9,891.9 ft. of 8" PVC pipe. The collection system contains 1 pump station discharging to 551.5 ft. of 4" PVC forced main. This pump station serves 125 of 126 connected Users.

The Felton Borough wastewater is treated by the Felton Borough Wastewater Treatment Plant (NPDES #PA0088579). The treatment facility is a 40,000 gpd extended aeration package plant. The treated effluent is discharged to North Branch of Muddy Creek.

### Operations and Maintenance

Since acquisition, the York Water Company has implemented an improved operations and maintenance program at the facility. In 2020, the YWC replaced both EQ tank pumps, a faulty UV sensor, effluent composite sampler, skimmers, return lines, and clarifier weir plates. Quarterly maintenance of blowers now includes oil change, filter, and belt replacements. The facility's emergency generator is tested weekly and serviced annually.

The YWC also improved sludge management by operating the aerobic digesters to allow for periodic settling and decant operations. A decant pump was installed to eliminate the pre-YWC practice of allowing the digester to overflow to the EQ tank during normal wasting operations. Through these changes, the facility has improved the overall loading and operation of the facility.

In 2020, the YWC Electronics division began installing a SCADA system to enable remote observation and trending of data collected. Completion of the installation is anticipated in 2021.

### Inflow and Infiltration

As part of the Corrective Action Plan (CAP) submitted by the former operator, the YWC began the CCTV inspection and cleaning of the collection system. In 2020, a total of 5,039 ft of sewer line was inspected for defects and infiltration sources using CCTV. As part of the inspection process, the same 5,039 ft of sewer were cleaned using high pressure jetting equipment.

Most of the sewer lines inspected found no significant defects that would be the sources of Inflow and Infiltration. The inspection found that Manhole FB-58 has subsided and has caused some pipe deflection in the immediate upstream and downstream manhole/pipe transitions. Based on field observations, this deflection has existed for several years and results in poor flow hydraulics through the manhole. The YWC has identified this manhole for replacement and correction of the observed pipe deflection.

The system does experience Inflow and Infiltration during significant rain events. The inspection did not identify any obvious sources of I/I, as the inspection took place during a relatively rain free period. Due

to the continuation of higher flows for several days after a rain event, the YWC suspects that a significant portion of the extraneous flow is coming from basement sumps activated during high ground water tables. Felton Borough notified residents, in early 2020, that basement sump pump discharge to the sanitary sewer is prohibited. The YWC is currently evaluating the best option to address these potential sources of inflow and infiltration.

### **Hydraulic & Organic Overloads**

The hydraulic overload status identified in the 2019 Felton Borough Chapter 94 Report was not found in the 2020 review of data. Referencing the 2019 report, the former operator suspected a defect in the housing of the flow meter ultrasonic transducer as the primary cause of continuous higher than permitted flows observed at the facility during the 2019 report year.

The review of the 2020 Operational data indicates that no hydraulic or organic overloads are projected for the next 5 years. The YWC continues to pursue investigation and removal of all identified I/I sources.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION


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

VERIFICATION

I, Terry L. Fought, hereby state that the facts set forth in my Direct Testimony, OCA Statement 6, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: August 19, 2022  
\*334090

Signature:

  
\_\_\_\_\_  
Terry L. Fought

Consultant Address: 780 Cardinal Drive  
Harrisburg, PA 17111

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission** :  
: **v.** : **Docket Nos. R-2022-3031340 (Water)**  
: **R-2022-3032806 (WW)**  
**York Water Company** :

**REBUTTAL TESTIMONY OF  
DR. DAVID S. HABR  
ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE**

**September 16, 2022**

1 **Q: PLEASE STATE YOUR NAME.**

2 A: David S. Habr.

3 **Q: ARE YOU THE SAME DAVID S. HABR WHO PREVIOUSLY FILED**  
4 **DIRECT TESTIMONY IN THIS PROCEEDING?**

5 A: Yes, I am.

6 **Q: WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

7 A: I have several comments related to the capital structure I&E witness Keller  
8 recommends in his direct testimony (Page 12, lines 1-16).

9 **Q: WHAT CAPITAL STRUCTURE DID MR. KELLER RECOMMEND?**

10 A: Mr. Keller accepted the capital structure proposed by Company witness Moul,  
11 45.23% long-term debt and 54.55% common equity. As I noted in my direct  
12 testimony, York Water's debt ratio fell from 49.0% to 36.8% as a result of York  
13 Water using the proceeds of an April 2022 common stock issuance to pay off  
14 \$29.32 million in long-term debt.

15 It was York Water's choice to refinance the long-term debt in this fashion.  
16 The Company could have refinanced the long-term debt by issuing new long-term  
17 debt instead of common stock. By doing so the debt ratio would have remained  
18 basically unchanged, and ratepayers would not have to pay higher rates due to  
19 excess common equity in the capital structure. For all of the reasons I have  
20 discussed in my direct testimony, the Company's proposed ratemaking capital  
21 structure, as adopted by Mr. Keller, is not reasonable for ratemaking purposes.



1 **Q: DO YOU HAVE ANY OTHER COMMENTS ON THE CAPITAL**  
2 **STRUCTURE ACCEPTED BY MR. KELLER?**

3 A: Yes, I do. In its Second Quarter 2022 10-Q, York Water observed that a debt ratio  
4 “between forty-six and fifty percent has historically been acceptable to the PPUC  
5 in rate filings.”<sup>1</sup> Thus, York Water has identified in its own financial reports that  
6 Mr. Moul’s and therefore, Mr. Keller’s, 45.23% debt ratio is below the PPUC’s  
7 historically acceptable range.

8 **Q: DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

9 A: Yes, it does.

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<sup>1</sup>York Water Company 2022 second quarter 10-Q, p. 23.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, David S. Habr, hereby state that the facts set forth in my Rebuttal Testimony, OCA Statement 3R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 16, 2022  
\*335405

Signature: *David S. Habr*  
David S. Habr

Consultant Address: Habr Economics  
213 Cornuta Way  
Nipomo, CA 93444-5020

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY )  
COMMISSION )  
v. ) DOCKET NOS. R-2022-3031340 (WATER)  
 ) R-2022-3032806 (WASTEWATER)  
THE YORK WATER COMPANY )

REBUTTAL TESTIMONY OF  
JEROME D. MIERZWA

ON BEHALF OF THE  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

SEPTEMBER 16, 2022

1 **I. INTRODUCTION**

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

4 A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter  
5 Associates, Inc (“Exeter”). My business address is 10480 Little Patuxent Parkway,  
6 Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-  
7 related consulting services.

8 Q. ARE YOU THE SAME JEROME D. MIERZWA THAT FILED DIRECT  
9 TESTIMONY IN THIS PROCEEDING ON AUGUST 19, 2022?

10 A. Yes. I am.

11 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

12 A. The purpose of my rebuttal testimony is to respond to certain aspects of the direct  
13 testimony of Brian Kalcic filed on behalf of the Office of Small Business Advocate  
14 (“OSBA”); and Ethan H. Cline filed on behalf of the Bureau of Investigation and  
15 Enforcement (“I&E”).  
16

17 **II. OSBA WITNESS: BRIAN KALCIC**

18 Q. HOW DID THE YORK WATER COMPANY (“YORK” OR “COMPANY”)  
19 ALLOCATE ITS PROPOSED WATER REVENUE REQUIREMENT  
20 INCREASE TO THE VARIOUS CUSTOMER CLASSES?

21 A. York has proposed to allocate its proposed revenue requirement increase to each  
22 customer class based on the results of its class cost of service study (“CCOSS”).

1 Q. IS MR. KALCIC IN AGREEMENT WITH THE COMPANY’S PROPOSED  
2 REVENUE ALLOCATION?

3 A. Exclusive of the Company’s proposed assignment of a portion of the wastewater  
4 revenue requirement to water service, Mr. Kalcic is in agreement with the Company’s  
5 proposed revenue allocation.<sup>1</sup> Mr. Kalcic refers to the assignment of a portion of the  
6 wastewater revenue requirement to water service as “Act 11 considerations.”

7 Q. DO YOU AGREE WITH MR. KALCIC’S RECOMMENDATION THAT,  
8 ABSENT ACT 11 CONSIDERATIONS, THE COMMISSION SHOULD  
9 ADOPT THE WATER CLASS REVENUE ALLOCATIONS PROPOSED  
10 BY YORK IN THIS PROCEEDING?

11 A. No, I do not. As explained in my direct testimony, the system-wide and customer class  
12 specific maximum day and maximum hour extra-capacity demand factors utilized in  
13 the Company’s CCOSS are outdated. Those extra-capacity demand factors have a  
14 significant impact on the CCOSS results. The system-wide maximum day factor  
15 reflected in York’s CCOSS was experienced in 2010, and the system-wide maximum  
16 hour extra-capacity factor was experienced in 2006. The customer class specific  
17 extra-capacity factors reflected in York’s CCOSS are based on an analysis conducted  
18 by York over 45 years ago. The extra-capacity demand factors utilized in York’s  
19 CCOSS do not reflect the usage characteristics of York’s current customers and,  
20 therefore, should not be used as the basis for determining the class revenue allocations  
21 and the setting of rates in this proceeding.<sup>2</sup>

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<sup>1</sup> Direct Testimony of Brian Kalcic, at 9, lines 21-23.

<sup>2</sup> Direct Testimony of Brian Jerome D. Mierzwa, at 10, line 1-18.

1 Q. HOW DO YOU RECOMMEND THAT RATES BE DETERMINED IN  
2 THIS PROCEEDING?

3 A. The extra-capacity factors included in the OCA's CCOSS presented in my direct  
4 testimony are reflective of the usage characteristics of York's current customers.  
5 Therefore, I recommend that the class revenue allocations adopted in this proceeding  
6 be determined based on the results of the OCA's CCOSS.<sup>3</sup>

7 Q. HOW DID YORK PROPOSE TO ALLOCATE THE ACT 11  
8 WASTEWATER REVENUE REQUIREMENT ASSIGNED TO WATER  
9 SERVICE TO THE VARIOUS WATER CUSTOMER CLASSES?

10 A. York proposed to allocate the Act 11 revenue requirement to the Residential and  
11 Commercial water service classes in proportion to each class's relative share of the  
12 water cost of service.<sup>4</sup>

13 Q. DID YOU RECOMMEND ANY MODIFICATIONS TO YORK'S ACT 11  
14 ALLOCATION PROPOSAL?

15 A. Yes. In my direct testimony I recommended that Industrial and Public Fire Protection  
16 customers be included in the allocation.

17 Q. DOES MR. KALCIC AGREE WITH THE METHOD USED BY YORK TO  
18 ALLOCATE THE WASTEWATER REVENUE REQUIREMENT  
19 ASSIGNED TO WATER SERVICE?

20 A. No. Mr. Kalcic claims that the Act 11 wastewater revenue requirement shortfall to be  
21 recovered from water service customers should be assigned to each water customer  
22 class based on the corresponding class's wastewater revenue requirement shortfall.<sup>5</sup>

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<sup>3</sup> Id., at 16, lines 7-11.

<sup>4</sup> York Statement No. 108, at 8.

<sup>5</sup> OSBA Statement No. 1 p. 11 lines 1-6.

1 That is, for example, the wastewater revenue requirement shortfall of the Residential  
2 wastewater class should be recovered from Residential water customers.

3 Q. DO YOU AGREE WITH MR. KALCIC'S PROPOSAL CONCERNING  
4 THE ALLOCATION OF THE ACT 11 WASTEWATER REVENUE  
5 REQUIREMENT SHORTFALL TO WATER SERVICE CUSTOMERS?

6 A. No. Mr. Kalcic's proposal might have merit if a significant percentage of York's  
7 wastewater customers were also water customers. However, they are not. York serves  
8 approximately 73,000 water and wastewater customers. Of these 73,000 customers,  
9 approximately 5,000 of those customers are also wastewater customers. There is no  
10 cost basis to assign the unrecovered wastewater costs of a particular class to the water  
11 customers in that same class that do not receive wastewater service from York and pay  
12 another provider for wastewater service. Mr. Kalcic's proposed change to York's Act  
13 11 revenue requirement allocation should not be adopted.

14 Q. MR. KALCIC HAS PROPOSED REDUCING THE COMPANY'S \$2.76  
15 MILLION ACT 11 ASSIGNMENT OF THE WASTEWATER REVENUE  
16 REQUIREMENT BY \$1.0 MILLION TO \$1.7 MILLION.<sup>6</sup> WHAT IS YOUR  
17 RESPONSE?

18 A. In my direct testimony, I recommended that the \$2,670,856 Act 11 wastewater revenue  
19 requirement York proposed to assign to water service be reduced by \$625,000 to  
20 \$2,045,856.<sup>7</sup> Under my recommendation, 24.7% of the wastewater revenue  
21 requirement would be assigned to water service. Under Mr. Kalcic's recommendation,  
22 20.5% of the wastewater revenue requirement would be assigned to water service. The  
23 amount of the wastewater revenue requirement assigned to water service is a matter of  
24 judgement. The difference between my recommendation and Mr. Kalcic's

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<sup>6</sup> OSBA Statement No. 1, p. 18, lines 17-20.

<sup>7</sup> OCA Statement No. 1, p. 24, 2-3.

1 recommendation is approximately \$350,000, or 4%. Therefore, based on this  
2 comparison alone, I don't believe my Act 11 revenue recommendation, or the  
3 recommendation of Mr. Kalcic is superior because the differences are not very  
4 significant.

5 However, in implementing his adjustment to the Act 11 assignment of the  
6 wastewater revenue requirement to water service, Mr. Kalcic has assigned the Act 11  
7 revenue requirement to York's wastewater customer classes so that the increase to each  
8 class would be 1.75 times the system average increase, or 58.3%.<sup>8</sup> This is shown on  
9 Schedule BK-2WW. In adjusting the Company's proposed assignment of the Act 11  
10 revenues to each of the wastewater customer classes, he has assigned each class an  
11 increase of 58.4%.<sup>9</sup> As subsequently explained, this is unreasonable.

12 Table 1-R below summarizes the results of the Company's wastewater CCOSS  
13 and the present revenues for each rate class served by York.

<b>Table 1-R. Comparison of Wastewater Cost of Service and Present Revenues</b>				
<b>Class</b>	<b>Present</b>		<b>Difference</b>	
	<b>Cost of Service</b>	<b>Revenues</b>	<b>Amount</b>	<b>Percent</b>
Residential	\$6,934,645	\$3,713,704	\$3,220,941	54%
Non-Residential	1,350,380	443,699	906,681	33%
<b>Total:</b>	<b>\$8,265,025</b>	<b>\$4,157,403</b>	<b>\$4,127,622</b>	<b>50%</b>

14 As shown in Table 1-R, at present rates, the Residential class is contributing revenues  
15 equal to 54% of the indicated cost of service, while the Non-Residential class is  
16 contributing revenue only equal to 33% of the indicated cost of service. As such, the

---

<sup>8</sup> OSBA Statement No. 1, p. 17, lines 12-16.

<sup>9</sup> *Id.*



1 Non-Residential class should receive an increase which is greater than the increase  
2 assigned to the Residential class in order to provide additional movement toward the  
3 indicated cost of service. Under Mr. Kalcic's proposal, both classes would receive the  
4 same percentage increases. This would be unreasonable.

5 As shown in Table 5 of my direct testimony, reducing the assignment of the Act  
6 11 revenue requirement to water service by \$625,000 would result in an increase of  
7 45.9% to the Residential class, 84.8% to the Non-Residential class, and 50.1% overall.  
8 The increase to the Non-Residential class would be 1.70 times the system average  
9 wastewater revenue increase. Under Mr. Kalcic's proposal to reduce the Act 11 revenue  
10 assignment to water service by \$1.0 million, the increase to the Non-Residential class  
11 would be even more significant. To better provide for gradualism and reflect greater  
12 movement toward cost of service rates for the Non-Residential class, I believe my  
13 recommended reduction of the wastewater revenue requirement assigned to water  
14 service of \$625,000 is more reasonable.

15

16

### **III. I&E WITNESS: ETHAN H. CLINE**

17 Q.

AS INDICATED IN RESPONDING TO MR. KALCIC, YOU  
18 RECOMMENDED THAT THE ACT 11 ASSIGNMENT OF THE  
19 WASTEWATER REVENUE REQUIREMENT TO WATER SERVICE BE  
20 REDUCED BY \$625,000. WHAT IS MR. CLINE'S RECOMMENDATION  
21 WITH RESPECT TO THE ACT 11 ASSIGNMENT?

22 A.

Based on York's requested revenue requirement increase, as shown on I&E Exhibit  
23 No. 3, Schedule 7, Column B, Mr. Cline has proposed reducing the Company's  
24 proposed Act 11 assignment from \$2,670,856 to \$1,951,390, or by \$719,466. He then

1 subsequently reduces the Act 11 assignment to \$844,015 to account for I&E's proposed  
2 reduction in York's wastewater revenue requirement claim.<sup>10</sup>

3 Q. HOW DID MR. CLINE DEVELOP HIS REDUCTION TO YORK'S  
4 PROPOSED ACT 11 ASSIGNMENT TO WATER SERVICE?

5 A. Mr. Cline's proposed reduction to York's Act 11 assignment to water service was  
6 developed by proposing changes to the current wastewater rate structure of certain  
7 customers and modifying the wastewater rate increases proposed by York to provide  
8 for additional movement toward rate consolidation.<sup>11</sup> These wastewater rate structure  
9 changes and rate increase modifications are discussed and described in detail on pages  
10 9 and 10 of Mr. Cline's direct testimony. Mr. Cline's Act 11 assignment  
11 recommendation is the end result of his proposed rate structure changes and rate  
12 increase modifications.

13 Q. WHAT IS YOUR RESPONSE TO MR. CLINE'S PROPOSED ACT 11  
14 ASSIGNMENT RECOMMENDATIONS?

15 A. Based on the Company's requested revenue increase, like Mr. Kalcic's  
16 recommendation, Mr. Cline's reduction of \$719,466 is not significantly different than  
17 the Act 11 assignment reduction of \$625,000 which I have proposed. Therefore, I do  
18 not find the amount of his reduction to be unreasonable. With respect to his adjustment  
19 to reflect I&E's proposed reduction to York's wastewater revenue requirement claim,  
20 I agree with Mr. Cline that the Act 11 assignment should be reduced by the reduction  
21 in the wastewater revenue requirement found appropriate by the Commission.

22 However, as also previously explained in responding to Mr. Kalcic, the rates of  
23 York's Non-Residential wastewater customers are currently recovering significantly

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<sup>10</sup> I&E Statement No. 3, page 6, lines 1-7.

<sup>11</sup> I&E Statement No. 3, page 6, lines 16 – 18.

1 less of the indicated cost of service than the current rates of Residential wastewater  
2 customers. Therefore, the rates of Non-Residential customers should be increased by a  
3 greater percentage than the rates of Residential customers if overall, the rates adopted  
4 in this proceeding are to reflect movement toward the cost of service. As shown on I&E  
5 Exhibit No. 3, Schedule 7, Column 11, Mr. Cline's proposed rate structures changes  
6 and rate increase modifications result in a higher percentage rate increase for  
7 Residential wastewater customers than Non-Residential customers which is  
8 inconsistent with cost of service ratemaking. Therefore, Mr. Cline's rate structure  
9 changes and rate increase modifications should be rejected, as should his modification  
10 to the assignment of Act 11 revenues because his modification to the assignment of Act  
11 11 revenues is based on his rate structure changes and rate increase modifications.

12 Q. THE COMPANY IS PROPOSING TO MAINTAIN THE CURRENT 4,000  
13 GALLON MINIMUM ALLOWANCE FOR ALL WASTEWATER  
14 CUSTOMERS OTHER THAN WEST MANHEIM CUSTOMERS.<sup>12</sup> DOES  
15 MR. CLINE AGREE WITH THE COMPANY'S PROPOSAL TO  
16 MAINTAIN THE MINIMUM ALLOWANCE, AND WHAT IS YOUR  
17 RESPONSE TO MR. CLINE?

18 A. No. As part of his rate structure changes, Mr. Cline has proposed to eliminate the  
19 current 4,000-gallon minimum allowance this proceeding.<sup>13</sup> However, as just  
20 explained, Mr. Cline's rate structure changes do not provide for appropriate movement  
21 toward cost of service rates for the wastewater customer classes served by York. I  
22 believe that the minimum allowance should eventually be eliminated; however, it may

---

<sup>12</sup> I&E Statement No. 3, page 7, lines 19-21.

<sup>13</sup> I&E Statement No. 3, page 10, lines 2-4.

1 be appropriate to eliminate the allowance over several rate proceedings so that  
2 appropriate movement towards cost of service rates is accomplished in this proceeding.

3 Q. DO YOU HAVE ANY OTHER COMMENTS CONCERNING MR.  
4 CLINE'S PROPOSED MODIFICATIONS TO THE RATES PROPOSED  
5 BY YORK?

6 A. Yes. Mr. Cline's proposed rates are summarized on I&E Exhibit No. 3, Schedule 3.  
7 Several of the modification result in rates increasing in excess of 100%. Increases of  
8 this magnitude are inconsistent with the principle of gradualism.

9 Q. ON PAGES 18 AND 19 OF HIS DIRECT TESTIMONY, MR. CLINE  
10 RECOMMENDS THAT THE CUSTOMER CHARGES FOR WATER  
11 SERVICE BE DETERMINED BASED ON THE COMPANY'S DIRECT  
12 COST ANALYSIS. WHAT IS YOUR RESPONSE?

13 A. As explained on page 19 of my direct testimony, the Company's direct customer cost  
14 analysis indicates that a cost-based customer charge for a Residential customer with a  
15 5/8-inch meter is \$20.71. However, the Company's calculation of direct costs is based  
16 on the Company's request revenue requirement increase and also improperly includes  
17 bad debt expense, office building and furniture and equipment related investment costs,  
18 and Enterprise Software investment costs. York's direct cost calculation should be  
19 adjusted to remove improperly included costs and to reflect the increase authorized by  
20 the Commission in this proceeding. This can be accomplished by removing the costs  
21 improperly included in the calculation and then scaling back the calculated rate to  
22 reflect the revenue increase authorized by the Commission in this proceeding.

23 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

24 A. Yes, it does.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts set forth in my Rebuttal Testimony, OCA Statement 4R, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 16, 2022  
\*335404

Signature:   
Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc.  
10480 Little Patuxent Parkway  
Suite 300  
Columbia, MD 21044-3575

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

	)	
Pennsylvania Public Utility Commission	)	
	)	
v.	)	Docket No. R-2022-3031340 (Water)
	)	Docket No. R-2022-3032806 (Wastewater)
The York Water Company	)	
	)	
	)	

**Surrebuttal Testimony of  
Mark E. Garrett**

On Behalf of:  
Office of Consumer Advocate

September 28, 2022

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**I. INTRODUCTION AND PURPOSE OF TESTIMONY**

1 **Q: PLEASE STATE YOUR NAME.**

2 A: My name is Mark Garrett.

3

4 **Q: ARE YOU THE SAME MARK GARRETT THAT FILED DIRECT TESTIMONY**  
5 **IN THIS PROCEEDING ON August 19, 2022?**

6 A: Yes. A description of my qualifications was filed with that testimony.

7

8 **Q: ON WHOSE BEHALF ARE YOU APPEARING IN THESE PROCEEDINGS?**

9 A: I am appearing on behalf of the Office of Consumer Advocate (“OCA”). I was retained  
10 by the OCA to assist in the review and evaluation of the general rate case filing submitted  
11 by The York Water Company (“York or “Company”).

12

13 **Q: WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

14 A: In my surrebuttal testimony I respond to the testimony of Matthew E. Poff set forth in his  
15 rebuttal testimony filed September 16, 2022. I address Mr. Poff’s rebuttal testimony  
16 regarding payroll costs, short-term incentives, long-term incentives, board of directors’  
17 compensation, and the blanket inflation adjustment.



## II. SUMMARY OF ADJUSTMENTS

1 **Q: PLEASE SUMMARIZE YOUR DIRECT TESTIMONY RECOMMENDATIONS.**

2 A: In direct testimony, I proposed several adjustments to the Company’s projected expense  
3 levels and incorporated the recommendations of OCA witnesses Morgan N. DeAngelo  
4 and Dr. David S. Habr. The impacts of these adjustments are set forth below and in the  
5 attached Schedules.<sup>1</sup> My adjustments are bolded.

<b>Table 1: Summary of OCA Adjustments</b>		
	Water	Wastewater
York’s Requested Increase in Base Rates	\$18,853,737	\$1,456,793
OCA Adjustments		
Cash Working Capital	\$(27,488)	
Acquisition Adjustments	(6,341)	\$(46,634)
ROE 25 Basis Point Reduction <sup>2</sup>	(683,661)	(63,800)
Capital Structure at 52% Equity	(1,136,823)	(106,089)
Return on Equity Adjustment	(7,944,800)	(741,415)
<b>Payroll Expense Adjustments</b>	<b>(382,591)</b>	<b>(17,296)</b>
<b>Short Term Incentive Compensation</b>	<b>(123,754)</b>	<b>(5,595)</b>
<b>Long Term Incentive Compensation</b>	<b>(238,146)</b>	<b>(10,766)</b>
<b>Board of Directors’ Compensation</b>	<b>(213,825)</b>	N/A
<b>Payroll Taxes</b>	<b>(37,287)</b>	<b>(1,686)</b>
<b>Inflation Adjustment</b>	<b>(1,023,307)</b>	<b>(298,363)</b>
Acquisition Adjustment Amortization	(6,789)	(57,718)
Indirect Impacts (Bad Debts, Late Charges, Other Taxes)	(27,402)	(2,646)
Net OCA Adjustments	\$(11,852,215)	\$(1,352,007)
Recommended Change to Base Rates	\$7,001,522	\$104,786)

6 York presented the following test periods in its filing:

- 7 ● The historic test year (“HTY”) ended December 31, 2021
- 8 ● The future test year (“FTY”) December 31, 2022
- 9 ● The fully projected future test year (“FPFTY”) February 29, 2024.

10 The requested revenue requirement is based on the FPFTY ending February 29, 2024.

---

1 The attached schedules are the same as those attached to my Revised Direct Testimony (OCA St. 1 (Revised)).

<sup>2</sup> A 25-basis point increase to ROE would increase revenue requirement by \$683,661 for Water and \$62,871 for Wastewater as shown on OCA Exhibit MEG-3, and as discussed in the testimony of OCA witness Dr. Habr.

**III SURREBUTTAL TO MR. POFF**

1 **Q: WHAT ISSUES DO YOU ADDRESS IN YOUR SURREBUTTAL TESTIMONY?**

2 A: I address the recommendations made by Mr. Poff related to the following issues:

- 3 A. Payroll Costs
- 4 B. Short Term Incentive Compensation
- 5 C. Long Term Incentive Compensation
- 6 D. Board of Directors' Compensation
- 7 E. Inflation Adjustment

**A. PAYROLL COSTS**

8 **Q: PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN DIRECT**  
9 **TESTIMONY REGARDING PAYROLL COSTS.**

10 A: In my direct testimony I testified that the Company's payroll request begins with payroll  
11 expense levels as of the historical test year ended December 31, 2021 ("HTY") and then  
12 adds: (1) estimated pay increases for the future test year ended December 31, 2022, and  
13 again for the fully projected future test year ended February 29, 2024, and (2) a proposed  
14 addition of ten new employees in 2022. The Company's projected pay increases for union  
15 employees was 3.5% and for non-union employees was 5.0%. I pointed out that the  
16 Company's estimates for non-union pay increases are significantly higher than the arms-  
17 length negotiated union pay increases is a cause for concern because it indicates that the  
18 projected non-union pay increases may be overstated in the Company's calculation. The  
19 union pay increases of 3.5% reflect market-based rates, while the non-union estimates may  
20 be escalated at higher rates, causing the Company's projected payroll cost to be overstated.  
21 For this reason, I proposed an adjustment to establish the Company's annual payroll  
22 escalation rate at 3.5% per year for all employees.

1           In support of this position, I referenced data reported by Mercer, a widely-  
2 recognized compensation firm, that indicates merit increases are tracking at 3.2%, while  
3 only 27% of the companies in its survey were planning merit increases of 3.5% or greater.<sup>3</sup>  
4 I also referenced a recent Forbes article addressing employer compensation survey data  
5 which indicated that, despite higher inflation rates, the average budgeted salary increase  
6 for 2022 was only 3.4%. This indicates York's proposed escalation rates for its union  
7 employees are consistent with these benchmarks in the range of 3.5% per year, however,  
8 its estimated non-union and management pay rate increases are well above these levels  
9 and should be reduced for rate-setting purposes.<sup>4</sup>

10           I recommended that the Commission approve projected pay increases for 2022 and  
11 2023 at 3.5% per year for all employees. This recommendation does not result in any  
12 reduction in the pay levels for union positions. This adjustment does, however, bring the  
13 projected pay increases for non-union and managerial positions in line with the 3.5%  
14 market-based levels projected for York's union employees.

15           The Company also requested that five (5) vacant position be included in rates. I  
16 recommended that the costs associated with vacant positions should not be included in  
17 rates, because there are always vacant positions with every company as a general rule. In  
18 its rebuttal testimony, the Company agreed with this position, and removed \$285,826 from

---

<sup>3</sup> See [Compensation is going up. But, is it enough? Compensation planning survey results | Mercer.US](#)

<sup>4</sup> See Exhibit FIII-5, p. 2.; Forbes, [Why Salary Increases Do Not Keep Pace With Inflation](#), April 7, 2022; <https://www.forbes.com/sites/johnbremen/2022/04/07/why-salary-increases-do-not-keep-pace-with-inflation/?sh=7162d3b17533>

1 its requested revenue requirement, so, I will not discuss the issue of vacant positions  
2 further in this testimony.

3  
4 **Q: WHAT DID MR. POFF SAY IN HIS REBUTTAL TESTIMONY IN RESPONSE**  
5 **TO YOUR POSITION REGARDING THE PROJECTED SALARY INCREASE**  
6 **FOR NON-UNION EMPLOYEES?**

7 A: Mr. Poff said that the Company maintains that a 5.0 percent increase in the FTY and  
8 FPFTY is reasonable and consistent with the general economy that continues to see low  
9 unemployment, high inflation, and upward pressure on wage growth as well as continued  
10 impact from the “Great Resignation.” He testified that the U.S. Bureau of Labor Statistics  
11 shows wages and salaries for private industry workers increased 5.7 percent for the 12-  
12 month period ending in June 2022.

13  
14 **Q: DO YOU AGREE WITH THIS RATIONALE?**

15 A: No. The problem with this testimony is that we are not setting rates for June 2022, we are  
16 setting rates for 2024. Mr. Poff provides no data to rebut the Mercer projections of 3.2%  
17 for merit increases. Moreover, he does not respond to the fact that the union increases of  
18 3.5% are market-based per se. In short, he provides no evidence that the actual increases  
19 going forward will be any greater than 3.5%.

**B. ANNUAL CASH INCENTIVE PLAN**

1 **Q: PLEASE SUMMARIZE YOUR DIRECT TESTIMONY ABOUT THE**  
2 **COMPANY’S ANNUAL INCENTIVE PLAN.**

3 A: In my direct testimony I acknowledged that the Commission’s policy is to allow recovery  
4 of incentive compensation in rates so long as the utility shows that the overall amount of  
5 compensation is reasonable and that the plan provides benefits to ratepayers. The  
6 Commission does require, however, that the utility show: (1) measurable performance  
7 objectives, (2) studies or other data to support the necessity of the incentive compensation  
8 plan, and (3) evidence supporting a claim of the utility’s inability to retain competent  
9 management personnel.<sup>5</sup>

10 I said that the Company’s cash incentive award for 2021 was based upon (1)  
11 achieving the Earnings Per Share (“EPS”) target and (2) exceeding the 75% of the  
12 Performance Objectives for the year. Most of the plan’s business criteria, and many of its  
13 performance objectives include financial metrics which are designed to benefit  
14 shareholders. Based upon my review, the Company has not provided sufficient evidence  
15 to demonstrate that its Cash Incentive Plan is beneficial for ratepayers.

16 I said that, while I generally agree with the policy that the plan should show a  
17 benefit to ratepayers, I point out that in utility ratemaking, a standard that requires benefits  
18 to customers actually means that a ‘*net benefit*’ to customers is required. In other words,  
19 a showing of ratepayer benefit at any cost is not sufficient. Instead, the utility has the

---

<sup>5</sup> *Pa. Public Util. Comm’n v. Philadelphia Gas Works*, Docket No. R-00061931, Order Sept. 28, 2007, p. 48.

1           burden of showing that the cost incurred provides a *net* benefit to ratepayers. I did not  
2           agree with the Company’s position that if a utility shows *any* benefit to ratepayers, no  
3           matter how small, the entirety of its incentive compensation plan costs should be included  
4           in rates. Moreover, I support the view that the costs of incentive compensation plans may  
5           be shared or allocated between shareholders and ratepayers where the objectives of the  
6           plan, particularly financial metrics, are designed to benefit shareholders. I provided a long  
7           list of states that follow this approach.<sup>6</sup>

8  
9   **Q:   WHAT WAS MR. POFF’S RESPONSE TO THIS TESTIMONY?**

10  A:   Mr. Poff stated, “The Commission’s policy is to allow recovery of incentive compensation  
11       in rates so long as the utility shows the overall amount of compensation is reasonable and  
12       that the plan provides benefits to ratepayers.”<sup>7</sup> This statement is not completely correct.  
13       The Pennsylvania Public Utility Commission actually requires more. The Commission  
14       also requires that the utility show: (1) measurable performance objectives, (2) studies or  
15       other data to support the necessity of the incentive compensation plan, and (3) evidence  
16       supporting a claim of the utility’s inability to retain competent management personnel.<sup>8</sup>  
17       In the 2007 PGW rate case, Docket No. R-00061931, the Commission stated:

18                   We agree with the finding of the ALJs on this issue. The ALJs’ rationale  
19                   for disallowance of this claim is accurate. The ALJs noted that PGW failed  
20                   to show by record evidence the requisite documentation to comply with its

---

<sup>6</sup> See page 21 of Mr. Garrett’s Direct and Errata testimonies.

<sup>7</sup> See Poff Rebuttal, p. 8, lines 1-3.

<sup>8</sup> See *e.g.*, *Pa. Pub. Util. Comm’n v. Philadelphia Gas Works*, Docket No. R-00061931, Order Sept. 28, 2007, p. 48.

1 Management Agreement, that PGW has not presented studies or  
2 submitted any data to support its claimed inability to retain competent  
3 management personnel without such a program and that the Philadelphia  
4 Gas Commission did not allow the expense in PGW’s 2007 budget because  
5 “clearly articulated, well-defined, quantitative goals and criteria (as are  
6 used in private industry for such ‘pay-for-performance’ programs) are  
7 absent.” Accordingly, we shall deny the exceptions of PGW on this issue  
8 and adopt the recommendation of the ALJs to disallow the \$500,000  
9 claimed expense.<sup>9</sup>  
10

11 As in the PGW case, York failed to provide this requisite information in its application.  
12 In particular, there was no evidence provided to show that York has not been able to retain  
13 competent management without these incentives, which is the third prong of the  
14 requirements.

15 Mr. Poff instead argued, “Although some of the performance objectives have a  
16 financial component, it is unreasonable to conclude that strong financial performance only  
17 benefits the shareholders and not the ratepayers.”<sup>10</sup> This is a strawman argument. I never  
18 took the position that financial performance measures “only benefit the shareholders and  
19 not ratepayers.” What I said is that financial measures benefit shareholders more than  
20 they do ratepayers. This is why incentive plans that contain these measures, such as the  
21 Company’s plan, are generally shared between shareholders and ratepayers.

22 Mr. Poff also says that the “net benefit” standard is not followed in Pennsylvania.  
23 He is mistaken on this point. Any commission that applies a “*used and useful*” standard

---

<sup>9</sup> *Pa. Public Util. Comm’n v. Philadelphia Gas Works*, Docket No. R-00061931, Order Sept. 28, 2007, p. 48. (Emphasis added).

<sup>10</sup> *Id.* at lines 13-15.

1 is applying a net benefits test. *Used* means operational and *useful* means providing a net  
2 benefit to ratepayers. Further, any commission that requires cost/benefit analysis is  
3 applying a net benefits test – *e.g.*, do the benefits *outweigh* the costs. Of course, this  
4 Commission applies net benefits standards. The standard that Mr. Poff supports is no  
5 standard at all—that *any* benefit to ratepayers, no matter how infinitesimal, is sufficient,  
6 no matter the cost.

7  
**C. LONG-TERM STOCK INCENTIVE PLAN**

8 **Q: PLEASE SUMMARIZE YOUR DIRECT TESTIMONY REGARDING THE**  
9 **COMPANY’S LONG-TERM COMPENSATION PLANS.**

10 A: I recommended that York’s long-term stock compensation costs be borne by the  
11 shareholders rather than the ratepayers in this proceeding. I testified that because the  
12 Company’s long-term stock compensation plan is designed to align the interests of  
13 Company executives and senior management with the interests of shareholders, the  
14 shareholders rather than ratepayers should be responsible for paying these costs. I  
15 explained that incentive compensation payments to officers, executives, and key employees  
16 of a utility are often excluded for ratemaking purposes. Since officers of any corporation  
17 have fiduciary duties of loyalty and care to the corporation itself and not to the customers  
18 of the company, these individuals are required to put the interests of the company first.

19 I testified that the interests of the company and the interests of the customer are  
20 not always the same, and at times, can be quite divergent. This natural divergence of  
21 interests creates a situation where not every cost associated with executive compensation



1 is presumed to be a necessary cost of providing utility service. Since the compensation of  
2 the employee is tied over a long period of time to the company's stock price, it motivates  
3 employees to make business decisions from the perspective of long-term shareholders.  
4 This intentional alignment of employee and shareholder interests means the costs of these  
5 plans should be borne solely by the shareholders. It would be inappropriate to require  
6 ratepayers to bear the costs of incentive plans designed to encourage employees to put the  
7 interests of the shareholders first.

8 I discussed that the majority view of regulatory commissions is to exclude stock-  
9 based long-term incentive compensation from rates. I referenced the Garrett Group  
10 Incentive Compensation Survey, which showed that 20 of the 24 western states tend to  
11 exclude all or virtually all long-term stock-based incentive pay, either through an outright  
12 ban on stock-based incentives or through applying the *financial performance* rule, which  
13 has the effect of excluding long-term earnings-based and stock-based awards. These states  
14 include Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Kansas, Louisiana,  
15 Minnesota, Missouri, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South  
16 Dakota, Texas, Utah, Washington and Wyoming. In the other four states, Alaska, Iowa,  
17 Montana and Nebraska, the issue just has not been addressed.

18 I also discussed the treatment in four midwestern states: Illinois, Kentucky,  
19 Michigan and Wisconsin. According to commission-staff personnel contacted in these  
20 states, these jurisdictions also adhere to the general rule that financial-based stock incentives  
21 of executives and upper management excluded from rates.

22

1 **Q: WHAT RESPONSE DID MR. POFF PROVIDE ON THIS ISSUE?**

2 A: Mr. Poff is dismissive of the telephonic surveys conducted of commission staffs in 28  
3 states, saying that we did not support our arguments with decisions in Pennsylvania.<sup>11</sup> But,  
4 that was our point. We are recommending that the Pennsylvania Public Utility  
5 Commission reconsider its prior treatment of stock incentives. In the 28 states surveyed,  
6 100% of the states that deal with stock incentives as a form of compensation (24 of 24)  
7 disallow the inclusion of this type of incentive payment in rates. (They do not disallow  
8 the incentives; they just do not include them in rates). In the other four states, Alaska,  
9 Iowa, Montana and Nebraska, the issue just has not been addressed.

**D. BOARD OF DIRECTORS' COMPENSATION**

10 **Q: HAS THE COMPANY INCLUDED BOARD OF DIRECTORS' COMPENSATION**  
11 **COSTS IN ITS REVENUE REQUIREMENT?**

12 A: Yes, as shown in Exhibit FIII-2-48, York included \$427,649 in its revenue requirement  
13 for directors' compensation. I propose an adjustment to remove a portion of these costs  
14 from the revenue requirement.

---

11 See Poff Rebuttal Testimony at page 12.

1 **Q: PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING BOARD**  
2 **OF DIRECTORS' ("BOD") COMPENSATION?**

3 A: York included \$427,649 in its revenue requirement for directors' compensation, a portion  
4 of which is in the form of *stock grants*. I proposed an adjustment to remove, from the  
5 revenue requirement, the board of directors' stock grants and 50% of the cash  
6 compensation costs. I testified that ratepayers should not be expected to bear the full cost  
7 of BOD compensation because officers and directors of any corporation have legal,  
8 fiduciary duties of loyalty and care to the corporation itself and not to its customers. These  
9 individuals are required by law to put the interests of the Company first, and the interests  
10 of the Company and the interests of customers are not always aligned. Because of this  
11 natural divergence of interests, not every compensation cost is presumed to be a necessary  
12 cost of providing utility service.

13 In addition, I testified regarding other recent cases in which regulators ordered a  
14 sharing of BOD compensation costs between shareholders and ratepayers is appropriate.  
15 I discussed the treatment approved issue by the Public Utility Commission of Nevada  
16 ("PUCN") and the Washington Utilities and Transportation Commission ("WUTC"). In  
17 discovery responses, I provided further examples of regulatory commissions that also have  
18 ordered similar sharing of these costs.<sup>12</sup>

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<sup>12</sup>See OCA Response to York Request Set III-7.

1 **Q: DID MR. POFF ADDRESS THE CONCERNS YOU RAISED REGARDING**  
2 **BOARD OF DIRECTORS' COMPENSATION?**

3 A: No. Instead of addressing the substantive issues I raised, Mr. Poff merely states that this  
4 Commission has not disallowed board of directors' costs in the past. He also says that I  
5 only point to two jurisdictions where these costs have been shared, even though I provided  
6 the Company with a list of several states in which these costs are shared.<sup>13</sup> I actually  
7 provided the Company with a list of regulatory commission decisions I relied on, most  
8 notably, recent decisions in Connecticut that allocated the majority of these costs to  
9 shareholders. The decisions I relied upon, as set forth in OCA's Response to York's  
10 discovery request Set III-7 is outlined below:

11 **Connecticut**

- 12 • In the *Application of the Connecticut Water Co., to Amend its Rate Schedule*, Conn.  
13 Pub. Util. Reg. Authority, Docket No. 20-12-30 the PURA stated:

14 The OCC stated that the BOD answers to and serves the interests of  
15 the Company's shareholders; thus, the expense should not be  
16 entirely recovered from ratepayers. A 75/25 sharing of costs  
17 between shareholders and ratepayers, respectively would be more  
18 appropriate. The OCC recommends a disallowance of 75% of this  
19 cost, a reduction of \$329,250. OCC Brief, p.49.

20 *The Authority finds that BOD fees should not be allocated solely to*  
21 *the ratepayers because both the ratepayers and shareholders*  
22 *benefit from the expense.*<sup>14</sup>

- 23 • In the *Application of the Connecticut Light and Power Co., to Amend its Rate*  
24 *Schedules*, Conn. Pub. Util. Reg. Authority, Docket No. 14-05-06 the PURA stated:

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<sup>13</sup> *Id.*

<sup>14</sup> *Application of the Connecticut Water Co., to Amend its Rate Schedule*, Conn. Pub. Util. Reg. Authority, Docket No. 20-12-30, Order issued July 28, 2022, at p.12. (Emphasis added). Document provided at **Att. OCA III-7**.

1 The Authority finds that the main objective of the BOD is to protect  
2 the interest of the Company's investors or shareowners.  
3 Ratepayers may indirectly benefit from the activities of the BOD;  
4 however, ratepayers are not the focus of the BOD decisions.  
5 Consistent with the determinations in previous Decisions regarding  
6 BOD expense and Directors' and Officers' Liability Insurance  
7 (DOL) expense, the Authority allows only 25% of BOD costs in  
8 rates.<sup>15</sup>

9 Regarding related Directors' insurance (DOL) costs, Connecticut PURA stated:

10 The OCC agreed that DOL protects the officers of the Company  
11 from lawsuits brought against them by shareholders that arise as a  
12 result of decisions that they make while performing their duties.  
13 Therefore, the shareholders, who receive the payout, are the  
14 primary beneficiaries of this insurance. Ratepayers receive very  
15 little of the benefit and should not be responsible for all of the costs.  
16 OCC Brief, p. 75. The OCC noted that the Company failed to  
17 recognize that many legitimate expenses (e.g., image building  
18 advertisements, lobbying expenses) are not recoverable. . . . The  
19 Authority finds no convincing reason to deviate from its previous  
20 treatment of DOL insurance. Consistent with the determinations in  
21 previous Decisions regarding BOD expense and DOL expense, the  
22 Authority will allow only 25% of DOL costs in rates.<sup>16</sup>  
23

## 24 Nevada

- 25 • In re *Southwest Gas Corp.*, Docket No. 18-05031, the Nevada  
26 commission on divided the cost of the BOD compensation equally  
27 between ratepayers and shareholders. The PUCN stated:  
28 420. The Commission accepts Staffs proposal to disallow 50  
29 percent of the BOD compensation costs in order to share the costs

---

<sup>15</sup> Application of the Connecticut Light and Power Co., to Amend its Rate Schedules, Conn. Pub. Util. Reg. Authority, Docket No. 14-05-06, Order issued p. 76. (Emphasis added). Document provided at **Att. OCA III-7**.

<sup>16</sup> Application of the Connecticut Light and Power Co., to Amend its Rate Schedules, Conn. Pub. Util. Reg. Authority, Docket No. 14-05-06, Order issued pp. 77 (Emphasis added) (The emphasized portion of the PURA's decision is an example of "net benefit" analysis that regulatory commissions apply when excluding a portion of a utility's BOD related costs from rates, as discussed by Mr. Garrett in his testimony, and in his Response to Interrogatory OCA III-3(a) above. Document provided at **Att. OCA III-7**.)

1 equally between ratepayers and shareholders. The Commission  
2 finds that the evidence on the record supports benefits to both  
3 ratepayers and shareholders. A competent BOD provides value to  
4 SWG through increased earning and market value, while ratepayers  
5 benefit from safe, reliable service. Accordingly, it is appropriate  
6 that the costs be shared between shareholders and ratepayers.<sup>17</sup>

### 7 Washington

- 8 • In re *Cascade Natural Gas Corp.*, the Washington commission  
9 approved the customers' adjustment to share board of directors'  
10 costs equally between shareholders and customers.<sup>18</sup>

### 11 New Mexico

- 12 • In the *Application of El Paso Electric Co.*, the ALJ's Recommended Decision stated:  
13 For the same reasons that the cost of D&O insurance should be shared 50%  
14 - 50% between shareholders and ratepayers, the cost of board of directors  
15 compensation should be shared 50%-50% between shareholders and  
16 ratepayers. Recovering 100% of the cost of board of directors  
17 compensation from ratepayers would not result in just and reasonable rates  
18 because ratepayers and shareholders at least equally benefit from the  
19 service of board members.<sup>19</sup>

### 20 Other Jurisdictions

21 It is Mr. Garrett's understanding and belief that regulatory commissions in  
22 California and Arkansas also have approved similar allocations resulting in  
23 a sharing of Board of Directors' costs between shareholders and ratepayers,  
24 however, he does not have these orders in his possession.  
25

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<sup>17</sup> *In re Southwest Gas Corp.*, Docket No. 18-05031, (Nev. Pub. Util. Comm'n) Modified Final Order, at p. 138, ¶ 420 (Feb. 15, 2019). Document provided at **Att. OCA III-7**.

<sup>18</sup> *In re Cascade Natural Gas Corp.*, Docket No. UG-200568 (Wash. Util. and Transport. Comm'n), Order No. 5, pp. 9-10 (May 18, 2021). Document provided at **Att. OCA III-7**.

<sup>19</sup> *Application of El Paso Electric Co. for Revision of its Retail Electric Rates*; New Mex. Pub. Reg. Comm'n, Case No. 20-00104-UT, Recommended Decision issued April 6, 2021, p. 170. (Emphasis added). The Recommended Decision was upheld in the final NMPRC Order issued. Document provided at **Att. OCA III-7**.

1 **Q: DID MR. POFF RAISE ANY OTHER ARGUMENTS AGAINST SHARING**  
2 **THESE COSTS WITH SHAREHOLDERS?**

3 A: Yes. In my direct testimony I said that directors and officers of the company are *required*  
4 *by law* to put the interests of the Company first, and the interests of the Company and the  
5 interests of customers are not always aligned, and because of this natural divergence of  
6 interests, not every compensation cost is presumed to be a necessary cost of providing  
7 utility service. In response to this Mr. Poff said that the Business Corporation Law of  
8 1988 allows directors in Pennsylvania to consider the effects of any actions on groups  
9 affected by the actions, including shareholders, members, employees, suppliers, customers  
10 and creditors as well as the community.<sup>20</sup>

11  
12 **Q: DOES THIS LANGUAGE CHANGE ANYTHING IN YOUR TESTIMONY?**

13 A: No. The Business Corporation Law of 1988 still specifically requires directors and  
14 officers to act in a manner they reasonably believe to be in the best interest of the  
15 corporation. In other words, the duty of loyalty, for officers and directors to act in the best  
16 interest of the corporation, is still in effect. As a result, shareholders should be responsible  
17 for at least a portion of the Board of Directors' costs.

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<sup>20</sup> See Poff rebuttal at p. 14.

**E. INFLATION ADJUSTMENT**

1 **Q: PLEASE SUMMARIZE YOUR POSITION REGARDING YORK’S REQUESTED**  
2 **INFLATION ADJUSTMENT.**

3 A: York proposed an inflation adjustment to both the water and the wastewater utilities based  
4 on a February 2021 to February 2022 increase in the CPI-U of 6.4%.<sup>21</sup> The adjustment is  
5 made for 2022, 2023, and 2 months of 2024, and applies to all expenses that are not  
6 separately adjusted. I recommended that the Commission reject the Company’s proposed  
7 *blanket* inflation adjustment because, such adjustments do not pass the *known and*  
8 *measurable* standard for utility ratemaking. Even in a future test year situation, projected  
9 increases must be based on specific analysis for each requested increase. Moreover,  
10 blanket inflation adjustments for projected test years are poor ratemaking policy because  
11 they create a disincentive for utilities to control costs going forward.

12 I testified regarding the Commission’s recent decisions rejecting general inflation  
13 adjustments in the recent Aqua Pennsylvania, Inc. rate case, Docket No. R-2021-  
14 3027385,<sup>22</sup> and in Pa PUC v. Wellsboro Electric Company (Order entered April 29, 2020),  
15 in which the Commission found that a blanket inflation adjustment does not meet the  
16 *known and measurable* test. For these reasons, I recommended the inflation adjustment  
17 should be rejected.

18

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<sup>21</sup> See York Water Statement No. 103W, Direct Testimony of Matthew E. Poff, p. 21.

<sup>22</sup> See. *Pa. Pub. Util. Comm’n v. Aqua Pennsylvania*, Docket No. R-2021-3027385, Order and Opinion, May 12, 2022, at p. 117.



1 **Q: HOW DID MR. POFF RESPOND REGARDING YOUR POSITION ON THE**  
2 **INFLATION ADJUSTMENT?**

3 A: Mr. Poff argued that prior decisions of the Commission had allowed inflation adjustments.  
4 He cites three cases, one 20 years old, one 30 years old and one 36 years old to support his  
5 position. However, he provided no rebuttal to the fact that the Commission has, in its most  
6 recent decision, rejected general inflation adjustments, such as the adjustment proposed  
7 by the Company in this case.

8 In the recent Aqua Pennsylvania, Inc. rate case, Docket No. R-2021-3027385,  
9 (Order entered May 12, 2022), the PUC found that Aqua’s general inflation adjustment to  
10 accounts was not specifically analyzed and adjusted and should be denied.

11 We agree with the ALJ that Aqua has not justified the use of a general price  
12 level adjustment to expenses not specifically adjusted in this case or not  
13 subject to inflation. R.D. at 70. We also agree that allowing Aqua to apply  
14 a general inflation adjustment to a block of expenses could incentivize less  
15 accurate tracking of expenses and a less rigorous approach to controlling  
16 costs for those expenses. The application of a General Price Adjustment to  
17 22% of expenses is neither targeted nor specific. We find the ALJ's  
18 recommendation to deny Aqua's use of a General Price Adjustment to be  
19 reasonable.<sup>23</sup>

20 In the recent Pa PUC v. Wellsboro Electric Company (Order entered April 29,  
21 2020), the Commission found that a blanket inflation adjustment does not meet the *known*  
22 *and measurable* test.

23 The ALJs explained that the Company has the burden of demonstrating that  
24 each FTY expense claim will increase in the FPFTY by some “known and  
25 measurable” change in the FPFTY. According to the ALJs, the Company  
26 did not demonstrate that the blanket three percent inflation adjustment to

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<sup>23</sup> See. *Pa. Pub. Util. Comm’n v. Aqua Pennsylvania*, Docket No. R-2021-3027385, Order and Opinion, May 12, 2022, at p. 117.

1 all expenses would meet the known and measurable change standard;  
2 specifically, the Company did not demonstrate that making this adjustment  
3 to each expense claim directly relates to the actual costs expected to be  
4 incurred in each expense account in the FPPTY. R.D. at 21-23.

5 The general inflation adjustments rejected by the Commission in these cases is precisely  
6 the type of inflation adjustment proposed in this case. Here, York proposed inflation  
7 adjustments to many accounts based on known and measurable changes expected to occur  
8 in those accounts over the next several years. We accepted those increases, although we  
9 proposed a downward adjustment to the requested payroll increases. On top of these  
10 specific increases, though, the Company then propose a blanket inflation adjustment for  
11 all of the other accounts. This is precisely the type of inflation adjustment rejected by the  
12 Commission in the recent Wellsboro and Aqua cases.

#### IV. CONCLUSION

13 **Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

14 A: Yes.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Summary Comparison of Revenue Requirement**

Line No.	Description	Ref.	York		OCA Recommendation		Difference		OCA Impact of Errata	
			Water	Wastewater	Water	Wastewater Errata	Water	Wastewater Errata	OCA Initial Wastewater	Impact of Errata
1	Rate Base		\$ 350,621,590	\$ 33,353,950	\$ 350,301,681	\$ 32,909,997	\$ (319,909)	\$ (443,953)	\$ 32,430,699	\$ 479,298
2	Rate of Return		7.93%	7.93%	6.01%	6.01%	-1.92%	-1.92%	6.01%	0.00%
3	Return Requirement		27,804,706	2,645,008	21,037,718	1,976,443	(6,766,988)	(668,565)	1,947,658	28,785
4	Adjusted Net Operating Income	<sup>v</sup>	\$ 16,450,949	\$ (270,366)	\$ 17,999,363	\$ 15,997	\$ 1,548,414	\$ 286,363	\$ 69,789	\$ (53,792)
5	Deficiency		11,353,757	2,915,374	3,038,355	1,960,446	(8,315,402)	(954,927)	1,877,869	(82,577)
6	Revenue Conversion Factor		0.701591	0.706304	0.701591	0.706304	0.000000	0.000000	0.706304	0.000000
7	Revenue Deficiency		\$ 16,182,881	\$ 4,127,649	\$ 4,330,666	\$ 2,775,642	\$ (11,852,215)	\$ (1,352,007)	\$ 2,658,728	\$ 116,915
8	Consolidated Allocation		2,670,856	(2,670,856)	2,670,856	(2,670,856)	-	-	(2,670,856)	-
9	Deficiency with Allocation		\$ 18,853,737	\$ 1,456,793	\$ 7,001,522	\$ 104,786	\$ (11,852,215)	\$ (1,352,007)	\$ (12,129)	\$ 116,915

Note 1 From Exhibit No. FI-2, p. 13.

**The York Water Company**  
**Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)**  
**Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024**  
**Office of Consumer Advocate - Revenue Requirement with OCA's Recommended Adjustments**

Line No.	Description	Ref.	Water			Waste Water Errata			Impact of Wastewater Errata	
			York	OCA	OCA	York	OCA Errata	OCA Errata	OCA Original	Difference
			Proposed Rates	Adjustment	Recommended	Proposed Rates	Adjustment	Recommended	Recommended	Original - Errata
			(A)	(B)	(C)	(A)	(B)	(C)		
<b>Rate Base</b>										
1	Plant in Service	<sup>1/</sup>	\$ 529,635,105		\$ 529,635,105	\$ 43,442,074		\$ 43,442,074	\$ 43,442,074	\$ -
2	Accumulated Depreciation	<sup>1/</sup>	(107,427,025)		(107,427,025)	(9,177,932)		(9,177,932)	(9,177,932)	-
3	Net Plant in Service	<sup>1/</sup>	\$ 422,208,080	\$ -	\$ 422,208,080	\$ 34,264,142	\$ -	\$ 34,264,142	\$ 34,264,142	\$ -
4	Materials and Supplies	<sup>1/</sup>	\$ 1,520,534		\$ 1,520,534	\$ -		\$ -	\$ -	\$ -
5	Cash Working Capital	<sup>1/</sup>	3,070,957	(259,943)	2,811,014			-	-	-
6	Utility Plant Acquisition Adjustments	<sup>1/</sup>	(68,018)	(59,966)	(127,984)	260,414	(443,953)	(183,539)	(662,837)	479,298
7	Taxes on Deposits and Advances	<sup>1/</sup>	1,403,563		1,403,563	18,347		18,347	18,347	-
8	Accumulated Deferred Income Tax	<sup>1/</sup>	(24,488,981)		(24,488,981)	(148,987)		(148,987)	(148,987)	-
9	Excess Accumulated Deferred Income Tax	<sup>1/</sup>	(13,371,592)		(13,371,592)	(6,782)		(6,782)	(6,782)	-
10	Contributions in Aid of Construction	<sup>1/</sup>	(33,721,565)		(33,721,565)	(1,033,184)		(1,033,184)	(1,033,184)	-
11	Customers' Advances for Construction	<sup>1/</sup>	(4,455,584)		(4,455,584)			-	-	-
12	Customers' Advances Not Expended	<sup>1/</sup>	(1,475,804)		(1,475,804)			-	-	-
13	Total Rate Base		\$ 350,621,590	\$ (319,909)	\$ 350,301,681	\$ 33,353,950	\$ (443,953)	\$ 32,909,997	\$ 32,430,699	\$ 479,298
14	Rate of Return	<sup>2/</sup>	7.930118%	-1.924518%	6.005600%	7.930118%	-1.924518%	6.005600%	6.005600%	0.000000%
15	Return Requirement		\$ 27,804,706	\$ (6,766,988)	\$ 21,037,718	\$ 2,645,008	\$ (668,565)	\$ 1,976,443	\$ 1,947,658	\$ 28,785
<b>Revenues</b>										
16	Sales of Water	<sup>3/</sup>	\$ 52,523,311		\$ 52,523,311	\$ 4,157,401		\$ 4,157,401	\$ 4,157,401	\$ -
17	Other Revenue	<sup>3/</sup>	1,119,149		1,119,149	4,861		4,861	4,861	-
18	Total Revenue		\$ 53,642,460	\$ -	\$ 53,642,460	\$ 4,162,262	\$ -	\$ 4,162,262	\$ 4,162,262	\$ -
<b>Expenses</b>										
19	Operating Expenses	<sup>4/</sup>	\$ 23,702,382	\$ (1,981,622)	\$ 21,720,760	\$ 4,229,014	\$ (332,020)	\$ 3,896,994	\$ 3,890,464	\$ 6,530
20	Depreciation	<sup>4/</sup>	12,960,981	(6,789)	12,954,192	933,718	(57,718)	876,000	803,226	72,774
21	Taxes Other Than Income Taxes	<sup>4/</sup>	1,378,995	(37,287)	1,341,708	43,491	(1,686)	41,805	41,805	-
22	Income Taxes	<sup>4/</sup>	(850,847)	477,284	(373,563)	(773,595)	105,061	(668,534)	(643,023)	(25,511)
23	Total Operating Expenses		\$ 37,191,511	\$ (1,548,414)	\$ 35,643,097	\$ 4,432,628	\$ (286,363)	\$ 4,146,265	\$ 4,092,473	\$ 53,793
24	Net Operating Income		\$ 16,450,949	\$ 1,548,414	\$ 17,999,363	\$ (270,366)	\$ 286,363	\$ 15,997	\$ 69,789	\$ (53,793)
25	Return (Sufficiency) Deficiency		\$ 11,353,757	\$ (8,315,402)	\$ 3,038,355	\$ 2,915,374	\$ (954,927)	\$ 1,960,446	\$ 1,877,869	\$ 82,578
26	Revenue Conversion Factor	<sup>5/</sup>	0.70159058	0.70159058	0.70159058	0.706303677	0.706303677	0.706303677	0.706303677	0
27	Revenue (Sufficiency) Deficiency	<sup>6/</sup>	\$ 16,182,881	\$ (11,852,215)	\$ 4,330,666	\$ 4,127,649	\$ (1,352,007)	\$ 2,775,642	\$ 2,658,727	\$ 116,915
28	Wastewater Revenue Allocation	<sup>6/</sup>	2,670,856		2,670,856	(2,670,856)		(2,670,856)	(2,670,856)	-
29	Total Increase in Rates	<sup>6/</sup>	\$ 18,853,737	\$ (11,852,215)	\$ 7,001,522	\$ 1,456,793	\$ (1,352,007)	\$ 104,786	\$ (12,129)	\$ 116,915
30	Percent of Requested Increase				37%			7%		

Note 1 From Exhibit No. FV-1, p. 3.

Note 2 See the Direct Testimony of Paul R. Moul, p. 2, lines 23 through 25.

Note 3 From Exhibit FII-2, p. 9.

Note 4 From Exhibit No. FI-2, pp 11, 13. Also see FV-1.pg5, column 7.

Note 5 From HV-1.wp1, factor for total revenue requirements.

Note 6 From Exhibit FII-2, p. 10.

From Exhibit No. FV-1W (tab FV-1W.pg3)

See the Direct Testimony of Paul R. Moul, p. 1.

From Exhibit No. FII-2W, page 9 (tab FII-2W.pg9) and

Exhibit No. FV-1W (tab FV-1W.pg6).

From HV-1W.wp1.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Summary of Recommendations

Line No.	Description	Witness	Water			Errata Wastewater			Impact of Wastewater Errata	
			Rate Base	Pre-Tax Return	Revenue Deficiency	Rate Base	Pre-Tax Return	Revenue Deficiency	OCA Original Recommended	Difference Original - Errata
1	York Requested Increase Amounts		\$ 350,621,590		\$ 18,853,737	\$ 33,353,950		\$ 1,456,793	\$ 1,456,793	\$ -
<u>Rate Base Adjustments</u>										
2	Cash Working Capital	Garrett	\$ (259,943)	10.57%	\$ (27,488)		10.50%	\$ -	\$ -	\$ -
3	Acquisition Adjustments	DeAngelo	(59,966)	10.57%	(6,341)	(443,953)	10.50%	(46,634)	(96,980)	50,347
4	Total Rate Base Adjustments		\$ (319,909)		\$ (33,830)	\$ (443,953)		\$ (46,634)	\$ (96,980)	\$ 50,347
<u>Rate of Return Adjustments</u>										
5	25 Basis Point Reduction in ROE		\$ 350,301,681	-0.20%	(683,661)	\$ 32,909,997	-0.19%	(63,800)	(62,871)	(929)
6	Capital Structure	Habr	350,301,681	-0.32%	(1,136,823)	32,909,997	-0.32%	(106,089)	(104,544)	(1,545)
7	Return on Equity	Habr	350,301,681	-2.27%	(7,944,800)	32,909,997	-2.25%	(741,415)	(730,617)	(10,798)
8	Total Rate of Return Adjustments				(9,765,284)			(911,304)	(898,031)	(13,272)
<u>Operating Income Adjustments</u>										
9	Payroll Expense	Garrett			\$ (382,591)			\$ (17,296)	\$ (17,296)	\$ -
10	Cash Incentives	Garrett			(123,754)			(5,595)	(5,595)	-
11	Stock Incentives	Garrett			(238,146)			(10,766)	(17,296)	6,530
12	Payroll Taxes	Garrett			(37,287)			(1,686)	(1,686)	-
13	Cost Escalation	Garrett			(1,023,307)			(298,363)	(298,363)	-
14	Board of Directors Expenses	Garrett			(213,825)			-	-	-
15	Acquisition Adjustment Amortization	DeAngelo			(6,789)			(57,718)	(130,492)	72,775
16	Rate Adjustment Impacts (Note 1)	Garrett			(27,402)			(2,646)	(3,183)	537
17	Total Operating Income Adjustments				(2,053,101)			(394,070)	(473,911)	79,841
18	Total Adjustments				(11,852,215)			(1,352,007)	(1,468,922)	116,915
19	OCA Recommended Increase(Decrease)				\$ 7,001,522			\$ 104,786	\$ (12,129)	\$ 116,915

Note 1 The impact of OCA's adjustments on late charges, bad debts, and assessments are accounted for here. The adjustment of these costs are a component of the revenue gross up factor on the Revenue Requirement Exhibit.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Payroll Expense Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Pro Forma Hourly Payroll Excluding Bonuses and Vacant Positions 12/31/2021	<sup>1/</sup>	\$ 2,007,650	
2	Pro Forma Salary Payroll Excluding Bonuses and Vacant Positions 12/31/2021	<sup>1/</sup>	3,563,364	
3	Total Non-Union Payroll 12/31/2021		\$ 5,571,014	
4	OCA Recommended 2022 Increase Factor		103.50%	
5	2022 Adjusted Amount		\$ 5,765,999	
6	2022 Additional Hourly and Salaried Positions	<sup>2/</sup>	606,243	
7	OCA Adjusted 2022 Hourly and Salaried Payroll		\$ 6,372,242	
8	OCA Recommended 2023 Increase Factor		103.50%	
9	February 29, 2024 Adjusted Non-Union Payroll		\$ 6,595,271	
10	February 29, 2024 Requested Union Payroll, Excluding Unfilled Positions	<sup>3/</sup>	2,479,100	
11	OCA Recommended Payroll Expense (without Bonuses)		\$ 9,074,371	
12	Requested 2/29/2024 Payroll (without Bonuses)	<sup>4/</sup>	9,518,048	
13	Gross Payroll Adjustment Before Expense Allocation		\$ (443,677)	\$ (443,677)
14	Expense Factor	<sup>5/</sup>	0.862317798	<sup>6/</sup> 0.038983417
15	Adjustment to Payroll Expense		\$ (382,591)	\$ (17,296)

- Note 1 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab HIII-2-4(b).pg1, cells G10-I147 and M10-O147 excluding rows 92 and 134 for hourly positions.
- Note 2 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-1(c).pg1, total of cells G10-I19 and M10-O19 excluding rows 21 and 83 for salaried positions.
- Note 3 Derived from CONFIDENTIAL File OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, total of cells G1 147I and M10-O147 for union positions.
- Note 4 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, total of cells G1 147I and M10-O147.
- Note 5 From FIII-2-40(b).pg1, Total of Accounts 6011000 through 60180003 / Pro Forma Company Labor.
- Note 6 From FIII-2-40(b).pg1, Total of Accounts 7015000 through 7018000 / Pro Forma Company Labor.

The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cash Incentive Award Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Cash Incentive Awards - 2/29/2024 Pro Forma	<sup>1/</sup>	\$ 287,026	\$ 287,026
2	Expense Factor	<sup>2/</sup>	<u>0.862317798</u>	<sup>3/</sup> <u>0.038983417</u>
3	Amount Included in Operating Expenses		\$ 247,508	\$ 11,189
4	Ratepayer Share		<u>50.00%</u>	<u>50.00%</u>
5	Amount Recommended for Recovery		<u>\$ 123,754</u>	<u>\$ 5,595</u>
6	OCA Recommended Adjustment		<u>\$ (123,754)</u>	<u>\$ (5,595)</u>

Note 1 See OCA IV-14 and CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, cell Q167.

Note 2 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G21-G51 / G61.

Note 3 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G52-G57 / G61.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Long-Term Incentive Plan Recommendations

Line No.	Description	Ref.	Water	Wastewater
1	Long-Term Stock Awards - 2/29/2024 Pro Forma	<sup>1/</sup>	\$ 276,170	\$ 276,170
2	Expense Factor	<sup>2/</sup>	<u>0.862317798</u> <sup>3/</sup>	<u>0.038983417</u>
3	Long-Term Incentive Expense		\$ 238,146	\$ 10,766
4	OCA Recommended Adjustment to Long-Term Incentives		<u>\$ (238,146)</u>	<u>\$ (10,766)</u>

Note 1 See OCA IV-9 and CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, cell R167.

Note 2 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G21-G51 / G61.

Note 3 Derived from CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-40(b).pg1, Total of cells G52-G57 / G61.



The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Payroll Tax Recommendations

Line No.	Description	Water		
		Payroll	Cash Incentive	Stock Incentive
1	Expense Adjustment	\$ (382,591)	\$ (123,754)	\$ (238,146)
2	Adjustments to Wages Over \$147K	<u>(58,581)</u>	<u>(54,124)</u>	<u>(204,490)</u>
3	Adjustment Subject to OASDI Tax	\$ (324,010)	\$ (69,630)	\$ (33,656)
4	Adjustment to Medicare Taxes	\$ (5,548)	\$ (1,794)	\$ (3,453)
5	Adjustment to OASDI Tax	<u>\$ (20,089)</u>	<u>\$ (4,317)</u>	<u>\$ (2,087)</u>
6	Tax Adjustment Totals	<u>\$ (25,636)</u>	<u>\$ (6,111)</u>	<u>\$ (5,540)</u>
7	Total Water Employment Tax Adjustment			<u>\$ (37,287)</u>
8	Payroll Tax Effective Rate			5.01%
		Wastewater		
		Payroll	Cash Incentive	Stock Incentive
9	Expense Adjustment	\$ (17,296)	\$ (5,595)	\$ (10,766)
10	Adjustments to Wages Over \$147K	<u>(2,648)</u>	<u>(2,447)</u>	<u>(9,245)</u>
11	Adjustment Subject to OASDI Tax	\$ (14,648)	\$ (3,148)	\$ (1,522)
12	Adjustment to Medicare Taxes	\$ (251)	\$ (81)	\$ (156)
13	Adjustment to OASDI Tax	<u>\$ (908)</u>	<u>\$ (195)</u>	<u>\$ (94)</u>
14	Tax Adjustment Totals	<u>\$ (1,159)</u>	<u>\$ (276)</u>	<u>\$ (250)</u>
15	Total Wastewater Employment Tax Adjustment			<u>\$ (1,686)</u>

Note 1 From CONFIDENTIAL File: OCA-IV-1 2022 Water Rate Case.xlsx, tab FIII-2-25(c).pg1, selected amounts times the appropriate expense factor.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Inflation Adjustment Recommendations

Line No.	Description	Ref.	Water	Wastewater
<u>Requested Inflation Adjustments</u>				
1	Adjustment December 2021 - December 2022	<sup>1/</sup>	\$ 360,236	<sup>3/</sup> \$ 106,523
2	Pro Forma Adjustment, December 2022 - February 2024	<sup>2/</sup>	<u>663,071</u>	<sup>4/</sup> <u>191,840</u>
3	Total Requested		\$ 1,023,307	\$ 298,363
4	OCA Adjustment		<u>\$ (1,023,307)</u>	<u>\$ (298,363)</u>

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Note 1 FIII-2.pg2, J239.

Note 2 FIII-2-37.pg1, cell H54.

Note 3 FIII-2W.pg2, J89.

Note 4 FIII-2-28W.pg1, cell H38.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Board of Directors Fees Recommendations**

Line No.	Description	Ref.	Amount
1	Requested Board of Directors Compensation	<sup>1/</sup>	\$ 427,649
2	OCA Recommended Ratepayer Share (50%)		<u>213,825</u>
3	OCA Recommended Board of Directors Fee Adjustment		<u>\$ (213,825)</u>

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Note 1 Exhibit FIII-2-48.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Acquisition Adjustment Recommendations

Line No.	Description	Ref	Water	Errata Ref.	Wastewater	Impact of Wastewater Errata	
						OCA Original Wastewater	Difference Original - Errata
<b>Rate Base</b>							
1	Wrightsville Acquisition Adjustment at 2/29/2024	<sup>1/</sup>	\$ 59,966				
2	Felton Acquisition Adjustment at 2/29/2024			<sup>2/</sup>	\$ 260,414	\$ 260,414	\$ -
3	Acquisition Adjustments Requested		\$ 59,966		\$ 260,414	\$ 260,414	\$ -
4	Jacobus Acquisition Adjustment at 2/29/24			<sup>3/</sup>	\$ (183,538.55)	\$ (183,538.55)	\$ -
5	Letterkenny Acquisition Adjustment at 2/29/2024			<sup>3/</sup>		(479,298.79)	479,298.79
6	Negative Acquisition Adjustments Not Requested				\$ (183,538.55)	\$ (662,837.34)	\$ 479,298.79
7	Adjustment to Remove Wrightsville and Felton Acquisition Adjustments		\$ (59,966)		\$ (260,414)	\$ (260,414)	\$ -
8	Adjustment to Add the Jacobus and Letterkenny Acquisition Adjustments				\$ (183,539)	\$ (662,837)	\$ 479,299
9	Total Rate Base Adjustments		\$ (59,966)		\$ (443,953)	\$ (923,251)	\$ 479,299
<b>Amortization</b>							
10	Wrightsville Acquisition Adjustment at 2/29/2024	<sup>4/</sup>	\$ 6,789				
11	Felton Acquisition Adjustment at 2/29/2024			<sup>5/</sup>	\$ 29,481	\$ 29,481	\$ -
12	Amortization of Acquisition Adjustments Requested		\$ 6,789		\$ 29,481	\$ 29,481	\$ -
13	Jacobus Acquisition Adjustment Amortization			<sup>6/</sup>	\$ (28,237)	\$ (28,237)	\$ -
14	Letterkenny Acquisition Adjustment Amortization			<sup>6/</sup>		(72,775)	72,775
15	Amortization of Omitted Negative Amortization Adjustments				\$ (28,237)	\$ (101,011)	\$ 72,775
16	Adjustment to Remove Amortization of Wrightsville and Felton Acq. Adj.		\$ (6,789)		\$ (29,481)	\$ (29,481)	\$ -
17	Adjustment to Add Amortization of Jacobus and Letterkenny Acq. Adj.				\$ (28,237)	\$ (101,011)	\$ 72,775
18	Total Amortization Adjustments		\$ (6,789)		\$ (57,718)	\$ (130,492)	\$ 72,775

Note 1 Exhibit No. FV-1-9, page 1.

Note 2 Exhibit No. FV-1-2W, page 1.

Note 3 See the Direct Testimony of Morgan N. DeAngelo, page 8, net of amortization beginning at date of acquisition.

Note 4 Exhibit No. FIII-2-22, page 1.

Note 5 Exhibit No. FIII-2W.

Note 6 Based on the ten year amortizations recommended by Morgan N. DeAngelo.

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cash Working Capital

Line No.	Description	-1220697.523 Amount	Lag Days	Dollar Days
1	Payroll Expense Adjustments	\$ (1,159,663)	7.0	\$ (8,117,639)
2	Payroll Tax Withholding	(61,035)	13.7	(837,976)
3	Payroll Taxes	(61,035)	13.7	(837,976)
4	Inflation Adjustment	<u>(1,023,307)</u>	18.1	<u>(18,545,719)</u>
5	Totals	\$ (2,305,039)	12.3	\$ (28,339,309)
6	Revenue Lag		<u>53.4</u>	
7	Cash Working Capital Expense Adjustments	\$ (6,315)	41.1	<u>\$ (259,502)</u>
8	Rate Base Adjustments	\$ (319,909)		
9	Long-Term Debt Component of Capital	1.77%		
10	Interest Adjustment	\$ (5,658)		
11	Daily Interest Adjustment	\$ (16)	28.4	<u>(440)</u>
12	Cash Working Capital Adjustment			<u>\$ (259,943)</u>

The York Water Company  
 Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
 Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
**Office of Consumer Advocate - Income Tax Expense**

Line No.	Description	Rate Base	Weighted Interest Cost	Errata Amount	Impact of Wastewater Errata	
					OCA Original Wastewater	Difference Original - Errata
<u>Water</u>						
1	Rate Base Adjustments	\$ (319,909)	-1.77%	\$ 5,658		
2	York Weighted Interest Cost		1.77%			
3	OCA Weighted Interest Cost		<u>1.88%</u>			
4	Difference	\$ 350,301,681	-0.11%	\$ (379,401)		
5	Operating Income Adjustments			<u>\$ 2,025,699</u>		
6	Total			\$ 1,651,955		
7	Combined Effective Tax Rate			<u>28.89210%</u>		
8	Adjustment to February 29, 2024 Income Tax Expense			<u>\$ 477,284</u>		
<u>Wastewater</u>						
9	Rate Base Adjustments	\$ 443,953	1.77%	\$ 7,851	\$ 16,328	\$ (8,477)
10	York Weighted Interest Cost		1.77%			
11	OCA Weighted Interest Cost		<u>1.88%</u>			
12	Difference	\$ 32,909,997	-0.11%	\$ (35,644)	\$ (35,125)	\$ (519)
13	Operating Income Adjustments			<u>\$ 391,423</u>	<u>\$ 470,728</u>	<u>\$ (79,305)</u>
14	Total			\$ 363,631	\$ 451,931	\$ (88,300)
15	Combined Effective Tax Rate			<u>28.89210%</u>	<u>28.89210%</u>	<u>0.00000%</u>
16	Adjustment to February 29, 2024 Income Tax Expense			<u>\$ 105,061</u>	<u>\$ 130,572</u>	<u>\$ (25,512)</u>

The York Water Company  
Docket Nos. R-2022-3031340 (Water) and R-2022-3032806 (Wastewater)  
Historic Test Year Ending 12/31/2021; Fully Projected Test Year Ending 2/29/2024  
Office of Consumer Advocate - Cost of Capital

Line No.	Description	Capital	Ratio	Rate	ROR Component	Water		Waste Water		
						Conversion Factor <sup>3</sup>	Pre-Tax ROR	Conversion Factor <sup>3</sup>	Pre-Tax ROR	
1	Long-Term Debt <sup>1/</sup>	\$ 174,870,000	45.23% <sup>2/</sup>	3.91%	1.77%	0.986656	1.79%	0.993284	1.78%	
2	Equity <sup>1/</sup>	\$ 211,777,106	54.77% <sup>2/</sup>	11.25%	6.16%	0.701591	8.78%	0.706304	8.72%	
3		\$ 386,647,106	100.00%		7.93%		10.57%		10.50%	
4	OCA Recommended:									
5	<u>25 Basis Point Reduction to Return on Equity</u>									
6	Long-Term Debt <sup>4/</sup>		45.23% <sup>4/</sup>	3.91%	1.77%	0.986656	1.79%	0.993284	1.78%	
7	Equity <sup>4/</sup>		54.77% <sup>4/</sup>	11.00%	6.02%	0.701591	8.59%	0.706304	8.53%	
8			100.00%		7.79%		10.38%		10.31%	
9	25 Basis Point ROE Adjustment							-0.20%		-0.19%
10	<u>Capital Structure</u>									
11	Long-Term Debt <sup>4/</sup>		48.00% <sup>4/</sup>	3.91%	1.88%	0.986656	1.90%	0.993284	1.89%	
12	Equity <sup>4/</sup>		52.00% <sup>4/</sup>	11.00%	5.72%	0.701591	8.15%	0.706304	8.10%	
13			100.00%		7.60%		10.06%		9.99%	
14	Capital Structure Adjustment							-0.32%		-0.32%
15	<u>Return on Equity</u>									
16	Long-Term Debt <sup>4/</sup>		48.00% <sup>4/</sup>	3.91%	1.88%	0.986656	1.90%	0.993284	1.89%	
17	Equity <sup>4/</sup>		52.00% <sup>4/</sup>	7.94%	4.13%	0.701591	5.88%	0.706304	5.85%	
18			100.00%		6.01%		7.79%		7.74%	
19	ROE Adjustment							-2.27%		-2.25%

Note 1 From Exhibit No. FVII-1, WP 1.

Note 2 From Exhibit No. FVII-1, WP 2, HV-1.pg3 and Moul Direct, page 2.

Note 3 From HV-1.wp1, factors for total revenue requirements.

Note 4 See the Responsive Testimony of Dr. David S. Habr.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

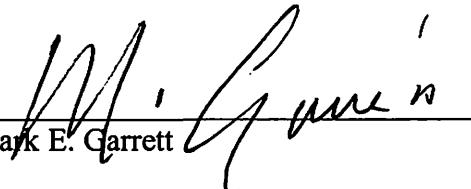
Pennsylvania Public Utility Commission :  
v. : Docket Nos. R-2022-3031340 (Water)  
The York Water Company : R-2022-3032806 (Wastewater)

VERIFICATION

I, Mark E. Garrett, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 1SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335887

Signature:

  
Mark E. Garrett

Consultant Address: Garrett Group Consulting, Inc.  
4028 Oakdale Farm Circle  
Edmond, Oklahoma 73013



**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission : Docket Nos. R-2022-3031340  
Office of Consumer Advocate : C-2022-3032868  
Office of Small Business Advocate : C-2022-3032902

v.

The York Water Company – Water Division

Pennsylvania Public Utility Commission : Docket Nos. R-2022-3032806  
Office of Consumer Advocate : C-2022-3032869  
Office of Small Business Advocate : C-2022-3033016

v.

The York Water Company – Wastewater  
Division

Surrebuttal Testimony of  
**Morgan N. DeAngelo**

On Behalf of  
Pennsylvania Office of Consumer Advocate

September 28, 2022

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**Positive Acquisition Adjustments** ..... 1

**Negative Acquisition Adjustments** ..... 4

**Conclusion:** ..... 5

1 **Introduction:**

2 **Q. Please state your name, business address and occupation.**

3 A. My name is Morgan N. DeAngelo. My business address is 555 Walnut Street, Forum  
4 Place, 5<sup>th</sup> Floor, Harrisburg, Pennsylvania 17101. I am currently employed as a  
5 Regulatory Analyst by the Pennsylvania Office of Consumer Advocate (OCA).

6 **Q. Have you provided testimony in this case?**

7 A. Yes. I provided Direct Testimony in this case on August 19, 2022, in OCA Statement 2.

8 **Q. How is your Surrebuttal Testimony organized?**

9 A. In this testimony, I respond to the Rebuttal Testimony of York Water Company's (York)  
10 witness, Mr. Joseph T. Hand, addressing York's proposed acquisition adjustments.

11 **Response to Mr. Joseph T. Hand:**

12 **Positive Acquisition Adjustments**

13 **Q. Please summarize your Direct Testimony regarding York's positive acquisition**  
14 **adjustments.**

15 A. In my Direct Testimony, OCA Statement 2, p. 6-7, I described reasons why the positive  
16 acquisition adjustment for Felton Borough should be removed from rate base and from  
17 the expense amortization on the basis that York has not met the criteria under Section  
18 1327(a)(3). Ultimately, York had not provided sufficient information to show that Felton  
19 was a troubled system and was not furnishing and maintaining adequate, efficient, safe,  
20 and reasonable service and facilities at the time of the acquisition.

1 **Q. What argument did Mr. Hand make in his Rebuttal Testimony?**

2 A. Mr. Hand disagreed and stated the “Company believes this positive acquisition  
3 adjustment meets the criteria of Section 1327(a)(3) of the Code”. (York Statement No. 1-  
4 R, p. 3, ln. 23-24) He also discussed a Corrective Action Plan that York put in place for  
5 the system’s inflow and infiltration (I&I) and stated, “the Company does not believe a  
6 similar outcome would have occurred under the continued ownership of Felton  
7 Borough”. (York Statement No. 1-R, p. 5, ln. 5-6) Mr. Hand also indicated York  
8 disagrees with OCA Witness Fought that a “notice of violation (NOV) that included an  
9 effluent violation does not indicate Felton Borough was providing inadequate service  
10 because it is not unusual for wastewater systems to get an NOV that includes an effluent  
11 violation. (York Statement No. 1-R, p. 3-4, ln. 3, 1-3) Additionally, Mr. Hand alleged  
12 that the positive and negative acquisition adjustments in the filing are miniscule  
13 compared to others. He also indicated that had York used fair market value treatment for  
14 all the acquisitions, the “resulting valuations, and resulting total revenue requirement for  
15 both water and wastewater operations, likely would have been higher and not subject to  
16 challenges based upon Section 1327 criteria presented by OCA”. (York Statement No. 1-  
17 R, p. 2-3, ln. 21-22, 1-2)

18 **Q. Do you agree with Mr. Hand?**

19 A. No. Mr. Hand’s testimony relies upon speculation about what Felton Borough would or  
20 would not have done, including the assumption that a Corrective Action plan was  
21 required, and that Felton Borough would not have created a Corrective Action Plan or did  
22 not have the resources to implement a Corrective Action Plan. The assumption made by  
23 Mr. Hand that Felton Borough would not have created a Corrective Action Plan, if one

1 had been required, is not enough to prove that Felton Borough was providing inadequate  
2 service to its customers at the time of acquisition. There is no evidence showing that  
3 Felton Borough would not be financially able to do so. Additionally, OCA witness  
4 Fought stated in his experience “DEP initiates Consent Order Agreement (COA) to  
5 address any serious recurring effluent non-compliance issues. The Borough was not  
6 under a COA like the Letterkenny Township Municipal Authority System was.” (OCA  
7 Statement 6SR, p. 3)

8 Finally, Mr. Hand argues that OCA’s challenge to two of the five acquisitions  
9 reflected in this rate case is somehow counterproductive. He stated, “Challenging these  
10 acquisition adjustments generated from depreciated original cost acquisitions discourages  
11 the Company from continuing to pursue this strategy”. (York Statement No. 1-R, p.2,  
12 ln.18-19) Mr. Hand’s argument ignores that in rebuttal, York accepted the OCA’s  
13 adjustment to remove the acquisition premium for York’s proposed acquisition  
14 adjustment for the Wrightsville Water System. He also argues that, because the OCA  
15 raised the lack of evidence and support for York’s claim for two acquisition adjustments,  
16 York would in the future choose a presumably more expensive acquisition strategy that  
17 would raise rates even more to the acquired customers and to the existing customers. The  
18 OCA takes cases as they come. Here, York made acquisitions and sought adjustments  
19 under Section 1327. Based on this, I have reviewed the acquisitions and the requests for  
20 acquisition adjustments and made recommendations about which should, and which  
21 should not be accepted. What York pursues in the future will be addressed in the future,  
22 but Mr. Hand appears to overlook that fair market value acquisitions can be challenged as  
23 well under Section 1329 and under Sections 1102 and 1103. My testimony addresses the

1 acquisitions filed under Section 1327. York failed to meet the criteria under Section  
2 1327, and therefore, I continue to recommend that York’s proposal for a positive  
3 acquisition adjustment should be rejected.

4 **Negative Acquisition Adjustments**

5 **Q. Please summarize your Direct Testimony regarding York’s negative acquisition**  
6 **adjustment.**

7 A. In my Direct Testimony, OCA Statement 2, p. 7-10, I described reasons why the negative  
8 acquisition adjustment for Jacobus Borough Sewer Authority (Jacobus) has not met the  
9 criterion of Section 1327(e) to support omitting its amortization of the pass-through of  
10 the difference between acquisition cost and the depreciated original cost. By indicating  
11 Jacobus did not wish to continue providing wastewater service and that there was no  
12 immediate successor for the contracted operator, York has not justified its position that it  
13 should not pass through the difference to ratepayers, and therefore there is no evidence of  
14 substantial public interest.

15 **Q. How did Mr. Hand respond in his Rebuttal Testimony?**

16 A. In his Rebuttal Testimony, Mr. Hand stated the “Company was not told all the steps  
17 Jacobus Borough took to try to fill the position, but the Company believes that their best  
18 efforts were fruitless based on increasing demand and limited supply of qualified  
19 operators”. (York Statement No. 1-R, p. 6, ln. 1-3) He also indicated a situation that  
20 occurred the first weekend, post-acquisition, stating “a severe storm and power outage  
21 disrupted power to two of the sanitary lift stations” and “Company personnel responded  
22 by setting mobile generators at the lift stations to keep customers in service and prevent  
23 an overflow condition”. (York Statement No. 1-R, p. 6, ln. 6-9) Furthermore, Mr. Hand

1 discussed capital improvements York has made, since the acquisition, and stated “these  
2 were capital improvements that Jacobus Borough was unwilling or unable to make and  
3 may have resulted in inadequate service or environmental violations in the future”. (York  
4 Statement No. 1-R, p. 6, ln. 16-18)

5 **Q. Do you agree with Mr. Hand?**

6 A. No. There is no information supporting that Jacobus could not have otherwise hired an  
7 operator. Mr. Hand acknowledges that he does not know what efforts, if any, Jacobus  
8 undertook to locate a qualified operator. Retirement of the current operator alone without  
9 any evidence that a replacement operator could not be located does not meet the public  
10 interest standard set forth in Section 1327(e). York appears to have been readily able to  
11 retain an operator and there is no information to show that Jacobus would not have been  
12 able to do the same other than Mr. Hand’s speculation. Additionally, if the storm and  
13 power outage occurred while the system was still in the ownership of Jacobus, there is no  
14 definitive way to prove Jacobus would not have been able to take the steps to bring in  
15 mobile generators and restore power. There is also no documentation that Jacobus would  
16 be financially or managerially unable to make the capital improvements York made, post-  
17 acquisition. Therefore, I continue to recommend that York amortize the difference  
18 between the purchase price and depreciated original cost of its assets, as an addition to  
19 income over ten years.

20 **Conclusion:**

21 **Q. Does this conclude your Surrebuttal Testimony?**

22 A. Yes. However, I reserve the right to modify if needed.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Morgan N. DeAngelo, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 2SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335891

Signature: Morgan N. DeAngelo  
Morgan N. DeAngelo

Consultant Address: Office of Consumer Advocate  
555 Walnut Street  
5<sup>th</sup> Floor, Forum Place  
Harrisburg, PA 17101-1923



**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**Pennsylvania Public Utility Commission** :  
: **v.** : **Docket Nos. R-2022-3031340 (Water)**  
: **R-2022-3032806 (WW)**  
**York Water Company** :

**SURREBUTTAL TESTIMONY OF  
DR. DAVID S. HABR  
ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE**

**September 28, 2022**

1 **Q: PLEASE STATE YOUR NAME.**

2 A: David S. Habr.

3 **Q: ARE YOU THE SAME DAVID S. HABR WHO PREVIOUSLY FILED**  
4 **DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?**

5 A: Yes, I am.

6 **Q: WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

7 A: I have comments on various portions of Mr. Moul's rebuttal testimony that are  
8 related to my direct testimony.

9 **Q: MR. MOUL REFERS TO INCREASING EQUITY COSTS AT VARIOUS**  
10 **POINTS IN HIS TESTIMONY AT PAGES 4 THROUGH 9. HAVE THE**  
11 **COMMON EQUITY COSTS FOR YORK WATER AND THE MEMBERS**  
12 **OF YOUR PROXY GROUP INCREASED SINCE YOUR DIRECT**  
13 **TESTIMONY WAS FILED?**

14 A: Based on stock price changes, it appears that the cost of common equity has  
15 increased for three members of the proxy group and decreased for four members  
16 of the proxy group as well as York Water. Surrebuttal TABLE-1 has three sets of  
17 stock prices for the proxy group and York Water. The first set contains the  
18 average prices for the period May 2 through July 19, 2022 that I used in my direct  
19 testimony. The second set contains the average prices for the period July 20  
20 through September 16, 2022, and the last set contains September 23, 2022 closing  
21 prices. Finally, the betas for the proxy group members and York Water are  
22 included in the table to provide a risk measure.

**SURREBUTTAL Table 1**

Company	Average Price		Price 9-23- 2022	Beta
	5-2--7-19-22	7-20--9-16-22		
American States Water	\$78.65	\$86.09	\$83.27	0.637
American Water Works	\$146.97	\$153.53	\$140.91	0.922
Artesian Resources Corporation	\$47.57	\$54.38	\$51.38	0.563
California Water Service	\$53.32	\$59.93	\$56.46	0.677
Essential Utilities, Inc.	\$45.31	\$50.10	\$44.34	0.873
Middlesex Water Company	\$86.59	\$91.39	\$84.19	0.744
SWJ Group	\$60.81	\$65.58	\$61.03	0.612
<b>York Water Company</b>	<b>\$40.07</b>	<b>\$43.79</b>	<b>\$41.76</b>	<b>0.566</b>

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For all of the companies, the average prices for the July 20<sup>th</sup> through September 16<sup>th</sup> period are greater than the prices used in my testimony. This suggests declining common equity costs for the period after I filed my testimony. However, comparing the 9-23 closing prices with the prices used in my direct suggests that the three riskiest companies, i.e., the companies with the three largest betas, are now experiencing increased common equity costs, i.e., their 9-23 stock prices are lower than the prices used in my direct testimony.

**Q: WHAT DOES THIS INFORMATION TELL YOU?**

A: It tells me that just because common equity costs in general may be up, the common equity cost for low-risk firms may go down as investors look for safe havens. S&P describes York Water as having low-risk water distribution operations.<sup>1</sup>

<sup>1</sup> Response to OCA Set V, No. 3, S&P Global Ratings, 10/8/2021, page 1.

1 **Q: ON PAGES 6-7, MR. MOUL ASSERTS THAT THE INTEREST RATES**  
2 **USED IN YOUR CAPM ANALYSIS ARE NOT APPROPRIATE. DO YOU**  
3 **AGREE WITH HIS ASSERTION?**

4 A: I do not. My interest rate time period matches the time period I used to calculate  
5 my betas. Investor expectations concerning future interest rates during this time period  
6 are embedded in the prices used to calculate the betas. Thus, there is no need to  
7 incorporate out of period interest rate forecasts.

8 **Q. DO YOU AGREE WITH MR. MOUL’S STATEMENT ON PAGE 9, LINES**  
9 **15-16 THAT “THE COMMISSION SHOULD INCREASE THE RETURN**  
10 **IN THIS CASE ABOVE THE 9.80% EQUITY RETURN THAT WAS**  
11 **RECENTLY ESTABLISHED IN THE DSIC PROCEEDING FOR WATER**  
12 **UTILITIES?”**

13 A. No. The DSIC water equity return is not an appropriate basis upon which to  
14 establish York’s ROE in this proceeding. The DSIC mechanism provides York the  
15 opportunity to recover certain eligible investments in the water and wastewater  
16 distribution system improvements between base rate cases. As an automatic rate  
17 recovery mechanism for York, the DSIC lowers its risk. Contrary to Mr. Moul’s  
18 inference, not all DSIC eligible plant may be recovered through the DSIC  
19 surcharge due to the 5% cap. The DSIC surcharge reflects specific statutory and  
20 regulatory policy, which favors investment in main replacement, subject to  
21 consumer protections. The equity return that is calculated in some way by  
22 Commission staff, for use in a single quarter test of whether York is over-earning

1 through its DSIC surcharge, is not suited to the identification of the cost of  
2 common equity which York should be allowed the opportunity to earn as a result  
3 of this proceeding.

4 **Q. MR. MOUL’S REBUTTAL TESTIMONY ON PAGE 5, LINES 8-20,**  
5 **REFERENCES THE RETURN ON COMMON EQUITY ESTABLISHED**  
6 **FOR UGI UTILITIES, INC.-ELECTRIC DIVISION (UGI), CITIZENS**  
7 **ELECTRIC COMPANY (CITIZENS), VALLEY ENERGY (VALLEY),**  
8 **WELLSBORO ELECTRIC COMPANY (WELLSBORO), COLUMBIA**  
9 **GAS COMPANY (COLUMBIA), PECO ENERGY COMPANY-GAS**  
10 **DIVISION (PECO GAS), AND AQUA PENNSYLVANIA, INC. (AQUA) IN**  
11 **COMMISSION PROCEEDINGS FROM 2017 THROUGH 2022. ARE**  
12 **THESE RETURNS AN APPROPRIATE METRIC BY WHICH TO ASSESS**  
13 **THE COST OF COMMON EQUITY ESTABLISHED FOR THIS**  
14 **PROCEEDING?**

15 **A:** No. The purpose of developing a proxy group in the development of a comparable  
16 group of utilities is to compare returns to other like companies. It would not be  
17 appropriate to include an electric or natural gas utility company in the proxy group  
18 for a water and wastewater utility, and that comparison is not appropriate here.  
19 The rates of return that the Commission has set for electric and natural gas utilities  
20 over the last five years are simply not relevant. Any impact Aqua Pennsylvania  
21 has in this proceeding is being represented in the proxy group by its parent  
22 company, Essential Utilities, Inc. While the OCA does not agree with the use of

1 these companies as comparisons, the OCA notes that the returns approved by the  
2 Commission in Mr. Moul's cited example are all at least 100 basis points below  
3 Mr. Moul's recommended 11.25% return in this proceeding.

4 **Q: ON PAGE 9, MR. MOUL COMPARES YOUR CAPITAL STRUCTURE**  
5 **RECOMMENDATIONS TO THE CAPITAL STRUCTURES APPROVED**  
6 **BY THE COMMISSION IN THE PECO ENERGY-GAS DIVISION RATE**  
7 **CASE, COLUMBIA GAS RATE CASE, AND THE AQUA RATE CASE.**  
8 **ARE THESE COMPARISONS APPROPRIATE?**

9 A: No. My capital structure recommendation proposed in this case is appropriate  
10 because it more accurately reflects York Water's capital structure and the  
11 Company's historically acceptable capital structure. The capital structures  
12 approved for an electric company, a natural gas company that is part of a large  
13 multistate corporation, and a large multistate water company are not relevant.

14 **Q: DO YOU AGREE WITH MR. MOUL'S STATEMENT AT PAGE 10, LINES**  
15 **13-14, THAT YOUR PROPOSED CAPITAL STRUCTURE "MERELY**  
16 **LOWERS THE COMPANY'S REVENUE REQUIREMENTS."**

17 A: No, I do not. All costs incurred by a regulated utility should be prudent. This  
18 includes capital costs. The Company has clearly shown in 2020 and 2021 that it  
19 can successfully operate with a debt ratio between 46% and 49%. Moreover, as I  
20 noted in my Rebuttal Testimony, Mr. Moul's recommended capital structure is  
21 outside its historically acceptable range. As noted in the Company's second  
22 Quarter 2022 10-Q, York Water observed that a debt ratio "between forty-six and

1 fifty percent has historically been acceptable to the PPUC in rate filings.”<sup>2</sup> The  
2 Company’s proposal to lower the debt ratio and increase costs to customers should  
3 be rejected.

4 **Q: AT PAGE 11, LINES 14-16, MR. MOUL CLAIMS THAT THERE IS NO**  
5 **UNCERTAINTY ASSOCIATED WITH CAPITAL STRUCTURE. WHY IS**  
6 **THIS NOT AN ACCURATE ASSESSMENT OF CAPITAL STRUCTURE?**

7 A: It is not an accurate assessment of the dynamic aspects of capital structure. At any  
8 point in time, the capital structure is certain. However, in the planning process the  
9 capital structure is quite changeable or fluid. It is during this process that a capital  
10 structure that is reasonable from both the stockholders’ and customers’ point of  
11 view can be established. York Water is in that process right now and still has the  
12 flexibility to establish a capital structure with 48% debt and 52% common equity.

13 **Q: ON PAGE 12, LINES 9-11, MR. MOUL CLAIMS THAT YOUR**  
14 **HYPOTHETICAL CAPITAL STRUCTURE SHOULD NOT BE USED**  
15 **BECAUSE IT CREATES A MISMATCH BETWEEN LONG-TERM DEBT**  
16 **AND THE HYPOTHETICAL DEBT RATIO THAT YOU ADVOCATE.**  
17 **WHY IS THIS NOT ACCURATE?**

18 A: This claimed mismatch is not accurate because there is still flexibility in the  
19 projected test year capital structure. Company can still create a 48% debt /52%  
20 common equity capital structure for the future test year.

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<sup>2</sup>York Water Company 2022 second quarter 10-Q, p. 23.

1 **Q: ON PAGE 14, LINES 24-32, MR. MOUL COMPARES THE USE OF THE**  
2 **DCF IN THE CALCULATION OF THE COMPANY'S RATE OF RETURN**  
3 **IN THIS PROCEEDING TO THE COMMISSION'S CALCULATION OF**  
4 **THE RETURN UTILIZED FOR THE CALCULATION OF THE DSIC**  
5 **RETURN IN THE QUARTERLY EARNINGS REPORTS. WHY IS THIS**  
6 **NOT AN APPROPRIATE COMPARISON?**

7 A: As I discussed above regarding the comparison of the overall return on equity and  
8 the use of the DSIC, the comparison similarly is not appropriate here. The equity  
9 return that is calculated in some way by Commission staff, for use in a single  
10 quarter test of whether York is over-earning through its DSIC surcharge, is not  
11 suited to the identification of the cost of common equity which York should be  
12 allowed the opportunity to each as of the end of the FPFTY.

13 **Q: ON PAGE 15, LINES 25-26 AND PAGE 18, LINES 11-18, MR. MOUL**  
14 **CLAIMS THAT YOUR USE OF A MULTI-STAGE DCF IS NOT**  
15 **APPROPRIATE. PLEASE EXPLAIN WHY YOUR USE OF THE MULTI-**  
16 **STAGE DCF IS APPROPRIATE?**

17 A: The multistage model must be used to temper analysts' 5-year earnings forecasts  
18 that are not sustainable in the long-run. That is, an individual firm cannot grow  
19 faster than the economy, as a whole, in perpetuity. We can think of it this way,  
20 assume that the economy is represented by a large balloon that is filled with  
21 smaller balloons that represent the individual companies. If one of the smaller  
22 balloons is growing faster than the economy, it will eventually fill up the entire



1 economy balloon thus becoming the entire economy. This clearly is not  
2 reasonable and cannot/would not occur. The multistage DCF recognizes this  
3 reality whereas the constant growth model, when saddled with an unsustainable,  
4 inappropriate growth rate, does not.

5 **Q: AT PAGE 18, LINES 8-9, MR. MOUL CLAIMS YOU USED YOUR**  
6 **MULTI-STAGE DCF APPROACH TO REDUCE YOUR ALLOWED ROE**  
7 **RECOMMENDATION FOR YORK WATER. IS THAT A CORRECT**  
8 **CHARACTERIZATION OF YOUR ANALYSIS?**

9 A: No, it is not. My 7.94% recommended ROE is based upon York Water's dividend  
10 yield and its historical earning growth (5.94%) which is higher than Yahoo!'s  
11 4.90% growth and Value Line's 5.00% growth.

12 **Q: ON PAGE 19, LINES 4-11, MR. MOUL CRITIQUES YOUR USE OF THE**  
13 **NON-CONSTANT DCF METHODS IN PUBLIC UTILITY RATE**  
14 **SETTING. WHY ARE THESE METHODS APPROPRIATE?**

15 A: As I stated previously, these methods are needed to temper the impact of  
16 unsustainably high earnings growth rate forecasts on DCF common equity cost  
17 estimates.

18 **Q. ON PAGE 19, LINES 12-20 AND PAGE 20, LINE 1-8, MR. MOUL CLAIMS**  
19 **THERE ARE FLAWS IN THE WAY THAT YOU HAVE APPLIED THE**  
20 **NON-CONSTANT DCF METHODOLOGY IN THIS CASE. DO YOU**  
21 **AGREE WITH HIS ASSESSMENT?**

22 A: No, I do not. First, Mr. Moul claims my use of GDP growth in the DCF model is

1 entirely misplaced. I would like to point out that I am not the first person to use  
2 GDP growth in a regulated utility setting. FERC started using GDP in regulated  
3 gas transmission cases over 20 years ago to temper extremely high analysts'  
4 earnings forecasts. They used a weighted average analysts' forecast earnings  
5 growth and a forecast GDP growth rate in the single-stage DCF. This method is  
6 referred to as the FERC 2-Step. High short-term earnings forecasts are inconsistent  
7 with the perpetual, sustainable growth that is at the core of the single stage DCF  
8 model.

9 **Q: REFERRING TO MR. MOUL'S TESTIMONY ON PAGE 20, LINES 12-17,**  
10 **DO YOU AGREE WITH HIM THAT YOU HAVE COMMITTED AN**  
11 **ERROR BY BASING YOUR RECOMMENDED RETURN ON COMMON**  
12 **EQUITY FOR YORK WATER ON YORK WATER'S ACTUAL**  
13 **EXPERIENCE?**

14 A: No, I do not. For an investor to look to other water companies' cost of common  
15 equity to determine what to expect from York Water is analogous to a car buyer  
16 looking at Chevys, Hondas, and BMWs to determine what to expect from a Ford.  
17 I used York Water's experience analysts' forecast to formulate York Water's  
18 market-based cost of common equity. The proxy group information provides a  
19 framework for examining the soundness of York Water's cost of common equity.

1 **Q. AT PAGE 22, LINES 21-26, MR. MOUL CLAIMS THAT YOU DO NOT**  
2 **CRITICIZE HIS USE OF THE LEVERAGE ADJUSTMENT AND THAT**  
3 **THE LEVERAGE ADJUSTMENT HAS NOTHING TO DO WITH**  
4 **MARKET TO BOOK RATIOS. IS THIS ACCURATE?**

5 A: No. First, Mr. Moul has mischaracterized my testimony. At page 29, beginning at  
6 line 7, I clearly state that leverage adjustments “are clearly not relevant to the  
7 regulated utility industry.” Second, Mr. Moul bases the need for a leverage  
8 adjustment on the divergence between the market value of the equity in the  
9 utility’s capital structure and its book value. This relationship is simply the  
10 market-to-book ratio. I then go on to explain that for a regulated utility to have a  
11 market-to-book ratio greater than one means that investors are expecting the  
12 utility’s earned returns to be greater than utility’s cost of common equity.

13 **Q: AT PAGE 27, LINES 18-19, MR. MOUL CLAIMS YOU CALCULATED**  
14 **“OPTION IMPLIED BETAS” FOR USE IN YOUR CAPM ANALYSIS. IS**  
15 **HIS CLAIM CORRECT?**

16 A: No, it is not. I use the same formula for calculating the holding period returns that  
17 Value Line uses, holding period return =  $\text{LN}(P_t/P_{t-1})-1$ . The only difference is that  
18 I used daily closing prices to calculate daily holding period returns while Value  
19 Line uses weekly closing prices to calculate weekly holding period returns. We  
20 both use these holding period returns in an ordinary least squares (OLS) regression  
21 analysis to estimate raw betas. Like Value Line, my betas are not based on option  
22 prices.

1 **Q: ALSO ON PAGE 27 AT LINES 21-22, MR. MOUL ASSERTS THAT YOUR**  
2 **BETAS ARE NOT BASED ON EMPIRICALLY AVAILABLE DATA, IS**  
3 **THIS ASSERTION CORRECT?**

4 A: No, it is not. The daily prices I used are readily available on Yahoo!

5 **Q: DO INVESTORS HAVE TO RELY ON YOUR BETAS FOR THEM TO BE**  
6 **RELEVANT TO THIS PROCEEDING?**

7 A: No, they do not. These betas were calculated so that the stock price information  
8 embedded in them is the same stock price information embedded in my DCF  
9 analysis. This matching makes them relevant to this proceeding.

10 **Q: DO YOU AGREE WITH MR. MOUL'S STATEMENT AT PAGE 28, LINES**  
11 **13-14 THAT YOU HAVE INCORRECTLY USED THE GEOMETRIC**  
12 **MEAN IN YOUR HISTORICAL MARKET RISK PREMIUM ANALYSIS?**

13 A: No, I do not. It is more appropriate to use the geometric mean in utility regulation  
14 where the common equity cost estimate covers an indefinite time in the future.

15 This is consistent with Professor Aswath Damodran's observation that if

16 . . . annual returns are uncorrelated over time, and our objective  
17 was to estimate the risk premium for the next year, the  
18 arithmetic average is the best and most unbiased estimate of  
19 the [risk] premium. *There are, however, strong arguments that*  
20 *can be made for the use of geometric averages.* (Emphasis  
21 added.) First, empirical studies seem to indicate that returns on  
22 stocks are negatively correlated over time. Consequently, the  
23 arithmetic average return is likely to overstate the premium.  
24 Second, while asset pricing models may be single period  
25 models, the use of these models to get expected returns over  
26 long periods (such as five or ten years) suggests that the  
27 estimation period may be much longer than a year. In this  
28 context, the argument for geometric average premiums

1 becomes stronger.<sup>3</sup>  
2

3 **Q: THE QUESTION THAT MR. MOUL IS ASKED ON PAGE 29, LINE 37 OF**  
4 **HIS REBUTTAL TESTIMONY SUGGESTS THAT YOU “IGNORED THE**  
5 **ADJUSTMENT TO THE CAPM RESULTS FOR SIZE DIFFERENCES.”**  
6 **DID YOU IGNORE MAKING POSSIBLE ADJUSTMENTS TO YOUR**  
7 **CAPM RESULTS TO REFLECT SIZE DIFFERENCES?**

8 A: No, I did not. On page 31 of my direct testimony, beginning at line 3, I explain  
9 how page 3 of his Schedule 13 demonstrates it is inappropriate to apply the size  
10 adjustment to regulated utility companies. Not only is the proposed size  
11 adjustment shown for each size group, that group’s beta is also shown. Every one  
12 of the size groups, except for the largest, have betas greater than one. Like  
13 regulated utility companies, the largest size group has a beta less than one. That  
14 less than one beta is associated with a negative size adjustment. It is clear that  
15 regulation negates any size risk that may otherwise be associated with a utility  
16 company.

17 **Q. ON PAGES 30-31, MR. MOUL CLAIMS THAT THE RISK PREMIUM**  
18 **METHOD SHOULD BE GIVEN “SERIOUS CONSIDERATION.” DO**  
19 **YOU AGREE WITH THAT STATEMENT?**

20 A. No. As is clearly shown on Mr. Moul’s Schedule 12, page 1, his risk premium is

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<sup>3</sup> Aswath Damodaran, “Equity Risk Premiums (ERP): Determinants, Estimation, and Implications – The 2022 Edition: Updated March 23, 2022.

1 based on large common stocks. Utility companies are not specifically  
2 considered. Adding a utility bond yield to a large company risk premium  
3 provides no information as to the market cost of common equity for a utility  
4 company. This methodology should not be given any consideration.

5 **Q. ON PAGE 33, MR. MOUL CLAIMS THAT YOUR RELIANCE ON THE**  
6 **BLUEFIELD AND HOPE CASES IS “MISTAKEN” BECAUSE THE DCF**  
7 **AND CAPM METHODS WERE NOT ENVISIONED FOR USE AT THE**  
8 **TIME OF THE CASES. IS THIS AN ACCURATE ASSESSMENT?**

9 A: No, it is not. The language in *Hope* is clearly consistent with the DCF  
10 methodology. Specifically, *Hope* states that “the return to the equity owner should  
11 be commensurate with returns on investments in other enterprises having  
12 corresponding risks.”<sup>4</sup> The is exactly the analysis that knowledgeable purchasers  
13 of common stock make when deciding which stock to buy and how much to buy.

14 **Q: DO YOU CONTINUE TO RECOMMEND FOR THE REASONS SET**  
15 **FORTH IN YOUR DIRECT TESTIMONY AND IN OCA WITNESS**  
16 **ALEXANDER’S TESTIMONY THAT IT IS NOT APPROPRIATE TO**  
17 **AWARD 25 BASIS POINTS FOR MANAGEMENT PERFORMANCE?**

18 A: Yes.

19 **Q: DOES THIS CONCLUDE YOUR SURREBUTAL TESTIMONY?**

20 A: Yes, it does.

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<sup>4</sup> See page 8 of Habr direct testimony for full citation.

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, David S. Habr, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 3SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335892

Signature: [/David S. Habr/](#)  
David S. Habr

Consultant Address: Habr Economics  
213 Cornuta Way  
Nipomo, CA 93444-5020

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY )  
COMMISSION )  
v. ) DOCKET NOS. R-2022-3031340 (WATER)  
R-2022-3032806 (WASTEWATER)  
THE YORK WATER COMPANY )

SURREBUTTAL TESTIMONY OF  
JEROME D. MIERZWA

ON BEHALF OF THE  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

SEPTEMBER 28, 2022

---

**EXETER**

ASSOCIATES, INC.

10480 Little Patuxent Parkway, Suite 300  
Columbia, Maryland 21044



1 **I. INTRODUCTION**

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

4 A. My name is Jerome D. Mierzwa. I am a Principal and Vice President of Exeter  
5 Associates, Inc (“Exeter”). My business address is 10480 Little Patuxent Parkway,  
6 Suite 300, Columbia, Maryland 21044. Exeter specializes in providing public utility-  
7 related consulting services.

8 Q. ARE YOU THE SAME JEROME D. MIERZWA THAT FILED DIRECT  
9 TESTIMONY IN THIS PROCEEDING ON AUGUST 19, 2022, AND  
10 REBUTTAL TESTIMONY ON SEPTEMBER 16, 2022?

11 A. Yes. I am.

12 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

13 A. The purpose of my surrebuttal testimony is to respond to certain aspects of the rebuttal  
14 testimony of Constance E. Heppenstall filed on behalf of the York Water Company  
15 (“York” or “Company”), and Brian Kalcic filed on behalf of the Office of Small  
16 Business Advocate (“OSBA”).

17 **II. YORK WITNESS: CONSTANCE E. HEPPENSTALL**

18 Q. IN YOUR DIRECT TESTIMONY YOU FOUND THAT THE SYSTEM-  
19 WIDE AND CLASS EXTRA CAPACITY DEMAND FACTORS, OR  
20 RATIOS, USED BY THE COMPANY IN ITS COST OF SERVICE STUDY  
21 (“COSS”) TO BE OUTDATED. WHAT WAS MS. HEPPENSTALL’S  
22 RESPONSE TO YOUR CLAIMS CONCERNING THE SYSTEM-WIDE  
23 CAPACITY FACTORS?

24 A. In its COSS, the Company used the system-wide maximum day ratio of 1.52  
25 experienced in 2010, and a system-wide maximum hour ratio of 1.84 experienced in

1 2006. In my direct testimony I recommend use of the system-wide maximum day ratio  
2 of 1.35 which was reflective of the actual maximum day demands experienced by York  
3 over the last 7 years, and a system-wide maximum hour ratio of 1.65 which was also  
4 reflective of the actual maximum hour demands experienced by York over the last 7  
5 years. Ms. Heppenstall claims a water system is designed to provide water during peak  
6 periods over many years, not just over the past 5 to 7 years. Therefore, she recommends  
7 that the historic peak ratios should be used, not more recent peak ratios.<sup>1</sup>

8 Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S CLAIM  
9 CONCERNING THE USE OF SYSTEM-WIDE MAXIMUM DAY AND  
10 MAXIMUM HOUR RATIOS?

11 A. With respect to developing demand ratio or factors to be used in a COSS, the American  
12 Water Works Association ("AWWA") M1 Manual indicates that demand data "over a  
13 representative number of recent years" should be utilized.<sup>2</sup> I believe that 7 years meets  
14 the standard identified in the AWWA M1 Manual, and the up to 16 years relied upon  
15 by York does not. Demands experienced 16 years ago are not representative of current  
16 customer demands.

17 Q. IN YOUR DIRECT TESTIMONY YOU FOUND THAT THE CLASS  
18 EXTRA CAPACITY RATIOS USED IN THE COMPANY'S COSS WERE  
19 DETERMINED IN THE 1976-1977 CUSTOMER DEMAND STUDY AND  
20 THAT THESE FACTORS WERE ALSO UNREASONABLE BECAUSE  
21 THEY WERE OUTDATED. DID MS. HEPPENSTALL FIND YOUR  
22 CONCERN TO BE VALID?

23 A. No. Ms. Heppenstall claims my concern is not valid. Ms. Heppenstall contends that  
24 the Stipulation approved by the Commission in the Company's 1992 rate case at Docket

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<sup>1</sup> York Statement No. 108-R, page 6, line 14 through page 7, line 3.

<sup>2</sup> AWWA M1 Manual, 7<sup>th</sup> Edition, page 373.

1 No. R-922168 required the Company to “complete a study to investigate the feasibility  
2 of preparing a study of customer demands on the York Water System.” She claims that  
3 the Company submitted the feasibility study in April 1993, but neither the OCA nor  
4 Bureau of Investigational Enforcement (“I&E”) provided any response to the feasibility  
5 study. She also claims that the Company submitted another feasibility study for a  
6 customer class demand study in April 2007, pursuant to the Settlement Petition adopted  
7 in the Company’s 2006 base rate case at Docket No. R-00061322. She claims that  
8 again, the Company received no response to the feasibility study and, therefore, the  
9 Company contends that it was not appropriate to spend several hundred thousand  
10 dollars on a customer class demand study for which it may not have been able to recover  
11 the costs.<sup>3</sup> She, therefore, claims that it is not the fault of the Company that they only  
12 have customer demand data from the 1970s upon which to base class extra capacity  
13 demand factors.<sup>4</sup>

14 Q. WHAT IS YOUR RESPONSE TO WITNESS HEPPENSTALL’S CLAIMS?

15 A. Ms. Heppenstall’s claims are not relevant to this proceeding. They do not change the  
16 fact that the Company’s class maximum day and maximum hour demand extra capacity  
17 factors are out of date and unreasonable. Had the customer demand studies described  
18 in Docket Nos. R-922168 and R-00061322 been performed, the results of those studies  
19 would also likely now be outdated.

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<sup>3</sup> York Statement No. 108-R, page 7, line 4 through page 8, line 17.

<sup>4</sup> *Id.*, page 9, lines 6-10.

1 Q. WERE YOU THE OCA'S COST ALLOCATION AND RATE DESIGN  
2 WITNESS IN THE COMPANY'S MOST RECENT PRIOR RATE CASE IN  
3 DOCKET NO. R-2018-300019, AND DID YOU PRESENT AN ANALYSIS  
4 OF CLASS DEMAND FACTORS SIMILAR TO THE ANALYSIS  
5 PRESENTED IN THIS PROCEEDING?

6 A. Yes.

7 Q. WHAT OBSERVATIONS DOES MS. HEPPENSTALL OFFER  
8 CONCERNING YOUR ANALYSES OF CLASS DEMAND FACTORS  
9 PRESENTED IN YORK'S PRIOR CASE AND IN THIS CASE?

10 A. Ms. Heppenstall provides a comparison of the results of each analysis and notes that in  
11 this case the class demand factors I have recommended in this case are each higher than  
12 the class demand factors I presented in the prior case. She claims that if the historic  
13 class maximum day and maximum hour ratio I have proposed were reasonable, they  
14 should not change as much from the prior rate case.<sup>5</sup>

15 Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S  
16 OBSERVATIONS CONCERNING THE TWO ANALYSES?

17 A. Contrary to Ms. Heppenstall's claims, the class maximum day and maximum hour  
18 ratios have not changed much since the prior case. As shown in the comparison  
19 presented on page 10 of Ms. Heppenstall's rebuttal testimony, the differences in each  
20 class's maximum day ratio is 0.1, or approximately 6%. The difference in the maximum  
21 hour ratios range from 0.15 to 0.20, or 7 to 8%. I would not consider these changes to  
22 be significant.

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<sup>5</sup> *Id.*, page 10, lines 5-11.

1 Q. MS. HEPPENSTALL CLAIMS THAT YOU HAVE FAILED TO PROVIDE  
2 CREDIBLE EVIDENCE THAT YOUR ALTERNATIVE METHOD OF  
3 DETERMINING CUSTOMER CLASS DEMANDS IS SUPERIOR TO THE  
4 COMPANY'S.<sup>6</sup> IN RESPONSE TO HER TESTIMONY, HAVE YOU  
5 CONDUCTED ANY FURTHER ANALYSIS OF THE DEMANDS OF  
6 YORK'S VARIOUS CUSTOMER CLASSES AND THE CLASS DEMAND  
7 FACTORS PRESENTED BY MS. HEPPENSTALL?

8 A. Yes. The maximum day extra capacity factor used by the Company for the Residential  
9 class is 2.5 (Exhibit No. FVIII, p. 16). That is, the demands of Residential customers  
10 on a maximum day are expected to be 2.5 times the demands experienced on an average  
11 day. To assess the reasonableness of the Company's estimate, I compared total  
12 projected system demands using the Company's estimated maximum day demands of  
13 Residential customers with actual system maximum day demands. This comparison is  
14 presented on Schedule JDM-1SR. This comparison revealed that based on the  
15 maximum day demands assigned to the Residential class of 2.5, the maximum day  
16 demands of Residential customers would exceed the actual total maximum day  
17 demands experienced by York. It is simply impossible for the maximum day demand  
18 of one customer class served by York to exceed the actual maximum day demand of  
19 all customer classes served by York.

20 I performed a similar comparison of the maximum hour demands assigned to  
21 each class and the maximum hour demands experienced on the York system. This  
22 comparison revealed that based on the maximum hour demands assigned to the  
23 Residential class of 4.5 (Exhibit No. FV111, page 26), the maximum hour demand of  
24 Residential customers would exceed the actual total maximum hour demand

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<sup>6</sup> *Id.*, page 10, lines 10 – 12.

1 experienced by York. This comparison is also presented on Schedule JDM-1SR.  
2 Again, it is simply impossible for the maximum hour demands of one customer class  
3 served by York to exceed the maximum hour demands of all customer classes served  
4 by York.

5 Based on these comparisons, clearly the maximum day and maximum hour  
6 extra capacity demand factors used by the Company for the Residential class are  
7 unreasonable. These comparisons also indicate that Ms. Heppenstall has failed to  
8 conduct any specific analysis of the reasonableness of the demand factors presented in  
9 her COSS. The AWWA Manual M1 approach I have utilized is superior because it is  
10 based on the recent actual consumption of York's customers over the last seven years,  
11 not data from the 1970s.

12 Q. BRIEFLY SUMMARIZE YOUR POSITION PRESENTED IN YOUR  
13 DIRECT TESTIMONY CONCERNING THE COMPANY'S PROPOSED  
14 MONTHLY RESIDENTIAL CUSTOMER CHARGE FOR A CUSTOMER  
15 WITH A 5/8-INCH METER.

16 A. York is proposing to increase the current customer charge for a Residential customer  
17 with a 5/8-inch meter from \$16.25 to \$20.71. The \$20.71 charge is based on an analysis  
18 of what the Company claims are direct customer costs presented in RS1-j Attachment.  
19 In my direct testimony, I found York's calculation of direct customer costs to be  
20 unreasonable because it included costs that did not vary directly with the addition or  
21 subtraction of customers. York included bad debt expense in its calculation, and office  
22 buildings and furniture and equipment which are not direct customer costs. Finally,  
23 York included the investment costs associated with its Enterprise Software which do  
24 not change with the addition or subtraction of a customer.

1 Q. DID MS. HEPPENSTALL AGREE WITH YOUR POSITION THAT BAD  
2 DEBT EXPENSE IS NOT A DIRECT CUSTOMER COST?

3 A. Ms. Heppenstall did not agree with my position that bad debt expense is not a direct  
4 customer costs and specifically addressed the inclusion of bad debt expense in a  
5 customer charge in her rebuttal testimony.<sup>7</sup>

6 Q. SHOULD BAD DEBT EXPENSE BE INCLUDED IN A CALCULATION  
7 OF DIRECT CUSTOMER COST?

8 A. No. As I explained in my direct testimony, only those costs that vary with the addition  
9 or subtraction of a customer should be considered a direct customer cost. If bad debt  
10 expense did vary directly with the number of customers, each new customer added by  
11 York would contribute to bad debt expense, and each customer that discontinues  
12 service would reduce bad debt expense. Since this is not the case, bad debt expense  
13 does not vary directly with the addition or a subtraction of a customer and, therefore,  
14 those costs should not be included in a calculation of direct customer costs.

15 Q. WHAT IS THE IMPACT OF ELIMINATING BAD DEBT EXPENSE  
16 FROM THE COMPANY'S CALCULATION OF DIRECT COSTS?

17 A. As shown on RS1-j Attachment, page 2, Ms. Heppenstall has included \$358,011 of bad  
18 debt expense in her calculation of direct customer costs. As shown in page 1 of that  
19 attachment, the number of bills over which bad debt expense would be collected is  
20 854,579. Thus, eliminating bad debt expense from Ms. Heppenstall's calculation of  
21 direct customer costs would reduce her calculated charge by \$0.42 (\$358,011/854,579).

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<sup>7</sup> *Id.*, page 14, lines 6-8.

1 Q. IN YOUR DIRECT TESTIMONY YOU RECOMMENDED  
2 PROPORTIONALLY INCREASING WASTEWATER RATES FOR EACH  
3 CUSTOMER CLASS IN ORDER TO REDUCE THE WASTEWATER  
4 SUBSIDY FROM \$2.67 MILLION TO \$2.05 MILLION. MS.  
5 HEPPENSTALL CLAIMS THAT YOU DID NOT PROPORTIONALLY  
6 INCREASE THE RATES OF EACH CLASS.<sup>8</sup> WHAT IS YOUR  
7 RESPONSE?

8 A. In my direct testimony I proposed reducing the wastewater subsidy from \$2.67 million  
9 to \$2.05 million, or by \$625,000. In assigning the additional \$625,000 to the  
10 Residential and Non-Residential classes, I allocated the \$625,000 to each class in  
11 proportion to the Company's initial assignment of the \$2.67 million subsidy to each  
12 class. This is shown in Table 5 that was included in my direct testimony.

13 Q. IN YOUR DIRECT TESTIMONY YOU RECOMMENDED THAT THE  
14 WASTEWATER SUBSIDY THAT IS PROPOSED TO BE SHIFTED TO  
15 WATER CUSTOMERS ALSO BE ALLOCATED TO THE INDUSTRIAL  
16 AND PRIVATE FIRE CLASSES. DOES MS. HEPPENSTALL AGREE  
17 WITH THIS RECOMMENDATION?

18 A. No. Ms. Heppenstall claims that the wastewater system has very few Industrial  
19 customers and no Private Fire customers. Therefore, she claims that the wastewater  
20 costs allocated to water customers should only be allocated to the Residential and  
21 Commercial classes, as these are the classes that are mostly responsible for the  
22 wastewater costs.<sup>9</sup>

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<sup>8</sup> *Id.*, page 15, line 15-16.

<sup>9</sup> *Id.*, page 16, line 5-12.



1 Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?

2 A. Allocating the wastewater subsidy only to Residential and Commercial customers  
3 might have merit if a significant percentage of York’s wastewater customers were also  
4 water customers. However, they are not. York serves approximately 73,000 water and  
5 wastewater customers. Of the 73,000 customers, approximately 5,000 of those  
6 customers are also wastewater customers. There is no basis to assign the unrecovered  
7 wastewater costs of a particular class to the water customers in that same class that do  
8 not receive wastewater service from York and pay another provider for wastewater  
9 service. Therefore, the wastewater subsidy should also be allocated to Industrial water  
10 customers and Private Fire customers.  
11

12 **III. OSBA WITNESS: BRIAN KALCIC**

13 Q. IN YOUR DIRECT TESTIMONY YOU FOUND THAT THE COMPANY’S  
14 BASE EXTRA-CAPACITY (“BEC”) WATER COST OF SERVICE STUDY  
15 UTILIZED INAPPROPRIATE SYSTEM-WIDE MAXIMUM DAY AND  
16 MAXIMUM HOUR CAPACITY FACTORS AND INAPPROPRIATE  
17 CLASS MAXIMUM DAY AND MAXIMUM HOUR CAPACITY  
18 FACTORS. ACCORDING TO MR. KALCIC, WHAT ROLE DO SYSTEM-  
19 WIDE MAXIMUM DAY AND MAXIMUM HOUR DEMAND CAPACITY  
20 FACTORS SERVE?

21 A. As explained by Mr. Kalcic, the BEC water cost of service methodology uses system  
22 maximum day and maximum hour capacity factors, or ratios, to determine the level of  
23 costs that are classified as base, maximum day, and maximum hour related.<sup>10</sup>

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<sup>10</sup> OSBA Statement No. 1-R, page 2, lines 10-14.

1 Q. DOES MR. KALCIC AGREE WITH YOUR PROPOSED SYSTEM-WIDE  
2 MAXIMUM DAY AND MAXIMUM HOUR DEMAND RATIOS?

3 A. No. Like Ms. Heppenstall, Mr. Kalcic believes that York's system-wide maximum day  
4 and maximum hour ratios should be based on demands experienced more than seven  
5 years ago, and implies that the maximum demands experienced since 2000 should be  
6 utilized.<sup>11</sup>

7 Q. WHAT IS YOUR RESPONSE TO MR. KALCIC?

8 A. Similar to my response to Ms. Heppenstall, the AWWA M1 Manuel indicates that  
9 demand data "over a representative number of recent years" should be utilized to  
10 determine demand factors.<sup>12</sup> I believe that seven years meets that standard, and the up  
11 to 16 years relied upon by York does not. Demands experienced 16 years ago are not  
12 representative of current customer demands.

13 Q. WHAT ARE MR. KALCIC'S CRITICISMS OF YOUR RECOMMENDED  
14 CLASS DEMAND FACTORS?

15 A. I developed my recommended class demand factors based on the methodology set forth  
16 in the AWWA Manual M1. Mr. Kalcic claims that the intent of the AWWA M1  
17 Manual is to provide an estimate of class demand factors when actual demand data is  
18 unavailable, implying that they should not be used in this proceeding because actual  
19 data is available.<sup>13</sup> He further claims that I undertook no empirical analysis to determine  
20 whether the approach described in the AWWA M1 Manual to develop maximum day  
21 and maximum hour demand factors was reasonable for the York system.<sup>14</sup>

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<sup>11</sup> *Id.*, page 3, line 9 through page 4, line 11.

<sup>12</sup> AWWA M1 Manuel, page 373.

<sup>13</sup> OSBA Statement No. 1-R, page 5, lines 17-21.

<sup>14</sup> *Id.*, page 6, lines 17-22.

1 Q. WHAT IS YOUR RESPONSE TO MR. KALCIC?

2 A. First, the actual demand data referred to by Mr. Kalcic is over 40 years old. As  
3 explained in my direct testimony, the water usage characteristics of York's customers  
4 have changed significantly over the last 40 years. For example, the demands of the  
5 Industrial customers reflected in York's demand study have declined over 80 percent  
6 since the demand study was conducted. Thus, I do not believe it reasonable to  
7 characterize the results of the customer demand study conducted by the Company in  
8 the 1970s to be based on relevant actual data.

9           Second, with respect to failing to provide any empirical analysis to support my  
10 proposed demand factors, without a detailed customer class demand analysis, the data  
11 necessary to perform such an analysis is simply not available. Hence, I used the  
12 approach described in the AWWA M1 Manual. The AWWA M1 Manual is the  
13 authoritative guide to setting water utility rates, and neither Mr. Kalcic nor Ms.  
14 Heppenstall would likely disagree with that characterization. As such, I do not believe  
15 that the approach discussed in the AWWA M1 Manual to determining customers  
16 demand factors can be dismissed as invalid.

17           Finally, as previously demonstrated in responding to Mr. Heppenstall, the  
18 maximum day and maximum hour factors utilized by York indicate that the demands  
19 of Commercial and Industrial customers would be negative when Residential  
20 customers experience their maximum day and maximum hour demands. This is simply  
21 impossible and confirms the unreasonableness of the Company's demand factors.

1 Q. HOW WOULD THE RESULTS OF YOUR COSS CHANGE  
 2 SIGNIFICANTLY IF THE COMPANY’S SYSTEM-WIDE DEMAND  
 3 FACTORS AND YOUR CLASS DEMAND FACTORS WERE  
 4 REFLECTED IN THAT STUDY IN THE EVENT THAT THE  
 5 COMMISSION WERE ONLY TO ADOPT YOUR CLASS DEMAND  
 6 FACTORS?

7 A. Table 1SR presented below provides a comparison of the results of the COSS presented  
 8 in my Direct Testimony which modified both system-wide and class maximum day and  
 9 maximum hour demand factors utilized by York, and the result of adjusting the  
 10 Company’s COSS only to reflect my recommended class demand factors. This  
 11 comparison is presented exclusive of the wastewater subsidy allocation to water  
 12 customers. As shown in Table 1SR, maintaining the Company’s systemwide demand  
 13 factors would not significantly change the results of the initial COSS presented in my  
 14 direct testimony. Schedule JDM-2SR presents a more detailed summary of the results  
 15 of a COSS which only adjusts the Company’s class demand factors. Scheduled JDM-  
 16 2SR includes an allocation of my recommended wastewater subsidy to water  
 17 customers, and is directly comparable to the COSS presented as Schedule JDM-2 in  
 18 my direct testimony.

<b>Table 1SR. Comparison of OCA COSS Results</b>				
<b>Class</b>	<b>Water Cost of Service Study Results</b>			
	<b>Direct<sup>[1]</sup></b>	<b>Surrebuttal<sup>[2]</sup></b>	<b>Difference</b>	<b>Percent</b>
Residential	\$42,819,383	43,070,285	\$250,903	0.6%
Commercial	\$15,325,308	15,350,405	\$25,097	0.2%
Industrial	\$6,053,924	6,011,541	(\$42,384)	-0.7%
Private Fire	\$2,735,857	2,597,596	(\$138,261)	-5.1%
Public Fire	\$1,745,44	1,653,008	(\$92,434)	-5.3%
<b>Total:</b>	<b>\$68,679,914</b>	<b>\$68,682,834</b>	<b>\$2,920</b>	<b>0.0%</b>
<sup>[1]</sup> Adjusts Company’s system-wide and class demand factors.				
<sup>[2]</sup> Adjusts only Company’s class demand factors				

1 Q. MR. KALCIC RECOMMENDS THAT THE WASTEWATER SUBSIDY BE  
2 ALLOCATED TO WATER CUSTOMERS BASED ON WASTEWATER  
3 CLASS CONTRIBUTIONS TO THE SUBSIDY.<sup>15</sup> DO YOU AGREE WITH  
4 THIS RECOMMENDATION?

5 A. No. Ms. Heppenstall has presented a similar recommendation. As previously explained  
6 in responding to Ms. Heppenstall, allocating the wastewater subsidy based on  
7 wastewater class contributions to the study might have merit if a significant percentage  
8 of York's wastewater customers were also water customers. However, they are not.  
9 York serves approximately 73,000 water and wastewater customers. Of the 73,000  
10 customers, approximately 5,000 of those customers are also wastewater customers.  
11 There is no basis to assign the unrecovered wastewater costs of a particular class to the  
12 water customers in that same class that do not receive wastewater service from York  
13 and pay another provider for wastewater service. Therefore, the wastewater subsidy  
14 should be allocated to each water customer class based on each class's indicated water  
15 cost of service.

16 Q. MR. KALCIC CLAIMS THAT YOUR PROPOSED NON-RESIDENTIAL  
17 WASTEWATER RATE INCREASE OF 84.8% VIOLATES THE  
18 PRINCIPLE OF GRADUALISM. WHAT IS YOUR RESPONSE?

19 A. I have proposed reducing the wastewater subsidy that is assigned to water customers  
20 by \$625,000, while Mr. Kalcic has proposed reducing the subsidy by \$1 million.<sup>16</sup>  
21 Based on the Company's proposed wastewater revenue requirement, under my  
22 proposed assignment of the wastewater subsidy to water customers, the system average  
23 increase for wastewater customers would be 50.4%, and under Mr. Kalcic's

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<sup>15</sup> *Id.*, page 11, lines 9-11.

<sup>16</sup> OSBA Statement No. 1, page 18, lines 17-20.

1 recommendation, the system average increase would be 58.3%.<sup>17</sup> Mr. Kalcic has  
2 proposed a wastewater rate increase of 58.4% for each customer class served by York.<sup>18</sup>  
3 As explained in greater detail in my rebuttal testimony, it is unreasonable to assign the  
4 Residential and Non-Residential wastewater classes the same percentage increase  
5 because the Non-Residential class is contributing revenue only equal to 33% of the  
6 indicated cost of service, while the Residential class is contributing revenues equal to  
7 54% of the indicated cost of service. As such, the Non-Residential class should receive  
8 an increase which is greater than the increase assigned to the Residential class in order  
9 to provide additional movement toward the indicated cost of service.

10 Witnesses for the OSBA have frequently testified that a common rule of thumb  
11 for rate gradualism is to limit the increase for any particular rate class to no more than  
12 1.5 to 2.0 times the system average increase.<sup>19</sup> Mr. Kalcic has proposed a system  
13 average wastewater rate increase of 58.3%. My proposed increase for the Non-  
14 Residential class is 84.8%, which is 1.45 times the system average increase. Therefore,  
15 my recommended wastewater rate increase for the Non-Residential class is slightly  
16 lower than an increase that complies with the OSBA's concept of gradualism.

17 DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

18 A. Yes, it does; however, I reserve the right to update this testimony as may be necessary.

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<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> See, for example, OSBA Statement No. 1, Pittsburgh Water and Sewer Authority, Docket Nos. R-202-3024773, R-202-302744, R-2021-3024779, page 19, lines 16-21- page 20, lines 1-16; OSBA Statement No. 1, PECO Energy Company-Electric Division, Docket No. R-2021-3024601, page 11, lines 8-22, page 12, lines 1-2; OSBA Statement No. 1, Columbia Gas of Pennsylvania, Inc., Docket No. R-2020-3031211, page 27, lines 1-10.

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

<b>PENNSYLVANIA PUBLIC UTILITY COMMISSION</b>	)	
	)	
	)	<b>DOCKET NOS. R-2022-3031340 (WATER)</b>
<b>v.</b>	)	<b>R-2022-3032806 (WASTEWATER)</b>
	)	
<b>THE YORK WATER COMPANY</b>	)	

**SCHEDULES ACCOMPANYING THE  
SURREBUTTAL TESTIMONY OF  
JEROME D. MIERZWA**

**ON BEHALF OF THE  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE**

**SEPTEMBER 28, 2022**

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**EXETER**

ASSOCIATES, INC.

10480 Little Patuxent Parkway, Suite 300  
Columbia, Maryland 21044

## THE YORK WATER COMPANY

Comparison of Company Class Demand Factor Usage and Maximum Usage  
Hundred Gallons

Line	Class (A)	Average Daily Usage (B)	Loss Adjustment (C)	Average Daily Sendout (D)=(B/(1-C))	Maximum Day Factor (E)	Projected Maximum Day Usage (F)=(D x E)	
1	Residential	81,522	21.22%	103,483	2.50	258,708	
2	Commercial	53,075	21.22%	67,374	1.60	107,798	
3	Industrial	25,165	21.22%	31,944	1.50	47,917	
4	Total	159,762	21.22%	202,801		414,423	
5	Actual Maximum Day Sendout - Total System (a)						255,000
6	Actual Maximum Day Sendout - Non-Residential Customers (Column F, Line 5 - 1)						(3,708)
Line	Class (A)	Average Daily Usage (B)	Loss Adjustment (C)	Average Daily Sendout (D)=(B/(1-C))	Maximum Hour Factor (E)	Projected Maximum Hour Usage (F)=(D x E)	
7	Residential	81,522	21.22%	103,483	4.50	465,675	
8	Commercial	53,075	21.22%	67,374	3.30	222,333	
9	Industrial	25,165	21.22%	31,944	2.70	86,250	
10	Total	159,762	21.22%	202,801		774,258	
11	Actual Maximum Hour Sendout - Total System (a)						319,000
12	Actual Maximum Hour Sendout - Non-Residential Customers (Column F, Line 11 - 7)						(146,675)
13	Note: (a) Exhibit No. FVIII, Schedule F, 2021.						



THE YORK WATER COMPANY  
WATER OPERATIONS  
DEVELOPMENT OF RATE OF RETURN BY CUSTOMER CLASSIFICATION  
UNDER PROPOSED RATES

Item (1)	Cost of Service (2)	Gravity System					Repumping System				
		Residential (3)	Commercial (4)	Industrial (5)	Fire Protection		Residential (8)	Commercial (9)	Industrial (10)	Fire Protection	
					Private (6)	Public (7)				Private (11)	Public (12)
1. Revenues From Sales	\$70,728,799	\$13,117,219	\$ 5,189,002	\$1,278,470	\$ 942,431	\$ 323,794	\$32,284,678	\$ 9,856,824	\$ 4,672,696	\$1,734,508	\$1,329,176
2. Other Revenues	1,142,025	195,971	83,254	20,671	15,189	21,584	456,011	156,343	76,744	27,980	88,393
3. Total Operating Revenues	71,870,824	13,313,191	5,272,256	1,299,141	957,620	345,378	32,740,689	10,013,167	4,749,441	1,762,488	1,417,569
4. Less: Operating Expenses	40,280,974	8,498,295	3,225,677	759,942	461,696	(476,002)	20,699,207	5,785,064	2,540,901	760,975	(1,975,149)
5. Return And Income Taxes (Ln 3 - Ln 4)	31,589,850	4,814,896	2,046,579	539,199	495,924	821,381	12,041,482	4,228,104	2,208,540	1,001,513	3,392,718
6. Less: Taxable Exclusions (Factor 24)	6,200,718	887,323	448,932	116,573	97,351	161,219	2,221,717	934,448	470,634	196,563	665,957
7. Taxable Income	25,389,132	3,927,573	1,597,647	422,626	398,573	660,162	9,819,764	3,293,656	1,737,905	804,950	2,726,761
8. Less: Income Taxes (Tax. Inc.)	3,769,035	583,051	237,172	62,739	59,168	98,002	1,457,751	488,946	257,993	119,495	404,790
9. Net Return (Line 5 - Line 8)	27,620,115	4,231,845	1,809,407	476,460	436,756	723,379	10,583,731	3,739,158	1,950,547	882,018	2,987,928
10. Original Cost Measure Of Value	350,621,588	50,173,107	25,373,854	6,575,050	5,501,538	9,119,577	125,619,819	52,849,741	26,605,146	11,120,925	37,673,257
11. Rate Of Return, Percent	7.93	8.43	7.13	7.25	7.94	7.93	8.43	7.08	7.33	7.93	7.93
12. Relative Rate Of Return	1.00	1.06	0.90	0.91	1.00	1.00	1.06	0.89	0.92	1.00	1.00

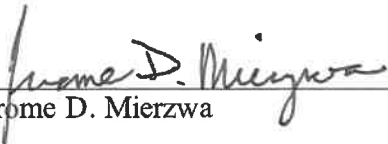
BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Jerome D. Mierzwa, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 4SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335893

Signature:   
Jerome D. Mierzwa

Consultant Address: Exeter Associates, Inc.  
10480 Little Patuxent Parkway  
Suite 300  
Columbia, MD 21044-3575

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

SURREBUTTAL TESTIMONY  
OF  
BARBARA R. ALEXANDER  
Barbara Alexander Consulting LLC  
ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE

September 28, 2022

1 Q. PLEASE STATE YOUR NAME, ADDRESS AND OCCUPATION.

2 A. My name is Barbara R. Alexander. I am the sole member of Barbara Alexander  
3 Consulting LLC. My address is 83 Wedgewood Dr., Winthrop, ME 04364. I appear in  
4 this case as a witness on behalf of the Office of Consumer Advocate (OCA).

5 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

6 A. Yes. I filed Direct Testimony on behalf of the OCA on August 23, 2022.

7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

8 A. I am filing Surrebuttal in response to the Rebuttal Testimony filed by the following York  
9 Water Company witnesses: Joseph Hand (York Statement No. 1-R), Mark A. Wheeler  
10 (York Statement No. 2-R), and Vernon L. Bracey (York Statement No. 6-R).

11 Q. PLEASE PROVIDE AN OVERVIEW OF YOUR RESPONSE TO THE COMPANY'S  
12 REBUTTAL TESTIMONY CONCERNING CUSTOMER SERVICE  
13 PERFORMANCE.

14 A. The Company's Rebuttal Testimony repeats the claim of "exemplary performance," and  
15 responds to all the shortcomings I identified in my testimony as either not a correct  
16 conclusion, unrelated to the decision to award an earnings reward, or explained as a  
17 reform that will be implemented prior to the next base rate case. In general, a claim of  
18 "exemplary performance," should be documented as occurring during the test year and  
19 not based on a future promise to correct deficiencies. And the claim of exemplary  
20 customer service without any internal performance standards or any analysis of how York  
21 Water's performance relates to other Pennsylvania public utilities is unsupported and  
22 should be rejected. Furthermore, other claims by York Water relating to its "exemplary"  
23 performance raised by Mr. Hand in his Rebuttal will be addressed by Counsel in OCA's

1           briefs.

2    Q.    DOES THE COMPANY RECOMMEND FUTURE IMPROVEMENTS IN RESPONSE  
3           TO YOUR TESTIMONY?

4    A.    Yes. I welcome the Company's statements that York Water will adopt the following  
5           improvements:

- 6           ▪    Development of written training materials that reflect the essential consumer  
7                    protections of Chapter 56 of the Commission's rules on the customer's rights in the  
8                    negotiation of payment arrangements; protections for customers with Protection from  
9                    Abuse Orders; the rights of tenants when a landlord or property owner fails to pay a  
10                  bill; customer rights upon declaration of a medical emergency; and identifying and  
11                  recording customer disputes;<sup>1</sup>
- 12          ▪    Documentation on how training is done and how ongoing compliance is monitored;<sup>2</sup>
- 13          ▪    The development of a means to track the existence of and response to customer  
14                  disputes as required by Chapter 56.432;<sup>3</sup>
- 15          ▪    The analysis of potential costs and benefits for a low income discount program,  
16                  including information on the demographics of its customer base.<sup>4</sup>

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<sup>1</sup> York Water Statement No. 6-R, pages 13-15.

<sup>2</sup> Ibid., page 15.

<sup>3</sup> Ibid., page 19.

<sup>4</sup> York Water Statement No. 2-R.

1 Q. MR. BRACEY ON BEHALF OF YORK WATER REJECTS YOUR CALL CENTER  
2 PERFORMANCE RECOMMENDATIONS BECAUSE OF YOUR COMPARISON OF  
3 YORK WATER’S PERFORMANCE WITH LARGER ELECTRIC AND GAS PUBLIC  
4 UTILITIES. PLEASE COMMENT.

5 A. The only published call center performance data available for Pennsylvania public  
6 utilities is contained within the Commission’s annual customer service reports that I cited  
7 in my Direct Testimony. It is correct that smaller public utilities are not required to  
8 report such information. However, Mr. Bracey’s excuse for not meeting the average  
9 performance standards reflected in these annual reports is not reasonable. First, he uses  
10 these same reports to compare York Water’s complaints submitted to BCS with other  
11 Pennsylvania public utilities and relies on this comparison to justify their additional  
12 earnings reward.<sup>5</sup> Second, the suggestion that smaller public utilities should not be held  
13 to *any* reasonable call center performance standards that are widely viewed as a best  
14 practice in many industries is not a hallmark of “exemplary” performance. Mr. Bracey  
15 offers no internal York Water benchmark to define his notion of reasonable performance  
16 and does not provide any information on any other smaller public utilities that would  
17 support his claim.

18 Q. MR. BRACEY CONTINUES TO ARGUE THAT ITS ASSUMPTION OF BILLING  
19 SERVICES FOR THE CITY OF YORK IS THE SOURCE OF THE LESS THAN  
20 OPTIMAL PERFORMANCE AT THE CALL CENTER. PLEASE RESPOND.

21 A. According to Mr. Bracey, the customer confusion and questions about the inclusion of  
22 the City of York wastewater and refuse service charges on bills issued by York Water  
23 was a significant cause of the deterioration in performance at the call center. He also

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<sup>5</sup> Mr. Bracey repeats this basis for their exemplary performance in his York Water Statement No. 6-R, page 4.

1 states that performance has improved in recent months because Pennsylvania American  
2 Water Co. has agreed to bill and collect the City of York’s wastewater charges.<sup>6</sup> And,  
3 while he opines that call center performance will continue to improve, he offers no  
4 specific performance goal or objective.

5 Q. WHAT IS YOUR OPINION ABOUT THE MOST RECENT CALL CENTER  
6 PERFORMANCE THAT MR. BRACEY INCLUDES IN HIS REBUTTAL?

7 A. Mr. Bracey’s “improvement” is only supported when considering the even worse  
8 performance in 2021 and early 2022. The current “improved” performance that he  
9 claims, while better than 2021 and earlier this year, is nevertheless a very unsatisfactory  
10 level of performance. In July 2022, only 34% of York Water’s customer calls were  
11 answered by a representative within 30 seconds, the abandonment rate was over 10%,  
12 and 30.35% of the calls were answered in MORE THAN 241 seconds (over 4 minutes).<sup>7</sup>  
13 While Mr. Bracey states further improvement is likely to occur, this vague promise  
14 without any goal or objective to determine when or how such improvement will occur is  
15 not a significant basis for giving York Water’s shareholders additional profit at the  
16 expense of ratepayers. As documented in my Direct testimony, York Water’s call center  
17 performance in 2020 was far better than any annual or monthly performance since that  
18 time. Yet, Mr. Bracey’s Rebuttal Testimony fails to identify any specific level of  
19 improvement or timetable during which significant improvement will occur.<sup>8</sup>

20 However, in subsequent responses to OCA Set XIV-2 he states, “In general, Mr.  
21 Bracey maintains that the Company’s call center performance prior to 2020 was, at a  
22 minimum, acceptable performance for a water and wastewater utility of York Water’s

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<sup>6</sup> York Water St. No. 6-R, page 6.

<sup>7</sup> York Water Exhibit VLB-2R.

<sup>8</sup> York Water Statement No. 6-R, page 9.

1 size.” Mr. Bracey then points out that York Water’s measurement of call center  
2 performance has changed over the years.<sup>9</sup> The 2019 annual performance reported a 1:18  
3 minutes as “time to answer,” a 6.63% abandonment rate, and 61.62% calls answered  
4 within 24 seconds. The 2020 results were reported slightly differently:  
5

Year	Percent Calls Answered in 30 Seconds	Abandonment Rate	Average Speed of Answer (minutes)
2020	66.83%	4.94%	1:03

6  
7 Q. WHAT DO YOU RECOMMEND THAT YORK WATER SHOULD BE REQUIRED  
8 TO MEET FOR CALL CENTER PERFORMANCE?

9 A. I think Mr. Bracey’s recommendation that York Water be held to meet its 2019  
10 performance standards is reasonable. However, the reported 2020 performance standards  
11 capture data that is similar to 2019 and reflect the current methodology. Therefore, I  
12 recommend that York Water be required to improve its call center performance with the  
13 objective to meet the 2020 annual results. Both 2019 and 2020 results are far superior to  
14 York Water’s call center performance as reflected in the test year of this proceeding.

15 Q. MR. BRACEY STATES IN A RECENT DATA RESPONSE THAT HE IS NOT  
16 RESPONSIBLE FOR CALCULATING THE COSTS TO ACHIEVE A HIGHER  
17 LEVEL OF CALL CENTER PERFORMANCE. PLEASE COMMENT.

18 A. Mr. Bracey states,  
19  
20 “It is not within Mr. Bracey’s job responsibilities to perform an analysis of the  
21 incremental capital costs and expenses that the Company would incur to meet an  
22 undefined “higher standard of performance at the customer call center.”<sup>10</sup>  
23

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<sup>9</sup> York Water Response to OCA-III-10 presented its call center performance data for 2018 through May 2022. I presented the 2020-2022 data in my Direct Testimony.

<sup>10</sup> York Water Response to OCA-XIV-4.



1 I find this response troubling. While Mr. Bracey (Vice President of Customer Service)  
2 now acknowledges that the York Water call center performance should be improved and  
3 that a proper source of adequate performance is the actual performance of York Water's  
4 call center in 2019 and 2020, he does not claim any responsibility for undertaking an  
5 analysis of how to achieve these results. This is not a reasonable response of a public  
6 utility that seeks a reward for "exemplary" management performance.

7 Q. MR. BRACEY EXPLAINS THE HISTORY OF YORK WATER'S BILLING AND  
8 COLLECTION OF THE CITY OF YORK WASTEWATER AND REFUSE  
9 SERVICES. PLEASE COMMENT.

10 A. Mr. Bracey documents that a "Chapter 507" contract was submitted to the Commission  
11 that describes York Water's agreement to bill and collect the City of York's wastewater  
12 and refuse services.<sup>11</sup> This agreement was updated several times, most recently in 2019.  
13 Mr. Bracey points to the collection of past due and current charges on behalf of the City  
14 of York as causing customer confusion and contributed to the volume of calls to York  
15 Water. York Water is no longer collecting the City of York wastewater charges.  
16 However, York Water is still collecting the City of York's refuse charges.<sup>12</sup> I have a  
17 number of serious concerns with York Water's ongoing collection of the City of York  
18 refuse charges. These "refuse charges" are the costs of the City of York's trash collection

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<sup>11</sup> York Water Exhibit VLB-3R.

<sup>12</sup> York Water's website states: "Effective August 17, 2022, City of York refuse customers are able to pay their refuse bills online or over the phone via credit, debit, or electronic check. We appreciate your patience.

City of York refuse customers can also be set up on automatic payments through our TAP program, which will use banking details to process the amount due on the due dates."

[[www.yorkwater.com](http://www.yorkwater.com) Site visited 9/19/2022]

1 service. These are not charges for “basic” service. They are “non-utility” or “non-basic”  
2 charges as that term is used in Chapter 56.263.

3 • First, Mr. Bracey does not state the York Water has or will seek to amend its  
4 Chapter 507 contract to eliminate wastewater services and include only the refuse  
5 charges. It is my understanding that a contract to approve of a regulated Pennsylvania  
6 public utility to collect non-basic charges on behalf of a municipal entity is not a typical  
7 Chapter 507 contract. Nonetheless, the current contract on file with the Commission that  
8 focuses on collecting City of York wastewater services and the description on how those  
9 charges will be collected under threat of disconnection of York Water’s charges for water  
10 service should be amended.

11 • Second, the current contract that was in effect when York Water was collecting  
12 and threatening termination of service for nonpayment of the City of York’s wastewater  
13 charges calls for payments to be allocated to York Water’s water services, City of York  
14 refuse services, and then City of York wastewater or sewer charges.<sup>13</sup> This policy would  
15 appear to allow a partial payment to be allocated to refuse service, a service that York  
16 Water agrees is not subject to termination by York Water, prior to payments for  
17 wastewater service that can be terminated pursuant to the contract. The priority of  
18 collecting refuse service charges prior to collecting wastewater or sewer charges bills that  
19 were the basis for threats of termination of service on behalf of the City of York is not  
20 reasonable because it could lead to the loss of water service due to unpaid sewer bills  
21 strictly due to the decision to prioritize payment towards refuse charges that cannot result  
22 in a loss of water service. In addition, this payment prioritization would certainly would  
23 not comply with the comparable Chapter 56.273 provision, which is at least impliedly

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<sup>13</sup> York Water Exhibit VLB-3R, page 6 of 21.

1 applicable given the contract provisions between York Water and the City of York. The  
2 Contract at issue here explicitly calls for York Water to comply with “Commission  
3 regulations.”

4 Notwithstanding the provision of the Agreement, it is understood and agreed by  
5 the parties hereto that the Water Company shall be required to comply with any  
6 existing regulations of the Pennsylvania Public Utility Commission relating to the  
7 notice before the termination, in addition to providing any notice that might  
8 otherwise be required under this contract or any applicable law or ordinance.  
9 Section 9.<sup>14</sup>

10 • Mr. Bracey’s most recent response relating to billing and collecting for City of  
11 York wastewater and refuse charges now states that this and other provisions of Chapter  
12 56 are not applicable to York Water’s billing services:

13 First, the City of York’s charges were not set forth on York Water’s bills. They  
14 were set forth on City of York bills prepared and issued by York Water. Second,  
15 I am advised by counsel that the City of York’s unbilled wastewater and refuse  
16 charges were not “unbilled public utility service” charges because the City of  
17 York was not and is not a regulated public utility; therefore, York Water did not  
18 have to comply with Section 56.264 of the PUC’s regulations with respect to the  
19 City of York’s bills for wastewater and refuse service. Thus, no such training, for  
20 the City of York’s unbilled wastewater and refuse charges, was provided or  
21 necessary.<sup>15</sup>  
22

23 As explained in OCA Set XIV, No. 13, the City of York’s wastewater and refuse  
24 charges were set forth on City of York bills prepared and issued by York Water.  
25 Those charges were not set forth on York Water’s water service bills. As a result,  
26 York Water’s water service bills never included the City of York’s wastewater  
27 and refuse charges, and, by extension, a customer could never make partial  
28 payments that required allocation under Section 56.273 of the PUC’s  
29 regulations.<sup>16</sup>  
30

31 These statements are contradicted by the language of the contract between the  
32 City of York and York Water that requires that York Water comply with the  
33 Commission’s regulations that I quoted above.

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<sup>14</sup> York Water Statement No. 6-R, Exhibit VLB-5R, page 6 of 13.

<sup>15</sup> York Water Response to OCA-XIV-13.

<sup>16</sup> York Water Response to OCA-XIV-14.

1  
2 Furthermore, the customer bill attached to Mr. Bracey’s Rebuttal Testimony  
3 (Exhibit VLB-7R) states “YORK WATER COMPANY, Billing and Collection Agent for  
4 the City of York.” And requires the customer to make payment to York Water Company.

5  
6 • York Water’s policies governing the collection of any non-utility charge such as  
7 this must be clearly enunciated to customers. The failure to pay these refuse charges  
8 should not be subjected to any suggestion or communication that the customer’s ability to  
9 pay and continue to receive regulated York Water service will suffer due to the  
10 nonpayment of the City of York refuse charges. Notices and disclosures to customers on  
11 the York Water web portal, in communications with customers, and in billing and  
12 collection notices must be clear on this point.

13 • Mr. Bracey states that York Water termination notices did not include unpaid  
14 refuse charges billed on behalf of the City of York.<sup>17</sup> This policy is a correct statement of  
15 Commission regulations. However, the lack of any instructions or training of York  
16 Water’s customer service representatives on how unpaid City of York refuse charges  
17 should be handled in customer communications and the lack of any disclosure on the  
18 York Water billing statement<sup>18</sup> or its web portal about the different treatment of refuse  
19 charges raises a serious concern. The lack of any written instructions that govern how  
20 customer call center representatives have handled customer calls about these City of York  
21 charges, the lack of disclosures about the non-utility portion of the bill on the York Water  
22 billing statement, and the provision of the Chapter 507 contract I quoted above  
23 concerning allocation of partial payments contribute to a potential that the access to

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<sup>17</sup> York Water Statement No. 6-R, page 23.

<sup>18</sup> York Water Exhibit VLB-7R.

1 continued service of York Water's customers to regulated water service has been  
2 compromised.

3 Q. TURNING TO MR. BRACEY'S REBUTTAL TESTIMONY CONCERNING THE  
4 SIGNIFICANT DISCREPANCY BETWEEN THE ISSUANCE OF TERMINATION  
5 NOTICES AND THE ACTUAL TERMINATION OF SERVICE, PLEASE  
6 COMMENT.

7 A. Mr. Bracey defends the significant discrepancy between the volume of termination  
8 notices and the actual terminations of service that I documented in my Direct testimony  
9 as a non-issue. He states that the City of York made the decision not to pursue  
10 termination and points to the typical distinction between termination notices and actual  
11 terminations in various Commission reports (which he does not specifically identify).<sup>19</sup> I  
12 do not accept the excuse that York Water continued to issue thousands of termination  
13 notices for York Water customers based on the nonpayment of the City of York  
14 wastewater charges on a monthly basis when it became obvious that the City of York  
15 then declined to pursue the actual termination of service. York Water continued to  
16 threaten termination of service for nonpayment of York Water and City of York charges  
17 knowing that the City of York's billing system was deficient, and that actual termination  
18 would not occur in the vast majority of situations. While he opines on the theoretical  
19 reasons why York Water customers could have properly avoided termination, he has no  
20 evidentiary basis for this assumption due to York Water's lack of data on how its  
21 customers avoid termination of service or whether informal disputes were filed since  
22 York Water cannot track disputes in its current software and billing system.

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<sup>19</sup> York Water Statement No. 6-R, page 24.

1 Q. MR. BRACEY AND MR. WHEELER REJECT YOUR PROPOSAL FOR YORK  
2 WATER TO DEVELOP A MONTHLY BILL PAYMENT DISCOUNT FOR LOW  
3 INCOME CUSTOMERS AT THIS TIME. DO YOU AGREE?

4 A. No. However, I do note that York Water has agreed to promote its arrears forgiveness  
5 program and other federally funded bill payment assistance programs on its web portal.  
6 He also stated that York Water does accept enrollment information for CARES directly  
7 from customers and then forwards this information electronically to the local service  
8 agency authorized to make a determination of eligibility and dollar amount. These are  
9 welcome developments. York Water has not responded to my recommendation with any  
10 analysis of the costs and benefits for such a program. However, Mr. Wheeler agrees that  
11 it would be possible to evaluate the development of a bill discount program if it does not  
12 “unduly” harm other customers, presumably referring to the rate impacts of funding such  
13 a program.<sup>20</sup> I appreciate the willingness of York Water to conduct research on potential  
14 enrollment and costs and urge that such an analysis and report be accomplished in the  
15 near term (such as 6 months after a final order in this proceeding) since waiting until  
16 York Water files a future rate case may reflect a long term delay.

17 Q. PLEASE COMMENT ON YORK WATER’S PARTICIPATION IN THE CURRENT  
18 LOW INCOME ASSISTANCE PROGRAMS.

19 Q. Mr. Wheeler describes the various federally funded programs available to York Water  
20 customers and agrees to participate in those programs and accept funding for its qualified  
21 low income customers. These programs now include Pennsylvania Homeowner  
22 Assistance Fund Program. However, both York Water’s CARES program and all of  
23 these newly funded programs provide a one-time benefit and most of these federally

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<sup>20</sup> York Statement No. 2-R, page 4, lines 16-17.

1 funded programs will terminate in the near term because they depend on one-time federal  
2 appropriations and are not assured of regular funding. As a result, none of these  
3 programs provide monthly bill payment assistance or respond to the ongoing  
4 unaffordability of essential utility services provided by York Water to customers whose  
5 household income is insufficient to avoid nonpayment or late payment. Therefore, York  
6 Water's agreement to fund its CARES program that provides a one-time annual benefit  
7 and accept one-time federal funding on behalf of its qualified low income customers is  
8 laudable, but certainly not a sufficient response to ongoing payment difficulties. The fact  
9 that its CARES funding commitment of \$20,000 resulted in customers being denied a  
10 benefit (as documented in my Direct Testimony) when the prior level of committed  
11 funding was exhausted is a significant indicator of unmet needs.

12 Q. DOES MR. WHEELER PROVIDE SOME PRELIMINARY EVIDENCE  
13 CONCERNING THE NEED FOR ONGOING BILL PAYMENT ASSISTANCE FOR  
14 LOW INCOME CUSTOMERS?

15 A. Yes. Mr. Wheeler cited to certain demographic information readily available from the  
16 U.S. Census in his Rebuttal Testimony to state that 27.7% of the residents of the City of  
17 York live in poverty and York County – 7.1% of residents living in poverty; (2) Adams  
18 County – 8.0% of residents living in poverty; and (3), and Franklin County – 9.4% of  
19 residents living in poverty.<sup>21</sup> This type of readily available information plus the number  
20 of its customers who have or will receive assistance via CARES and the federally funded  
21 programs for which York Water receives funding should provide a sufficient basis for  
22 preliminary estimates of the enrollment and costs for a discount program in a relatively  
23 short time frame.

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<sup>21</sup> Ibid., pages 3-4.

1 Q. TURNING TO MR. WHEELER’S REJECTION OF YOUR RECOMMENDATION TO  
2 INCLUDE ESSENTIAL CHAPTER 56 CONSUMER PROTECTIONS IN ITS  
3 TARIFFS, PLEASE RESPOND.

4 A. Mr. Wheeler rejects my recommendation to include essential Chapter 56 consumer  
5 protections in its tariffs on the grounds that Chapter 56 is incorporated by reference and  
6 that it would be unwieldy to constantly update the tariffs if Chapter 56 changes.<sup>22</sup>  
7 Neither of these reasons are sufficient. First, York Water’s current tariffs include  
8 statements on consumer rights that fail to recognize the Chapter 56 requirements as I  
9 documented in my Direct testimony. The potential for misinterpretation by customers  
10 and employees in these areas should be avoided if possible. I identified other  
11 Pennsylvania water and wastewater utility tariffs as proper examples. Second, tariffs can  
12 be routinely updated where necessary during base rate cases since rates and other tariff  
13 language change at that time. The combination of the lack of proper language in the  
14 current tariffs with the lack of written training materials on many of these essential  
15 consumer protections relating to termination of service, payment arrangements, medical  
16 certificates, and disputes heighten my concern and support my recommendation.

17 Q. BASED ON YOUR REVIEW AND RESPONSE TO THE COMPANY’S REBUTTAL  
18 TESTIMONY, DO YOU HAVE ANY CHANGES OR MODIFICATIONS TO YOUR  
19 RECOMMENDED CONDITIONS FOR ANY BASE RATE INCREASE?

20 A. Yes. I present my original recommendations below with my amendments and additions  
21 based on York Water’s Rebuttal:  
22 ■ York Water should be required to take steps to improve the monthly performance of  
23 its call center. Specific performance standards should be implemented, which include

---

<sup>22</sup> York Water Statement No. 2-R, pages 9-10.



1 objectives for Average Speed of Answer and Abandonment Rate that are designed to  
2 achieve (over a reasonable number of years) that 80% of the customer calls that enter  
3 the queue to speak to a customer service representative to be answered within 30  
4 seconds and that the call abandonment rate be 4% or less. The Commission should  
5 mandate significant progress in quarterly reports from York Water as a condition of  
6 any rate increase.

7 RESPONSE: At a minimum York Water should be held accountable to meet its 2020 customer  
8 call center performance. The actual performance experienced in 2021 and 2022 to date should  
9 be considered in determining whether York Water’s customer service has been “exemplary.”

10       ▪ York Water should take steps to identify, track, evaluate, and respond to customer  
11 disputes and complaints. The training materials are seriously deficient in identifying  
12 and responding to customer disputes and complaints. I recommend that York Water  
13 be required to submit a plan that adopts explicit training for identification, tracking,  
14 monitoring, and evaluating customer complaints. This complaint analysis should also  
15 include the payment arrangement disputes that are an essential component of  
16 adequate and reasonable service, particularly in light of my discussion of York  
17 Water’s inadequate internal payment arrangement training and policies. The  
18 Commission should require quarterly reports that document improved complaint  
19 handling and analysis as a condition of any rate increase.

20 RESPONSE: York Water has agreed to develop a tracking mechanism for customer disputes.  
21 This reform should be documented in a compliance filing within six months of a final order in  
22 this proceeding.

23       ▪ York Water should be required to reform its customer training programs with regard

1 to payment arrangement negotiations with customers to undertake a more  
2 individualized approach based on the customer's circumstances and needs. This  
3 reform should be undertaken immediately and documented in a compliance filing as a  
4 condition of any rate increase.

5 RESPONSE: As part of its commitment to develop more detailed training materials for its  
6 customer call center and other staff, York Water should make explicit its commitment to  
7 developing payment arrangements based on the customer's individual circumstances.

8       ▪ York Water should be required to create and implement internal training programs  
9 relating to Landlord/Tenant rights, obligations and policies governing Protection from  
10 Abuse Orders, and the policies that will be implemented when personal contact is  
11 initiated immediately prior to termination of service. In addition, the training regime  
12 itself needs reform to document how training is conducted and how ongoing  
13 compliance is audited.

14 RESPONSE: York Water has agreed to develop more detailed training materials on Chapter 56  
15 and Act 14 policies and consumer protections as well as adopt a mechanism for oversight and  
16 compliance monitoring. This commitment should be completed within six months of a final  
17 order in this proceeding.

18       ▪ In light of my findings concerning the poor performance of the call center, the lack of  
19 uniform and complete training of customer representatives on Pennsylvania rights and  
20 remedies, and the lack of connection between complaint analysis and changes to  
21 address underlying root causes, I recommend that the Commission undertake an audit  
22 of York Water's customer service operations. The Commission should establish a  
23 timetable for this audit as a condition of any rate increase.

1 RESPONSE: In light of the commitments by York Water concerning training programs,  
2 oversight, and dispute tracking, I withdraw this recommendation.

- 3       ▪ York Water should implement a low income discount program similar to that  
4       implemented by Community Utilities of Pennsylvania. Such a program would  
5       provide a modest discount on the consumption charge for eligible low income  
6       customers, most of whom could be enrolled based on their participation in existing  
7       means-tested social welfare programs. The CARES program should continue at a  
8       proposed budget of \$40,000. York Water should document its participation in the  
9       various programs funded through the American Rescue Plan Act and publicize the  
10      available of funding to help pay for overdue water and sewer bills in order to obtain  
11      the maximum funding to assist its low income customers and avoid unnecessary bad  
12      debt expense paid by all ratepayers.

13 RESPONSE: York Water agrees to develop research and recommendations for a potential bill  
14 discount program based on an analysis of the demographics of its customer base and the costs of  
15 such a program. However, rather than delay such analysis until the next base rate case, I  
16 recommend that York Water report the results of its analysis and make a recommendation for a  
17 monthly discount program with cost recovery mechanism within six months of the final order in  
18 this case.

- 19       ▪ York Water’s water and wastewater tariffs should be amended to include the essential  
20      consumer protections set forth in Chapter 56, similar to, for example, the tariff  
21      provisions of Pennsylvania American Water Co.

22 RESPONSE: This recommendation should be implemented.

- 23       • I propose that while the rates established in this proceeding are in effect, York

1 Water submit quarterly reports to the Commission and the parties that include the  
2 progress in meeting my proposed commitments. At a minimum, the Commission  
3 should open an investigation of persistent failure to meet reasonable performance  
4 standards.

5 RESPONSE: Based on the Company's commitments to develop training materials, compliance  
6 auditing, and dispute and complaint tracking, I withdraw this recommendation

- 7 • I recommend that this policy (referring to the billing for the City of York), which  
8 is no longer in effect, be separately investigated by the Commission to determine  
9 the appropriate enforcement action, if any, that is necessary.

10 RESPONSE: In light of the termination of the billing for City of York wastewater service by  
11 York Water, I recommend that York Water seek an amendment to its contract to collect the City  
12 of York's refuse charges with the Commission and that such an agreement reflect an obligation  
13 by York Water to disclose the refuse charges as non-basic charges on its bills and web portal that  
14 will not threaten a customer's access or maintenance of York Water regulated services and  
15 document an allocation of partial payment policy in York Water's billing system.

16

17 Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY AT THIS TIME?

18 A. Yes.


BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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

VERIFICATION

I, Barbara R. Alexander, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 5SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335894

Signature:   
Barbara R. Alexander

Consultant Address: Barbara Alexander Consulting, LLC  
83 Wedgewood Drive  
Winthrop, Maine 04364

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
	:	
	:	Docket No. R-2022-3031340
	:	(WATER)
v.	:	
	:	
	:	Docket No. R-2022-3032806
	:	(WASTEWATER)
YORK WATER COMPANY	:	

SURREBUTTAL TESTIMONY  
OF  
TERRY L. FOUGHT

ON BEHALF OF  
PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

SEPTEMBER 28, 2022

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1 **INTRODUCTION**

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

3 A. Terry L. Fought, 780 Cardinal Drive, Harrisburg, Pennsylvania, 17111.

4

5 **Q. MR. FOUGHT, HAVE YOU ALREADY SUBMITTED TESTIMONY IN THIS**  
6 **PROCEEDING ON BEHALF OF THE OFFICE OF CONSUMER ADVOCATE?**

7 A. Yes. I submitted direct testimony.

8

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

10 A. The purpose of my surrebuttal testimony is to respond to portions of the rebuttal  
11 testimony by: (1) Joseph T. Hand, York Water Statement No. 1-R, regarding  
12 acquisition adjustments; (2) Mark A. Wheeler, York Water Statement No. 2-R  
13 regarding line pressures, pressure surveys and fire hydrants; and (3) Vernon L.  
14 Bracey, York Water Statement No. 6-R, regarding customer complaints.

15

16 **ACQUISITION ADJUSTMENTS**

17 **Q. WHAT IS THE COMPANY'S POSITION ON ACQUISTIONS?**

18 A. Mr. Hand's rebuttal testimony regarding the Acquisitions is addressed by Ms.  
19 DeAngelo in OCA Statement 2SR. I am providing surrebuttal testimony on specific  
20 comments by Mr. Hand on Felton Borough Wastewater System.



1 **Q. WHAT ARE THE SPECIFIC COMMENTS BY MR. HAND THAT YOU WANT TO**  
2 **ADDRESS REGARDING THE FELTON BOROUGH WASTEWATER SYSTEM**  
3 **POSITIVE ACQUISTION ADJUSTMENT?**

4 A. First the Company strongly disagrees with my position that a notice of violation  
5 (“NOV”) that included an effluent violation does not indicate Felton Borough was  
6 providing inadequate service because it is not unusual for wastewater systems to  
7 get an NOV that includes an effluent violation.<sup>1</sup>

8 Second, Mr. Hand stated that problems of inflow and infiltration (“I/I”) in the 2018  
9 Chapter 94 Report filed by the Borough should be considered since a subsequent  
10 report filed by the Company identified no hydraulic or organic overloads projected  
11 for the next five years. York Water developed, funded, and executed the  
12 Corrective Action Plan (CAP), which included inspecting and cleaning the  
13 collection system, identifying potential sources of the I/I and scheduling the needed  
14 remediation, and committing to ongoing review and remediation of I/I.<sup>2</sup>

15  
16 **Q. DO YOU STILL RECOMMEND THAT THE COMPANY’S POSITIVE**  
17 **ACQUISTION ADJUSTMENT REGARDING THE FELTON BOROUGH**  
18 **WASTEWATER SYSTEM DOES NOT MEET THE CRITERIA IN SECTION**  
19 **1327(a)(3) OF THE CODE?**

20 A. Yes. First, regarding the NOV and one effluent violation, the Company did not  
21 indicate that the Borough continued to discharge effluent in violation of its permit;

---

<sup>1</sup> York Water Statement No. 1-R, pp. 3-4.

<sup>2</sup> York Water Statement No. 1-R, pp. 4-5.

1 but stated that the Borough would eventually do so in the future. It has been my  
2 experience in reviewing wastewater utilities correspondences with DEP (during  
3 many base rate cases) that DEP initiates Consent Order and Agreement (COA) to  
4 address any serious recurring effluent non-compliance issues. The Borough was  
5 not under a COA like the Letterkenny Township Municipal Authority System was.  
6 Second, York relies on the 2018 Chapter 94 Report filed by the Borough indicating  
7 that the treatment plant was hydraulically overloaded because of infiltration/inflow  
8 (I/I). A later Chapter 94 Report indicates that a defect in the housing of the flow  
9 meter ultrasonic transducer was the primary cause of continuous higher than  
10 permitted flows. Therefore, the 2018 Chapter 94 Report predicted an  
11 overloaded treatment plant based on an inaccurate flow meter. A CAP is required  
12 when a Chapter 94 Report predicts that a wastewater facility will become  
13 hydraulically or organically overloaded during the following five years. The  
14 Company did not offer any evidence that a CAP would have been necessary if  
15 accurate flows were used in the 2018 Chapter 94 Report. See OCA Statement 6,  
16 Exhibit TLF-4. It can be noted from Exhibit TLF-4, the Company did not identify  
17 any obvious sources of I/I.

18 Therefore, I still recommend that the positive acquisition adjustment does not meet  
19 the criteria in Section 1327(a)(3) of the Code.

1 **LINE PRESSURES AND PRESSURE SURVEYS**

2 **Q. WHAT IS THE COMPANY'S POSITION REGARDING PRESSURE SURVEYS?**

3 A. Mr. Wheeler stated in his rebuttal testimony that: (1) York Water addresses all  
4 water pressure complaints, whether they be low or high water pressure concerns;  
5 (2) York Water's policy on water pressure is more stringent than the Commission's  
6 requirements, as the Company works to ensure appropriate water pressure for all  
7 of York Water's customers; (3) as explained in Mr. Bracey's rebuttal testimony  
8 (York Water St. No. 6-R), the Company is updating its Oracle customer service  
9 database to log and track all customer disputes, including pressure complaints; (4)  
10 Mr. Bracey also states that a complaint log will be presented in York Water's next  
11 base rate case; and (5) Mr. Wheeler is unaware of any other pressure complaints  
12 from 2019 to present other than the two informal complaints filed with the  
13 Commission in 2020 which in both cases, the Commission's Bureau of Consumer  
14 Services found that the Company's line pressures were within the Commission's  
15 requirements and closed out the informal complaints.<sup>3</sup>

16  
17 **Q. IN FUTURE RATE BASE CASES, WILL THE SUBMISSION OF A CUSTOMER  
18 COMPLAINT LOG THAT INCLUDES ALL CUSTOMER PRESSURE  
19 COMPLAINTS BE CONSIDERED ACCEPTABLE TO OCA INSTEAD OF  
20 PRESSURE SURVEYS?**

21 A. Yes.  
22

---

<sup>3</sup> York Water Statement No. 2-R, pp. 10-11.

1 **Q. WHAT IS THE COMPANY'S POSITION REGARDING PROTECTING EXISTING**  
2 **CUSTOMERS' PROPERTY WHEN THEIR NORMAL OPERATING PRESSURES**  
3 **ARE INCREASED TO EXCEED 125 PSI IN ORDER TO SERVE NEW**  
4 **CUSTOMERS?**

5 A. Mr. Wheeler testified that York Water's policy is more stringent than the  
6 Commissions regulations because, among other reasons, if the existing static  
7 pressure at the curb is greater than 80 psi, York Water customers are informed  
8 and pressure reducing valves are recommended to be in place on their service  
9 lines.<sup>4</sup>

10 Mr. Wheeler also testified that the Commission should reject my recommendations  
11 and follow the same approach as it did in in Aqua Pennsylvania, Inc.'s ("Aqua")  
12 2022 base rate case.<sup>5</sup>

13  
14 **Q. DO YOU CONTINUE TO RECOMMEND THAT EXISTING CUSTOMERS BE**  
15 **PROTECTED WHEN THEIR PRESSURES ARE INCREASED TO OVER 125 PSI**  
16 **TO SERVE ADDITIONAL CUSTOMERS?**

17 A. Yes. It can be noted from Mr. Wheeler's rebuttal testimony that the Company  
18 disagrees with protecting the existing customers because of some of my  
19 suggested methods to do so. I would note that the circumstances here appear to  
20 be different than in the Aqua case that Mr. Wheeler referred to. For example, in

---

<sup>4</sup> In the case of an application for service to a new residential, commercial, or industrial property, York Water similarly informs applicants of the anticipated static pressure at the curb. York Water policy requires the customer to install pressure reducing valves if the normal static operating pressure is greater than 110 psi.

<sup>5</sup> York Water Statement No. 2-R, pp. 12 citing 2022 Pa. PUC LEXIS 161, at \*187.

1 the Aqua 2021 case, the normal operating pressures to some existing customers  
2 was increased up to and exceeded 200 psi – and the existing customers only  
3 became aware of the pressure increase after it caused considerable damage to  
4 pressure reducing valves and in at least one case, reoccurring damages.

5 However, the York's efforts to inform its customers in a high pressure situation  
6 appear to be reasonable based on the information I have in this case. I believe  
7 that the Company has adequately addressed my concerns at this time.

8  
9 **FIRE HYDRANTS**

10 **Q. WHAT IS THE COMPANY'S POSITION ON FIRE HYDRANTS THAT CANNOT**  
11 **PROVIDE THE MINIMUM FIRE FLOW?**

12 A. Mr. Wheeler testified that: (1) York Water already meets these recommendations<sup>6</sup>;  
13 (2) York Water will not install a fire hydrant that cannot meet the minimum  
14 requirements of flow; (3) the Company is in regular contact with all Fire Chiefs in  
15 its certificated service territory about new fire hydrants, and the local municipalities  
16 must provide a letter for installation of any new fire hydrants; (4) there have been  
17 instances in the past where York Water hydrants could not meet minimum flow,  
18 and those hydrants were removed; (5) the Company is aware of two non-standard  
19 fire hydrants (2 hose connection only) tapped on a 4" main that York Water  
20 acquired through a system acquisition. These hydrants are still in place as a means  
21 to flush in that area. The township in question was not interested in fire protection  
22 because it was a 4" main; (6) the local fire department is aware that these hydrants

---

<sup>6</sup> OCA St. 6, p. 12.

1 are not available for fire service. The Township would rely on a tanker operation  
2 response in the event of a fire in that area.<sup>7</sup>

3  
4 **Q. DO YOU AGREE WITH THE COMPANY'S POSITION ON FIRE HYDRANTS**  
5 **THAT CANNOT PROVIDE THE MINIMUM FIRE FLOW?**

6 A. Yes. Mr. Wheeler testimony indicates that it addresses our recommendations.

7  
8 **Q. WHAT IS THE COMPANY'S POSITION ON OVER PUMPING FIRE HYDRANTS**  
9 **AND CONTAMINATING THE DISTRIBUTION SYSTEM? BY CAUSING**  
10 **NEGATIVE PRESSURES?**

11 A. Mr. Wheeler discussed the local fire companies' firefighting procedure as follows:  
12 (1) every fire hydrant can produce at least 500 gpm; (2) almost all fire departments  
13 within the Company's service area are using Large Diameter Hose ("LDH") for  
14 supply lines; (3) most standard operating procedures call for the 1st in Engine to  
15 lay out a supply line from the closest hydrant to the front of the structure on fire;  
16 (4) this hose is "soft," so it will only deliver what the fire hydrant can produce, which  
17 the Fire Department Pump Operator can monitor on the "intake pressure" gauge  
18 on the pump panel of the Engine, prior to the hose collapsing; (5) If the fire being  
19 fought is large enough, the fire department may order a second Engine to "re-  
20 pump" the supply line to the first Engine, by connecting to the original fire hydrant  
21 using a "soft suction" line or a 4-way valve. In this set-up, the Fire Department  
22 Pump Operator monitors the "intake pressure" from the hydrant and the "output

---

<sup>7</sup> York Water Statement No. 2-R, pp. 12-13.

1 pressure” to the 1st Engine; (6) in this situation, the hose is “soft”, and will collapse  
2 before going to a negative pressure; (7) as for contamination in other portions of  
3 the Distribution system, all service lines (Residential, Commercial, Industrial and  
4 Public) are fitted with backflow prevention devices, as per the Company’ Cross  
5 Connection Control Policy. This makes back-siphonage remote under standard  
6 fire-fighting conditions.<sup>8</sup>

7  
8 **Q. DO YOU AGREE WITH THE COMPANY’S POSITION REGARDING**  
9 **CONTAMINATING THE DISTRIBUTION SYSTEM BY CAUSING NEGATIVE**  
10 **PRESSURES?**

11 A. Yes, with the understanding that although remote, some contamination of other  
12 portions of the distribution system can occur even with the procedure described  
13 above. Most, if not all, pipelines experience unavoidable leakage under positive  
14 pressure and can provide unavoidable leaking of contamination into the distribution  
15 system under negative pressure. If negative pressures occur in other portions of  
16 the distribution system, the Company should make sure that contamination did not  
17 occur. Customer complaints of a water outage during a fire would be an indication  
18 of possible areas of contamination by negative pressure. In case of possible  
19 contamination, the Company should contact DEP and follow standard procedures  
20 to test and remove any contamination.

---

<sup>8</sup> York Water Statement No. 2-R, pp. 13-14.

1 **Q. DOES THIS COMPLETE YOUR WRITTEN SURREBUTTAL TESTIMONY?**

2 A. Yes, at this time. I reserve the right to supplement this testimony either in writing  
3 or orally if additional relevant information is received.



BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

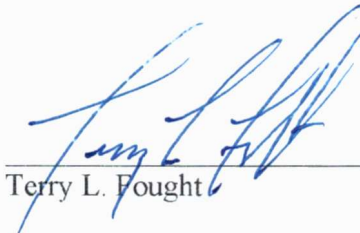
Pennsylvania Public Utility Commission	:	
	:	Docket Nos. R-2022-3031340 (Water)
v.	:	R-2022-3032806 (Wastewater)
	:	
The York Water Company	:	

VERIFICATION

I, Terry L. Fought, hereby state that the facts set forth in my Surrebuttal Testimony, OCA Statement 6SR, are true and correct (or are true and correct to the best of my knowledge, information, and belief) and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

DATED: September 28, 2022  
\*335895

Signature:

  
\_\_\_\_\_  
Terry L. Fought

Consultant Address: 780 Cardinal Drive  
Harrisburg, PA 17111