



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

BUREAU OF  
 INVESTIGATION  
 &  
 ENFORCEMENT

August 22, 2022

***Via Electronic Filing***

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

Re: Pennsylvania Public Utility Commission v.  
 Borough of Ambler – Water Department  
 Docket No.: R-2022-3031704  
**I&E Pre-Served Testimony**

Your Honors:

Enclosed please find the following prepared Pre-Served Testimony, Exhibits and Verification Statements of the Bureau of Investigation and Enforcement’s witnesses, that were admitted at the Hearing on August 2, 2022:

<b>Christine Wilson</b>	<b>I&amp;E Statement No. 1</b>	<b>I&amp;E Exhibit No. 1</b>
<b>Christopher Keller</b>	<b>I&amp;E Statement No. 2</b>	<b>I&amp;E Exhibit No. 2</b>
<b>Joseph Kubas</b>	<b>I&amp;E Statement No. 3</b>	<b>I&amp;E Exhibit No. 3</b>
<b>Christopher Keller</b>	<b>I&amp;E Statement No. 2-R</b>	
<b>Christine Wilson</b>	<b>I&amp;E Statement No. 1-SR</b>	
<b>Christopher Keller</b>	<b>I&amp;E Statement No. 2-SR</b>	
<b>Joseph Kubas</b>	<b>I&amp;E Statement No. 3-SR</b>	
<b>Verification Statements</b>		

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

Sincerely,

Allison C. Kaster  
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ACK/jfm  
 Enclosures

cc: Secretary Rosemary Chiavetta (*Cover Letter & Certificate of Service only – via e-file*)  
 Per Certificate of Service

**I&E Statement No. 1**  
**Witness: Christine Wilson, CPA**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Direct Testimony**

**of**

**Christine Wilson, CPA**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Overall Revenue Requirement**

**Operating & Maintenance Expenses, Taxes, and Cash Working Capital**

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1 **INTRODUCTION**

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

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

5

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

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

10

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

13 A. My education and professional background are set forth in the attached  
14 Appendix A.

15

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

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

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

2 A. The purpose of my testimony is to present recommended adjustments to claims  
3 made in the base rate filing of the Borough of Ambler – Water Department  
4 (Ambler or Water Department) and to present the I&E overall recommended  
5 revenue requirement. In this testimony I make recommendations regarding  
6 Ambler’s proposed fully projected future test year (FPFTY) ending September 30,  
7 2023 claims for operating and maintenance (O&M) expenses, taxes, and cash  
8 working capital.

9

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

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

12

13 **OVERALL I&E POSITION**

14 **Q. PLEASE SUMMARIZE AMBLER’S REQUESTED REVENUES IN THIS**  
15 **PROCEEDING.**

16 A. On a total system basis, which includes customers inside and outside the  
17 jurisdictional boundaries, the Water Department is requesting an increase of  
18 \$930,768 to present rate revenues of \$2,493,129, resulting in a total revenue  
19 requirement of \$3,423,897.<sup>1</sup>

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<sup>1</sup> Ambler Schedule 1.

1 **Q. PLEASE SUMMARIZE THE I&E RECOMMENDED REVENUE**  
 2 **REQUIREMENT.**

3 A. I&E’s total system recommended revenue requirement is \$2,968,301. This  
 4 recommended revenue requirement represents an increase of \$475,172 to the  
 5 Water Department’s claimed present rate revenues of \$2,493,129. This total  
 6 recommended allowance incorporates my adjustments made in this testimony to  
 7 O&M expenses, taxes, and CWC, and those recommended adjustments made in  
 8 the testimony of I&E witnesses Christopher Keller<sup>2</sup> and Joseph Kubas.<sup>3</sup>

9 The I&E recommended total system revenue requirement for Ambler is  
 10 shown below:

Borough of Ambler R-2022-3031704	TABLE I				
	INCOME		SUMMARY		
	9/30/23	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	2,493,129	0	2,493,129	475,172	2,968,301
Deductions:					
O&M Expenses	2,412,865	-146,112	2,266,753	0	2,266,753
Depreciation	275,744	-13,959	261,785		261,785
Taxes, Other	0	-1,292	-1,292	0	-1,292
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	0	0	0	0
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	2,688,609	-161,363	2,527,246	0	2,527,246
Income Available	-195,480	161,363	-34,117	475,172	441,055
Measure of Value	11,236,670	-399,938	10,836,732	0	10,836,732
Rate of Return	-1.74%		-0.31%		4.07%

<sup>2</sup> I&E Statement No. 2.

<sup>3</sup> I&E Statement No. 3.

1 **Q. WHAT IS THE I&E RECOMMENDED OVERALL INCREASE FOR**  
2 **JURISDICTIONAL CUSTOMERS?**

3 A. As Ambler did not provide a line-item breakdown for jurisdictional customers to  
4 total system, I must use the revenue increase overall ratio to provide a  
5 jurisdictional customer increase recommendation. Accordingly, based on the  
6 stated ratio of the jurisdictional customer revenue increase to the total revenue  
7 increase, \$637,691 to \$930,768, or 68.51% ( $\$637,691 / \$930,768$ ),<sup>4</sup> my  
8 recommendation would yield a jurisdictional customer revenue increase of  
9 \$325,540 ( $\$475,172 \times 0.6851$ ). However, Ambler's revenue request for  
10 jurisdictional customers reflects assignment of 100% of rate case expense, which  
11 is recommended for rejection by I&E witness Joseph Kubas in I&E Statement No.  
12 3. As I have recommended a reduction to rate case expense of \$60,169 herein, the  
13 share of that rate case expense adjusted by the revenue ratio to Borough customers  
14 (inside the jurisdictional boundaries) additionally needs removed from my overall  
15 recommendation. Therefore, my final recommendation for the jurisdictional  
16 revenue increase is \$308,921 ( $\$325,540 - (\$60,169 \times [(\$930,768 - \$673,691) /$   
17  $\$930,768])$ ).

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<sup>4</sup> Ambler Schedule 2.

1 **I&E RECOMMENDED ADJUSTMENTS TO O&M, TAXES, AND CASH**

2 **WORKING CAPITAL**

3 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED O&M, TAX, AND**  
4 **CASH WORKING CAPITAL ADJUSTMENTS TO AMBLER’S REVENUE**  
5 **REQUIREMENT.**

6 A. The following table summarizes my recommended adjustments:

	<b>Ambler’s Claim</b>	<b>I&amp;E Recommended Allowance</b>	<b>I&amp;E Adjustment</b>
<b><u>O&amp;M and Tax Adjustments:</u></b>			
Rate Case Expense	\$113,000	\$52,831	(\$60,169)
Salaries – Water/Admin.	\$423,789	\$406,901	(\$16,888)
Payroll Tax	\$64,287	\$62,995	(\$1,292)
A&G Expense-Mattison Ave. Expense	\$69,055	\$0	(\$69,055)
<b>Total O&amp;M Expense &amp; Tax Adjustments</b>			<b><u>(\$147,404)</u></b>
<b><u>Rate Base Adjustments:</u></b>			
Cash Working Capital	\$301,608	\$275,308	(\$26,300)
<b>Total Rate Base Adjustments</b>			<b><u>(\$26,300)</u></b>

7

8

9 **RATE CASE EXPENSE**

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

13 A. The nature and types of individual expenditures that comprise a utility’s allowable  
14 claim for rate case expense are those directly incurred to compile, present, and  
15 defend a utility’s request for a base rate increase before the Commission. The  
16 actual expenditures and estimated costs typically found in an allowable rate case

1 expense claim include legal fees for outside counsel, outside consultants, and the  
2 cost of printing, document assembly, and postage.

3  
4 **Q. HOW HAS THE COMMISSION TRADITIONALLY TREATED RATE**  
5 **CASE EXPENSE FOR RATEMAKING PURPOSES?**

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

12  
13 **Q. HOW IS THE FREQUENCY OF RATE CASE FILINGS DETERMINED?**

14 A. The frequency is determined by computing the average number of months  
15 between the filing dates of the utility's most recently filed rate cases.

16  
17 **Q. WHAT IS THE WATER DEPARTMENT'S CLAIM FOR RATE CASE**  
18 **EXPENSE?**

19 A. The Water Department's projected total rate case expense of \$339,000 is spread

1 out over a period of three years, or 36 months, resulting in a total annual rate case  
2 expense claim of \$113,000.<sup>5</sup>

3  
4 **Q. WHAT IS THE BASIS FOR AMBLER'S CLAIM?**

5 A. According to Ambler's consultant, Connie Heppenstall, Ambler views a  
6 normalization of rate case expense over several years as appropriate because the  
7 benefits last more than one year, and she asserts that a three-year normalization  
8 period is reasonable because it takes into account that rate case expense should be  
9 spread over a period of years but does not penalize the Water Department for  
10 delaying its filing due to the cost, the requirements from the previous case, and its  
11 limited resources.<sup>6</sup>

12  
13 **Q. DO YOU AGREE WITH AMBLER'S RATE CASE EXPENSE CLAIM?**

14 A. No.

15  
16 **Q. WHAT DO YOU RECOMMEND?**

17 A. I recommend an allowance of \$52,831 or a reduction of \$60,169 (\$113,000 -  
18 \$52,831) to the Water Department's claim.

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<sup>5</sup> Ambler Schedule 6, p. 2.

<sup>6</sup> I&E Exhibit No. 1, Schedule 1, p. 1.

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

2 A. I recommend that Ambler’s rate case expense be normalized over a 77-month  
3 period, based on the most recent three filing intervals, resulting in an annual  
4 allowance of \$52,831 [(\$339,000 ÷ 77 months) x 12].

5 Ambler’s requested normalization period of three years is not supported by  
6 its recent historic filing frequency as shown below:<sup>7</sup>

<u>Filing Date</u>	<u>Docket Number</u>	<u>Filing Interval in Months</u>	
3/31/2022	R-2022-3031704	98	
1/31/2014	R-2014-2400003	84	
1/31/2007	R-00062017	48	
1/30/2003	R-00038103		
		Sum of all Months	230
		/ 3 filing intervals	77 months

7  
8 This recommended filing interval of 77 months aligns with the importance of  
9 considering a utility’s history of rate filings when determining the normalization  
10 period for rate case expense. A three-year normalization period should be  
11 disallowed since it is speculative and would result in an unreasonable increase in  
12 rates.

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<sup>7</sup> I&E Exhibit No. 1, Schedule 2, p. 1.

1 **Q. HAVE OTHER UTILITIES BEEN GRANTED A NORMALIZATION**  
2 **PERIOD BASED ON SPECULATION OF FUTURE FILINGS, AND IF SO,**  
3 **WHAT WAS THE RESULT?**

4 A. Yes. In 2012, the Commission granted PPL Electric Utilities Corporation (PPL)  
5 permission to normalize its rate case expense over a 24-month period based on the  
6 expected timing of future base rate case filings.<sup>8</sup> That base rate case was filed on  
7 March 30, 2012; however, PPL did not file its next rate case until March 31, 2015,  
8 which was 36 months after the 2012 rate case filing. It should be noted that I&E's  
9 recommended normalization period in the 2012 PPL proceeding was a 32-month  
10 interval based on the Company's historic filing frequency.<sup>9</sup> I&E's  
11 recommendation in that instance produced a much more accurate result than the  
12 Company's stated future intention to file a rate case.

13  
14 **Q. ARE THERE ANY COMMISSION DECISIONS THAT SUPPORT YOUR**  
15 **RECOMMENDATION FOR A RATE CASE FILING INTERVAL BASED**  
16 **ON HISTORIC FILING FREQUENCY?**

17 A. Yes. In a base rate case filed by Emporium Water Company, the Commission  
18 adopted the I&E-recommended historic filing frequency finding in favor of I&E's

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<sup>8</sup> *PA PUC v. PPL Electric Utilities Corporation*, Docket No. R-2012-2290597, pp. 47-48 (Order Entered December 28, 2012).

<sup>9</sup> I&E Statement No. 2, pp. 13-14 at Docket No. R-2012-2290597.

1 recommended five-year normalization period based on a historic average filing  
2 frequency that was rounded down from 64 months.<sup>10</sup>

3 Similarly, the Commission agreed with I&E's recommendation in the City  
4 of DuBois base rate case to use a historic filing frequency finding in favor of  
5 I&E's recommended 64-month normalization period, matching the actual historic  
6 filing frequency.<sup>11</sup>

7 Likewise, in the 2020 Columbia Gas of Pennsylvania, Inc. base rate  
8 proceeding, the Commission confirmed the normalization period should align with  
9 the historic data rather than the Company's intent to file its next rate case.<sup>12</sup>

10 Finally, and most recently, the Commission determined that a  
11 normalization period based on actual historic filing frequency is more reliable than  
12 future speculation in the 2020 PECO Energy Company – Gas Division (PECO  
13 Gas) rate case. In the PECO Gas case, the Commission accepted I&E's  
14 recommended five-year normalization period in contrast to a claim based on a  
15 three-year period.<sup>13</sup>

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<sup>10</sup> *PA PUC v. Emporium Water Company*, Docket No. R-2014-2402324, pp. 47-50 (Order Entered January 28, 2015).

<sup>11</sup> *PA PUC v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, pp. 65-66 (Order Entered March 28, 2017); *PA PUC v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, p. 13 (Order Entered May 18, 2017).

<sup>12</sup> *PA PUC v. Columbia Gas*, Docket No. R-2020-3018835, Opinion and Order, pp. 78-79 (Order Entered February 19, 2021).

<sup>13</sup> *PA PUC v. PECO Energy Company – Gas Division*, Docket No. R-2020-3018929, Opinion and Order, pp. 117-119 (Non-Proprietary Order Entered June 22, 2021).

1 **Q. DO YOU HAVE ANY OTHER CONCERNS RELATED TO THE WATER**  
2 **DEPARTMENT’S CLAIM FOR RATE CASE EXPENSE?**

3 A. Yes. The Water Department has used the terms amortization and normalization  
4 interchangeably in Ambler Statement No. 2, p. 5, Ambler Schedule 6, p. 2, and in  
5 response to I&E-RE-13-D,<sup>14</sup> and I am concerned about this use of conflicting  
6 terminology with respect to the ratemaking treatment of this claim.

7

8 **Q. YOU RECOMMEND ABOVE THAT RATE CASE EXPENSE SHOULD BE**  
9 **NORMALIZED RATHER THAN AMORTIZED. BRIEFLY DISCUSS THE**  
10 **CONCEPT OF NORMALIZATION.**

11 A. Normalization is a ratemaking concept that describes the transformation of an  
12 operating expense that recurs at irregular intervals into a normal annual test year  
13 expense allowance. Normalization specifically addresses the prospective recovery  
14 of an ongoing expense that recurs sporadically. Allowed normalized rate case  
15 expenses are no different than other O&M expenses in that a company is given the  
16 opportunity to achieve full recovery.

17

18 **Q. EXPLAIN THE CONCEPT OF AMORTIZATION.**

19 A. Amortization is an accounting procedure that extinguishes an atypical,  
20 nonrecurring expense over a pre-determined number of years by charging to

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<sup>14</sup> I&E Exhibit No. 1, Schedule 1, p. 1.

1 operations a pro rata share based on the selected amortization period. Although a  
2 claim for an unrecovered normalized expense would be disallowed if requested in  
3 a subsequent rate case, because the base rate case gives the opportunity to  
4 reevaluate and reset the normalized level of expense, an amortization expense  
5 allowance could be claimed in succeeding rate cases if there is a remaining  
6 unamortized balance.

7  
8 **Q. IS AMBLER'S SUGGESTION TO AMORTIZE RATE CASE EXPENSE**  
9 **APPROPRIATE?**

10 A. No. The Water Department's rate case expense claim should be normalized  
11 instead of amortized because it is an ongoing expense that recurs at irregular  
12 intervals, which is the precise circumstance under which normalization treatment  
13 of an expense should occur. It should be noted that the terms are not  
14 interchangeable and should not be used as such for ratemaking purposes.

15  
16 **SALARIES – WATER ADMIN.**

17 **Q. WHAT IS INCLUDED IN SALARIES – WATER ADMIN.?**

18 A. Ambler has included a salaries and wages claim for administrative staff allocated  
19 to the Water Department as indicated in response to I&E-RE-4-D.<sup>15</sup>

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<sup>15</sup> I&E Exhibit No. 1, Schedule 3, p. 1.

1 **Q. WHAT IS AMBLER’S CLAIM FOR SALARIES – WATER ADMIN.**  
2 **EXPENSE?**

3 A. Ambler’s claim for salaries – water admin. expense is \$423,789.<sup>16</sup>

4  
5 **Q. WHAT IS THE BASIS FOR THE AMBLER’S CLAIM?**

6 A. Ambler applied an approximate 2.5% increase to its 2022 salaries for  
7 administrative staff as detailed in response to I&E-RE-5-D.<sup>17</sup>

8  
9 **Q. DO YOU AGREE WITH AMBLER’S CLAIM?**

10 A. No.

11

12 **Q. WHAT DO YOU RECOMMEND?**

13 A. I recommend an allowance of \$406,901 for salaries – water admin., or a reduction  
14 of \$16,888 (\$423,789 - \$406,901) to the Water Department’s claim.

15

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

17 A. My recommendation is based on an inconsistency between the supporting data for  
18 2022 and the data as presented in Ambler’s filing. In response to I&E-RE-4-D, the

19 Water Department did not provide a breakdown for the FPFTY claim,<sup>18</sup> and when

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<sup>16</sup> Ambler Schedule 3, p. 2.

<sup>17</sup> I&E Exhibit No. 1, Schedule 3, p. 2.

<sup>18</sup> I&E Exhibit No. 1, Schedule 3, p. 1.

1 it did provide a breakdown for 2022,<sup>19</sup> the breakdown only supported a dollar  
 2 amount of \$396,977 as summarized below, compared to a 2021 claim amount of  
 3 \$413,453:<sup>20</sup>

Source:	I&E-RE-5			
	% Charged to Water	2022 Rate/ Hour	Total Salary	2022 Water Salary
<b>Non-Union</b>				
Borough Manager	33%	\$ 58.79	\$ 122,283	\$ 40,353
Finance Manager	33%	\$ 41.62	\$ 86,570	\$ 28,568
Assist Fin Mgr-A/P	33%	\$ 28.70	\$ 59,696	\$ 19,700
Receptionist-takes water prmts	30%	\$ 25.05	\$ 52,104	\$ 15,631
Water Superintendent	80%	\$ 45.06	\$ 93,725	\$ 74,980
Assit Wtr Sup	80%	\$ 36.34	\$ 75,587	\$ 60,470
Assist Wtr Sup	80%	\$ 39.61	\$ 82,389	\$ 65,911
Secy to Wtr Sup	50%	\$ 30.68	\$ 63,814	\$ 31,907
<b>Union</b>				
Billing Clerk	50%	\$ 30.21	\$ 62,837	\$ 31,418
Account Clerk	50%	\$ 26.96	\$ 56,077	\$ 28,038
				\$ 396,977
		Sch. 3, p. 2, 2021 Claim		\$ 413,453
		Unexplained variance between Sch. 3, p. 2 and I&E-RE-5-D		\$ (16,476)
		* 2.5% FPFTY increase		\$ (412)
		FPFTY Adjustment		\$ (16,888)
		FPFTY Claim		\$ 423,789
		I&E Adjustment		\$ (16,888)
		I&E Recommended Allowance		\$ 406,901

4

<sup>19</sup> I&E Exhibit No. 1, Schedule 3, p. 2.

<sup>20</sup> Ambler Schedule 3, p. 2.

1 Due to this unexplained difference of \$16,476, I am recommending an adjustment  
2 to the FPFTY claim in the amount of the difference further adjusted by its  
3 corresponding 2.5% increase to the overall change in this account between 2022  
4 and the FPFTY.

5  
6 **Q. ARE THERE ANY DISCREPANCIES IN THE PERIODS PRESENTED IN**  
7 **THE FILING?**

8 A. Yes. The Water Department has indicated that changes for the FTY and FPFTY  
9 were combined in the filing on Ambler Schedule 3, Column 7;<sup>21</sup> therefore, my  
10 2.5% increase between 2022 and 2023 aligns with that change made in Column 7  
11 for salaries – water admin. ( $\$10,336 / \$413,453 = 2.5\%$  increase between Pro  
12 Forma 30-Sep-21 and Pro Forma 30-Sep-23).<sup>22</sup>

13  
14 **Q. ARE THERE ANY OTHER REASONS WHY AN ADJUSTMENT TO**  
15 **SALARIES – WATER ADMIN. IS APPROPRIATE?**

16 A. Yes. The job descriptions for the receptionist, the billing clerk, and the account  
17 clerk indicate much lower maximum salaries than those claimed by the Water  
18 Department. The documentation indicates maximum salaries for each of these  
19 positions of \$15.26<sup>23</sup> per hour, \$19.00<sup>24</sup> per hour, and \$16.80<sup>25</sup> per hour

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<sup>21</sup> I&E Exhibit No. 1, Schedule 4.

<sup>22</sup> Ambler Schedule 3, p. 2, line 93.

<sup>23</sup> I&E Exhibit No. 1, Schedule 3, p. 18.

<sup>24</sup> I&E Exhibit No. 1, Schedule 3, p. 14.

<sup>25</sup> I&E Exhibit No. 1, Schedule 3, p. 6.

1           respectively. While those job descriptions do indicate that the only exception for  
2           exceeding these maximum hourly rates is annual contract increases, each of these  
3           positions have what appear to be excessively high total salaries before the  
4           allocations to the Water Department of \$52,104 for the receptionist, \$62,837 for  
5           the billing clerk, and \$56,077 for the account clerk (as calculated in the table  
6           above). While I have not made individual adjustments for these generous salary  
7           amounts, this point further supports the adjustment I am recommending to this  
8           expense.

9  
10    **PAYROLL TAXES**

11    **Q.    WHAT IS THE WATER DEPARTMENT'S SHARE OF PAYROLL**  
12    **TAXES?**

13    A.    Employees and employers pay an equal share of payroll taxes based on the social  
14    security rate of 6.2% (capped at a certain salary level each year) and Medicare rate  
15    of 1.45% (with no cap on annual earnings). The Water Department's claim for  
16    payroll taxes is based on the employer's share of this tax, for a total of 7.65%.

17  
18    **Q.    WHAT IS THE WATER DEPARTMENT'S CLAIM FOR PAYROLL**  
19    **TAXES?**

20    A.    The Water Department's claim for payroll taxes is listed as "social security" in its

1 filing and is a claim amount of \$64,287.<sup>26</sup>

2

3 **Q. WHAT IS THE BASIS OF AMBLER’S CLAIM?**

4 A. Ambler’s claim for payroll taxes is based on the claimed salaries and wages in this  
5 proceeding and the tax rates as explained above.

6

7 **Q. DO YOU AGREE WITH THE WATER DEPARTMENT’S CLAIM FOR**  
8 **PAYROLL TAXES?**

9 A. No.

10

11 **Q. WHAT IS YOUR RECOMMENDATION FOR PAYROLL TAXES?**

12 A. I recommend a payroll tax expense allowance of \$62,995 or a reduction of \$1,292  
13 (\$64,287 - \$62,995) to the Water Department’s claim.

14

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

16 A. My recommendation is based on the salaries – water admin. recommendation  
17 explained above and applying a 7.65% tax rate to my recommended payroll  
18 reduction of \$16,888, producing a corresponding recommended reduction to  
19 payroll taxes of \$1,292 (\$16,888 x 7.65%).

---

<sup>26</sup> Ambler Schedule 3, p. 2, line 98.

1 **ADMINISTRATIVE & GENERAL EXPENSE – MATTISON AVENUE**

2 **Q. WHAT IS MATTISON AVENUE EXPENSE?**

3 A. The Water Department indicated that Mattison Avenue Expense represents an  
4 annual debt service payment for a 2014 bond.<sup>27</sup>

5

6 **Q. WHAT IS AMBLER’S CLAIM FOR MATTISON AVENUE EXPENSE?**

7 A. Ambler included \$69,055 in its filing for this expense.<sup>28</sup>

8

9 **Q. HAS THE WATER DEPARTMENT MADE ANY CHANGES TO THIS**  
10 **CLAIM?**

11 A. Yes. The Water Department indicated that this expense should not be included for  
12 ratemaking. Therefore, I am reflecting an expense adjustment of \$69,055 until  
13 Ambler updates its revenue requirement calculation in rebuttal testimony for this  
14 change.

15

16 **CASH WORKING CAPITAL**

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

19 A. CWC includes the amount of funds necessary to operate a utility during the  
20 interim period between the rendition of service, including the payment of related

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<sup>27</sup> I&E Exhibit No. 1, Schedule 5, p. 1.

<sup>28</sup> Ambler Schedule 3, p. 2.

1 expenses, and the receipt of revenue in payment for services rendered by the  
2 utility. One way to calculate CWC is the Formula Method, also known as the 45-  
3 day rule or the 1/8<sup>th</sup> method.

4  
5 **Q. HOW DID AMBLER CALCULATE ITS CWC CLAIM?**

6 A. Ambler used the 1/8<sup>th</sup> method wherein it computed one-eighth of operation and  
7 maintenance expenses and taxes.<sup>29</sup>

8  
9 **Q. DO YOU AGREE WITH AMBLER'S USE OF THE ONE-EIGHTH  
10 METHOD?**

11 A. Yes. I agree with Ambler's use of this method. However, Ambler failed to  
12 subtract its claim for payroll tax expense (shown as social security of \$64,287)<sup>30</sup>  
13 from the total O&M expenses in its computation.

14  
15 **Q. WHAT IS THE WATER DEPARTMENT'S CLAIM FOR CWC?**

16 A. The Water Department's claims for CWC is \$301,608.<sup>31</sup>

17  
18 **Q. DO YOU AGREE WITH THE WATER DEPARTMENT'S CLAIM?**

19 A. No.

---

<sup>29</sup> Ambler Statement No. 2, p. 7.

<sup>30</sup> Ambler Schedule 3, p. 2.

<sup>31</sup> Ambler Schedule 4, p. 1.

1 **Q. WHAT DO YOU RECOMMEND?**

2 A. I recommend an allowance of \$275,308 or a reduction of \$26,300 (\$301,608 -  
3 \$275,308) to the Water Department's claim.

4

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

6 A. My recommendation first modifies the Water Department's claim for the inclusion  
7 of payroll taxes in the calculation and second for my recommended adjustments to  
8 O&M expenses as discussed above.

9

10 **Q. EXPLAIN WHY IT IS NECESSARY TO EXCLUDE PAYROLL TAXES**  
11 **FROM THE CWC COMPUTATION.**

12 A. Payroll taxes are viewed as being recovered from ratepayers prior to the amounts  
13 being paid to the taxing authority, and therefore should be excluded from the CWC  
14 computation.

15

16 **Q. HOW DID YOU CALCULATE YOUR CWC RECOMMENDATION?**

17 A. I calculated my recommendation as shown below:

18 Water Department Claim for CWC \$301,608

19 Adjustment to Remove Payroll Taxes (\$64,287 / 8) (\$8,036)

20 Adjustment for My Other O&M Recommendations

21  $[(\$60,169 + \$16,888 + \$69,055) \times -1] / 8$  (\$18,264)

22 I&E-Recommended CWC Allowance \$275,308

1 **Q. IS YOUR RECOMMENDED CWC ALLOWANCE A FINAL**  
2 **RECOMMENDATION?**

3 A. No. All adjustments to Ambler’s claims for revenues, expenses, taxes, and rate  
4 base must be continually brought together in the Administrative Law Judge’s  
5 Recommended Decision and again in the Commission’s Final Order. This  
6 process, known as iteration, effectively prevents the determination of a precise  
7 calculation until such time as all adjustments have been made to Ambler’s claim.

8

9 **PUC ANNUAL FILINGS**

10 **Q. HAS THE WATER DEPARTMENT FILED ANNUAL REPORTS WITH**  
11 **THE COMMISSION AS REQUIRED?**

12 A. No. Ambler has indicated it has no record of filing PUC annual reports for 2013  
13 and 2019.<sup>32</sup>

14

15 **Q. DO YOU HAVE ANY RECOMMENDATIONS RELATED TO PUC**  
16 **ANNUAL REPORTS?**

17 A. Yes. I recommend that the Commission require Ambler to file the 2019 annual  
18 report within 90 days of the close of the record in this proceeding.

19

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

21 A. Yes.

---

<sup>32</sup> I&E Exhibit No. 1, Schedule 6, p. 1.

**Christine S. Wilson, CPA**

**Professional and Educational Background**

**Experience:**

Pennsylvania Public Utility Commission, Harrisburg, Pennsylvania

August 2013 to Present:

Fixed Utility Financial Analyst Supervisor, Bureau of Investigation and Enforcement

Responsible for supervising six fixed utility financial analysts in the analysis and preparation of written and oral testimony in base rate case proceedings, purchased gas cost proceedings, and other proceedings as required.

February 2008 to August 2013:

Fixed Utility Financial Analyst, Bureau of Investigation & Enforcement

Review of operating and maintenance expenses for regulated utilities as a part of the evaluation and recommendation process for utility base rate and purchased gas cost filings, preparing written testimony for cases, and testifying as an expert witness.

Prior Accounting Employment: Approximately fifteen years performing public, corporate, and nonprofit accounting, in addition to eight years of full-time administrative work.

**Education/Certification:**

Green Mountain College, Poultney, Vermont

Sustainable MBA Program, four credits earned, 2009-2010

Certified Public Accountant in Pennsylvania, since 2000

Pennsylvania State University, Middletown, Pennsylvania

Bachelor of Science, Professional Accountancy, 1995

(Graduated with distinction)

**Utility-Related Trainings & Other Courses/Webinars:**

NARUC Staff Subcommittee on Accounting & Finance, Fall 2021 webinar, October 5-7, 2021

Institute of Public Utilities Accounting and Ratemaking Course (Online)

Michigan State University, East Lansing, Michigan, September 14-16, 2021 (not for credit)

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

NARUC Staff Subcommittee on Accounting & Finance, Fall 2020 webinar, October 21-22, 2020

S&P Global Essentials of Regulatory Finance, Georgetown University, Washington, DC,  
October 15-16, 2019

**Christine S. Wilson, CPA**

**Professional and Educational Background**

**Utility-Related Trainings & Other Courses/Webinars (continued):**

Taxation of Business Entities I: Corporations by University of Illinois, coursera.com, completed October 2019 (not for credit)

Federal Taxation II: Property Transactions of Business Owners and Shareholders by University of Illinois, coursera.com, completed August 2019 (not for credit)

Federal Taxation I: Individuals, Employees, and Sole Proprietorships by University of Illinois, coursera.com, completed July 2019 (not for credit)

Institute of Public Utilities Advanced Regulatory Studies Program  
Michigan State University, East Lansing, Michigan, October 1-5, 2018 (not for credit)

Financial Markets (with Honors) by Yale University, coursera.com, completed November 2017 (not for credit)

PA Public Utility Commission Rate Case Training, March 5-6, 2010; October 4-5, 2012

Institute of Public Utilities Advanced Regulatory Studies Program  
Michigan State University, East Lansing, Michigan, October 7-10, 2008

NARUC Utility Rate School (conducted by NARUC's Committee on Water and the Institute of Public Utilities, Michigan State University), San Diego, May 11-16, 2008

**Testimony Submitted:**

R-2021-3027385	Aqua Pennsylvania, Inc. (Water)
R-2021-3027386	Aqua Pennsylvania Wastewater, Inc.
R-2021-3024750	Duquesne Light Company
P-2020-3022426	PAWC Response to COVID-19 Emergency and Financial Impacts
R-2020-3019369	PAWC base rate case (Water)
R-2020-3019371	PAWC base rate case (Wastewater)
R-2018-3000164	PECO Energy Company – Electric Division
R-2017-2640058	UGI Utilities, Inc. – Electric Division
R-2014-2428745	Metropolitan Edison Company (Met-Ed)
R-2014-2428744	Pennsylvania Power Company (Penn Power)
R-2014-2428743	Pennsylvania Electric Company (Penelec)

**Christine S. Wilson, CPA**

**Professional and Educational Background**

**Testimony Submitted (continued):**

R-2014-2428742	West Penn Power Company
R-2014-2402324	Emporium Water Company
R-2014-2406274	Columbia Gas of Pennsylvania, Inc.
R-2013-2397353	Pike County Power & Light (Gas)
R-2013-2372129	Duquesne Light Company
R-2013-2360798	Columbia Water Company
R-2012-2336379	York Water Company
R-2012-2321748	Columbia Gas of Pennsylvania, Inc.
R-2012-2292082	Peoples Natural Gas Company, LLC (1307(f))
R-2012-2285985	Peoples Natural Gas Company, LLC
R-2011-2267958	Aqua Pennsylvania, Inc.
R-2010-2214415	UGI Central Penn Gas, Inc.
R-2010-2201702	Peoples Natural Gas Company, LLC
R-2010-2166214	PAWC Northeast Wastewater Operations
R-2010-2166212	PAWC Coatesville Wastewater Operations
R-2010-2166210	PAWC Claysville Wastewater Operations
R-2010-2166208	PAWC Clarion Wastewater Operations
R-2010-2161694	PPL Electric Utilities Corporation
R-2009-2132019	Aqua Pennsylvania, Inc.
R-2009-2117740	Penn Estates Utilities Inc. (Sewer)
R-2009-2117532	Penn Estates Utilities Inc. (Water)
M-2009-2123945	PPL Electric Utility Company (Smart Meter Plan)
M-2009-2123944	PECO Energy Company (Smart Meter Plan)
M-2009-2093216	PPL Electric Utility Corporation (EE&C Plan)
M-2009-2093215	PECO Energy Company (EE&C Plan)
R-2008-2079675	UGI Central Penn Gas, Inc.
R-2008-2046518	Pike County Light & Power Company (Electric)
R-2008-2042293	Newtown Artesian Water Company
R-2008-2032689	PAWC Coatesville Wastewater Operations

**I&E Exhibit No. 1**  
**Witness: Christine Wilson, CPA**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Exhibit to**

**Accompany**

**the**

**Direct Testimony**

**of**

**Christine Wilson, CPA**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Overall Revenue Requirement**

**Operating & Maintenance Expenses, Taxes, and Cash Working Capital**

Responses to I&E Set RE Data Requests

- I&E-RE-13-D:** Reference Bureau of Water Schedule 6, p. 2, Adjustment E3. Provide the following information regarding the rate case expense:
- A. Copies of all invoices received and receipts for amounts paid associated with the rate case expense.
  - B. Copies of ongoing invoices and receipts associated with the rate case expense throughout the proceeding on a monthly basis.
  - C. A detailed breakdown of items comprising the Bureau of Water’s rate case expense from its most recent rate case filing.
  - D. An explanation behind the Bureau of Water’s three-year normalization period.
  - E. An estimated breakdown of rate case expense for the current proceeding:
    - 1. If the case settles prior to testimony.
    - 2. If the case settles after testimony is prepared by the parties.
  - F. Copies of all documents addressing terms for payment of rate case expense-related services (such as agreements, contracts, quotes, etc.), including but not limited to legal and consulting services.

**Response:**

- A. Please see ‘I&E-RE-13 Attachment’ for all the invoices associated with rate case expense.
- B. See response to part A.
- C. The breakdown of estimated costs for services related to the rate case are listed in Adjustment E3.
- D. The Borough views a normalization of rate case expense over several years is appropriate as the expense for a rate case is only incurred during the period of the actual rate case but the benefits of increased rates last more than one year. A three-year normalization period is reasonable as it acknowledges that rate case expense should be spread over a period of years, but also does not penalize the Borough for delaying a rate case due to costs, requirements from the previous case, and limited resources.

Responses to I&E Set RE Data Requests

E.

1. If the case settles prior to testimony, the rate case expense costs would be anticipated to be 339,000 plus 15% for a total of \$389,850 which approximates the discovery period and prehearing conference.
2. If the case settles after testimony is prepared by the parties, the rate case expense costs would be anticipated to be 339,000 plus 30% for a total of \$440,700 which approximates the discovery period, prehearing conference and preparing testimony.

F. Please see “I&E-RE-13 Attachment” which includes the contracts for the services provided for the rate case from Gannett Fleming Valuation and Rate Consultants, LLC and McNees, Wallace and Nurick LLC. The cost of capital related services’ invoices from Scott Madden, Inc. are not included as it’s company policy to complete invoices after testimony is prepared and are not yet available.

**Response Provided by: Connie Heppenstall, Gannett Fleming Valuation and Rate Consultants, LLC.**

**Date: May 31, 2022**

Responses to I&E Set RE Data Requests

**I&E-RE-12-D:** Reference Bureau of Water Schedule 6, p. 2, Adjustment E3 concerning rate case expense. Provide the following details for the last three base rate proceedings:

- A. The docket number and date of filing.
- B. Whether the case was fully litigated or settled.
- C. The effective date of each rate increase (including phase-ins).
- D. The actual rate case expense for each base rate proceeding.
- E. The claimed amount of rate case and the amount actually incurred for each filing.

**Response:**

Docket No.: R-00038103

Filed: January 30, 2003

Case was fully litigated.

Effective Date of Rate Increase: July 28, 2003

Actual/Proposed Rate Case Expense: The Borough has not been able to locate records of actual and proposed rate case expenses from this case.

Docket No. R-00062017:

Filed: January 31, 2007

Case was settled.

Effective Date of Rate Increase: This was done in three steps, with step 1 rates effective February 14, 2008. Step 2 and Step 3 rates were effective 30 days after the Borough completed agreed upon capital projects, the completion of Well #15 and the painting of the Houston Road Tank.

Actual/Proposed Rate Case Expense: The Borough has not been able to locate records of actual and proposed rate case expenses from this case.

Docket No. R-2014-2400003:

Filed: January 31, 2014

Case was settled.

Effective Date of Rate Increase: January 1, 2015

Actual Rate Case Expense: \$55,907

Proposed Rate Case Expense: \$220,000

**Response Provided by: Connie Heppenstall, Valuation and Rate Consultants, LLC**

**Date: May 31, 2022**

Responses to I&E Set RE Data Requests

- I&E-RE-4-D:** Reference Bureau of Water Schedule 6, Adjustments E1 and E8 concerning the salaries and wages for the average pay increase effective January 1, 2022 (E1) and January 1, 2023 (E8). Provide the following:
- A. A list of all Borough employees by job title (with names excluded/redacted) with 2023 salaries.
  - B. A list of Bureau of Water employees only by job title with 2023 salaries.
  - C. A list of Borough employees by job title that do work for the Bureau of Water and an explanation how those employees’ salaries are allocated between funds/departments.
  - D. A list of Bureau of Water employees by job title that do work for the Borough and an explanation how those employees’ salaries are allocated between funds/departments.

**Response:**

- A. The 2023 salaries are not yet official for all Borough employees.
- B. See response to part A. Furthermore, for an explanation for the FPPTY Adjustment E8, please see response to I&E-RE-3, Part B.
- C. See response to part D.
- D. See chart below for the list of Bureau of Water employees that charge time to the water fund and other funds. The allocation percentages reflect estimates of time allocated to the water department and other activities based on job descriptions.

<u>Job Description</u>	<u>% charged to water</u>	<u>Breakdown Of time to Other Funds</u>
<u>Non-Union</u>		
Borough Manager	33%	67%
Finance Manager	33%	67%
Asst Fin Mgr- Accts Payable	33%	67%
Receptionist-Takes wtr payments	30%	70%
Water Superintendent	80%	20%
Asst Wtr Super	80%	20%
Asst Wtr Superintendent	80%	20%
Secretary to Wtr Super	50%	50%
<u>Union</u>		
Billing Clerk	50%	50%
Account Clerk	50%	50%

**Response Provided by: Connie Heppenstall, Gannett Fleming Valuation and Rate Consultants, LLC**

**Date: May 31, 2022**

Responses to I&E Set RE Data Requests

**I&E-RE-5-D:** Reference the Bureau of Water’s response to I&E-RE-4-D concerning the sharing of any administrative employee(s) between funds. Provide the following:

- A. The employee’s salary.
- B. The employee’s responsibilities.
- C. List of the employee’s responsibilities by department/fund.
- D. Detailed time records showing the amount of time spent on work for each department/fund for the most recent 12-month period.
- E. An explanation why this employee’s salary is only allocated to the specific funds that it is and the reason for such weighting.

**Response:**

A. See chart below for the administrative employees 2022 allocated salaries to the bureau of water.

Job Description	% charged to water	2022 Rate/ Hr	Water Fund Salary
<u>Non Union</u>			
Borough Manager	33%	58.79	\$40,353
Finance Manager	33%	41.62	\$28,568
Asst Fin Mgr- Accts Payable	33%	28.7	\$19,700
Receptionist-Takes wtr payments	30%	25.05	\$15,631
Water Superintendent	80%	45.06	\$74,980
Asst Wtr Superintendent	80%	36.34	\$60,470
Asst Wtr Superintendent	80%	39.61	\$65,911
Secretary to Wtr Super	50%	30.68	\$31,907
<u>Union</u>			
Billing Clerk	50%	30.21	\$31,418
Account Clerk	50%	26.96	\$28,038

- B. See ‘I&E-RE-5 Attachment’ for the administrative employees’ job descriptions and responsibilities.
- C. See response to Part B.

Responses to I&E Set RE Data Requests

- D. The Borough does not keep detailed time records showing the amount of time spent on work for each department/fund.
- E. The administrative employees' salaries are only allocated to the specific funds that were provided in response to I&E-RE-4, because these are the only funds for which each employees responsibilities fall under. The allocations that are determined across the water funds and other funds are described in response to I&E-RE-4.

**Response Provided by: Connie Heppenstall, Gannett Fleming Valuation and Rate Consultants, LLC**

**Date: May 31, 2022**

**Ambler Borough  
Job Description  
Account Clerk**

I&E Exhibit No. 1  
Schedule 3  
Page 4 of 22

Definition

Responsible for record retention and updates, of water, sewer & trash, applying credits and debits, customer service, answering telephone, meeting with customers in person, meter reading, computer interface. Collection of delinquent accounts as well as payment arrangements. Interfacing with finance system and the finance manager, scheduling field work, clearing field work, enter payments, emergency calls, correspondence, invoices, final billing account transfers, return checks and fee, liens, bankruptcy, payment arrangements, collection procedure. Knowledge of Public Utility Commission Rules and Regulations as they apply to Utilities.

Duties

Record Retention

- Documentation of telephone calls, correspondence and a dated history of all contacts on customer accounts. Documenting telephone contacts as well as in person. Update customer telephone numbers on every contact.
- Enter cash receipts when necessary, balance to deposit, run journal and distribution to general ledger.

Billing

- Verify accounts that need repair to reading device
- Run Journal
- Print backs of bills
- Prepare postal form

Customer Service

- Answer customer calls and meet with customers in the office
- High Bill Complaints

- Payment arrangements, collecting up front payment and review installments for balance, enter into computer system.
- Complex bill explanation. Analyze previous usage, review readings and identify estimates from actual readings, determine if any plumbing work was completed due to leak.
- Water Quality Information- Answer questions on levels of iron and other mineral; identify levels of hardness based on service area for recommended water softener settings.
- Explain rates and bill calculation- manually calculate bill with customer
- PUC rules and regulations. Written response to informal complaints in detail within the 30 day allotted time set.
- Final billing for transfer of ownership, prepare final bill and fax to conveyancer
- Bankruptcy- File proper paperwork with the County
- Liens- Notify solicitor's office to file a lien. Update and or remove a lien from customer accounts.
- Collection of Delinquent accounts- Prepare notices to be mailed or delivered. Follow up for additional notice procedure and termination if necessary.

#### Other Duties

- Prepare letter and mailing labels for Drought Notice to be mailed to all water customers
- Prepare mailing labels for any special mailings, print letters and mail
- Answer base radio calls from workers in the field requiring information or assistance.
- Prepare reports for water superintendent for water consumption
- Communicate effectively with Borough officials and internal and external customers.
- Performs other related duties as determined by supervisor

- Assist at the front window when necessary by taking water and parking ticket payments, registering contractors, plumbers and electricians and various general office duties which include but are not limited to filing, answering the telephones, preparing daily bank deposits, faxing, coping and typing.
- Process invoices and enter all information into system, print checks and prepare them for council signatures
- Process signed checks and mail out to vendors
- Type, fax and copy for documents as needed as well as various other duties requested as needed
- Type Council and Committee packets, meetings and Agenda's
- Organize and prepare packets with all attachments for Council and Committee meetings with necessary criteria.
- Set up Council chambers on the First and Third Monday's of each month for Council and Committee meetings by putting out name plaquards and gavel and setting up the microphone. On Council Mondays (third Monday) include tape recorder.
- Offered computer help (software & General Complications) to office employees throughout the building.
- Perform other duties and tasks from department heads as assigned which includes Purchase orders, designing spreadsheets, creating templates, making phone calls, sending out letters and mailings, and various other duties.

Salary Range for position, starting minimum \$ 14.00 maximum \$ 16.80 all new employees will start at the minimum rate for the position in which they apply. They will receive an evaluation after six, twelve and twenty four months of employment. Based on performance their supervisor may recommend an increase, with an opportunity to receive three increases of equal value to reach top rate for their job classification. The maximum rate listed for each job description in the maximum an employee can make in his or her job classification; the only exception is annual contract increases. An individual increase may or may not be recommended based on performance, knowledge and ability, the decision to increase is completely at the discretion of the supervisor, and under no circumstance shall the decision be questioned or challenged by grievance or otherwise. If an employee works out of his or her classification, in a higher paying position they will be paid upon supervisor approval the minimum rate for the classification in which they are working.

*Frank  
Scarbato*

I&E Exhibit No. 1  
Schedule 3  
Page 7 of 22

12/27/95

## JOB DESCRIPTION

### ASSISTANT WATER DEPARTMENT SUPERVISOR

#### **Job Definition**

This is semi-skilled water system operations work. Work involves operating, installing, maintaining and repairing pumping equipment, fire hydrants and water meters and lines and maintaining related records.

Work is performed under the general supervision of an administrative supervisor in accordance with established procedures. Work is checked through observation, review of operating reports, operating efficiency of the water system, and oral meetings with the water department supervisor and the borough manager. Employee has considerable latitude in developing solutions to a variety of operating problems but most are based on precedents.

#### **Job Objective**

Supervises and assists the Water Department Supervisor and work crews in the maintenance and repair of the borough water system, buildings, property, wells, meters and telemetering for SCUD and remote meter reading.

#### **Essential Job Functions (Functions essential to attaining the job objective):**

Assists in the supervision and directs the activity of the labor crew working on assigned projects; inspects work progress to insure conformance with instructions.

In the absence of the Supervisor, he performs his functions.

Maintains records of employee time, work performed, materials and supplies used.

Drives borough vehicles.

Trains employees in proper work methods, safety precautions and proper operation of equipment.

Transmits and receives radio dispatch communications.

Confer with the Highway Supervisor regarding work assignments.

I&E Exhibit No. 1  
Schedule 3  
Page 8 of 22

**Borough of Ambler  
Job Description  
Assistant Water Department Supervisor**

Confers with Manager regularly regarding proposed or potential work assignments, in the absence of the Supervisor.

Operates hand tools (shovel, rake, pick, etc.) and power tools (jackhammer, chain saw, string trimmer, whacked, lawn mower, etc.)

Maintains plant grounds and buildings, shovels snow, plows, removes trash, and cleans storm sewer inlets.

Does flagging for highway department.

Paints borough water department buildings, structures and equipment on street.

Maintains equipment at wells.

Assists with wiring, plumbing and carpentry in the repair and construction of borough buildings and structures.

Investigates and reports unusual situations, such as meter leaks, broken glass on meter faces, diversion of water, unauthorized connections of pipes to inlets and flooded water meter pits.

Prepares reports for state on readings, flows, lake levels, monitoring wells of the underground water.

Flushes fire hydrants, takes a reading on flow, and prepares daily activity sheets on readings.

Reads water meters and records readings; takes special readings as required.

Maintains assigned vehicle by checking oil and gas levels, washing it and assuring necessary maintenance activities are performed.

Delivers notices to service addresses for non-assess to meters, and possible shut-off of service.

Responds to calls on a twenty-four hour basis, seven days a week for water problems or customer complaints.

**Borough of Ambler  
Job Description  
Assistant Water Department Supervisor**

Performs various office support duties.

Pickup of borough mail.

Maintains markings on curbs for curb boxes.

Perform federal, state and PUC readings and reports.

Performs other related duties.

Installs and maintains meters and repairs the same.

**Job Standards (Minimum qualifications needed to perform essential functions):**

Understand and follow instructions.

Handle tools and construction materials continuously; stand; walk; lift and carry up to 40 lb.; push and pull up to 80 lb.. frequently.

Knowledge of the methods, materials, tools and practices used in the repair of water meters

Knowledge of the geography and street locations of the borough area.

Strength and endurance to lift heavy objects, perform manual labor, and work in adverse weather conditions.

Ability to understand and follow oral and written instructions.

Ability to learn to read water meters quickly and accurately.

Sit, recline, climb, balance, kneel, crawl and perform fine manipulation occasionally.

Possess visual acuity (mid and far vision and field of vision continuously; near vision, depth perception and color vision occasionally).

I&E Exhibit No. 1 Schedule 3 Page 10 of 22
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**Borough of Ambler  
Job Description  
Assistant Water Department Supervisor**

Withstand exposure to weather continuously; withstand exposure to high noise levels, vibration and wet conditions (during rainy weather) frequently.

Work with moving machinery, chlorine, slippery and/or uneven surfaces, unprotected heights, sharp edges, hot surfaces, dusty conditions and confined spaces.

Ability to learn to detect irregularities in meters and pipe connections.

Ability to test meters for leakage and for proper volume reading.

Ability to perform limited maintenance duties.

Ability to establish and maintain effective working relationships with other employees.

Work with others.

**Job Location (Place(s) where work is performed):**

Various within and outside the borough.

**Equipment (Examples of machines, devices, tools, etc. use in job performance):**

I&E Exhibit No. 1  
Schedule 3  
Page 11 of 22

**Borough of Ambler  
Job Description**

Received on this 20<sup>th</sup> day of NOV., 1996.

Frank J. Scalfaro

Signature

FRANK J. SCALFARO

Print Name

**Ambler Borough  
Job Description  
Account Billing Clerk**

I&E Exhibit No. 1  
Schedule 3  
Page 12 of 22

Definition

Responsible for record retention and updates, billing of water, sewer & trash, applying credits and debits, correction of billing, customer service, answering telephone, meeting with customers in person, meter reading, computer interface, monthly, quarterly and Annual Billing. Collection of delinquent accounts as well as payment arrangements. Responsible for monthly and year end balancing. Interfacing with finance system and the finance manager, scheduling field work, clearing field work, coordination of employees daily work, Township billing, fire billing, apply interest, enter payments, emergency calls, correspondence, invoices, final billing account transfers, return checks and fee, liens, bankruptcy, payment arrangements, collection procedure, meter changes and radio read updates. Updating computer database with new rates, customer charge, and interest rate when applicable. Knowledge of Public Utility Commission Rules and Regulations as they apply to Utilities. Respond in writing to Informal and in person if a Formal complaint is filed with the PUC by a customer.

Duties

Record Retention

- Includes billing and any and all adjustments to accounts
- Documentation of telephone calls, correspondence and a dated history of all contacts on customer accounts. Documenting telephone contacts as well as in person. Update customer telephone numbers on every contact.
- Meter Information- Record all information that pertains to customers account such as meter size, measurement, manufacturer of meter, meter changes and readings. Radio read device identification number, meter location or Pit. Age of meter.
- Enter cash receipts when necessary, balance to deposit, run journal and distribution to general ledger.

### Billing

- Creating meter reading file to be exported to EZ-Drive mobile reading system
- Create meter reading file from mobile reading system to be imported for billing
- Review all out-of-range readings prior to billing. Analysis of account to verify previous estimates possible water leak at customers property, verify accuracy of meter reading.
- Run Interest and post to accounts
- Verify accounts that need repair to reading device
- Run Journal
- Print backs of bills
- Print bills
- Post bills to customer accounts
- Prepare postal form

### Customer Service

- Answer customer calls and meet with customers in the office
- High Bill Complaints
- Payment arrangements, requesting at least 50% up front payment and review installments for balance, enter into computer system.
- Complex bill explanation. Analyze previous usage, review readings and identify estimates from actual readings, determine if any plumbing work was completed due to leak.
- Water Quality Information- Answer questions on levels of iron and other mineral; identify levels of hardness based on service area for recommended water softener settings.
- Explain rates and bill calculation- manually calculate bill with customer
- PUC rules and regulations. Written response to informal complaints in detail within the 30 day allotted time set.
- Final billing for transfer of ownership, prepare final bill and fax to conveyancer
- Bankruptcy- File proper paperwork with the County

- New construction, creating new account- Verify area and well served by, identify walking route and create account number and account in sequence with appropriate address and physical location.
- Liens- Notify solicitor's office to file a lien. Update and or remove a lien from customer accounts.
- Collection of Delinquent accounts- Prepare notices to be mailed or delivered. Follow up for additional notice procedure and termination if necessary.

#### Other Duties

- Prepare letter and mailing labels for Drought Notice to be mailed to all water customers
- Prepare mailing labels for any special mailings, print letters and mail
- Answer base radio calls from workers in the field requiring information or assistance.
- Occasional check of water levels or chemical level on Scada system when asked by Supervisor in the field or for Water Engineer.
- Prepare reports for water superintendent for water consumption
- Communicate effectively with Borough officials and internal and external customers.
- Performs other related duties as determined by supervisor

Salary Range for position, starting minimum \$ 16.80 maximum \$ 19.00 all new employees will start at the minimum rate for the position in which they apply. They will receive an evaluation after six, twelve and twenty four months of employment. Based on performance their supervisor may recommend an increase, with an opportunity to receive three increases of equal value to reach top rate for their job classification. The maximum rate listed for each job description in the maximum an employee can make in his or her job classification; the only exception is annual contract increases. An individual increase may or may not be recommended based on performance, knowledge and ability, the decision to increase is completely at the discretion of the supervisor, and under no circumstance shall the decision be questioned or challenged by grievance or otherwise. If an employee works out of his or her classification, in a higher paying position they will be paid upon supervisor approval the minimum rate for the classification in which they are working.

### Borough Manager

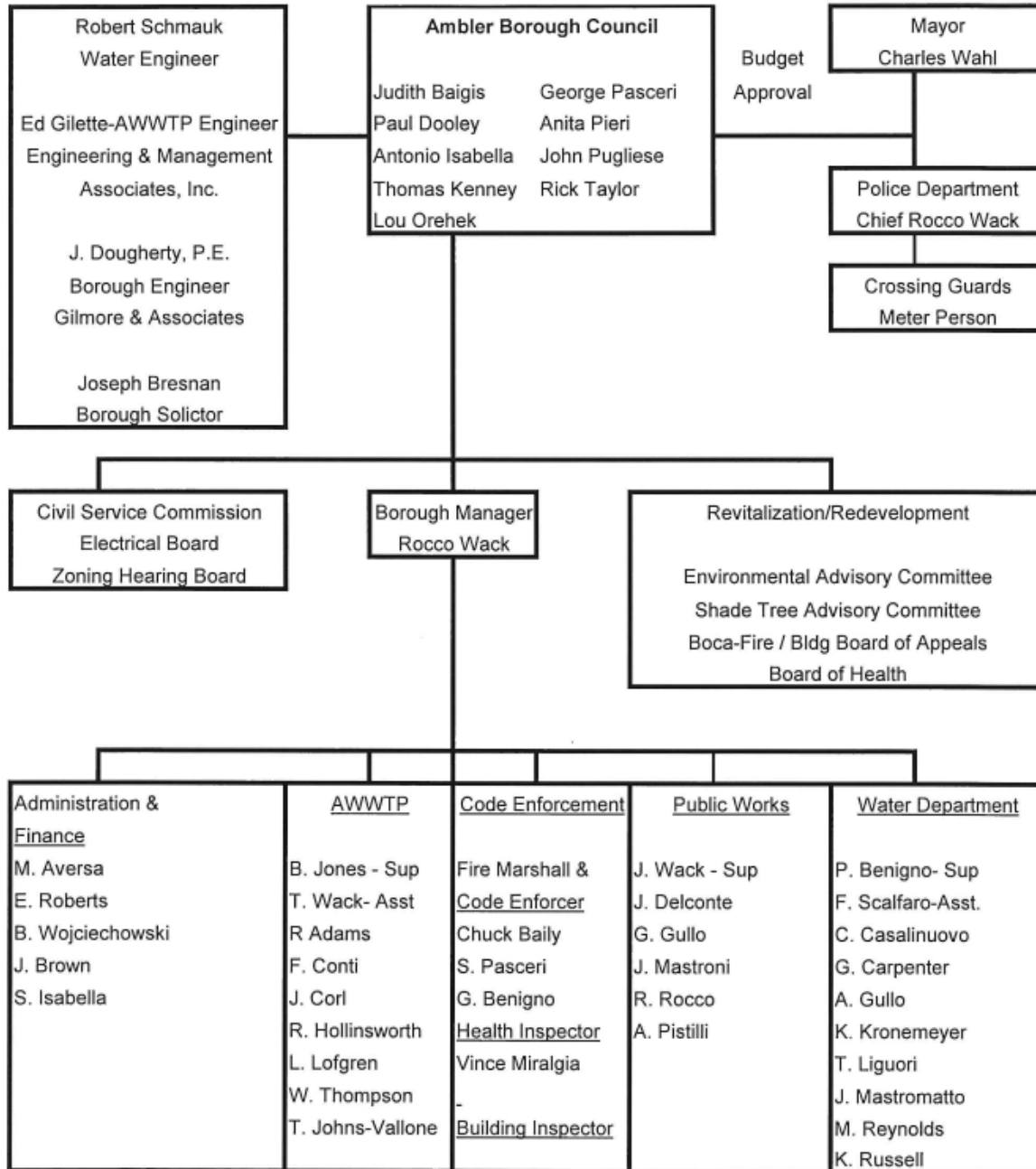
The Borough Manager is hired and appointed by the Borough Council and is delegated the responsibility for taking care of the day-to-day business of the Borough. The following list encompasses the responsibilities:

1. Preparing short-term and long-range objectives for recommendation to council.
2. Preparing plans and programs to attain objectives approved by council.
3. Determining projects to meet objectives approved by council.
4. Investigating and presenting recommendations to council concerning state and federal grant programs.
5. Preparing reports to other governmental units.
6. Attending and participating at state convention and professional association meetings.
7. Maintaining professional affiliations and keeping abreast of new developments in the field.
8. Reviewing budget performance of all departments.
9. Preparing monthly reports on all activities, including construction projects and costs and equipment purchases, for submission to council.
10. Preparing recommendations, background information and cost estimates for monthly council meetings.
11. Attending and participating in all municipal meetings.
12. Programming all major expenditures from cash flow viewpoint.
13. Assisting in preparing annual report and budget.
14. Preparing, recommending and implementing a capital improvement program.
15. Meeting with land developers, business developers and groups involved in economic developments.
16. Preparing and/or approving news releases.
17. Maintaining public relations contact with residents.
18. Delegating responsibility and authority for performance and assigned functions to departments.
19. Developing and updating a training plan for municipal employees.
20. Preparing and implementing a preventive maintenance program for borough equipment.
21. Developing and administering municipal personnel policies, procedures and programs.
22. Reviewing applications for prospective employees, interviewing and hiring, and when necessary, firing or laying off employees.
23. Preparing and/or approving specifications for purchase of major equipment.
24. Directing and supervising the daily work of the administrative staff.
25. Coordinating activities of all municipal departments.
26. Ordering or approving purchases as needed.

I&E Exhibit No. 1  
Schedule 3  
Page 16 of 22

AMBLER BOROUGH ORGANIZATIONAL CHART

Date 10/1/2006



### Part Time Employee Termination

The manager/Supervisor should:

- Review all written documents included in the individual's file.
- Plan out and practice what will be said in the exit interview.
- Be able to answer any question the employee might have about the termination.
- Prepare a list of all company belongings that should be returned upon termination, including keys, credit cards and software.
- Write a termination letter for the employee in advance.
- Consult legal counsel with questions about termination
- Bring in a witness for the exit interview

Prepare to change security passwords

Receptionist/Dispatcher/Clerk  
Police Dept.

**Requirements**

- Must be at least 18 years of age
- Must be a U.S. Citizen
- Must be a high school graduate with diploma

Salary Range for position, starting minimum \$ 13.20 maximum \$ 15.26 all new employees' hired or current employees assigned to this position will start at the minimum rate for the position in which they apply or are assigned. New employees will receive an evaluation within six, twelve and twenty four months of employment. Based on performance their supervisor may recommend an increase, with an opportunity to receive three increases of equal value to reach top rate for their job classification.

The maximum rate listed for each job description is the maximum an employee can make in his or her job classification; the only exception is annual contract increases. An individual employee evaluation will take place yearly, and given according to the contract calendar year used for calculating vacation eligibility. At this time an increase may or may not be recommended based on performance, knowledge and ability, the decision to increase is completely at the discretion of the supervisors' recommendation, and under no circumstance shall the decision be questioned or challenged by grievance or otherwise. If an employee works out of his or her classification (upon supervisor approval) in a higher paying position they will be paid the minimum rate for the higher job classification in which they are working

**FINANCE MANAGER - Ambler Borough**, Montgomery County (pop. 6,600) seeks skilled applicant for the position of Finance Manager. Candidate provides technical advice to Borough Manager, elected/appointed officials, for the Borough, Water, Waste Water Treatment and Police Departments on matters of finance. Finance Manager prepares monthly summary reports of fiscal/budget status. Compiles annual department budgets and prepares annual Management Discussion & Analysis, providing auditors with all information necessary to prepare the annual financial statements. Responsibilities include grants management and filing of state and federal compliance reports. Finance Manager handles specific administrative functions such as general ledger, payroll, pension and benefits for 65 Borough employees. Position requires minimum bachelor's degree (or equivalent knowledge and experience) in accounting or public finance with municipal experience or knowledge of local government practices and strong organizational skills. Salary DOQ, plus benefits. Send cover letter, résumé, salary requirements and references to Elizabeth Russell, Ambler Borough, 131 Rosemary Avenue, Ambler, PA 19002. Submissions must be received by 10/15/21

**AMBLER BOROUGH  
JOB DESCRIPTION  
RECEPTIONIST/DISPATCHER/CLERK**

**Summary**

Work involves responsibility for the receipt and transmission of radio, telephone, dispatching of police and disseminating emergency information for law enforcement personnel. Maintain and control all documentation and records for the police department.

**Duties and Responsibilities**

Greeting all persons who come to the police station. Answering general information questions or directing caller to appropriate personnel or agency.

Type all traffic citations and maintain log.

Type all parking ticket citations and maintain log.

Record all warrants from district and county court.

Record subpoenas from district and county court.

Reproduce criminal arrest folders for county court.

Maintain vacation log and disseminate information to patrols.

**Other Tasks**

Answer telephone

Distribute mail

Computer use for data entry

Participate in confidential interviews of female victims

Back up for secretary during vacations, personal days, etc.

Filing

## WATER DEPARTMENT ADMINISTRATIVE ASSISTANT

The fundamental reason this classification exists is to assist the Water Superintendent and Assistant Superintendent in the daily operations including maintaining records assisting in the coordination and implementation of improvement projects, and record retention. The Assistant works under the general direction of the Water Superintendent and his Assistant Superintendent. This person will also maintain all distribution records, bid documents and all maintenance files. Other duties include the tracking of office deliveries for parts and supplies. Maintain service contracts including copiers, fax machine and the like; this person must be able to demonstrate resourcefulness, organization, and flexibility.

### ESSENTIAL FUNCTIONS:

- Assists in the development of policies and procedures for program implementation;
- Writes status reports or minutes on project activities.
- Assists in the budget preparation;
- Prepares bid specifications as requested; *prepares grant applications with engineers.*
- Provides technical support;
- Maintains files detailing upgrades performed throughout the water system;
- Maintains water inventory records;
- Maintains water system maps and document changes to ensure current accurate information is submitted to the Borough Engineer as required;
- Assists in handling nonroutine inquiries regarding water services;
- Maintains record's of the facility inventory, and the processing of right-of-way requests to support the Department's Superintendent's activities;
- Maintains accurate notes, records, and sketches of work performed or data secured;
- Assists in the implementation of new monitoring/control instrumentation
- Demonstrates continuous effort to improve operations, decrease turnaround times, streamline work processes, and work cooperatively and jointly to provide quality seamless customer service.
- Maintains and assists in the preparation of DEP reports, as required.
- Answering/ directing incoming calls
- Assisting other departments as requested
- Any other Borough tasks as instructed by supervisor;
- Establish and maintain a filing system:
- Determine if files should be active, inactive, or archived and follow retention schedule to move and purge files on periodic basis.

**Required Knowledge, Skills and Abilities:**

**Knowledge of:**

- Understanding and Knowledge of the Borough Codes and PUC regulations relating to water operations.
- Modern methods and techniques of design and maintenance of water distribution systems.
- Water pipeline construction.
- Budgeting process and accounting procedures.
- Geographic Information
- Scada system

**Ability to:**

- Read maps
- Work cooperatively with other Borough employees and the public.
- Produce written documents with clearly organized thoughts using proper English sentence construction, punctuation and grammar.
- Operate and maintain a computer data base.
- Communicate orally with customers, clients and the public in face-to-face one-on-one settings or using a telephone.

Responses to I&E Set RE Data Requests

- I&E-RE-2-D:** Reference Bureau of Water Schedule 3, pp. 1-2, “Statement of Pro Forma Operating Expenses for the Twelve Months Ended September 31, 2023” [sic]. Provide similar schedules with added columns for the annual amounts for each account listed for the fiscal years ended September 30, 2019, and September 30, 2020 by:
- A. Inside customers.
  - B. Outside (PA PUC Jurisdictional) customers.
  - C. All customers (inside and outside combined).
  - D. Explain why the year 2022 was skipped over on this schedule.
  - E. State whether Column (5), Pro Forma 30-Sep-21 should be entitled Pro Forma 30-Sep-22.
  - F. Provide explanations for each line of expense that increases or decreases by 10% or more from one year to the next between the fiscal years September 30, 2019, 2020, 2021, the FTY, and the FPFTY.

**Response:**

- A. See response to I&E-RE-1-D.
- B. See response to Part A.
- C. The Borough does not typically track its twelve months year ended on September 30, as the historic test year was determined only for purpose of the rate case. Please see ‘I&E-RE-2 Attachment’ which is the Rate Study, Schedule 3 including the twelve months ended December 31, 2019 and December 31, 2020.
- D. Column 5 represents the pro forma historic test year. The future test year and fully projected test year adjustments are included in column 7. The sum of column 7 and column 9 equals the fully projected future test year as of September 30, 2023 operation and maintenance expenses. Schedules in similar format have been prepared by Gannett Fleming Valuation and Rate Consultants, LLC in other municipal utility rate cases and have been accepted by the Commission.
- E. Column 5’s date is correct. It reflects the pro forma expenses for the historic test year, the twelve months ended September 30, 2021.
- F. See ‘I&E-RE-2 Attachment’ for the explanations of increase or decreases 10% or more from 2019 to 2020 and 2020 to the pro forma historic test year ended September 30, 2021. For increases or decreases of 10% or greater for expenses from the HTY to the FTY and FTY to FPFTY are explained in the expense adjustments schedule in the Rate Study, Schedule 6. If there was not an expense adjustment detailed for the FTY and FPFTY expenses, the FTY and FPFTY reflect the same level of pro forma HTY expenses per account.

**Response Provided by: Connie Heppenstall, Senior Project Manager, Gannett Fleming Valuation and Rate Consultants, LLC**

**Date: May 10, 2022**

Responses to TUS Data Request – Set 1

**TUS-14.** The Rate Study’s Page 13, Line No. 127 identified a \$69,055 expense described as “Mattison Ave.”. Please provide a description of this expense, provide supporting invoices or similar documents detailing this expense and quantify the normalized amount of this expense.

**Response:**

The expense amount of \$69,055 for Mattison Ave. represents an annual debt service payment for a bond issued in 2014. The \$69,055 expense should not be included in the Rate Study.

**Response Provided by: Connie Heppenstall, Senior Project Manager, Gannett Fleming Valuation and Rate Consultants, LLC**

**Date: April 25, 2022**

Responses to TUS Data Request – Set 1

**TUS-18.** Please provide evidence that Ambler filed annual financial reports for the 2013 and 2019 calendar years with the Commission. Also, provide copies of the subject reports as part of the Ambler’s response to this data request.

**Response:** Ambler does not have any record of filed PUC Annual Reports for 2013 or 2019.

**Response Provided by: Mary Aversa, Borough Manager**

**Date: April 25, 2022**

**I&E Statement No. 2**  
**Witness: Christopher Keller**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Direct Testimony**

**of**

**Christopher Keller**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Rate of Return**

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1 **INTRODUCTION**

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

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

6

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

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

11

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

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

14

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

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

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

2 A. The purpose of my testimony is to review the base rate filing of the Borough of  
3 Ambler – Water Department (Ambler or Water Department), and make  
4 recommendations regarding Ambler’s rate of return, including capital structure,  
5 cost of long-term debt, the cost of equity, and the overall fair rate of return for the  
6 fully projected future test year (FPFTY) ending September 30, 2023.

7

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

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

10

11 **BACKGROUND**

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

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

18

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

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

21 
$$RR = E + D + T + (RB \times ROR)$$

1                   Where:  
2                   RR    =    Revenue Requirement  
3                   E     =    Operating Expenses  
4                   D     =    Depreciation Expense  
5                   T     =    Taxes  
6                   RB    =    Rate Base  
7                   ROR =    Overall Rate of Return

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

13

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

16 A.    A fair and reasonable overall rate of return is one that will allow the utility an  
17        opportunity to recover those costs prudently incurred by all classes of capital used  
18        to finance the rate base during the prospective period in which its rates will be in  
19        effect.

20                   The *Bluefield Water Works & Improvements Co. v. Public Service Comm. of*  
21                   *West Virginia*, 262 U.S. 679, 692-93 (1923), and the *FPC v. Hope Natural Gas Co.*,  
22                   320 U.S. 591, 603 (1944) cases set forth the principles that are generally accepted

1 by regulators throughout the country as the appropriate criteria for measuring a fair  
2 rate of return:

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

12  
13 **Q. EXPLAIN HOW THE OVERALL RATE OF RETURN IS**  
14 **TRADITIONALLY CALCULATED IN BASE RATE PROCEEDINGS.**

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

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

9 **WATER DEPARTMENT’S RATE OF RETURN CLAIM**

10 **Q. WHO IS THE WATER DEPARTMENT’S RATE OF RETURN WITNESS?**

11 A. Ambler witness Dylan W. D’Ascendis is the primary witness addressing rate of  
12 return (Ambler Statement No. 4). Mr. D’Ascendis provided analysis for the  
13 claimed capital structures, long-term debt, and cost of common equity for Ambler.  
14

15 **Q. PLEASE SUMMARIZE THE WATER DEPARTMENT’S RATE OF**  
16 **RETURN CLAIM.**

17 A. Mr. D’Ascendis recommended the following rate of return for Ambler, which does  
18 not include an implied tax rate adjustment, based on its FPFTY ending  
19 September 30, 2023 (Ambler Schedule DWD-1, p. 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.26%	2.36%	1.19%
Common Equity	49.74%	10.75%	5.35%
Total	100.00%		6.54%

20

1 **I&E POSITION**

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

4 A. As shown in the table below, I have a rate of return recommendation which  
5 includes an implied tax rate adjustment for the Water Department (I&E Exhibit  
6 No. 2, Schedule 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	57.00%	2.36%	1.35%
Common Equity	<u>43.00%</u>	6.33%	<u>2.72%</u>
Total	<u>100.00%</u>		<u>4.07%</u>

7  
8 I will discuss in further detail below why it is necessary to include an implied tax  
9 rate adjustment within the Water Department's rate of return.

10  
11 **PROXY GROUP**

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

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

16  
17 **Q. WHAT ARE THE REASONS FOR USING A PROXY GROUP?**

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

1 corresponding risks and uncertainties.

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

9  
10 **Q. WHAT CRITERIA DID YOU USE IN SELECTING YOUR WATER**  
11 **INDUSTRY PROXY GROUP?**

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

- 15 1. Fifty percent or more of the company's revenues must be generated from  
16 the regulated water utility industry;
- 17 2. The company's stock must be publicly traded;
- 18 3. Investment information for the company must be available from more than  
19 one source, which includes Value Line;
- 20 4. The company must not be currently involved/targeted in an announced  
21 material merger or acquisition; and
- 22 5. The company must have four consecutive years of historic earnings data.

1 **Q. WHAT CRITERIA DID MR. D’ASCENDIS USE IN SELECTING HIS**  
2 **WATER PROXY GROUP COMPANIES?**

3 A. Mr. D’Ascendis determined his proxy group of seven water companies by using  
4 the following criteria (Ambler Statement No. 4, p. 13, lines 9-23):

- 5 1. The company is included in the Water Utility Group of Value Line’s  
6 Standard Edition;
- 7 2. The company has 70% or greater of 2020 total operating income and 70%  
8 or greater of 2020 total assets attributable to regulated water operations;
- 9 3. At the time of the preparation of Mr. D’Ascendis’ testimony, the company  
10 must not have publicly announced they were involved in any major merger  
11 or acquisition activity;
- 12 4. The company must not have cut or omitted its common dividends during  
13 the five years ended 2020 or through the time of the preparation of Mr.  
14 D’Ascendis’ testimony;
- 15 5. The company must have Value Line and Bloomberg Professional Services  
16 (Bloomberg) adjusted betas;
- 17 6. The company must have a positive Value Line five-year dividends per  
18 share (DPS) growth rate projection; and
- 19 7. The company must have Value Line, Zacks, Yahoo! Finance, or Bloomberg  
20 consensus five-year earnings per share (EPS) growth rate projections.

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

2 A. I included the following seven companies in my proxy group (I&E Exhibit No. 2,  
3 Schedule 2):

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

4

5

6 **Q. WHAT PROXY GROUP DID MR. D'ASCENDIS USE IN HIS ANALYSIS?**

7 A. Mr. D'Ascendis utilized the same companies as my proxy group (Ambler  
8 Schedule DWD-2, p. 2).

9

10 **CAPITAL STRUCTURE**

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

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

1 **Q. WHAT IS THE WATER DEPARTMENT’S CLAIMED CAPITAL**  
2 **STRUCTURE?**

3 A. The Water Department’s claimed *hypothetical* capital structure is summarized in  
4 the table below (Ambler Statement No. 4, p. 14, lines 19-21 and Ambler Schedule  
5 DWD-1, p. 1):

Type of Capital	Ratio
Long-Term Debt	50.26%
Common Equity	49.74%
Total	100.00%

6  
7

8 **Q. WHAT IS THE BASIS FOR THE WATER DEPARTMENT’S CLAIMED**  
9 **CAPITAL STRUCTURE?**

10 A. Mr. D’Ascendis stated that water and wastewater utilities in Pennsylvania should  
11 use an imputed capital structure of comparable public utilities providing water or  
12 wastewater service which is consistent with Title 66 PA. C.S. Section 1301(b)  
13 (Ambler Statement No. 4, p. 14, lines 17-19).

14

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

17 A. No. While I agree that a hypothetical capital structure is appropriate for this  
18 proceeding, I recommend using a hypothetical capital structure of 57% long-term  
19 debt and 43% equity.

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

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

11  
12 **Q. IN THE DETERMINATION OF JUST AND REASONABLE RATES,**  
13 **WHAT DIRECTIVES ARE PROVIDED WITH RESPECT TO**  
14 **MUNICIPAL CAPITAL STRUCTURES BEING USED IN BASE RATE**  
15 **CASES?**

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

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

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

5 A. Yes. While I believe that a capital structure between 80% debt and 20% equity  
6 and 70% debt and 30% equity is more appropriate for the Water Department in  
7 this proceeding, this fails to comply with Section 1301(b) as it is outside the range  
8 of equity ratios in my proxy group. Therefore, I am recommending that the  
9 Commission adopt the hypothetical capital structure made up of 57% long-term  
10 debt and 43% equity. The resulting 43% equity ratio more closely resembles the  
11 low end of the range of equity ratios of the average capital structures in my proxy  
12 group which is 42.40% (I&E Exhibit No. 2, Schedule 2).

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

17 A. My recommendation is designed to comply with Section 1301(b), while not  
18 inappropriately overburdening ratepayers. As stated above, if the non-  
19 jurisdictional portion of the Water Department requires increased funding, the  
20 municipality has the ability to acquire debt and/or increase taxes to generate funds.  
21 Moreover, municipally owned water/wastewater utilities differ from investor-  
22 owned utilities in that they have no equity investors. Accordingly, they do not

1 have the burden of compensating investors with a competitive, market-based  
2 return on equity. As such, it is inappropriate to pass along a large proportion of  
3 the higher equity cost to the Water Department's ratepayers. This difference in  
4 utility ownership more than adequately supports using the low end of an investor-  
5 owned utility proxy group's capital structure.

6  
7 **COST OF LONG-TERM DEBT**

8 **Q. WHAT IS THE WATER DEPARTMENT'S CLAIMED COST RATE OF**  
9 **LONG-TERM DEBT?**

10 A. The Water Department's claimed long-term debt cost rate is 2.36% for the  
11 FPFTY (Ambler Statement No. 4, p. 15, lines 3-4).

12  
13 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE WATER**  
14 **DEPARTMENT'S COST RATE OF LONG-TERM DEBT?**

15 A. I recommend using the Water Department's long-term debt cost rate of 2.36%.

16  
17 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE**  
18 **WATER DEPARTMENT'S COST RATE OF LONG-TERM DEBT?**

19 A. Although this falls below my proxy group's implied long-term debt cost range of  
20 2.61% to 4.21% (I&E Exhibit No. 2, Schedule 3), I agree with Mr. D'Ascendis  
21 that the Water Department's actual long-term debt cost rate of 2.36% is reasonable  
22 and appropriate in this proceeding (Ambler Statement No. 4, p. 15, lines 3-4).

1 **COST OF COMMON EQUITY**

2 **COMMON METHODS**

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

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

8  
9 **Q. WHAT IS THE THEORETICAL BASIS FOR THE DCF METHOD?**

10 A. The DCF method is the “dividend discount model” of financial theory, which  
11 maintains that the value (price) of any security or commodity is the discounted  
12 present value of all future cash flows. The DCF method assumes that investors  
13 evaluate stocks in the classical economic framework, which maintains that the  
14 value of a financial asset is determined by its earning power, or its ability to  
15 generate future cash flows.

16  
17 **Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?**

18 A. The CAPM describes the relationship of a stock’s investment risk and its market  
19 rate of return. It identifies the rate of return investors expect so that it is  
20 comparable with returns of other stocks of similar risk. This method hypothesizes  
21 that the investor-required return on a company’s stock is equal to the return on a  
22 “risk free” asset plus an equity premium reflecting the company’s investment risk.

1 In the CAPM, two types of risk are associated with a stock: (1) firm-specific risk  
2 (unsystematic risk); and (2) market risk (systematic risk), which is measured by a  
3 firm's beta. The CAPM allows for investors to receive a return only for bearing  
4 systematic risk. Unsystematic risk is assumed to be diversified away, and  
5 therefore, does not earn a return.

6  
7 **Q. WHAT IS THE THEORETICAL BASIS FOR THE RP METHOD?**

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

15  
16 **Q. WHAT IS THE THEORETICAL BASIS FOR THE CE METHOD?**

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

1 **Q. WHAT METHOD DO YOU RECOMMEND USING TO DETERMINE AN**  
2 **APPROPRIATE COST OF COMMON EQUITY FOR THE WATER**  
3 **DEPARTMENT?**

4 A. I recommend using the DCF method as the primary method to determine the cost  
5 of common equity. I provide the results of my CAPM as a comparison and not as  
6 a check to the DCF results. Although no one method can capture every factor that  
7 influences an investor, including the results of methods that are less reliable than  
8 the DCF does not make the end result more reliable or more accurate. My  
9 recommendation is also consistent with the methodology historically used by the  
10 Commission in base rate proceedings, even as recently as 2017, 2018, 2020, and  
11 2021.<sup>1</sup>  
12

13 **Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE DCF AND CAPM IN**  
14 **YOUR ANALYSIS.**

15 A. I have used the DCF as the primary method for several reasons. First, the DCF is  
16 appealing to investors as it is based upon the concept that the receipt of dividends  
17 in addition to expected appreciation is the total return requirement determined by

---

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

1 the market.<sup>2</sup> Second, the use of a growth rate and expected dividend yield are also  
2 strengths of the DCF, as this recognizes the time value of money and is forward-  
3 looking. Third, the use of the utilities' own, or in this case, the proxy group's  
4 stock prices and growth rates directly in the calculation also causes the DCF to be  
5 industry and company specific. Fourth, the DCF method is the superior method  
6 for determining the rate of return for the current economic market because it  
7 measures the cost of equity directly. Finally, the DCF, through the use of a spot  
8 stock price when determining the dividend yield and analysts who generate  
9 forecasted earnings growth rates, almost certainly takes current inflationary trends  
10 into consideration, therefore, it contains the most up-to-date projected information  
11 of any model. Therefore, the DCF method is the superior method for determining  
12 the rate of return for the current economic market because it measures the cost of  
13 equity directly.

14  
15 **Q. PLEASE EXPLAIN WHY YOU CHOSE TO USE THE CAPM AS A**  
16 **COMPARISON IN YOUR ANALYSIS.**

17 A. I have included a CAPM analysis only as a comparison and not as a  
18 recommendation because while both the CAPM and the DCF include inputs that  
19 allow the results to be specific to the utility industry, the CAPM is far less  
20 responsive to changes in the industry than the DCF. The CAPM is based on the

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<sup>2</sup> David C. Parcell, "The Cost of Capital – A Practitioner's Guide," 2010 Edition, p. 151.

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

13  
14 **Q. EXPLAIN THE DISADVANTAGES OF THE CAPM.**

15 A. The CAPM, and the RP method by virtue of its similarities to the CAPM, give  
16 results that indicate to an investor what the equity cost rate should be if current  
17 economic and regulatory conditions are the same as those present during the  
18 historical period in which the risk premiums were determined. This is because  
19 beta, which is the only company-specific variable in the CAPM model, measures  
20 the *historical* volatility of a stock compared to the *historical* overall market return.  
21 Reliance on historical values is especially problematic now given the recent  
22 impact of the coronavirus on economic conditions. Although the CAPM and RP

1 results can be useful to investors in making rational buy and sell decisions within  
2 their portfolios, the DCF method is the superior method for determining the rate of  
3 return for the current economic market and measuring the cost of equity directly.  
4 The CAPM and the RP methods are less reliable indicators because they measure  
5 the cost of equity indirectly and risk premiums vary depending on the debt and  
6 equity being compared. Also, regulators can never be certain that economic and  
7 regulatory conditions underlying the historical period during which the risk  
8 premiums were calculated are the same today or will be the same in the future.

9  
10 **Q. IS THERE ANY ACADEMIC EVIDENCE THAT QUESTIONS THE**  
11 **CREDIBILITY OF THE CAPM MODEL?**

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

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<sup>3</sup> Berg, Eric N. “Market Place; A Study Shakes Confidence in the Volatile-Stock Theory” *The New York Times*, 18 Feb 1992: *nytimes.com* Web. 23 Mar 2016.

1           A more recent article, “The Capital Asset Pricing Model: Theory and  
2 Evidence,” which appeared in the *Journal of Economic Perspectives*, states that  
3 “the attraction of the CAPM is that it offers powerful and intuitively pleasing  
4 predictions about how to measure risk and the relation between expected return  
5 and risk. Unfortunately, the empirical record of the model is poor - poor enough  
6 to invalidate the way it is used in applications.”<sup>4</sup> As a result, I conclude that the  
7 CAPM’s relevance to the investment decision making process does not carry over  
8 into the regulatory rate setting process.

9  
10 **Q. PLEASE EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE RP**  
11 **METHOD FROM YOUR ANALYSIS.**

12 A. The RP method is excluded because it is a simplified version of the CAPM and is  
13 subject to the same faults listed above. Additionally, unlike the CAPM, the RP  
14 method does not recognize company-specific risk through beta.

15  
16 **Q. EXPLAIN WHY YOU HAVE CHOSEN TO EXCLUDE THE CE METHOD**  
17 **FROM YOUR ANALYSIS.**

18 A. The CE method is excluded because the choice of which companies are  
19 comparable is highly subjective, and it is debatable whether historic accounting  
20 values are representative of the future. Moreover, its historical usage in this  
21 regulatory forum has been minimal.

---

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

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

4 A. Yes. The Commission indicated in the most recent Aqua Pennsylvania, Inc.  
5 (Aqua) base rate case order that its method “for determining Aqua’s ROE shall  
6 utilize both I&E’s DCF and CAPM methodologies”<sup>5</sup> and that “I&E’s DCF and  
7 CAPM produce a range of reasonableness for the ROE...”<sup>6</sup>, which deviates from  
8 prior Commission practice of primarily relying on the DCF.

9  
10 **Q. SHOULD THE COMMISSION’S USE OF THE CAPM AS A CEILING**  
11 **FOR A “RANGE OF REASONABLENESS” APPLY IN THIS**  
12 **PROCEEDING?**

13 A. No. In a report issued by Regulatory Research Associates, a group within S&P  
14 Global Market Intelligence,<sup>7</sup> Aqua’s return on equity of 10.00% is stated as being  
15 above the national average for water utility base rate cases and above the  
16 Distribution System Improvement Charge (DSIC) authorized by the Commission  
17 of 9.80%<sup>8</sup> for water and wastewater utilities based on the year ended December

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

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

<sup>7</sup> Regulatory Research Associates, “Commission authorizes management performance bonus for Aqua Pennsylvania,” *S&P Global Market Intelligence*, May 16, 2022.

<sup>8</sup> PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended December 31, 2021, p. 27, approved at Public Meeting on June 16, 2022 at Docket No. M-2022-3032405.

1 31, 2021, issued at the recent Public Meeting held June 16, 2022. The above  
2 referenced Regulatory Research Associates report also states that the average  
3 return on equity for water utility base rate cases that have been completed during  
4 the first four months of 2022 was 9.63%, and for the last twelve months ended  
5 April 30, 2022 it was 9.53%, which are well below the 10.00% return on equity  
6 authorized by the Commission for Aqua. This demonstrates the problem  
7 associated with using the CAPM as a ceiling for determining a utility's return on  
8 equity.

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

## 15 16 **SUMMARY OF THE WATER DEPARTMENT'S RESULTS**

### 17 **Q. WHAT ARE THE RESULTS OF THE WATER DEPARTMENT'S COST** 18 **OF EQUITY ANALYSES?**

19 A. Mr. D'Ascendis used the DCF, CAPM, and the RP methods in analyzing  
20 Ambler's cost of equity. Mr. D'Ascendis also used the Predictive Risk Premium  
21 Method (PRPM) and the Empirical Capital Asset Pricing Model (ECAPM) in  
22 forming his recommendations under the RP and the CAPM methods, respectively.

1 Mr. D'Ascendis applied these methods using his proxy group of regulated water  
2 utilities and averaged the results of the methods for his non-price regulated proxy  
3 group. Mr. D'Ascendis then listed the results for each method for the regulated  
4 utility group and the average of the median and mean of the results of the methods  
5 for the non-price regulated group. Finally, he recommended that the cost of equity  
6 be increased by 100 basis points due to the Water Department's small size.

7 Ultimately, Mr. D'Ascendis opined that a cost of equity of 10.75% is warranted  
8 (Ambler Statement No. 4, p. 3, line 9 through p. 4, line 14 and Ambler Schedule  
9 DWD-1, p. 2). It should be noted that Mr. D'Ascendis did not make a tax  
10 adjustment in his recommendation for his cost of equity. I will discuss in further  
11 detail below why it is necessary to include an implied tax rate adjustment within  
12 the Water Department's rate of return.

13  
14 **I&E RECOMMENDATION**

15 **Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR**  
16 **THE WATER DEPARTMENT?**

17 A. Based upon my analysis, I recommend a cost of common equity of 6.33% which  
18 includes a 25.68% downward adjustment in consideration of the tax status of the  
19 Water Department (I&E Exhibit No. 2, Schedule 1).

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

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

6

7 **DISCOUNTED CASH FLOW**

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

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

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

12 Where:

13 K = Cost of equity

14 D<sub>1</sub> = Dividend expected during the year

15 P<sub>0</sub> = Current price of the stock

16 g = Expected growth rate

17 When a forecast of D<sub>1</sub> is not available, D<sub>0</sub> (the current dividend) must be adjusted  
18 by one half of the expected growth rate to account for changes in the dividend paid  
19 in period one. As forecasts for each company in my proxy group were available  
20 from Value Line, no dividends were adjusted for the purpose of my analysis.

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

3 A. A representative dividend yield must be calculated over a time frame that avoids  
4 the problems of both short-term anomalies and stale data series. For my DCF  
5 analysis, the dividend yield calculation places equal emphasis on the most recent  
6 spot and the 52-week average dividend yields. The following table summarizes  
7 my dividend yield computations for the proxy group (I&E Exhibit No. 2,  
8 Schedule 4):

<b>Seven-Company Proxy Group</b>	<b>Dividend Yield</b>
Spot	2.18%
52-week average	1.90%
Average	2.04%

9

10

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

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

15

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

18 A. The expected average growth rates for the seven-company proxy group ranged  
19 from 2.10% to 14.00% with an overall average of 6.48% (I&E Exhibit No. 2,  
20 Schedule 5).

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

3 A. The results of my DCF analysis are calculated as follows (I&E Exhibit No. 2,  
4 Schedule 6):

$$\begin{array}{rccccccc} K & = & D_1/P_0 & + & g & & \\ 8.52\% & = & 2.04\% & + & 6.48\% & & \end{array}$$

5

6

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

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

17

18 **CAPITAL ASSET PRICING MODEL**

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

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

21 
$$K = R_f + \beta(R_m - R_f)$$

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22

Where:

- K = Cost of equity
- R<sub>f</sub> = Risk-free rate of return
- R<sub>m</sub> = Expected rate of return on the overall stock market
- β = Beta measures the systematic risk of an asset

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

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

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

A. In estimating an equity cost rate for my proxy group of seven water companies, I used the average of the betas for the companies as provided in the Value Line Investment Survey. The average beta for my proxy group is 0.78 (I&E Exhibit No. 2, Schedule 7).

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

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

15 The forecasted yield on the 10-year Treasury Note, as can be seen in Blue  
16 Chip Financial Forecasts, is expected to be between 2.90% and 3.30% from the  
17 third quarter of 2022 through the third quarter of 2023, and it is forecasted to be  
18 2.90% from 2023-2027. For my forecasted CAPM analysis, I used 3.15%, which  
19 is the average of all the yield forecasts I observed (I&E Exhibit No. 2,  
20 Schedule 8).

---

<sup>9</sup> *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018).  
*See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 99.

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

3 A. To arrive at a representative expected return on the overall stock market, I  
4 observed Value Line's 1700 stocks and the S&P 500. Value Line expects its  
5 universe of 1700 stocks to have an average yearly return of 14.47% over the next  
6 three to five years based on a forecasted dividend yield of 2.00% and a yearly  
7 index appreciation of 60%. The S&P 500 index is expected to have an average  
8 yearly return of 15.29% over the next five years based upon Barron's forecasted  
9 dividend yield of 1.49% and Morningstar's average expected increase in the S&P  
10 500 index of 13.70% (I&E Exhibit No. 2, Schedule 9).

11  
12 **Q. WHAT IS THE EXPECTED RETURN ON THE OVERALL STOCK**  
13 **MARKET BASED ON YOUR FORECASTED ANALYSIS?**

14 A. The expected return on the overall market is 14.88% for my forecasted analysis  
15 (I&E Exhibit No. 2, Schedule 9).

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

19 A. The result of my analysis is as follows (I&E Exhibit No. 2, Schedule 10):

$$\begin{aligned} 20 \quad K &= R_f + \beta(R_m - R_f) \\ 21 \quad 12.28\% &= 3.15\% + 0.78(14.88\% - 3.15\%) \end{aligned}$$

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

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

9  
10 **Q. IS IT NECESSARY OR APPROPRIATE TO APPLY THE CAPM WITH**  
11 **SIMILAR WEIGHT TO THE DCF WHEN DETERMINING A SPECIFIC**  
12 **RETURN ON EQUITY DUE TO RECENT INFLATIONARY TRENDS?**

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

1 **Q. BASED ON THE WATER DEPARTMENT’S FILED RATE BASE AND**  
 2 **CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN**  
 3 **ADDITIONAL 376 BASIS POINTS TO THE COST OF EQUITY BASED**  
 4 **ON THE DIFFERENCE IN RESULTS BETWEEN YOUR CAPM**  
 5 **ANALYSIS (12.28%) AND YOUR DCF ANALYSIS (8.52%)?**

6 A. The example below illustrates the impact of 376 additional basis points to  
 7 Ambler’s cost of equity if the results of my CAPM analysis, rather than my DCF  
 8 results were applied to Ambler’s filed rate base:

<b>Borough of Ambler – Water Department</b>	
Claimed Equity Percentage of Capital Structure	50.26%
Difference in Return on Equity between I&E CAPM and DCF Analysis (12.28% - 8.52% = 3.76%)	376
Claimed Rate Base*	\$11,236,670
Total Impact (0.5026 x 0.0376 x \$11,236,670)	<u><u><b>\$212,348</b></u></u>

\*(Ambler Schedule 4, p. 1)

9  
 10 In this example, an addition of 376 basis points to the cost of equity would burden  
 11 ratepayers to fund an additional amount of \$212,348. In short, I believe it is  
 12 inappropriate to use the CAPM as the top end of a range as was done by the  
 13 Commission in the recent Aqua rate case in determining a return on equity.  
 14 Contrary to the 376 basis point spread in this proceeding as illustrated above, the  
 15 spread between the DCF and the CAPM in the Aqua case was much less

1 substantial at 99 basis points.<sup>10</sup> Any amount granted above the DCF (8.52% based  
2 on my recommendation) places an inappropriate burden on ratepayers.

3  
4 **IMPLIED TAX RATE ADJUSTMENT**

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

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

17  
18 **Q. WHAT IS YOUR RECOMMENDATION FOR THE IMPLIED TAX RATE**  
19 **ADJUSTMENT?**

20 A. I recommend that the cost of common equity be adjusted by a tax rate of 25.68%.  
21 This adjustment reduces my common equity recommendation from 8.52% to  
22 6.33% (8.52% x (1 - 25.68%)).

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

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

2 A. I have compared Moody's A-Rated monthly Municipal Bond Yields to Moody's  
3 A-Rated monthly Public Utility Bond Yields for May 2021 to April 2022. The  
4 implied tax rate for this time period ranged between 15.51% to 33.93%, with an  
5 average of 25.68% (I&E Exhibit No. 2, Schedule 11).

6  
7 **Q. PLEASE EXPLAIN WHY YOU HAVE ONLY EMPLOYED A-RATED  
8 BONDS IN YOUR IMPLIED TAX RATE ADJUSTMENT?**

9 A. I have only employed the A-Rated Bonds because Moody's only offers three  
10 different ratings categories (Aa, A, and Baa) for Public Utility Bonds. I believe it  
11 is appropriate and logical to use the middle rating to avoid any bias. Additionally,  
12 the more important comparison is between municipal bonds and public utility  
13 bonds and not the specific bond rating being used.

14  
15 **Q. WHAT TAX RATE IS MR. D'ASCENDIS RECOMMENDING FOR THIS  
16 PROCEEDING?**

17 A. Mr. D'Ascendis did not make an implied tax rate adjustment to his cost of  
18 common equity recommendation. Mr. D'Ascendis opined that there is not a  
19 difference in risk between tax exempt utilities such as Ambler and investor owned  
20 utilities. Mr. D'Ascendis stated that the required return is based on the risk and  
21 return of an investment and not the source of the funds, and therefore, there  
22 shouldn't be a difference in the return on equity. Mr. D'Ascendis continued by

1 stating that an implied tax rate adjustment violates the “law of one price” which  
2 states that in an efficient market, identical assets would have the same value. Mr.  
3 D’Ascendis relied upon technical literature including Richard A. Brealey and  
4 Stewart C. Myer’s textbook entitled “Principles of Corporate Finance” and Haim  
5 Levy and Marshall Sarnat’s textbook entitled “Capital Investments and  
6 Decisions.” Mr. D’Ascendis also asserted that in the *Bluefield* case that it is the  
7 stability and certainty and risks and uncertainties of the property, in this case the  
8 Water Department’s rate base, employed for the convenience of the public that  
9 determines the appropriate level of return where it is the Water Department’s  
10 investment risk and its operations and assets that are relevant to the appropriate  
11 rate of return for the Water Department (Ambler Statement No. 4, p. 5, line 1,  
12 through p. 7, line 8).

13  
14 **Q. HOW DO MUNICIPAL UTILITIES DIFFER FROM INVESTOR-OWNED**  
15 **UTILITIES?**

16 A. Municipalities report to their customers and the taxpayers within their jurisdiction  
17 while an investor-owned utility reports to both its customers and to its investors or  
18 owners. An investor-owned utility is expected to earn a return for its investors;  
19 however, a municipality has no investors to earn a return for. Therefore, the  
20 comparison of an investor-owned utility’s financials to those of a municipal utility  
21 is not equal.

1 **Q. ARE THERE ANY COMMISSION ORDERS WHERE THE COMMISSION**  
2 **ACCEPTED THE USE OF AN IMPLIED TAX RATE ADJUSTMENT IN**  
3 **DETERMINING A MUNICIPAL’S COST OF COMMON EQUITY?**

4 A. Yes. In the 2016 City of DuBois base rate case, the Commission adopted I&E’s  
5 implied tax rate adjustment stating that “Based upon the evidence of record, and  
6 Commission precedent, we are in agreement with the recommendation of the ALJ  
7 that adoption of the I&E methodology and resulting tax adjustment factor of  
8 18.22% is the most reasonable and appropriate on the record of this proceeding.”<sup>11</sup>

9 Additionally, in the 2010 City of Lancaster – Bureau of Water base rate  
10 case, the Commission stated the following regarding an implied tax rate  
11 adjustment:

12 As stated by the Commission in *Lancaster Sewer 2005*, 2005  
13 Pa. PUC LEXIS 44, \*148, this particular issue arises due to the  
14 fact that interest paid to municipal bond holders is exempt from  
15 taxation. Thus, a tax savings factor has been recognized based  
16 upon the premise that investors will accept a lower return in  
17 exchange for the tax exemption.<sup>12</sup>

18 The Commission also stated the following when it adopted the ALJ’s  
19 Recommended Decision that included I&E’s implied tax rate adjustment  
20 recommendation finding it to be reasonable, appropriate, and in accordance with  
21 the record evidence:

22 The ALJ recommended that the Commission adopt a tax  
23 savings adjustment, as it has done for many years in municipal  
24 utility base rate cases. *See, Lancaster Sewer 2005; Lancaster*

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<sup>11</sup> *Pa. PUC v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, p. 110 (Order entered March 28, 2017).

<sup>12</sup> *Pa. PUC v. City of Lancaster – Bureau of Water*, Docket No. R-2010-2179103, p. 81 (Order entered July 14, 2011).

1           *Water 1999; City of Bethlehem, supra.* In addition,  
2 Commonwealth Court has expressly approved utilization of a  
3 tax savings adjustment recognizing the difference in long-term  
4 bond costs for taxable bonds versus municipal or tax-free  
5 bonds, as was recommended by the OTS herein. *Lancaster*  
6 *Water 2001, supra.*

7  
8           The ALJ further recommended that the OTS 20% tax savings  
9 factor adjustment be adopted in this case. She agreed with the  
10 OTS that the City has not met its affirmative burden of proof  
11 as to the justness and reasonableness of its proposed 18% tax  
12 adjustment, but has endeavored to support its position only  
13 through critiquing other Parties' positions. According to the  
14 ALJ, this is insufficient. The ALJ found that OTS has provided  
15 sufficient support for its position and has adequately responded  
16 to the criticisms of the City. The ALJ stated that she was  
17 particularly persuaded by OTS' 20% marginal tax rate  
18 evidence and concluded that it was this tax savings rate which  
19 is the most appropriate to use. R.D. at 75. <sup>13</sup>  
20

21 **CRITIQUE OF MR. D'ASCENDIS' PROPOSED COST OF EQUITY**

22 **Q. DO YOU AGREE WITH MR. D'ASCENDIS' PROPOSED COST OF**  
23 **EQUITY?**

24 A. No. I disagree with Mr. D'Ascendis' proposed cost of equity analysis for several  
25 reasons. First, I disagree with the weights given to the results of his DCF, CAPM,  
26 RP, PRPM, and ECAPM analyses in his recommendation. Second, I disagree with  
27 the use of a proxy group of companies that are not regulated water utilities that  
28 were used in the calculation of the Water Department's cost of equity. Third, I  
29 disagree with his inclusion of a size adjustment. Finally, I disagree with his  
30 reliance on the 30-year Treasury Bond for his risk-free rate.

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<sup>13</sup> *Pa. PUC v. City of Lancaster – Bureau of Water*, Docket No. R-2010-2179103, p. 81 (Order entered July 14, 2011).

1           **WEIGHTS GIVEN TO THE CAPM AND RP METHODS**

2   **Q.   DO YOU AGREE WITH MR. D’ASCENDIS’ RELIANCE ON THE CAPM**  
3           **AND RP MODELS?**

4   A.   No. While I am not opposed to providing the Commission the results of the  
5           CAPM for a point of comparison to the results of the DCF calculation, I am  
6           opposed to giving the CAPM and RP considerable weight. For the reasons  
7           discussed above, including my reference to recent Commission orders, it is not  
8           appropriate to give the CAPM and RP models similar weight to the DCF as Mr.  
9           D’Ascendis has done in creating his recommended cost of equity range (Ambler  
10          Statement No. 4, p. 4, line 7). As discussed above, the CAPM measures the cost  
11          of equity indirectly and can be manipulated by the time period chosen. Since the  
12          RP is a simplified version of the CAPM, it suffers these same flaws. Also, as  
13          discussed in more detail below, the results of the lesser-used ECAPM and PRPM  
14          models should also be rejected. I have not used the ECAPM because it only  
15          weights the results of the CAPM in order to flatten the Security Market Line, but it  
16          does not correct the previously discussed problems with the CAPM. I have not  
17          used Mr. D’Ascendis’ Predicative Risk Premium Model, because it is not a widely  
18          accepted method and investors must have a statistical software package to use the  
19          PRPM.

1           **PREDICTIVE RISK PREMIUM MODEL**

2   **Q.    WHAT IS THE PREDICTIVE RISK PREMIUM MODEL?**

3    A.    The PRPM is a method published in August 2011 by Pauline M. Ahern, Frank J.  
4           Hanley, and Richard A. Michelfelder in the article *New Approach to Estimating*  
5           *the Cost of Common Equity Capital for Public Utilities.*<sup>14</sup> Mr. D’Ascendis’ PRPM  
6           requires Eviews<sup>®</sup> statistical software to compute (Ambler Statement No. 4, pp. 19-  
7           21).

8  
9   **Q.    DO YOU AGREE WITH MR. D’ASCENDIS’ USE OF THE PRPM?**

10   A.    No. Mr. D’Ascendis’ PRPM is not a commonly used method and cannot be  
11           evaluated or recreated without the software. I am also unaware of any state that  
12           has accepted the use of the PRPM. Finally, the PRPM does not solve the problem  
13           of the RP method because it is still an indirect measure of the cost of equity, and  
14           the PRPM complicates the RP method with the introduction of a measurement that  
15           requires the use of specialized software.

16  
17           **EMPIRICAL CAPITAL ASSET PRICING MODEL**

18   **Q.    WHAT DOES MR. D’ASCENDIS CLAIM IS THE BASIS FOR HIS USE OF**  
19           **THE ECAPM?**

20   A.    Mr. D’Ascendis opined that the Security Market Line (SML) defined by the  
21           CAPM is not as steeply sloped as the predicted SML (Ambler Statement No. 4,

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<sup>14</sup> Ahern, Pauline M., Hanley, Frank J., Michelfelder, Richard A. (December 2011, Volume 40, Issue 3). *New Approach to Estimating the Cost of Common Equity Capital for Public Utilities*. Journal of Regulatory Economics, pp. 261-278.

1 p. 30, lines 8-12). Mr. D'Ascendis used a formula to account for the systematic  
2 risk that is not accounted for with beta in the CAPM formula. This methodology,  
3 called ECAPM, uses a factor, alpha, to account for the additional systematic risk  
4 not captured by beta.

5  
6 **Q. DO YOU AGREE WITH MR. D'ASCENDIS' USE OF THE ECAPM?**

7 A. No. Although some studies indicate that the CAPM does not properly define the  
8 SML, the degree to which the CAPM would require adjustment varies widely and  
9 is dependent on the inputs used to determine the difference between the SML and  
10 actual historical figures. I was unable to find the value of alpha Mr. D'Ascendis  
11 has chosen to use to adjust the SML in either Mr. D'Ascendis' testimony or  
12 exhibits. The ECAPM attempts to add a factor, alpha, to "correct" the perceived  
13 underestimation of the cost of capital for betas lower than one but as identified in  
14 *New Regulatory Finance* by Roger A. Morin, estimations for alpha range  
15 from -9.61% to 13.56%.<sup>15</sup> This large range demonstrates the difficulty of  
16 accurately and precisely measuring the difference between what the CAPM is  
17 estimating and actual results. The use of the ECAPM in estimating the cost of  
18 capital does not increase the validity of the result but merely adds another difficult  
19 to measure factor to the CAPM. The CAPM's attempts to measure a variable that  
20 changes; the difference between a risk-free rate and the market is not a constant  
21 factor. The ECAPM attempts to correct the CAPM's inability to accurately

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<sup>15</sup> Morin, Roger A. (2006). *New Regulatory Finance*. Vienna, VA: Public Utilities Reports, Inc.

1 predict the cost of capital but does so through an additional factor that corrects  
2 none of the underlying problems of the model.

3  
4 **DOMESTIC NON-PRICE REGULATED COMPANIES**

5 **Q. DOES MR. D'ASCENDIS RELY ON ANY MARKET DATA INPUTS**  
6 **SPECIFIC TO COMPANIES THAT ARE NOT REGULATED UTILITIES?**

7 A. Yes. Mr. D'Ascendis asserted that in the *Hope* and *Bluefield* cases, the U.S.  
8 Supreme Court did not specify that comparable risk companies had to be utilities.  
9 Consequently, he assembled a proxy group consisting of 25 non-price regulated  
10 firms which he asserts are comparable in terms of total risk to the Utility Proxy  
11 Group (Ambler Statement No. 4, pp. 36-37). After forming his proxy group of 25  
12 non-price regulated firms, Mr. D'Ascendis calculated common equity costs with  
13 data inputs specific to these companies using the DCF, RP, and CAPM methods  
14 (Ambler Schedule DWD-8). The average of the mean and median results of these  
15 analyses of 11.87% was incorporated into Mr. D'Ascendis' final calculation of the  
16 Water Department's return on equity of 10.75% (Ambler Schedule DWD-1, p. 2).

17  
18 **Q. DO YOU AGREE WITH MR. D'ASCENDIS' APPROACH OF USING THE**  
19 **MARKET DATA OF NON-UTILITY COMPANIES TO CALCULATE**  
20 **AMBLER'S RETURN ON EQUITY?**

21 A. No. The process of choosing a proxy group of non-utility companies similar in  
22 risk to Ambler is highly speculative and subjective. In effect, Mr. D'Ascendis  
23 blends the CE approach into the DCF, RP, and CAPM models. As stated earlier,

1 the Commission has ruled on the use of the CE approach, specifically, the use of  
2 non-utility companies in comparable groups, and stated,

3 The use of nonregulated companies as a comparable group for  
4 regulated firms requires numerous unsupported assumptions which  
5 results in a highly speculative finding.<sup>16</sup>

6 Additionally, in the UGI Electric case, the Commission made the following  
7 comments regarding the CE method, specifically, the use of non-utility companies  
8 in comparable groups, and stated,<sup>17</sup>

9 With respect to the CE method, as noted above, this cost of equity  
10 method utilizes data for non-regulated firms. Thus, by its very nature,  
11 determining which companies are comparable is entirely subjective.  
12 In addition, the record indicates that the companies UGI utilized in its  
13 CE group results in the selection of companies such as Coca-Cola  
14 Company, Kellogg Company, and Walmart Stores, Inc.....Each of  
15 these companies operate in industries that are very different from a  
16 utility company and have significantly more competition, which  
17 would require a higher return for the associated additional risk.

18 If the non-price regulated company proxy group is truly similar in total risk to  
19 Ambler, I would expect to see similar results in the calculation of the DCF, RP,  
20 and CAPM between the Water Utility and Non-Price Regulated Company proxy  
21 groups used by Mr. D’Ascendis. However, two of the three Non-Price Regulated  
22 Company proxy groups results were higher. This clearly demonstrates the  
23 Commission’s ruling that “the use of non-regulated companies as a comparable  
24 group for regulated firms .... results in a highly speculative finding.”

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<sup>16</sup> *Pennsylvania Public Utility Commission v. Philadelphia Electric Co.* 33 PUR 4<sup>th</sup> 319, 341 (Pa PUC 1980).

<sup>17</sup> *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order entered October 25, 2018), p. 105. The Commission has also ruled “[t]he use of nonregulated companies as a comparable group for regulated firms requires numerous unsupported assumptions which results in a highly speculative finding.” *Pennsylvania Public Utility Commission v. Philadelphia Electric Co.* 33 PUR 4<sup>th</sup> 319, 341 (Pa PUC 1980).

1           **SIZE ADJUSTMENT**

2   **Q.   WHAT SIZE ADJUSTMENT HAS MR. D’ASCENDIS PROPOSED?**

3   A.   Mr. D’Ascendis added 100 basis points to his cost of common equity because he  
4       opined that smaller companies are less able to cope with significant events  
5       affecting sales, revenues, or earnings. He further stated that the loss of revenue  
6       from a few larger customers would have a greater effect on a small company. Mr.  
7       D’Ascendis relied upon technical literature including Duff & Phelps’ 2020  
8       Valuation Handbook – U.S. Guide to Cost of Capital (D&P – 2020), a Fama and  
9       French study entitled “The Capital Asset Pricing Model: Theory & Evidence” and  
10      Professor Eugene Brigham’s textbook entitled “Fundamentals of Finance  
11      Management.” Mr. D’Ascendis quantified his size adjustment based on size  
12      premiums for portfolios of New York Stock Exchange, American Stock Exchange,  
13      and NASDAQ listed companies ranked by deciles for the 1926 to 2019 period.  
14      While Mr. D’Ascendis’ proxy group companies fell in the 5<sup>th</sup> decile, he asserted  
15      that Ambler fell in the 10<sup>th</sup> decile for size. He stated that while this indicates an  
16      upward equity risk premium adjustment of 392 basis points, he chose an upward  
17      adjustment of 100 basis points. Finally, Mr. D’Ascendis points to a 2019  
18      Commission order where the Commission considered a size adjustment (Ambler  
19      Statement No. 4, pp. 38-42).

1 **Q. BASED ON THE WATER DEPARTMENT’S FILED RATE BASE AND**  
2 **CLAIMED CAPITAL STRUCTURE, WHAT IS THE VALUE OF AN**  
3 **ADDITIONAL 100 BASIS POINTS TO THE COST OF EQUITY?**

4 A. The example below illustrates the impact of 100 additional basis points to the  
5 Water Department’s cost of equity:

<b>Borough of Ambler – Water Department</b>	
Claimed Equity Percentage of Capital Structure	50.26%
Additional Basis Points to Calculated Cost of Equity	100
Claimed Rate Base*	\$11,236,670
Total Impact (0.5026 x 0.0100 x \$11,236,670)	<u><u>\$56,476</u></u>

\*(Ambler Schedule 4, p. 1)

6

7 In this example, an addition of 100 basis points to the cost of equity would force  
8 ratepayers to fund an unwarranted additional amount of \$56,476.

9

10 **Q. DO YOU AGREE WITH MR. D’ASCENDIS’ SIZE ADJUSTMENT?**

11 A. No. Mr. D’Ascendis’ proposed size adjustment is unnecessary because the  
12 technical literature he cited supporting investment adjustments related to the size  
13 of a company is not specific to the utility industry; therefore, it has no relevance in  
14 this proceeding.

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

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

6 The objective of this study is to examine if the size effect exists in the  
7 utility industry. After controlling for equity values, there is some  
8 weak evidence that firm size is a missing factor from the CAPM for  
9 the industrial but not for utility stocks. This implies that although the  
10 size phenomenon has been strongly documented for the industriales,  
11 the findings suggest that there is no need to adjust for the firm size in  
12 utility rate regulation.<sup>18</sup>

13 Ambler has presented no evidence to support application of a non-utility study  
14 regarding a size adjustment for risk to a utility setting. Absent any credible article  
15 to refute Dr. Wong’s findings, Mr. D’Ascendis’ size adjustment to his cost of  
16 common equity results should be rejected. Furthermore, the Commission has  
17 rejected the application of a size adjustment to the cost of equity calculation.<sup>19</sup>

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<sup>18</sup> Dr. Annie Wong, “Utility Stocks and the Size Effect: An Empirical Analysis,” *Journal of Midwest Finance Association* 1993, pp. 95-101.

<sup>19</sup> *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 100.

1 **Q. DID THE COMMISSION AWARD A SIZE ADJUSTMENT IN THE**  
2 **REFERENCED COMMISSION ORDER FOR CITIZENS' ELECTRIC**  
3 **COMPANY?**

4 A. No. The Commission did not, in fact, award an explicit 100-basis point size  
5 adjustment as the Commission determined that there was not enough evidence as  
6 to whether size is specifically a risk for utilities,

7 Consistent with the foregoing discussion, like the ALJs, we shall not  
8 specify an exact size adjustment. Instead, we shall adopt the ALJs'  
9 recommendation that Citizens' be awarded a DCF cost of common  
10 equity of 9.49%. In our view, this cost of equity is reasonable and  
11 strikes an appropriate balance by recognizing the general inverse  
12 relationship between a company's size and its risk, while  
13 acknowledging that there is not substantial evidence in the record to  
14 prove that an explicit size basis point adjustment is warranted in this  
15 case.<sup>20</sup>  
16

17 **RISK-FREE RATE**

18 **Q. WHAT RISK-FREE RATE DID MR. D'ASCENDIS USE IN HIS RP AND**  
19 **CAPM MODELS?**

20 A. Mr. D'Ascendis calculated his risk-free rate of 2.74% by using the 30-year  
21 Treasury Bonds (Ambler Statement No. 4, p. 33, lines 1-6).

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<sup>20</sup> *Pa. PUC v. Citizens Electric Company of Lewisburg, PA*; Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 103-104.

1 **Q. DO YOU AGREE WITH MR. D’ASCENDIS’ USE OF THE 30-YEAR**  
2 **TREASURY BOND TO DETERMINE THE RISK-FREE RATE?**

3 A. No. As discussed above, long-term Treasury Bonds have substantial maturity risk  
4 associated with the market risk and the risk of unexpected inflation and normally  
5 offer higher yields to compensate investors for these risks. Using the 10-year  
6 Treasury Note is more appropriate to balance the short-term volatility risk and the  
7 long-term inflation risk.

8

9 **OVERALL RATE OF RETURN RECOMMENDATION**

10 **Q. WHAT IS THE WATER DEPARTMENT’S PROPOSED OVERALL RATE**  
11 **OF RETURN?**

12 A. The Water Department’s proposed overall rate of return is 6.54%, which does not  
13 include a tax adjustment to the cost of equity (Ambler Statement No. 4, p. 3,  
14 line 8).

15

16 **Q. WHAT IS I&E’S RECOMMENDED OVERALL RATE OF RETURN?**

17 A. I recommend an overall rate of return for the Water Department of 4.07%, which  
18 includes a tax adjustment to the cost of equity (I&E Exhibit No. 2, Schedule 1).

1 **Q. DO YOU HAVE ANY FINAL COMMENTS REGARDING THE WATER**  
2 **DEPARTMENT’S PROPOSED RETURN ON EQUITY?**

3 A. Yes. First, a report issued by Regulatory Research Associates, a group within  
4 S&P Global Market Intelligence,<sup>21</sup> illustrates that while the return on equity for  
5 water utilities may be trending upward in 2022, Ambler’s 10.75% requested return  
6 on equity is a significant 122 basis points higher than the average return on equity  
7 of 9.53% of nationwide water utility rate cases for the past twelve months ended  
8 April 30, 2022 and 129 basis points higher than the average return on equity of  
9 9.46% of nationwide water utility rate cases for 2021.

10 Second, when asked, Mr. D’Ascendis indicated he was unaware if any  
11 water utilities throughout the United States were granted a Commission authorized  
12 return of 10.75% or higher cost of common equity in the past two years (I&E  
13 Exhibit No. 2, Schedule 12).

14 Third, as discussed earlier in my testimony, Ambler’s requested return on  
15 common equity is 95 basis points higher than the Commission’s approved DSIC  
16 rate of 9.80%<sup>22</sup> for water and wastewater companies. My understanding is that the  
17 DSIC rate is designed to encourage its use and to incentivize accelerated pipeline  
18 replacement and infrastructure upgrades to bring the existing aging infrastructure  
19 closer to meeting safety and reliability requirements in between base rate filings.

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<sup>21</sup> Regulatory Research Associates, “Pa. generic ROE drops for gas utilities, stable for electric and water utilities,” *S&P Global Market Intelligence*, June 17, 2022.

<sup>22</sup> PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended December 31, 2021, p. 27, approved at Public Meeting on June 16, 2022 at Docket No. M-2022-3032405.

1           Additionally, the DSIC rate establishes a benchmark above which a utility  
2           company is considered “overearning.” To recommend a cost of equity that is  
3           above the DSIC rate in this base rate proceeding is inappropriate and not in the  
4           public interest.

5                       Finally, while I am aware of the rising costs of capital due to the after-  
6           effects of the pandemic and increasing levels of inflation, I believe it is important  
7           not to overburden ratepayers. While the economy is in decline, Ambler is  
8           requesting a record return on equity to apply to its capital structure.

9

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

11   A.    Yes.

**Professional and Educational Experience**  
**Christopher Keller**

**Professional Experience**

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

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

**Education and Training**

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

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

**Testimony Submitted**

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

- Docket No. R-2022-3032242 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2022-3031211 – Columbia Gas of Pennsylvania, Inc. (ROR)
- Docket No. A-2021-3026132 – Aqua Pennsylvania Wastewater, Inc. – Acquisition of the Wastewater Collection and Conveyance System Assets of East Whiteland Township (1329)
- Docket No. P-2021-3030012 – Metropolitan Edison Company (DSP)
- Docket No. P-2021-3030013 – Pennsylvania Electric Company (DSP)
- Docket No. P-2021-3030014 – Pennsylvania Power Company (DSP)
- Docket No. P-2021-3030021 – West Penn Power Company (DSP)
- Docket No. R-2021-3026116 – Borough of Hanover – Water (ROR)
- Docket No. R-2021-3025206 – Community Utilities of Pennsylvania – Water Division (ROR)
- Docket No. R-2021-3025207 – Community Utilities of Pennsylvania – Wastewater Division (ROR)
- Docket No. R-2021-3025652 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2021-3024750 – Duquesne Light Company (O&M and ROR)
- Docket No. R-2021-3024296 – Columbia Gas of Pennsylvania, Inc. (ROR)

**Professional and Educational Experience**  
**Christopher Keller**

**Testimony Submitted (Continued)**

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

- Docket No. R-2020-3018929 – PECO Energy Company – Gas Division (ROR)
- Docket No. P-2020-3020914 – Twin Lakes Utilities, Inc. (529 Proceeding)
- Docket No. R-2020-3018835 – Columbia Gas of Pennsylvania, Inc. (ROR)
- Docket No. R-2020-3019680 – UGI Utilities, Inc. (1307(f))
- Docket No. P-2020-3019356 – PPL Electric Utilities Corporation (DSP)
- Docket No. R-2019-3015162 – UGI Utilities, Inc. – Gas Division (ROR)
- Docket No. R-2019-3010955 – City of Lancaster – Sewer Fund (O&M)
- Docket No. R-2019-3009647 – UGI Utilities, Inc. – Gas Division (1307(f))
- Docket No. R-2018-3006818 – Peoples Natural Gas Company LLC (O&M)
- Docket No. R-2018-3000124 – Duquesne Light Company (O&M)
- Docket No. R-2018-3001631 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2018-3001632 – UGI Penn Natural Gas, Inc. (1307(f))
- Docket No. R-2018-3001633 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2018-2645938 – Philadelphia Gas Works (1307(f))
- Docket No. P-2017-2637855 – Metropolitan Edison Company (DSP)
- Docket No. P-2017-2637857 – Pennsylvania Electric Company (DSP)
- Docket No. P-2017-2637858 – Pennsylvania Power Company (DSP)
- Docket No. P-2017-2637866 – West Penn Power Company (DSP)
- Docket No. R-2017-2602627 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2017-2602638 – UGI Utilities, Inc. (1307(f))
- Docket No. R-2017-2586783 – Philadelphia Gas Works (O&M)
- Docket No. R-2017-2587526 – Philadelphia Gas Works (1307(f))
- Docket No. I-2016-2526085 – Delaware Sewer Company (529 Proceeding)
- Docket No. R-2016-2531550 – Citizens’ Electric Company (O&M)
- Docket No. R-2016-2531551 – Wellsboro Electric Company (O&M)
- Docket No. R-2016-2537349 – Metropolitan Edison Company (CWC and CAP)
- Docket No. R-2016-2537352 – Pennsylvania Electric Company (CWC and CAP)
- Docket No. R-2016-2537355 – Pennsylvania Power Company (CWC and CAP)
- Docket No. R-2016-2537359 – West Penn Power Company (CWC and CAP)
- Docket No. R-2016-2543311 – UGI Central Penn Gas, Inc. (1307(f))
- Docket No. R-2015-2518438 – UGI Utilities, Inc. – Gas Division (CWC and USP)
- Docket No. P-2015-2511333 – Metropolitan Edison Company (DSP)
- Docket No. P-2015-2511351 – Pennsylvania Electric Company (DSP)
- Docket No. P-2015-2511355 – Pennsylvania Power Company (DSP)
- Docket No. P-2015-2511356 – West Penn Power Company (DSP)
- Docket No. R-2015-2468056 – Columbia Gas of Pennsylvania, Inc. (O&M)

**Professional and Educational Experience**  
**Christopher Keller**

**Testimony Submitted (Continued)**

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

**Assisted with the Following Cases**

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

**I&E Exhibit No. 2**  
**Witness: Christopher Keller**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Exhibit to Accompany**

**the**

**Direct Testimony**

**of**

**Christopher Keller**

**Bureau of Investigation and Enforcement**

**Concerning:**

**Rate of Return**

**I&E (Before Tax Adjustment)  
Summary of Cost of Capital**

Type of Capital	Ratio	Cost Rate	Weighted Cost
Borough of Ambler - Water Department			
Long-Term Debt	57.00%	2.36%	1.35%
Common Equity	43.00%	8.52%	3.66%
Total	100.00%		5.01%

**I&E (With Tax Adjustment)  
Summary of Cost of Capital**

Type of Capital	Ratio	Cost Rate	Weighted Cost
Borough of Ambler - Water Department			
Long-Term Debt	57.00%	2.36%	1.35%
Common Equity	43.00%	6.33%	2.72%
Total	100.00%		4.07%

	8.52	
Tax Adjustment	<u>(2.19)</u>	8.52 X 25.68%
	<u>6.33</u>	

Proxy Group Capital Structure

	2021		2020		2019		2018		2017		Average	
<b>American Water Works</b>												
Long-term Debt	\$ 10,424,000	58.82%	\$ 9,414,000	59.33%	\$ 8,733,000	58.79%	\$ 7,576,000	56.37%	\$ 6,498,000	54.68%	57.60%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	7,298,000	41.18%	6,454,000	40.67%	6,121,000	41.21%	5,864,000	43.63%	5,385,000	45.32%	42.40%	
	17,722,000	100.00%	15,868,000	100.00%	14,854,000	100.00%	13,440,000	100.00%	11,883,000	100.00%	100.00%	
<b>American States Water Co</b>												
Long-term Debt	595,596	46.47%	584,184	47.66%	492,735	45.03%	376,587	40.28%	321,039	37.73%	43.43%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	685,947	53.53%	641,673	52.34%	601,530	54.97%	558,223	59.72%	529,945	62.27%	56.57%	
	1,281,543	100.00%	1,225,857	100.00%	1,094,265	100.00%	934,810	100.00%	850,984	100.00%	100.00%	
<b>California Water Service Group</b>												
Long-term Debt	1,069,395	47.59%	794,968	46.32%	799,682	50.63%	710,027	49.30%	515,793	42.65%	47.30%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	1,177,594	52.41%	921,344	53.68%	779,906	49.37%	730,157	50.70%	693,462	57.35%	52.70%	
	2,246,989	100.00%	1,716,312	100.00%	1,579,588	100.00%	1,440,184	100.00%	1,209,255	100.00%	100.00%	
<b>Middlesex Water Co</b>												
Long-term Debt	310,887	45.67%	278,286	44.41%	236,509	42.05%	152,851	37.83%	139,045	37.51%	41.50%	
Preferred Stock	2,084	0.31%	2,084	0.33%	2,084	0.37%	2,433	0.60%	2,433	0.66%	0.45%	
Common Equity	367,726	54.02%	346,208	55.25%	323,792	57.57%	248,787	61.57%	229,175	61.83%	58.05%	
	680,697	100.00%	626,578	100.00%	562,385	100.00%	404,071	100.00%	370,653	100.00%	100.00%	
<b>SJW Group</b>												
Long-term Debt	1,492,935	59.07%	1,287,580	58.40%	1,283,597	59.05%	431,424	32.67%	431,092	48.20%	51.48%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	1,034,519	40.93%	917,160	41.60%	889,984	40.95%	889,312	67.33%	463,209	51.80%	48.52%	
	2,527,454	100.00%	2,204,740	100.00%	2,173,581	100.00%	1,320,736	100.00%	894,301	100.00%	100.00%	
<b>Essential Utilities</b>												
Long-term Debt	5,827,734	52.92%	5,563,386	54.29%	2,954,972	43.23%	2,398,464	54.41%	2,007,753	50.63%	51.10%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	5,184,450	47.08%	4,683,877	45.71%	3,880,860	56.77%	2,009,364	45.59%	1,957,621	49.37%	48.90%	
	11,012,184	100.00%	10,247,263	100.00%	6,835,832	100.00%	4,407,828	100.00%	3,965,374	100.00%	100.00%	
<b>York Water Company</b>												
Long-term Debt	138,869	47.64%	123,573	46.31%	94,535	41.33%	93,328	42.51%	90,098	43.01%	44.16%	
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%	
Common Equity	152,622	52.36%	143,252	53.69%	134,185	58.67%	126,195	57.49%	119,405	56.99%	55.84%	
	291,491	100.00%	266,825	100.00%	228,720	100.00%	219,523	100.00%	209,503	100.00%	100.00%	
<b>Five-Year Average Capital Structure</b>												
Long-term Debt	48.08%		Maximum	57.60%	Minimum	41.50%						
Preferred Stock	0.06%											
Common Equity	51.85%		Minimum	42.40%	Maximum	58.05%						
	100.00%											

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

Accessed on May 12, 2022

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

Source:

Compustat (S&P Global Market Intelligence - Data Management Solutions)

Yearly data updates typically provided late April of each year

(data in millions)

Accessed on May 12, 2022

**Dividend Yields of Seven Company Proxy Group**

<b>Company</b>	<b>American Water Works</b>	<b>American States Water Co</b>	<b>California Water Service Group</b>	<b>Middlesex Water Co</b>	<b>SJW Group</b>	<b>Essential Utilities</b>	<b>York Water Company</b>
<i>Symbol</i>	<i>AWK</i>	<i>AWR</i>	<i>CWT</i>	<i>MSEX</i>	<i>SJW</i>	<i>WTRG</i>	<i>YORW</i>
Div	2.80	1.65	1.08	1.25	1.52	1.25	0.83
52-wk low	142.63	74.77	49.84	77.84	57.17	42.03	38.10
52-wk high	189.65	103.77	72.08	121.43	73.69	53.93	53.77
Spot Price	144.04	75.79	50.33	88.34	59.42	42.87	39.96
Spot Div Yield	1.94%	2.18%	2.15%	1.41%	2.56%	2.92%	2.08%
52-wk Div Yield	1.69%	1.85%	1.77%	1.25%	2.32%	2.61%	1.81%
<b>Average</b>	<b>1.81%</b>	<b>2.01%</b>	<b>1.96%</b>	<b>1.33%</b>	<b>2.44%</b>	<b>2.76%</b>	<b>1.94%</b>

	<u><b>Average</b></u>
Spot Div Yield	<u><b>2.18%</b></u>
52-wk Div Yield	<u><b>1.90%</b></u>
Average	<u><b>2.04%</b></u>

**Source:** Barrons Value Line      May 12, 2022  
 April 8, 2022

**Five-Year Growth Estimate Forecast for Seven Company Proxy Group**

Company	Symbol	Yahoo	Zacks	Morningstar	Value Line	Average
		Source				
American Water Works	AWK	8.20%	8.10%	7.80%	7.50%	7.90%
American States Water Co	AWR	6.70%	NA	4.40%	5.50%	5.53%
California Water Service Group	CWT	11.70%	NA	2.10%	6.50%	6.77%
Middlesex Water Co	MSEX	2.70%	NA	NA	4.50%	3.60%
SJW Group	SJW	5.70%	NA	7.90%	14.00%	9.20%
Essential Utilities	WTRG	6.40%	6.10%	7.20%	10.00%	7.43%
York Water Company	YORW	4.90%	NA	NA	5.00%	4.95%
<b>Average</b>						<b>6.48%</b>

**Sources date:**

( From Internet )

April 8, 2022 and May 12, 2022

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

---

<u>Time Period</u>	<u>Adjusted Dividend Yield</u> (1)	<u>Growth Rate</u> (2)	<u>Expected Return on Equity</u> (3=1+2)
(1) <b>52-Week Average</b> Ending: May 12, 2022	1.90%	6.48%	8.38%
(2) <b>Spot Price</b> Ending: May 12, 2022	<u>2.18%</u>	<u>6.48%</u>	<u>8.66%</u>
(3) <b>Average:</b>	<u><b>2.04%</b></u>	<u><b>6.48%</b></u>	<u><b>8.52%</b></u>

**Sources:** Value Line April 8, 2022  
Barrons May 12, 2022

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

**Source:**

Value Line

April 8, 2022

<b>Risk-Free Rate</b> <b><u>Treasury note 10-yr Note</u></b>	<b><u>Yield</u></b>
3Q 2022	3.00
4Q 2022	3.10
1Q 2023	3.30
2Q 2023	3.30
3Q 2023	3.30
2023-2027	2.90
<b>Average</b>	<b><u><u>3.15</u></u></b>

**Source:**  
Blue Chip  
December 1, 2021 and April 29, 2022

**Required Rate of Return on Market as a Whole Forecasted**

---

	<u>Dividend Yield</u>	+	<u>Growth Rate</u>	=	<u>Expected Market Return</u>
<b>Value Line Estimate</b>	2.00%		12.47%	(a)	14.47%
<b>S&amp;P 500</b>	1.59%	(b)	13.70%		15.29%
<b>Average Expected Market Return</b>				=	<u>14.88%</u>

(a)  $((1+60\%)^{.25} - 1)$  Value Line forecast for the 3 to 5 year index appreciation is 60%

(b) S&P 500 dividend yield multiplied by half the S&P 500 growth rate

(b)  $1.49\% * ((1+13.70\%/2)) = 1.59\%$

**Sources:**

S&P 500 Growth Rate (Morningstar)	5/12/2022	13.70%
S&P 500 Dividend Yield (Barrons)	5/6/2022	1.49%
Value Line Dividend Yield	5/13/2022	2.00%
Value Line Appreciation Yield	5/13/2022	60.00%

**CAPM with Forecasted Return**

---

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

$$\mathbf{Re} = Rf + Be(Rm - Rf)$$

$$\mathbf{Rf} = 3.15$$

$$\mathbf{Rm} = 14.88$$

$$\mathbf{Be} = 0.78$$

$$\mathbf{Re} = \underline{\underline{12.28}}$$

**Sources:** Value Line April 8, 2022  
Blue Chip December 1, 2021 and April 29, 2022

**Borough of Ambler - Water Department**  
**Municipal Tax Adjustment**  
**Moody's A-Rated Bonds**

Mergent Bond Record	Average Municipal Bond Yields	Average Public Utility Bond Yields	Implied Tax Rate
	(M)	(P)	$1 - [(M)/(P)]$
May-21	2.20%	3.33%	33.93%
Jun-21	2.14%	3.16%	32.28%
Jul-21	2.16%	2.95%	26.78%
Aug-21	2.21%	2.95%	25.08%
Sep-21	2.25%	2.96%	23.99%
Oct-21	2.44%	3.09%	21.04%
Nov-21	2.20%	3.02%	27.15%
Dec-21	2.18%	3.13%	30.35%
Jan-22	2.48%	3.33%	25.53%
Feb-22	2.70%	3.68%	26.63%
Mar-22	3.19%	3.98%	19.85%
Apr-22	3.65%	4.32%	15.51%
<b>Average:</b>	<b>2.48%</b>	<b>3.33%</b>	<b>25.68%</b>
<b>Range:</b>	2.14%	2.95%	27.46%
	to	to	to
	<b>3.65%</b>	<b>4.32%</b>	<b>15.51%</b>

**Source:** Mergent Bond Record (May 2022)

**BOROUGH OF AMBLER – WATER DEPARTMENT’S RESPONSES  
TO BUREAU OF INVESTIGATION AND ENFORCEMENT DATA REQUESTS**

**DOCKET NO. R-2022-3031704**

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**I&E-RR-10**

Reference Ambler Statement No.4, page 42, lines 25-26:

- A. State whether Mr. D’Ascendis is aware of any water distribution utilities throughout the United States that have been granted a Commission authorized 10.75% or higher cost of common equity in the past two years.
- B. If the response to Part A is yes, identify which company/companies have been authorized such cost of common equity, in what jurisdiction, and docket numbers associated with each instance.

**Response:**

- A. Mr. D’Ascendis is not aware of any water distribution utilities throughout the United States that have been granted a Commission authorized 10.75% or higher cost of common equity in the past two years. Mr. D’Ascendis limited his review to decisions provided by Regulatory Research Associates which only covers rate cases in which the company has requested a rate change of at least \$1 million.
- B. N/A.

**Response Provided by: Dylan W. D’Ascendis, Partner  
ScottMadden, Inc.**

**Date: June 23, 2022**

**I&E Statement No. 3  
Witness: Joseph Kubas**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – BUREAU OF WATER**

**Docket No. R-2022-3031704**

**Direct Testimony**

**of**

**Joseph Kubas**

**Bureau of Investigation and Enforcement**

**Concerning:**

**Rate Base  
Annual Depreciation Expense  
Reporting Requirements  
Cost of Service Issue  
Scale Back of Rates**

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1 **INTRODUCTION**

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

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

5

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

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

10

11 **Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT EXPERIENCE?**

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

14

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

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

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

2 A. The purpose of my testimony is to evaluate the Borough of Ambler’s – Bureau of  
3 Water (“Ambler” or “Water Department”) request for a total annual increase in  
4 operating revenue of \$930,768, of which \$637,691 is from jurisdictional  
5 customers living outside the Borough, using a fully projected future test year  
6 (“FPFTY”) of September 30, 2023 (Ambler St. No. 2, p. 3). My testimony will  
7 address issues related to the rate base, including Contributions in Aid of  
8 Construction, annual depreciation expense, reporting requirements, a cost of  
9 service issue, and the scale back of rates.

10

11 **Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?**

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

13

14 **RATE BASE**

15 **Q. WHAT IS RATE BASE?**

16 A. Rate base is the depreciated original cost of a utility’s investment in plant that is in  
17 place to serve customers plus other additions and deductions that the Commission  
18 deems necessary in order to keep the utility operating and providing safe and  
19 reliable service to its customers.

20

21 **Q. HOW IS RATE BASE USED IN THE RATEMAKING FORMULA?**

22 A. Rate base is one part of the financial equation used by the Commission to

1 determine the appropriate revenue that a utility is granted in a rate proceeding.  
2 The revenue determination allows the utility to meet its expense obligations and  
3 gives it the opportunity to earn the rate of return established by the Commission in  
4 a rate proceeding. The equation used to determine the proper revenue requirement  
5 is:

$$\begin{aligned} & \text{Revenue Requirement} = (\text{Rate Base} \times \text{Rate of Return}) + \text{Operating} \\ & \text{Expenses} + \text{Depreciation Expense} + \text{Taxes} \end{aligned}$$

8  
9 **Q. HOW DOES THE WATER DEPARTMENT CALCULATE ITS RATE**  
10 **BASE CLAIM?**

11 A. The Water Department's FPFTY rate base claim of \$11,236,670 includes  
12 depreciated original cost plant in service plus the addition of Cash Working  
13 Capital as shown on Ambler Schedule 4, p. 1.

14  
15 **Q. HOW IS DEPRECIATED ORIGINAL COST PLANT IN SERVICE**  
16 **CALCULATED?**

17 A. The depreciated original cost plant in service is determined by subtracting the  
18 book reserve, which is the accumulation of all prior annual depreciation expense,  
19 and other items such as salvage value from the original cost of the plant in service  
20 that is projected to be used and useful in the public service. The depreciated  
21 original cost of the plant in service is determined by taking a "snapshot" look at

1 the depreciated original cost value of used and useful utility plant expected to be in  
2 service at the end of the FPPTY.

3  
4 **CONTRIBUTIONS IN AID OF CONSTRUCTION**

5 **Q. WHAT ARE CONTRIBUTIONS IN AID OF CONSTRUCTION (“CIAC”)**  
6 **AND HOW ARE THEY REFLECTED IN THE FILING?**

7 A. CIAC refers to plant paid for by developers or customers then transferred to the  
8 Borough. The net value (original cost less accrued) is subtracted from rate base so  
9 that does not earn a return on the contributed plant.

10  
11 **Q. DID THE WATER DEPARTMENT REFLECT ANY CIAC IN THE LAST**  
12 **BASE RATE CASE?**

13 A. Yes. Ambler reflected \$2,926,495 of original cost CIAC in the last base rate case  
14 at Docket R-2014-2400003.

15  
16 **Q. DID AMBLER REFLECT ANY CIAC IN THIS BASE RATE CASE?**

17 A. No. There was no specific mention of CIAC.

18  
19 **Q. DID YOU ASK WHY IT DID NOT REFLECT ANY CIAC IN THE**  
20 **CURRENT BASE RATE CASE?**

21 A. Yes. Ambler’s response to I&E-RB-18 indicates that some of the CIAC was  
22 netted against the original cost of the plant reflected in the original filing.

1           However, the Water Department admitted that its rate base should be reduced by  
2           \$373,638 to reflect a correction to the CIAC (I&E Ex. No. 3, Sch. 2).

3  
4   **Q.    DID YOU ACCEPT THE CORRECTION PROVIDED IN THE RESPONSE**  
5   **TO I&E-RB-18?**

6   A.    Yes. Therefore, to reflect this correction, I prepared I&E Ex. No. 3, Schedule 1, p.  
7           1 showing the \$373,638 reduction to rate base. As a result of this \$373,638  
8           reduction, rate base should be reduced to \$10,863,032 (I&E Ex. No. 3, Sch. 1, p.  
9           1, column C, line 7).

10  
11   **ANNUAL DEPRECIATION EXPENSE**

12   **Q.    WHAT IS ANNUAL DEPRECIATION EXPENSE?**

13   A.    Annual depreciation expense is an operating expense. It represents the loss of  
14           service value of plant over the life of the plant.

15  
16   **Q.    WHAT ANNUAL DEPRECIATION EXPENSE IS AMBLER CLAIMING**  
17   **FOR THE FPFTY?**

18   A.    Ambler is claiming \$275,744 of annual depreciation expense for the FPFTY  
19           ending September 30, 2023 (Ambler Sch. 1, p. 1, line 10 and I&E Ex. No. 3, Sch.  
20           1, p. 1, line 3, column A).

1 **Q. DID THE WATER DEPARTMENT REVISE ITS CLAIM FOR ANNUAL**  
2 **DEPRECIATION EXPENSE IN THE RESPONSE TO I&E-RB-18?**

3 A. Yes. Ambler indicated in its response that depreciation expense should be reduced  
4 by \$13,959 (I&E Ex. No. 3, Sch. 2).

5  
6 **Q. IS THE REVISED CLAIM FOR ANNUAL DEPRECIATION EXPENSE IN**  
7 **THE RESPONSE TO I&E-RB-18 REASONABLE?**

8 A. Yes. Therefore, to reflect this correction, I prepared I&E Ex. No. 3, Schedule 1, p.  
9 2, columns B and C showing the \$13,959 reduction to annual depreciation  
10 expense. As a result of this \$13,959 reduction to annual depreciation expense,  
11 annual depreciation expense should be reduced to \$261,785 (I&E Ex. No. 3, Sch.  
12 1, p. 2, column C, line 3).

13

14 **FTY AND FPFTY REPORTING**

15 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING PLANT**  
16 **ADDITIONS THAT THE WATER DEPARTMENT PROJECTS TO BE IN**  
17 **SERVICE DURING THE FTY ENDING SEPTEMBER 30, 2022 AND THE**  
18 **FPFTY ENDING SEPTEMBER 30, 2023?**

19 A. Yes. I recommend that the Water Department provide the Commission Bureau of  
20 Investigation and Enforcement and the Office of Consumer Advocate with an  
21 update to Tables 2 and 3 of Ambler Exhibit JJS-2, no later than January 1, 2023,  
22 which should include actual capital expenditures, plant additions, and retirements

1 for the twelve months ending September 30, 2022. I also recommend an  
2 additional update to Tables 2 and 3 of Ambler Exhibit JJS-3 no later than January  
3 1, 2024, which should include actual capital expenditures, plant additions, and  
4 retirements for the twelve months ending September 30, 2023.

5  
6 **Q. WHY DO YOU RECOMMEND THAT THE WATER DEPARTMENT**  
7 **PROVIDE THESE UPDATES?**

8 A. Through use of the FPFTY, a utility is allowed to require ratepayers to pre-pay a  
9 return on a utility's projected investment in future facilities that are not in place  
10 and providing service at the time the new rates take effect and are not subject to  
11 any guarantee of being completed and placed into service. While the FPFTY  
12 provides for such projections, there should be some timely verification of the  
13 projections.

14  
15 **COST OF SERVICE ISSUE**

16 **Q. WHAT IS A COST OF SERVICE STUDY (COSS)?**

17 A. A COSS is an analyses of a company's revenues, expenses, return, and taxes. In the  
18 analysis, these items are assigned or allocated to various rate classes such as  
19 Residential, Commercial, and Industrial to determine if the revenue received from  
20 each class is equal to, more than, or less than the corresponding cost of providing  
21 service to that class. It can include a customer cost analysis that determines the  
22 monthly fixed cost incurred to provide service to the various classes.

1 **Q. DID AMBLER PROVIDE A COSS IN THIS PROCEEDING?**

2 A. No. However, according to Ambler's response to I&E-RS-11, it singled out 100%  
3 of the \$113,000 in rate case expenses to customers outside of the Borough.

4  
5 **Q. HOW DOES AMBLER PROPOSE TO RECOVER RATE CASE EXPENSE**  
6 **IN THIS PROCEEDING?**

7 A. Ambler divided the \$113,000 of rate case expense into the volumes sold outside  
8 the Borough to calculate the additional cost to customers outside the Borough.  
9 Specifically, Ambler proposed that the usage rate applicable to customers outside  
10 the Borough be \$0.4738 per thousand gallons higher than the usage rate applicable  
11 to customers inside the Borough (I&E Ex. No. 3, Sch. 3).

12  
13 **Q. DO YOU AGREE WITH SINGLING OUT 100% OF RATE CASE**  
14 **EXPENSE AND ALLOCATING THAT \$113,000 EXPENSE TO**  
15 **CUSTOMERS OUTSIDE THE BOROUGH?**

16 A. No. I recommend that this allocation be rejected.

17  
18 **Q. WHY DO YOU RECOMMEND THAT 100% OF RATE CASE EXPENSE**  
19 **NOT BE ALLOCATED TO CUSTOMERS OUTSIDE THE BOROUGH?**

20 A. Singling out one expense to allocate is not fair to customers outside the Borough  
21 without considering all other expenses, costs, and revenues. Other expenses could  
22 be identified as only applicable or more applicable to customers inside the

1 Borough. For example, it is possible that mains inside the Borough may need  
2 replaced sooner than mains outside the Borough or require more maintenance or  
3 there could be a greater number of fire hydrants located inside the Borough. This  
4 could result in higher replacement and restoration costs and more time and  
5 expense replacing or maintaining services and hydrants inside the Borough. In  
6 another example, revenue sources such as lease income from cell tower space  
7 would typically not be shared to Borough inside customers as the water towers are  
8 located outside the Borough. However, under the Borough's cost and revenue  
9 assignment approach, the revenue is currently used to offset all customer costs.  
10 Therefore, to only assign one cost without considering other costs and other  
11 revenue is not reasonable.

12  
13 **Q. IS THERE ANOTHER REASON THAT YOU BELIEVE PART OF RATE**  
14 **CASE EXPENSE SHOULD ALWAYS BE ASSIGNED TO INSIDE**  
15 **CUSTOMERS?**

16 A. Yes. The \$113,000 annual rate case expense represents one-third of the total rate  
17 case expense of \$339,000 shown on Ambler Sch. 6, p. 2. The \$339,000 is  
18 comprised of \$208,000 for the Rate Study, \$130,000 for legal fees, and \$1,000 for  
19 customer notices and postage. I believe that the customers inside the Borough  
20 benefit from the Rate Study because it informs the Water Department of rates it  
21 should charge all customers, which enables it to project revenues and establish  
22 rates necessary to recover the operating costs for customers inside and outside the

1 Borough. Therefore, as a minimum, customers inside the Borough benefit from  
2 the rate study and, therefore, the cost of the rate study should be shared between  
3 customers inside and outside the Borough. However, as noted previously, it is not  
4 appropriate to cherry pick one expense for direct allocation when other expenses  
5 and revenues are not individually allocated by applicable function, so my  
6 recommendation is to share all of rate case expense in line with how all other  
7 expenses are allocated.

8  
9 **Q. BASED UPON YOUR RECOMMENDATION TO SHARE THE \$113,000**  
10 **RATE CASE EXPENSE, HOW MUCH HIGHER SHOULD ALL BASE**  
11 **RATES BE INCREASED?**

12 A. Base rates should be increased by 41.6% (I&E Ex. No. 3, Sch. 3, p. 1). Increasing  
13 all rates 41.6% will produce an increase of \$930,511 which is approximately equal  
14 to the \$930,768 originally requested by the Company (I&E Ex. No. 3, Sch. 3, p. 2,  
15 column I and Borough Schedule 2, page 1, column 10).

16  
17 **SCALE BACK OF RATES**

18 **Q. WHAT INCREASE DID THE WATER DEPARTMENT PROPOSE FOR**  
19 **EACH RATE?**

20 A. The Water Department proposed that all customer charges, the usage rate for  
21 customers inside the Borough, and fire service rates increase approximately 36.6%.

22 The Water Department proposed that the usage rate for customers outside the

1 Borough increase 46.8% for usage up to 110,000 gallons per quarter and 48.3% for  
2 usage over 110,000 gallons per quarter (Ambler Sch. 9, p. 1). As described above, I  
3 believe that the larger percentage increase for usage outside the Borough is the result  
4 of recovery of 100% of rate case expense from customers outside the Borough, and  
5 as I have previously explained, this rate setting methodology should be rejected.

6  
7 **Q. WHAT IS A SCALE BACK OF RATES?**

8 A. If the Commission grants an increase less than the amount the Water Department  
9 requested, the proposed rates would be reduced, or scaled back, to produce the  
10 revenue requirement allowed by the Commission.

11  
12 **Q. WHAT SCALE BACK METHODOLOGY DO YOU RECOMMEND IF THE**  
13 **COMMISSION ACCEPTS YOUR RECOMMENDATION TO SHARE 100%**  
14 **OF RATE CASE EXPENSE TO ALL CUSTOMERS?**

15 A. If the Commission accepts my recommendation to not single out rate case  
16 expense, I recommend that all rates be reduced proportional to the 41.6% shown  
17 on I&E Ex. No. 3, Sch. 3, p. 1, column D. This recommendation is reasonable  
18 because it will result in each rate receiving the same percentage increase.

1 **Q. WHAT SCALE BACK METHODOLOGY DO YOU RECOMMEND IF THE**  
2 **COMMISSION ALLOCATES SOME OR ALL OF THE OF RATE CASE**  
3 **EXPENSE TO ONLY CUSTOMERS OUTSIDE THE BOROUGH?**

4 A. If the Commission allows some or all rate case expense to be allocated solely to  
5 customer outside the Borough, base rates should also be scaled back  
6 proportionally incorporating the higher usage rates for customers outside the  
7 borough as originally proposed.

8  
9 **Q. WHY DO YOU RECOMMEND A PROPORTIONAL SCALE BACK?**

10 A. Since the Water Department did not provide a COSS and proposed generally that  
11 all rates increase the same percentage, a proportional scale back is a reasonable  
12 recommendation because there is no way to determine if one or more class is  
13 subsidizing another class, thus requiring a different percentage increase for that  
14 class.

15  
16 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

17 A. Yes.

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

**Education:** Bachelor of Science in Civil Engineering Technology, 1985, University of Pittsburgh at Johnstown, Johnstown, PA.

**Continuing**

**Education:** Legal Principles and Practices of Surveying at the University of Maryland. Economics, Accounting, 33 Credit hours of accounting at the Howard County Community College and the University of Pittsburgh at Johnstown. Managing Multiple Priorities at the Pennsylvania State University. Various PA-PUC and Utility Company Seminars.

**Professional:** Engineer In Training, 1985,

**Exams:** Uniform Certified Public Accounting Exam, 1993.

**Rate School:** Cost of Service - Rate Structure & Rate Design instructor at Commission's Rate School - September 2010, 2012 and 2014.

**Title:** **FIXED UTILITY VALUATION ENGINEER SUPERVISOR**

December 2011 - Present  
Pennsylvania Public Utility Commission  
Bureau of Investigation and Enforcement

**Duties:** Duties include the areas of Engineering, Revenue and Rate Structure for all fixed utility types. During the course of formal and informal investigations personnel under my direction are responsible for reviewing and presenting recommendations regarding tariff rate schedules, tariff rules and regulations, measures of value claims, revenue annualizations, depreciation claims, fuel purchasing practices and economic analyses. The types of dockets reviewed by the Bureau of I&E include applications, formal complaints, investigations, petitions and rate investigations. The Engineering Section is also responsible for reviewing all pertinent supporting information such as cost of service studies, bill frequency analyses, proofs of revenue, depreciation studies, water quality test results and formal complaints. Duties also include reviewing default service petitions by electric distribution companies and Act 129 Filings by the

seven major electric Utilities, including energy efficiency and conservation plans and Smart Meter Plans.

**Title: RATE CASE REVIEW SPECIALIST**

December 2009 - December 2011  
Pennsylvania Public Utility Commission  
Bureau of Investigation and Enforcement and Office of Trial Staff

**Duties:** These duties include the determination of the reasonableness of claims and proposals in the areas of plant in service, rate base, depreciation expense, cost of service, quality of service, revenues, acquisitions, purchase gas expense, rate structure, and tariff proposal submitted by Water, Sewer, Telephone, Gas and Steam Heat utilities to justify utility service rates, or alternative forms of regulation. Research, analyze, and review rate case filings, tariff filings, acquisitions and investigations. Participate in on-site inspections of utility properties to determine the used and usefulness of the plant-in service and make recommendations. Prepare interrogatories in the areas of rate base, depreciation expense, purchase gas expense, amortizations, rate structure, revenue and quality of service in order to obtain additional information regarding a utility's filing. Analyze present revenue, proposed revenue, rate structure and tariff issues. Recommend adjustments to rate base, depreciation expense, revenue, rate structure and other issues concerning fixed utilities. Prepare testimony and exhibits for the purpose of establishing the I&E position in formal and informal proceedings before the Commission. Provide assistance and input to I&E employees concerning engineering and rate structure issues including input for briefs and exceptions. Participate in Commission consultative report proceedings and collaboratives undertaken by the Commission.

**Title: FIXED UTILITY VALUATION ENGINEER III**

December 1999 - December 2009  
Pennsylvania Public Utility Commission  
Office of Trial Staff

**Duties:** These duties include the determination of the reasonableness of claims and proposals in the areas of plant in service, rate base, depreciation expense, cost of service, quality of service, revenues, acquisitions, purchase gas expense, rate structure, and tariff proposal submitted by Water, Sewer, Telephone, Gas and Steam Heat utilities to justify utility service rates, or alternative forms of regulation. Research, analyze, and review rate case filings, tariff filings, acquisitions and investigations. Participate in on-site

inspections of utility properties to determine the used and usefulness of the plant-in service and make recommendations. Prepare interrogatories in the areas of rate base, depreciation expense, purchase gas expense, amortizations, rate structure, revenue and quality of service in order to obtain additional information regarding a utility's filing. Analyze present revenue, proposed revenue, rate structure and tariff issues. Recommend adjustments to rate base, depreciation expense, revenue, rate structure and other issues concerning fixed utilities. Prepare testimony and exhibits for the purpose of establishing the OTS position in formal and informal proceedings before the Commission. Provide assistance and input to OTS employees concerning engineering and rate structure issues including input for briefs and exceptions. Participate in Commission consultative report proceedings and collaboratives undertaken by the Commission.

**Title: FIXED UTILITY VALUATION ENGINEER II**

April 1996 - December 1999  
Pennsylvania Public Utility Commission  
Office of Trial Staff and Bureau of Fixed Utility Services

**Duties:** Perform the duties of a Fixed Utility Valuation Engineer II in the Office of Trail Staff (OTS) and Bureau of Fixed Utility Services.

**Title: FIXED UTILITY VALUATION ENGINEER TRAINEE, I & II**

May 1993 - March 1996  
Pennsylvania Public Utility Commission  
Office of Trial Staff  
Telecommunications and Water Division

**Duties:** Perform the duties of a Fixed Utility Valuation Engineer II in the Rate Structure/Engineering Section of the Telecommunications and Water Division of the Office of Trial Staff (OTS).

**Title: CIVIL ENGINEER**

May 1985 - January 1991  
Clark Finefrock & Sackett Inc.  
7135 Minstrel Way  
Columbia, MD 21045

**Duties:** Engineering, Surveying, Computer, and Field Inspection work related to land development projects in Maryland.

**Testimony Before the Pennsylvania Public Utility Commission**

1.	National Utilities Inc. (Water)	R-00953416
2.	Consumer Pennsylvania Water Company - Roaring Creek Division	R-00973869
3.	Philadelphia Suburban Water Company	R-00973952
4.	Bell Atlantic - Pennsylvania Inc.	P-00971307
5.	City of Bethlehem- Bureau of Water	R-00984375
6.	Pennsylvania Telephone Association - Chapter 30 Plan	P-00981425
7.	GTE North Inc. Telephone Chapter 30 Plan	P-00981449
8.	Pennsylvania American Water Co.	R-00994638
9.	Philadelphia Suburban Water Co.	R-00994868
10.	PG Energy (Gas)	R-00005119
11.	Pennsylvania American Water - Coatesville Acquisition	A-212285-F0071
12.	T. W Phillips Gas and Oil Company	R-00005459
13.	Verizon North - Chapter 30 Plan	P-00001854
14.	Philadelphia Gas Works	R-00006042
15.	PFG Gas Inc. & Penn Fuels Gas Co.	R-00013679
16.	Pennsylvania American Water Co.	R-00016339
17.	Philadelphia Suburban Water Co.	R-00016750
18.	Philadelphia Gas Works	R-00017034
19.	PFG Gas Inc. & Penn Fuels Gas Co	R-00027389
20.	Verizon - Pennsylvania, Inc.	P-00021973
21.	Verizon - Pennsylvania, Inc.	P-00937105-F0002
22.	Pennsylvania American Water Co.	R-00027982
23.	Dominion Peoples 1307(f)	R-00038170
24.	Verizon PA / Verizon North	C-20027195
25.	National Fuel Gas Distribution, Inc.	R-00038168
26.	Aqua Pennsylvania Inc.	R-00038805
27.	Dominion Peoples 1307 (f)	R-00049153
28.	PPL Electric Utilities	R-00049255
29.	National Fuel Gas Distribution, Inc.	R-00049656
30.	City of Lancaster - Sewer	R-00049862
31.	Dominion Peoples 1307(f)	R-00050267
32.	Verizon PA / Verizon North	C-20027195
33.	PPL Gas Utilities Inc. 1307(f)	R-00050540
34.	United Telephone	A-313200-F0007
35.	Aqua Pa	R-00051030
36.	T.W. Phillips 1307(f)	R-00051134
37.	City of Dubois	R-00050671

38.	T.W. Phillips	R-00051178
39.	The Peoples Natural Gas Co. 1307(f)	R-00061301
40.	Meted/Penelec	R-00061366 and R-00061367
41.	The York Water Company	R-00061322
42.	PPL Gas Utilities Corporation	R-00061398
43.	National Fuel Gas Distribution, Inc.	R-00061493
44.	Pennsylvania American Water Co.	P-00062241
45.	Philadelphia Gas Works	R-00061931
46.	PPL Electric	R-00072155
47.	Pennsylvania-American Water Co.	R-00072229
48.	Valley Energy	R-00072349
49.	City of Bethlehem	R-00072492
50.	Aqua Pennsylvania, Inc.	R-00072711
51.	T.W. Phillips 1307(f)	R-2008-2013026
52.	Columbia Gas	R-2008-2011621
53.	The Peoples Natural Gas Co. 1307(f)	R-2008-2022206
54.	PECO Energy	P-2008-2032333
55.	NRG Energy Center Harrisburg	R-2008-2028395
56.	PAWC - Coatesville Wastewater	R-2008-2032689
57.	York Water	R-2008-2023067
58.	Pike County Power and Light (Gas)	R-2008-2046520
59.	Columbia Water	R-2008-2045157
60.	T. W. Phillips Gas (1307-f)	R-2008-2075250
61.	The Peoples Natural Gas Co. (1307-f)	R-2009-2088069
62.	UGI Utilities Inc. (1307-f)	R-2009-2105911
63.	PAWC Water	R-2009-2097323
64.	UGI Utilities Inc.	R-2009-2105911
65.	Penn Estates Water	R-2009-2117532
66.	Penn Estates Sewer	R-2009-2117740
67.	AT&T Communications	C-2009-2098380
68.	Aqua Pennsylvania Inc.	R-2009-2132019
69.	T.W. Phillips Gas (1307-f)	R-2009-2145441
70.	PGW Gas	R-2009-2139884
71.	City of Bethlehem - Remand	R-00072492
72.	Dominion Peoples (1307-f)	R-2010-2155608
73.	PECO Energy - Gas Division	R-2010-2161592
74.	UGI Penn National Gas	R-2010-2172928
75.	PAWC Coatesville Operations	R-2010-2166212
76.	PAWC Northeast Operations	R-2010-2166214
77.	Duquesne Light	R-2010-2179522
78.	Peoples Natural Gas Company	R-2010-2201702
79.	T.W. Phillips - Steel River Application	A-2010-2210326
80.	Peoples Natural Gas 1307(f)	R-2011-2228694

81.	UGI Penn Natural Gas 1307(f)	R-2011-2238943
82.	Pennsylvania American Water	R-2011-2232243
83.	Aqua Pennsylvania, Inc.	R-2011-2267958
84.	Borough of Quakertown	R-2011-2251181
85.	Peoples Natural Gas Company	R-2012-2285985
86.	Columbia Gas of Pennsylvania	R-2012-2321748
87.	UGI Utilities Inc.	R-2015-2518438
88.	Aqua Wastewater	A-2017-2605434
89.	Pennsylvania American Water	R-2017-2595853
90.	UGI Electric	R-2017-2640058
91.	PECO Electric	R-2018-3000164
92.	York Water Company	R-2018-3000019
93.	Penn Power	P-2019-3012628
94.	Aqua-PA -New Garden Twp	A-2019-2580061
95.	UGI Gas	R-2019-3015162
96.	Pittsburgh Water and Sewer Auth.	P-2020-3019019
97.	PAWC Wastewater	R-2020-3019371
98.	Aqua PA Wastewater	R-2021-3027386

**I&E Exhibit No. 3**  
**Witness: Joseph Kubas**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – BUREAU OF WATER**

**Docket No. R-2022-3031704**

**Exhibit to Accompany the  
Direct Testimony**

**of**

**Joseph Kubas**

**Bureau of Investigation and Enforcement**

**Concerning:**

**Rate Base**  
**Annual Depreciation Expense**  
**Reporting Requirements**  
**Cost of Service Issue**  
**Scale Back of Rates**

**Borough of Ambler Water Department**  
**DOCKET NO. R-2022-3031704**  
**RATE BASE**  
Test Year Ending September 30, 2023

	<b>Borough Claim Sept. 30, 2023</b>	<b>I&amp;E Adjustment</b>	<b>I&amp;E Recommendation Sept. 30, 2023</b>
	(A)	(B) = (C) - (A)	(C)
1	Original Cost of Utility Plant in Service	\$18,197,784	\$18,197,784
2	Less: Accrued Depreciation	\$7,262,722	\$7,262,722
3	Depreciated Plant In Service	\$10,935,062	\$10,935,062
4	Add: Inventory	\$0	\$0
5	Cash Working Capital	\$301,608	\$301,608
6	Less: Contributions In Aid of Const	\$0	\$373,638
7	<b>TOTAL RATE BASE</b>	<b>\$11,236,670</b>	<b>\$10,863,032</b>

**Borough of Ambler Water Department**  
**DOCKET NO. R-2022-3031704**  
**ANNUAL DEPRECIATION EXPENSE**  
 Test Year Ending September 30, 2023

	<b>Borough Claim Sept. 30, 2023</b>	<b>I&amp;E Adjustment</b>	<b>I&amp;E Recommendation Sept. 30, 2023</b>
	(A)	(B) = (C) - (A)	(C)
1        Original Cost of Utility Plant in Service	\$275,744	\$0	\$275,744
2    Less: Contributions In Aid of Const	\$0	-\$13,959	-\$13,959
3 <b>TOTAL DEPRECIATION EXPENSE</b>	<b>\$275,744</b>	<b>-\$13,959</b>	<b>\$261,785</b>

Docket No. R-2022-3031704  
Borough of Ambler Supplement No. 40 to Tariff Water – Pa. P.U.C. No. 5

Responses to I&E Data Requests, Set RB

**I&E-RB-18** In the Company’s last base rate case at Docket No. R-2014-2400003, the Company reflected \$2,926,495 of Contributions In Aid of Construction (“CIAC”) and \$1,307,802 of corresponding Accrued Depreciation.

- A. Explain why the Company reflected no CIAC in this case.
- B. If any correction is needed, provide the revised rate base, CIAC plant, CIAC book reserve, CIAC annual depreciation expense and all supporting documents that shows the correction.

**Response:**

- A. There is CIAC included in the depreciation calculations. The amounts are netted against the related plant in service. The amount of CIAC as of September 30, 2021, was \$2,552,372 and the book reserve was \$1,488,935. An amount of \$374,123 of CIAC was initially removed due to a related retirement of plant, however, this should not have affected the CIAC balance.
- B. As of the fully projected future test year, September 30, 2023, the CIAC plant value should be \$374,123 higher, the total rate base will be \$373,638 lower, and the total annual expense will be \$13,959 lower than that presented in Exhibit JJS-3.

**Response Provided by: John Spanos, President**  
**Gannett Fleming Valuation and Rate Consultants, LLC**

**Date: June 7, 2022**

BOROUGH OF AMBLER - BUREAU OF WATER  
**INSIDE & OUTSIDE-BOROUGH**  
 COMPARISON OF PRESENT AND PROPOSED RATES

<u>Quarterly Customer Charge</u>		<u>Present</u>	<u>Proposed</u>	<u>Increase</u>	
(A)		(B)	(C)	(D)	
1	5/8	\$12.61	\$17.86	41.6%	
2	3/4	\$15.44	\$21.87	41.6%	
3	1	\$19.41	\$27.49	41.6%	
4	1 1/2	\$44.49	\$63.01	41.6%	
5	2	\$62.10	\$87.95	41.6%	
6	3	\$200.62	\$284.15	41.6%	
7	4	\$507.90	\$719.36	41.6%	
8	6	\$800.77	\$1,134.16	41.6%	
9	8	\$1,056.16	\$1,495.88	41.6%	
10	10	\$1,392.56	\$1,972.33	41.6%	
11	12	\$1,836.18	\$2,600.65	41.6%	
12	<u>Quarterly Domestic Multiple Meter</u>				
13	1	\$47.61	\$67.43	41.6%	
14	2	\$99.93	\$141.53	41.6%	
15	<u>Inside Consumption Charge per Quarter</u>				
		<u>Per Thousand Gallons</u>			
16	First 110,000 gallons	\$4.62	\$6.5401	41.6%	
17	Over 110,000 gallons	\$4.04	\$5.7151	41.6%	
18	<u>Outside Consumption Charge per Quarter</u>				
19	First 110,000 gallons	\$4.62	\$6.5401	41.6%	
20	Over 110,000 gallons	\$4.04	\$5.7151	41.6%	
21	<u>Fire Protection - Annual Charge:</u>				
		<u>Present</u>	<u>Proposed</u>	<u>Increase</u>	
22	Public Fire Hydrant	\$165.27	\$234.08	41.6%	
23	Private Fire Hydrant	\$665.65	\$942.78	41.6%	
24	<u>Private Fire - Annual Charge:</u>				
25	1	Sprinkler/Standby	\$190.43	\$269.71	41.6%
26	2	Sprinkler/Standby	\$399.73	\$566.15	41.6%
27	4	Sprinkler/Standby	\$502.67	\$711.95	41.6%
28	6	Sprinkler/Standby	\$665.65	\$942.78	41.6%
29	8	Sprinkler/Standby	\$1,085.97	\$1,538.10	41.6%
30	10	Sprinkler/Standby	\$1,435.96	\$2,033.80	41.6%
31	12	Sprinkler/Standby	\$1,832.26	\$2,595.10	41.6%

BOROUGH OF AMBLER - BUREAU OF WATER

STATEMENT OF THE CALCULATION OF THE RATE OF RETURN UNDER PRESENT RATES FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021 AND SEPTEMBER 30, 2023, AND THE ANTICIPATED RATE OF RETURN UNDER PROPOSED RATES FOR INSIDE-BOROUGH AND OUTSIDE-BOROUGH CUSTOMERS

Pursuant To Subsection 53.52 (b)(2) and (c)(1) of Tariff Regulations

Line No.	Description (A)	12 Months Ended 30-Sep-21 (B)	Pro Forma Test Year Adjustments (C)		Pro Forma Present Rates, 30-Sep-21 (E)		Pro Forma Future Test Year Adjustments (F)		Pro Forma Present Rates, 30-Sep-23 (H)	Increase (I)	Under Proposed Rates, Supplement No. 40 to Tariff Water Pa-PUC No. 5 Pro Forma 30-Sep-23 (J)
			Ref.	Amount (D)	Ref.	Amount (G)	Ref.	Amount (G)			
1	Operating Revenue (Inside and Outside)										
2	Revenue from Sale of Water (Inside)	\$787,647	Sch. 5	\$13,328	\$800,975	Sch. 5	\$978	\$801,953	\$333,882	\$1,135,835	
3	Revenue from Sale of Water(Outside)	\$1,386,144	Sch. 5	\$5,363	\$1,391,507	Sch. 5	\$12,904	\$1,404,411	\$596,629	\$2,001,040	
4	Other Operating Revenue	\$346,765		\$0	\$346,765	Sch. 5	-\$60,000	\$286,765	\$0	\$286,765	
5	Total Operating Revenue	\$2,520,556		\$18,691	\$2,539,247		-\$46,118	\$2,493,129	\$930,511	\$3,423,639	
6	Operating Revenue Deductions:										
7	Operation and Maintenance										
8	Expenses	\$2,572,363	Sch. 6	-\$238,961	\$2,333,402	Sch. 6	\$79,463	\$2,412,865	\$2,412,865	\$2,412,865	
9	Depreciation	\$344,987	Sch. 6	-\$154,405	\$190,582	Sch. 6	\$85,162	\$275,744	\$275,744	\$275,744	
10	Total Operating Revenue Deductions	\$2,917,350		-\$393,366	\$2,523,984		\$164,625	\$2,688,609	\$0	\$2,688,609	
12	Net Operating Income Available for Return	-\$396,794		\$412,056	\$15,263		-\$210,743	-\$195,480	\$930,511	\$735,030	
14	Original Cost Measure of Value	\$7,599,384		\$0	\$7,599,384		\$3,637,287	\$11,236,670	\$0	\$11,236,670	
15	Rate of Return	-5.22%			0.20%			-1.74%		6.54%	

**I&E Statement No. 2-R  
Witness: Christopher Keller**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Rebuttal Testimony**

**of**

**Christopher Keller**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Rate of Return**

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**INTRODUCTION OF WITNESS ..... 1**  
**CAPITAL STRUCTURE ..... 2**

1 **INTRODUCTION OF WITNESS**

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

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

6

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

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

11

12 **Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO IS**  
13 **RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E**  
14 **STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?**

15 A. Yes.

16

17 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

18 A. The purpose of my rebuttal testimony is to address statements made by the Office  
19 of Consumer Advocate (OCA) witness Morgan N. DeAngelo (OCA Statement No.  
20 2R) where he accepts the Borough of Ambler's (Ambler's or Water Department's)  
21 capital structure.

1 **Q. DOES YOUR REBUTTAL TESTIMONY INCLUDE AN EXHIBIT?**

2 A. No. However, I will make references to my direct testimony and its  
3 accompanying exhibit (I&E Statement No. 2 and I&E Exhibit No. 2).

4

5 **CAPITAL STRUCTURE**

6 **Q. SUMMARIZE OCA WITNESS DeANGELO'S RECOMMENDATION IN**  
7 **DIRECT TESTIMONY FOR HIS CAPITAL STRUCTURE?**

8 A. In direct testimony, OCA witness Morgan N. DeAngelo accepts the Water  
9 Department's hypothetical capital structure of 50.26% long term debt and 49.74%  
10 equity to perform his rate of return analysis (OCA Statement No. 1, p. 7, lines 14-  
11 16).

12

13 **Q. DO YOU AGREE WITH MR. DeANGELO'S ACCEPTANCE OF THE**  
14 **WATER DEPARTMENT'S CAPITAL STRUCTURE?**

15 A. No. As I stated in my direct testimony, I recommend using a hypothetical capital  
16 structure of 57% long-term debt and 43% equity. My recommendation was based  
17 on the fact that municipalities are typically able to acquire debt at lower cost rates  
18 than publicly traded utility companies. In large part, this is because a municipality  
19 can use its taxing authority to ensure repayment of its debt, which reduces risk.

20 The risk reduction commands a lower interest rate on long-term debt.

21 Accordingly, the taxing authority that is unique to municipalities enables them to

22 tolerate more debt in their capital structure to finance rate base.

1           It is also inappropriate and unnecessary to pass larger proportions of more  
2 expensive equity costs on to ratepayers, especially when the Water Department  
3 does not have equity investors. Accordingly, they do not have the burden of  
4 compensating investors with a competitive, market-based return on equity. As  
5 such, it is inappropriate to pass along a large proportion of the higher equity cost  
6 to the Water Department's ratepayers. This difference in utility ownership more  
7 than adequately supports using the low end of an investor-owned utility proxy  
8 group's capital structure.

9           Finally, my recommendation was designed to comply with the requirement  
10 in Section 1301(b) of the Public Utility Code that municipal corporations use an  
11 imputed capital structure of comparable public utilities providing water service,  
12 while not inappropriately overburdening ratepayers (I&E Statement No. 2, pp. 9-  
13 13). This is evidenced by the fact that my recommended 43% equity ratio is  
14 within the low end of the range of equity ratios of the average capital structures in  
15 my proxy group, which is 42.40% (I&E Exhibit No. 2, Schedule 2).

16  
17 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION?**

18 A. No. For the reasons stated above, I continue to recommend that the Commission  
19 adopt my hypothetical capital structure comprised of 57% long-term debt and 43%  
20 equity.

1 **Q. ARE THERE OTHER AREAS WHERE MR. DeANGELO'S**  
2 **RECOMMENDATIONS CONFLICT WITH RECOMMENDATIONS YOU**  
3 **HAVE MADE IN DIRECT TESTIMONY?**

4 A. Yes. Anywhere that Mr. DeAngelo's methods to determine an appropriate rate of  
5 return for Ambler disagree with my recommended methods in direct testimony, it  
6 should be noted, I continue to maintain the recommendations made in my direct  
7 testimony for the reasons explained therein.

8  
9 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

10 A. Yes.

**I&E Statement No. 1-SR  
Witness: Christine Wilson, CPA**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Surrebuttal Testimony**

**of**

**Christine Wilson, CPA**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Overall Revenue Requirement**

**Operating & Maintenance Expenses, Taxes, and Cash Working Capital**

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**SUMMARY OF I&E OVERALL UPDATED POSITION ..... 3**

**RATE CASE EXPENSE ..... 6**

**CASH WORKING CAPITAL ..... 10**

**PUC ANNUAL FILINGS ..... 13**

1 **INTRODUCTION**

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

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

5

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

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

10

11 **Q. ARE YOU THE SAME CHRISTINE WILSON WHO SUBMITTED**  
12 **TESTIMONY IN I&E STATEMENT NO. 1 AND I&E EXHIBIT**  
13 **NO. 1?**

14 A. Yes.

15

16 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

17 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of  
18 The Borough of Ambler – Water Department (Ambler or Water Department)  
19 witnesses Mary Aversa (Ambler Statement No. 1-R) and Constance E. Heppenstall  
20 (Ambler Statement No. 2-R).

1 **Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN**  
2 **ACCOMPANYING EXHIBIT?**

3 A. No.

4

5 **OPERATING AND MAINTENANCE EXPENSE ADJUSTMENTS**

6 **Q. HAS AMBLER ACCEPTED ANY OF YOUR RECOMMENDED**  
7 **ADJUSTMENTS?**

8 A. Yes. Ambler witness Constance Heppenstall has accepted my recommendations  
9 for salaries – water admin. expense, related payroll tax expense, and Mattison  
10 Avenue expense.<sup>1</sup>

11

12 **Q. PLEASE SUMMARIZE AMBLER’S UPDATED REQUESTED REVENUE**  
13 **INCREASE.**

14 A. Ambler updated its requested total system revenue increase of \$930,768<sup>2</sup> to  
15 \$804,579<sup>3</sup> for the Fully Projected Future Test Year (FPFTY) ending  
16 September 30, 2023, in rebuttal testimony.

---

<sup>1</sup> Ambler Statement No. 2-R, p. 8.

<sup>2</sup> Ambler Schedule 1.

<sup>3</sup> Ambler Exhibit CEH-1R, p. 2, Schedule 1R.

1 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED ADJUSTMENTS AS**  
2 **CONTAINED IN THIS SURREBUTTAL TESTIMONY.**

3 A. The following table summarizes my recommended adjustments to Ambler’s  
4 rebuttal position:

	<b>Ambler’s Rebuttal Claim</b>	<b>I&amp;E Recommended Allowance</b>	<b>I&amp;E Adjustment</b>
<b><u>O&amp;M Adjustments:</u></b>			
Rate Case Expense	\$113,000	\$52,831	(\$60,169)
<b>Total O&amp;M Expense Adjustments</b>			<b><u>(\$60,169)</u></b>
<b><u>Rate Base Adjustments:</u></b>			
Cash Working Capital	\$290,704	\$275,309	<u>(\$15,396)</u>
<b>Total Rate Base Adjustments</b>			<b><u>(\$15,396)</u></b>

5

6

7 **SUMMARY OF I&E OVERALL UPDATED POSITION**

8 **Q. WHAT IS I&E’S TOTAL UPDATED RECOMMENDED REVENUE**  
9 **REQUIREMENT?**

10 A. I&E’s total system recommended revenue requirement is \$2,968,396. This  
11 recommended revenue requirement represents an increase of \$475,267 to the  
12 Water Department’s claimed present rate revenues of \$2,493,129. This  
13 recommended allowance incorporates my adjustments made in this surrebuttal  
14 testimony to rate case expense and cash working capital, and those recommended  
15 adjustments made in the testimony of I&E witness Christopher Keller.<sup>4</sup>

---

<sup>4</sup> I&E Statement No. 2 and I&E Statement No. 2-SR.

1 The I&E recommended total system revenue requirement for Ambler is  
 2 shown below:

Borough of Ambler R-2022-3031704	TABLE I				
	INCOME		SUMMARY		
	9/30/23	INVESTIGATION & ENFORCEMENT			
	Proforma	[-----]			
	Present Rates	Adjustments	Present Rates	Allowances	Proposed
	\$	\$	\$	\$	\$
Operating Revenue	2,493,129	0	2,493,129	475,267	2,968,396
Deductions:					
O&M Expenses	2,325,630	-60,169	2,265,461	0	2,265,461
Depreciation	261,785	0	261,785		261,785
Taxes, Other	0	0	0	0	0
Income Taxes:					
Current State	0	0	0	0	0
Current Federal	0	0	0	0	0
Deferred Taxes	0	0	0		0
ITC	0	0	0		0
Total Deductions	2,587,415	-60,169	2,527,246	0	2,527,246
Income Available	-94,286	60,169	-34,117	475,267	441,150
Measure of Value	10,854,455	-15,396	10,839,059	0	10,839,059
Rate of Return	-0.87%		-0.31%		4.07%

3  
 4  
 5 **Q. WHAT IS THE I&E RECOMMENDED OVERALL INCREASE FOR**  
 6 **JURISDICTIONAL CUSTOMERS?**

7 A. Ms. Heppenstall indicates that the Water Department assigns 45.41% of the total  
 8 increase to outside customers (PUC jurisdictional customers),<sup>5</sup> therefore, the I&E  
 9 overall recommendation would yield a jurisdictional customer revenue increase of  
 10 \$215,818 (\$475,267 x 0.4541). However, Ambler’s revenue request for  
 11 jurisdictional customers reflects assignment of 100% of rate case expense, which

<sup>5</sup> Ambler Statement No. 2-R, p. 5.

1 is recommended for rejection by I&E witness Joseph Kubas in I&E Statement  
2 No. 3 and I&E Statement No. 3-SR. As I have recommended a reduction to rate  
3 case expense of \$60,169 herein, the share of that rate case expense adjusted by the  
4 revenue ratio to Borough customers (inside the jurisdictional boundaries)  
5 additionally needs removed from my overall recommendation. Therefore, my  
6 final recommendation for the jurisdictional revenue increase is \$182,972  
7 (\$215,818 - [\$60,169 x (100% - 45.41%, or 54.59%)]).

8  
9 **Q. IF THE ALLOCATION FACTOR OF 45.41%<sup>6</sup> PRESENTED IN MS.**  
10 **HEPPENSTALL'S REBUTTAL TESTIMONY IS DETERMINED TO BE**  
11 **INCORRECT, WHAT ALLOCATION PERCENTAGE AND**  
12 **JURIDITIONAL INCREASE SHOULD BE ALLOWED?**

13 A. As Ambler did not provide supporting documentation for its claimed 45.41%, it is  
14 possible this percentage is presented in error. If that is the case, an allocation  
15 percentage of 69.25% should be used to determine the amount of the rate increase  
16 attributable to jurisdictional customers. Based on the stated ratio of the  
17 jurisdictional customer revenue increase to the total proposed revenue increase in  
18 Ambler's rebuttal testimony, \$557,193 to \$804,579, or 69.25% (\$557,193 /  
19 \$804,579),<sup>7</sup> my recommendation would yield a jurisdictional customer revenue  
20 increase of \$329,122 (\$475,267 x 0.6925). However, as mentioned above,

---

<sup>6</sup> Ambler Statement No. 2-R, p. 5.

<sup>7</sup> Ambler Exhibit CEH-1R, p. 2, Schedule 1R.

1 Ambler's revenue request for jurisdictional customers reflects assignment of 100%  
2 of rate case expense, which is recommended for rejection by I&E witness Joseph  
3 Kubas in I&E Statement No. 3 and I&E Statement No. 3-SR. As I have  
4 recommended a reduction to rate case expense of \$60,169 herein, the share of that  
5 rate case expense adjusted by the revenue ratio to Borough customers (inside the  
6 jurisdictional boundaries) additionally needs removed from my overall  
7 recommendation. Therefore, my final recommendation for the jurisdictional  
8 revenue increase would be \$310,620 ( $\$329,122 - (\$60,169 \times [100\% - 69.25\%, \text{ or}$   
9  $30.75\%])$ ).

10  
11 **RATE CASE EXPENSE**

12 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**  
13 **FOR RATE CASE EXPENSE.**

14 A. I recommended Ambler's rate case expense be normalized over a period of 77  
15 months, in line with Ambler's historic rate case filing frequency, producing an  
16 annualized amount of \$52,831 [ $(\$339,000 \div 77 \text{ months}) \times 12$ ] per year. This  
17 results in a reduction of \$60,169 ( $\$113,000 - \$52,831$ ) to Ambler's annual rate  
18 case expense claim. This recommendation was based on historic filing frequency  
19 which is a more reliable predictor of future rate filings and on previous  
20 Commission decisions that supported a rate case filing interval based on historic  
21 filing frequency. Finally, I pointed out the use of inconsistent language where the

1 Water Department used the terms normalization and amortization interchangeably  
2 in the rate filing.<sup>8</sup>

3  
4 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

5 A. Yes. Ambler witnesses Mary Aversa<sup>9</sup> and Constance Heppenstall<sup>10</sup> disagree with  
6 my recommendation.

7  
8 **Q. PLEASE SUMMARIZE MS. AVERSA'S RESPONSE.**

9 A. Ms. Aversa highlights the circumstances that led to the large gap between the  
10 Water Department's previous rate case filing and the current rate case. She  
11 explains the Water Department's failed exploration of potentially transferring the  
12 water system to a municipal authority and the subsequent filing of an  
13 Abandonment Application with the Commission on July 22, 2020 (Docket No A-  
14 2020-3020984). She notes that the Water Department was considering filing a  
15 base rate case at that time but determined it lacked the internal resources to  
16 support two simultaneous PUC proceedings. Ms. Aversa further states that the  
17 Water Department later withdrew the Abandonment Application and redirected its  
18 resources toward this base rate case. She concludes that the Commission should  
19 not allow this one-time complicating factor to unreasonably extend the  
20 normalization period for the Water Department's rate case expense.

---

<sup>8</sup> I&E Statement No. 1, pp. 9-10.

<sup>9</sup> Ambler Statement No. 1-R, pp. 2-3.

<sup>10</sup> Ambler Statement No. 2-R, pp. 7-8.

1 **Q. WHAT IS YOUR RESPONSE TO MS. AVERSA’S ASSERTION?**

2 A. While extenuating circumstances may have affected the Water Department’s  
3 ability to file its most recent rate case in a timely manner, there is no way to  
4 predict future circumstances and their effect on the Water Department’s ability to  
5 file future rate cases. Any attempt to do so would be speculative in nature and  
6 would be considered unreasonable as a basis for determining the normalization  
7 period for rate case expense. Furthermore, while the witness attempts to excuse  
8 the most recent 98-month gap due to the preparation of the 2020 abandonment  
9 proceeding, that excuse cannot be extended to explain the 84-month gap between  
10 the prior two proceedings.<sup>11</sup>

11

12 **Q. PLEASE SUMMARIZE MS. HEPPENSTALL’S RESPONSE.**

13 A. Ms. Heppenstall agrees with my clarification regarding the different meanings of  
14 the terms amortization and normalization, agreeing that the terms are not  
15 interchangeable, and that the term normalization should be used in the context of  
16 rate case expense. However, she presents several arguments in her disagreement  
17 with my overall recommendation. First, she points out Ambler’s two most recent  
18 rate case filings each include extenuating circumstances: the COVID-19 pandemic  
19 and the 2008 market crash, respectively. Next, she opines that a three-year  
20 normalization period acknowledges that the expense should be spread over a  
21 period of years, but also does not penalize Ambler for delaying a rate case filing

---

<sup>11</sup> I&E Statement No. 1, p. 8.

1 for any reason. She also states that in the current high-inflation environment,  
2 Ambler will be more likely to file a rate case within the next three years.  
3 Additionally, she argues that the precedent set by the Commission to rely on  
4 historic filing frequency in determining a normalization period is better suited for  
5 private utilities that have greater resources to file more regular rate cases than  
6 Ambler. Finally, she claims that rate case expense is a higher percentage of  
7 annual expenses for Ambler versus private utilities, thus a six-year normalization  
8 period discourages the Water Department from filing future rate cases in a timely  
9 manner.

10  
11 **Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL?**

12 A. As discussed in response to Ms. Aversa, it is unreasonable to assume there will be  
13 no further extenuating circumstances affecting future rate case filings. I continue  
14 to assert that historic filing frequency is a more accurate representation of when a  
15 utility will file a future rate case, regardless of whether the reasons for a delay  
16 change from case to case. A three-year normalization period is arbitrary and  
17 unsupported by historical data, as none of the last three rate cases were filed  
18 within three years of the previous rate case. The assertion that Ambler will be  
19 more likely to file a rate case within the next three years is speculative in nature  
20 and is not a reasonable basis for determining the normalization period of rate case  
21 expense. I understand Ms. Heppenstall's concern about Ambler being a smaller  
22 utility, however, over time if the Water Department does in fact file more frequent  
23 rate filings, the normalization period will decrease, thereby affording Ambler a

1 larger annual expense amount when it is demonstrated that more frequent filings  
2 will occur.

3 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR**  
4 **RATE CASE EXPENSE?**

5 A. No. For the reasons explained above, I continue to recommend normalizing rate  
6 case expense over 77 months, which yields an annual allowance of \$52,831. This  
7 is a reduction of \$60,169 (\$113,000 - \$52,831) to Ambler’s annual rate case  
8 expense claim.

9

10 **CASH WORKING CAPITAL**

11 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**  
12 **FOR CASH WORKING CAPITAL (CWC).**

13 A. I recommended an allowance of \$275,308 or a reduction of \$26,300 (\$301,608 -  
14 \$275,308) to the Water Department’s claim.<sup>12</sup> My recommendation removed  
15 payroll taxes from the calculation due to those being viewed as paid after the  
16 money is collected from ratepayers and adjusted for my recommended O&M  
17 adjustments (rate case expense, salaries – water admin., and the Mattison Avenue  
18 expense adjustment).<sup>13</sup>

---

<sup>12</sup> I&E Statement No. 1, p. 20.

<sup>13</sup> I&E Statement No. 1, p. 21.

1 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

2 A. Yes. Ambler witness Constance Heppenstall disagrees with my CWC  
3 recommendation based on Ambler's disagreement with my recommended  
4 adjustment to rate case expense as well as with the exclusion of payroll taxes from  
5 the CWC calculation.<sup>14</sup>

6  
7 **Q. DID AMBLER UPDATE ITS CWC CLAIM IN REBUTTAL TESTIMONY?**

8 A. Yes. Based on the changes discussed in the Ambler witnesses' testimony, an  
9 update was provided to its CWC claim.

10

11 **Q. WHAT IS AMBLER'S UPDATED CWC CLAIM?**

12 A. Ambler's updated CWC claim is \$290,704,<sup>15</sup> based on the changes the Water  
13 Department has accepted in rebuttal testimony and denying my recommended  
14 exclusion of payroll tax expense from the calculation.

15

16 **Q. DO YOU AGREE WITH THE WATER DEPARTMENT'S UPDATED  
17 CLAIM?**

18 A. No.

19

20 **Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR  
21 CWC?**

22 A. Yes. Since the Company has accepted some of my recommendations as explained

---

<sup>14</sup> Ambler Statement No. 2-R, p. 8.

<sup>15</sup> Ambler Schedule 4R.

1 above but continues to disagree with my rate case expense recommendation and  
2 the exclusion of payroll taxes from the CWC calculation, I am updating my  
3 recommendation.

4  
5 **Q. WHAT IS YOUR UPDATED RECOMMENDATION?**

6 A. I recommend an updated allowance of \$275,309 or a reduction of \$15,396  
7 (\$290,704 - \$275,309) to the Water Department's claim.

8  
9 **Q. HOW DID YOU CALCULATE YOUR UPDATED RECOMMENDATION?**

10 A. I calculated my updated CWC recommendation as follows:

11	Water Department Updated Claim for CWC	\$290,704
12	Adjustment to Remove Payroll Taxes (\$62,995 / 8)	(\$7,874)
13	Adjustment for Rate Case Expense (\$60,169 / 8)	<u>(\$7,521)</u>
14	I&E-Recommended CWC Allowance	<u>\$275,309</u>

15  
16 **Q. DOES YOUR RECOMMENDED CWC ALLOWANCE REPRESENT A**  
17 **FINAL RECOMMENDED ALLOWANCE?**

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

1 **PUC ANNUAL FILINGS**

2 **Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY**  
3 **REGARDING THE FILING OF ANNUAL REPORTS WITH THE**  
4 **COMMISSION.**

5 A. I recommended that the Commission require Ambler to file the missing 2019  
6 annual report within 90 days of the close of the record in this proceeding.

7

8 **Q. DID ANY WITNESS RESPOND TO YOUR RECOMMENDATION?**

9 A. Yes. Ambler witness Mary Aversa partially agrees with my recommendation;  
10 however, she clarifies that the deadline for filing the 2019 annual report should be  
11 set for 90 days from the Commission's Final Order rather than close of the record  
12 in this proceeding.

13

14 **Q. DO YOU ACCEPT MS. AVERA'S RECOMMENDATION ON THE**  
15 **DEADLINE FOR FILING THE MISSING ANNUAL REPORT?**

16 A. Yes.

17

18 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

19 A. Yes.

**I&E Statement No. 2-SR  
Witness: Christopher Keller**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – WATER DEPARTMENT**

**Docket No. R-2022-3031704**

**Surrebuttal Testimony**

**of**

**Christopher Keller**

**Bureau of Investigation & Enforcement**

**Concerning:**

**Rate of Return**

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1 **INTRODUCTION OF WITNESS**

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

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

6

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

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

11

12 **Q. ARE YOU THE SAME CHRISTOPHER KELLER WHO SUBMITTED**  
13 **THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2**  
14 **AND I&E EXHIBIT NO. 2?**

15 A. Yes.

16

17 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

18 A. The purpose of my surrebuttal testimony is to address statements made by the  
19 Borough of Ambler – Water Department (Ambler or Water Department) witness  
20 Dylan W. D’Ascendis (Ambler Statement No. 4-R) in his rebuttal testimony  
21 regarding rate of return topics including the cost of common equity and the overall  
22 fair rate of return, which will be applied to the Company’s rate base.

1 **Q. DID THE COMPANY PROVIDE AN UPDATE TO ITS RATE OF**  
2 **RETURN?**

3 A. Yes. Mr. D’Ascendis performed a similar analysis as to what was included in his  
4 direct testimony and exhibit using more recent data available as of June 30, 2022.  
5 Mr. D’Ascendis also updated his application of the Predictive Risk Premium  
6 Method (PRPM) to use the long-term predicted variance instead of averaging it  
7 with the spot predicted variance. Although Mr. D’Ascendis provided an update to  
8 his cost of equity analysis, he does not change his recommendation and continues  
9 to recommend a cost of equity of 10.75% (Ambler Statement No. 4-R, pp. 4-5).  
10 Below is the Company’s rate of return claim (Ambler Schedule DWD-10, p. 1):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.26%	2.36%	1.19%
Common Equity	49.74%	10.75%	5.35%
Total	100.00%		6.54%

11  
12  
13 **Q. PLEASE EXPLAIN WHY YOU HAVE NOT PERFORMED AN UPDATED**  
14 **ANALYSIS.**

15 A. While I do not dispute Mr. D’Ascendis’ use of updated information, it is important  
16 to note that financial information from respected and commonly used sources such  
17 as Value Line, Yahoo! Finance, Morningstar, Zacks, etc. is updated regularly  
18 (monthly, weekly, daily, hourly, etc. depending on the source). At the time of my  
19 analysis, I utilized the most recent financial information accessible to me. It

1 should be recognized that it is not always prudent or time conducive in the scope  
2 of a rate case to continuously change one's position.

3  
4 **SUMMARY OF MR. D'ASCENDIS' REBUTTAL TESTIMONY**

5 **Q. SUMMARIZE MR. D'ASCENDIS' RESPONSE TO YOUR RATE OF**  
6 **RETURN RECOMMENDATIONS.**

7 A. Mr. D'Ascendis disputes my recommendations regarding an overall fair rate of  
8 return. Specifically, he disagrees with my application of a tax adjustment. Next,  
9 he disagrees with the capital structure I implemented. Mr. D'Ascendis also claims  
10 that I failed to consider the results of cost of equity models other than the  
11 Discounted Cash Flow (DCF) model. He criticizes my application of the Capital  
12 Asset Pricing Model (CAPM), claiming that I have incorrectly relied on the 10-  
13 year Treasury Bond for my risk-free rate and have not employed the Empirical  
14 CAPM (ECAPM). Mr. D'Ascendis claims that I fail to account for Ambler's size-  
15 specific risk. Finally, Mr. D'Ascendis takes issue with my dismissal of his Non-  
16 Price Regulated Proxy Group.

17  
18 **CAPITAL STRUCTURE**

19 **Q. PLEASE SUMMARIZE MR. D'ASCENDIS' CAPITAL STRUCTURE**  
20 **RECOMMENDATION.**

21 A. Mr. D'Ascendis continues to claim it is appropriate to use a hypothetical capital

1 structure of 50.26% debt and 49.74% equity which is imputed based on his proxy  
2 group's average capital structure for 2020 and complies with Title 66, Section  
3 1301(b) (Ambler Statement No. 4-R, p. 14, line 15 through p. 17, line 4).

4  
5 **Q. PLEASE SUMMARIZE MR. D'ASCENDIS' CRITIQUE OF YOUR**  
6 **CAPITAL STRUCTURE RECOMMENDATION OF 57% DEBT AND 43%**  
7 **EQUITY.**

8 A. Mr. D'Ascendis claims that my recommendation is not credible as I included the  
9 capital structure of American Water Works (AWK) in my proxy group, which is at  
10 the lower end of my range. Additionally, Mr. D'Ascendis states that debt raised  
11 by Ambler to support the non-jurisdictional rate base is paid through rates charged  
12 to outside customers and not by inside customers. Mr. D'Ascendis further states  
13 that municipalities have debt ceilings as part of debt covenants, which limits the  
14 amount of debt that can be used to fund outside customers and general Borough of  
15 Ambler operations. Then, Mr. D'Ascendis asserts that my recommendation fails  
16 to comply with Title 66, Section 1301(b) as it does not represent a capital structure  
17 that is comparable to other public utilities that provide water and wastewater  
18 services. Finally, he argues that Ambler's higher five-year actual capital structure,  
19 with equity ratios ranging from 75.85% to 61.50% with an average of 70.07%,  
20 discredits my recommended capital structure and that my suggestion that his  
21 recommended capital structure would pass a larger proportion of more expensive

1 equity costs on to ratepayers is not realistic (Ambler Statement No. 4-R, pp. 14-  
2 17).

3  
4 **Q. DO YOU AGREE WITH MR. D'ASCENDIS' CRITIQUE OF YOUR**  
5 **CAPITAL STRUCTURE DETERMINATION?**

6 A. No. As explained in greater detail in my direct testimony, a capital structure  
7 between 80% debt and 20% equity and 70% debt and 30% equity would be much  
8 more appropriate for the Water Department (I&E Statement No. 2, p. 10, line 15  
9 through p. 13, line 5). Municipalities differ from investor-owned utilities in that  
10 they have no equity investors and they do not have the burden of compensating  
11 investors with a competitive, market-based return on equity, so comparing equity  
12 for municipalities to investor-owned utilities as Mr. D'Ascendis has done is like  
13 comparing apples to oranges. Equity for municipalities consists primarily of  
14 investments in capital assets as well as funds that are restricted for certain uses  
15 such as pensions with the remaining balance being unrestricted or similar to  
16 retained earnings for investor-owned utilities. Equity for investor-owned utilities,  
17 on the other hand, consists primarily of various types of stock that require a return  
18 on equity for their investors in addition to retained earnings.

19 Additionally, Municipalities are able to secure lower cost rates of debt and  
20 can tolerate higher amounts of debt in the capital structure, again, due to the taxing  
21 authority. In this proceeding, the Water Department's claimed cost of debt is  
22 2.36%, which is much less than my proxy group's 3.67% average cost of debt.

1 Stated differently, my proxy group's average cost of debt is 55.51% more  
2 expensive than the Water Department's cost of debt. Therefore, it is inappropriate  
3 and unnecessary to pass larger proportions of more expensive equity costs on to  
4 ratepayers. However, to comply with Title 66, Section 1301(b) which became  
5 effective December 21, 2017, I recommend a capital structure of 57% debt and  
6 43% equity for the Water Department. This represents the low end of my range of  
7 equity ratios of the average capital structures in my proxy group (I&E Exhibit No.  
8 2, Schedule 2).

9  
10 **Q. WHY DID YOU APPLY THE LOW END OF YOUR PROXY GROUP**  
11 **CAPITAL STRUCTURE RANGE TO THE WATER DEPARTMENT?**

12 A. The Water Department does not face the same level of financial risk as the  
13 companies in my proxy group, nor does it have any investor expectations to  
14 satisfy; therefore, it is not appropriate or necessary for the Water Department to  
15 benefit from a higher equity ratio in its capital structure.

16  
17 **Q. DOES YOUR RECOMMENDED CAPITAL STRUCTURE FOR THE**  
18 **WATER DEPARTMENT COMPLY WITH TITLE 66, SECTION 1301(b)?**

19 A. Yes. Title 66, Section 1301(b) states the following:

20 In determining a just and reasonable rate furnished or rendered  
21 by a municipal corporation or by the operating agencies of a  
22 municipal corporation providing public utility water or  
23 wastewater service beyond its corporate limits, the commission

1 shall employ an imputed capital structure of comparable public  
2 utilities providing water or wastewater service.

3 On advice of counsel, the statute does not define what makes the public utilities  
4 providing water or wastewater service comparable to the municipal utility, nor  
5 does it dictate where the “imputed capital structure” must fall within the range of  
6 comparable utilities. My recommended capital structure is in the range, albeit the  
7 low end of the range, for my proxy group; therefore, it complies with the  
8 requirement to use “an imputed capital structure of comparable public utilities...”  
9

10 **IMPLIED TAX RATE ADJUSTMENT**

11 **Q. PLEASE SUMMARIZE MR. D’ASCENDIS’ CRITIQUE OF YOUR**  
12 **IMPLIED TAX RATE ADJUSTMENT RECOMMENDATION.**

13 A. Mr. D’Ascendis states that my tax adjustment analysis is unnecessary as the Water  
14 Department’s tax-exempt status is already reflected in the Water Department’s  
15 debt cost rate, taxes are not included in the revenue requirement formula, and to  
16 include a tax adjustment would be “double counting” risk and returns. Mr.  
17 D’Ascendis states that the return on equity is based on the risk of the investment  
18 and that the proxy group reflects the risk of providing water service that is of  
19 similar risk to the Water Department. Mr. D’Ascendis asserts that there were  
20 occasions where the spread between A-rated municipal bond yields and A-rated  
21 public utility bond yields was negative which would suggest a return premium to  
22 not pay taxes. Next, Mr. D’Ascendis states that my implied tax adjustment of

1 25.68% is unreasonable, as it is above the capital gains tax rate and the median  
2 household income tax rate for Ambler customers (Ambler Statement No. 4-R, pp.  
3 5-14).

4  
5 **Q. DO YOU AGREE WITH MR. D'ASCENDIS ASSERTION APPLYING AN**  
6 **IMPLIED TAX RATE ADJUSTMENT IS "DOUBLE COUNTING" RISK**  
7 **AND RETURNS?**

8 A. No. As explained in greater detail in my direct testimony, the implied tax rate  
9 adjustment recognizes that the interest paid to municipal bondholders is exempt  
10 from taxation while interest paid to corporate bondholders is not exempt and an  
11 adjustment must be made to the cost of common equity based on the idea that an  
12 investor would accept a lower return on a municipal bond due to the tax  
13 exemption. Additionally, municipalities report to their customers and the  
14 taxpayers within their jurisdiction, while an investor-owned utility reports to both  
15 its customers and to its investors or owners. An investor-owned utility is expected  
16 to earn a return for its investors; however, a municipality has no investors for  
17 which to earn a return. Therefore, the comparison of an investor-owned utility's  
18 financials to those of a municipal utility is not equal. Finally, I referenced three  
19 base rate cases where the Commission accepted the use of and calculation used to  
20 determine an implied tax rate adjustment in determining a municipal's cost of  
21 common equity (I&E Statement No. 2, pp. 32-36).

1 **Q. WHY IS YOUR IMPLIED TAX RATE OF 25.68% REASONABLE?**

2 A. Mr. D'Ascendis' argument that my implied tax rate is too high because it is above  
3 the capital gains tax rate is not applicable for two reasons. First, municipal bonds  
4 are not taxable so there is no need to compare the implied tax rate to the capital  
5 gains tax rate. Second, interest and dividends on bonds and stocks are considered  
6 income and not capital gains so trying to tie the tax rate to the capital gains tax rate  
7 of 10% is also not relevant.

8           Additionally, I disagree with Mr. D'Ascendis' assertion that my implied tax  
9 rate of 25.68% is too high. Again, the purpose of the implied tax rate adjustment  
10 is to reflect the difference between tax exempt municipal bonds to taxable public  
11 utility bonds in the Water Department's cost of equity and since neither Mr.  
12 D'Ascendis' nor my proxy groups contain any tax-exempt municipalities, the  
13 calculated cost of equity for the proxy group must be higher to achieve the same  
14 yield as the Water Department due to its lower risk due to its taxing authority. In  
15 this proceeding, I compared Moody's A-Rated monthly Municipal Bond Yields to  
16 Moody's A-Rated monthly Public Utility Bond Yields where implied tax rate  
17 ranged between 15.51% to 33.93%, with an average of 25.68% (I&E Exhibit No.  
18 2, Schedule 11). While Mr. D'Ascendis disagrees with my recommended implied  
19 tax adjustment of 25.68%, he does not provide an implied tax rate that he would  
20 deem to be reasonable. Finally, the calculation of my recommended implied tax  
21 rate is consistent with the methodology accepted by the Commission in

1 determining an implied tax rate adjustment in determining a municipal's cost of  
2 common equity.

3  
4 **Q. DO YOU CONTINUE TO SUPPORT YOUR RECOMMENDED TAX**  
5 **ADJUSTMENT OF 25.68%?**

6 A. Yes.

7  
8 **DISCOUNTED CASH FLOW**

9 **Q. SUMMARIZE MR. D'ASCENDIS' REBUTTAL TESTIMONY**  
10 **REGARDING YOUR DCF ANALYSIS.**

11 A. Mr. D'Ascendis opines that I have inappropriately relied solely on the DCF model  
12 for my cost of equity recommendations (Ambler Statement No. 4-R, p. 17, lines 6-  
13 8). He presents three cases where he claims the Commission has considered  
14 multiple cost of equity models (Ambler Statement No. 4-R, pp. 28-30). Then, Mr.  
15 D'Ascendis argues that market-to-book (M/B) ratios over the past decade have  
16 increased significantly for the water industry and likely cause the DCF results to  
17 understate the investor-required return. He argues that the difference between the  
18 market value, on which investors evaluate and receive their returns, and the book  
19 value, on which regulators authorize returns, will cause the market-based results of  
20 the DCF, which are applied to the book value capital structure, to understate the  
21 cost of equity (Ambler Statement No. 4-R, pp. 21-26). Finally, although Mr.  
22 D'Ascendis is not advocating for a leverage adjustment to the results of the DCF,

1 he claims he provided the discussion with the purpose of demonstrating the  
2 model's limitations and supporting the use of multiple models (Ambler Statement  
3 No. 4-R, p. 26, lines 16-22).

4  
5 **ALLEGED SOLE RELIANCE ON THE DCF**

6 **Q. PLEASE RESPOND TO MR. D'ASCENDIS' ASSERTION THAT YOU**  
7 **RELIED SOLELY ON THE DCF.**

8 A. As stated in my direct testimony, while my recommendation was based on the  
9 results of my DCF analysis, I also employed the CAPM as a comparison as the  
10 DCF method is the most reliable (I&E Statement No. 2, pp. 16-18). I have  
11 considered the fact that no method can perfectly predict the return on equity,  
12 which is why I also use the CAPM as a comparison to the DCF. Although no one  
13 method can capture every factor that influences an investor, including the results  
14 of methods less reliable than the DCF, this does not make the end result of the  
15 DCF less reliable or less accurate. As a result, I stand by my method of using the  
16 DCF with a CAPM comparison, which is consistent with the methodology  
17 historically used by the Commission in base rate proceedings, even as recently as

1 2017, 2018, 2020, and 2021.<sup>1</sup>

2  
3 **Q. WHICH CASES DOES MR. D’ASCENDIS MENTION WHERE HE**  
4 **CLAIMS THE COMMISSION HAS CONSIDERED MULTIPLE COST OF**  
5 **EQUITY MODELS?**

6 A. Mr. D’Ascendis mentions the 2013 Columbia Water Company,<sup>2</sup> the 2014  
7 Emporium Water Company,<sup>3</sup> and the 2021 Aqua Pennsylvania, Inc.<sup>4</sup> cases to  
8 suggest the Commission has considered multiple cost of common equity models  
9 (Ambler Statement No. 4-R, pp. 28-30).

10  
11 **Q. WHAT COMMENTS DO YOU HAVE REGARDING THE CASES MR.**  
12 **D’ASCENDIS MENTIONS?**

13 A. First, within the citation Mr. D’Ascendis presents regarding the Columbia Water  
14 Company case, the Commission specifically states that it used the DCF method as  
15 the foundation in determining the cost of equity (Ambler Statement No. 4-R, p. 28,

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<sup>1</sup> *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company*; Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA*; Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*; Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131. *Pa. PUC v. PECO Energy Company – Gas Division*; Docket No. R-2020-3018929 (Order Entered June 22, 2021). *See generally* Disposition of Return of Rate on Common Equity, p. 171.

<sup>2</sup> *Pa. PUC v. The Columbia Water Company*, Docket No. R-2013-2360798, Order Entered January 23, 2014.

<sup>3</sup> *Pa. PUC v. Emporium Water Company*, Docket No. R-2014-2402324, Order Entered January 28, 2015.

<sup>4</sup> *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket Nos. R-2021-3027385 & R-2021-3027386, Order entered May 16, 2022.

1 line 32 through p. 29, line 1). Any adjustments to the cost of equity after the fact  
2 are at the Commission's discretion and independent of the result of any cost of  
3 equity model. Regarding the Emporium Water Company case, the Commission  
4 simply summarized the recommendations presented by OCA, I&E, and the  
5 Company; it did not specifically comment on which model(s) it relied on (Ambler  
6 Statement No. 4-R, p. 29, lines 10-28). Regarding the Aqua Pennsylvania, Inc.,  
7 case, as I stated in my direct testimony, Aqua's return on equity of 10.00% is  
8 above the national average for water utility base rate cases and above the  
9 Distribution System Improvement Charge (DSIC) authorized by the Commission  
10 of 9.80%<sup>5</sup> for water and wastewater utilities based on the year ended  
11 December 31, 2021, issued at the recent Public Meeting held June 16, 2022 which  
12 demonstrates the problem associated with using the CAPM as a ceiling for  
13 determining a utility's return on equity. Additionally, the use of the CAPM in this  
14 proceeding would result in a significant burden to ratepayers during a time of  
15 increasing levels of inflation and economic decline (I&E Statement No. 2, p. 21,  
16 line 13 through p. 22, line 14). Finally, as stated in my direct testimony, I did in  
17 fact employ the CAPM as a comparison to my DCF result and my  
18 recommendation is consistent with the methodology historically used by the

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<sup>5</sup> PA Public Utility Commission, Bureau of Technical Utility Services Report on the Quarterly Earnings of Jurisdictional Utilities for the Year Ended December 31, 2021, p. 27, approved at Public Meeting on June 16, 2022 at Docket No. M-2022-3032405.

1 Commission in base rate proceedings, even as recently as 2017, 2018, 2020, and  
2 2021<sup>6</sup> (I&E Statement No. 2, p. 16, lines 4-11).

3  
4 **MARKET-TO-BOOK RATIO**

5 **Q. WHAT DOES MR. D’ASCENDIS CLAIM REGARDING MARKET-TO-**  
6 **BOOK RATIOS IN THIS PROCEEDING?**

7 A. He opines that a M/B ratio above 1.0 causes the market based DCF to understate  
8 the return required by investors (Ambler Statement No. 4-R, p. 21).

9  
10 **Q. DOES A MARKET-TO-BOOK RATIO ABOVE ONE (1.0) CAUSE THE**  
11 **DCF TO INCORRECTLY ESTIMATE THE INVESTOR-REQUIRED**  
12 **RETURN ON EQUITY?**

13 A. No. Although, there are differences between the book value and market value of  
14 water utilities, Mr. D’Ascendis’ assertion that the difference causes the DCF to  
15 undervalue the rate of return assumes that investors are unaware of the difference.  
16 The forecasted growth rates used in the DCF are set by analysts based on current  
17 conditions and what they expect the future could be for the stock. If a market-to-

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<sup>6</sup> *Pa. PUC v. City of DuBois – Bureau of Water*; Docket No. R-2016-2554150 (Order Entered March 28, 2017). *See generally* Disposition of Cost Rate Models, pp. 96-97; *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018). *See generally* Disposition of Cost of Common Equity, p. 119; *Pa. PUC v. Wellsboro Electric Company*; Docket No. R-2019-3008208 (Order Entered April 29, 2020). *See generally* Disposition of Primary Methodology to Determine ROE, pp. 80-81; *Pa. PUC v. Citizens Electric Company of Lewisburg, PA*; Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 91-92. *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*; Docket No. R-2020-3018835 (Order Entered February 19, 2021). *See generally* Disposition of Cost of Common Equity, p. 131.

1 book ratio is above 1.0, no rational investor would invest in a utility stock that has  
2 been trading above book value for several years and be surprised that rates  
3 continue to be set based on the book value capital structure. A market-to-book  
4 ratio of above 1.0 for utility stocks reflects their value in the market and implies  
5 that investors expect future cash flows to be more valuable than the historical  
6 accounting value of the company. Since the stock market is impacted by  
7 regulatory policies and economic and financial conditions, a market-to-book ratio  
8 could be less than 1.0 when the stock market is in a depression or a company is  
9 experiencing under-performance, so it is inappropriate to evaluate DCF results  
10 with the market-to-book ratio.

11  
12 **CAPITAL ASSET PRICING MODEL**

13 **Q. SUMMARIZE MR. D'ASCENDIS' RESPONSE TO YOUR CAPM**  
14 **ANALYSIS.**

15 A. Mr. D'Ascendis disputes my use of the 10-year U.S. Treasury Note as a proxy to  
16 measure the risk-free rate that I use in my CAPM analysis as well as the inputs I  
17 chose from Blue Chip forecasts. He also disagrees with my exclusion of the  
18 ECAPM method of computing the Company's return on equity (Ambler Statement  
19 No. 4-R, p. 30, lines 18-21).

1           **RISK-FREE RATE**

2   **Q.   WHAT IS MR. D’ASCENDIS’ RESPONSE TO YOUR USE OF THE**  
3           **YIELD ON THE 10-YEAR U.S. TREASURY BOND?**

4   A.   Mr. D’Ascendis claims his use of the yield on a 30-year U.S. Treasury Bond is  
5           more appropriate than my use of the yield on a 10-year Treasury Bond because it  
6           better reflects the life of the underlying investment. He also claims that not  
7           incorporating the longest projection available is inconsistent with the DCF  
8           assumption of a constant rate of dividend growth and the Efficient Market  
9           Hypothesis (EMH), which assumes that all available information is considered by  
10          investors (Ambler Statement No. 4-R, pp. 30-32).

11  
12   **Q.   IS THE LIFE OF THE INVESTMENT THE ONLY FACTOR THAT**  
13          **SHOULD BE CONSIDERED IN THE CHOICE OF A RISK-FREE RATE?**

14   A.   No. The risk-free rate is the return that can be earned without accepting any risk,  
15          and while the life of the investment can be considered in the choice of risk-free  
16          rates, the most important consideration is that the rate be as risk-free as possible.  
17          As explained in my direct testimony, I chose the 10-year Treasury Note as it  
18          mitigates the short-comings of the short-term Treasury-Bill and the 30-year  
19          Treasury Bond (I&E Statement No. 2, p. 28). Although long-term Treasury Bonds  
20          have less risk of being influenced by federal policies, they have substantial  
21          maturity risk associated with market risk. In addition, long-term Treasury Bonds  
22          bear the risk of unexpected inflation. As such, my choice of a 10-year Treasury

1 Note is appropriate. Further, as also pointed out in my direct testimony, the  
2 Commission recently agreed with I&E that the 10-year Treasury Note is the  
3 superior measure of the risk-free rate of return.<sup>7</sup>  
4

5 **Q. DOES THE PROJECTED RISK-FREE RATE NEED TO REPRESENT**  
6 **THE LONGEST TIME PERIOD AVAILABLE AS MR. D’ASCENDIS**  
7 **CLAIMS?**

8 A. No. The time period reflected in a projected risk-free rate should include the  
9 period in which rates will be in effect. Since Ambler is not setting rates to be  
10 applicable far into the future, using projections for six or more years from now, as  
11 Mr. D’Ascendis suggests, is inappropriate (Ambler Statement No. 4-R, p. 31, lines  
12 26-28). The yield on the 10-year Treasury Note is expected to range between  
13 3.00% and 3.30% from the third quarter of 2022 through the third quarter of 2023  
14 and is forecasted to be 2.90% from 2023-2027. For my forecasted CAPM  
15 analysis, I calculated 3.15%, which is the average of all the yields I observed (I&E  
16 Exhibit No. 2, Schedule 8). In addition, the further out into the future one  
17 forecasts, the less reliable and more speculative the estimates become; therefore,  
18 to give more weight to less reliable estimates would not be prudent. My  
19 calculation provides a balance of shorter-term future estimates.

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<sup>7</sup> *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018).  
*See generally* Disposition of Capital Asset Pricing Model (CAPM), p. 99.

1           **EXCLUSION OF THE ECAPM**

2   **Q.   PLEASE SUMMARIZE MR. D’ASCENDIS’ RESPONSE TO YOUR**  
3   **EXCLUSION OF THE ECAPM IN YOUR ANALYSIS.**

4   A.   Mr. D’Ascendis asserts that the empirical Security Market Line (SML) described  
5       by the traditional CAPM is not as steeply sloped as the CAPM model predicts and  
6       that tests of the CAPM have measured the level of which security returns and  
7       betas are related as predicted by the CAPM (Ambler Statement No. 4-R, pp. 33-  
8       35).

9  
10 **Q.   WHY IS THE ECAPM EXCLUDED FROM YOUR ANALYSIS?**

11 A.   The ECAPM is a modified version of the CAPM which attempts to address the  
12       belief that the actual risk vs. return correlation is flatter than what is predicted by  
13       the CAPM. The implication is that the CAPM under-estimates returns with lower  
14       levels of risk and over-estimates the returns associated with higher levels of risk.  
15       The model entails assigning 25% weight to the market beta and 75% weight to the  
16       individual company or proxy group.<sup>8</sup>

17           Additionally, the use of the ECAPM in estimating the cost of capital does  
18       not increase the validity of the result but merely adds another measure of  
19       subjectivity to the CAPM in an attempt to make the SML more accurate. The  
20       ECAPM reduces the purpose of the beta, which is the only company-specific

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<sup>8</sup> David C. Parcell, “The Cost of Capital – A Practitioner’s Guide,” 2010 Edition, p. 104.

1 variable in the CAPM model. This additional layer of subjectivity provides an  
2 even stronger basis to rely on the DCF as the primary method to calculate a  
3 utility's cost of equity.

4  
5 **Q. HAVE YOU CHANGED YOUR CAPM RETURN ON EQUITY**  
6 **RECOMMENDATION AS A RESULT OF MR. D'ASCENDIS' REBUTTAL**  
7 **TESTIMONY?**

8 A. No. I continue to recommend using my CAPM result of 12.28% (I&E Exhibit  
9 No. 2, Schedule 10) only as a comparison to my DCF result of 8.52% (I&E  
10 Exhibit No. 2, Schedule 6).

11  
12 **SIZE ADJUSTMENT**

13 **Q. SUMMARIZE YOUR DIRECT TESTIMONY REGARDING MR.**  
14 **D'ASCENDIS' CLAIM FOR AN ADJUSTMENT FOR THE COMPANY'S**  
15 **SMALL SIZE.**

16 A. In direct testimony, I stated that Mr. D'Ascendis' 100-basis point adjustment is  
17 unnecessary because none of the technical literature cited in his direct testimony  
18 supporting an adjustment related to the size of a company is specific to the utility  
19 industry. Additionally, I presented an article by Dr. Annie Wong that  
20 demonstrated there is no need to make an adjustment for the size of a company in  
21 utility rate regulation. Finally, I indicated that the Commission has recently

1 rejected the application of a size adjustment to the cost of equity calculation (I&E  
2 Statement No. 2, pp. 42-45).

3  
4 **Q. SUMMARIZE MR. D'ASCENDIS' RESPONSE IN REBUTTAL**  
5 **TESTIMONY REGARDING A SIZE RISK FACTOR ADJUSTMENT.**

6 A. Mr. D'Ascendis opines that firms of smaller size are less able to cope with  
7 significant events affecting sales, are less diverse in their operations, and have less  
8 financial flexibility. He supports these statements by pointing to two studies, one  
9 from Fama and French, and one from Kroll, relating the size of a company to its  
10 return on equity. Mr. D'Ascendis also attempts to discredit a study performed by  
11 Dr. Wong, which I&E relied upon in rejection of his size adjustment, by citing a  
12 review of her study authored by Thomas M. Zepp. Additionally, Mr. D'Ascendis  
13 inaccurately asserts that I&E claims his size risk premium is not specific to  
14 utilities because the study he cites utilizes data from the New York Stock  
15 Exchange (NYSE), American Stock Exchange (AMEX), and National Association  
16 of Security Dealers Automated Quotation System (NASDAQ). Finally, Mr.  
17 D'Ascendis points to a 2019 Commission order where the Commission considered  
18 a size adjustment (Ambler Statement No. 4-R, pp. 36-40).

1 **Q. ARE MR. D’ASCENDIS’ ASSERTIONS REGARDING FIRMS OF**  
2 **SMALLER SIZE RELEVANT TO THE REGULATED UTILITY**  
3 **INDUSTRY?**

4 A. No. The study performed by Dr. Wong provides empirical evidence that refutes  
5 Mr. D’Ascendis’ claim which I will further elaborate upon below.

6  
7 **Q. WHAT ARE YOUR OBSERVATIONS REGARDING THE STUDIES MR.**  
8 **D’ASCENDIS RELIES ON TO SUPPORT HIS CLAIM OF A SIZE**  
9 **ADJUSTMENT?**

10 A. The Fama and French study and the Kroll study are not specific to the utility  
11 industry. While I&E relied upon the Fama and French study in this proceeding, as  
12 Mr. D’Ascendis correctly points out, the purpose for which I&E cited the study  
13 was to demonstrate empirically the shortcomings of the CAPM. The Fama and  
14 French study is irrelevant toward the determination of the size risk factor because  
15 it is not specific to the utility industry.

16  
17 **Q. PLEASE COMMENT ON THE REVIEW OF DR. WONG’S STUDY**  
18 **PERFORMED BY DR. ZEPP.**

19 A. The article Mr. D’Ascendis references from Dr. Zepp does not recreate Dr.  
20 Wong’s study; it simply speculates on other possible reasons for her results and  
21 references the results of two other studies. The first study, completed by the  
22 California Public Utilities Commission Staff in 1991, is not included in the article,

1 and, therefore, Dr. Zepp's opinions cannot be properly evaluated. Dr. Zepp also  
2 draws his conclusions about an entire industry based on the second study, which  
3 examines the effects of size on only four water utility companies. This article  
4 does not contain enough credible evidence to refute Dr. Wong's findings.

5  
6 **Q. PLEASE DISCUSS THE INCORRECT INTERPRETATION MADE BY**  
7 **MR. D'ASCENDIS REGARDING YOUR DIRECT TESTIMONY.**

8 A. Mr. D'Ascendis appears to have mistaken an observation I made in direct  
9 testimony as a criticism of his analysis. He incorrectly asserts in rebuttal  
10 testimony that I stated his size adjustment is not specific to utilities because the  
11 study he cites uses data from the NYSE, AMEX, and NASDAQ. However, I  
12 merely observed that Mr. D'Ascendis used market information from NYSE,  
13 AMEX, and NASDAQ exchanges as a means to calculate his perceived size risk  
14 premium for Ambler. This is an important observation because it is not  
15 appropriate to compare highly competitive private companies with regulated,  
16 monopolistic, public utilities.

17  
18 **Q. HAVE YOU FOUND FURTHER EVIDENCE TO SUPPORT YOUR**  
19 **RECOMMENDATION REGARDING SIZE ADJUSTMENTS?**

20 A. Yes. The difficulty in predicting the risk effect of a company's size is  
21 demonstrated in the variance from year to year of the measurement of difference  
22 between the annual returns on the large and small-capitalization stocks of the

1 NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation: 2015*  
2 *Yearbook*. As stated on page 100,

3 While the largest stocks actually declined in 2001, the smallest  
4 stocks rose more than 30%. A more extreme case occurred in  
5 the depression-recovery year of 1933, when the difference  
6 between the first and 10<sup>th</sup> decile returns was far more  
7 substantial. The divergence in the performance of small- and  
8 large- cap stocks is evident. In 30 of the 89 years since 1926,  
9 the difference between the total returns of the largest stocks  
10 (decile 1) and the smallest stocks (decile 10) has been greater  
11 than 25 percentage points.

12 Page 109 states,

13 In four of the last 10 years, large-capitalization stocks (deciles  
14 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-  
15 capitalization stocks (deciles 9-10). This has led some market  
16 observers to speculate that there is no size premium. But  
17 statistical evidence suggests that periods of underperformance  
18 should be expected.

19 Page 112 states,

20 Because investors cannot predict when small-cap returns will  
21 be higher than large-cap returns, it has been argued that they  
22 do not expect higher rates of return for small stocks.

23  
24 **Q. WHAT IS YOUR RESPONSE TO MR. D’ASCENDIS’ REBUTTAL**  
25 **TESTIMONY REGARDING THE REFERENCED COMMISSION ORDER**  
26 **FOR CITIZENS’ ELECTRIC COMPANY?**

27 A. Although the Commission in the Citizens’ Electric Company proceeding agreed  
28 that there is an inverse relationship between size and risk, the Commission

1 concluded that there is not substantial evidence that size is specifically a risk for  
2 utilities as follows,

3 At the same time, however, we echo the ALJs that the Parties  
4 have presented offsetting arguments such that there is not  
5 substantial evidence to determine whether size is specifically a  
6 risk for utilities. As I&E and the OCA both noted, the technical  
7 literature presented by Citizens' is not specific to the utility  
8 industry and also may not definitively support a size  
9 adjustment. Additionally, as I&E observed, the empirical  
10 study undertaken by the Company's witness Mr. D'Ascendis  
11 illustrates the difficulty in predicting the risk effect of a  
12 company's size. More specifically, while Mr. D'Ascendis  
13 used market information from the NYSE, the AMEX, and the  
14 NASDAQ, we find that I&E offered evidence indicating that  
15 for certain periods, large-capitalization stocks have  
16 outperformed small-capitalization stocks such that there is not  
17 sufficient correlation to prove that size is a specific risk for  
18 utilities. I&E St. 2-SR at 23-24. Therefore, we are not  
19 persuaded by the Company's argument that the ALJs erred by  
20 not awarding Citizens' a greater size adjustment. For this  
21 reason, we decline to award an explicit 100-basis point size  
22 adjustment, as advocated by Citizens'.<sup>9</sup>

23 Finally, as stated in my direct testimony, the Commission has recently  
24 rejected the application of a size adjustment to the cost of equity calculation (I&E  
25 Statement No. 2, p. 44, lines 16-17).

---

<sup>9</sup> *Pa. PUC v. Citizens Electric Company of Lewisburg, PA*; Docket No. R-2019-3008212 (Order Entered April 29, 2020). *See generally* Disposition of Cost of Common Equity, pp. 103-104.

1 **Q. HAS YOUR RECOMMENDATION REGARDING MR. D’ASCENDIS’**  
2 **SIZE ADJUSTMENT CHANGED SINCE YOUR DIRECT TESTIMONY?**

3 A. No. I continue to recommend that any adjustments in consideration of the  
4 Company’s size be disallowed.

5

6 **NON-PRICE REGULATED PROXY GROUP**

7 **Q. WHAT WAS YOUR RECOMMENDATION IN DIRECT TESTIMONY**  
8 **CONCERNING MR. D’ASCENDIS’ UTILIZATION OF A NON-**  
9 **REGULATED PROXY GROUP?**

10 A. I recommended the Commission reject all analyses performed using the non-price  
11 regulated company proxy group as it is highly speculative and subjective. Mr.  
12 D’Ascendis’ non-regulated proxy group in effect blends the CE approach into the  
13 DCF, RP, and CAPM models, and I cited that the Commission has ruled on the  
14 use of non-utility companies in comparable groups for the CE approach as being  
15 highly speculative (I&E Statement No. 2, pp. 40-41).

16

17 **Q. SUMMARIZE MR. D’ASCENDIS RESPONSE REGARDING YOUR**  
18 **DISAGREEMENT WITH HIS USE OF A NON-REGULATED PROXY**  
19 **GROUP.**

20 A. In rebuttal testimony, Mr. D’Ascendis attempts to justify the use of the companies  
21 contained in his non-regulated proxy group based on the betas and standard errors  
22 of the regression being similar to that of the companies in his water company

1 proxy group and, therefore, opining they are similar to Ambler (Ambler Statement  
2 No. 4-R, pp. 45-47).

3  
4 **Q. HAS MR. D'ASCENDIS PROVEN THAT THE RISKS FACED BY HIS**  
5 **NON-REGULATED PROXY GROUP ARE SIMILAR TO THAT OF HIS**  
6 **WATER UTILITY GROUP?**

7 A. No. The risks faced in each industry for the companies used in Mr. D'Ascendis'  
8 unregulated group differ from the risks faced by his water utility group.  
9 Specifically, the level of competition between non-price regulated companies and  
10 monopolies, which utilities largely are, is too difficult a factor to control.  
11 Although beta is an indicator of a company's investment risk in relation to the  
12 entire stock market, beta is not a quantification of the total investment risk of a  
13 given company. Mr. D'Ascendis' unregulated proxy group may have a beta  
14 comparable to that of his water group, but that does not mean the companies face  
15 sufficiently similar risks to be used as a substitute for an industry's market. Both  
16 beta and the standard error of regression are measures of the past performance of a  
17 stock and as such do not necessarily reflect where an industry is going or what  
18 risks it is expected to face.

19 Additionally, the Commission made the following comments in a recent  
20 UGI Electric case regarding the CE method, specifically, the use of non-utility

1 companies in comparable groups, and stated,<sup>10</sup>

2 With respect to the CE method, as noted above, this cost of  
3 equity method utilizes data for non-regulated firms. Thus, by  
4 its very nature, determining which companies are comparable  
5 is entirely subjective. In addition, the record indicates that the  
6 companies UGI utilized in its CE group results in the selection  
7 of companies such as Coca-Cola Company, Kellogg Company,  
8 and Walmart Stores, Inc.... Each of these companies operate in  
9 industries that are very different from a utility company and  
10 have significantly more competition, which would require a  
11 higher return for the associated additional risk.

12 Finally, I am advised by counsel that this premise defies the principle set  
13 forth in the *Hope* and *Bluefield cases*<sup>11</sup> that a utility is entitled to a return similar to  
14 that being earned by companies with similar risks and uncertainties, but not as  
15 high as those earned by highly profitable or speculative ventures.

16  
17 **OVERALL RATE OF RETURN**

18 **Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION**  
19 **CHANGED FROM YOUR DIRECT TESTIMONY?**

20 **A.** No. I continue to support each recommendation made in I&E Statement No. 2.

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<sup>10</sup> *Pa. PUC v. UGI Utilities, Inc. – Electric Division*; Docket No. R-2017-2640058 (Order Entered October 25, 2018), p. 105. The Commission has also ruled “[t]he use of nonregulated companies as a comparable group for regulated firms requires numerous unsupportable assumptions which results in a highly speculative finding.” *Pennsylvania Public Utility Commission v. Philadelphia Electric Co.* 33 PUR 4<sup>th</sup> 319, 341 (Pa PUC 1980).

<sup>11</sup> *See Bluefield Water Works & Improvements Co. v. Public Service Comm. of West Virginia*, 262 U.S. 679,692-93 (1923), and the *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

1 **Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION**  
2 **FOR THE WATER DEPARTMENT?**

3 A. I recommend the following rate of return for the Water Department which includes  
4 a 25.68% tax adjustment to the cost of common equity:

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	57.00%	2.36%	1.35%
Common Equity	43.00%	6.33%	2.72%
Total	100.00%		4.07%

5

6

7 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

8 A. Yes.

**I&E Statement No. 3-SR  
Witness: Joseph Kubas**

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**v.**

**BOROUGH OF AMBLER – BUREAU OF WATER**

**Docket No. R-2022-3031704**

**Surrebuttal Testimony**

**of**

**Joseph Kubas**

**Bureau of Investigation and Enforcement**

**Concerning:**

**Reporting Requirements  
Cost of Service Issue  
Scale Back of Rates**

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1 **INTRODUCTION**

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

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

5

6 **Q. ARE YOU THE SAME JOSEPH KUBAS THAT SUBMITTED DIRECT**  
7 **TESTIMONY ON JULY 1, 2022 IN THIS PROCEEDING?**

8 A. Yes.

9

10 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

11 A. The purpose of my surrebuttal testimony is to evaluate the Borough of Ambler’s –  
12 Bureau of Water (“Ambler” or “Water Department”) request for a revised total  
13 annual increase in operating revenue of \$804,579, of which \$557,193 is from  
14 jurisdictional customers living outside the Borough, using a fully projected future  
15 test year (“FPFTY”) of September 30, 2023 (Ambler Ex. (CEH1-R), pp. 2-3). My  
16 surrebuttal testimony will address the rebuttal testimony of Mary Averas  
17 submitted on behalf of Ambler as Statement No. 1-R, and Constance E.  
18 Heppenstall submitted on behalf of Ambler as Statement No. 2-R. My surrebuttal  
19 testimony will address the rate base, including Contributions in Aid of  
20 Construction, annual depreciation expense, reporting requirements, a cost of  
21 service issue, and the scale back of rates.

1 **Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?**

2 A. No.

3

4 **CONTRIBUTIONS IN AID OF CONSTRUCTION**

5 **Q. WHAT ARE CONTRIBUTIONS IN AID OF CONSTRUCTION (“CIAC”)**  
6 **AND HOW ARE THEY REFLECTED IN THE FILING?**

7 A. CIAC refers to plant paid for by developers or customers then transferred to the  
8 Borough. The net value (original cost less accrued) is subtracted from rate base so  
9 that the utility does not earn a return on the contributed plant.

10

11 **Q. WHAT DID YOU RECOMMEND IN YOUR DIRECT TESTIMONY**  
12 **CONCERNING CIAC?**

13 A. I recommended that the Water Department reflect \$373,638 of CIAC to reduce  
14 rate base from \$11,236,670 to \$10,863,032 (I&E Ex. No. 3, Sch. 1, p. 1, column  
15 C, line 7).

16

17 **Q. DID THE WATER DEPARTMENT AGREE WITH YOUR RATE BASE**  
18 **RECOMMENDATION?**

19 A. Yes. The Water Department agreed with my recommendation (Ambler St. 2-R, p.  
20 2).

1 **ANNUAL DEPRECIATION EXPENSE**

2 **Q. WHAT IS ANNUAL DEPRECIATION EXPENSE?**

3 A. Annual depreciation expense is an operating expense. It represents the loss of  
4 service value of plant over the life of the plant.

5  
6 **Q. WHAT DID YOU RECOMMEND CONCERNING ANNUAL  
7 DEPRECIATION EXPENSE?**

8 A. I recommended that Ambler’s annual depreciation expense be reduced by \$13,959  
9 to remove the annual depreciation expense associated with the CIAC describe  
10 above (I&E Ex. No. 3, Sch. 2).

11  
12 **Q. DID THE WATER DEPARTMENT AGREE WITH YOUR ANNUAL  
13 DEPRECIATION EXPENSE RECOMMENDATION?**

14 A. Yes. The Water Department agreed with my recommendation (Ambler St. 2-R, p.  
15 2).

16  
17 **FTY AND FPFTY REPORTING**

18 **Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING PLANT  
19 ADDITIONS THAT THE WATER DEPARTMENT PROJECTS TO BE IN  
20 SERVICE DURING THE FTY ENDING SEPTEMBER 30, 2022 AND THE  
21 FPFTY ENDING SEPTEMBER 30, 2023?**

22 A. Yes. I recommend that the Water Department provide the Commission Bureau of  
23 Investigation and Enforcement and the Office of Consumer Advocate with an

1 update to Tables 2 and 3 of Ambler Exhibit JJS-2, no later than January 1, 2023,  
2 which should include actual capital expenditures, plant additions, and retirements  
3 for the twelve months ending September 30, 2022. I also recommend an  
4 additional update to Tables 2 and 3 of Ambler Exhibit JJS-3 no later than January  
5 1, 2024, which should include actual capital expenditures, plant additions, and  
6 retirements for the twelve months ending September 30, 2023 (I&E St. No. 3, pp.  
7 6-7).

8  
9 **Q. WHY DO YOU RECOMMEND THAT THE WATER DEPARTMENT**  
10 **PROVIDE THESE UPDATES?**

11 A. Through use of the FPFTY, a utility is allowed to require ratepayers to pre-pay a  
12 return on a utility's projected investment in future facilities that are not in place  
13 and providing service at the time the new rates take effect and are not subject to  
14 any guarantee of being completed and placed into service. While the FPFTY  
15 provides for such projections, there should be some timely verification of the  
16 projections (I&E St. No. 3. p. 7).

17  
18 **Q. DID THE WATER DEPARTMENT ADDRESS YOUR**  
19 **RECOMMENDATION?**

20 A. Yes. The Water Department disagreed with my recommendation claiming that the  
21 requirement is costly because it will require them to pay an outside consultant to

1 complete the comparison before the next base rate case. However, Ambler agreed  
2 to provide the comparisons in the next base rate case (Ambler St. No. 1-R, p. 7).

3  
4 **Q. WHAT DO YOU RECOMMEND AS A COMPROMISE?**

5 A. As a compromise, I will revise my proposal and recommend that the Water  
6 Department provide a breakdown of the plant installed and retirements made in the  
7 FTY by January 1, 2023, and a breakdown of the plant installed and retirements  
8 made in the FPFTY by January 1, 2024, without comparisons to Ex. JJS-2 and  
9 JJS-3. I agree with Ambler's proposal to provide the comparisons described in my  
10 direct testimony as part of the next base rate proceeding.

11  
12 **Q. SHOULD AMBLER BE ABLE TO PROVIDE THE TOTAL PLANT**  
13 **ADDITIONS AND RETIREMENTS IN THESE TEST YEARS WITHOUT**  
14 **A CONSULTANT BEFORE THE NEXT BASE RATE CASE?**

15 A. Yes. I believe the Company can obtain this information from its accounting and  
16 project management records without the burden or expense of an outside  
17 consultant.

18  
19 **COST OF SERVICE ISSUE**

20 **Q. WHAT IS A COST OF SERVICE STUDY (COSS)?**

21 A. A COSS is an analyses of a company's revenues, expenses, return, and taxes. In the  
22 analysis, these items are assigned or allocated to various rate classes such as

1 Residential, Commercial, and Industrial to determine if the revenue received from  
2 each class is equal to, more than, or less than the corresponding cost of providing  
3 service to that class. It can include a customer cost analysis that determines the  
4 monthly fixed cost incurred to provide service to the various classes.

5  
6 **Q. DID AMBLER PROVIDE A COSS IN THIS PROCEEDING?**

7 A. No. However, according to Ambler's response to I&E-RS-11, it singled out 100%  
8 of the \$113,000 in rate case expenses to customers outside of the Borough.

9  
10 **Q. HOW DOES AMBLER PROPOSE TO RECOVER RATE CASE EXPENSE**  
11 **IN THIS PROCEEDING?**

12 A. Ambler divided the \$113,000 of rate case expense into the volumes sold outside  
13 the Borough to calculate the additional cost to customers outside the Borough.  
14 Specifically, Ambler proposed that the usage rate applicable to customers outside  
15 the Borough be \$0.4738 per thousand gallons higher than the usage rate applicable  
16 to customers inside the Borough (I&E Ex. No. 3, Sch. 3).

17  
18 **Q. DID YOU AGREE WITH SINGLING OUT 100% OF RATE CASE**  
19 **EXPENSE AND ALLOCATING THAT \$113,000 EXPENSE TO**  
20 **CUSTOMERS OUTSIDE THE BOROUGH?**

21 A. No. I recommended that this allocation be rejected because it is unfair to single  
22 out one expense and allocate that to customers outside the Borough when all other

1 costs are allocated arbitrarily without consideration of cost causation.

2 Additionally, Ambler benefits from having a total system rate structure analysis as  
3 it informs the Water Department of the appropriate rate design for all customers,  
4 not just jurisdictional customers; therefore, this expense should be allocated to  
5 inside and outside customers like all the other expenses in the rate filing (I&E St.  
6 No. 3. pp. 8-9).

7  
8 **Q. DID AMBLER ADDRESS YOUR RECOMMENDATION?**

9 A. Yes. Ambler believes that my recommendation should be rejected for several  
10 reasons. First, the Water Department states that it is not required to file a COSS.  
11 Second, Ambler argues that the goal was to assign a cost to outside customer  
12 purely caused by outside customers. Third, the Water Department states that there  
13 is no reason to have a rate filing or commission a rate study without outside  
14 Borough customers. Fourth, the Water Department believes that since only  
15 outside customers benefit from Commission oversight, that only outside customers  
16 should pay this expense (Ambler St. No. 2-R. p. 9). Finally, Ambler states that the  
17 sole purpose of commissioning the rate study was to navigate the PUC regulatory  
18 and ratemaking process (Ambler St. No. 1-R, p. 7).

19  
20 **Q. DOES THE FACT THAT AMBLER IS NOT REQUIRED TO FILE A COSS  
21 SUPPORT THE WATER DEPARTMENT'S POSITION?**

22 A. No. The fact that Ambler is not required to file a COSS supports my  
23 recommendation not to allocate this cost solely to outside customers. I recognize

1 that Ambler is not required to file a COSS; however, it is improper to single out  
2 one expense and allocate it to outside customers when Ambler has not filed a fully  
3 allocated COSS.

4  
5 **Q. IS AMBLER’S “GOAL” OF DIRECTLY ASSIGNING THIS COST TO**  
6 **OUTSIDE CUSTOMERS APPROPRIATE?**

7 A. No. As described above and in my direct testimony, it is unfair to single out and  
8 directly assign one cost without also assigning other costs based on cost causation.  
9 If Ambler wants to assign individual costs or revenues to inside or outside  
10 customers, it is free to file a COSS and allocate all costs and revenues to its  
11 customer classes based on the cost causation and revenue generated. However,  
12 Ambler cannot exercise its ability to not file a COSS while still picking and  
13 choosing which costs it wants to assign. That type of cherry picking is not  
14 appropriate for ratemaking purposes and should not be permitted.

15  
16 **Q. DOES AMBLER’S CLAIM THAT IT WOULD HAVE NO REASON TO DO**  
17 **A RATE STUDY SUPPORT ITS POSITION THAT THIS EXPENSE**  
18 **SHOULD BE FULLY ALLOCATED TO OUTSIDE CUSTOMERS?**

19 A. No. The Water Department’s claim that there is no reason to have a rate filing or  
20 commission a rate study without outside Borough customers demonstrates that  
21 Ambler is unfairly singling out one item that it can identify as being the  
22 responsibility of customer outside the Borough without doing the same for other

1 expenses that could be assigned to customers inside the Borough. I do believe the  
2 Water Department would have experienced some expense in developing rates for  
3 inside customers given that it would be necessary to project revenue needed to  
4 operate the system. However, the Water Department does not have to incur that  
5 expense because it can use the instant rate study to determine both inside and  
6 outside rates. Accordingly, this expense, like all other expenses in this filing,  
7 should be uniformly allocated to inside and outside customers given that there is  
8 no COSS to directly assign such costs.

9  
10 **Q. PLEASE ADDRESS THE WATER DEPARTMENT’S CLAIM THAT IT**  
11 **ONLY COMMISSIONED A RATE STUDY TO NAVIGATE THE**  
12 **COMMISSION’S REGULATORY AND RATEMAKING PROCESS.**

13 A. While I recognize that Ambler used the rate study for the purpose of this  
14 proceeding, the Water Department never stated it was not going to rely on the rate  
15 study to establish rates inside the Borough. Since the Water Department can, and  
16 likely will, use the rate study to establish rates inside the Borough those costs  
17 should be allocated to all customers.

18  
19 **SCALE BACK OF RATES**

20 **Q. WHAT SCALE OF RATES DID YOU RECOMMEND?**

21 A. I recommended two different scale backs, one if the Commission approves my rate  
22 case expense allocation recommendation and one if the Commission rejects my rate

1 case expense allocation recommendation. These similar scale backs are the most  
2 reasonable approach without a COSS to guide the Commission. (I&E St. No. 3, p.  
3 11-12).

4  
5 **Q. DID THE WATER DEPARTMENT ADDRESS YOUR**  
6 **RECOMMENDATION?**

7 A. Yes. The Water Department recommends my rate case expense allocation be  
8 rejected and, therefore, recommends my scale back with the inclusion of the  
9 allocated expense be rejected in favor of a scale back that reflects the assignment of  
10 rate case expense only to outside customers (Ambler St. No. 2-R, p. 10).

11  
12 **Q. DO YOU CONTINUE TO RECOMMEND THE SCALE BACK**  
13 **METHODOLOGY DESCRIBED ABOVE AND IN YOUR DIRECT**  
14 **TESTIMONY?**

15 A. Yes. I continue to recommend the proportional scale back for the reasons stated  
16 above, and in my direct testimony (I&E St. No. 3. pp. 10-12).

17  
18 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

19 A. Yes.

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2022-3031704
	:	
Borough of Ambler-Water Department	:	
	:	

**VERIFICATION OF THE  
BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, Christine Wilson, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as I&E Statement No. 1, I&E Exhibit No. 1, and I&E Statement No. 1-SR were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

\_ /s/ Christine Wilson \_\_\_\_\_  
Christine Wilson  
Fixed Utility Financial Analyst Supervisor  
Pennsylvania Public Utility Commission  
Bureau of Investigation and Enforcement

Dated: July 29, 2022 \_\_\_\_\_

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission

v.

Borough of Ambler-Water Department

:  
:  
:  
:  
:

Docket No. R-2022-3031704

**VERIFICATION OF THE  
BUREAU OF INVESTIGATION AND ENFORCEMENT**

I, Joseph Kubas, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as I&E Statement No. 3, I&E Exhibit No. 3, and I&E Statement No. 3-SR were prepared by me or under my direct supervision and control.

Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

/s/ Joseph Kubas

\_\_\_\_\_  
Joseph Kubas  
Fixed Utility Valuation Engineer Supervisor  
Pennsylvania Public Utility Commission  
Bureau of Investigation and Enforcement

Dated: 7/29/22 \_\_\_\_\_

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Pennsylvania Public Utility Commission :  
v. : Docket No.: R-2022-3031704  
Borough of Ambler – Water Department :

**CERTIFICATE OF SERVICE**

I hereby certify that I am serving the foregoing **I&E Pre-Served Testimony, Exhibits and Verification Statements** dated August 22, 2022, in the manner and upon the persons listed below:

**Served via Electronic Mail Only**

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Administrative Law Judge John M. Coogan  
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