**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA INC**	: : : : : :	**Docket No. R-2018-3000834**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Brenton Grab, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 1, and, I&E Exhibit No. 1 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.

Brenton Grab

Brenton Grab
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: August 30, 2018

I&E Statement No. 1
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Direct Testimony

of

Brenton Grab

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

TAXES

CASH WORKING CAPITAL

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brenton Grab, and my business address is Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND?

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

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

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

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to review the base rate filing of Suez Water Pennsylvania Inc. (Suez, SWPA, or Company) and make recommended adjustments to the Company's proposed operating and maintenance (O&M) expenses, taxes, and cash working capital claims for the fully projected future test year (FPFTY) ending December 31, 2019. I will also make recommendations regarding flowback of the 2018 tax over recovery created by the Tax Cuts & Jobs Act of 2017 (TCJA). Lastly, I will address the Company's excess accumulated deferred income tax (ADIT) related the TCJA.

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

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

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS.

A. The following table summarizes my recommended adjustments:

	Company Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses and Taxes:			
Adjustments for Mahoning Township Acquisition	$430,783	$0	($430,783)
Labor Expense	$5,458,942	$5,413,703	($45,239)
Payroll Tax	$650,123	$644,689	($5,434)
Employee Group Health and Life Insurance	$1,439,521	$1,425,008	($14,513)
Fringe Benefits Transferred	($1,106,288)	($1,099,737)	$6,551
Outside Contractors	$1,147,114	$922,114	($225,000)
Purchased Water	$182,928	$74,591	($108,337)
Purchased Power	$1,570,688	$1,357,874	($212,814)
Management and Service Fees	$5,359,497	$4,492,483	($867,014)
Real Estate Taxes	$318,178	$304,553	($13,625)
O&M and Tax Expense Adjustments			**($1,916,208)**
Rate Base Adjustments:			
Cash Working Capital	$863,746	$796,364	($67,382)
Capitalized Labor	$2,669,386	$2,647,265	($22,121)
Fringe Benefits Transferred	$1,106,288	$1,099,737	($6,551)
Rate Base Adjustments			**($96,054)**

OVERALL I&E POSITION

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

A. I&E's total recommended revenue requirement for the Company is $46,531,591. This recommended revenue requirement represents a decrease of $850,659 to the I&E-adjusted present rate revenues of $47,382,250. This total recommended allowance incorporates my adjustments made in this testimony to O&M expenses, taxes, rate base, and cash working capital, and those recommended adjustments made in the testimonies of I&E witnesses D. C. Patel (I&E Statement No. 2) for the overall rate of return and Ethan Cline (I&E Statement No. 3) for revenues, rate base, and depreciation expense.

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

Suez Water Pennsylvania
R-2018-3000834
7/17/18

TABLE I
INCOME SUMMARY

	12/31/19 Proforma Present Rates	OFFICE OF TRIAL STAFF Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	47,382,250	0	47,382,250	-850,659	46,531,591
Deductions:					
O&M Expenses	19,205,688	-1,902,583	17,303,105	-3,028	17,300,077
Depreciation/Amortizations	8,515,508	-331,929	8,183,579		8,183,579
Taxes, Other	968,391	-13,625	954,766	-4,283	950,483
Income Taxes:					
Current State	1,086,677	266,804	1,353,481	-84,250	1,269,231
Current Federal	2,072,918	504,818	2,577,736	-159,411	2,418,325
Deferred Taxes	573,193	0	573,193		573,193
ITC	0	0	0		0
Total Deductions	32,422,375	-1,476,515	30,945,860	-250,972	30,694,888
Income Available	14,959,875	1,476,515	16,436,390	-599,687	15,836,703
Measure of Value	243,448,860	-19,766,618	223,682,242	0	223,682,242
Rate of Return	6.14%		7.35%		7.08%

ADJUSTMENTS FOR MAHONING TOWNSHIP ACQUISITION

Q. WHAT IS THE MAHONING TOWNSHIP ACQUISITION?

A. As mentioned by I&E witness Ethan Cline, the Company has indicated that it plans to file a Section 1329 application with the Commission to acquire the

Mahoning Township Water System (Mahoning Township) and serve its approximately 1200 customers (I&E Statement No. 3, p. 4 and SWPA Statement No. 1, p. 26). The Company has stated that it plans to, at some unspecified time in the second quarter of 2018 (SWPA St. No. 1, p. 26), file a Section 1329 application with the Commission to officially acquire Mahoning Township. Despite the fact that the Company has not yet filed this Application and it has not been approved the Commission, the Company is seeking to recover $430,783 in expenses related to the Mahoning Township system.

Q. WHAT O&M EXPENSES ARE THE COMPANY CLAIMING RELATED TO THE MAHONING TOWNSHIP ACQUISITION?

A. The Company's claimed O&M expenses include the cost of: purchased water from Danville, labor expense for the one employee retained, and other operating costs such as energy, chemicals, etc. (SWPA Statement No. 1, p. 27). More specifically, the Company is claiming an expense amount of $430,783 under the account name Adjustments for Mahoning Township Acquisition in its FPFTY (SWPA Exhibit No. CEH-2, Schedule-1). This expense is further broken down as purchased water of $360,835, energy/power of $24,948, and an additional subcontractor of $45,000 (SWPA Exhibit No. CEH-2, Schedule-29). Also, the Company is including the planned Mahoning Township one new hire in its calculation of labor expense and employee group health and life insurance expense. These items this will be addressed below in separate sections of my direct testimony.

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

A. The Company is including Adjustments for the Mahoning Township Acquisition ($430,783) due to the planned acquisition (SWPA Statement No. 2, p. 12 and SWPA Statement No. 1, p. 27). However, as previously indicated, the Application to acquire the system has not yet been filed.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR ADJUSTMENTS FOR THE MAHONING TOWNSHIP ACQUISITION OF $430,783?

A. No.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend disallowance of the $430,783 claim for Adjustments for the Mahoning Township Acquisition in its entirety (SWPA Exhibit No. CEH-2, Schedule-1).

Q. WHAT IS THE BASIS THE FOR YOUR RECOMMENDATION?

A. As explained by I&E witness Ethan Cline, the Company's proposal to include costs associated with this potential acquisition is improper because the Application to acquire Mahoning Township has not yet been filed or approved by the Commission. Including costs associated with the potential Mahoning Township acquisition goes against the rules set forth in Section 1329 of the Public Utility Code as explained in more detail by Mr. Cline (I&E Statement No. 3, pp. 5-6).

Additionally, Mr. Cline explained that including costs associated with Mahoning Township is improper because there is no guarantee that this potential acquisition will be approved before the end of the Fully Projected Future Test Year ("FPFTY") and the Company's proposal to raise rates of Mahoning Township customers in this base rate case is concerning given that these customers have had no notice of a potential rate increase or opportunity to participate in this base rate case (I&E Statement No. 3, p. 6). For more detail on Mr. Cline's recommendations, see I&E Statement No. 3. In consideration of Mr. Cline's testimony, I recommend disallowance of the O&M Acquisition Adjustments in the amount of $430,783.

LABOR EXPENSE

Q. WHAT IS LABOR EXPENSE?

A. The Company's labor expense consists of the Company's payroll claim (SWPA Exhibit No. CEH-2, Workpaper CEH-2.1).

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

A. The Company's claim for labor expense is $5,458,942 (SWPA Exhibit No. CEH-2, Sch.-1).

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

A. The Company's claim is based on gross salaries of $6,994,207, the gross salary increase of $201,569, gross incentive pay of $420,095, gross overtime pay of $413,475, gross standby pay of $78,686, gross shift pay of $15,685, and gross substitution pay of $4,743 for the existing employees and the five new hires for the FPFTY, which equals gross labor expense of $8,128,460 (SWPA Exhibit No.-CEH-2, p. 38, Workpaper CEH-2.1). Next, the Company makes an adjustment based on its capitalized labor percentage of 32.84% (rounded) which produces a FPFTY capitalized labor amount of $2,669,386 ($8,128,460 x 32.84%). However, the Company's claim for capitalized labor is $2,669,518 due to the Company not rounding off its labor capitalization percentage in its calculation. The Company's labor expense is equal to $5,458,942 ($8,128,460 - $2,669,518).

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

A. No.

Q. WHAT DO YOU RECOMMEND FOR LABOR EXPENSE?

A. I recommend an allowance of $5,413,703 or a reduction of $45,239 ($5,458,942 - $5,413,703) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. As discussed above, I recommend that all expenses related to the Mahoning Township acquisition be denied for the reasons set forth in I&E witness Ethan Cline's direct testimony (I&E Statement No. 3). This includes the denial of an employee as claimed in the Company's filing for Mahoning Township (SWPA Statement No. 1, p. 27).

Q. PLEASE CONTINUE.

A. The gross labor amount of $67,360 related to the Mahoning Township employee is claimed on SWPA Exhibit No. CEH-2, p. 37, Workpaper CEH-2.1, line 53 under the job title Utility B Person. As stated previously the Company's capitalization percentage of labor is 32.84%. The capitalization of the Mahoning Township employee gross labor amount is $22,121 ($67,360 x 32.84%). The labor expense for the Mahoning Township employee is $45,239 ($67,360 - $22,121). Disallowance of the Mahoning Township employee's labor expense produces a decrease of $45,239 to labor expense.

Q. ARE THERE ANY OTHER ADJUSTMENTS RELATED TO YOUR LABOR RECOMMENDATION?

A. Yes. Since I am removing the Mahoning Township employee from the Company's claim it is necessary to make a corresponding adjustment to rate base for the employee's capitalized portion of labor. I recommend an allowance of

$2,647,265 or a reduction of $22,121 ($2,669,386 - $2,647,265) to the Company's capitalized labor.

PAYROLL TAXES

Q. WHAT ARE PAYROLL TAXES?

A. Payroll taxes are taxes imposed on employers and employees and are usually calculated as a percentage of the salaries and wages paid to staff. Payroll taxes generally fall into two categories: (1) deductions from employees' salaries and wages, and (2) taxes paid by the employer based on employees' salaries and wages. The Company has made a claim in this filing for its share of those payroll taxes.

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

A. The Company's claim for payroll taxes is $650,213 (SWPA Exhibit No. CEH-2, Schedule-1 and Exhibit No. CEH-2, Schedule-32).

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

A. The Company's payroll tax claim is based on multiplying proposed gross FPFTY salaries and wages by the FICA tax rate (6.2%), the Medicare tax rate (1.45%), the federal unemployment tax rate (0.6%), and the state unemployment tax rate (2.3905%) (SWPA Exhibit No. CEH-2, Sch.-32 and SWPA Exhibit No. CEH-2, Workpaper CEH-2.2).

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

A. No.

Q. WHAT DO YOU RECOMMEND FOR PAYROLL TAXES?

A. I recommend an allowance of $644,689 or a reduction of $5,434 ($650,213 - $5,434) to the Company's claim.

Q. WHAT IS THE BASIS OF YOUR RECOMMENDATION?

A. My recommended adjustment to labor expense as discussed above would require a corresponding adjustment to payroll taxes. The Company claims the payroll tax for the Mahoning Township Employee under the job title Utility B Person. The payroll tax claim for Utility B Person is FICA tax of $4,176, Medicare tax of $977, federal unemployment tax of $42, and state unemployment tax of $239. The total of these equals my recommended adjustment of $5,434 ($4,176 + $977 + $42 + $239) (SWPA Exhibit No. CEH-2, p. 47, Workpaper CEH-2.2, line 52).

EMPLOYEE GROUP HEALTH AND LIFE INSURANCE EXPENSE

Q. WHAT IS EMPLOYEE GROUP HEALTH AND LIFE INSURANCE EXPENSE?

A. This expense includes the Company-funded portion of employee health and life insurance.

Q. WHAT IS THE COMPANY'S CLAIM FOR EMPLOYEE GROUP HEALTH AND LIFE INSURANCE EXPENSE?

A. The Company's claim for employee group health and life insurance is $1,439,521 (SWPA Exhibit No. CEH-2, Schedule-3).

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

A. The Company based its claim on its medical, dental, and group life insurance for the future test year ending December 31, 2018 (FTY) as adjusted for five new employees in 2018 (SWPA, Exhibit No. CEH-2, Schedule-3). The FTY expense of $1,407,156 is then increased by the Company's claimed inflation rate of 2.3% to determine the FPFTY claim of $1,439,521 ($1,407,156 x 1.023).

Q. WHAT IS YOUR RECOMMENDATION FOR EMPLOYEE GROUP HEALTH AND LIFE INSURANCE EXPENSE.

A. I recommend an allowance of $1,425,008 or a reduction of $14,513 ($1,439,521 - $1,425,008) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the disallowance of all expenses related to the Mahoning Township acquisition. The Company included five new employees in its calculation for the FTY (SWPA, Exhibit No. CEH-2, Schedule-3), and it indicated on SWPA Statement No. 1, p. 16 that one of these employees is from the Mahoning Township Acquisition.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDED ADJUSTMENT?

A. In response to OCA-IV-33, the Company provided the employer annual rate for 2018 for the employee group health and life insurance without the adjustment for the new hires of $1,336,815 ($1,208,956 + $72,607 + $55,252) (I&E Exhibit No. 1, Schedule 1, p. 2). I used the chart on SWPA Exhibit No. CEH-2, Schedule-3 to recalculate the 2018 adjustment for new hires (I&E Exhibit No. 1, Schedule 2). I excluded the Mahoning Township employee from the calculation, which decreased the number of new employees to four (I&E Exhibit No. 1, Schedule 2). Therefore, the updated adjustment to the FTY for new hires' employee group health and life insurance is $56,155 (I&E Exhibit No. 1, Schedule 2). This amount plus the FTY amount of $1,336,815 provided in the Company's response to OCA-IV-33 equals $1,392,970 ($56,155 + $1,336,815). This amount increased by the FPFTY inflation adjustment of 2.3% is equal to my recommendation of $1,425,008 ($1,392,970 x 1.023).

Q. DID THE COMPANY PROVIDE UPDATES TO ITS TESTIMONY REGARDING NEW EMPLOYEES IN DISCOVERY?

A. Yes. In response to I&E-RE-3 the Company updated John Hollenbach's testimony, specifically SWPA Statement No. 1, p. 16, lines 4-7, to indicate that the five new positions are all included in the 2019 budget, and all expenses related to the new employees should have been reflected in the FPFTY (I&E Exhibit No. 1, Schedule 3).

Q. ARE YOU UPDATING YOUR RECOMMENDATION TO EMPLOYEE GROUP HEALTH AND LIFE INSURANCE BASED ON THIS UPDATED INFORMATION?

A. No. I am not updating my recommendation for employee group health and life insurance based on this information because any dollar change related to moving the new employee group and life insurance adjustment would be immaterial. However, the Company should update its filing in rebuttal testimony to include all expenses related to new employees in the FPFTY.

<u>FRINGE BENEFITS TRANSFERRED</u>

Q. WHAT IS THE COMPANY'S FRINGE BENEFITS TRANSFERRED CLAIM?

A. The Company's claim for fringe benefits transferred is ($1,106,288) (SWPA Exhibit No. CEH-2, Schedule 25).

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

A. The Company is reclassifying an amount representing capitalized amounts, amounts "transferred out" and amounts reclassified to other accounts. This adjustment is based on the historic percentage of benefits transferred of 32.84% (SWPA Statement No. 2, p. 10). This percentage is multiplied by the total projected fringe benefits listed for FICA taxes, federal unemployment tax, state unemployment tax, workers' compensation, employee pension cost, post-retirement healthcare accrued, employee group health and life, employee 401K, other employee benefits, and other awards. The gross amounts of these listed expenses were claimed in the FPFTY on SWPA Exhibit No. CEH-2, Schedule-1. The Company totaled these expenses to arrive at the gross amount of $3,368,554 and multiplied that by the Company's transferred in/transferred out/capitalization percentage of 32.84%, which equals $1,106,288 ($3,368,554 x 32.84%) in fringe benefits transferred expense (SWPA Exhibit No. CEH-2, Schedule-25). Finally, the Company decreases O&M expenses by $1,106,288 to remove the transferred in/transferred out/capitalized portions of all expenses previously listed.

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

A. No.

Q. WHAT DO YOU RECOMMEND FOR FRINGE BENEFITS TRANSFERRED?

A. I recommend an allowance of ($1,099,737) or an increase to the Company's fringe benefits transferred of $6,551 (-$1,106,288 + $6,551).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommended adjustments to payroll taxes and employee group health and life insurance expense as discussed above require corresponding adjustments to fringe benefits transferred. Since I recommended negative adjustments to payroll taxes and employee group health and life insurance, it is necessary to make positive adjustments based on these accounts to fringe benefits transferred.

Q. HOW DID YOU CALCULATE YOUR RECOMMENDED ADJUSTMENT?

A. Multiplying my recommended adjustments to payroll taxes and employee group health and life insurance by the net transferred in/transferred out/capitalization percentage of 32.84% produces the corresponding adjustments that should be made to fringe benefits transferred. The positive adjustment to fringe benefits transferred based on my $5,434 payroll tax adjustment is $1,785 ($5,434 x 32.84%). The positive adjustment to fringe benefits transferred based on my $14,513 adjustment to employee group health and life insurance is $4,766 ($14,513 x 32.84%). The sum of these two amounts equals my recommended adjustment to fringe benefits transferred of $6,551 ($1,785 + $4,766).

Q. ARE THERE ANY OTHER ADJUSTMENTS RELATED TO YOUR FRINGE BENEFITS TRANSFERRED RECOMMENDATION?

A. Yes. Since my adjustment to fringe benefits transferred was based on the removal of the Mahoning Township employee from the Company's claim it is necessary to make a corresponding adjustment to rate base for the employee's capitalized fringe benefits transferred. I am recommending a corresponding reduction to capitalized fringe benefits transferred of $6,551. I recommend an allowance of $1,099,737 or a reduction of $6,551 ($1,106,288 - $1,099,737) to the Company's capitalized fringe benefits transferred.

OUTSIDE CONTRACTORS

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

A. The Company's claim for outside contractors expense is $1,147,114 (SWPA Exhibit No. CEH-2, Schedule-1).

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

A. The Company's claim was based on a two-year historic average of outside contractors expense which equals $739,050 (($729,456 + 748,644)/2) (SWPA Exhibit No. CEH-2, Schedule-14). This amount was then increased by the Company's inflation factors of 2.125% for the FTY and 2.3% for the FPFTY to determine the amount of $772,114. This expense was then increased by additional convenience fees of $150,000, a Non-Revenue Water (NRW) study expense of $150,000, and an inventory process study expense of $75,000 to determine the total FPFTY claim of $1,147,114 ($772,114 + $150,000 + 150,000 + $75,000). The Company stated a total expense of $300,000 for the NRW study expense and total expense of $150,000 for the inventory process study, which the Company is normalizing over the FTY and the FPFTY (SWPA Statement No. 2, p. 10, and SWPA Exhibit No. CEH-2, Schedule-14).

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

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR THE COMPANY'S OUTSIDE CONTRACTORS EXPENSE?

A. I recommend an allowance of $922,114 or a reduction of $225,000 ($1,147,114 - $225,000) to the Company's claim.

Q. WHAT IS THE BASIS OF YOUR RECOMMENDATION?

A. I recommend that the claim of $150,000 related to the NRW study and the claim of $75,000 related to the inventory process study be denied.

Q. WHY DO YOU RECOMMEND DENYING THE COMPANY'S CLAIMS FOR THE NRW STUDY AND THE INVENTORY PROCESS STUDY?

A. In response to OCA-IV-47 the Company indicated that it would hire an outside vendor to perform the NRW study (I&E Exhibit No. 1, Schedule 4, p. 1). The Company also indicated in this response that an outside vendor would be hired to perform the inventory process study (I&E Exhibit No. 1, Schedule 4, p. 2). One reason I recommend disallowance of the FPFTY related costs for these studies is because the Company did not provide any supporting documentation from the vendors to verify the costs.

Q. DID YOU ASK THE COMPANY TO PROVIDE SUPPORTING DOCUMENTATION FOR THE NRW STUDY AND INVENTORY PROCESS STUDY DURING DISCOVERY?

A. Yes. In I&E-RE-35, I asked the Company to provide supporting documentation such as invoices, workpapers, worksheets, contractor estimates, contractor agreements, etc. to support the total NRW study expense of $300,000 and the inventory process study expense of $150,000 (I&E Exhibit No. 1, Schedule 5, p. 1). I should note the Company indicated that it would receive bids for the NRW study project on June 15, 2018, but it never provided these bids (I&E Exhibit No. 1, Schedule 5, p. 2).

Q. ARE THERE ANY OTHER REASONS THAT YOU RECOMMEND DISALLOWANCE OF THE COSTS RELATED TO THE NRW STUDY AND THE INVENTORY PROCESS STUDY?

A. Yes. According to the Company's response to I&E-RE-35, it appears the Company is still in the very early planning stages of these projects and as such does not know what these studies will cost or what the studies will entail (I&E Exhibit No. 1, Schedule 5, p. 2). The Company indicated that it was not going to receive bids related to the NRW study until June 15, 2018 (I&E Exhibit No. 1, Schedule 5, p. 2). This means when the Company filed its rate case on April 30, 2018, it did not have bids from vendors showing the estimated costs for the NRW study. Without vendor bids the Company cannot accurately estimate the cost of the NRW study and as such the Company should not have claimed an expense related to the NRW study in its rate case filing. As stated previously, the Company still has not provided these bids, so I&E cannot verify the cost of the NRW study.

The Company stated in its response received on June 11, 2018 to I&E-RE-35 that the inventory process study has yet to go out for vendor bids, and the Company has a scheduled meeting in July to define what the inventory process study will entail (I&E Exhibit No. 1, Schedule 5, p. 2). Since the Company has not received any vendor bids for the inventory process study to verify the cost of the study, and since the Company did not even meet to define what the inventory process study will entail before filing its rate case, the Company should not have included any cost related to the inventory process study in its rate case filing (I&E Exhibit No. 1, Schedule 5, p. 2).

PURCHASED WATER

Q. WHAT IS PURCHASED WATER EXPENSE?

A. The Company has purchased water agreements with the Susquehanna Area Regional Airport Authority (SARAA), the Borough of Steelton, and Aqua

Pennsylvania (Aqua PA). The Company buys water from these organizations to supplement its water production.

Q. WHAT IS THE COMPANY'S CLAIM FOR PURCHASED WATER?

A. The Company's claim for purchased water expense is $182,928 (SWPA Exhibit No. CEH-2, Schedule-7).

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

A. The Company used a three-year historical average of this expense ($74,591) and increased it by the FTY inflation factor (2.125%) to compute the FTY expense of $76,176 ($74,591 x 1.02125). The Company then increased this figure by its FPFTY inflation factor (2.3%) to calculate the amount of $77,928 ($76,176 x 1.023). Lastly the Company increased this figure by $105,000 to reflect the Company's plan to purchase water from the SARAA, creating the Company's FPFTY claim of $182,928 ($77,928 + $105,000).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIM FOR PURCHASED WATER EXPENSE?

A. No.

Q. WHAT DO YOU RECOMMEND FOR PURCHASED WATER EXPENSE?

A. I recommend an allowance for purchased water expense of $74,591 or a reduction of $108,337 ($182,928 - $74,591) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend disallowance of the SARAA additional purchased water of $105,000 and disallowance of the Company's FTY and FPFTY inflationary increases. The adjustment related to the inflationary increase is $3,337 ($77,928 – $74,591).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO DISALLOW THE SARAA ADDITIONAL PURCHASED WATER OF $105,000?

A. In the Company's prior rate case, at Docket No. R-2015-2462723, the Company believed it would purchase water from the SARAA for the FPFTY ending September 30, 2016 (UWPA Statement No. 4 p. 12, lines 4-16), but according to the breakdown of purchased water by the Company and municipalities provided in response to OCA-IV-37 for 2015 to 2017 (I&E Exhibit No. 1, Schedule 6, p. 2) there was no water purchased from SARAA from 2015 to 2017. If the Company believed in the prior case, it would purchase water from the SARAA and it did not purchase water from it according to the Company's purchased water history (I&E Exhibit No. 1, Schedule 6, p. 2), the Commission should not accept the projected $105,000 in purchased water from SARAA in this proceeding.

In response to I&E-RE-27 the Company indicated that it did not purchase water from SARAA in the past several years due to contamination, but the Company anticipates that SARAA will fix this issue in the near future (I&E Exhibit No. 1, Schedule 7, p. 1). The Company stated that it provided supporting documentation for the $105,000 increase in Attachment I&E-RE-27c but it did not include this attachment in its response (I&E Exhibit No. 1, Schedule 7, p. 1). Hence, the Company did not provide any documentation from SARAA to prove that it would be purchasing water from SARAA in the FPFTY. Also, the Company did not provide any documentation from SARAA indicating that SARAA would fix its contamination issue by the FPFTY. If SARAA does not fix its contamination issue by the FPFTY, the Company will not be able to purchase water from this entity in the FPFTY. Since the Company did not provide any documentation from SARAA indicating that SARAA will fix its contamination issue in the near future, and since the Company did not provide any documentation from SARAA indicating that the Company will purchase water from SARAA in the FPFTY, the corresponding $105,000 claim for purchased water should be disallowed.

Lastly, the Company did not provide documentation indicating that it needs to purchase water from SARAA to provide safe and reliable service to its ratepayers. According to the Company's breakdowns of purchased water expense for the last three years provided in response to OCA-IV-37 (I&E Exhibit No. 1, Schedule 6, p. 2), the Company has not been purchasing water from the SARAA for the last three years. The Company has not indicated that the lack of purchased water from this entity has caused any detriment to the Company's operations.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO DENY THE INFLATIONARY ADJUSTMENTS TO PURCHASED WATER?

A. Purchased water expense is dependent on the rates set by the water suppliers. The Company has not provided documentation from its water suppliers indicating an increase in water rates in the FTY or the FPFTY based on these percentages. While Aqua PA is expected to file a base rate case in late July 2018, the Company has not indicated whether it has contract rates that will be subject to increase during the course of the upcoming proceeding. Additionally, just because Aqua PA files a base rate case does not guarantee with any certainty that Suez's customer class will receive a rate increase.

PURCHASED POWER

Q. WHAT IS PURCHASED POWER EXPENSE?

A. Purchased power expense is the energy cost incurred for water treatment and delivery operations.

Q. WHAT IS THE COMPANY'S CLAIM FOR PURCHASED POWER?

A. The Company's claim for purchased power expense is $1,570,688 (SWPA Exhibit No. CEH-2, Schedule-8).

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

A. The Company's claim is based on a three-year historic average of purchased power expense of $1,503,426 (($2015 expense of $1,516,207 + 2016 expense of $1,589,719 + 2017 expense of $1,404,353) / 3), increased by the FTY inflation factor of 2.125% and the FPFTY inflation factor of 2.3% to compute its claim of $1,570,688 (SWPA Exh. No. CEH-2, Schedule-8).

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

A. No.

Q. WHAT IS YOUR RECOMMENDATION?

A. I recommend an allowance for purchased power of $1,357,874 or a reduction of $212,814 ($1,570,688 - $1,357,874) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on two different adjustments. First, I recommend that the Company's three-year historic average for purchased power be adjusted to reflect more accurate historic information. Second, I recommend that the Company's inflation adjustments for the FTY and FPFTY be disallowed.

I accept the Company's use of a three-year historic average in computing its FPFTY claim, but I do not agree with the figures the Company used in its three-year historic average calculation, and I do not agree with the Company's FTY and FPFTY inflation adjustments.

Q. PLEASE EXPLAIN YOUR RATIONALE FOR RECOMMENDING A CHANGE TO THE COMPANY'S THREE-YEAR HISTORIC AVERAGE FOR PURCHASED POWER.

A. The Company provided convoluted and contradictory information regarding its purchased power history in its filing and in discovery. In the filing on SWPA Exhibit No. CEH-2, Schedule-8 the Company stated two different purchased power expense amounts for the HTY of $1,242,836 (line 1) and $1,404,352 (line 9). The Company indicated that the difference between these two amounts is because Fuel for Power Production of $161,001 was included in purchased power expense in 2017, although the actual difference between these two amounts is $161,516 ($1,404,352 - $1,242,836). The Company used the 2017 amount of $1,404,353 (SWPA Exhibit No. CEH-2, Schedule-8) in its historic average calculation but it should have used $1,242,836 in its three-year historic average calculation, since the $1,404,353 amount contains fuel for power production expense which has its own line on the Company's O&M breakdown and is claimed elsewhere in the filing (SWPA Exhibit No. CEH-2, Schedule-1, line 8 and SWPA Exhibit No. CEH-2, Schedule-9).

In response I&E-RE-28, Part B and OCA-IV-39, the Company provided monthly purchased power expense for January 2017 through May 2018 (I&E

Exhibit No. 1, Schedule 8, p. 2, and I&E Exhibit No. 1, Schedule 9, p. 2). On those responses, none of the total monthly purchased power expense dollar amounts match up (I&E Exhibit No. 1, Schedule 10). The total 2017 purchased power expense provided in the Company's response to I&E-RE-28, Part B equals $1,436,601, and the total 2017 purchased power expense in the Company's response to OCA-IV-39 is $1,427,000, for a difference of $9,601 ($1,436,601 - $1,427,000) (I&E Exhibit No. 1, Schedule 10). Also, the Company never explained why the total purchased power of $1,436,601 and $1,427,000 reported in these responses do not match either of the 2017 figures ($1,242,836 or $1,404,359) reported on SWPA Exhibit No. CEH-2, Schedule-8.

In response to OCA-IV-38, the Company provided OCA-IV-38 Attachment, which reported new figures for purchased power expense of $1,483,893 for 2015, $1,564,552 for 2016, and $1,436,603 for 2017 (I&E Exhibit No. 1, Schedule 11, p. 2). The Company did not reconcile these figures to the figures reported in its filing on SWPA Exhibit No. CEH-2, Schedule-8. However, I should note the Company did indicate that the information on OCA-IV-38 Attachment may not match its income statement exactly due to the information coming from a third-party vendor (I&E Exhibit No. 1, Schedule 11, p. 1), but this does not alleviate the fact the Company did not provide a reconciliation between OCA-IV-38 Attachment's historic figures for purchased power and the historic figures for purchased power on SWPA Exhibit No. CEH-2, Schedule 8. Also, the Company did not provide the bills requested in I&E-RE-28, Part B, which requested copies of purchased power invoices from January 2017 to the current date.

In response to I&E-RE-7 the Company provided purchased power figures of $1,363,806 for 2015, and $1,466,981 for 2016 (I&E Exhibit No. 1, Schedule 12, p. 2). These figures differ from the purchased power expense of $1,516,207 for 2015 and $1,589,719 for 2016 reported on SWPA Exhibit No. CEH-2, Schedule-8, and the Company did not provide an explanation for this.

Q. GIVEN THE INCONSISTENCY IN DATA PROVIDED BY THE COMPANY, WHAT AMOUNTS ARE YOU USING TO COMPUTE A THREE-YEAR HISTORIC AVERAGE?

A. I am using the 2015 purchased power expense of $1,363,806 and the 2016 purchased power expense of $1,466,981 from the Company's response to I&E-RE-7 (I&E Exhibit No. 1, Schedule 12, p. 2), along with the Company's reported 2017 purchased power expense of $1,242,836 (SWPA Exhibit No. CEH-2, Schedule-8). The reason I am using these purchased power amounts is because the Company provided an ample amount of contradictory information regarding purchased power expense during discovery without explanation. Another reason is that these figures are mostly in agreement with the purchased power expense reported on the Company's PUC annual reports (2015 expense of $1,368,121; 2016 expense of $1,466,981; and 2017 expense of $1,242,836) (I&E Exhibit No. 1, Sch. 13). The three year average of these figures is $1,357,874

(($1,363,806 + $1,466,981 + $1,242,836)/3), which agrees with my recommendation for purchased power expense.

Q. WHY DO YOU BELIEVE IT IS APPROPRIATE TO DISALLOW FTY AND FPFTY INFLATION ADJUSTMENTS FOR PURCHASED POWER EXPENSE?

A. The purchased power rates are determined by the Company's electric suppliers. The Company did not provide any supporting documentation from its electric suppliers indicating that the suppliers plan on increasing rates for the FTY and the FPFTY.

MANAGEMENT AND SERVICE FEES

Q. WHAT ARE MANAGEMENT AND SERVICE FEES?

A. Management and Services Fees (M&S fees) are costs incurred by the Company for services rendered by its affiliate SUEZ Water Management & Services (SWM&S). SWM&S provides executive services, accounting and tax, engineering and technical services, legal services, etc. (SWPA Exhibit D III-06, Attachment B). The M&S fees also include a common asset allocation from the affiliate. (See the affiliated interest agreement included in SWPA Exhibit D Requirement III.06.)

Q. WHAT IS THE COMPANY'S CLAIM FOR M&S FEES?

A. The Company's claim for M&S fees is $5,359,497 (SWPA Exhibit No. CEH-2, Schedule 12).

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

A. The Company used charges from SWM&S for its claim of $5,359,497 (SWPA Exhibit No. D III-06 and SWPA Exhibit D III-06, Attachment A).

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

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR M&S FEES?

A. I recommend an allowance of $4,492,483 or a reduction $867,014 to the Company's claim ($5,359,497 - $4,492,483).

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I recommend that the common asset allocation of $867,017 (SWPA Exhibit No. D III-06, Attachment A) be disallowed.

Q. DID THE COMPANY CHANGE ITS COMMON ASSET ALLOCATION INCLUDED IN MANAGEMENT AND SERVICE FEES DURING DISCOVERY?

A. Yes. The Company indicated a necessary change to its common asset allocation and that the correct amount is $727,079 (I&E Exh. No. 1, Schedule 14, p. 1). I should note that I&E Exhibit No. 1, Schedule 14, p. 1 is incorrectly labeled as I&E-RE-17, but it is actually the Company's response to I&E-RE-1.

Q. DOES THIS CHANGE YOUR RECOMMENDATION?

A. No. The Company did not change its claim in any official capacity so the claim in the Company's filing still stands. Regardless, even if the Company provides an official update to its claim for the common asset allocation, I continue to recommend disallowance of this amount.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION THAT THE COMMON ASSET ALLOCATION BE DISALLOWED?

A. The Company indicates in response to I&E-RE-1, Attachment D-III-6 A that the common asset allocation is a pre-tax rate of return on shared assets from its affiliate, SWM&S and depreciation expense on these shared assets (I&E Exhibit 1, Schedule 14, p. 3). Accepting the Company's claim encourages the regulated utility to move assets off of its books. There is no control over how the SWM&S depreciates these assets, thus there is limited regulatory oversight on the depreciation expense. Since there is limited regulatory oversight on the depreciation expense from SWM&S the Commission should disallow this depreciation expense. And regardless, if the Commission decides to allow Suez to claim SWM&S depreciation expense, Suez should not be allowed to claim a rate of return on any assets it receives from an affiliate because it allows the affiliate to profit on the transaction. Ratepayers should not be required to pay a profit or markup on assets provided by the Company's affiliate. The point of using a service company is to save the Company money since the service company will have more buying power and ability to negotiate prices when it is buying more of each type of item then distribute these assets to each company it services. Charging a markup is an inappropriate action by the service company. Also, it is possible that the assets included in the common asset allocation were expensed in the year they were purchased by SWM&S so it is inappropriate to pass on related expenses to Suez ratepayers in subsequent years. In my opinion, there are too many unknown factors involved with this common asset allocation and it is far too speculative for it to be allowed as part of Suez's management and service fees expense.

Q. DO YOU HAVE ANY RECOMMENDATIONS IF THE COMMISSION APPROVES THE COMPANY'S COMMON ASSET ALLOCATION?

A. Yes. If the Commission decides to approve the Company's common asset allocation as part of its M&S fees expense, some modifications should be made to the common asset allocation calculation. First, the Company updated its FTY common allocation figure to $795,686 and its FPFTY common allocation figure to $727,078, so these changes would need to be incorporated into the Company's

M&S fees calculation (I&E Exhibit 1, Schedule 14, p. 1). Second, the pre-tax rate of return the Company is using in its calculation would need to be updated to the Commission approved rate of return. Third, the Company is including far too much depreciation expense in its calculation for both the FTY and the FPFTY. The Company is claiming a depreciation expense for the FTY of $6,127,039 and for the FPFTY of $5,970,944 (I&E Exhibit 1, Schedule 14, p. 3). In contrast, the Company is claiming an accumulated depreciation for the FTY of $13,339,436 and FPFTY $19,356,696 (I&E Exhibit 1, Schedule 14, p. 3). This means that the Company's current year depreciation expense for the FTY is 46% ($6,127,039/$13,339,436) of the accumulated depreciation and 31% ($5,970,944/$19,356,696) of the FPFTY accumulated depreciation. Also, the Company is providing contradictory information regarding depreciation expense within the same response. On I&E Exhibit No. 1, Schedule 14, p. 4, the Company indicates a depreciation expense of $510,587 for the FTY and a depreciation expense of $497,579 for the FPFTY. The Company needs to provide an explanation for the different depreciation expense amounts and state the actual appropriate depreciation expense involved in the common asset allocation calculation, before an accurate common asset allocation can be calculated. At this point, I would recommend that the Commission use the lower depreciation expense amounts ($510,587 for the FTY and $497,579 for the FPFTY) in determining an appropriate allowance amount.

REAL ESTATE TAXES

Q. WHAT IS THE COMPANY'S CLAIM FOR REAL ESTATE TAXES?

A. The Company's claim for real estate taxes is $318,178. This claim can further be broken down into PURTA of $256,228 and property tax of $61,950 (SWPA Exhibit No. CEH-2, Schedule-31).

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

A. For PURTA the Company used the HTY amount of $245,256 and increased that by an inflation factor of 2.125% for the FTY and 2.3% for the FPFTY to determine the FPFTY claim of $256,228 (SWPA Exhibit No. CEH-2, Schedule-31). For the property tax claim, the Company used its property tax from the HTY of $270,553 and increased it by the FTY inflation factor of 2.125% and the FPFTY inflation factor of 2.3% to determine the FPFTY property tax claim of $61,950.

Q. WHAT IS YOUR RECOMMENDATION FOR PURTA?

A. I recommend an allowance of $245,256 for PURTA or an adjustment of $10,972 ($256,228 - $245,256) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR PURTA RECOMMENDATION?

A. I recommend disallowing the inflation adjustments for the FTY of $5,212 and the FPFTY of $5,760 (SWPA Exhibit No. CEH-2, Schedule-31), because PURTA is imposed by the PA Department of Revenue based on information it receives from the County Tax Assessor Offices. The Company did not provide documentation from the PA Department of Revenue or the County Tax Assessor Offices indicating that the PURTA tax is going to increase within the FTY and the FPFTY.

Q. WHAT IS YOUR RECOMMENDATION FOR PROPERTY TAX?

A. I recommend an allowance of $59,297 for property tax or an adjustment of $2,653 ($61,950 – $59,297) to the Company's claim.

Q. WHAT IS THE BASIS FOR YOUR PROPERTY TAX RECOMMENDATION?

A. I recommend disallowing the inflation adjustments for the FTY of $1,260 and the FPFTY inflation adjustment of $1,393 (SWPA Exhibit No. CEH-2, Schedule-31), because property tax is imposed by local authorities and the Company did not provide any documentation from these local authorities indicating that the property tax is going increase for the FTY or the FPFTY.

Q. WHAT IS YOUR TOTAL RECOMMENDATION FOR REAL ESTATE TAXES?

A. My recommended balance for real estate taxes is $304,553 or a reduction of $13,625 ($318,178 - $304,553) to the Company's claim. This recommendation includes my adjustments of $10,972 for PURTA and $2,653 for property tax.

RATE CASE EXPENSE

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

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

Q. A KEY ISSUE CONCERNING THE RECOVERY OF RATE CASE EXPENSE IS WHETHER THE CLAIM SHOULD BE NORMALIZED. BRIEFLY DISCUSS THE CONCEPT OF NORMALIZATION.

A. Normalization is a ratemaking concept that describes the transformation of an operating expense that recurs at irregular intervals into a "normal" annual test year expense allowance. Allowed normalized expenses are no different than any other O&M expense in that a company is given the opportunity to achieve full recovery.

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

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

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

A. The frequency is determined by calculating the average number of months between the utility's previous rate case filings.

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

A. The Company's FPFTY claim for rate case expense is $189,000.

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

A. The Company has estimated its total rate case expense amount to be $567,000 and is requesting an amortization period of three years (SWPA Exhibit No. CEH-2, Schedule-22). This produces an amortized claim of $189,000 ($567,000 ÷ 3).

Q. THE COMPANY IS PROPOSING AMORTIZATION OF RATE CASE COSTS, RATHER THAN APPLYING A NORMALIZATION TECHNIQUE. EXPLAIN THE CONCEPT OF AMORTIZATION.

A. Amortization is an accounting procedure that extinguishes an atypical, nonrecurring expense over a predetermined number of years by charging to operations a pro rata share based on the selected amortization period. Although a claim for an unrecovered normalized expense would be disallowed if requested in a subsequent rate case, an amortization expense allowance could be claimed in succeeding rate cases as long as there is a remaining unamortized balance.

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMED AMORTIZATION TREATMENT OF RATE CASE EXPENSE?

A. No.

Q. WHAT IS YOUR RECOMMENDATION FOR RATE CASE EXPENSE TREATMENT?

A. I recommend normalization of rate case expense over three years as opposed to amortization. Rate cases are recurring events for regulated utility companies and as such, a normalized level of expenses for this operating cost should be established for rate determination. Amortization, as proposed by the Company, is not appropriate.

<u>FEDERAL INCOME TAX - TAX CUTS AND JOBS ACT OF 2017</u>

Q. WHAT ISSUES WILL YOU ADDRESS HEREIN RELATED TO THE ENACTMENT OF THE TAX CUTS AND JOBS ACT OF 2017 (TCJA)?

A. I will address the Company's over-recovery of 2018 taxes and the claim for excess accumulated deferred income taxes (ADIT) as a reduction to rate base.

<u>FTY Over-Recovery</u>

Q. HAS THE COMMISSION ISSUED ANY TCJA-RELATED ORDERS RECENTLY THAT SHOULD INFLUENCE THE HANDLING OF THE 2018 INCOME TAX OVER-RECOVERY?

A. Yes. The Commission issued a Temporary Rates Order on May 17, 2018 at Docket No. M-2018-2641242 (Temporary Rates Order) regarding the effects of the TCJA on the tax liabilities of Commission-regulated public utilities.

Q. BRIEFLY SUMMARIZE THE COMMISSION'S RECENT TEMPORARY RATES ORDER REGARDING THE TCJA AT DOCKET NO. M-2018-2641242.

A. The Commission ruled separately for utilities with pending base rate cases, utilities without pending base rate cases, and utilities with no federal tax liabilities. Since Suez has a pending base rate case, the Commission, in its Temporary Rates Order, did not require Suez to file a reconcilable negative surcharge adjustment mechanism pursuant to Section 1307(a) for refunding the 2018 excess income tax collection that is to be made effective July 1, 2018. However, the Commission did state that it expects the utilities and parties currently in pending base rate case proceedings (including Suez) to address the effect of federal tax reductions on the justness and reasonableness of consumer rates during the term of the suspension, and in particular, whether a retroactive surcharge or other measure is necessary to account for tax rate changes that became effective on January 1, 2018 (Temporary Rates Order, page 20). Pursuant to the Commission's Temporary Rates Order, the temporary rates proceeding for Suez at Docket No. R-2018-3000770 has been consolidated with this pending Section 1308(d) rate proceeding.

Therefore, the parties to this base rate case are required to address the federal tax issues consequent to the passage of the TCJA in the context of an overall review of Suez's rates and rate structure.

Q. WHAT AMOUNT IS THE COMPANY PROPOSING TO RETURN TO RATEPAYERS AS AN ADJUSTMENT FOR 2018 FEDERAL INCOME TAX OVER-RECOVERY?

A. The Company has not claimed any amount to return excess 2018 income taxes to ratepayers related to changes resulting from the TCJA (SWPA Statement No. 3, p. 6).

Q. DO YOU AGREE WITH THE COMPANY'S LACK OF CLAIM IN ITS FILING TO RETURN EXCESS 2018 INCOME TAXES TO RATEPAYERS?

A. No. The Company is inappropriately recovering federal income tax at the 35% tax rate up to the point when new rates go into effect, and an adjustment should be made to return excess taxes to ratepayers.

Q. HAS THE COMPANY MENTIONED ALTERNATIVES DURING THE DISCOVERY PROCESS?

A. Yes. The Company has estimated its 2018 over-recovery of income taxes at $1.7 million (I&E Exhibit No. 1, Sch. 15, p. 1). If the Company is required to return this amount to ratepayers, it proposes to return it over a 36-month period based on its rate case filing frequency. Further, the Company has indicated that it would track this balance in a regulatory asset/liability until the next base rate case is filed and would address that amount in the next rate case.

Q. DO YOU AGREE WITH THE COMPANY'S ALTERNATIVE RECOMMENDATION TO RETURN EXCESS 2018 INCOME TAXES OVER A 36-MONTH PERIOD?

A. No. These excess taxes have been collected only during the 2018 calendar year, since January 1st, and therefore should not be flowed back over a three-year period.

Q. WHAT DO YOU RECOMMEND?

A. I recommend the Company be required to flow back to ratepayers via a reconcilable 1307 surcharge mechanism (which could be entitled the Federal Tax Adjustment Credit, or FTAC) over a one-year period the net savings associated with the reduction in federal income taxes from January 1, 2018 through the effective date of new rates, or through December 31, 2018, whichever occurs first. Further, I recommend that the Company's claimed amount of $1.7 million (I&E Exhibit No. 1, Sch. 15, p. 1) be increased to reflect the flow back of 2018 excess ADIT of $265,189 (SWPA Exhibit JCC-1).

Q. DO YOU HAVE PROPOSED LANGUAGE FOR THE FTAC?

A. Yes. I propose the following language be adopted, which is modeled on, but not identical to, PECO Electric's surcharge proposal:

> <u>Federal Tax Adjustment Credit (FTAC)</u>
> A credit value of x.xx% will apply to all Pennsylvania Public Utility Commission jurisdictional distribution charges during the period xxx x, xxxx through xxx x, xxxx to pass the January 1, 2018 through December 31, 2018 effects of the Tax Cuts and Jobs Act (TCJA) to customers. The FTAC will be computed annually, will be effective ten days after filing, and will continue until the effect of the change in tax rates resulting from the TCJA has been refunded to customers.
>
> The FTAC will be based on the difference in total annual revenue requirement before and after implementing the 2018 effects of the TCJA and the calculation will reflect the reduction in required revenues. The reduction in required revenues will be divided by estimating annual applicable base revenues to develop the FTAC to be applied to customers' bills for service rendered during the twelve-month period beginning on the effective date of new rates. The difference between the actual reduction in required revenue and the

> reduction in revenues produced by the FTAC as applied will be subject to refund or recovery in an annual revision to the FTAC. The interest rate on the over or under collection will be applied at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et. seq.), in effect on the last day of the month the over collection or under collection occurs. For any over/under credit balance that remains after the twelve-month refund period elapses, the Company shall propose a final additional FTAC adjustment in the thirteenth month to ensure the balance is eliminated.
>
> A reconciliation statement will be submitted to the Commission at the end of the twelfth month. A final reconciliation statement will be filed with the Commission within 30 days after the final over/under balance has been eliminated in the thirteenth month after the effective date of new rates. The FTAC revenues and reconciliation will be subject to audit by the Commission's Bureau of Audits.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. Now that the federal income tax rate is reduced to 21%, it is necessary to return to ratepayers an amount equal to the excess income tax recovery resulting during 2018. In its filing, Suez has not proposed returning any excess taxes collected to ratepayers.

Q. YOU USED THE RESIDENTIAL MORTGAGE LENDING RATE IN YOUR PROPOSED FTAC LANGUAGE, ARE THERE ANY OTHER SITUATIONS WHERE THE RESIDENTIAL MORTGAGE LENDING RATE IS UTILIZED?

A. Yes. As stated in its Final Implementation Order regarding Act 11 of 2012, the Commission stated that the residential mortgage lending rate should be utilized when Distribution System Improvement Charge (DSIC) revenues exceed DSIC-eligible costs.[1]

Q. WHAT IS YOUR BASIS REGARDING THE PROPOSED ONE-YEAR REFUND PERIOD?

A. It should not be necessary to take more than one year to refund the excess 2018 incomes taxes to ratepayers because it relates to over-recovery of taxes for a single year, 2018. Thus, I recommend that a final reconciliation statement be filed with the Commission within 30 days after the over/under balance is eliminated in the thirteenth month after the effective dates of new rates, which will be subject to audit by the Commission's Bureau of Audits. That is, the Company should refund the amount of 2018 excess taxes over a one-year (twelve month) period, with a reconciliation to eliminate any over/under balance on the thirteenth month. At that point, the surcharge mechanism should no longer be required. Thus, it should not take multiple years to provide the refund to ratepayers.

[1] Final Implementation Order at Docket No. M-2012-2293611, p. 56, Order Entered August 2, 2012.

Excess Accumulated Deferred Income Taxes

Q. WHAT HAS CAUSED THE NEED FOR COMPANIES TO IDENTIFY AND RECLASSIFY A PORTION OF ADIT?

A. Due to the changes made by the TCJA, as of January 1, 2018, regulated utilities hold an amount of ADIT that was calculated based on the prior federal income tax rate of 35%. Since the tax rate is now reduced to 21%, the attributable dollar amount needs to be reclassified to a deferred liability account. This deferred liability account is necessary to track the remaining balances of excess taxes recorded in prior years due to the higher 35% federal income tax rate that was in effect before January 1, 2018. The protected portion (the amount subject to amortization using the Average Rate Assumption Method (ARAM) where records are available, or the alternative method known as the Reverse South Georgia Method for the remainder) should be returned to ratepayers over a period of time equal to the remaining life of the affected assets per IRS regulation. The unprotected portion does not have a similar amortization requirement, and therefore, may be returned to ratepayers more expeditiously. Each year, the balance in the excess ADIT account will be ratably reduced until the entire amount is refunded to ratepayers using corresponding methods for the protected and unprotected portions.

Q. HAS THE COMPANY IDENTIFIED ITS COMPONENTS OF EXCESS ADIT?

A. Yes. However, it has provided conflicting information about the breakdown between the protected excess ADIT and the unprotected excess ADIT balances. On Suez Exhibit JCC-1, the Company states that the December 31, 2017 balance for protected excess ADIT is $10,077,192 and that the unprotected balance is $0. In SWPA Statement No. 3, Company witness James C. Cagle indicates that the Company is still reviewing this matter to verify the protected and unprotected balances, and it believes that an amortization period of 40 years using the alternative method is appropriate pending ongoing analysis (SWPA Statement No. 3, p. 6).

Q. DID THE COMPANY MAKE A REDUCTION TO RATE BASE FOR THE REGULATORY LIABILITY?

A. Yes. The excess ADIT balance is included in the total for deferred taxes as shown on SWPA Exhibit No. CEH-1, Sch. 1-1 as a reduction to rate base. However, the Company does not show the breakdown between ADIT and excess ADIT on this rate base schedule, and there is no detailed supporting schedule for the FTY and FPFTY amounts similar to the HTY schedule provided on SWPA Exhibit JCC-1.

Q. DO YOU AGREE THAT THE COMPANY SHOULD BE REDUCING RATE BASE FOR THE REMAINING BALANCE OF EXCESS ADIT?

A. Yes. However, the Company should be required to show calculation breakdowns for the HTY, the FTY, and the FPFTY (similar to SWPA Exhibit JCC-1) and a reconciliation starting with calendar year 2018 showing the amount returned to ratepayers in each calendar year up until the full amount is refunded to ratepayers. Most importantly, the FPFTY is the amount claimed in the ratemaking formula, and in looking at the filing there is no way to confirm the components of the deferred tax breakdown of ($18,810,736) as shown on SWPA Exhibit No. CEH-1, Sch. 1.1.

Q. WHAT DO YOU RECOMMEND?

A. First, I recommend that the Company be required to provide an update, as soon as possible, showing a breakdown of its excess ADIT between the protected and unprotected balances. The Company's failure to provide the necessary data is hampering I&E's ability to fully and fairly evaluate the Company's filing. Second, I recommend that the Company use its claimed 40-year amortization for the protected portion and a five-year amortization for the unprotected portion. Finally, I recommend that the Company be required to show the excess ADIT calculations and breakdowns for protected and unprotected balances for the HTY, the FTY, and the FPFTY periods as discussed above, and that the Company be required to continue reducing rate base in future filings for the remaining balance until the full amount is refunded to ratepayers.

Q. WHY IS IT IMPORTANT FOR THE COMPANY TO PROVIDE A TIMELY BREAKDOWN BETWEEN THE PROTECTED AND UNPROTECTED BALANCES FOR EXCESS ADIT?

A. These balances are subject to different requirements in determining the amortization period to refund monies to ratepayers.

Q. WHY DO YOU RECOMMEND A FIVE-YEAR AMORTIZATION PERIOD FOR THE UNPROTECTED EXCESS ADIT BALANCE?

A. The unprotected balance of excess ADIT should be returned to ratepayers in the shortest timeframe possible to ensure that efforts were made to return the money to the same set of ratepayers who paid those tax amounts in prior rates. The longer the Company takes to refund the money to ratepayers, the more likely it is that people will move out of the service territory and not receive refunds to what they are entitled. Since there is no limitation on the number of years that companies should take to return the unprotected balance, it should be returned in a shorter time period than the protected balance.

Q. WHY ARE YOU NOT PROVIDING SPECIFIC DOLLAR AMOUNT RECOMMENDATIONS FOR YOUR PROPOSED CHANGE TO EXCESS ADIT?

A. Until such time as the Company identifies the breakdown between protected excess ADIT and unprotected excess ADIT (I&E Exhibit No. 1, Sch. 16), I cannot calculate my recommended change to the Company's claim. As soon as this information is available, I can compute my recommended change to excess ADIT and the corresponding rate base adjustment and a corresponding change to the Company's amortization of the regulatory liability as shown on SWPA Exhibit No. CEH-2, Sch.-1.

CASH WORKING CAPITAL

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

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

Q. HOW DOES THE COMPANY CALCULATE ITS CWC CLAIM?

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

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

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

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

A. The Company's claim for CWC is $863,746 (SWPA Exhibit No. CEH-1, Sch.-1.1).

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

A. No.

Q. WHAT DO YOU RECOMMEND?

A. I recommend an allowance of $796,364 or reduction of $67,382 ($863,746 - $796,364) to the Company's claim (I&E Exhibit No. 1, Sch. 17).

Q. IS YOUR RECOMMENDED CWC ALLOWANCE A FINAL RECOMMENDATION?

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

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My CWC recommendation adjusts the Company's claim based on all recommended adjustments to O&M expenses as discussed previously in this testimony. Each of these components is discussed in more detail below. Additionally, my recommendation reduces the Company's claimed expenses by the fringe benefits capitalized/transferred out as detailed on line 24 of SWPA Exhibit No. CEH-2, Sch.-1 and further broken down on SWPA Exhibit No. CEH-2, Sch.-25.

Q. WHY IS IT NECESSARY TO REMOVE THE FRINGE BENEFITS CAPITALIZED/TRANSFERRED OUT?

A. The Company's expenses are reduced for the amounts capitalized as reflected on SWPA Exhibit No. CEH-2, Sch.-25. Since the amount of the reduction represents capitalized wages and benefits, those capitalized portions are receiving a return based on the rate of return granted in this proceeding. These items should not also be included in the CWC computation which would allow for duplication of the return.

Q. WHICH FRINGE BENEFITS CAPITALIZED TRANSFERRED OUT ARE YOU ADJUSTING IN COMPUTING A RECOMMENDED CWC ALLOWANCE?

A. The Company has claimed the entire amount in the CWC computation for FICA Taxes ($621,827); Federal Unemployment Taxes ($4,242); State Unemployment Taxes ($24,144); Workers' Compensation ($110,717); Employee Pension Cost ($1,442,010); and Employee Group Health ($1,439,521) (SWPA Exhibit No. CEH 2, Sch. 25). Thus, I am removing the capitalized portion (32.84%) for each of these claims from the corresponding line item in the Company's workbook for the Summary of Cash Working Capital Requirements. It appears that the remaining items on SWPA Exhibit No. CEH-2, Sch.-25 have not been included in the Company's CWC computation (i.e., post-retirement healthcare accrued, employee 401k, other employee benefits, and other awards). My recommended CWC workpaper contains these adjustments for payroll taxes, workers' compensation, pension, and employee group health as discussed here along with all of my proposed adjustments as mentioned below.

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

A. All O&M adjustments that are cash-based expense claims are included when determining the Company's overall CWC requirement. Therefore, CWC was adjusted to reflect these recommended adjustments. In order to reflect the I&E recommended adjustments, I modified the Company's electronic CWC calculation as shown on SWPA Exhibit HW-1, Schedule 1 (I&E Exhibit No. 1, Sch. 17).

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

A. The following recommended adjustments must be incorporated into the CWC calculation on the corresponding line item to arrive at my recommended allowance:

Expense	**Increase/ (Decrease)**
Labor Expense	($45,239)
Payroll Tax	($5,434)
Employee Group Health & Life Insurance	($14,513)
Outside Contractors	($225,000)
Purchased Water	($108,337)
Purchased Power	($212,814)
Management & Service Fees	($867,014)
Real Estate Taxes	($13,625)
Fringe Benefits Transferred – Payroll Tax	$1,785
Fringe Benefits Transferred – Employee Group Health	$4,766

All of these recommended adjustments to CWC as incorporated into the Company's workpaper produce a recommended allowance of $796,364.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Brenton Grab
Education & Employment Experience

March 2016 to Present
Fixed Utility Financial Analyst
PA Public Utility Commission, Bureau of Investigation & Enforcement
Responsible for review of operating and maintenance expenses for utility companies as a part of the evaluation and recommendation process for utility base rate filings, preparing related written testimony for cases, and testifying as an expert witness as necessary.

November 2010 to March 2016
Corporate Tax Officer, PA Department of Revenue, Bureau of Corporation Taxes
Responsible for the audit of corporate tax filings by Corporations and other Pass-through entities doing business in Pennsylvania, reviewing tax returns for compliance with both federal and state statutes and regulations.

April 2010 to November 2010
Loan Service Counselor, PA Higher Education Assistance Agency

May 2008 to August 2008
Finance Department Intern, County Commissioners Association of PA

Education/Certification:

Pennsylvania State University, University Park, Pennsylvania
Bachelor of Science, Accounting (Minor in Management Information Systems), 2009

Utility-Related Trainings & Webinars:

The State of the Utility Industry Heading into 2018, SURFA Webinar, January 10, 2018

Power & Utilities Tax Reform Update with Edison Electric Institute, PWC Webcast, December 14, 2017

Power & Utilities Quarterly Accounting Update 3Q17, Deloitte Power & Utilities Webcast, October 3, 2017

38th Western NARUC Utility Rate School, May 15, 2017 to May 19, 2017

Power & Utilities Quarterly Accounting Update 1Q17, Deloitte Power & Utilities Webinar, April 11, 2017

Brenton Grab
Education & Employment Experience

Reinventing Resilience: Defining the Model for Utility-Led Renewable Microgrids, Deloitte Dbriefs Power & Utilities Webcast, March 30, 2017

Outlook on the Energy and Resources Industry, Deloitte Debriefs Webcast, January 10, 2017

Power & Utilities Quarterly Accounting Update 3Q16, Deloitte Power & Utilities Webcast, September 23, 2016

Power & Utilities Quarterly Accounting Update 2Q16, Deloitte Power & Utilities Webcast, June 20, 2016

How Utilities Make Money, Enerdynamics Webcast, April 18, 2016

National Regulatory Research Institute Webinar on Targeted Demand Management, March 23, 2016

Submitted Testimony on the Following Cases:

R-2018-2640058	UGI Utilities, Inc. – Electric Division
R-2017-2598203	Columbia Water Company
R-2017-2595853	Pennsylvania American Water
P-2016-2573023	PECO Energy Company

Assisted on the Following Cases:

R-2017-2618332	Pine-Roe Natural Gas Company
R-2017-2582461	National Fuel Gas Distribution Corporation 1307(f)
R-2016-2580030	UGI Penn Natural Gas, Inc.
R-2016-2531551	Wellsboro Electric Company
R-2016-2531550	Citizen's Electric Company
R-2016-2538660	Community Utilities of Pennsylvania Inc.
R-2016-2537359	West Penn Power Company
R-2016-2537355	Pennsylvania Power Company
R-2016-2537352	Pennsylvania Electric Company
R-2016-2537349	Metropolitan Edison Company
R-2016-2529660	Columbia Gas of Pennsylvania, Inc.

I&E Exhibit No. 1
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Exhibit to Accompany

the

Direct Testimony

of

Brenton Grab

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES

TAXES

CASH WORKING CAPITAL

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-33
(Heppenstall)
June 6, 2018

OCA-IV-33 With reference to Exhibit CEH-2, Schedule-3, Adjustment No. 2,

a. Please provide the medical, dental and group life insurance amounts for the historical test year.

b. Please provide the supporting documentation showing the derivation of the FTY amounts for medical, dental and group life insurance.

Response:

a. Please see attached workpaper OCA-IV-33 Attachment that shows 2017 and 2018 medical, dental and group life insurance expenses. However, the 2018 medical expenses on OCA-IV-33 Attachment do not include the medical, dental and group life insurance expenses for the five newly hired employees in 2018.

b. Please see workpaper OCA-IV-33 Attachment that includes medical expenses for 2017 and 2018. The adjustment on Exhibit CEH-2, Schedule 3, Adjustment No. 2 adjusts the medical, dental, and group life insurance by the 5 employees for the FTY.

2018 Medical Expense Adjustment: 2018 Medical expense equals $1,208,956 without the adjusted value for the new employees. The increase of $15,112 per employee is the average of all the medical insurance plans in 2018. This average value was weighted by 84.21%, as that is the current percentage of employees of SUEZ Water PA that are covered by medical insurance. (5 employees*$15,112*84.21%) = $63,629

$1,208,956 (2018 unadjusted medical insurance expense) + $63,629 = $1,272,585 FTY Medical Expense.

The same methodology applies for the FTY Dental and Group Life Insurance expenses.

12/31/2017

Medical	# of ee	Employer Annual Rate	Employee Annual Rate	Total Annual Cost
HDHP EE Only	9	68,427	1,944	70,371
HDHP EE + Spouse / DP	7	111,916	3,024	114,940
HDHP EE + child(ren)	4	54,569	1,728	56,297
HDHP Family	18	410,562	11,664	422,226
PPO EE Only	21	145,889	36,218	182,107
PPO EE + Spouse / DP	6	91,909	22,818	114,727
PPO EE + Child(ren)	5	65,649	16,298	81,947
PPO Family	10	218,832	54,328	273,160
				-
Dental	**# of ee**	**Total Annual Cost**	**Employee Annual Rate**	
DMO EE Only	1	276	47	324
DMO EE + Spouse / DP				-
DMO EE + child(ren)				-
DMO Family	1	813	141	954
PPO EE Only	28	12,220	2,614	14,835
PPO EE + Spouse / DP	16	14,573	2,803	17,376
PPO EE + Child(ren)	8	7,668	1,402	9,069
PPO Family	32	41,111	8,897	50,008
				-
STD/LTD/LIFE	**# of ee**	**Total Employer Cost**	**Total Employee Cost**	
Basic STD	95	3,203		3,203
Basic LTD	95	30,706		30,706
Optional LTD	13		1,549	1,549
Basic Life 1X annual	19	2,192		2,192
Basic Life 3 X annual	68	21,718		21,718

2018 (Current)

Medical	# of ee	Employer Annual Rate	Employee Annual Rate	Total Annual Cost	
HDHP EE Only	15	119,279	3,870	123,149	
HDHP EE + Spouse / DP	5	83,624	2,580	86,204	
HDHP EE + child(ren)	4	57,048	2,064	59,112	
HDHP Family	21	501,097	16,128	517,225	
PPO EE Only	17	126,486	31,402	157,888	
PPO EE + Spouse / DP	8	124,997	31,033	156,030	% of
PPO EE + Child(ren)	3	40,177	9,975	50,152	Employee
PPO Family	7	156,248	38,790	195,037	Covered
	80	1,208,956			95
	Avg.	15,112			84%
Dental	**# of ee**	**Total Annual Cost**	**Employee Annual Rate**		
DMO EE Only	1	276	47	324	
DMO EE + Spouse / DP		-	-	-	
DMO EE + child(ren)		-	-	-	
DMO Family	1	813	141	954	
PPO EE Only	31	12,886	2,894	15,780	
PPO EE + Spouse / DP	16	14,625	2,803	17,428	% of
PPO EE + Child(ren)	7	6,078	1,226	7,305	Employee
PPO Family	31	37,929	8,619	46,548	Covered
	87	72,607			95
	Avg.	835			92%
STD/LTD/LIFE	**# of ee**	**Total Employer Cost**	**Total Employee Cost**		
Basic STD	96	3,237		3,237	
Basic LTD	96	28,244		28,244	
Optional LTD	13		1,617	1,617	% of
Basic Life 1X annual	22	2,508		2,508	Employee
Basic Life 3 X annual	66	21,262		21,262	Covered
	Total	55,252			
	Avg.	34			100%
		294			100%
		114			23%
		322			69%

I&E Calculation of 2018 Employee Group Health and Life Insurance New Hire Adjustment Based on SWPA Exhibit No. CEH-2, Schedule-3					
	I&E Modified Column		I&E Modified Column		I&E Modified Column
Healthcare Group	Number of Employees	Average cost of coverage	New Hires x Average Cost of Coverage	Employees with Coverage Percentage	New Hire Cost of Coverage
Medical	4	$ 15,112	$ 60,448	84%	$ 50,776
Dental	4	$ 835	$ 3,340	92%	$ 3,073
Basic STD	4	$ 34	$ 136	100%	$ 136
Basic LTD	4	$ 294	$ 1,176	100%	$ 1,176
Basic Life 1X Annual	4	$ 114	$ 456	23%	$ 105
Basic Life 3X Annual	4	$ 322	$ 1,288	69%	$ 889
				Total	$ 56,155

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-3
(Heppenstall/Hollenbach)
June 11, 2018

I&E-RE-3 Reference SWPA Statement No. 2, p. 8 and SWPA Exhibit No. CEH-2, CEH Workpaper 2.1, concerning labor expense. Explain why Statement No. 2 indicates that the Company will hire five new employees in 2018 while Exhibit No. CEH-2, CEH Workpaper 2.1 indicates that all five employees will start on 01/01/2019.

Response: SWPA Statement No. 2 page 8 and SWPA Exhibit No. CEH-2, CEH Workpaper 2.1 should be corrected to reflect that all five employees will be hired in 2019.

In addition, see the correction to John Hollenbach's direct testimony. Page 16 of Mr. Hollenbach's testimony read as follows:

> **Q. Have any of these positions been filled?**
>
> A. No, they are all included in the 2019 budget. The Company's goal is to commence the job search in the fourth quarter of 2019 and fill the new positions within the first quarter of 2020.

It should have read:

> **Q. Have any of these positions been filled?**
>
> A. No, they are all included in the 2019 budget. The Company's goal is to commence the job search in the fourth quarter of 2018 and fill the new positions within the first quarter of 2019.

Mr. Hollenbach's and Ms. Heppenstall's testimonies will be corrected before they are entered in to the evidentiary record.

Pennsylvania Public Utility Commission
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SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-47
(Heppenstall)
June 6, 2018

OCA-IV-47 With reference to Exhibit CEH-2, Schedule-14, Adjustment No. 13,

a. Please provide the 2014 and 2015 outside contractors expense and explain why a 2-year average was used to determine the FTY amount.

b. Please provide the derivation of the $150,000 additional convenience fee.

c. Please explain what the NRW study is, the purpose of the study and how frequent this study is required.

d. Please explain what the inventory process study is, the purpose of the study and how frequently this study is required.

Response:

a. The 2015 outside contractor expense was $1,173,281. SUEZ updated the Fixed Asset Capitalization policy which broadened the definition for items that should be capitalized and not expensed due to additions, replacement, reconstructions and improvements or betterments of property, plant and equipment. This policy update in mid-2014 was reinforced throughout 2015 until the current results in outside contractors was maintained. Therefore, a two year average was used so that the average would not have been inflated due to the Fixed Asset Capitalization Policy change.
b. Please see OCA-IV-47b Attachment for the Western Union Payment Summary for 2016 and 2017. The fees paid by SUEZ' customers to Western Union increased 57% from 2016 to 2017 and totaled $138,236 in 2017. The Future Test Year includes an increase of 8.5% to the $150,000 as customers continue to look for non-traditional ways to pay their monthly water invoice.
c. The study referred to is actually a survey and not a study. The survey will consist of the Company retaining an outside vendor to survey all of SUEZ PA in a timely manner to identify potential areas in which the SUEZ PA operations will investigate the causes of the NRW and implement plans to reduce and eliminate NRW in previously unidentified areas. This is not required by any governmental agency at this time but is a prudent step to take to continue the efforts of reducing NRW in SUEZ PA.
d. A result of the Workforce Management Study that was performed in SUEZ PA, was that the current inventory processes are insufficient to support daily and long term

planning of field work. The Inventory Process project intends to hire an outside vendor to support current SUEZ personnel in making the decisions necessary to improve the inventory processes so that daily and long term planning of field work has the proper materials necessary to complete the field work without having a substantial increase in inventory levels. SUEZ PA intends to move forward with the inventory process study as part of the PUC's recommendations in the Materials Management section of the Focused Management and Operations Audit issued in 2017.

SUEZ Water Pennsylvania
Docket No. R-2018-3000834

Western Union Speedpay - Payments Summary

Actuated Date - From: 01/01/2017 To: 01/01/2018

Site:	(ALL)
Business Unit:	Pennsylvania (002)
Payment Type:	(ALL)
Include Convenience Pay:	Yes
Include Refunds:	No
Include Chargebacks:	No
User Group:	(ALL)
User:	(ALL)
Summary by:	Payment Type
Sub Group By:	(Ungrouped)

Payment Type	Payment Count	Payment Amount	Avg Payment Amount	Fee Count	Fee Amount	Total Amount
ACH	59,063	3,615,721.27	61.22	24,026	47,841.74	3,663,563.01
ATM	19,857	1,383,791.82	69.69	15,857	39,515.43	1,423,307.25
Cash	2,972	205,774.07	69.24	2,923	2,923.00	208,697.07
Checks	476	34,211.63	71.87	476	476.00	34,687.63
Master Card	2,858	309,183.05	108.18	2,858	5,687.42	314,870.47
Visa	21,001	1,522,873.72	72.51	21,001	41,791.99	1,564,665.71
Credit Card Totals	**23,859**	**1,832,056.77**	**76.79**	**23,859**	**47,479.41**	**1,879,536.18**
Grand Totals -	**106,227**	**7,071,555.56**	**66.57**	**71,141**	**138,235.58**	**7,209,791.14**

SUEZ Water Pennsylvania
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OCA-IV-47b Attachment
Page 2 of 2

United Water

Western Union Speedpay - Payments Summary

Activated Date - From: 01/01/2016 To: 01/01/2017

Site	(ALL)
Business Unit	Pennsylvania (002)
Payment Type	(ALL)
Include Convenience Pay	Yes
Include Refunds	No
Include Chargebacks	No
User Group	(ALL)
User	(ALL)
Summary by	Payment Type
Sub Group By	(Ungrouped)

Payment Type	Payment Count	Payment Amount	Avg Payment Amount	Fee Count	Fee Amount	Total Amount
ACH	40,584	2,389,423.82	58.88	14,584	29,221.16	2,418,644.98
ATM	12,847	896,019.77	69.75	12,847	25,565.53	921,585.30
Cash	1,848	125,901.67	68.13	1,830	1,830.00	127,731.67
Checks	142	10,183.32	71.71	142	142.00	10,325.32
Master Card	2,070	176,933.30	85.48	2,070	4,119.30	181,052.60
Visa	13,447	988,349.78	73.50	13,447	26,759.53	1,015,109.31
Credit Card Totals	**15,517**	**1,165,283.08**	**75.10**	**15,517**	**30,878.83**	**1,196,161.91**
Grand Totals -	**70,938**	**4,586,811.66**	**64.66**	45,020	87,637.52	**4,674,449.18**

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-35
(Heppenstall)
June 13, 2018

I&E-RE-35 Reference SWPA Exhibit No. CEH-2, Schedule-14, concerning outside contractors expense:

A. Provide a detailed breakdown including the individual contractors and the types of service performed along with supporting documentation such as invoices, workpapers, worksheets, contractor estimates, contractor agreements, etc. for the following:

1. The HTY's outside contracting expense of $748,644;

2. 2016 outside contracting expense of $729,456;

3. The total NRW study expense of $300,000;

4. The total inventory process study expense of $150,000;

B. Indicate if the NRW study expense and inventory process study expense will continue past the FPFTY and if the expenses will recur annually or at what frequency;

C. Provide a detailed breakdown and supporting documentation such as workpapers, bank statements, credit statements, etc. for the FPFTY additional convenience fees of $150,000;

D. Provide the credit card transaction convenience fees for 2015, 2016, the HTY, and the FTY along with supporting documentation even if the ratepayer was paying these fees;

E. Provide justification for the Company's need for an NRW study;

F. Provide justification for the Company's need for an inventory process study;

G. Provide the begin and end date of the NRW study and the inventory process study;

H. Provide justification for the Company's normalization period of two years for the NRW study and the inventory process study;

I. Indicate if the Company did an NRW study in the past and if so provide the following details on the most recent study done:

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

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1. The cost of the study;
2. The begin and end date of the study;
3. The normalization period used to recover the cost of the study;

J. Indicate if the Company did an inventory process study in the past and if so provide the following details on the most recent study done:

1. The cost of the study;
2. The begin and end date of the study;
3. The normalization period used to recover the cost of the study;

K. Provide a detailed breakdown of outside contractors expense by year for 2013, 2014, and 2015.

Response:

A.
1. Please refer to I&E-RE-35 A1 Attachment.
2. Please refer to I&E-RE-35 A2 Attachment.
3. Please refer to OCA-IV-47c for an explanation of the NRW survey. The bids for this project are due back to the Company on June 15, 2018.
4. Please refer to OCA-IV-47d for an explanation of the Inventory Process project. This project has not gone out for bids at this time, however, a meeting is scheduled in July to define what this project will entail.

B. Both of the projects may continue into the future depending on the results achieved at the end of each study. The NRW Survey should be completed every two years until the Company achieves a NRW percentage acceptable to the PUC. Likewise, the Inventory Process project will continue to be reviewed until the Company is able to satisfactorily implement solutions related to the PUC's recommendations listed in the Materials Management section of the Focused Management and Operations Audit from 2017.

C. Please refer to OCA-IV-47b and OCA-IV-47b attachment for these details.

D. Please refer to OCA-IV-47b and OCA-IV-47b attachment for these details.

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SUEZ WATER PENNSYLVANIA INC.

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E. Please refer to the response to part B.

F. Please refer to the response to part B.

G. Please refer to the response to part A3 and A4

H. Please refer to the response to part B.

I. The Company has contracted Heath Consultants to completed a leak survey in the past, however, it has been more than ten years ago and those details are no longer available in our accounts payable system.

J. The Company has not conducted an inventory process study in the past using an outside consultant, which impacted the Company's ability to obtain favorable results in the Materials Management section of the Focused Management and Operations Audit.

K. Based on discussions between SUEZ's counsel and I&E's counsel, it is SUEZ's understanding that, at this time, I&E has withdrawn interrogatories and requests for production of documents pertaining to 2015 and prior years.

SUEZ Water Pennsylvania
Outside Contractor List - HTY

Contractor	Amount
ADP LLC	$ 9,483
ALTUS GROUP US INC	$ 3,387
BANK OF AMERICA PURCHASING CAR	$ 34,655
BLOOMSBURG, TOWN OF	$ 387
BOROUGH OF HUMMELSTOWN	$ 330
BOROUGH OF MECHANICSBURG	$ 790
CHAMPION SYSTEMS INTEGRATION L	$ 122
COMMONWEALTH DISPOSAL INC	$ 216,930
CONSCIENTIOUS CLEANERS	$ 2,099
CONTROLS SERVICE & ENGINEERING	$ 8,802
CONTROLS, SERVICE & ENGI	$ 395
CYCLE CHEM INC	$ 1,195
DALLACHIESA, DOUGLAS	$ 325
DALLAS AREA MUNICIPAL AUTHORIT	$ 830
DIAMOND AUTOMATIC SPRINKLERS I	$ 550
DYNATECH INDUSTRIES LTD	$ 8,847
E COMMERCE GROUP PRODUCTS INC	$ 46,842
ECOVA INC	$ 3,510
EDEN BROTHERS	$ 130
EDWIN L HEIM CO	$ 5,122
EK SERVICES INC	$ 17
EVANS DISPOSAL LLC	$ 420
FIRST ADVANTAGE LNS OCCUPATION	$ 228
FISSEL'S LANDSCAPING	$ 57,151
FOUGHT'S DISPOSAL SERVICE INC	$ 945
FRANK KUS PROPERTY MAINTENANCE	$ 17,400
GANNETT FLEMING INC	$ 13,558
GE INTELLIGENT PLATFORMS INC	$ 21,648
GOOD'S TREE CARE INC	$ 3,100
GROFF TRACTOR & EQUIPMENT INC	$ 861
HACH CO	$ 13,761
HARRELL AUTOMATIC SPRINKLER C	$ 3,159
HEWLETT PACKARD FINANCIAL SERV	$ 8,790
HILBERT'S EQUIPMENT & WEL	$ 367
HOCK ENTERPRISE	$ 5,183
HOCK ENTERPRISES	$ 9,657
HOWARD ORGANIZATION INC	$ 1,943
HYDRO CORP BACKFLOW PREVENTION	$ 2,800
HYDROCORP	$ 25,200
IRTH SOLUTIONS LLC	$ 18,613
ITRON INC	$ 12,197
J A KOLVA INC	$ 2,575
JJ KELLER & ASSOCIATES INC	$ 5,037
KINGSNORTH CONSULTING INC	$ 480

SUEZ Water Pennsylvania
Outside Contractor List - HTY

Contractor	Amount	
LOBAR ASSOCIATES INC	$	13,790
LOWER PAXTON TOWNSHIP AUTHORIT	$	620
LRM INC	$	840
MARION FENCE	$	650
MARTIN WATER CONDITIONING	$	362
MORGAN CORPORATION ELECTRICAL	$	1,800
NEW HARRISBURG TRUCK BODY CO	$	1,417
Out Servs, Accruals & Misc.	$	4,831
PENN CREDIT CORP	$	6,175
PENN TOWNSHIP MUNICIPAL AUTHOR	$	630
PENN WASTE INC	$	3,386
PENNSYLVANIA ONE CALL SYSTEM	$	32,608
PENTELEDATA LIMITED PARTNERSHIP	$	5,080
PIONEER CONSTRUCTION CO INC	$	1,323
POW-R MOLE SALES LLC	$	3,357
PRECISION MILLWRIGHT & FABRICATORS	$	1,660
PRINT-O-STAT INC	$	2,268
REPUBLIC WASTE SERVICES	$	5,172
ROGELE INC	$	20,300
SCOTT BLACK LANDSCAPING	$	7,421
SERVICE SUPPLY CORP	$	705
SQ *ROETING MECHANICAL	$	107
STERICYCLE COMMUNICATION SOLUTION	$	18,139
STERLING INFOSYSTEMS INC	$	922
SUSQUEHANNA TOWNSHIP AUTHORITY	$	1,642
SUSQUEHANNA FIRE EQUIPMENT CO	$	510
SWATARA TOWNSHIP AUTHORITY	$	954
TEREX SERVICES	$	1,680
THE HOWARD COMPANY	$	4,770
TOWER SERVICES UNLIMITED	$	680
UTILITY SERVICES GROUP INC	$	4,158
VECTOR SECURITY INC	$	27
VEOLIA ES TECHNICAL SOLUTIONS	$	4,864
VEOLIA NORTH AMERICA	$	345
VERIZON WIRELESS	$	8,985
WEST INTERACTIVE SERVICES CORP	$	14,875
WINTER ENGINE GENERATOR SERVIC	$	639
WRIGHTSTONE ELECTRIC INC	$	688
WRIGHTSTONE ELECTRIC INC	$	443
Grand Total	$	**748,644**

SUEZ Water Pennsylvania
Outside Contractor List

Contractors		Amount
ADECCO EMPLOYMENT SERVICES	$	789
ADP INC	$	8,276
ADP LLC	$	11,482
ALTUS GROUP US INC	$	3,379
BANK OF AMERICA PURCHASING CAR	$	34,257
BOROUGH OF MECHANICSBURG	$	7,459
CHAPIN SEWAGE DISPOSAL	$	385
COMMONWEALTH DISPOSAL INC	$	192,270
CONSCIENTIOUS CLEANERS	$	2,507
CONTROL SYSTEMS 21	$	6,558
CONTROLS SERVICE & ENGINEERING	$	22,540
CYBULSKI, JOHN	$	9,229
DALLACHIESA, DOUGLAS	$	325
DYNATECH INDUSTRIES LTD	$	8,866
E COMMERCE GROUP PRODUCTS INC	$	41,306
ECOVA INC	$	886
EDEN BROTHERS	$	3,293
EDWIN L HEIM CO	$	5,855
EK SERVICES INC	$	3,799
FIRST ADVANTAGE LNS OCCUPATION	$	342
FISSEL'S LANDSCAPING	$	63,733
FS BRAINARD & CO	$	1,200
GANNETT FLEMING INC	$	19,599
GE INTELLIGENT PLATFORMS INC	$	21,637
GOOD'S TREE CARE INC	$	4,034
GS MADISON LLC	$	6,208
HACH CO	$	17,241
HARRELL AUTOMATIC SPRINKLER C	$	550
HEWLETT PACKARD FINANCIAL SERV	$	23,905
HOCK ENTERPRISE	$	7,924
HOWARD ORGANIZATION INC	$	175
INGERSOLL RAND CO	$	650
INORGANIC MERCURY COMP - 5 GAL	$	(18)
IRTH SOLUTIONS LLC	$	19,382
ITRON INC	$	45,492
J A KOLVA INC	$	4,081
JJ KELLER & ASSOCIATES INC	$	6,651
KOLVA SYSTEMS	$	580
LOBAR ASSOCIATES INC	$	14,594
MA COMPRESSOR	$	319
MARION FENCE	$	382
MORGAN CORPORATION INC	$	3,653
NORTHROP GRUMMAN	$	3,249
Out Servs, Accruals & Misc.	$	(7,640)

SUEZ Water Pennsylvania
Outside Contractor List

Contractors	Amount	
PENN CREDIT CORP	$	7,766
PENNSYLVANIA ONE CALL SYSTEM	$	25,323
PENTELEDATA LIMITED PARTNERSHIP	$	4,078
PIONEER CONSTRUCTION CO INC	$	7,296
POW-R MOLE SALES LLC	$	649
PRINT-O-STAT INC	$	2,300
REPUBLIC WASTE SERVICES	$	3,036
SCHAEDLER YESCO DISTRIBUTION	$	2,319
SCOTT BLACK LANDSCAPING	$	10,435
SILVERMINE CONSULTING	$	987
SOKOL INC	$	550
STERLING INFOSYSTEMS INC	$	727
SUSQUEHANNA FIRE EQUIPMENT CO	$	510
TELEVOX SOFTWARE INC	$	1,521
TEREX SERVICES	$	1,240
TOWER SERVICES UNLIMITED	$	2,540
VEOLIA ES TECHNICAL SOLUTIONS	$	12,671
VEOLIA NORTH AMERICA	$	9,059
VEOLIA WATER NORTH AMERICA	$	1,011
WEST INTERACTIVE SERVICES CORP	$	13,340
WRIGHTSTONE ELECTRIC INC	$	714
Grand Total	**$**	**729,456**

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-37
(Heppenstall)
June 6, 2018

OCA-IV-37 With reference to Exhibit CEH-2, Schedule-7, Adjustment No. 6,

a. Please provide a breakdown of the purchased water expense and quantity by supplier in each of the 3 years provided.

b. Please provide data that demonstrate that the cost of purchased water varies with inflation.

c. Please explain how the cost of water could decrease in 2017 while consumption increased.

d. Please provide the contract for the purchase of water from Susquehanna Area Regional Airport Authority (SARAA).

e. Please explain the reason for the water purchase from SARAA.

Response:

a. Please refer to OCA-IV-37a Attachment
b. Per the attached report titled "Water and Wastewater Annual Price Escalation Rates for Selected Cities across the United States" dated September 2017, performed by the US Department of Energy, the average increase for the price of water from 2008 through 2016 was 4.1%, much higher than the inflation factors used for purchased water in the Company's filing. Therefore, adjusting this expense using inflation factors of 2.125% and 2.300% is conservative.
c. The Cost of water decreased due to the fact that the price of the purchased water from Steelton is higher per 1,000 gallons and the Company purchased more water from Steelton in 2016 than in 2017.
d. Please see OCA-IV-37 Part d Attachment.
e. For the past several years the Company has not purchased water from SARAA due to their Perfluorooctanesulfonic acid (PFOS) contamination issue. SARAA is currently addressing the problem and once it's resolved, which is anticipated to be in the near future, the Company is planning to begin purchasing water from them again.

2017

Line No.	Name of Vender (a)	Point of Delivery (b)	Service* Capacity (c)	Pressure @ Point of Delivery (d)	Quantity of Water Purch. (1,000-Gal.) (e)	Cost of Purchased Water (f)	Cost Per (1,000-Gal.) $ (g)
1	Borough of Steelton	Kelker Street, Steelton, PA			Standby Fee	$ 20,100	
2	Borough of Steelton	Kelker Street, Steelton, PA	6"	60 psi	577	$ -	
3	AQUA PA	Hill Drive, Dallas, PA	2"	90 psi	13035	$ 48,521	0.27
				TOTALS	**13,612**	**$ 68,621**	**0.20**

2016

Line No.	Name of Vender (a)	Point of Delivery (b)	Service* Capacity (c)	Pressure @ Point of Delivery (d)	Quantity of Water Purch. (1,000-Gal.) (e)	Cost of Purchased Water (f)	Cost Per (1,000-Gal.) $ (g)
1	Borough of Steelton	Kelker Street, Steelton, PA			Standby Fee	$ 20,100	
2	Borough of Steelton	Kelker Street, Steelton, PA	6"	60 psi	2,387	$ 1,914	1.25
3	AQUA PA	Hill Drive, Dallas, PA	2"	90 psi	10,424	$ 48,892	0.21
4	City of Harrisburg	TGIF on Paxton Street, Harrisburg, PA	24"	100 psi	0	$ -	
				TOTALS	**12,811**	**$ 70,906**	**0.18**

2015

Line No.	Name of Vender (a)	Point of Delivery (b)	Service* Capacity (c)	Pressure @ Point of Delivery (d)	Quantity of Water Purch. (1,000-Gal.) (e)	Cost of Purchased Water (f)	Cost Per (1,000-Gal.) $ (g)
1	Borough of Steelton	Kelker Street, Steelton, PA			Standby Fee	$ 20,100	
2	Borough of Steelton	Kelker Street, Steelton, PA	6"	60 psi	4,100	$ 12,824	0.32
3	AQUA PA	Hill Drive, Dallas, PA	2"	90 psi	11,843	$ 51,322	0.23
4	City of Harrisburg	TGIF on Paxton Street, Harrisburg, PA	24"	100 psi	265		
				TOTALS	16,208	$ 84,246	0.19

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-27
(Heppenstall)
June 13, 2018

I&E-RE-27 Reference SWPA Exhibit No. CEH-2, Schedule-7, concerning purchased water expense:

A. Provide a copy of the current Purchase Water Agreements for the Company;

B. Provide an explanation with supporting documentation for the FTY inflationary increase of 2.125% and the FPFTY inflationary increase of 2.3% when according to the Company's history the purchased water expense has been decreasing;

C. Provide justification and supporting documentation for purchasing an extra $105,000 in water from the SARAA for the FPFTY. Indicate if the $105,000 water purchase will be an annually recurring expense and provide justification;

D. Indicate if the FPFTY water purchase of $105,000 from the SARAA will cause the amount of water purchased from other companies or municipalities to decrease;

   1. If so indicate the companies or municipalities that will experience this decrease and the amount of purchased water decrease from each of these companies or municipalities;

   2. Also show how these decreases are included in the Company's calculation of FPFTY claim of $182,928.

Response:

A. Please refer to I&E-RE-27a Attachment – Steelton, I&E-RE-27a Attachment – AQUAPA and I&E-RE-27a Attachment – SARAA.

B. See response to OCA-IV-37 part B.

C. For the past several years the Company has not purchased water from SARAA due to their Perfluorooctanesulfonic acid (PFOS) contamination issue. SARAA is currently addressing the problem and once it's resolved, which is anticipated to be in the near future, the Company is planning to begin purchasing water from them again. Please see attached I&E-RE-27c Attachment for supporting documentation.

D. No it will not cause the amount of water purchased from other companies or municipalities to decrease. SARAA is only used in conjunction with the Company's Harrisburg system.
   1. Not applicable
   2. Not applicable

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-28
(Heppenstall)
June 13, 2018

I&E-RE-28 Reference SWPA Exhibit No. CEH-2, Schedule-8, concerning purchased power expense:

A. Provide a yearly breakdown of purchased power expense by metered site for 2015, 2016, the HTY, the FTY, and the FPFTY;

B. Provide copies of the invoices/bills from January 2017 through the current date;

C. Provide an explanation for the 5% increase in cost of purchased power from 2015 of $1,516,207 to 2016 of $1,589,719;

D. Provide an explanation for the 12% decrease in the cost of purchased power from 2016 of $1,589,719 to the HTY of $1,404,353;

E. Provide an explanation for the FTY inflationary increase of 2.125% and the FPFTY inflationary increase of 2.3% when according to the Company's history the purchased power expense decreased between 2016 and 2017.

Response:

A. Please reference OCA-IV-38 Attachment for 2015, 2016, 2017 expenses. The FTY is calculated by taking a three year average (2015-2017) and adjusting for the inflationary factor of 2.125%. The FPFTY is calculated by taking the FTY expense and adjusting for the inflationary factor of 2.3%.

B. In lieu of producing monthly invoices for over 100 sites, the Company is attaching I&E-RE-28 b which lists each vendor by month and the associated expense for 2017 through the current data available. The company invites I&E to visit the Company's administrative building where we can sign in to the third party vendor's site that maintains each of the purchased power invoices for each site to review invoices during the Company's office hours.

C. There are many underlying reasons for increasing or decreasing purchased power expense not directly tied to production. In 2016, kWh increased 1.7% as kWh/MG increased 2.2%. Also, the cost/kWh increased 3.1% in 2016 when compared to 2015.

D. There are many underlying reasons for increasing or decreasing purchased power expense not directly tied to production. In 2017, kWh decreased 5.1% as kWh/MG decreased 0.6%. Also, the cost/kWh decreased 6.8% in 2017 when compared to 2016.

E. See response to OCA-IV-38 part b.

2017

Vendor	Jan Usage	Jan Cost	Feb Usage	Feb Cost
Champion Energy Services, LLC/4723	-	$ 56,664	-	$ 19,375
ENGIE Resources	-	$ 14,294	-	$ 40,884
Met-Ed/3687	84,799	$ 8,255	68,331	$ 6,801
PPL Electric Utilities/Allentown	1,476,384	$ 35,746	1,288,936	$ 32,183
UGI Utilities Inc	123,390	$ 22,309	110,888	$ 19,241
Grand Total	**1,684,574**	**$ 137,269**	**1,468,156**	**$ 118,483**

Vendor	Mar Usage	Mar Cost	Apr Usage	Apr Cost
Champion Energy Services, LLC/4723	-	$ 21,065	-	$ 19,342
ENGIE Resources	-	$ 43,338	-	$ 41,913
Met-Ed/3687	75,940	$ 7,438	65,747	$ 6,423
PPL Electric Utilities/Allentown	1,369,153	$ 33,883	1,284,972	$ 31,276
UGI Utilities Inc	119,842	$ 19,342	101,354	$ 14,039
Grand Total	**1,564,935**	**$ 125,065**	**1,452,074**	**$ 112,993**

Vendor	May Usage	May Cost	Jun Usage	Jun Cost
Champion Energy Services, LLC/4723	-	$ 18,851	-	$ 18,533
ENGIE Resources	-	$ 44,779	-	$ 46,182
Met-Ed/3687	64,504	$ 6,173	62,090	$ 5,797
PPL Electric Utilities/Allentown	1,297,332	$ 29,866	1,284,416	$ 29,140
UGI Utilities Inc	97,563	$ 10,899	93,119	$ 10,209
Grand Total	**1,459,399**	**$ 110,568**	**1,439,625**	**$ 109,861**

Vendor	Jul Usage	Jul Cost	Aug Usage	Aug Cost
Champion Energy Services, LLC/4723	-	$ 19,206	-	$ 17,975
ENGIE Resources	-	$ 48,971	-	$ 48,455
Met-Ed/3687	63,131	$ 5,836	63,652	$ 5,720
PPL Electric Utilities/Allentown	1,344,289	$ 30,608	1,326,416	$ 31,984
UGI Utilities Inc	95,137	$ 10,504	98,247	$ 10,655
Grand Total	**1,502,558**	**$ 115,124**	**1,488,315**	**$ 114,789**

Vendor	Sep Usage	Sep Cost	Oct Usage	Oct Cost
Champion Energy Services, LLC/4723	-	$ 17,838	-	$ 18,826
ENGIE Resources	-	$ 46,511	-	$ 48,279
Met-Ed/3687	60,744	$ 5,201	61,924	$ 5,215
PPL Electric Utilities/Allentown	1,284,423	$ 30,414	1,329,100	$ 33,011
UGI Utilities Inc	97,033	$ 10,586	109,705	$ 12,770
Grand Total	**1,442,200**	**$ 110,550**	**1,500,730**	**$ 118,100**

Vendor	Nov Usage	Nov Cost	Dec Usage	Dec Cost
Champion Energy Services, LLC/4723	-	$ 18,637	-	$ 26,359
ENGIE Resources	-	$ 46,443	-	$ 49,715
Met-Ed/3687	74,904	$ 6,236	78,364	$ 6,734
PPL Electric Utilities/Allentown	1,295,145	$ 31,705	1,436,873	$ 35,968
UGI Utilities Inc	106,063	$ 17,082	133,496	$ 24,919
Grand Total	**1,476,113**	**$ 120,103**	**1,648,732**	**$ 143,696**

2018

Vendor	Jan		Feb	
	Sum of Usage	Sum of Cost	Sum of Usage	Sum of Cost
Champion Energy Services, LLC/4723	-	$ 27,829	-	$ 18,754
ENGIE Resources	-	$ 50,122	-	$ 41,505
Met-Ed/3687	78,969	$ 6,817	67,640	$ 5,913
PPL Electric Utilities/Allentown	1,542,439	$ 39,676	1,323,473	$ 33,139
UGI Utilities Inc	154,161	$ 29,026	127,513	$ 24,020
Grand Total	**1,775,569**	**$ 153,469**	**1,518,626**	**$ 123,332**

Vendor	Mar		Apr	
	Sum of Usage	Sum of Cost	Sum of Usage	Sum of Cost
Champion Energy Services, LLC/4723	-	$ 19,671	-	$ 17,462
ENGIE Resources	-	$ 44,172	-	$ 42,145
Met-Ed/3687	82,524	$ 7,268	75,127	$ 6,683
PPL Electric Utilities/Allentown	1,378,103	$ 33,260	1,285,438	$ 31,513
UGI Utilities Inc	138,450	$ 25,329	125,794	$ 21,216
Grand Total	**1,599,077**	**$ 129,699**	**1,486,359**	**$ 119,018**

Vendor	May	
	Sum of Usage	Sum of Cost
Champion Energy Services, LLC/4723	-	$ 6,300
ENGIE Resources	-	$ 25,670
Met-Ed/3687	47,359	$ 4,165
PPL Electric Utilities/Allentown	853,835	$ 23,347
UGI Utilities Inc	35,239	$ 5,271
Grand Total	**936,432**	**$ 64,753**

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-39
(Heppenstall)
June 6, 2018

OCA-IV-39 With reference to Exhibit CEH-2, Schedule-8, Adjustment No. 7, for 2017 through the most recent date available, please provide the monthly power expense, kWh consumption and the production (MG).

Response: Please see OCA-IV-39 Attachment.

2017	January	February	March	April	May	June	July	August	September	October	November	December
Power Expense	$ 118,919	$ 141,253	$ 130,859	$ 96,750	$ 112,841	$ 105,433	$ 118,099	$ 120,402	$ 108,343	$ 113,336	$ 129,067	$ 131,698
kWh Consumption	1,684,574	1,468,156	1,564,935	1,452,074	1,459,399	1,439,625	1,502,558	1,488,315	1,442,200	1,500,730	1,476,113	1,646,264
Production (MG)	533.306	472.114	500.995	490.910	510.026	512.410	527.767	534.640	517.814	524.163	493.804	508.036

2018	January	February	March	April	May
Power Expense	$ 175,391	$ 144,042	$ 103,828	$ 118,013	$ 116,248
kWh Consumption	1,766,163	1,611,677	1,609,468	1,556,919	1,451,448
Production (MG)	546.295	475.085	505.009	490.749	518.753

2017 Month	Purchased Power from I&E-RE-28 Part B	Purchased Power from OCA-IV-39
January	$137,269	$118,919
February	$118,483	$141,253
March	$125,065	$130,859
April	$112,993	$96,750
May	$110,568	$112,841
June	$109,861	$105,433
July	$115,124	$118,099
August	$114,789	$120,402
September	$110,550	$108,343
October	$118,100	$113,336
November	$120,103	$129,067
December	$143,696	$131,698
Total	$1,436,601	$1,427,000

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-38
(Heppenstall)
June 6, 2018

OCA-IV-38 With reference to Exhibit CEH-2, Schedule-8, Adjustment No. 7,

a. Please provide a breakdown of the purchase power expense by supplier in each of the 3 years provided.

b. Please provide evidence that the cost of power varies with inflation.

c. Please explain how the Company purchases power for pumping. Is the purchase based upon negotiated rates or at rates set by tariffs?

Response:

a. Please see OCA-IV-38 Attachment. This attachment was obtained from our third party vendor, ECOVA, which manages the monthly invoicing and payments of our purchased power utilities. Therefore, the dollars and usage may not match the income statement exactly due to incoming and reversing accruals.
b. According to the U.S. Bureau of Labor Statistics, energy experienced an average inflation rate of 3.18% per year between 2000 and 2018. Therefore, adjusting this expense using inflation factors of 2.125% and 2.300% is conservative.
c. The purchase of power for pumping is based on negotiated rates for approximately 80% of the usage and approximately 20% based on the tariff rates of the utilities in which we purchase power.

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OCA-IV-38 Attachment
Page 1 of 1

2015

Vendor	Cost	Usage
Constellation NewEnergy/4640	$ 788,516	-
Direct Energy Business/32179	$ 98,672	-
Met-Ed/3687	$ 83,010	778,871
PPL Electric Utilities/Allentown	$ 337,877	16,868,732
UGI Utilities Inc	$ 175,818	1,133,776
Grand Total	**$ 1,483,893**	**18,781,378**

2016

Vendor	Cost	Usage
Champion Energy Services, LLC/4723	$ 394,415	-
Constellation NewEnergy/4640	$ 556,149	-
Met-Ed/3687	$ 83,253	835,004
PPL Electric Utilities/Allentown	$ 363,667	17,076,188
UGI Utilities Inc	$ 167,067	1,190,342
Grand Total	**$ 1,564,552**	**19,101,533**

2017

Vendor	Cost	Usage
Champion Energy Services, LLC/4723	$ 272,670	-
ENGIE Resources	$ 519,764	-
Met-Ed/3687	$ 75,828	824,131
PPL Electric Utilities/Allentown	$ 385,785	16,017,440
UGI Utilities Inc	$ 182,555	1,285,838
Grand Total	**$ 1,436,603**	**18,127,409**

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-7
(Heppenstall)
June 13, 2018

I&E-RE-7 Reference SWPA Exhibit No. CEH-2, Schedule-1 concerning operation and maintenance expenses. Provide similar schedules in Excel with formulas intact for each year ended 12/31/2015 and 12/31/2016.

Response: Please see I&E-RE-7 Attachment.

SUEZ Water Pennsylvania
Docket No. R-2018-3000834
Operation and Maintenance Expenses
For the Years 2015 and 2016

I&E-RE-7 Attachment
Schedule-1
Summary of Adjustments
Page 1 of 1

Line No.	Account Number	Utility Operating Expenses	12-Months Ending 12/31/2016	12-Months Ending 12/31/2015
1	601.0	Labor Expense	$ 4,581,783	$ 4,662,122
2	604.0	Employee Group Health & Life	1,019,258	1,015,935
3	604.0	Employee Pension Benefits	1,411,753	1,296,903
4	604.0	Employee Post Retirement Benefits Other than Pension	(458,655)	(32,395)
5	604.0	Other Employee Benefits	218,070	231,345
6	610.0	Purchased Water	70,906	84,246
7	615.0	Purchased Power	1,466,981	1,363,806
8	616.0	Fuel for Power Production	242,225	118,514
9	618.0	Chemicals	587,150	607,875
10	620.0	Materials and Supplies	231,996	322,421
11	634.0	Management and Service Fees	4,393,722	3,238,101
12	635.0	Lab Testing Fees	69,635	71,150
13	636.0	Outside Contractors	729,456	1,173,281
14	636.0	Outside Professional Services	51,134	81,018
15	641.0	Rental - Building/Real Property	54,594	56,867
16	642.0	Rental of Equipment	42,413	35,016
17	650.0	Transportation Expense	406,263	415,044
18	657.0	Prop& Gen Liab. Insurance	5,897	262,198
19	658.0	Worker Compensation	136,030	108,651
20	660.0	Advertising		
21	666-667	Rate Case Expense - Amort	251,307	23,347
22	666-667	Regulatory Commission Expense	186,863	195,783
23	670.0	Bad Debt Expense	130,887	228,050
24	675.0	Fringe Benefit Expense Transfer	(956,856)	(264,117)
25	675.6	Office Expense and Utilities	340,334	445,262
26	675.9	Postage and Air Freight Expense	345,903	354,667
27	Various	Other O&M	246,603	(439,521)
28		**Adjustments for Mahoning Twp Acquisition**		
29		**Total Operation and Maintenance Expenses**	$ 15,805,651	$ 15,655,567
30				
31		**Taxes Other Than Income**		
32		Real Estate Tax		
33		Payroll	559,588	502,183
34		Taxes Other Than Income	241,323	429,307
35		**Total Taxes Other Than Income**	$ 800,911	$ 931,490
36				
37		**Depreciation Expense**	$ 6,068,785	$ 5,808,449
38		**Amortization of Acquisition Adjustment**	$ 57,744	$ 57,744
39		**Amortization of Regulatory Liability**		
40				
41		**Income Taxes**	$ 8,538,239	$ 5,607,721
42				
43		**Total**	$ 31,271,330	$ 28,060,971

SUEZ WATER PENNSYLVANIA, INC. — For the Year Ended December 31, 2015
(Company Name)

407. WATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

Line No.	Account Number and Title (a)		Schedule No. (b)	Amount of Operating Expenses: Current Year (c)	Previous Year (d)	Increase (Decrease) (e)
1		**Salaries and Wages**		XXX	XXX	XXX
2	601.0	Employees	409	4,686,136	4,684,876	1,260
3	603.0	Officers, Directors and Majority Stockholders	409	-	-	-
4		Total Salaries and Wages		4,686,136	4,684,876	1,260
5	604.0	Employee Pensions and Benefits	409-A	2,514,211	2,255,510	258,700
6	610.0	Purchased Water	408	84,246	127,433	(43,187)
7	615.0	Purchased Power		1,368,121	1,416,601	(48,480)
8	616.0	Fuel for Power Production		118,514	55,963	62,551
9	618.0	Chemicals		609,051	629,186	(20,134)
10	620.0	Materials and Supplies		324,181	297,793	26,389
11		**Contractual Services**		XXX	XXX	XXX
12	631.0	Engineering	411-A	-	9,516	(9,516)
13	632.0	Accounting	411-A	-	62,014	(62,014)
14	633.0	Legal	411-A	-	28,883	(28,883)
15	634.0	Management Fees	411-B	3,238,101	2,433,828	804,273
16	635.0	Testing	411-B	-	103,516	(103,516)
17	636.0	Other - Maintenance	411-B	1,682,936	1,433,506	249,430
18		Total Contractual Services		4,921,037	4,071,263	849,775
19	641.0	Rental of Building/Real Property			72,844	(72,844)
20	642.0	Rental of Equipment		91,883	25,247	66,636
21	650.0	Transportation Expenses		416,220	469,926	(53,706)
22		**Insurance**		XXX	XXX	XXX
23	656.0	Vehicle		-	-	-
24	657.0	General Liability		262,281	268,602	(6,321)
25	658.0	Workman's Compensation		108,756	108,406	350
26	659.0	Other				-
27		Total Insurance		371,037	377,008	(5,971)
28	660.0	Advertising Expense - Other than Conservation	412		25,203	(1,856)
29	666.0	Regulatory Commission Expenses-Amort. of Rate Case Expense		23,347	116,010	(92,663)
30	667.0	Regulatory Commission Expenses-Other		195,783	185,350	10,433
31	668.0	Water Resource Conservation Expense			-	-
32	670.0	Bad Debt Expense		228,050	164,603	63,446
33		**Miscellaneous Expenses**		XXX	XXX	XXX
34	675.0	Miscellaneous Other	413	(751,319)	(578,204)	(173,115)
35	675.1	Membership Dues		-	59,118	(59,118)
36	675.2	Registration Fees for Conventions & Meetings of Industry	414	-	31,625	(31,625)
37	675.3	Communication Services		-	200,688	(200,688)
38	675.4	Trustee Fees and Bank Charges		-	-	-
39	675.5	Stockholders Expenses		-	-	-
40	675.6	Office Expenses and Utilities		445,512	186,183	259,329
41	675.7	Uniforms		57,305	72,753	(15,449)
42	675.8	Director's Fees and Expenses		-	-	-
43	675.9	Mailing		2,074	265,951	(263,877)
44	675.10	Subscriptions		-	4,955	(4,955)
45	675.11	Write off of expenditures for preliminary surveys, plans, investigations etc. included in Account 183.0 - Preliminary Survey and Investigation Charges, relative to projects which have been abandoned				-
						-
						-
					-	-
46	675.12	Travel	416		25,695	(25,695)
47	675.13	Education	415		-	-
48	675.14	Charitable Contributions			-	-
49		Total Miscellaneous Expenses		(246,429)	268,763	(515,192)
50		Total Water Operation and Maintenance Expense Accounts		15,705,388	15,243,578	461,810

SUEZ WATER PENNSYLVANIA, INC. — For the Year Ended December 31, 2016
(Company Name)

407. WATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

Line No.	Account Number and Title (a)		Schedule No. (b)	Amount of Operating Expenses: Current Year (c)	Previous Year (d)	Increase (Decrease) (e)
1		**Salaries and Wages**		XXX	XXX	XXX
2	601.0	Employees	409	4,608,714	4,686,136	(77,423)
3	603.0	Officers, Directors and Majority Stockholders	409			
4		Total Salaries and Wages		4,608,714	4,686,136	(77,423)
5	604.0	Employee Pensions and Benefits	409-A	2,199,232	2,514,211	(314,978)
6	610.0	Purchased Water	408	70,906	84,246	(13,340)
7	615.0	Purchased Power		1,466,981	1,368,121	98,861
8	616.0	Fuel for Power Production		242,225	118,514	123,711
9	618.0	Chemicals		587,819	609,051	(21,233)
10	620.0	Materials and Supplies		235,247	324,181	(88,935)
11		**Contractual Services**		XXX	XXX	XXX
12	631.0	Engineering	411-A			
13	632.0	Accounting	411-A			
14	633.0	Legal	411-A			
15	634.0	Management Fees	411-B	4,393,722	3,238,101	1,155,621
16	635.0	Testing	411-B			
17	636.0	Other - Maintenance	411-B	1,212,699	1,682,936	(470,237)
18		Total Contractual Services		5,606,421	4,921,037	685,384
19	641.0	Rental of Building/Real Property				
20	642.0	Rental of Equipment		97,007	91,883	5,124
21	650.0	Transportation Expenses		408,598	416,220	(7,623)
22		**Insurance**		XXX	XXX	XXX
23	656.0	Vehicle				
24	657.0	General Liability		5,897	262,281	(256,384)
25	658.0	Workman's Compensation		136,564	108,756	27,808
26	659.0	Other				
27		Total Insurance		142,461	371,037	(228,576)
28	660.0	Advertising Expense - Other than Conservation	412			
29	666.0	Regulatory Commission Expenses-Amort. of Rate Case Expense		251,307	23,347	227,960
30	667.0	Regulatory Commission Expenses-Other		186,863	195,783	(8,920)
31	668.0	Water Resource Conservation Expense				
32	670.0	Bad Debt Expense		130,887	228,050	(97,163)
33		**Miscellaneous Expenses**		XXX	XXX	XXX
34	675.0	Miscellaneous Other	413	(814,829)	(751,319)	(63,510)
35	675.1	Membership Dues				
36	675.2	Registration Fees for Conventions & Meetings of Industry	414			
37	675.3	Communication Services				
38	675.4	Trustee Fees and Bank Charges				
39	675.5	Stockholders Expenses				
40	675.6	Office Expenses and Utilities		340,584	445,512	(104,927)
41	675.7	Uniforms		104,576	57,305	47,272
42	675.8	Director's Fees and Expenses				
43	675.9	Mailing			2,074	(2,074)
44	675.10	Subscriptions				
45	675.11	Write off of expenditures for preliminary surveys, plans, investigations etc., included in Account 183.0 - Preliminary Survey and Investigation Charges, relative to projects which have been abandoned.				
46	675.12	Travel	416			
47	675.13	Education	415			
48	675.14	Charitable Contributions				
49		Total Miscellaneous Expenses		(369,669)	(246,429)	(123,240)
50		Total Water Operation and Maintenance Expense Accounts		15,864,997	15,705,388	159,609

SUEZ WATER PENNSYLVANIA, INC. For the Year Ended December 31, 2017
(Company Name)

407. WATER OPERATION AND MAINTENANCE EXPENSE ACCOUNTS

Line No.		Account Number and Title (a)	Schedule No. (b)	Amount of Operating Expenses: Current Year (c)	Previous Year (d)	Increase (Decrease) (e)
1		**Salaries and Wages**		XXX	XXX	XXX
2	601.0	Employees	409	4,529,640	4,549,369	(19,728)
3	603.0	Officers, Directors and Majority Stockholders	409			
4		Total Salaries and Wages		4,529,640	4,549,369	(19,728)
5	604.0	Employee Pensions and Benefits	409-A	2,523,514	2,199,232	324,281
6	610.0	Purchased Water	408	68,621	70,906	(2,285)
7	615.0	Purchased Power		1,242,836	1,466,981	(224,145)
8	616.0	Fuel for Power Production		184,165	242,225	(58,060)
9	618.0	Chemicals		540,832	587,819	(46,986)
10	620.0	Materials and Supplies		255,653	235,247	20,406
11		**Contractual Services**		XXX	XXX	XXX
12	631.0	Engineering	411-A			
13	632.0	Accounting	411-A			
14	633.0	Legal	411-A			
15	634.0	Management Fees	411-B	4,921,757	4,393,722	528,035
16	635.0	Testing	411-B			
17	636.0	Other - Maintenance	411-B	1,308,781	1,212,699	96,083
18		Total Contractual Services		6,230,538	5,606,421	624,117
19	641.0	Rental of Building/Real Property				
20	642.0	Rental of Equipment		109,505	97,007	12,498
21	650.0	Transportation Expenses		410,968	408,598	2,371
22		**Insurance**		XXX	XXX	XXX
23	656.0	Vehicle				
24	657.0	General Liability		4,732	5,897	(1,165)
25	658.0	Workman's Compensation		103,028	136,564	(33,535)
26	659.0	Other				
27		Total Insurance		107,760	142,461	(34,700)
28	660.0	Advertising Expense - Other than Conservation	412			
29	666.0	Regulatory Commission Expenses-Amort. of Rate Case Expense		140,080	251,307	(111,226)
30	667.0	Regulatory Commission Expenses-Other		199,002	186,863	12,139
31	668.0	Water Resource Conservation Expense				
32	670.0	Bad Debt Expense		155,640	130,887	24,753
33		**Miscellaneous Expenses**		XXX	XXX	XXX
34	675.0	Miscellaneous Other	413	(1,024,783)	(814,829)	(209,954)
35	675.1	Membership Dues				
36	675.2	Registration Fees for Conventions & Meetings of Industry	414			
37	675.3	Communication Services				
38	675.4	Trustee Fees and Bank Charges				
39	675.5	Stockholders Expenses				
40	675.6	Office Expenses and Utilities		450,104	340,584	109,520
41	675.7	Uniforms		108,869	104,576	4,293
42	675.8	Director's Fees and Expenses				
43	675.9	Mailing				
44	675.10	Subscriptions				
45	675.11	Write off of expenditures for preliminary surveys, plans, investigations etc., included in Account 183.0 - Preliminary Survey and Investigation Charges, relative to projects which have been abandoned.				
46	675.12	Travel	416			
47	675.13	Education	415			
48	675.14	Charitable Contributions				
49		Total Miscellaneous Expenses		(465,810)	(369,669)	(96,141)
50		Total Water Operation and Maintenance Expense Accounts		16,232,944	15,805,652	427,292

BUREAU OF INVESTIGATION & ENFORCEMENT DATA REQUESTS

SUEZ WATER PENNSYLVANIA, INC.

Docket No. R-2018-3000834

I&E RE-1
(Walker, Heppenstall, Cagle)
June 11, 2018

I&E-RE-17 **Provide the following Suez Water Pennsylvania, Inc. (SWPA) schedules in working Excel format with all formulas intact:**

A. SWPA Exhibit No. CEH-1, Schedule-1

B. SWPA Exhibit No. CEH-1, Schedule-1.1;

C. SWPA Exhibit No. CEH-2, Schedule-1 through Schedule-34;

D. SWPA Exhibit No. CEH-2, Workpaper CEH-2.1;

E. SWPA Exhibit No. CEH-2, Workpaper CEH-2.2;

F. SWPA Exhibit No. HW-1, Schedule-1 through Schedule-27;

G. SWPA Exhibit No. D III-06, Attachment A;

H. SWPA Exhibit No. D III-11, Attachment;

I. Exhibit JCC-1.

Response: A. – E. Please refer to the Company's response to OCA-IV-24

F. Please refer to I&E-RE-1 Attachment HW

G. Please refer to I&E-RE-1 Attachment D-III-6 which shows the summary of Shared Services fees from SUEZ Water Management & Services (SWM&S) and a more detailed Shared Services fees schedule by SWM&S Department. Please refer to I&E-RE-1 Attachment D-III-6 A for a calculation of the depreciation expense and return component (Common Asset Allocation) charged to SWPA for common assets booked on the SWM&S Company.

In reviewing I&E-RE-1 Attachment D-III-6 A, the Company discovered that the original amount of Common Asset Allocation included in the FTY and FPFTY ($897,647 and $867,014 respectively) was overstated. The correct figures are shown on I&E-RE-1 Attachment D-III-6 A and amount to $795,686 for the FTY and $727,078 for the FPFTY.

BUREAU OF INVESTIGATION & ENFORCEMENT DATA REQUESTS

SUEZ WATER PENNSYLVANIA, INC.

Docket No. R-2018-3000834

H. Please refer to I&E-RE-1 Attachment D-III-11

I. Please refer to I&E-RE-1 Attachment – JCC-1

Suez Water Pennsylvania
M&S Shared Services Allocation
Shared Assets

Line No.	Description	Annualized Amount 12/31/2018 (a)	12/31/2019 (b)
1	Plant in Service	$42,510,450	$42,510,450
2	Accumulted Depreciation	13,339,436	19,356,696
3	ADIT	3,534,674	3,334,427
4	Net Rate Base	25,636,339	19,819,327
5	Pre-Tax ROR (1)	10.32%	10.32%
6	Return, Interest, and Income Taxes	2,645,670	2,045,355
7	Depreciation Expense	6,127,039	5,970,944
8	Total Annualized Amount	8,772,709	8,016,298
9	Allocation Factor	9.07%	9.07%
10	Pro forma total	795,685	727,078

(1) Calculation of Proposed Pre-tax Rate of Return:

	Capital Structure	**Cost Rates**	**Weighted Cost Rates**	
LTD	45.82%	4.65%	2.13%	2.13%
Equity	54.18%	10.75%	5.82%	8.19%
			7.95%	10.32%
				9.99%
				21.00%
				28.89%

Date	12/31/2018

Row Labels	Sum of Current Value	Sum of Ending Reserve	Sum of ADIT	Sum of Curr Depr Expense
Computer Software - AS	335,010	146,567	8,305	6,979
Computer-Hardware	2,578,190	1,391,547	(98,946)	65,855
Computer-Software	34,947,289	10,721,574	3,687,104	411,636
Furniture	959,825	416,871	8,062	10,724
Leased property, expenditures on	3,702,002	663,275	(69,519)	15,425
Non-Utility Property	(11,865)	(399)	(332)	(33)
Grand Total	**42,510,450**	**13,339,436**	**3,534,674**	**510,587**

Date	12/31/2019

Row Labels	Sum of Current Value	Sum of Ending Reserve	Sum of ADIT	Sum of Curr Depr Expense
Computer Software - AS	335,010	230,319	14,168	6,979
Computer-Hardware	2,578,190	2,072,033	(141,557)	52,848
Computer-Software	34,947,289	15,661,203	3,541,239	411,636
Furniture	959,825	545,563	9,638	10,724
Leased property, expenditures on	3,702,002	848,375	(88,456)	15,425
Non-Utility Property	(11,865)	(798)	(604)	(33)
Grand Total	**42,510,450**	**19,356,696**	**3,334,427**	**497,579**

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-58
(Heppenstall / Cagle)

I&E-RE-58 Reference Exhibit No. CEH-2, Schedule-34, concerning income taxes:

A. Provide a detailed calculation and supporting documentation for the tax savings associated with the reduction of the federal income tax rate for the period January 1, 2018 through the date that rates are expected to become effective in this proceeding;

B. State the amount of excess 2018 income taxes proposed to be returned to ratepayers and what mechanism the Company proposes, and over what time period;

C. If the Company is not proposing to return any amount to ratepayers for excess collection of 2018 income taxes, explain why in detail.

Response:

A. Please see I&E-RE-58 Attachment for a calculation of the estimated amount for the 13 months ended January 31, 2019.

B. The Company did not make a proposal in its original filing as it had anticipated further guidance regarding this in Case M-2018-2641242. The Company has and will continue to record as a regulatory liability the effect of the change in federal income tax rate from 35% to 21% in anticipation of this amount being returned to ratepayers until such time as the change in rate is reflected in the Company's base rates. The calculation of this monthly amount is based upon the actual results of SWPA. While there are several ways to return this amount to customers, the Company would propose to amortize the $1.7 M estimate as shown on I&E-RE-58 Attachment, over a 36 month period approximating the period between historic rate cases for SWPA. The monthly amortization would be $47,805. Additionally, the Company would propose the amortization to the regulatory liability continue until such time as rates go into effect in the next future rate case filing and the remaining balance, either under or over amortized, would be addressed in the Company's next future rate case filing. By this process, the Company proposes to make sure that the correct amount is returned to ratepayers.

C. N/A

Line No.	Description	Dec-17 Federal Income Tax Current Rates	Dec-17 State Income Tax Current Rates	Dec-18 Federal Income Tax Current Rates	Dec-18 State Income Tax Current Rates	Dec-18 Total Income Taxes	Dec-19 Federal Income Tax Current Rates	Dec-19 State Income Tax Current Rates	Dec-19 Total Income Taxes	Dec-19 Federal Income Tax Proposed Rates	Dec-19 State Income Tax Proposed Rates	Dec-19 Total Income Taxes Proposed Rates
1	Operating Income Before Income Taxes	$ 20,648,526	$ 20,648,526	$ 16,897,453	$ 16,897,453		$ 18,692,663	$ 18,692,663		$ 24,875,462	$ 24,875,462	
2	Interest Expense (1)	4,465,685	4,485,685	4,454,044	4,485,685		5,186,994	5,186,994		5,186,994	5,186,994	
3	State Income Tax	1,289,182		1,096,254			1,086,677			1,704,339		
4	Repair Adjustment on 2018 Additions			1,467,857	1,467,857							
5	Repair Adjustment on 2019 Additions						2,222,921	2,222,921		2,222,921	2,222,921	
9	Excess Of Tax Depreciation Over Book	3,042,455	3,258,114	71,872	282,414		506,570	717,113		506,570	717,113	
10	Taxable Income	$ 11,831,205	$ 12,904,728	$ 8,807,427	$ 10,661,497		$ 9,699,500	$ 10,565,634		$ 15,254,638	$ 16,748,434	
11	Income Tax Rate	35.00%	9.99%	35.00%	9.99%		35.00%	9.99%		35.00%	9.99%	
12	Pro Forma Income Tax - Current	4,140,922	1,289,182	3,432,599	1,065,084		3,391,325	1,055,507		5,339,123	1,673,169	
13	CTA Adjustment											
14	Amortization of Flow through Taxes			38,123	31,170		38,123	31,170		38,123	31,170	
15	Amortization of Income Tax Credit						-			-		
16	Total - Current Income Taxes	$ 4,140,922	$ 1,289,182	$ 3,470,722	$ 1,096,254		$ 3,429,448	$ 1,086,677		$ 5,377,246	$ 1,704,339	
	Deferred Income Tax:											
17	Repair Adjustment			$ 1,467,857			2,222,921			2,222,921		
18	Less: State Deduction (Fr. Sch.6-6)											
19	Income Tax Rate			35.00%			35.00%			35.00%		
20	Deferred Income Tax - Repair Adjustment			513,750			778,022			778,022		
21	Excess Of Tax Depreciation Over Book			$ 71,872			$ 506,570			$ 506,570	$ -	
22	Less: State Deferred Income Tax			-			-			-		
23	Income Tax Rate			35.00%	9.99%		35.00%	9.99%		35.00%	9.99%	
24	Deferred Income Tax - Tax/Book Deprec.			25,155	-		177,300	-		177,300	-	
25	Total Deferred Income Tax (L20+L24)			538,905	-		955,322	-		955,322	-	
26	Total Income Taxes (L16+L25)	$ 4,140,922	$ 1,289,182	$ 4,009,627	$ 1,096,254	$ 5,105,881	$ 4,384,770	$ 1,086,677	$ 5,471,447	$ 6,332,568	$ 1,704,339	$ 8,036,906
	Adjustment											
27	Rate Base	$ 190,763,193	$ 190,763,193	$ 209,048,221	$ 209,048,221		$ 243,448,860	$ 243,448,860		$ 243,448,860	$ 243,448,860	
28	Weighted Cost Of Debt	2.13%	2.13%	2.13%	2.13%		2.13%	2.13%		2.13%	2.13%	
29	Interest Expense (1)	$ 4,064,458	$ 4,064,458	$ 4,454,044	$ 4,454,044		$ 5,186,994	$ 5,186,994		$ 5,186,994	$ 5,186,994	
	Total Income Taxes (Line 26) Original Filing			2,421,325	1,096,254		2,646,111			$ 3,814,790		
	Difference		12 Months	1,588,502	-		1,738,659			2,517,778		
			1 Month	132,383								
			13 Months	1,720,985								
			Amortization (36 Months)	47,805								

I&E Exhibit No. 1
Schedule 15
Page 2 of 2

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-24
(Cagle)
June 22, 2018

I&E-RE-24 Reference SWPA Exhibit JCC-1, concerning accumulated deferred income tax and excess deferred income tax regulatory liability.

A. Provide similar exhibits for the FTY and the FPFTY in Excel format with formulas intact;

B. In reference to Part A clearly specify a breakdown between ADIT and excess ADIT by year for the FTY and the FPFTY;

C. Show how the $265,189 claimed on line 29 is being calculated;

D. Provide justification with supporting documentation for using a 40-year amortization period for the excess deferred income tax regulatory liability.

Response:

A. Exhibit JCC-1 is the calculation of the regulatory liability as a result of the passage of the TCJA and does not change over time. Exhibits for FTY and FPFTY would be identical to Exhibit JCC-1. As stated in testimony, currently the Company is reviewing in detail its income tax records in order to verify the balance of the regulatory liability subject to continued normalization (protected) as well as those that are not (unprotected). The review is also determining amounts subject to ARAM amortization of RSG amortization.

B. Please see the response to A above.

C. This amount is the TCJA regulatory liability balance divided by 38.

D. The calculation for this estimate is simply Net Plant in Service as of 12/31/2017 divided by 2017 Depreciation Expense. $270,634,313 / $7,361,991 = 36.76. This exact amount was not utilized as the required amortization amounts by year have not been determined as yet.

f

SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2017

I&E MODIFIED

Utility Operating Expenses	Revenue Days	Expense Days	Net (Lead) Lag Days	Expense Claim 12-Months Ending 12/31/2017	12-Months Ending 12/31/2017 CWC	Expense Claim Future Test Year 12/31/2018	Future Test Year 12/31/2018 CWC	Expense Claim Fully Projected Year Under Present Rates 12/31/2019	Fully Projected Year Under Present Rates 12/31/2019 CWC	Expense Claim Fully Projected Future Test Year Under Proposed Rates 12/31/2019	Fully Projected Future Test Year Under Proposed Rates 12/31/2019 CWC
Labor Expense--I&E MODIFIED	33.3	13.4	19.9	$ 4,579,937	$ 249,701	$ 5,311,453	$ 289,583	$ 5,458,942	$ 297,625	$ 5,413,703	$ 295,158
Employee Group Health & Life--I&E MODIFIED	33.3	12.7	20.6	1,323,689	74,707	1,407,156	79,418	1,439,521	81,244	957,035	54,013
Employee Pension Benefits--I&E MODIFIED	33.3	57.4	(24.1)	1,425,022	(94,091)	1,409,589	(93,071)	1,442,010	(95,212)	968,453	(63,944)
Purchased Water--I&E MODIFIED	33.3	15.4	17.9	68,621	3,365	76,176	3,736	182,928	8,971	74,591	3,658
Purchased Power--I&E MODIFIED	33.3	27.0	6.3	1,242,836	21,452	1,535,374	26,501	1,570,688	27,111	1,357,874	23,437
Fuel for Power Production	33.3	36.7	(3.4)	184,165	(1,716)	23,163	(216)	23,696	(221)	23,696	(221)
Chemicals	33.3	25.1	8.2	540,682	12,147	586,048	13,166	599,527	13,469	599,527	13,469
Materials and Supplies	33.3	10.5	22.8	254,476	15,896	277,066	17,307	283,439	17,705	283,439	17,705
Management and Service Fees--I&E MODIFIED	33.3	14.7	18.6	4,921,757	250,807	5,289,281	269,536	5,359,497	273,114	4,492,483	228,932
Lab Testing Fees	33.3	15.5	17.8	114,698	5,594	81,888	3,993	83,542	4,074	83,542	4,074
Outside Contractors--I&E Modified	33.3	28.7	4.6	748,644	9,435	979,755	12,348	1,147,114	14,457	922,114	11,621
Outside Professional Services	33.3	49.7	(16.4)	64,321	(2,890)	66,660	(2,995)	68,193	(3,064)	68,193	(3,064)
Rental - Building/Real Property	33.3	(14.7)	48.0	60,330	7,934	60,476	7,953	60,476	7,953	60,476	7,953
Rental of Equipment	33.3	(5.1)	38.4	49,175	5,173	50,220	5,283	51,375	5,405	51,375	5,405
Transportation Expense	33.3	31.0	2.3	407,033	2,565	463,897	2,923	560,322	3,531	560,322	3,531
Prop& Gen Liab. Insurance	33.3	(59.6)	92.9	4,732	1,204	4,832	1,230	4,935	1,256	4,935	1,256
Worker Compensation -- I&E MODIFIED	33.3	13.7	19.6	102,384	5,498	108,228	5,812	110,717	5,945	74,358	3,993
Regulatory Commission Expense	33.3	(77.0)	110.3	198,665	60,035	219,880	66,446	238,664	72,122	270,077	81,615
Office Expense and Utilities	33.3	4.0	29.3	446,337	35,829	419,541	33,678	540,894	43,420	540,894	43,420
Postage and Air Freight Expense	33.3	30.1	3.2	354,308	3,106	358,563	3,144	366,358	3,212	366,358	3,212
Other O&M	33.3	13.8	19.5	143,806	7,683	199,353	10,650	203,938	10,895	203,938	10,895
Real Estate Tax--I&E MODIFIED	33.3	(26.9)	60.2	270,553	44,623	311,025	51,298	318,178	52,478	304,553	50,230
Payroll -- I&E MODIFIED	33.3	18.6	14.7	560,626	22,579	618,438	24,907	650,213	26,187	433,034	17,440
Federal Income Taxes	33.3	37.0	(3.7)	5,168,780	(52,396)	2,420,415	(24,536)	2,645,730	(26,820)	3,814,409	(38,667)
State Income Taxes	33.3	28.8	4.6	1,663,801	20,741	1,096,254	13,666	1,086,476	13,544	1,704,138	21,243
Total					$ 708,981		$ 821,760		$ 858,401		$ 796,364

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA, INC.**	: : : : : :	**Docket No. R-2018-3000770**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, D. C. Patel, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 2, and, I&E Exhibit No. 2

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.

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: September 7, 2018

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Direct Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

TABLE OF CONTENTS

INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel. My business address is Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

Q. WHAT IS YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND?

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

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

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

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my direct testimony is to address the claimed rate of return, including the cost of common equity, and the overall fair rate of return for Suez Water Pennsylvania, Inc. (Suez or Company).

Q. DOES YOUR TESTIMONY INCLUDE AN EXHIBIT?

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

<u>BACKGROUND</u>

Q. WHAT IS THE GENERAL DEFINITION OF RATE OF RETURN (ROR) IN THE CONTEXT OF A RATE CASE?

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

Q. WHAT IS THE REVENUE REQUIREMENT FORMULA?

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

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

Where:

RR	=	Revenue Requirement
E	=	Operating Expenses

D = Depreciation Expense

T = Taxes

RB = Rate Base

ROR = Overall Rate of Return

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

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

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

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

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

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

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

I&E POSITION

Q. SUMMARIZE YOUR RATE OF RETURN RECOMMENDATION IN THIS PROCEEDING.

A. I recommend the following overall rate of return for Suez:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	9.13%	4.95%
Total	100.00%		7.08%

COMPANY POSITION

Q. SUMMARIZE THE COMPANY'S RATE OF RETURN CLAIM IN THIS CASE.

A. The Company's witness, Dylan W. D'Ascendis, has recommended the following overall rate of return range (Suez Statement No. 5, p. 3):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	10.40% - 11.50%	5.63% - 6.23%
Total	100.00%		7.76% - 8.36%

In the filing, the Company claimed an overall rate of return of 7.95% in its revenue requirement calculation for the fully projected future test year (FPFTY) ending December 31, 2019 as shown in the table below (Suez Exhibit CEH-1, Schedule 1.2):

Type of Capital	Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	10.75%	5.82%
Total	100.00%		7.95%

PROXY GROUP

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

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

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

A. A proxy group is used as a benchmark to satisfy the long-established guideline of utility regulation that seeks to provide the subject utility with an opportunity to earn a return equal to that of similar risk enterprises.

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

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

A. To select a proxy group that resembles the water utility industry, I used the following criteria:

1. 50% or more of the company's revenues must be generated from the water utility industry;
2. The company's stock must be publicly traded;
3. Investment information for the company must be available from more than one source; and

4. The company must not be currently involved in an announced merger or targeted in an acquisition.

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

A. I have selected six regulated water companies in my proxy group: American Water Works Company, Inc., American States Water Co., California Water Service Group, Middlesex Water Co., Aqua America, Inc., and York Water Company (I&E Exhibit No. 2, Schedule 1).

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

A. Mr. D'Ascendis created two proxy groups: regulated and unregulated. His regulated proxy group contains companies in the Water Utility Industry. Mr. D'Ascendis selected the second group containing non-price regulated companies engaged in various industries.

Q. WHAT COMPANIES DID MR. D'ASCENDIS USE IN HIS REGULATED PROXY GROUP ANALYSIS?

A. Mr. D'Acendis' regulated proxy group consists of the same companies as my utility proxy group (Suez Statement No. 5, p. 11).

Q. WHAT IS MR. D'ASCENDIS' BASIS FOR ALSO USING AN UNREGULATED PROXY GROUP?

A. Mr. D'Ascendis states that the U.S. Supreme Court in the *Hope* and *Bluefield* cases did not specify that comparable risk companies had to be utilities. He claims that as rate regulation is a substitute for competition in the marketplace, non-price regulated firms operating in the competitive marketplace make an excellent proxy if they are comparable in total risk to the utility proxy group being used to estimate the cost of common equity (Suez Statement No. 5, p. 31, ln. 5-10).

Q. WHAT CRITERIA DID MR. D'ASCENDIS USE IN SELECTING HIS UNREGULATED PROXY GROUP COMPANIES?

A. Mr. D'Ascendis used the following criteria when selecting his unregulated proxy group:

1. The company must be covered by the Value Line Investment Survey (Standard Edition);
2. The company must be a domestic, non-price regulated company, i.e., non-utility;
3. The company's beta must lie within plus or minus two standard deviations of the average unadjusted beta of the utility proxy group; and
4. The residual standard errors of the Value Line regressions which gave rise to the unadjusted beta coefficients must lie within plus or minus two standard deviations of the average residual standard error of the regulated utility proxy group (Suez Statement No. 5, p. 31, lines 23-24 and p. 32, lines 1-6).

Q. WHAT COMPANIES DID MR. D'ASCENDIS USE IN HIS UNREGULATED PROXY GROUP ANALYSIS?

A. Mr. D'Ascendis selected 17 companies in his unregulated proxy group (Suez Statement No. 5, Exhibit 5, Schedule DWD 6, p. 3) engaged in various industries, such as restaurants (Cheesecake Factory), medical services (DaVita), industrial services (ABM Ind.), brokerage (CBOE), and retail automotive (AutoZone) (I&E Exhibit No. 2, Schedule 2).

Q. DO YOU AGREE WITH MR. D'ASCENDIS' USE OF AN UNREGULATED PROXY GROUP?

A. No. Although Mr. D'Ascendis' unregulated proxy group may have betas that are similar to his water group, it is not an acceptable proxy group for Suez.

Mr. D'Ascendis' unregulated group defies the principles of the *Hope* and *Bluefield* cases because the selected companies are not from the water utility industry and therefore face different risks, they are not natural monopolies and can be significantly more profitable.

Q. WHY SHOULD THE COMPANIES OF A PROXY GROUP OPERATE IN THE SAME INDUSTRY AS SUEZ?

A. Proxy groups are used to provide market data for companies that are not publicly traded. Since each industry faces different types of industry-specific risk, a proxy group must contain companies in the same industry as the Company for the estimated return to be accurate. Mr. D'Ascendis has chosen companies for his unregulated proxy group from different industries such as retail automotive, broker/exchange, restaurant, food processing, hotel, medical services, insurance, industrial services, information services, medical supplies, and the household products industry. All these industries deal in different products or services and, therefore, face different challenges. Further, the selected company from each of the industry groups is not necessarily representative of its specific industry group. Each industry has its own industry-specific risk profile, so comparing the results of a diversified industry proxy group with the water utility proxy group is not fair and reasonable.

Q. DOES MR. D'ASCENDIS' INCLUSION OF A CRITERION THAT THE BETA COEEFICIENTS BE WITHIN TWO STANDARD DEVIATIONS OF THE AVERAGE UNADJUSTED BETA OF A REGULATED UTILITY PROXY GROUP ALLEVIATE YOUR CONCERN?

A. No. Each industry faces different risks, which dramatically affect the future growth or decline of the companies within that industry. Although, the beta can indicate market risk, two companies with similar betas do not always face the same type or level of risk in the future. Beta is an indicator of volatility or how each company responds when compared with the market as a whole. A beta of less than one indicates that the price movement of the stock is less than that of the market as a whole. The fact that Mr. D'Ascendis' unregulated proxy group has a beta close to that of his water group (Suez Exhibit No. 5, Schedule DWD-6, p. 3) does not mean that the companies face the same risks or will perform the same in the future.

CAPITAL STRUCTURE

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

A. The Company has claimed a capital structure of 45.82% long-term debt and 54.18% common equity for the FPFTY ending December 31, 2019 (Suez Statement No. 5, p. 9 and Suez Exhibit No. 5, Schedule DWD-1, p. 1).

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

A. Mr. D'Ascendis states that his recommended capital structure is based on the January 31, 2018 actual capital structure of Suez Water Resources, the parent company of Suez (Suez Statement No. 5, p. 9).

Q. DO YOU AGREE WITH THE COMPANY'S CLAIMED CAPITAL STRUCTURE?

A. Yes.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION TO USE THE COMPANY'S CLAIMED CAPITAL STRUCTURE?

A. The Company's capital structure is appropriate for this proceeding as it is similar to the range of capital structures of my proxy group. For the past five years, the average capital structure of my proxy group ranged from 39.14% to 53.20% for long-term debt and 46.80% to 60.12% for common equity. The average capital structure of my proxy group companies for the past five years was 44.63% long-term debt and 55.25% common equity (I&E Exhibit No. 2, Schedule 1).

COST RATE OF LONG-TERM DEBT

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

A. Mr. D'Ascendis uses a debt cost rate of 4.65% based on the actual long-term debt cost rate of Suez Water Resources as of January 31, 2018 (Suez Statement No. 5, p. 10 and Suez Exhibit No. 5, Schedule DWD-1, p. 1).

Q. DO YOU AGREE WITH THE CLAIMED COST RATE OF LONG-TERM DEBT?

A. Yes. I agree with the Company's long-term debt cost rate of 4.65% because it is reasonable as it lies within the range of implied cost rates of my proxy group of 3.96% to 7.04% (I&E Exhibit No. 2, Schedule 3).

COST OF COMMON EQUITY

COMMON METHODS

Q. WHAT METHODS ARE COMMONLY PROPOSED TO DETERMINE THE COST OF COMMON EQUITY?

A. There are four methods commonly proposed to estimate the cost of common equity: the Discounted Cash Flow (DCF), the Capital Asset Pricing Model (CAPM), the Risk Premium (RP), and the Comparable Earnings (CE) method.

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

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

Q. WHAT IS THE THEORETICAL BASIS FOR THE CAPM?

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

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

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

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

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

Q. IN THIS PROCEEDING, WHAT METHODS DO YOU RECOMMEND TO DETERMINE THE COST OF COMMON EQUITY?

A. I recommend using the DCF method as the primary method to determine the cost of common equity and using the results of the CAPM as a comparison to the DCF results.

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

A. I have used the DCF as the primary method for a variety of reasons. The DCF is intuitively appealing to investors since it is based upon the concept that the receipt of dividends in addition to expected appreciation is the total return requirement determined by the market. The use of a growth rate and expected dividend yield are also strengths of the DCF as they allow it to recognize the time value of money and enable the DCF to be forward-looking. The use of the utilities' own stock prices and growth rates in the calculation causes the DCF to be company-specific. The DCF method is the superior method for determining the rate of return for the current economic market because it measures the cost of equity directly. The CAPM and RP do not measure the cost of equity directly but instead measure the relationship between a security's investment risk and its market rate of return.

Q. WHY HAVE YOU INCLUDED A CAPM ANALYSIS?

A. I have included the CAPM analysis as a comparison to the results of the DCF to confirm the reasonableness of the DCF results. I have chosen both the CAPM and the DCF because they include inputs that allow the results to be specific to the utility industry. However, the CAPM is far less responsive to changes in the industry than the DCF. The CAPM is based on the performance of U.S. Treasury bonds and the performance of the market as measured through the S&P 500 and is company-specific only through the use of beta. Beta reflects a stock's volatility relative to the overall market thereby incorporating an industry-specific aspect to the CAPM but only as a measure of how reactive an industry is compared to the market. Although, changes in the utility industry are more likely to be accurately reflected in the DCF as it uses the companies' actual prices, dividends, and growth rates, I have included the results of my CAPM analysis because changes in the market, whether as a whole or specific to the utility industry, affect the outcome of each method in different ways.

Out of the four commonly proposed methods identified above, other than the DCF, the CAPM should be used as the second method. Like the DCF, the CAPM is based on the concept of risk and return, is company-specific through the use of beta, which has widespread use in the financial investment community, and it is forward-looking. Although the CAPM is more company-specific than the RP method, there are several disadvantages to using the CAPM, which is why it should not be used as a primary method.

Q. EXPLAIN THE CAPM'S DISADVANTAGES.

A. The relevancy of the CAPM (and therefore, the RP method) does not carry over from the investment decision-making process into the regulatory process. The CAPM and RP method give results that indicate to an investor what the equity cost rate should be if current economic and regulatory conditions are the same as those present during the historical period in which the risk premiums were determined. Although, the CAPM and RP results can be useful to investors in making rational buy and sell decisions within their portfolios, the DCF method is the superior method for determining the rate of return for the current economic market and measuring the cost of equity directly. The CAPM and the RP method are less reliable indicators because they measure the cost of equity indirectly and risk premiums vary depending on the debt and equity being compared. Also, regulators can never be certain that economic and regulatory conditions underlying the historical period during which the risk premiums were calculated are the same today or will be the same in the future.

Q. CAN THE RESULTS OF THE CAPM AND RP METHOD BE AFFECTED BY THE FACT THAT ECONOMIC AND REGULATORY CONDITIONS TODAY CAN BE AND ARE OFTEN DIFFERENT FROM THE HISTORICAL PERIOD?

A. Yes. The CAPM and the RP methods do not measure the current rate of return on common equity directly. Instead, the CAPM and the RP method determine the rate of return on common equity indirectly by observing the cost of debt.

An implicit assumption when using the CAPM and the RP method is that the variables determining the equity cost rate and debt cost rate are the same, which allows the analyst to apply a constant risk premium (the difference between the risk-free rate and the return on the market). However, the variables determining the cost rates in the two markets affect the cost rates differently, leading to a changing risk premium over time. The use of a constant risk premium fails to capture the effect of changing economic conditions on risk premiums over time.

While a historical risk premium is the result of the comparison of two cost rates over time, the DCF's constant growth rate is derived directly from the stock and is not a comparative factor.

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

A. Yes. The article, "Market Place; A Study Shakes Confidence In the Volatile-Stock Theory," which appeared in the *New York Times* on February 18, 1992, summarized a CAPM study conducted by professors Eugene F. Fama and Kenneth R. French (Berg, Eric N. "Market Place; A Study Shakes Confidence In the Volatile-Stock Theory" The New York Times, Feb 1992: nytimes.com

Web. 23 Mar 2016). Their study examined the importance of beta, CAPM's risk factor, in explaining returns on common stock. In CAPM theory, a stock with a higher beta should have a higher expected return. They found that the model did not do well in predicting actual returns and suggested the use of more elaborate multi-factor models.

A more recent article, "The Capital Asset Pricing Model: Theory and Evidence," which appeared in the *Journal of Economic Perspectives* states that:

> "The attraction of the CAPM is that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor, poor enough to invalidate the way it is used in applications,"

(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).

As a result, I conclude that the CAPM's relevance to the investment decision making process does not carry over into the regulatory rate setting process.

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

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

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

A. The CE method is excluded because choosing the companies that are comparable is subjective, and it is debatable whether historic financial performance or accounting values are representative of the future. Moreover, the usage of only historic data in this regulatory forum has been minimal.

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

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

A. Mr. D'Ascendis testifies that in analyzing the Company's cost of equity, he applied three cost of common equity models, specifically, the DCF, the RP, and the CAPM to the market data of his proxy group of six water companies and his non-price regulated proxy group. In addition to the non-traditional versions of the RP and CAPM, Mr. D'Ascendis also employs the Predictive Risk Premium Method (PRPM) (which is included under the title of the RP Method) and the Empirical Capital Asset Pricing Model (ECAPM) (which is included under the title of the CAPM). Mr. D'Ascendis applies these models using his proxy group of regulated water utilities. Similarly, he applies these models to his non-price regulated proxy group and averages the mean and median results of these models. He then lists the results for each method for the regulated utility group and the average of the median and mean of the results of the three methods for the non-price regulated group as shown in table below:

Method	**Cost of Common Equity**
Utility Proxy Group:	
DCF	9.10%
Risk Premium	12.12%
CAPM	11.31%
Non-Price Regulated Companies (Average of mean and median of three methods)	12.63%

Next, Mr. D'Ascendis chooses an indicated range for the common equity cost rate from 10.20% to 11.30% for the Company. Finally, he recommends that his cost of common equity be increased by 20 basis points (0.20%) to reflect Suez's greater business risk based on its smaller size as compared with members of the utility proxy group, which results in a final recommended adjusted cost of common equity range from 10.40% to 11.50% (Suez Statement No. 5, p. 4 and Suez Exhibit No. 5, Schedule DWD-1, p. 3).

<u>I&E RECOMMENDATION</u>

Q. WHAT IS YOUR RECOMMENDATION FOR THE APPROPRIATE COST OF COMMON EQUITY IN THIS PROCEEDING?

A. Based upon my analysis, I recommend a cost of common equity of 9.13% as shown in the table below:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	9.13%	4.95%
Total	100.00%		7.08%

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I arrived at common equity return of 9.13% using the DCF method. As explained below, I used my CAPM results of 10.48% (forecasted) and 9.36% (historical) only to present to the Commission a comparison to my DCF results. My DCF analysis employed a spot dividend yield, a 52-week dividend yield, and earnings growth forecasts.

<u>DISCOUNTED CASH FLOW</u>

Q. PLEASE EXPLAIN YOUR DCF ANALYSIS.

A. My analysis employs the standard discrete DCF model as portrayed in the following formula:

$$K = D_1/P_0 + g$$

Where:

K = Cost of equity

D_1 = Dividend expected during the year

P_0 = Current price of the stock

g = Expected growth rate of dividends

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

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

A. A representative dividend yield must be calculated over a time frame that avoids the problems of both short-term anomalies and stale data series. For the purpose of my DCF analysis, the dividend yield calculation places equal emphasis on the most recent spot and the 52-week average dividend yields. The following table summarizes my dividend yield computations for the proxy group (I&E Exhibit No. 2, Schedule 4, p. 1):

Six Water Company Proxy Group	Dividend Yield
Spot Dividend Yield	2.26%
52-week Average Dividend Yield	2.29%
Average	2.28%

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

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

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

A. The following table presents the expected growth rates for the six water companies proxy group (I&E Exhibit No. 2, Schedule 4, p. 2):

Utility Company	Average Growth Rate
American Water Works	8.00%
American States Water Co.	5.17%
California Water Service Group	9.65%
Middlesex Water Co.	5.35%
Aqua America Inc.	6.00%
York Water Company	6.95%
Average	**6.85%**

Q. DO YOU HAVE ANY ADDITIONAL COMMENTS ON THE RESULTS OF THE FIVE-YEAR PROJECTED GROWTH RATES?

A. Yes. While these five-year projected growth rates can be used in analyses, one must be aware that analysts' estimates may be biased. This bias has been observed in literature.

Q. PLEASE EXPLAIN.

A. An article authored by Professors Ciciretti, Dwyer, and Hasan in 2009 observed strong evidence of earnings forecasts being higher than actual earnings.[1] In the spring of 2010, *McKinsey on Finance* presented an article reporting that after a decade of stricter regulation, analysts' forecasts are still overly optimistic. The article demonstrates that at twelve months out, earnings estimates exceed actual earnings while a one-month forecast is closer to the actual result.[2] Thus, my return on equity recommendation is more than adequate as it is based upon growth rates that are already upwardly biased.

Q. WHAT IS THE RESULT OF YOUR DISCOUNTED CASH FLOW ANALYSIS BASED ON YOUR RECOMMENDED DIVIDEND YIELDS AND GROWTH RATES?

A. The result of my DCF analysis is 9.13% and is calculated as follows (I&E Exhibit No. 2, Schedule 4, p. 3):

K	=	D_1/P_0	+	g
9.13%	=	2.28%	+	6.85%

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

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

CAPITAL ASSET PRICING MODEL

Q. PLEASE EXPLAIN YOUR CAPM ANALYSIS.

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

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

Where:

K	=	Cost of equity
R_f	=	Risk-free rate of return
R_m	=	Expected rate of return on the overall stock
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 volatility or 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 have a beta of 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. WHAT BETA DID YOU CHOOSE FOR YOUR CAPM ANALYSIS?

A. In estimating an equity cost rate for my proxy group of six water utilities, I used the average of the betas for the companies as provided in the Value Line Investment Survey. The average beta for the proxy group is 0.74, which indicates that water utilities are less volatile than the overall stock market (I&E Exhibit No. 2, Schedule 5).

Q. WHAT TIME PERIOD HAVE YOU CHOSEN FOR YOUR CAPM ANALYSIS?

A. I calculated both a historical and a forecasted CAPM. My historical CAPM uses a risk-free rate and a market risk premium calculated over the 65 years that information on the 10-year Treasury Note is available.

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

A. For my historical CAPM analysis, I have chosen to use the risk-free rate of return (R_f) from the projected yield on 10-year Treasury Notes. While the yield on the short-term T-Bill is a more theoretically correct parameter to represent a risk-free yield, this yield can be extremely volatile. The volatility of short-term T-Bills is directly influenced by Federal Reserve policy. At the other extreme, the 30-year Treasury Bond yield exhibits more stability but is not risk-free. Long-term Treasury Bonds have substantial maturity risk associated with market risk and the risk of unexpected inflation. Long-term treasuries normally offer higher yields to compensate investors for these risks. For these reasons, I chose to use the yield on the 10-year Treasury Note because it balances the shortcomings of the other alternative. The historical geometric average for the yield on the 10-year Treasury Note is 5.21% (I&E Exhibit No. 2, Schedule 6).

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

A. I used a historical return for the S&P Composite Index as a benchmark for the expected return on the overall stock market. The geometric average for the historical return of the S&P Composite index is 10.80% (I&E Exhibit No. 2, Schedule 6).

Q. WHY HAVE YOU USED THE GEOMETRIC MEAN TO CALCULATE THE HISTORICAL RETURN ON THE MARKET AND THE HISTORICAL RISK-FREE RATE?

A. The geometric mean is appropriate in the calculation of the historical CAPM as it normalizes the returns or yields, and thus measures the change over of more than one period. The arithmetic average is more susceptible to being influenced by outliers and, therefore, is not as good of a representation of the central tendency of a set of numbers. I have chosen to use the geometric mean to calculate a historical return and risk-free rate because I am calculating a historical CAPM. For the historical performance of the market to be a valid representation of the future, a geometric mean should be calculated to minimize the effect of any years that deviated from normal years. The arithmetic mean is influenced by any outliers in the data set and, therefore, would not be a better representation of the volatility of returns than it is of historical performance.

One of the difficulties of calculating the CAPM is that the risk premium is measured by the difference between the return on the market and the risk-free rate, and since the return on the market and the risk-free rate do not always change in the same direction or by the same percent, the risk premium itself is not constant over time. When measuring a historical risk premium, these volatilities and, therefore, the potential inaccuracies of the CAPM are accentuated by the use of the arithmetic mean. The geometric mean more accurately represents the typical value and, therefore, is a better representation of the historical market risk premium, because it is not as influenced by fluctuation in the market as the arithmetic average.

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

A. The yield on the 10-year Treasury Note is expected to range between 3.10% and 3.50% from the third quarter of 2018 through the third quarter of 2019 and is forecasted to be 3.60% from 2019 to 2023. For my forecasted CAPM analysis, I chose 3.35%, which is the average of all the yields I observed (I&E Exhibit No. 2, Schedule 7, p. 2).

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

A. To arrive at a representative expected return on the overall stock market, I observed Value Line's 1700 stocks and the S&P 500. As shown on I&E Exhibit No. 2, Schedule 7, p. 3, Value Line expects its universe of 1700 stocks to have an average yearly return of 11.83% over the next three to five years, based on a forecasted dividend yield of 2.10% and three to five years' index appreciation of 45%. The S&P 500 index is expected to have an average yearly return of 14.10% over the next five years, based upon Barron's forecasted dividend yield of 1.98% and Yahoo's expected increase in the S&P 500 index of 12.00% (I&E Exhibit No. 2, Schedule 7, p. 3).

Q. WHAT ARE THE EXPECTED RETURNS ON THE OVERALL STOCK MARKET BASED ON YOUR FORECASTED AND HISTORICAL ANALYSES?

A. The expected returns on the overall market are 10.80% (I&E Exhibit No. 2, Schedule 6) for my historical analysis and 12.97% (I&E Exhibit No. 2, Schedule 7, p. 3) for my forecasted analysis.

Q. WHAT ARE THE COST OF EQUITY RESULTS FROM YOUR FORECASTED AND HISTORICAL CAPM ANALYSES?

A. The results of these two analyses are as follows (I&E Exhibit No. 2, Schedule 6 and Schedule 7, p. 1):

	CAPM Cost of Equity
Historical	9.36%
Forecasted	10.48%

CRITIQUE OF THE COMPANY'S COST OF EQUITY CLAIM

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

A. No. Mr. D'Ascendis' claimed cost of equity is overstated for several reasons. First, by using the results of his DCF, CAPM, RP, PRPM, and ECAPM methods in presenting his final recommendation, Mr. D'Ascendis gives undue weight to his CAPM, RP, PRPM, and ECAPM, which is neither valid nor representative of previous Commission methodology. As previously discussed, Mr. D'Ascendis' use of an unregulated proxy group compounds this issue.

In addition, Mr. D'Ascendis uses an improper risk-free rate and incorrectly adds 20 basis points (0.20%) to his recommended cost of equity range to account for the difference between the size of Suez and that of the companies in his proxy group.

WEIGHTS GIVEN TO METHODS

Q. WHAT IS THE BASIS OF MR. D'ASCENDIS' USE OF MULTIPLE MODELS?

A. Mr. D'Ascendis claims that the use of multiple models "adds reliability and accuracy when arriving at a recommended common equity cost rate" (Suez Statement No. 5, p. 5, lines 16-18).

Q. DO YOU AGREE WITH THE COMPANY'S RELIANCE ON THE CAPM AND RP?

A. No. While I am not opposed to using the CAPM results as a comparison to the results of the DCF calculation, it is inappropriate to give the CAPM and RP models comparable weight as I have discussed previously. The CAPM measures the cost of equity indirectly and can be manipulated by the time period, risk-free rate, and measure of the market that is chosen. Since the RP model is a simplified version of the CAPM, it suffers these same flaws and is not company-specific. As discussed below, the results of the lesser-used ECAPM and PRPM models should similarly be rejected. I have not used the ECAPM because it only weights the results of the CAPM in order to flatten the Security Market Line, but it does not correct the previously discussed problems with the CAPM. I have not used

Mr. D'Ascendis' PRPM, because it is not a widely accepted method and investors must have a statistical software package to use the PRPM.

In addition, a recent Commission Order relied primarily on the DCF and rejected giving equal weight to the other methodologies:

> [T]he City's cost of equity in this proceeding should be based upon the use of the DCF methodology, with the other methodology results used as a check on the reasonableness of the DCF results. We note that we have primarily relied upon the DCF methodology in arriving at previous determinations of the proper cost of equity and utilized the results of methods other than the DCF, such as the CAPM and RP methods, as a check upon the reasonableness of the DCF derived equity return calculation, tempered by informed judgement. We are not persuaded by the arguments of the City that we should assign equal weight to the multiple methodologies.[3]

PREDICTIVE RISK PREMIUM MODEL

Q. WHAT IS THE PREDICTIVE RISK PREMIUM MODEL?

A. The PRPM is a method published in August 2011 by Pauline M. Ahern, Frank J. Hanley, and Richard A. Michelfelder in the article *New Approach to Estimating the Cost of Common Equity Capital for Public Utilities.*[4] Mr. D'Ascendis' PRPM requires Eviews© statistical software to compute (Suez Statement No. 5, p. 17, lines 10-11).

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[3] *Pennsylvania Public Utility Commission v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, pp. 96-97, Order entered March 28, 2017.

[4] 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.

Q. DO YOU AGREE WITH MR. D'ASCENDIS' USE OF THE PRPM?

A. No. The PRPM is not a commonly used method and cannot be evaluated or recreated without the software. I am unaware of any state that has accepted the use of the PRPM. The PRPM does not solve the problem of the RP method because it is still an indirect measure of the cost of equity, and the PRPM complicates the RP method with the introduction of a measurement that requires the use of specialized software.

EMPIRICAL CAPITAL ASSET PRICING MODEL

Q. WHAT IS THE BASIS OF MR. D'ASCENDIS' CLAIM FOR USE OF THE ECAPM?

A. Mr. D'Ascendis claims that the Security Market Line (SML) defined by the CAPM is not as steeply sloped as the predicted SML. Mr. D'Ascendis uses a formula to account for the systematic risk that is not accounted for with beta in the CAPM formula. This methodology, called ECAPM, uses a factor, alpha, to account for the additional systematic risk not captured by beta.

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

A. No. Although some studies indicate that the CAPM does not properly define the SML, the degree to which the CAPM would require adjustment varies widely and is dependent on the inputs used to determine the difference between the SML and actual historical figures. I was unable to find the value of alpha Mr. D'Ascendis has chosen to use to adjust the SML in either Suez Statement No. 5 or his Exhibit. The ECAPM attempts to add a factor (alpha) to "correct" the perceived underestimation of the cost of capital for betas lower than one, but as identified in *New Regulatory Finance* by Roger A. Morin, estimations for alpha range from -9.61% to 13.56%.[5] This large range demonstrates the difficulty of accurately and precisely measuring the difference between what the CAPM is estimating and the actual results. The use of the ECAPM in estimating the cost of capital does not increase the validity of the result but merely adds another difficult to measure factor to the CAPM. The CAPM attempts to measure a variable that changes; the difference between a risk-free rate and the market rate is not a constant factor. The ECAPM attempts to correct the CAPM's inability to accurately predict the cost of capital but does so through an additional factor that corrects none of the underlying problems of the model.

<u>RISK-FREE RATE</u>

Q. HOW HAS MR. D'ASCENDIS CALCULATED HIS RISK-FREE RATE USED IN HIS RP AND CAPM MODELS?

A. Mr. D'Ascendis calculated his risk-free rate similar to my calculation; however, he used the 30-year Treasury Bond yield whereas I used 10-year Treasury Note yield. Also, where I used a future data point accounting for 2019-2023 predictions, Mr. D'Ascendis used two future data points accounting for 2019-2023 and 2024-

[5] Morin, Roger A. (2006). *New Regulatory Finance.* Vienna, VA: Public Utilities Reports, Inc.

2028 (Suez Statement No. 5, p. 28, ln. 6-9 and Suez Exhibit No. 5, Schedule DWD-5, p. 2).

Q. WHY IS MR. D'ASCENDIS' METHOD INCORRECT?

A. As stated earlier, long-term Treasury Bonds have substantial maturity risk associated with the market risk and the risk of unexpected inflation and normally offer higher yields to compensate investors for these risks. Using the 10-year Treasury Note is more appropriate to balance the short-term volatility risk and the long-term inflation risk.

Further, the use of a 30-year Treasury Bond yield projection for an additional period of 2024-2028 is an unreliable measure and should not be included in determining the risk-free rate. The Company's FPFTY year ends December 31, 2019, and therefore in my opinion using an estimated risk-free rate that is five to nine years beyond the test year is unnecessary.

BUSINESS RISK ADJUSTMENT

Q. WHAT IS MR. D'ASCENDIS' BUSINESS RISK ADJUSTMENT?

A. Mr. D'Ascendis' 20 basis points (0.20%) adjustment is based on the claim that the Company has a greater relative business risk than the average company in his proxy group due to its smaller size. Mr. D'Ascendis states that empirical evidence supporting the size effect is often based on studies of industries beyond regulated utilities but notes that "utility analysts" have noted risk associated with small market capitalizations (Suez Statement No. 5, p. 35, lines 2-5). He quotes an article by Michael Annin published in *Public Utilities Fortnightly*, October 15, 1995 that implies the need for a higher investor return due to additional business obstacles (Suez Statement No. 5, p. 35, ln. 8).

Q. DO YOU AGREE WITH MR. D'ASCENDIS' CLAIM THAT THE COMPANY'S SIZE WARRANTS A BUSINESS RISK ADJUSTMENT?

A. No. Mr. D'Ascendis' risk adjustment is based solely on the size of the Company. Although, there is technical literature supporting adjustments relating to the size of a company, this literature is not specific to the utility industry. Even the *Public Utilities Fortnightly* article referenced by Mr. D'Ascendis depends upon the New York Stock Exchange and makes no attempt to differentiate between the public utility industry and the universe of publicly traded stocks. Additionally, Mr. D'Ascendis has not shown that the Company's size has in any way hampered it from accessing capital markets in the past.

Q. IS THERE ANY ACADEMIC EVIDENCE THAT SUPPORTS THE LACK OF VALIDITY OF A SIZE OR RISK ADJUSTMENT FOR UTILITY COMPANIES?

A. Yes. An article by Dr. Annie Wong, "Utility Stocks and the Size Effect: An Empirical Analysis," from the Journal of Midwest Finance Association in 1993, pp. 95-101, concludes that:

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

While this article is older, it remains the most credible study on this topic and, therefore, the proposed adjustment based on size should be rejected.

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE PROPOSED BUSINESS RISK ADJUSTMENT?

A. Given the lack of evidence related to the utility industry's need to adjust the cost of equity to account for the size of a company, Mr. D'Ascendis business risk adjustment should be rejected.

OVERALL RATE OF RETURN

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

A. The Company's proposed overall rate of return is 7.95% (Suez Exhibit CEH-1, Schedule 1.2, p. 3).

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

A. The calculation of I&E's recommended overall rate of return of 7.08% for Suez is shown in the table below:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	9.13%	4.95%
Total	100.00%		7.08%

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

D. C. Patel
Professional and Educational Background

EXPERIENCE:

- **Pennsylvania Public Utility Commission,** Harrisburg, Pennsylvania
  June 2015 to present

  Fixed Utility Financial Analyst, Bureau of Investigation and Enforcement

- **Pennsylvania Insurance Department,** Harrisburg, Pennsylvania
  March 2013 - June 2015

  Insurance Company Financial Analyst, Bureau of Company Licensing & Financial Analysis

- **Pennsylvania Department of Revenue,** Harrisburg, Pennsylvania
  November 2010 - March 2013

  Accounting Assistant, Bureau of Corporation Taxes (Accounting)

- **Hersha Hospitality Management,** Harrisburg, Pennsylvania
  June 2007 - November 2010

  Staff Accountant (Taxes), Accounting Department

- **Corporate Experience-India**
  February 1987 – April 2007

  Worked as Company Secretary for three different companies during this period that were publicly held companies and whose stocks were listed on the Stock Exchanges.

EDUCATION/CERTIFICATION:

- Gujarat State University, Ahmedabad, India:

  June 1980 - April 1983
  Bachelor of Commerce (Major concentration: Accounting with 38 credits)

D. C. Patel
Professional and Educational Background

EDUCATION/CERTIFICATION (continued):

June 1983 - December 1988
Bachelor of Law

- The Institute of Company Secretaries of India, New Delhi, India:

June 1983 - December 1985
Post Graduate Professional Degree: Company Secretary

RATE CASE TRAINING:

- Attended 37th Western NARUC Utility Rate School in May 2016

WORKED ON THE FOLLOWING CASES (Testimony not required):

- R-2018-3001568 - PECO Energy Co. - Gas Operations (1307(f))
- R-2018-3000253 - Columbia Gas of Pennsylvania, Inc. (1307(f))
- A-2017-2629534 - PPL Electric Utilities (Restructuring Plan)
- R-2017-2631441 - Reynolds Water Co.
- R-2017-2602611 - PECO Energy Co. - Gas Operations (1307(f))
- R-2016-2567893 - Andreassi Gas Co.
- R-2016-2525128 - The Columbia Water Co. - Marietta Division
- R-2015-2479962 - Corner Water Supply and Service Corporation
- R-2015-2479955 - Allied Utility Services, Inc.
- R-2015-2493905 - Sands, Inc.

SUBMITTED TESTIMONY IN THE FOLLOWING CASES:

- R-2018-2647577 - Columbia Gas of Pennsylvania, Inc. (proceeding ongoing)
- R-2017-2595853 - Pennsylvania American Water Co.
- P-2016-2526627 - PPL Electric Utilities Corp. (DSP IV)
- R-2016-2529660 - Columbia Gas of Pennsylvania, Inc.
- R-2016-2554150 - City of DuBois - Bureau of Water
- R-2016-2580030 - UGI Penn Natural Gas, Inc.

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Exhibit to Accompany

the

Direct Testimony

of

D. C. Patel

Bureau of Investigation and Enforcement

Concerning:

Rate of Return

I&E Exhibit No. 2
Schedule 1

Proxy Group Capital Structure - Water Companies

	2017		2016		2015		2014		2013		Average
American Water Works											
Long-term Debt	$ 6,498.000	54.68%	$ 5,759.000	52.46%	$ 5,874.000	53.78%	$ 5,448.245	52.57%	$ 5,230.058	52.52%	53.20%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	5,385.000	45.32%	5,218.000	47.54%	5,049.000	46.22%	4,915.591	47.43%	4,727.804	47.48%	46.80%
	11,883.000	100.00%	10,977.000	100.00%	10,923.000	100.00%	10,363.836	100.00%	9,957.862	100.00%	100.00%
American States Water Co											
Long-term Debt	321.039	37.73%	320.981	39.37%	325.541	41.13%	325.798	39.13%	326.079	39.84%	39.44%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	529.945	62.27%	494.297	60.63%	465.945	58.87%	506.801	60.87%	492.404	60.16%	60.56%
	850.984	100.00%	815.278	100.00%	791.486	100.00%	832.599	100.00%	818.483	100.00%	100.00%
California Water Service Group											
Long-term Debt	515.793	42.65%	531.745	44.64%	512.287	44.38%	419.233	40.09%	426.142	41.58%	42.67%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	693.462	57.35%	659.471	55.36%	642.155	55.62%	626.626	59.91%	598.756	58.42%	57.33%
	1,209.255	100.00%	1,191.216	100.00%	1,154.442	100.00%	1,045.859	100.00%	1,024.898	100.00%	100.00%
Middlesex Water Co											
Long-term Debt	139.045	37.51%	134.538	37.85%	136.247	39.45%	136.039	40.52%	129.798	40.38%	39.14%
Preferred Stock	2.433	0.66%	2.436	0.69%	2.436	0.71%	2.436	0.73%	2.886	0.90%	0.73%
Common Equity	229.175	61.83%	218.437	61.46%	206.694	59.85%	197.291	58.76%	188.745	58.72%	60.12%
	370.653	100.00%	355.411	100.00%	345.377	100.00%	335.766	100.00%	321.429	100.00%	100.00%
Aqua America Inc											
Long-term Debt	2,007.753	50.63%	1,737.605	48.43%	1,743.612	50.25%	1,560.695	48.53%	1,468.791	48.90%	49.35%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	1,957.621	49.37%	1,850.068	51.57%	1,725.930	49.75%	1,655.343	51.47%	1,534.835	51.10%	50.65%
	3,965.374	100.00%	3,587.673	100.00%	3,469.542	100.00%	3,216.038	100.00%	3,003.626	100.00%	100.00%
York Water Company											
Long-term Debt	90.098	43.01%	84.609	42.59%	87.261	44.45%	84.842	44.79%	84.885	45.06%	43.98%
Preferred Stock	-	0.00%	-	0.00%	-	0.00%	-	0.00%	-	0.00%	0.00%
Common Equity	119.405	56.99%	114.061	57.41%	109.070	55.55%	104.563	55.21%	103.511	54.94%	56.02%
	209.503	100.00%	198.670	100.00%	196.331	100.00%	189.405	100.00%	188.396	100.00%	100.00%

Five-Year Average Capital Structure	
Long-term Debt	44.63%
Short-term Debt	0.12%
Common Equity	55.25%
	100.00%

Source: Compustate (Dollars in millions)

I&E Exhibit No. 2
Schedule 2

Suez Water Pennsylvania, Inc.

Unregulated Companies Proxy Group

Company Name	Ticker	Value Line Industry
ABM Industries, Inc.	ABM	Industrial Services
AutoZone, Inc.	AZO	Retail Automotive
Cheesecake Factory	CAKE	Restaurant
CBOE Holdings	CBOE	Brokers and Exchanges
Chemed Corp.	CHE	Diversified
C. H. Robinson	CHRW	Industrial Services
Cigna Corp.	CI	Medical Services
Darden Restaurants	DRI	Restaurant
DaVita, Inc.	DVA	Medical Services
Forrester Research	FORR	Information Services
Hormel Foods	HRL	Food Processing
IQVIA Holdings	IQV	Medical Services
Mercury General	MCY	Insurance
Vail Resorts	MTN	Hotel/Gaming
Pinnacle Foods	PF	Food Processing
Spectrum Brands	SPB	Household Products
West Pharma. Services	WST	Medical Supplies

Source: Value Line

I&E Exhibit No. 2
Schedule 3

Suez Water Pennsylvania, Inc.

Proxy Group Debt Cost

	2017		
	Interest Charges	**Long-term Debt**	**Debt Cost**
American Water Works	$350.00	$6,498.00	5.39%
American States Water Co	$22.58	$321.04	7.03%
California Water Service Group	$36.29	$515.79	7.04%
Middlesex Water Co	$5.51	$139.05	3.96%
Aqua America Inc	$88.54	$2,007.75	4.41%
York Water Company	$5.35	$90.10	5.94%
	Range:	**Low**	**3.96%**
		High	**7.04%**
		Average	**5.63%**
Source: Compustat			

Suez Water Pennsylvania, Inc.

Dividend Yields of Six Water Company Proxy Group

Company	American Water Works	American States Water Co.	California Water Service Group	Middlesex Water Co.	Aqua America Inc.	York Water Company
Symbol	*AWK*	*AWR*	*CWT*	*MSEX*	*WTR*	*YORW*
Dividend	1.95	1.15	0.78	0.96	0.91	0.75
52-week low	74.63	43.83	33.30	32.23	31.18	27.45
52-wek high	92.37	60.00	46.15	46.74	39.55	39.86
Spot Price	83.74	55.65	39.75	42.03	34.62	32.60
Spot Dividend Yield	2.33%	2.07%	1.96%	2.28%	2.63%	2.30%
52-week Dividend Yield	2.34%	2.22%	1.96%	2.43%	2.57%	2.23%
Average	**2.33%**	**2.14%**	**1.96%**	**2.36%**	**2.60%**	**2.26%**

		Average
Spot Div Yield		2.26%
52-wk Div Yield		2.29%
Average		2.28%

Source: Barrons - May 11, 2018 and Valueline - May 11, 2018

Suez Water Pennsylvania, Inc.

Five-Year Growth Forecast for Proxy Group (Actual)

Company	Symbol	Yahoo	Zacks	Morningstar	Value Line	Average
American Water Works	AWK	8.20%	7.70%	7.60%	8.50%	8.00%
American States Water Co	AWR	4.00%	5.00%	NA	6.50%	5.17%
California Water Service Group	CWT	9.80%	NA	NA	9.50%	9.65%
Middlesex Water Co	MSEX	2.70%	NA	NA	8.00%	5.35%
Aqua America Inc	WTR	5.00%	NA	NA	7.00%	6.00%
York Water Company	YORW	4.90%	NA	NA	9.00%	6.95%
Average						**6.85%**

Source: Internet websites - May 11, 2018

Suez Water Pennsylvania, Inc.

Expected Market Cost Rate of Equity

(Using Data of the Proxy Group of Six Water Companies)

	Time Period	Adjusted Dividend Yield	Growth Rate	Expected Return on Equity
		(1)	(2)	(3 = 1 + 2)
(1)	52-Week Average Ending: May 11, 2018	2.29%	6.85%	9.14%
(2)	Spot Price Ending: May 11, 2018	2.26%	6.85%	9.11%
(3)	**Average:**	**2.28%**	**6.85%**	**9.13%**

Sources: Value Line - May 11, 2018

Barrons - May 11, 2018

I&E Exhibit No. 2
Schedule 5

Suez Water Pennsylvania, Inc.

Beta of Six Water Companies Proxy Group

Company	Beta
American Water Works	0.65
American States Water Co	0.75
California Water Service Group	0.75
Middlesex Water Co	0.80
Aqua America Inc	0.70
York Water Company	0.80
Average beta for CAPM	**0.74**

Source: Value Line - May 11, 2018

I&E Exhibit No. 2
Schedule 6

Suez Water Pennsylvania, Inc.

CAPM with Historic Return

Re	Required return on individual equity security
Rf	Risk-free rate
Rm	Required return on the market as a whole
Be	Beta on individual equity security
Re =	Rf+Be(Rm-Rf)
Rf =	5.2103
Rm =	10.8012
Be =	0.74
Re =	**9.36**

Source: Value Line – May 11, 2018

Suez Water Pennsylvania, Inc.

CAPM with Forecasted Return

Re	Required return on individual equity security
Rf	Risk-free rate
Rm	Required return on the market as a whole
Be	Beta on individual equity security
Re =	Rf+Be(Rm-Rf)
Rf =	3.3500
Rm =	12.9665
Be =	0.74
Re =	**10.48**

Sources: Value Line May 11, 2018
Blue Chip May 1, 2018 & December 1, 2017

Suez Water Pennsylvania, Inc.

Risk-Free Rate

10-year Treasury Note	Yield
3Q 2018	3.10%
4Q 2018	3.20%
1Q 2019	3.30%
2Q 2019	3.40%
3Q 2019	3.50%
2019-2023	3.60%
Average	**3.35%**

Source: Blue Chip – May 1, 2018 and December 1, 2017

Suez Water Pennsylvania, Inc.

Required Rate of Return on Market as a Whole Forecasted

		Dividend Yield	+	Growth Rate	=	Expected Market Return
Value Line Estimate		2.10%		9.73%	(a)	11.83%
S&P 500		2.10%	(b)	12.00%		14.10%
Average Expected Market Return					=	**12.97%**

(a) ((1+45%)^.25) -1) Value Line forecast for the 3 to 5 years' index appreciation is 45%.
(b) S&P 500 multiplied by half the growth rate.

Sources:

S&P 500 Growth Rate Yahoo	5/11/2018	12.00%
S&P 500 Dividend Yield Barron's	5/11/2018	1.98%
Value Line Dividend Yield	5/11/2018	2.10%
Value Line Appreciation Potential	5/11/2018	45.00%

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA, INC.**	: : : : : :	**Docket No. R-2018-3000834**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Ethan H. Cline, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 3 and 3-SR, and, I&E Exhibit No. 3 and 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.

Ethan H. Cline
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: September 10, 2018

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Test Year
Average Rate Base
FTY and FPFTY Reporting
Present Rate Revenue
Proposed Rate Revenue
Customer Cost Analysis
Customer Charges
Scale Back of Rates

TABLE OF CONTENTS

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

A. My name is Ethan H. Cline. My business address is P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

A. My education and professional background are set forth in Appendix A, which is attached.

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

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

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. My direct testimony relates to Suez Water Pennsylvania, Inc.'s ("SWPA" or "Company") requested $6.2 million overall revenue increase.

Q. DOES YOUR DIRECT TESTIMONY INCLUDE AN EXHIBIT?

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

MAHONING TOWNSHIP WATER SYSTEM ACQUISITION

Q. PLEASE DESCRIBE THE MAHONING TOWNSHIP WATER SYSTEM ACQUISITION AND THE RELATED BASE RATE CLAIMS.

A. The Mahoning Township Water System ("MTWS") is a water and wastewater system that the Company is attempting to acquire, for an agreed upon purchase price of $9.5 million (SWPA St. No. 1, p. 25). The Company has stated that it plans to, at some unspecified time in the second quarter of 2018 (SWPA St. No. 1, p. 26), file a Section 1329 application with the Commission to officially acquire the MTWS. As of the date of this Testimony, the Company has not yet filed this application. The Company is proposing to include 60% of the $9.5 million[1] purchase price in rate base, though the Company may adjust the claim based on the appraisals (SWPA St. No. 1, p. 25), O&M expenses, and an increase of 1,200

[1] Per the Company's response to OCA-IV-23, attached as I&E Exhibit No. 3, Schedule 5, $5.8 million is the portion of purchase price the Company is claiming in rate base.

customers in the present filing as a result of the potential acquisition of the MTWS. I will address the proposed additions to rate base and the increase in customers below. I&E witness Grab will address the related O&M expenses in I&E Statement No. 1.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL TO INCLUDE THE COSTS ASSOCIATED WITH THE ACQUISITION OF THE MTWS IN THE PRESENT PROCEEDING?

A. No. I do not agree with the Company's proposal to include the costs associated with the MTWS in the present proceeding for several reasons. First, the Company's proposal to include MTWS in this rate proceeding, before it has even filed the acquisition case or obtained Commission approval to acquire MTWS, goes directly against Section 1329 of the Public Utility Code ("Code"). Second, I do not agree with the Company's proposal to raise the rates of the MTWS customers at the conclusion of this base rate case. Third, I do not agree with the Company's projected timing of the acquisition aligning with the end of the fully projected future test year ("FPFTY").

Q. WHY DO YOU BELIEVE THAT THE COMPANY'S MTWS PROPOSAL DOES NOT COMPORT WITH SECTION 1329 OF THE PUBLIC UTILITY CODE?

A. To be clear, the Company has not yet requested approval to acquire MTWS or filed its Section 1329 case, yet it is requesting to recover those costs in this rate case. This violates Section 1329, 66 Pa. C. S. § 1329 (c)(1)(i), as it clearly instructs that the ratemaking rate base should be incorporated into the "next" base rate case after the approval of the 1329 application:

> **(c) Ratemaking rate base.**--The following apply:
> (1) The ratemaking rate base of the selling utility shall be incorporated into the rate base of:
> (i) the acquiring public utility during the acquiring public utility's next base rate case; or
> ...

Here, the 1329 filing has not been made and the acquisition has not been approved, yet the Company is seeking recovery of the $5.8 million MTWS plant.

Additionally, the definition of "ratemaking rate base" in Section 1329(g) indicates that the inclusion of the plant into the acquiring utility's rate base is intended to occur post acquisition in the next base rate case. Furthermore, 66 Pa. C. S. § 1329 (f) also sets forth a mechanism for the Company to follow for plant additions that will occur after the acquisition that are not included in a Distribution System Improvement Charge ("DSIC") until the next base rate case.

> **(f) Postacquisition projects.**--The following apply:
> (1) An acquiring public utility's postacquisition improvements that are not included in a distribution improvement charge shall accrue allowance for funds used during construction after the date the cost was incurred until the asset has been in service for a period of four years or until the asset is included in the acquiring public utility's next base rate case, whichever is earlier.
> (2) Depreciation on an acquiring public utility's postacquisition improvements that have not been included in the calculation of a distribution system improvement charge shall be deferred for book and ratemaking purposes.

This further indicates that Section 1329 does not intend for a Company to include the potential acquired plant in rate base in a base rate case before the Commission has approved the acquisition.

Q. YOUR SECOND ISSUE IS THE COMPANY'S PROPOSAL TO INCREASE MTWS RATES AT THE CONCLUSION OF THIS RATE CASE. PLEASE EXPLAIN.

A. The Company's proposal to immediately alter the rates of the MTWS customers[2] will produce a 61.76% increase in revenue for a 5/8-inch meter residential customer using 9,000 gallons of water as shown on the Company's response to OCA-I-8 (I&E Ex. No. 3, Sch. 20, p. 2) as compared to a 13.66% increase for a current SWPA 5/8-inch meter residential customer using 9,000 gallons of water (SWPA Ex. No. CEH-1, Sch. 10-1). Including this increase in rates as part of the current rate proceeding does not follow the terms set in Sections 1329(d)(1)(v) and (d)(4), which states that the rates that are incorporated into the acquiring company's tariff will be equal to the rates which the customers are currently paying until the next base rate case. Once again, this implies that the "next base

[2] The proposed changes to the MTWS customers include removing a water allowance for each meter size, decreasing the existing minimum customer charges, and increase the consumption charge for the residential customers and moving from a single block consumption charge to a declining block consumption charge for commercial customers (SWPA Ex. No. PRH-1, Sch. I, p. 2).

rate case" is the base rate case that occurs after the acquisition and not concurrently.

> **(d) Acquisitions by public utility.**--The following apply:
> (1) If the acquiring public utility and selling utility agree to use the process outlined in subsection (a), the acquiring public utility shall include the following as an attachment to its application for commission approval of the acquisition filed pursuant to section 1102 (relating to enumeration of acts requiring certificate):
>
> ...
>
> (v) A tariff containing a rate equal to the existing rates of the selling utility at the time of the acquisition and a rate stabilization plan, if applicable to the acquisition.
>
> ...
>
> (4) The tariff submitted pursuant to subsection (d)(1)(v) shall remain in effect until such time as new rates are approved for the acquiring public utility as the result of a base rate case proceeding before the commission. The acquiring public utility may collect a distribution system improvement charge during this time, as approved by the commission under this chapter.

Additionally, it is my understanding that the MTWS customers have not received any notice of a rate increase as part of the current proceeding, as they are not currently SWPA customers and the Company has not yet requested Commission approval to acquire those customers. Therefore, under the Company's proposal, MTWS customers will not only be paying their water bills to a new entity but will also have their rates increased. The Company should not be permitted to increase MTWS customer rates, particularly to the degree that is being proposed, given that it does not currently serve those customers, MTWS customers have had no notice that its rates may increase and MTWS customers have not had an opportunity to participate in this base rate proceeding given that they are not SWPA customers.

The Company argues that including the Mahoning Township acquisition in this proceeding is in the public interest because it moves the Mahoning Township customers closer to their true cost of service more quickly (SWPA Statement No. 1, p. 27). It is premature to design rates for MTWS or state that moving MTWS customers to SWPA is in the public interest given that the application to acquire the system has yet to be filed. In short, the Company is designing rates for customers it has not yet acquired and the Commission has not yet determined that such an acquisition is in the public interest.

Q. YOUR THIRD ISSUE IS THAT THE MTWS ACQUISITION MAY OCCUR BEYOND THE FPFTY. PLEASE EXPLAIN.

A. The Company implies that inclusion of the MTWS purchase price in this proceeding is appropriate because the acquisition will close in the FPFTY (SWPA Statement No. 1, p. 26). To support this contention, the Company anticipates filing the Mahoning Township acquisition sometime in the second quarter of 2018 and, based on the timeline set forth on page 26 of SWPA Statement No. 1, the six-month time period for the Commission to take final action would end sometime in January 2019. Accordingly, the Company indicates that it has approximately one year to close the transaction before the FPFTY ends on December 31, 2019.

However, the Company's timeline does not account for any potential appeal to the Pennsylvania Commonwealth Court. Such an appeal would potentially delay the acquisition of the MTWS beyond the end of the FPFTY. As an example, the Aqua Pennsylvania Wastewater, Inc. ("Aqua") acquisition of the New Garden Sewer System filed pursuant to Section 1329, at Docket No. A-2016-2580061, was accepted by the Commission on December 30, 2016, is currently on appeal to Commonwealth Court and has yet to close. As a result, the New Garden acquisition has been pending for approximately 19 months with no guarantee of when or how it will be resolved. Similarly, Aqua's acquisition of the Limerick Township wastewater system assets was filed pursuant to Section 1329, at Docket No. A-2017-2605434, was accepted by the Commission on May 31, 2017 and has not yet closed. If the Company's MTWS acquisition follows a similar timeline, closing would occur beyond the FPFTY. Therefore, the Company's assumption that the MTWS acquisition, which has not even been filed yet, will close within the FPFTY is speculative. The Company's new rates are effective January 1, 2018 and it is not just and reasonable to include the $5.8 million MTWS plant in those rates and begin to recover it from ratepayers given that the MTWS acquisition has not been filed, has not been approved and may not close within the FPFTY.

Q. WHAT DO YOU RECOMMEND REGARDING THE MTWS?

A. For the reasons above, I recommend that the inclusion of the MTWS in the current base rate proceeding be denied and that all associated costs, expenses, and revenues be removed. I discuss the effect on rate base and revenue of my recommended denial of the inclusion of the MTWS below and I&E witness Grab discusses the expenses associated with the MTWS in I&E Statement No. 1.

Q. ARE YOU MAKING ANY RECOMMENDATION IN THIS PROCEEDING ON WHETHER THE COMPANY SHOULD BE ALLOWED TO ACQUIRE THE MTWS?

A. No. Such a determination will be properly addressed when the Company eventually files its application.

<u>TEST YEAR</u>

Q. WHAT IS A TEST YEAR AND HOW IS IT USED BY A COMPANY IN A RATE PROCEEDING?

A. A test year is the twelve-month period over which a utility's costs and revenues are measured as the basis for setting prospective base rates. Previously in rate case proceedings, in order to meet its burden of proof, a utility could only use a historic test year ("HTY") or a future test year ("FTY"). An HTY is a twelve-month period selected by a company that represents a recent full year of actual data. An FTY begins the day after the HTY ends and is used in order to allow for the time it takes to adjudicate a rate proceeding by permitting a company to select a future time period upon which to base its financial information. This is necessary so that the rates set by the Commission reflect current and synchronized financial information. By using an FTY, a utility makes a projected annualized and normalized estimate of future revenues and expenses and a corresponding measure of value at the end of the period.

Q. HAVE THERE BEEN ANY STATUTORY AMENDMENTS THAT HAVE MODIFIED A UTILITY'S TEST YEAR OPTIONS?

A. Yes. Act 11, which was signed on February 14, 2012, permits utilities to use a fully projected future test year ("FPFTY") in order to meet their burden of proof in rate cases. The FPFTY is defined as the twelve-month period that begins with the first month that the new rates will be placed into effect, after the application of the full suspension period permitted under Section 1308(d). The FPFTY is a shift from the fundamental ratemaking principle that a public utility should only be permitted to include projects in rate base and earn a reasonable return on its investments after they become "used and useful" for the utility's public service. Prior to the passage of Act 11 by the Pennsylvania Legislature, utilities could use either an HTY or an FTY.

Q. WHAT TEST YEARS HAS THE COMPANY USED IN THIS PROCEEDING?

A. The Company used the twelve-month period ending December 31, 2017 as the HTY, the twelve-month period ending December 31, 2018 as the FTY, and the twelve-month period ending December 31, 2019 as the FPFTY.

Q. COULD YOU ILLUSTRATE HOW ACT 11 IMPACTS THE TEST YEARS SELECTED BY THE COMPANY?

A. Yes. Using the Company's HTY and FTY, without Act 11 and with the Company having filed its rate case on March 16, 2018, the Company's HTY ended December 31, 2017 and its rates would have been based on the FTY ending December 31, 2018. At the end of the suspension period set by the Commission, the Company's new rates would have been placed into effect on January 1, 2019. With the addition of the FPFTY, however, the Company has the ability to project plant additions, revenues, and expenses out one more year, using as the FPFTY the twelve-month period that begins with the first month that the new rates will be placed into effect, or January 1, 2019 through December 31, 2019.

RATE BASE

Q. WHAT IS RATE BASE?

A. Rate base is the depreciated original cost of a utility's plant-in-service plus other additions and deductions that the Commission determines to be necessary in order to keep the utility operating and providing safe and reliable service to its customers.

Q. HOW IS RATE BASE USED WITHIN THE RATEMAKING FORMULA?

A. Rate base is one part of the financial equation used by the Commission to determine the appropriate revenue that a utility is granted in a rate proceeding.

The revenue determination allows the utility to meet its expense obligations and gives it the opportunity to earn the rate of return established by the Commission in a rate proceeding. The equation used to determine the proper revenue requirement level is:

Revenue Requirement = (Rate Base x Rate of Return) + Operating Expenses + Depreciation Expenses + Taxes.

Q. HOW IS THE DEPRECIATED ORIGINAL COST OF PLANT-IN-SERVICE AT THE END OF THE TEST YEAR DETERMINED?

A. The depreciated original cost is equal to the original cost of the plant-in-service that is used and useful in the provision of utility service to the customers less the depreciation reserve as adjusted by other items such as salvage value and removal costs. Before the passage of Act 11, the end of the FTY was the focal point used to calculate the depreciated original cost. With the addition of the FPFTY in Act 11, the depreciated original cost of the plant in service is computed by taking a "snapshot" look at the depreciated original cost value of used and useful utility plant estimated to be in service at the end of the FPFTY. It is the "snapshot" look at the depreciated original cost value of used and useful utility plant estimated to be in service at the end of the FPFTY that is used to formulate my average rate base recommendation.

Q. PLEASE EXPLAIN THE AVERAGE RATE BASE CONCEPT.

A. Under the FPFTY, the traditional interpretation of the "used and useful" requirement for rate base inclusion of investments is unclear because when a company employs the use of a FPFTY in a base rate case, the new rates will go into effect before the end of the Company's FPFTY. The inclusion of rate base added in a FPFTY necessarily means that customers will be paying a return on and a return of a utility's plant investment that has not yet been placed in service. By using an average of the rate base that is projected to be in service by the end of the FPFTY, rather than the full year-end amount, the impact of the necessary customer overpayment at the beginning of the year is mitigated. This results in rates that are more just and reasonable because ratepayers are not paying for approximately a year of plant that is not yet in service.

Q. WHY IS IT APPROPRIATE TO ADOPT AN AVERAGE RATE BASE IN THIS CASE?

A. As discussed above, SWPA is requiring ratepayers, in essence, to pre-pay a return on its projected investment in future facilities that are not only not in place and providing service at the time the new rates take effect, but also that are not subject to any guarantee of being completed and placed into service. As a result, ratepayers will begin paying for expenses and plant when new rates become effective on January 29, 2019, but those projected expenses and plant may not be incurred or placed into service until December 31, 2019 or even later.

Q. WHY DO YOU RECOMMEND THE USE OF THE AVERAGE RATE BASE METHODOLOGY FOR ESTABLISHING RATES?

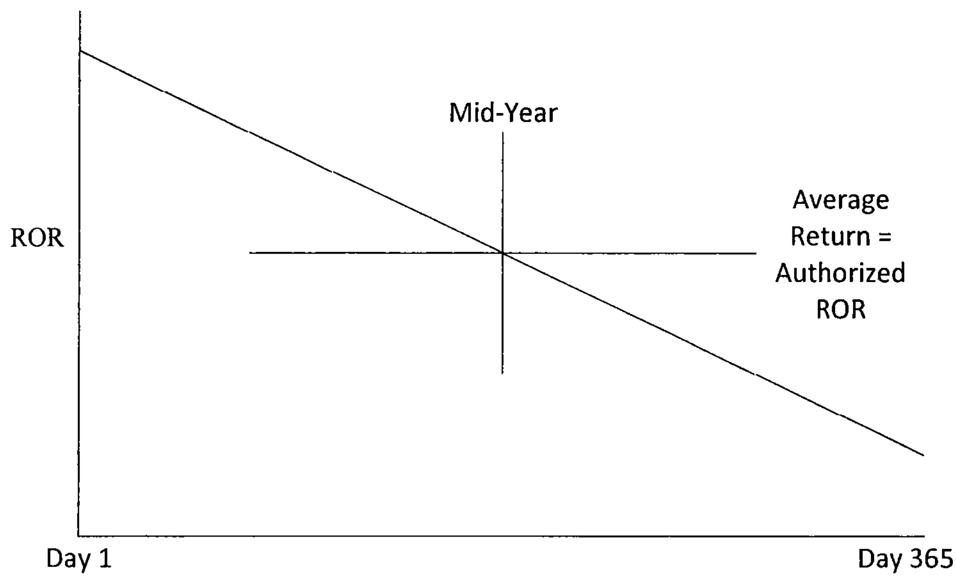
A. This case was filed on April 30, 2018. SWPA's new rates are expected to become effective on January 29, 2019, which is approximately eleven months before the end of the Company's FPFTY of December 31, 2019. However, several of the Company's capital projects included in the 2019 FPFTY year have an end date that is "various," or in the year 2023 as shown on page 3 of the attachment to the Company's response to I&E-RB-8-D (I&E Ex. No. 3, Sch. 2, p. 4). Thus, with several of the Company's projected plant additions with a projected end date well beyond the end of the FPFTY, allowing the Company to use the December 31, 2019 year-end plant-in-service as proposed in this proceeding, could result in customers paying, for approximately eleven months, rates that include costs for projects and plant that are not in service and used or useful to those customers. In other words, SWPA would potentially be collecting a return of and a return on plant that is not used or useful in the provision of utility service to its customers for nearly a year before that plant actually goes into service, or even longer, in some cases.

Q. HOW DOES THE YEAR-END PLANT INCLUSION IN FPFTY CALCULATIONS IMPACT CUSTOMER RATES AND COMPANY RETURNS?

A. Using the year-end approach to determine rates, when new rates go into effect on January 29, 2019, the Company will earn a return of and a return on plant investments that will not fully materialize before the final day of the FPFTY on December 31, 2019. Accordingly, customers would pay rates in February 2019 that are calculated to recover depreciation expense and a return on investment at the end of the FPFTY, which are in excess of the rates that are necessary to provide the revenue requirement that allows the Company the opportunity to earn its authorized rate of return ("ROR") on the plant and expenses that are used and useful when the new rates become effective. Requiring customers to pay a return of and on plant investments that will not occur for almost one year does not produce just and reasonable rates for ratepayers. Instead, ratepayers reach the projected "just and reasonable" rate point on the final day of the FPFTY, or more specifically, on the first day of the year after the FPFTY.

Q. HOW DOES THE USE OF AN AVERAGE RATE BASE RESULT IN RATES THAT ARE JUST AND REASONABLE?

A. An average rate base would yield an average annual return on rate base throughout the FPFTY equal to the authorized ROR. As illustrated below, the sloping line represents the ROR during the FPFTY. As time pass left to right, the ROR will decrease over time as the Company places FPFTY plant into service during the FPFTY:



Under the Company's proposed methodology, only the end-of-year point at Day 365 would coincide with the authorized ROR, which would shift the entire graph upwards with the entire ROR line shifted above the authorized rate of return for every point.

Q. DOES THE COMPANY MAKE OTHER FPFTY CLAIMS THAT FURTHER DEMONSTRATE HOW THE PROPOSED YEAR-END METHODOLOGY RESULTS IN UNJUST AND UNREASONABLE RATES?

A. Yes. As I mentioned previously, the return of investment, or depreciation expense, which is recovered on a dollar for dollar basis, will also be overstated to reflect an amount greater than the Company's actual recorded depreciation expense in the FPFTY. Because the plant is added at different dates throughout the year, the Company will not record a full-year of depreciation expense for plant that is added variably throughout the year, which results in a greater revenue requirement result than necessary when the full end-of-year depreciation expense is included in the Company's FPFTY claim.

Likewise, usage declines and customer count adjustments projected to the end of the FPFTY will not accurately reflect the actual FPFTY usage, nor will annualized expenses for which a full year's expense is not realized in the FPFTY accurately reflect the actual FPFTY expenses. Both will impact the revenue requirement through the ratemaking equation on a dollar for dollar basis and overinflate the Company's FPFTY revenue needs. These items will all serve to shift the return graph even further upward, which would result in an end of FPFTY ROR that is even higher than the authorized ROR.

The expense issues and authorized ROR will be addressed elsewhere in testimony by I&E witnesses Grab in I&E Statement No. 1 and Patel in I&E Statement No. 2.

Q. WILL THE REDUCTION IN THE REVENUE REQUIREMENT ASSOCIATED WITH THESE ADJUSTMENTS IMPACT RATE CASE FREQUENCY?

A. Possibly. However, companies should file rate cases on the frequency demanded by revenue needs and should not unnecessarily inflate customer rates beyond what is just and reasonable for the sole purpose of decreasing rate case frequency.

Imposing rates on customers that are excessive and unreasonable to alleviate a single issue does not comport with a utility's obligation to provide service at just and reasonable rates.

Further, utilizing an average rate base could allow earlier implementation of a distribution system improvement charge ("DSIC") if the Company demonstrated that the plant-in-service used to establish rates had been added to rate base. Usage of the DSIC earlier would mitigate the impact of the rate increase that would result from assuming an end-of-year rate base in establishing rates and still provide the Company the opportunity to recover later DSIC-eligible plant investments, potentially within the FPFTY. Earlier implementation of the DSIC could also limit any increase in rate case frequency presumed to be associated with usage of the average rate base method.

Q. IS YOUR DIRECT TESTIMONY MAKING A SPECIFIC ROR RECOMMENDATION?

A. No. I&E witness Patel (I&E St. No. 2) discusses I&E's recommended adjustments to the Company's ROR claims. My testimony simply addresses the impact of the end-of-year versus average rate base, revenue, and expense claims have on the ROR and rates.

Q. IS THIS THE FIRST TIME I&E OR ANY OF THE STATUTORY ADVOCATES HAVE RAISED THIS AVERAGE RATE BASE ISSUE IN PROCEEDINGS BEFORE THE COMMISSION?

A. No. I&E and the Office of Consumer Advocate ("OCA") recently raised this issue in the UGI Utilities, Inc. – Electric Division base rate proceeding at Docket No. R-2017-2640058 as well as the Pennsylvania American Water Company base rate proceeding at Docket No. R-2017-2595853.[3] Prior to that, the OCA and the Office of Small Business Advocate ("OSBA") raised this issue in the UGI Penn Natural Gas, Inc. base rate proceeding at Docket No. R-2016-2580030. OCA also raised it in the FirstEnergy base rate proceedings at Docket Nos. R-2016-2537349, R-2016-2537352, R-2016-2537355, R-2016-2537359. The UGI Utilities. Inc. – Electric Division was litigated, but a Recommended Decision from the Administrative Law Judge has not yet been filed. All of the other cases were resolved through settlement.

Q. DO ANY OTHER STATE UTILITY COMMISSIONS OR JURISDICTIONS APPLY AN AVERAGE RATE BASE TO THE FPFTY IN THE SAME MANNER AS YOU RECOMMEND IN THIS CASE?

A. Yes. The Illinois Commerce Commission ("Illinois Commission") in its Administrative Code at 83 Ill. Adm. Code 287.20, attached as I&E Exhibit No. 3,

[3] In that proceeding, I&E referred to the average rate base as the half-year convention.

Schedule 3, allows a utility to propose a "future" test year that is "[a]ny consecutive twelve-month period of forecasted data beginning no earlier than the date new tariffs are filed and ending no later than 24 months after the date new tariffs are filed." This allowed projected time period includes the same time period that Pennsylvania allows as a FPFTY. While the Illinois Administrative Code does not specifically mandate that an average rate base should be used, paragraph (e) of Section 285.2005 mandates specific reporting and calculation requirements in the event that an average rate base is not used (I&E Exhibit No. 3, Schedule 4, p. 2). Additionally, in a recent case the Illinois Commission concluded that an average rate base is more appropriate than a year-end rate base, given a future test year, which, by definition, can match the FPFTY in Pennsylvania (*Re North Shore Gas Company*, 2013 WL 3762292 (Ill. C. C.), pp. 28-29 (Order entered June 18, 2013)).

<u>**UTILITY PLANT-IN-SERVICE**</u>

Q. WHAT IS UTILITY PLANT-IN-SERVICE?

A. Utility plant-in-service comprises all the utility's intangible assets (i.e., organization costs, franchise and consents costs, and land and land right costs) and tangible assets (i.e., facilities and equipment). Moreover, for a utility plant to be included in rates, the plant must be used and useful in the provision of utility service to the customers. Therefore, by definition, only plant currently providing or capable of providing utility service to customers is eligible to be reflected in rates.

Q. WHAT IS SWPA'S UTILITY PLANT-IN-SERVICE CLAIM FOR ITS FTY AND FPFTY?

A. SWPA's utility plant-in-service claim for the FTY ending November 30, 2018 is $367,714,123 (SWPA Ex. No. JDH-1, col. 6). The Company's utility plant-in-service claim for the FPFTY ending December 31, 2019 is $409,389,892 (SWPA Ex. No. JDH-1, col. 10).

Q. PLEASE EXPLAIN YOUR PLANT-IN-SERVICE ADJUSTMENT REGARDING THE MTWS.

A. For the reasons I discussed above, I am recommending the utility plant-in-service related to the proposed MTWS acquisition be rejected. As shown on the Company's response to Office of Consumer Advocate ("OCA") interrogatory OCA-IV-23, the Company is claiming $5,820,000 in utility plant-in-service related to the MTWS in the FPFTY (I&E Ex. No. 3, Sch. 5). Therefore, my recommended rejection of the MTWS reduces the Company's utility plant-in-service claim in the FPFTY by $5,820,000 from $409,389,892 to $403,569,892 (I&E Ex. No. 3, Sch. 1, col. D-F, line 10). As stated on page 26 of SWPA Statement No. 1, the fair market appraisals for the MTWS have not yet been submitted as part of an application. Therefore, once the appraisals are complete, if the amount the Company proposes to include in rate base associated with the MTWS is altered, I recommend the Company provide an update to OCA-IV-23 that shows a correct breakdown of plant-in-service costs associated with the MTWS.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS REGARDING UTILITY PLANT-IN-SERVICE IN THIS PROCEEDING?

A. Yes, I recommend that SWPA's FPFTY year-end utility plant-in-service claim not be reflected in rate base. Rather, I recommend a utility plant-in-service amount of $385,642,008 be reflected in rate base (I&E Ex. No. 3, Sch. 1, col. H, line 10). I based my recommendation on the use of an average rate base methodology rather than the year-end rate base contained in the Company's filing as well as several adjustments to the Company's claimed utility plant-in-service as discussed below.

Q. USING AN AVERAGE RATE BASE, HOW DID YOU DETERMINE SWPA'S UTILITY PLANT-IN-SERVICE?

A. I computed I&E's recommended $385,642,008 of utility plant-in-service for the FPFTY by taking the average of the Company's total utility plant-in-service for the FTY ending December 31, 2018 and my recommended total utility plant-in-service for the FPFTY ending December 31, 2019 as shown on I&E Exhibit No. 3, Schedule 1, line 10 and below:

($367,714,123 + $403,569,892) ÷ 2 = $385,642,008.

ANNUAL DEPRECIATION EXPENSE

Q. WHAT IS ANNUAL DEPRECIATION EXPENSE?

A. Depreciation is the loss of value of a utility's assets used and useful in the provision of utility service due to usage, passage of time, etc. The National Association of Regulatory Utility Commissioners defines annual depreciation expense as the annual cost associated with the diminution in the usefulness of an asset over time. Depreciation expense is the way the return of a utility's investment is captured in rates and is generally computed by dividing the original cost of an asset by its expected useful life or by multiplying the annual accrual rate by the original cost.

Q. WHAT IS SWPA'S CLAIMED ANNUAL DEPRECIATION EXPENSE FOR THE FTY AND FPFTY?

A. SWPA's claimed annual depreciation expense for the FTY ending December 31, 2018 is $8,164,788 (SWPA Ex. CEH-2, Sch. 33), and for the FPFTY ending December 31, 2019 is $8,722,962 (SWPA Ex. CEH-2, Sch. 33).

Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S PROPOSED ANNUAL DEPRECIATION EXPENSE IN THE FPFTY?

A. Yes. Consistent with my recommended removal of the Company's plant-in-service related to the MTWS, the annual depreciation expense must necessarily also be adjusted. Therefore, I recommend that the Company's annual depreciation expense claim in the FPFTY be reduced by $107,323 from $8,724,603 to $8,617,280 (I&E Ex. No. 3, Sch. 7, cols. C-E).

Q. HOW DID YOU DETERMINE YOUR ADJUSTMENT TO THE FPFTY ANNUAL DEPRECIATION EXPENSE?

A. I determined my adjustment to the FPFTY annual depreciation expense by multiplying the adjusted original cost plant-in-service by the composite accrual rate (I&E Ex. No. 3, Sch. 6, lines 14, 16, 25, and 51-55).

Q. DO YOU HAVE A RECOMMENDATION REGARDING THE COMPANY'S ANNUAL DEPRECIATION EXPENSE CLAIM?

A. Yes. Based on my use of average rate base methodology and my FPFTY annual depreciation expense adjustments regarding the MTWS, discussed above, I recommend an annual depreciation expense of $8,391,033 be reflected in this case, which represents a decrease of $331,929 to the Company's annual depreciation expense claim ($8,722,962 - $8,391,033) (I&E Ex. No. 3, Sch. 7).

My $8,391,033 annual depreciation expense recommendation was determined by taking the average of the annual depreciation expense in the FTY and my adjusted annual depreciation expense in the FPFTY, less the $950,910 depreciation on contribution in aid of construction ("CIAC") / Advances, as shown on I&E Exhibit No. 3, Schedule 7 and below:

($9,115,697 + $9,568,190) ÷ 2 = $9,341,943 - $950,910 = $8,391,033.

ACCUMULATED DEPRECIATION

Q. WHAT IS ACCUMULATED?

A. A utility's accumulated depreciation is the aggregate of all the annual depreciation expenses over the years that the asset was in service. The accumulated depreciation is subtracted from the original cost of plant in service as part of the total rate base calculation.

Q. WHAT IS SWPA'S ACCUMULATED DEPRECIATION FOR THE FTY AND FPFTY?

A. The Company's accumulated depreciation for the FTY is $78,617,020 and accumulated depreciation for the FPFTY is $85,360,944 (SWPA Ex. No. CEH-1, Sch. 1.1).

Q. DO YOU HAVE A RECOMMENDATION REGARDING THE UTILITY'S ACCUMULATED DEPRECIATION AT THE END OF THE FPTFY?

A. Yes. Based on my recommendation to remove the cost of the MTWS plant, there should be a corresponding reduction of $798,576 in accumulated depreciation associated with the MTWS plant. Therefore, I recommend the Company's accumulated depreciation in the FPFTY be decreased by $798,576 from $85,360,943 to $84,562,367 (I&E Ex. No. 3, Sch. 1, cols. D-F, line 11).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO THE ACCUMULATED DEPRECIATION AT THE END OF THE FPFTY?

A. As shown on I&E Exhibit No. 3, Schedule 6, first I determined the level of future accruals by multiplying the adjusted accrual amount (col. M) by the remaining life (column O). My recommended accumulated depreciation level was determined by subtracting the adjusted future accruals (column J) from the adjusted original cost plant-in-service (column E).

Q. DO YOU HAVE A RECOMMENDATION REGARDING THE UTILITY'S ACCUMULATED DEPRECIATION THAT SHOULD BE REFLECTED IN RATE BASE?

A. Yes. Based on my use of average rate base methodology and my accumulated depreciation adjustment regarding the MTWS, discussed above, I recommend an accumulated depreciation of $81,589,693 be reflected in this case, which represents a decrease of $3,771,251 ($81,589,693 - $85,360,944) to the Company's accumulated depreciation claim.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ACCUMULATED DEPRECIATION AMOUNT?

A. I determined my recommended accumulated depreciation level by taking the average of the Company's accumulated depreciation for the FTY ending

December 31, 2018 and my adjusted accumulated depreciation for the FPFTY ending December 31, 2019 as shown on I&E Exhibit No. 3, Schedule 1, line 11 and below:

$$(\$78,617,020 + \$84,562,367) \div 2 = \$81,589,693.$$

OTHER ADDITIONS AND DEDUCTIONS

Q. WHAT OTHER ADDITIONS AND DEDUCTIONS TO THE DEPRECIATED ORIGINAL COST OF UTILITY PLANT ARE ALLOWED?

A. Some of the additions to the depreciated original cost of a company's investment in utility include materials and supplies and cash working capital. Some of the deductions include deferred income taxes and contributions in aid of construction ("CIAC"). Some additions are applicable to a specific utility or utility type. The FPFTY depreciated original cost claimed by SWPA in this proceeding is $324,028,948 shown on SWPA Exhibit No. CEH-1, Schedule 1.1. The claimed additions to the Company's depreciated original cost are as follows:

1. Cash Working Capital;
2. Materials and Supplies;

The deductions to the depreciated original cost are:

1. CIAC and Contributions; and
2. Deferred Taxes.

Q. IS I&E RECOMMENDING ANY ADJUSTMENTS TO THE ADDITIONS AND DEDUCTIONS LISTED ABOVE?

A. Yes. As discussed below, I am recommending adjustments to Materials and Supplies. Additionally, adjustments to cash working capital are discussed by I&E witness Grab in I&E Statement No. 1. I am not recommending any changes to the Company's CIAC and Contributions claim because the Company reflected the same amount in the HTY, FTY, and FPFTY and any adjustments were included in the net plant claim, therefore, an average would not change the amount reflected.

<u>MATERIALS AND SUPPLIES</u>

Q. HOW DID THE COMPANY DEVELOP ITS CLAIM FOR MATERIALS AND SUPPLIES?

A. The Company's claim for Materials and Supplies was developed by first calculating a thirteen-month average of plant balances for each in the historic test year. The $481,594 claim for Materials and Supplies is a 12-month average of the HTY thirteen-month average plant balances as shown on SWPA Exhibit D V-11. The Company used the same $481,594 claim for Materials and Supplies in the HTY, FTY, and FPFTY (SWPA Ex. No. CEH-1, Sch. 1.1).

Q. WHAT DO YOU RECOMMEND CONCERNING THE COMPANY'S $481,594 CLAIM FOR MATERIALS AND SUPPLIES IN THE FPFTY?

A. I recommend the Company's $481,594 jurisdictional claimed level of Materials and Supplies be increased by $19,474 to $501,067 (I&E Ex. No. 3, Sch. 1, line 16).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED LEVEL OF MATERIALS AND SUPPLIES?

A. I updated the thirteen-month average balances of materials and supplies to account for the additional actual balances provided by the Company in its responses to I&E-RB-9 (supplemented on June 26, 2018), attached as I&E Exhibit No. 3, Schedule 8. This update results in a total Company 12-month average material supplies level of $501,067 (I&E Ex. No. 3, Sch. 9). Because the Company claimed the same level of Materials and Supplies in the HTY, FTY, and FPFTY, the average of the FTY and FPFTY adjusted balances of Materials and Supplies is the same $501,067.

Q. IF THE COMPANY PROVIDES FURTHER UPDATES THROUGH THE COURSE OF THIS PROCEEDING, SHOULD THE MATERIALS AND SUPPLIES CLAIM BE ADJUSTED?

A. Yes. It is appropriate to use the most recent data available to determine the Materials and Supplies balance.

DEFERRED TAXES

Q. WHAT AMOUNT OF DEFERRED TAXES DID THE COMPANY CLAIM IN THE FTY AND FPFTY?

A. The Company's claim for Deferred Taxes is $18,237,542 in the FTY and $18,810,736 in the FPFTY (SWPA Ex. No. CEH-1, Sch. 4.1).

Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE COMPANY'S DEFERRED TAXES CLAIM THAT IS REFLECTED IN RATE BASE?

A. Yes. I recommend that $18,524,139 of Deferred Taxes be reflected in rate base (I&E Ex. No. 3, Sch. 1, col. H, line 28).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED ADJUSTMENT TO THE COMPANY'S CLAIM FOR DEFERRED TAXES?

A. Based on the average rate base methodology, my recommended $18,524,139 level of Deferred Taxes was determined by taking the average of the Company's Deferred Taxes claim for the FTY and the Company's Deferred Taxes claim for the FPFTY as shown on I&E Exhibit No. 3, Schedule 1, line 15 and below:

($18,237,542 + $18,810,736) ÷ 2 = $18,524,139.

Q. WHAT EFFECT DOES I&E'S RECOMMENDED ADJUSTMENTS HAVE ON SWPA'S RATE BASE AND ANNUAL DEPRECIATION EXPENSE CLAIM?

A. My use of the average rate base methodology and the resulting recommended adjustments discussed above coupled with I&E witnesses Grab's rate base adjustments reduce the Company's claimed rate base as shown on I&E Exhibit No. 3, Schedule 1, line 18 and as follows:

**Effects of I&E's Plant in Service,
Accumulated Depreciation Expenses, Materials and Supplies,
Deferred Income Taxes, CIAC and Contributions, and
Cash Working Capital on SWPA's Claimed Rate Base for the
Fully Projected Future Test Year ending December 31, 2019**

Line No.	Company Claimed	I&E Adjustment	I&E Recommended
(A)	(B)	(C)	(D)
1	$243,448,860	$(19,737,946)	$233,710,914

The same methodology reduces the annual depreciation expense claim as shown on I&E Exhibit No. 3, Schedule 7 and as follows:

**I&E's Recommended
Annual Depreciation Expense for the
Fully Projected Future Test Year ending September 30, 2019**

Line No.	Company Claimed	I&E Adjustment	I&E Recommended
(A)	(B)	(C)	(D)
1	$8,722,962	$(331,929)	$8,391,033

FTY AND FPFTY REPORTING

Q. WHAT AMOUNT OF ADDITIONAL RATE BASE WILL BE ASSOCIATED WITH THE INCLUSION OF THE FPFTY ENDING DECEMBER 31, 2019 FOR SWPA?

A. As mentioned above, the Company's rate base for the FPFTY ending December 31, 2019 is $243,448,860 (SWPA Ex. No. CEH-1, Sch. 1.1). SWPA's rate base for the FTY ending December 31, 2018 is $209,048,221 (SWPA Ex. No. CEH-1, Sch. 1.1). Therefore, $47,888,486 ($243,448,860 – $209,048,221) of rate base additions are associated with the twelve months between the end of FTY and the end of the FPFTY.

Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING PLANT ADDITIONS THAT SWPA PROJECTS TO BE IN SERVICE DURING THE FTY ENDING DECEMBER 31, 2018 AND THE FPFTY ENDING DECEMBER 31, 2019?

A. Yes. I recommend that the Company provide the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement with an update to SWPA Exhibit No. JDH-1, no later than April 1, 2019, which should include actual capital expenditures, plant additions, and retirements by month from January 1, 2017 through December 31, 2018 and an additional update for actuals from January 1, 2019 through December 31, 2019, no later than April 1, 2020.

Q. WHY DO YOU RECOMMEND THAT SWPA PROVIDE THESE UPDATES?

A. Although I&E is recommending that SWPA's plant projections be modified by applying the average rate base methodology, I&E continues to believe that there is value in determining how closely SWPA's projected investments in future facility comport with the actual investments that are made by the end of the FTY and FPFTY. Determining the correlation between SWPA's projected and actual results will help inform the Commission and the parties in SWPA's future rate cases.

Whether based on the average rate base methodology or an end-of-year rate base value, the updates are important. As I previously explained, through use of the FPFTY, SWPA is essentially requiring ratepayers to pre-pay a return on its projected investment in future facilities that are not in place and providing service at the time the new rates take effect, but also are not subject to any guarantee of being completed and placed into service. While the FPFTY provides for such projections, there should be verification of the projections. Therefore, requiring the Company to provide updates demonstrating that actual investment comports with projections used in setting rates using the FPFTY provides the Commission with actual data to gauge the accuracy of SWPA's projected investments in future proceedings.

PRESENT RATE REVENUE

Q. WHAT IS THE COMPANY'S CLAIMED PRESENT RATE REVENUE LEVEL IN THE FPFTY?

A. The Company's claimed revenues under pro forma present rates in the FPFTY ending December 31, 2019 is $47,382,250 (SWPA Exhibit No. CEH-1, Schedule 4, col. 8).

Q. DOES THE COMPANY'S PRESENT RATE REVENUES INCLUDE AN ADJUSTMENT FOR THE MTWS?

A. Yes. As stated on page 7 of SWPA Statement No. 2, the adjustment for the acquisition of the MTWS is shown on SWPA Exhibit No. CEH-1, Schedule 9.3, Adjustment 3 and included in the adjustments on SWPA Exhibit No. CEH-1, Schedules 5 and 3. The total adjustment for the MTWS under present rates is an addition of $613,261 (SWPA Ex. No. CEH-1, Sch. 5, col. 7).

Q. DO YOU HAVE ANY RECOMMENDATIONS REGARDING THE MTWS REVENUE ADJUSTMENTS?

A. Yes. Consistent with my recommendation above to deny the inclusion of the MTWS acquisition in the current base rate case, I recommend that the $613,261 revenue adjustments associated with the MTWS be denied.

Q. OTHER THAN THE MTWS REVENUE ADJUSTMENT DISCUSSED ABOVE, IDENTIFY THE BASIS FOR THE COMPANY'S FPFTY PRESENT RATE REVENUE LEVEL.

A. As discussed on SWPA Statement No. 2, pages 5-7, the Company's pro forma revenue at present rates is calculated by taking an application of present rates to the consumption analysis shown on SWPA Exhibit No. CEH-1, Schedule 5 and multiplied by an adjustment factor. Then, the pro forma revenue is adjusted for annualized customer growth, declining usage, and the effects of the Company's territory expansion, labeled as Trunk Line, and described on SWPA Statement No. 1, pp. 22-24. These adjustments are summarized on SWPA Exhibit No. CEH-1, Schedule 5.

Q. WHAT DO YOU RECOMMEND REGARDING THE COMPANY'S CLAIMED PRESENT RATE REVENUE?

A. I recommend the Company's present rate revenue level be decreased by $655,983 from $47,382,250 to $46,320,657 (I&E Ex. No. 3, Sch. 10, col. F-G, line 18).

Q. WHY DO YOU RECOMMEND THE COMPANY'S CLAIMED PRESENT RATE REVENUE BE DECREASED TO $46,320,657?

A. In addition to the MTWS adjustment discussed above, when calculating a revenue requirement in a designated test year, it is vital that the expenses and revenues are assessed using the same time period. In this case, I&E is recommending the application of an average rate base to calculate the Company's rate base and depreciation expense claims, as described above. Therefore, for purposes of consistency, it is also necessary to calculate the Company's present rate revenue level in the FPFTY using a consistent average methodology.

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED PRESENT RATE REVENUE LEVEL IN THE FPFTY.

A. I determined my recommended present rate revenue level in the FPFTY by removing the MTWS adjustment, then applying an average methodology to the remaining customer growth, declining usage, and Trunk Line adjustments.

Q. IDENTIFY AND EXPLAIN YOUR ADJUSTMENT TO THE CUSTOMER GROWTH ADJUSTMENT.

A. The Company's adjustment for customer growth is shown on SWPA Exhibit No. CEH-1, Schedule 9.1. The Company projects the same customer growth in the FTY and the FPFTY, therefore, an average of the annualized number of bills (or the forecasted customer growth multiplied by 12), would simply be half of the projected number of bills in the FPFTY. These calculations are shown on I&E Exhibit No. 3, Schedule 11, line 7. The number of bills is then multiplied by an average service charge for each rate class (I&E Ex. No. 3, Sch. 11, line 3) to determine the revenue adjustment from the service charge (I&E Ex. No. 3, Schedule 11, line 12). The number of bills is also multiplied by an average volume per normalization (I&E Ex. No. 3, Sch. 11, lines 9-11) and a volumetric charge (I&E Ex. No. 3, Sch. 11, lines 4-5) to determine the revenue from the volumetric charge (I&E Ex. No. 3, Sch. 11, lines 13-14). The revenue from the service charge and the revenue from the volumetric charge are then added together to determine the total revenue adjustment for customer growth for each rate class (I&E Ex. No. 3, Sch. 11, line 15). The result of my average methodology is to reduce the total customer growth adjustment by $162,011 from $336,786 to $174,775 (I&E Ex. No. 3, Sch. 11, line 16, col. M-O).

Q. IDENTIFY AND EXPLAIN YOUR ADJUSTMENT TO THE DECLINING USAGE ADJUSTMENT.

A. The Company's adjustment for declining is shown on SWPA Exhibit No. CEH-1, Schedule 9.2. The Company's projected daily usage for the residential class is 113.53 gallons per day in the FTY and 111.32 gallons per day in the FPFTY. For the commercial class, the projected daily usage is 808.25 gallons per day in the FTY and 798.96 gallons per day in the FPFTY. In order to determine the usage at the midpoint of the FPFTY, I took the average of the projected daily usage in the FTY and FPFTY (I&E Ex. No. 3, Sch. 12, line 12). The result is an increase in the projected daily usage in the FPFTY of 1.10 gallons per day from 111.32 gallons per day to 112.42 for the residential class and an increase of 4.64 gallons per day from 798.86 gallons per day to 803.6 gallons per day.

To determine the revenue adjustment derived from the declining usage, the difference in daily usage between the actual 2017 daily usage and the projected daily usage in the FPFTY is multiplied by 30 and divided by 1,000 to determine the reduction in monthly usage per thousand gallons as shown on I&E Exhibit No. 3, Schedule 12, lines 11-15. The result under my recommendation is an average reduction in monthly usage per 1,000 gallons of 0.10 ((112.42 – 115.73) x 30 / 1,000) for the residential class and an average reduction in monthly usage per 1,000 gallons of 0.42 ((803.60 – 817.54) x 30 / 1,000) for the commercial class.

Finally, the average reduction in monthly usage per 1,000 gallons is multiplied by the actual normalized bills for each class shown on line 10 of I&E Exhibit No. 12 and by the first block usage rate under present rates of $7.7506 per 1,000 gallons (I&E Ex. No. 3, Sch. 12, line 17) to determine the revenue adjustment for declining usage. As shown on I&E Exhibit No. 3, Schedule 12, columns C and F, line 18, the adjustment in present rate revenue under my recommendation for the residential class is to increase the adjustment by $167,415 from negative $669,310 to negative $501,895 ((0.1) x 652,728 x 7.7506) and for the commercial class is to increase the adjustment by $61,235 from negative $245,006 to negative $183,771 ((0.42) x 56,712 x 7.7506).

Q. IDENTIFY AND EXPLAIN YOUR ADJUSTMENT TO THE TRUNK LINE ADJUSTMENT.

A. The Company's adjustment for the Trunk Line is shown on SWPA Exhibit No. CEH-1, Schedule 9.4. This adjustment is comprised of two parts; a service charge adjustment for the addition of 252 customers and a volumetric rate adjustment for usage at the projected usage level in the FPFTY. Because the 252 additional customers are projected to be added in the FPFTY, I determined that the number of customers at the mid-point of the FPFTY would simply be half of the customers, or 126.

Similar to the customer growth adjustment described above, the service charge adjustment is calculated by multiplying the average number of customers by 12 to determine the number of bills (126 x 12 = 1,512), the multiplying the number of bills by the present rate service charge of $13.75, which results in a reduction of $20,790 from the Company's revenue from service charge of $41,580 to $20,790 (1,512 x $13.75) (I&E Ex. No. 3, Sch. 13, line 7).

Similar to the usage decline adjustment described above, the revenue adjustment from the volumetric charge is calculated by determining the monthly volumes per normalization, or the projected daily usage in gallons multiplied by 30 and divided by 1,000. Using the projected usage for the FPFTY that I recommended above of 112.42, the monthly volumes per normalization is 3.37 ((112.42 x 30) / 1,000) or an increase of 0.03 from the Company's 3.34 (I&E Ex. No. 3, Sch. 13, line 4). The revenue from the volumetric charge is determined by multiplying the monthly volumes per normalization by the annualized number of bills and by the present rate volumetric charge of $7.7506. the result under my recommendation is $39,528 (3.34 x 1,512 x $7.7506) or a reduction of $38,754 from the Company's adjustment of $78,282 (I&E Ex. No. 3, Sch. 13, line 13).

My total recommended Trunk Line adjustment is the sum of the revenue from the service charge and revenue from the volumetric charge, or $60,318 ($20,790 + $39,528). This represents a reduction of $59,544 from the Company's $119,862 adjustment level (I&E Ex. No. 3, Sch. 13, line 15).

Q. ARE YOU RECOMMENDING ANY OTHER ADJUSTMENTS TO THE PRESENT RATE REVENUE?

A. Yes. SWPA Exhibit No. CEH-1, Schedule 4 includes an adjustment to present rate revenue for the add back of annualized DSIC revenue. This adjustment is calculated by multiplying the sum of column 5, revenue under present rates, and column 6, adjustments to present rates, by 7.5%. As I described above, my recommendation alters the adjustments to present rates. Therefore, the calculated adjustment for annualized DSIC revenue would also be adjusted under my recommendation. My recommended adjustment for annualized DSIC revenue is a reduction of $45,766 from $3,112,098 (SWPA Ex. No. CEH-1, Sch. 4, col. 7) to $3,066,331 (I&E Ex. No. 3, Sch. 10, col. E, line 18).

Q. WHAT IS YOUR TOTAL RECOMMENDED CHANGE TO THE REVENUE UNDER PRESENT RATES?

A. The adjustments to revenue under present rates by rate class are summarized on I&E Exhibit No. 3, Schedule 14. My recommendation is to reduce present rate revenue by $655,983 from $47,382,250 to $46,320,657 (I&E Ex. No. 3, Sch. 10, line 18, col. F-H).

REVENUE UNDER PROPOSED RATES

Q. DOES THE COMPANY INCLUDE ANY ADJUSTMENTS TO ITS REVENUE UNDER PROPOSED RATES?

A. Yes. As shown on SWPA Exhibit No. CEH-1, Schedule 2, column 6, the Company is including $772,793 in adjustments to its proposed rate revenues.

Q. ARE YOU RECOMMENDING ANY CHANGES TO THE COMPANY'S ADJUSTMENTS TO ITS REVENUE UNDER PROPOSED RATES?

A. Yes. As a result of my recommendation regarding the MTWS acquisition and the average rate base methodology, as discussed above, I am recommending the Company's total adjustments to proposed rate revenue be reduced by $846,091 from $772,793 to negative $73,299 (I&E Ex. No. 3, Sch. 15, col. E-G, line 9). My recommendation reduces the Company's total proposed rate revenue by the same $846,091 from $53,618,655 to $52,722,563 (I&E Ex. No. 3, Sch. 15, col. H-K, line 9).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED REVENUE UNDER PROPOSED RATES?

A. As shown on I&E Exhibit No. 3, Schedule 16, p. 2, I determined my recommended adjustments to the Company's proposed rates by multiplying the number of bills and consumption, adjusted for the average rate base methodology as discussed above, by the Company's proposed rates. I also removed the adjustments to proposed rates associated with the MTWS acquisition. My recommended changes to the proposed revenue adjustments are summarized on I&E Exhibit No. 3, Schedule 17.

CUSTOMER COST ANALYSIS

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

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

Q. WHAT ARE DIRECT AND INDIRECT CUSTOMER COSTS?

A. A direct customer cost is an expense or plant item that changes every time the Company adds new customers or when customers leave the system. They are direct costs the Company must have in place to serve its customers every month. Indirect costs are costs that do not change with the addition or subtraction of customers but could be considered customer related.

Q. WHY IS IT IMPORTANT TO DISTINGUISH BETWEEN DIRECT AND INDIRECT CUSTOMER COSTS AS YOU HAVE DEFINED THEM?

A. As acknowledged in the seventh edition of the American Water Works Association M1 Manual, there is a tradeoff between revenue stability from a high customer charge and affordability and conservation from a low customer charge and higher usage rates.[4] In providing utility service to ratepayers utilities in general, and SWPA in particular, entire business are based around serving customers. Using a loose definition of direct customer costs, such as those costs allocated based on customer count in the cost of service study, as is the case with Mr. Herbert's fully allocated customer cost analysis, could have the effect of driving up the customer charge which adversely effects conservation and low-income customers. The Commission has recognized this fact in previous cases and it is now common practice in Pennsylvania to allocate only direct customer cost as well as some indirect customer costs int the customer cost analysis.

Q. DID THE COMPANY PREPARE A CUSTOMER COST ANALYSIS TO SUPPORT ITS PROPOSAL TO INCREASE ITS CUSTOMER CHARGES?

A. The Company provided a breakdown of the various costs included in its proposed customer charges in a schedule entitled "Direct Customer Costs - Detail" (SWPA Ex. PRH-1, Schedule H).

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

Q. WHAT COSTS ARE INCLUDED IN THE COMPANY'S DIRECT CUSTOMER COST ANALYSIS?

A. The Company's customer cost analysis is split into three categories of allocation: Meters, Services, and Billing and Collecting. The costs allocated specifically to Meters are Operation and Maintenance Expenses: T&D Labor – Operation – Employee Salaries – Supervision, Employee Salaries – Meters, and Fringe Benefits, as well as Rate Base: Meters and Depreciation Expense: Meters. The costs allocation specifically to Services are Operation and Maintenance Expenses: T&D Labor – Maintenance – Employee Salaries – Supervision, Employee Salaries – Structures and Improvements, Employee Salaries – Services, and Fringe Benefits, as well as Rate Base: Services and Depreciation Expense: Services.

The following costs are allocated across all three categories: Management Fees – Employee Related, Transportation Expense, Worker's Compensation, Advertising Expense, Office Rents as well as the Depreciation Expense costs from Office Buildings and Office Furntiure & Equipment. Also allocated across all three categories are Rate Base costs from Office Buildings, Office Furntiure & Equipment, Materials and Supplies, and Deferred Taxes, in addition to Payroll Taxes.

Finally, the following costs are allocated solely to the Billing and Collecting category: Total Customer Accounting Expense, Management Fees – Customer Related, and Rate Base and Depreciation Expense associated with Computer Software – CIS. It should be noted that the Total Customer Accounting

Expense includes costs that are not shown on SWPA Exhibit No. PRH-1, Schedule H, p. 2, but instead are detailed on SWPA Exhibit D VIII-01i, p. 4 of 8 as follows: Employee Salaries – Supervision, Employee Salaries – Meter Reading, Employee Salaries – Billing, Fuel for Power Production, Material and Supplies, Outside Services, Outside Services – Mahoning, Rental of Equipment, Transportation Expense, Bad Debt Expense, Fringe Benefits, Miscellaneous Other, Office Expenses, Utilities and Other, and Postage.

Q. WHAT IS THE RESULT OF THE COMPANY'S CUSTOMER COST ANALYSIS?

A. The result of the Company's customer cost analysis is a monthly cost per 5/8-inch Meter of $14.96 as shown on SWPA Exhibit No. PRH-1, Schedule H, p. 1, that the Company used to support its proposed customer charge of $15.00.

Q. DO YOU AGREE WITH THE COMPANY'S CUSTOMER COST ANALYSIS?

A. No. Consistent with my rejection of the MTWS above, the $5,372 of Customer Accounts cost Outside Services – Mahoning (SWPA Ex. D VIII-01i, p. 4 of 8) should be removed from the customer cost analysis. Furthermore, I believe, based on my definition above, that the Company has included costs that are not direct customer costs or the indirect costs that have been allowed by the Commission in the past. The following indirect costs should be removed from the customer cost analysis: Operation and Maintenance Expenses: T&D Labor – Maintenance – Employee Salaries – Structures and Improvements, Transportation Expense, Worker's Compensation, Management Fees – Employee Related, and Management Fees – Customer Related, and a part of the Total Customer Accounting Expense (I&E Ex. No. 3, Sch. 18). The costs that are a part of the Total Customer Accounting Expense that should not be included in the customer cost analysis because they are not direct customer costs are as follows: Fuel for Power Production, Rental of Equipment, Bad Debt Expense, Miscellaneous Other, Office Expenses, and Utilities and Other. These costs do not change with the addition or subtraction of a single customer and, therefore, should not be included in the calculation of the customer charge.

Q. WHAT IS THE TOTAL CUSTOMER COST AND PUBLIC FIRE MONTHLY COST PER 5/8-INCH METER?

A. The total customer cost and public fire monthly cost per 5/8-inch meter that results from my recommended customer cost analysis is $14.01 per customer per month (I&E Ex. No. 3, Sch. 19, col. D, line 6). This is a reduction of $0.95 from the Company's unit cost per customer of $14.96 (I&E Ex. No. 3, Sch. 19, col. D-F, line 6).

CUSTOMER CHARGES

Q. WHAT IS THE COMPANY'S PRESENT 5/8-INCH SERVICE CHARGE?

A. The Company's current 5/8-inch service charge for all rate classes is $13.75 per month (SWPA Ex. No. PRH-1, Sch. 1, p. 1). The Company's customer charge rate schedule is based on meter size and is the same for all rate classes (SWPA Ex. No. PRH-1, Schedule I, p. 1).

Q. WHAT 5/8-INCH SERVICE CHARGE IS THE COMPANY PROPOSING FOR THE CUSTOMER CLASSES?

A. The Company is proposing a 5/8-inch service charge of $15.00 for the residential classes. This is an increase of $1.25, or approximately 9%, over the Company's current customer charge of $13.75 (SWPA Ex. No. PRH-1, Sch. I, p. 1).

Q. HOW DO YOU ASSESS THE REASONABLENESS OF A UTILITY'S PROPOSED CUSTOMER CHARGE?

A. Generally, my assessment of the reasonableness of a utility's proposed customer charge is based two factors: the customer cost analysis that properly includes only direct customer costs and some appropriately included indirect customer costs and whether the proposed increase to the customer charge violates the concept of gradualism.

Q. WHAT IS GRADUALISM?

A. Gradualism is a well-established ratemaking concept that seeks to limit the immediate increases customers receive when rates are increased and implement significant rate changes on a more gradual basis over time.

Q. DO YOU AGREE WITH THE COMPANY'S RECOMMENDED 5/8-INCH CUSTOMER CHARGE OF $15.00?

A. No. While the Company's proposed 9% increase to the customer charge does satisfy the concept of gradualism, the Company's proposed customer charge is not supported by a customer cost analysis that properly includes only direct customer costs as well as some appropriately included indirect customers costs, as I discuss above. Therefore, I recommend the Company's proposed $15.00 customer charge denied.

Q. WHAT CUSTOMER CHARGE ARE YOU RECOMMENDING?

A. I am recommending a $14.00 customer charge for the residential classes. This is an increase of $0.25, or 1.8%, over the Company's current $13.75 customer charge. My recommended $14.00 customer charge is based on my recommended customer cost analysis as described above.

Q. DID THE COMPANY PROPOSE AN INCREASE TO ANY OTHER RATE CUSTOMER CHARGES?

A. Yes. The Company rate schedule consists of customer charges based on meter size, which are then applied to all rate classes. As shown on PWSA Ex. No. PRH-1, Sch. I, p. 1, the Company is recommending an increase to each customer charge of approximately 9%, consistent with the 5/8-inch customer charge.

Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE CUSTOMER CHARGES FOR THE OTHER METER SIZES?

A. Yes. I recommend the customer charges of the other meter sizes also be increase by approximately 1.8%, consistent with my recommended increase of the 5/8-inch customer charge. My recommended increase to each customer charge by meter size is shown below:

Meter Size	Present Rate	I&E Proposed	Percent Increase
5/8 & 3/4-inch	$13.75	$14.00	1.818%
1-inch	$28.50	$29.00	1.754%
1 ½-inch	$57.00	$58.00	1.754%
2-inch	$97.63	$99.40	1.813%
3-inch	$183.13	$186.50	1.840%
4-inch	$305.25	$310.80	1.818%
6-inch	$610.50	$621.60	1.818%
8-inch	$976.88	$994.60	1.814%

SCALE BACK OF RATES

Q. WHAT DO YOU RECOMMEND SHOULD THE COMMISSION GRANT LESS THAN THE COMPANY'S FULLY REQUESTED INCREASE?

A. Should the Commission grant less than the Company's fully requested increase and approves my recommended customer charges described above, I recommend the usage rates be scaled back prior to the scale back of my recommended customer charge until the usage rates are at present rate levels. However, if the usage rates are scaled back to present rate levels, I recommend the customer charge then be scaled back.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

Appendix A

ETHAN H. CLINE

PROFESSIONAL EXPERIENCE AND EDUCATION

EXPERIENCE:

03/2009 - Present

Bureau of Investigation and Enforcement, Pennsylvania Public Utility Commission - Harrisburg, Pennsylvania

Fixed Utility Valuation Engineer – Assists in the performance of studies and analyses of the engineering-related areas including valuation, depreciation, cost of service, quality and reliability of service as they apply to fixed utilities. Assists in reviewing, comparing and performing analyses in specific areas of valuation engineering and rate structure including valuation concepts, original cost, rate base, fixed capital costs, inventory processing, excess capacity, cost of service, and rate design.

06/2008 – 09/2008

Akens Engineering, Inc. - Shiremanstown, Pennsylvania

Civil Engineer – Responsible, primarily, for assisting engineers and surveyors in the planning and design of residential development projects

10/2007 – 05/2008

J. Michael Brill and Associates - Mechanicsburg, Pennsylvania

Design Technician – Responsible, primarily, for assisting engineers in the permit application process for commercial development projects.

01/2006 – 10/2007

CABE Associates, Inc. - Dover, Delaware

Civil Engineer – Responsible, primarily, for assisting engineers in performing technical reviews of the sewer and sanitary sewer systems of Sussex County, Delaware residential development projects.

EDUCATION:

Pennsylvania State University, State College, Pennsylvania
Bachelor of Science; Major in Civil Engineering, 2005

- Attended NARUC Rate School, Clearwater, FL

TESTIMONY SUBMITTED:

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

1. Clean Treatment Sewage Company, Docket No. R-2009-2121928
2. Pennsylvania Utility Company – Water Division, Docket No. R-2009-2103937
3. Pennsylvania Utility Company – Sewer Division, Docket No. R-2009-2103980
4. UGI Central Penn Gas, Inc., 1307(f) proceeding, Docket No. R-2010-2172922
5. PAWC Clarion Wastewater Operations, Docket No. R-2010-2166208
6. PAWC Claysville Wastewater Operations, Docket No. R-2010-2166210
7. Citizens' Electric Company of Lewisburg, Pa, Docket No. R-2010-2172665
8. City of Lancaster – Bureau of Water, Docket No. R-2010-2179103
9. Peoples Natural Gas Company LLC, Docket No. R-2010-2201702
10. UGI Central Penn Gas, Inc., Docket No. R-2010-2214415
11. Pennsylvania-American Water Company, Docket No. R-2011-2232243
12. Pentex Pipeline Company, Docket No. A-2011-2230314
13. Peregrine Keystone Gas Pipeline, LLC, Docket No. A-2010-2200201
14. Philadelphia Gas Works 1307(f), Docket No. R-2012-2286447
15. Peoples Natural Gas Company LLC, Docket No. R-2012-2285985
16. Equitable Gas Company, Docket Nos. R-2012-2312577, G-2012-2312597
17. City of Lancaster – Sewer Fund, Docket No. R-2012-2310366
18. Peoples TWP, LLC 1307(f), Docket No. R-2013-2341604
19. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2013-2361763
20. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2013-2361764
21. Joint Application, Docket Nos. A-2013-2353647, A-2013-2353649, A-2013-2353651
22. City of Dubois – Bureau of Water, Docket No. R-2013-2350509
23. The Columbia Water Company, Docket No. R-2013-2360798
24. Pennsylvania American Water Company, Docket No. R-2013-2355276
25. Generic Investigation Regarding Gas-on-Gas Competition, Docket Nos. P-2011-227868, I-2012-2320323
26. Philadelphia Gas Works 1307(f), Docket No. R-2014-2404355
27. Pike County Light and Power Company (Gas), Docket No. R-2013-2397353
28. Pike County Light and Power Company (Electric), Docket No. R-2013-2397237
29. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2014-2403939
30. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2014-2420273
31. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2014-2420276
32. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2014-2420279
33. Emporium Water Company, Docket No. R-2014-2402324
34. Borough of Hanover – Hanover Municipal Water, Docket No. R-2014-2428304
35. Philadelphia Gas Works 1307(f), Docket No. R-2015-2465656
36. Peoples Natural Gas Company LLC 1307(f), Docket No. R-2015-2465172

37. Peoples Natural Gas Company – Equitable Division 1307(f), Docket No. R-2015-2465181
38. PPL Electric Utilities Corporation, Docket No. R-2015-2469275
39. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2015-2480934
40. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2015-2480937
41. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2015-2480950
42. UGI Utilities, Inc. – Gas Division, Docket No. R-2015-2518438
43. Joint Application of Pennsylvania American Water, et al., Docket No. A-2016-2537209
44. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2016-2543309
45. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2016-2543311
46. City of Dubois – Company, Docket No. R-2016-2554150
47. UGI Penn Natural Gas, Inc., Docket No. R-2016-2580030
48. UGI Central Penn Gas, Inc. 1307(f), Docket No. R-2017-2602627
49. UGI Penn Natural Gas, Inc. 1307(f), Docket No. R-2017-2602633
50. UGI Utilities, Inc. – Gas Division 1307(f), Docket No. R-2017-2602638
51. Application of Pennsylvania American Water Company Acquisition of the Municipal Authority of the City of McKeesport, Docket No. A-2017-2606103
52. Pennsylvania American Water Company, Docket No. R-2017-2595853
53. Pennsylvania American Water Company Lead Line Petition, Docket No. P-2017-2606100
54. UGI Utilities, Inc. – Electric Division, Docket No. R-2017-2640058
55. Peoples Natural Gas Company, LLC – Peoples and Equitable Division 1307(f), Docket Nos. R-2018-2645278 & R-2018-3000236
56. Peoples Gas Company, LLC 1307(f), Docket No. R-2018-2645296
57. Columbia Gas of Pennsylvania, Inc., Docket No. R-2018-2647577
58. Duquesne Light Company, Docket No. R-2018-3000124

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Exhibit to Accompany

the

Direct Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Test Year
Average Rate Base
FTY and FPFTY Reporting
Present Rate Revenue
Proposed Rate Revenue
Customer Cost Analysis
Customer Charges
Scale Back of Rates

SUEZ Water Pennsylvania, Inc.
I&E ADJUSTMENTS TO
RATE BASE
R-2018-3000834

		Company As Filed Rate Base		
Line No.	Description	As of December 31, 2018	Adjustments	As of December 31, 2019
		(A)	(B)	(C)
1	Original Cost of Utility Plant in Service	$367,714,123	$41,675,769	$409,389,892
2	Accumulated Depreciation	$78,617,020	$6,743,924	$85,360,944
3	Net Plant in Service	$289,097,103	$34,931,845	$324,028,948
4	CIAC and Contributions	($63,114,693)	$0	($63,114,693)
5	Add:			
6	Deferred Taxes	($18,237,542)	($573,193)	($18,810,736)
7	Materials and Supplies	$481,594	$0	$481,594
8	Cash Working Capital	$821,760	$41,986	$863,746
9	Total Rate Base	$209,048,221	$34,400,638	$243,448,860

I&E ADJUSTMENTS TO RATE BASE

Line No.	Description	Company Pro Forma December 31, 2018	Adjusted From Company	I&E Pro Forma December 31, 2018	Company Pro Forma December 31, 2019	Adjusted From Company	I&E Pro Forma December 31, 2019	I&E Adjustments	I&E Average
		(A)	(B)	(C)	(D)	(E)	(F)	(G)=(H)-(D)	(H)
10	Original Cost of Utility Plant in Service	$367,714,123	$0	$367,714,123	$409,389,892	($5,820,000)	$403,569,892	($23,747,885)	$385,642,008
11	Accumulated Depreciation	$78,617,020	$0	$78,617,020	$85,360,944	($798,577)	$84,562,367	($3,771,251)	$81,589,693
12	Net Plant in Service	$289,097,103	$0	$289,097,103	$324,028,948	($5,021,423)	$319,007,526	($19,976,634)	$304,052,314
13	CIAC and Contributions	($63,114,693)	$0	($63,114,693)	($63,114,693)	$0	($63,114,693)	$0	($63,114,693)
14	Add:								
15	**Deferred Taxes**	**($18,237,542)**	**$0**	**($18,237,542)**	**($18,810,736)**	**$0**	**($18,810,736)**	**$286,597**	**($18,524,139)**
16	Materials and Supplies	$481,594	$19,474	$501,067	$481,594	$19,474	$501,067	$19,474	$501,067
17	***Cash Working Capital***	***$821,760***	***$0***	***$821,760***	***$863,746***	***($67,382)***	***$796,364***	***($67,382)***	***$796,364***
18	Total Rate Base	$209,048,221	$19,474	$209,067,695	$243,448,860	($5,069,331)	$238,379,528	($19,737,946)	$223,710,914

I&E Exhibit No. 3
Schedule 1

BUREAU OF INVESTIGATION & ENFORCEMENT DATA REQUESTS

SUEZ WATER PENNSYLVANIA, INC.

Docket No. R-2018-3000834

I&E RB-7-D
(Hollenbach)
May 21, 2018

I&E-RB-7-D For all plant additions for the future test year ending December 31, 2018, please provide a schedule showing the following for each plant addition:

A. Total monthly amount spent as of December 31, 2018;

B. Location and overall cost of each project;

C. Starting date of each project; and

D. Anticipated completion date of each project.

Response: Please see I&E RB-7-D Attachment which is May 2018's forecast report that captures information to date for the 2018 projects to be in service either by December 2018 or December 2019 except C18M105, Mechanicsburg SOS-Hempt Bros. WTP for $100,000.

I&E-RB-7-D

Project ID	Project Title	Jan Budget	Jan RF	Jan Actual	Feb Budget	Feb RF	Feb Actual	Mar Budget	Mar RF	Mar Actual	Apr Budget	Apr RF	Apr Actual	May Budget	May RF	May Actual	Jun Budget
	Carryover	28.0	28.0	84.8	619.5	619.5	152.3	748.5	748.5	22.2	775.3	540.9	602.1	1,344.0	878.3		1,700.0
C18A501_002	Intake and Source Improvements - R	-	-	-	-	-	-	-	-	-	-	-	-	-	-		20.0
C18A502_002	Rockville Intake Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
C18B501_002	Treatment Needs - R	-	-	-	10.0	10.0	16.2	20.0	20.0	38.6	30.0	40.0	48.9	50.0	50.0		70.0
C18B502_002	Sixth St Filter 2 Underdrain	-	-	-	-	-	7.9	10.0	10.0	54.4	25.0	75.0	66.6	60.0	85.0		90.0
C18C501_002	Pumping Improvements- Replacements - R	-	-	-	10.0	10.0	2.8	15.0	15.0	39.0	30.0	50.0	38.8	50.0	60.0		70.0
C18C503_002	Sixth St. HS #5 Pump Repl. and VFD	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
C18D100_002	New Main	-	-	-	-	-	-	-	-	24.1	160.0	160.0	237.5	275.0	275.0		500.0
C18D300_002	Extensions, Developer Projects	200.0	200.0	-	125.0	125.0	4.7	320.0	320.0	8.0	515.0	310.0	15.3	715.0	508.0		910.0
C18D300_002	Extensions, Developer Projects, A&C	(200.0)	(200.0)	(0.0)	(400.0)	(400.0)	(0.0)	(600.0)	(600.0)	(38.6)	(800.0)	(800.0)	(105.1)	(1,000.0)	(1,000.0)		(1,200.0)
C18D350_002	Developer Refunds	170.0	170.0	271.0	275.0	275.0	275.4	280.0	280.0	488.4	285.0	490.0	488.4	285.0	492.0		290.0
C18D400_002	Extensions for Bona Fide Customer	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
C18D600_002	Replacement Main Projects	25.0	25.0	46.4	150.0	150.0	258.3	605.0	605.0	530.6	1,570.0	1,228.8	952.0	2,930.0	1,630.0		4,221.0
C18D700_002	Highway Main Projects	-	-	-	-	-	-	80.0	80.0	-	200.0	150.0	184.2	350.0	300.0		500.0
C18D900_002	Distribution Improvments (NRW) - R	-	-	-	-	-	-	25.0	25.0	-	50.0	-	-	75.0	-		100.0
C18D901_002	Distribution Hydraulic Model	-	-	-	-	-	-	-	-	1.6	10.0	5.0	6.4	25.0	25.0		50.0
C18E501_002	Tank Painting	-	-	-	-	-	-	-	-	-	100.0	100.0	-	250.0	-		375.0
C18E503_002	Stonehedge Tank Replacement	-	-	-	-	-	-	-	-	-	-	-	-	15.0	-		30.0
C18E504_002	Susquehanna Village Hydropnumatic Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
C18J101_002	OT Optimization-Smart Utility - R	-	-	-	-	-	-	-	-	-	-	-	-	-	-		25.0
C18J501_002	SCADA - R	-	-	-	-	-	1.5	1.5	1.5	4.4	1.5	5.0	4.2	2.5	7.5		5.0
C18K001_002	Building & Facility Improvments - R	-	-	-	-	-	6.9	10.0	10.0	15.3	15.0	18.0	19.3	20.0	20.0		25.0
C18K101_002	Safety & Security Improvements- R	-	-	-	-	-	1.7	1.7	1.7	2.0	1.7	3.5	1.9	5.0	5.0		10.0
C18K102_002	Mini Excavator	-	-	-	-	-	-	-	-	-	94.0	-	-	94.0	-		94.0
C18K501_002	New and Replacement Small Tools & Equip. - R	-	-	-	-	-	3.6	5.0	5.0	6.2	60.0	15.0	6.2	60.0	25.0		60.0
C18K502_002	Electrical Upgrades/Repl - R	-	-	-	-	-	2.8	5.0	5.0	7.6	5.0	10.0	9.0	10.0	15.0		20.0
C18K505_002	Dallas Skid Steer Loader	-	-	-	-	-	-	-	-	-	35.0	-	35.8	35.0	35.8		35.0
C18M101_002	Mahoning Township Interconnection	-	-	13.0	-	-	(6.4)	15.0	15.0	(8.0)	50.0	(8.0)	(8.0)	125.0	-		175.0
C18M102_002	Mahoning Acquisition	20.0	20.0	-	25.0	25.0	37.3	40.0	40.0	56.6	45.0	60.0	70.1	50.0	75.0		55.0
C18M103_002	Adams Drive Addition	-	-	-	-	-	-	10.0	10.0	-	25.0	-	4.9	50.0	-		75.0
C18M104_002	Rabold Sed Tank DBP Study	-	-	-	-	-	-	-	-	-	10.0	-	-	25.0	-		50.0
C18M105_002	Mechanicsburg SOS - Hempt Bros WTP (move from C17A101)	-	-	-	-	-	-	-	-	-	-	-	-	-	-		25.0
CYYD001_002	New Fire Hydrants	-	-	4.7	4.7	4.7	5.1	5.5	5.5	6.3	6.0	7.5	6.3	10.0	10.0		15.0
CYYD002_002	New Short Mains & Valves	-	-	24.3	50.0	50.0	53.0	75.0	75.0	82.4	100.0	100.0	112.7	125.0	125.0		150.0
CYYD501_002	Replacement Fire Hydrants - DSIC	-	-	(1.5)	-	-	2.4	4.0	4.0	1.6	6.0	6.0	2.9	10.0	10.0		15.0
CYYD502_002	Replacement Short Mains & Valves - DSIC	80.0	80.0	97.7	110.0	110.0	166.0	200.0	200.0	228.4	250.0	250.0	259.1	350.0	350.0		450.0
CYYF001_002	New Domestic Services (Company Only)	-	-	11.0	20.0	20.0	38.1	45.0	45.0	58.3	50.0	65.0	59.1	70.0	70.0		80.0
CYYF003_002	New Fire Services (Company Only)	-	-	0.4	-	-	0.3	5.0	5.0	0.3	10.0	2.0	0.5	15.0	4.0		20.0
CYYF501_002	Replacement Domestic Services - DSIC	25.0	25.0	50.0	75.0	75.0	71.7	100.0	100.0	139.7	125.0	150.0	172.5	175.0	200.0		225.0
CYYF503_002	Replacement Fire Services	-	-	-	-	-	-	-	-	-	-	-	0.9	-	0.9		-
CYYG001_002	New Customer Meters	4.0	4.0	6.6	8.0	8.0	8.2	12.0	12.0	20.6	15.0	50.0	33.6	75.0	75.0		90.0
CYYG501_002	Replacement Customer Meters Regulatory- DSIC	20.0	20.0	29.3	30.0	30.0	70.1	80.0	80.0	124.2	100.0	175.0	167.1	300.0	300.0		340.0
OVERHEAD	LOCAL OVERHEAD	137.5	137.5	102.6	275.0	275.0	205.7	412.5	412.5	372.3	550.0	550.0	483.4	687.5	687.5		825.0
		510	**510**	**740**	**1,387**	**1,387**	**1,385**	**2,531**	**2,531**	**2,286**	**4,505**	**3,809**	**3,977**	**7,718**	**5,319**	-	**10,590**

I&E-RB-7-D

Project ID	Project Title	Jun RF	Jun Actual	Jul Budget	Jul RF	Jul Actual	Aug Budget	Aug RF	Aug Actual	Sept Budget	Sept RF	Sept Actual	Oct Budget	Oct RF	Oct Actual	Nov Budget
	Carryover	1,171.5		1,891.6	1,400.1		2,046.6	1,796.6		2,143.6	2,096.1		1,915.6	1,874.1		1,914.6
C18A501_002	Intake and Source Improvements - R	20.0		40.0	40.0		60.0	60.0		80.0	80.0		100.0	100.0		110.0
C18A502_002	Rockville Intake Improvements	-		-	-		-	-		-	-		340.0	340.0		370.0
C18B501_002	Treatment Needs - R	70.0		90.0	90.0		110.0	110.0		140.0	140.0		160.0	160.0		180.0
C18B502_002	Sixth St.Filter 2 Underdrain	90.0		90.0	90.0		90.0	90.0		90.0	90.0		90.0	90.0		90.0
C18C501_002	Pumping Improvements- Replacements - R	70.0		90.0	90.0		110.0	110.0		140.0	140.0		160.0	160.0		175.0
C18C503_002	Sixth St. HS #5 Pump Repl. and VFD	-		-	-		-	-		50.0	50.0		100.0	100.0		250.0
C18D100_002	New Main	300.0		625.0	450.0		715.3	715.3		715.3	715.3		945.3	945.3		1,065.3
C18D300_002	Extensions, Developer Projects	690.0		1,100.0	890.0		1,280.0	1,280.0		1,470.0	1,285.0		1,650.0	1,483.0		1,825.0
C18D300_002	Extensions, Developer Projects, A&C	(1,200.0)		(1,400.0)	(1,400.0)		(1,600.0)	(1,600.0)		(1,800.0)	(1,800.0)		(2,000.0)	(2,000.0)		(2,200.0)
C18D350_002	Developer Refunds	510.0		300.0	510.0		320.0	320.0		330.0	515.0		350.0	517.0		375.0
C18D400_002	Extensions for Bona Fide Customer	-		-	-		-	-		-	-		-	-		-
C18D600_002	Replacement Main Projects	2,440.0		5,646.0	3,922.7		7,169.7	6,821.4		8,249.2	7,383.4		9,031.5	8,817.2		8,881.5
C18D700_002	Highway Main Projects	525.0		675.0	703.8		825.0	825.0		975.0	1,003.8		1,075.0	1,103.8		1,150.0
C18D900_002	Distribution Improvments (NRW) - R	50.0		110.0	75.0		125.0	125.0		150.0	150.0		175.0	175.0		200.0
C18D901_002	Distribution Hydraulic Model	50.0		65.0	65.0		80.0	80.0		110.0	110.0		130.0	130.0		150.0
C18E501_002	Tank Painting	-		500.0	-		650.0	-		800.0	50.0		1,000.0	75.0		1,100.0
C18E503_002	Stonehedge Tank Replacement	-		40.0	-		50.0	-		60.0	5.0		75.0	5.0		85.0
C18E504_002	Susquehanna Village Hydropnumatic Tank	-		-	-		-	-		50.0	50.0		125.0	125.0		140.0
C18J101_002	OT Optimization-Smart Utility - R	25.0		30.0	30.0		50.0	50.0		60.0	60.0		65.0	65.0		75.0
C18J501_002	SCADA - R	8.5		10.0	10.0		30.0	30.0		60.0	60.0		80.0	80.0		90.0
C18K001_002	Building & Facility Improvments - R	25.0		30.0	30.0		50.0	50.0		80.0	80.0		100.0	100.0		110.0
C18K101_002	Safety & Security Improvements- R	10.0		25.0	25.0		40.0	40.0		55.0	55.0		60.0	60.0		70.0
C18K102_002	Mini Excavator	94.0		94.0	94.0		94.0	94.0		94.0	94.0		94.0	94.0		94.0
C18K501_002	New and Replacement Small Tools & Equip. - R	40.0		60.0	50.0		60.0	60.0		75.0	75.0		80.0	80.0		85.0
C18K502_002	Electrical Upgrades/Repl - R	20.0		30.0	30.0		40.0	40.0		50.0	50.0		70.0	70.0		75.0
C18K505_002	Dallas Skid Steer Loader	35.8		35.0	35.8		35.0	35.0		35.0	35.8		35.0	35.8		35.0
C18M101_002	Mahoning Township Interconnection	50.0		230.0	125.0		230.0	230.0		230.0	230.0		-	-		-
C18M102_002	Mahoning Acquisition	77.0		60.0	80.0		65.0	65.0		70.0	85.0		75.0	85.0		80.0
C18M103_002	Adams Drive Addition	25.0		90.0	75.0		90.0	90.0		90.0	90.0		90.0	90.0		90.0
C18M104_002	Rabold Sed Tank DBP Study	-		75.0	25.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0
C18M105_002	Mechanicsburg SOS - Hempt Bros WTP (move from C17A101)	25.0		75.0	75.0		100.0	100.0		100.0	100.0		100.0	100.0		100.0
CYYD001_002	New Fire Hydrants	15.0		25.0	25.0		30.0	30.0		35.0	35.0		36.0	36.0		36.0
CYYD002_002	New Short Mains & Valves	150.0		175.0	175.0		185.0	185.0		200.0	200.0		210.0	210.0		230.0
CYYD501_002	Replacement Fire Hydrants - DSIC	15.0		25.0	25.0		30.0	30.0		35.0	35.0		36.0	36.0		36.0
CYYD502_002	Replacement Short Mains & Valves - DSIC	450.0		500.0	500.0		650.0	650.0		700.0	700.0		750.0	750.0		800.0
CYYF001_002	New Domestic Services (Company Only)	80.0		90.0	90.0		100.0	100.0		110.0	110.0		115.0	115.0		125.0
CYYF003_002	New Fire Services (Company Only)	15.0		25.0	25.0		30.0	30.0		35.0	35.0		40.0	40.0		45.0
CYYF501_002	Replacement Domestic Services - DSIC	225.0		250.0	250.0		375.0	375.0		385.0	385.0		300.0	300.0		325.0
CYYF503_002	Replacement Fire Services	0.9		-	0.9		-	-		-	0.9		20.0	20.0		30.0
CYYG001_002	New Customer Meters	90.0		100.0	100.0		110.0	110.0		120.0	120.0		150.0	150.0		165.0
CYYG501_002	Replacement Customer Meters Regulatory- DSIC	340.0		400.0	400.0		450.0	450.0		500.0	500.0		650.0	650.0		700.0
OVERHEAD	LOCAL OVERHEAD	825.0		962.5	962.5		1,100.0	1,100.0		1,237.5	1,237.5		1,375.0	1,375.0		1,512.5
		7,428	-	13,259	10,165	-	16,076	14,777	-	18,210	16,537	-	20,053	18,842	-	20,870

I&E-RB-7-D

Project ID	Project Title	Nov RF	Nov Actual	Dec Budget	Dec RF	Dec Actual	Start Month	In-Service Month
	Carryover	1,880.1		1,913.6	1,885.1			
C18A501_002	Intake and Source Improvements - R	110.0		120.0	120.0		May	Dec
C18A502_002	Rockville Intake Improvements	370.0		420.0	420.0		Jan	2019
C18B501_002	Treatment Needs - R	180.0		200.0	200.0		Jan	Dec
C18B502_002	Sixth St.Filter 2 Underdrain	90.0		90.0	90.0		Jan	May
C18C501_002	Pumping Improvements- Replacements - R	175.0		200.0	200.0		Jan	Dec
C18C503_002	Sixth St. HS #5 Pump Repl. and VFD	250.0		375.0	375.0		Aug	Nov
C18D100_002	New Main	1,065.3		1,215.3	1,215.3		Various	Various
C18D300_002	Extensions, Developer Projects	1,682.0		2,500.0	2,500.0			
C18D300_002	Extensions, Developer Projects, A&C	(2,200.0)		(2,500.0)	(2,500.0)			
C18D350_002	Developer Refunds	518.0		400.0	520.0			
C18D400_002	Extensions for Bona Fide Customer	-		10.0	10.0			
C18D600_002	Replacement Main Projects	9,500.0		9,206.5	10,229.7		Various	Various
C18D700_002	Highway Main Projects	1,178.8		1,698.2	1,727.0		Various	Various
C18D900_002	Distribution Improvments (NRW) - R	200.0		200.0	200.0		May	Dec
C18D901_002	Distribution Hydraulic Model	150.0		150.0	150.0		Feb	Dec
C18E501_002	Tank Painting	351.2		1,100.0	351.2		Aug	Dec
C18E503_002	Stonehedge Tank Replacement	5.0		100.0	5.0		Aug	Dec
C18E504_002	Susquehanna Village Hydropnumatic Tank	140.0		150.0	150.0		Aug	Dec
C18J101_002	OT Optimization-Smart Utility - R	75.0		80.0	80.0		May	Dec
C18J501_002	SCADA - R	90.0		96.0	96.0		Jan	Dec
C18K001_002	Building & Facility Improvments - R	110.0		120.0	120.0		Jan	Dec
C18K101_002	Safety & Security Improvements- R	70.0		80.0	80.0		Jan	Dec
C18K102_002	Mini Excavator	94.0		94.0	94.0		May	Jun
C18K501_002	New and Replacement Small Tools & Equip. - R	85.0		96.0	96.0		Jan	Dec
C18K502_002	Electrical Upgrades/Repl - R	75.0		80.0	80.0		Jan	Dec
C18K505_002	Dallas Skid Steer Loader	35.8		35.0	35.8		Mar	Apr
C18M101_002	Mahoning Township Interconnection	-		-	-		Apr	2019
C18M102_002	Mahoning Acquisition	85.0		85.0	85.0		Jan	2019
C18M103_002	Adams Drive Addition	90.0		90.0	90.0		Mar	2019
C18M104_002	Rabold Sed Tank DBP Study	100.0		100.0	100.0		Jun	2019
C18M105_002	Mechanicsburg SOS - Hempt Bros WTP (move from C17A101)	100.0		100.0	100.0		May	2023
CYYD001_002	New Fire Hydrants	36.0		36.0	36.0		Jan	Dec
CYYD002_002	New Short Mains & Valves	230.0		240.0	240.0		Jan	Dec
CYYD501_002	Replacement Fire Hydrants - DSIC	36.0		36.0	36.0		Jan	Dec
CYYD502_002	Replacement Short Mains & Valves - DSIC	800.0		900.0	900.0		Jan	Dec
CYYF001_002	New Domestic Services (Company Only)	125.0		125.0	125.0		Jan	Dec
CYYF003_002	New Fire Services (Company Only)	45.0		50.0	50.0		Jan	Dec
CYYF501_002	Replacement Domestic Services - DSIC	325.0		376.0	376.0		Jan	Dec
CYYF503_002	Replacement Fire Services	30.0		35.0	35.0		Mar	Dec
CYYG001_002	New Customer Meters	165.0		140.0	140.0		Jan	Dec
CYYG501_002	Replacement Customer Meters Regulatory- DSIC	700.0		760.0	760.0		Jan	Dec
OVERHEAD	LOCAL OVERHEAD	1,512.5		1,650.0	1,650.0			
		20,660	-	22,953	23,254	-		

Joint Committee on Administrative Rules

ADMINISTRATIVE CODE

TITLE 83: PUBLIC UTILITIES
CHAPTER I: ILLINOIS COMMERCE COMMISSION
SUBCHAPTER b: PROVISIONS APPLICABLE TO MORE THAN ONE KIND OF UTILITY
PART 287 RATE CASE TEST YEAR
SECTION 287.20 TEST YEAR OPTIONS

Section 287.20 Test Year Options

A utility, at its option, may propose either one of the following periods as its proposed test year:

a) Historical. Any consecutive 12 month period, beginning no more than 24 months prior to the date of the utility's filing, for which actual data are available at the time of filing new tariffs; or

b) Future. Any consecutive 12 month period of forecasted data beginning no earlier than the date new tariffs are filed and ending no later than 24 months after the date new tariffs are filed.

Joint Committee on Administrative Rules

ADMINISTRATIVE CODE

TITLE 83: PUBLIC UTILITIES
CHAPTER I: ILLINOIS COMMERCE COMMISSION
SUBCHAPTER b: PROVISIONS APPLICABLE TO MORE THAN ONE KIND OF UTILITY
PART 285 STANDARD INFORMATION REQUIREMENTS FOR PUBLIC UTILITIES AND TELECOMMUNICATIONS CARRIERS IN FILING FOR AN INCREASE IN RATES
SECTION 285.2005 SCHEDULE B-1: JURISDICTIONAL RATE BASE SUMMARY BY ICC ACCOUNT

Section 285.2005 Schedule B-1: Jurisdictional Rate Base Summary by ICC Account

a) Schedule B-1 shall present, by ICC Account with appropriate subtotals, data for the jurisdiction for which a rate increase is requested for the test year. Where rates are being sought for more than one applicable service or for more than one service area (e.g., district, division), a separate B-1 shall be provided for each utility service type and/or service area. Information provided shall include:

1) ICC Account number;

2) ICC Account description;

3) Amount included in the unadjusted test year jurisdictional rate base;

4) Amounts of any adjustments; and

5) Amount included in the pro forma jurisdictional balance.

b) The presentation of each rate base component shall include the unadjusted total company balance, the total of all adjustments to each rate base component, and the applicable service pro forma balance. The source for the unadjusted balance shall be the general ledger for a historical test year as defined in 83 Ill. Adm. Code 287 or the utility's forecast for a future test year as defined in 83 Ill. Adm. Code 287. The resulting jurisdictional pro forma balance shall represent that level of rate base investment attributable to the provision of services to jurisdictional customers.

c) The components of rate base shall include, but not be limited to, the following:

1) Gross utility plant in service at original cost;

2) Reserve for accumulated depreciation;

3) Net utility plant in service;

4) Other individual items comprising rate base separately listed, such as working capital, construction work in progress included in rate base, customer advances, and accumulated deferred income taxes; and

5) Total rate base.

d) All items shall be supported by schedules. If the item requires a schedule other than as described by the standard information requirements, a schedule shall be provided that includes the following:

1) Dollars involved by account; and

2) Reasons for additions or deletions to rate base.

e) If the rate base components of a future test year are not derived from average data for the test year or from monthly average data, provide work papers supporting Schedule B-1 that reflect the 13 month-end balances of all rate base items commencing with the month-end balance for the month prior to the beginning of the test year and ending with the month-end balance for the last month of the test year.

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

OCA-IV-23
(Hollenbach)
June 6, 2018

OCA-IV-23 Please provide the supporting documentation showing the determination of the 60% of the Mahoning purchase price which was included in rate base in this proceeding.

Response: The appraisals for the Mahoning Township system should be finalized by early June and the Company reserves the right to update information as necessary. However, based on the balance sheet data that we did have at the time, below is the estimated value of the water assets:

Pennsylvania Public Utility Commission
v.
SUEZ Water Pennsylvania, Inc.

Docket No. R-2018-3000834

Interrogatories of the
Office of Consumer Advocate
Set IV

Assets		Plant Account	Estimated Value
5.8 Acres		303.2	$ 3,000
23 easements or Rights-of-Way		303.2	$ 3,000
	Year Built		
300,000 Gallon Tank	1968	330.4	$ -
500,000 Gallon Tank	1990	330.4	$ 308,800
75,000 Gallon Tank	2007	330.4	$ 96,240
Route 11 Water Booster Station		304.4	$ 12,450
Montgomery Village Booster Station		304.4	$ 33,700
Edgewood Booster Station		304.4	$ 40,000
Woods of Welsh Booster Station		304.4	$ 30,000
Pressure Reducing Station		304.4	$ 5,000
Chlorination Building		304.3	$ 5,000
Storage Building		304.5	$ 70,000
137 Hydrants		335.4	$ 214,953
	Feet		
4" main in feet	3,485	331.4	$ 121,975
6" main in feet	44,141	331.4	$ 1,677,358
8" main in feet	45,302	331.4	$ 1,721,476
10" main in feet	12,778	331.4	$ 488,759
12" main in feet	10,454	331.4	$ 402,689
1200 meters		334.4	$ 180,000
1200 services		333.4	$ 405,600
			$ 5,820,000

SUEZ WATER PENNSYLVANIA, INC.
I&E ADJUSTMENTS TO
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND
I&E ADJUSTMENTS TO CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2019

Line No.		DEPRECIABLE GROUP (A)	COMPANY ORIGINAL COST (C)	ADJUSTMENT (D)	I&E ORIGINAL COST (E)	COMPANY BOOK RESERVE (F)	ADJUSTMENTS (F)	I&E BOOK RESERVE (G)	COMPANY FUTURE ACCRUALS (H)	ADJUSTMENTS (I)	I&E FUTURE ACCRUALS (J)	ANNUAL COMPANY ACCRUAL AMOUNT (K)	ANNUAL ADJUSTMENT (L)	ANNUAL I&E ACCRUAL AMOUNT (M)	COMPOSITE ACCRUAL RATE (N)	REMAINING LIFE (O)
		INTANGIBLE PLANT														
1	301	ORGANIZATION	66,399.00		66,399.00	152,179		152,179								
2	302	FRANCHISES AND CONSENTS	64,265.56		64,265.56											
3	303	MISCELLANEOUS INTANGIBLE PLANT	4,429,099.01	6,000	4,423,099.01	(130,715)		(130,715)								
4		*TOTAL INTANGIBLE PLANT*	**4,559,763.57**	**6,000**	**4,553,763.57**	**21,464**		**21,464**								
		DEPRECIABLE PLANT														
		STRUCTURES AND IMPROVEMENTS														
5	304.2	PUMPING	3,721,078.15		3,721,078.15	1,038,181	0	1,038,181	2,682,897	0	2,682,897	82,531	0	82,531	2.22	32.5
6	304.3	WATER TREATMENT PLANT														
7		BLOOMSBURG TREATMENT PLANT	181,380.86 *	*	181,380.86	121,462	0	121,462	59,919	0	59,919	8,185	(0)	8,185	4.51	7.3
8		BLOOMSBURG TREATMENT PLANT - NEW	5,829,778.36 *	*	5,829,778.36	429,119	0	429,119	5,400,659	0	5,400,659	135,084	0	135,084	2.32	40.0
9		SIXTH STREET PLANT	4,160,026.78 *	*	4,160,026.78	1,715,268	0	1,715,268	2,444,759	0	2,444,759	113,621	(0)	113,621	2.73	21.5
10		RICHARD C. RABOLD	1,619,181.24 *	*	1,619,181.24	859,750	0	859,750	759,431	0	759,431	40,356	(0)	40,356	2.49	18.8
11		MARKET STREET	101,359.72 *	*	101,359.72	82,692	0	82,692	18,668	0	18,668	4,432	(0)	4,432	4.37	4.2
12		OLD HUMMELSTOWN PLANT	86,583.70 *	*	86,583.70	86,584	0	86,584	0	0	0	0	0	0	-	-
13		HUMMELSTOWN MEMBRANE PLANT	4,410,545.60 *	*	4,410,545.60	1,235,044	0	1,235,044	3,175,501	0	3,175,501	104,571	0	104,571	2.37	30.4
14		**OTHER TREATMENT FACILITIES**	**3,093,200.07**	**5,000**	**3,088,200.07**	**559,316**	**(904)**	**558,411**	**2,533,884**	**(4,096)**	**2,529,789**	**70,447**	**(114)**	**70,333**	**2.28**	**36.0**
15		TOTAL WATER TREATMENT PLANT	19,482,056.33		19,477,056.33	5,089,235	(904)	5,088,331	14,392,821	(4,096)	14,388,726	476,696	(114)	476,582	2.45	30.2
16	**304.4**	**TRANSMISSION AND DISTRIBUTION**	**419,271.11**	**121,150**	**298,121.11**	**31,008**	**(8,960)**	**22,048**	**388,263**	**(112,190)**	**276,073**	**12,150**	**(3,511)**	**8,639**	**2.90**	**32.0**
17	304.51	OFFICES														
18		BLOOMSBURG TREATMENT PLANT	9,243,292.21 *	*	9,243,292.21	671,672	0	671,672	8,571,620	0	8,571,620	213,998	0	213,998	2.32	40.1
19		OTHER OFFICES	901,876.60		901,876.60	234,777	0	234,777	667,100	0	667,100	23,413	(0)	23,413	2.60	28.5
20		TOTAL OFFICES	10,145,168.81	0	10,145,168.81	906,449	0	906,449	9,238,720	0	9,238,720	237,411	(0)	237,411	2.34	38.9
21	304.52	STORES, SHOP AND GARAGE														
22		SUMMIT VIEW MAINTENANCE BUILDING	3,796,397.30 *	*	3,796,397.30	521,667	0	521,667	3,274,730	0	3,274,730	155,349	(0)	155,349	4.09	21.1
23		OTHER MAINTENANCE BUILDINGS	539,833.39		539,833.39	103,288	0	103,288	436,546	0	436,546	19,010	(0)	19,010	3.52	23.0
24		TOTAL ACCOUNT STORES, SHOP AND GARAGE	4,336,230.69	0	4,336,230.69	624,955	0	624,955	3,711,276	0	3,711,276	174,359	(0)	174,359	4.02	21.3
25	**304.53**	**MISCELLANEOUS**	**351,471.62**	**70,000**	**281,471.62**	**182,461**	**(36,339)**	**146,121**	**169,011**	**(33,661)**	**135,350**	**16,055**	**(3,198)**	**12,857**	**4.57**	**10.5**
26		TOTAL STRUCTURES AND IMPROVEMENTS	38,455,276.71	196,150	38,259,126.71	7,872,288	(46,203)	7,826,085	30,582,988	(149,947)	30,433,042	999,202	(6,822)	992,380	2.58	30.8
27	305	COLLECTING AND IMPOUNDING RESERVOIRS	434,632.39		434,632.39	115,869	0	115,869	318,763	0	318,763	7,983	0	7,983	1.84	39.9
28	306	LAKE, RIVER AND OTHER INTAKES														
29		ROCKVILLE INTAKE	4,662,260.11 *	*	4,662,260.11	685,138	0	685,138	3,977,122	0	3,977,122	166,366	(0)	166,366	3.57	23.9
30		HUMMELSTOWN INTAKE	1,335,191.80 *	*	1,335,191.80	317,516	0	317,516	1,017,676	0	1,017,676	29,235	(0)	29,235	2.19	34.8
31		OTHER INTAKES	509,724.53		509,724.53	83,586	0	83,586	426,139	0	426,139	13,184	(0)	13,184	2.59	32.3
32		TOTAL LAKE, RIVER AND OTHER INTAKES	6,507,176.44	0	6,507,176.44	1,086,240	0	1,086,240	5,420,937	0	5,420,937	208,785	(0)	208,785	3.21	26.0
33	307	WELLS AND SPRINGS	1,028,041.81		1,028,041.81	545,289	0	545,289	482,753	0	482,753	17,514	(0)	17,514	1.70	27.6
34	308	INFILTRATION GALLERIES AND TUNNELS	13,358.04		13,358.04	2,857	0	2,857	10,501	0	10,501	400	(0)	400	2.99	26.3
		PUMPING EQUIPMENT														
35	311.2	ELECTRIC PUMPING EQUIPMENT	16,307,072.06		16,307,072.06	5,224,981	0	5,224,981	11,082,091	0	11,082,091	583,227	(0)	583,227	3.58	19.0
36	311.3	OIL ENGINE PUMPING EQUIPMENT	314,155.59		314,155.59	254,820	0	254,820	59,336	0	59,336	3,833	(0)	3,833	1.22	15.5
37		TOTAL PUMPING EQUIPMENT	16,621,227.65	0	16,621,227.65	5,479,801	0	5,479,801	11,141,427	0	11,141,427	587,060	(0)	587,060	3.53	19.0

Line No		DEPRECIABLE GROUP (A)	COMPANY ORIGINAL COST (C)	ADJUSTMENT (D)	I&E ORIGINAL COST (E)	COMPANY BOOK RESERVE (F)	ADJUSTMENT (F)	I&E BOOK RESERVE (G)	COMPANY FUTURE ACCRUALS (H)	ADJUSTMENTS (I)	I&E FUTURE ACCRUALS (J)	ANNUAL COMPANY ACCRUAL AMOUNT (K)	ANNUAL ADJUSTMENT (L)	ANNUAL I&E ACCRUAL AMOUNT (M)	COMPOSITE ACCRUAL RATE (N)	REMAINING LIFE (O)
		WATER TREATMENT PLANT														
38	320.1	STRUCTURES AND IMPROVEMENTS														
39		BLOOMSBURG TREATMENT PLANT	338,354.21 *	*	338,354.21	328,623	0	328,623	9,731	0	9,731	1,217	0	1,217	0.36	8.0
40		BLOOMSBURG TREATMENT PLANT - NEW	13,979,069.61 *	*	13,979,069.61	1,705,396	0	1,705,396	12,273,674	0	12,273,674	393,097	(0)	393,097	2.81	31.2
41		SIXTH STREET PLANT	10,675,645.55 *	*	10,675,645.55	6,119,550	0	6,119,550	4,556,095	0	4,556,095	220,695	0	220,695	2.07	20.6
42		RICHARD C. RABOLD	1,756,585.15 *	*	1,756,585.15	1,226,980	0	1,226,980	529,605	0	529,605	27,972	0	27,972	1.59	18.9
43		MARKET STREET	192,621.85 *	*	192,621.85	177,020	0	177,020	15,602	0	15,602	3,522	(0)	3,522	1.83	4.4
44		OLD HUMMELSTOWN PLANT	858,433.64 *	*	858,433.64	858,434	0	858,434	0	0	0	0	0	0	-	-
45		HUMMELSTOWN MEMBRANE PLANT	9,469,382.38 *	*	9,469,382.38	3,882,532	0	3,882,532	5,586,851	0	5,586,851	198,547	(0)	198,547	2.10	28.1
46		OTHER TREATMENT FACILITIES	892,814.19		892,814.19	498,465	0	498,465	394,349	0	394,349	16,326	0	16,326	1.83	24.2
47		TOTAL STRUCTURES AND IMPROVEMENTS	38,162,906.58	0	38,162,906.58	14,797,000	0	14,797,000	23,365,907	0	23,365,907	861,376	(0)	861,376	2.26	27.1
48	320.2	PAINTING	447,524.82		447,524.82	262,661	0	262,661	184,863	0	184,863	39,209	0	39,209	8.76	4.7
49	320.3	CHEMICAL EQUIPMENT	8,436,076.94		8,436,076.94	1,197,295	0	1,197,295	7,238,782	0	7,238,782	572,150	(0)	572,150	6.78	12.7
50		TOTAL WATER TREATMENT PLANT	47,046,508.34	0	47,046,508.34	16,256,957	0	16,256,957	30,789,552	0	30,789,552	1,472,735	(0)	1,472,735	3.13	20.9
51	**330**	**DISTRIBUTION RESERVOIRS AND STANDPIPES**	**13,813,043.79**	**405,040**	**13,408,003.79**	**3,680,088**	**(107,911)**	**3,572,177**	**10,132,956**	**(297,129)**	**9,835,827**	**385,353**	**(11,300)**	**374,053**	**2.79**	**26.3**
52	**331**	**TRANSMISSION AND DISTRIBUTION MAINS**	**192,092,452.47**	**4,412,257**	**187,680,195.47**	**17,895,858**	**(411,058)**	**17,484,800**	**174,196,594**	**(4,001,199)**	**170,195,395**	**2,992,182**	**(68,729)**	**2,923,453**	**1.56**	**58.2**
53	**333**	**SERVICES**	**41,020,732.30**	**405,600**	**40,615,132.30**	**10,799,668**	**(106,784)**	**10,692,884**	**30,221,064**	**(298,816)**	**29,922,248**	**736,362**	**(7,281)**	**729,081**	**1.80**	**41.0**
54	**334**	**METERS**	**21,503,128.88**	**180,000**	**21,323,128.88**	**6,960,056**	**(58,262)**	**6,901,794**	**14,543,073**	**(121,738)**	**14,421,334**	**955,415**	**(7,998)**	**947,417**	**4.44**	**15.2**
55	**335**	**HYDRANTS**	**8,108,690.83**	**214,953**	**7,893,737.83**	**2,578,680**	**(68,358)**	**2,510,322**	**5,530,011**	**(146,595)**	**5,383,416**	**135,573**	**(3,594)**	**131,979**	**1.67**	**40.8**
56	339	OTHER PLANT AND MISC EQUIPMENT	539,255.49		539,255.49	387,356	0	387,356	151,899	0	151,899	8,424	0	8,424	1.56	18.0
		OFFICE FURNITURE AND EQUIPMENT														
57	340.1	COMPUTERS AND SOFTWARE	2,646,180.68		2,646,180.68	2,550,409	0	2,550,409	95,772	0	95,772	80,752	42	80,794	3.05	1.2
58	340.11	SOFTWARE - LARGE	3,665,579.00		3,665,579.00	3,659,926	0	3,659,926	5,653	0	5,653	5,653	(0)	5,653	0.15	1.0
59	340.2	FURNITURE	659,446.10		659,446.10	303,872	0	303,872	355,574	0	355,574	33,197	(0)	33,197	5.03	10.7
60		TOTAL OFFICE FURNITURE AND EQUIPMENT	6,971,205.78	0	6,971,205.78	6,514,207	0	6,514,207	456,999	0	456,999	119,602	42	119,644	1.72	3.8
61	341	TRANSPORTATION EQUIPMENT - TRUCKS	1,057.45		1,057.45	530	0	530	528	0	528	215	(0)	215	20.33	2.5
		TOOLS, SHOP AND GARAGE EQUIPMENT														
62	343.1	SHOP AND GARAGE EQUIPMENT	1,140,592.94		1,140,592.94	403,155	0	403,155	737,438	0	737,438	48,767	0	48,767	4.28	15.1
63	343.2	TOOLS AND WORK EQUIPMENT	2,185,518.00		2,185,518.00	773,731	0	773,731	1,411,787	0	1,411,787	109,759	0	109,759	5.02	12.9
64		TOTAL TOOLS SHOP AND GARAGE EQUIPMENT	3,326,110.94	0	3,326,110.94	1,176,886	0	1,176,886	2,149,225	0	2,149,225	158,526	0	158,526	4.77	13.6
65	344	LABORATORY EQUIPMENT	127,367.71		127,367.71	93,143	0	93,143	34,224	0	34,224	4,514	0	4,514	3.54	7.6
66	346	COMMUNICATION EQUIPMENT	7,073,007.59		7,073,007.59	3,853,331	0	3,853,331	3,219,677	0	3,219,677	553,841	(0)	553,841	7.83	5.8
67	347	MISCELLANEOUS EQUIPMENT	147,854.10		147,854.10	40,376	0	40,376	107,479	0	107,479	10,332	(0)	10,332	6.99	10.4
68		***TOTAL DEPRECIABLE PLANT***	**404,830,128.71**	**5,814,000**	**399,016,128.71**	**85,339,479**	(798,576)	**84,540,903**	**319,490,650**	**(5,015,424)**	**314,475,226**	**9,354,018**	**(105,681)**	**9,248,337**	**2.28**	**34.5**
69		***AMORTIZATION OF NET SALVAGE***										319,853	0	319,853		
70		TOTAL UTILITY PLANT IN SERVICE	409,389,892.28	5,820,000	403,569,892.28	85,360,943	(798,576)	84,562,367	319,490,650	(5,015,424)	314,475,226	9,673,871	(105,681)	9,568,190		

* Life Span Procedure was used. Curve shown is Interim Survivor Curve.

SUEZ WATER PENNSYLVANIA, INC.
I&E ADJUSTMENTS TO
ANNUAL DEPRECIATION EXPENSE
R-2018-3000834

Line No.	Description	Company As Filed and I&E Recommended					AVERAGE ANNUAL DEPRECIATION	
		Pro Forma December 31, 2018	Adjustments	Pro Forma December 31, 2019	2019 I&E Adjustments	I&E Adjusted December 31, 2019	2019 I&E Average Adjustment	I&E Average Annual Depreciation
		(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	Total Water	$9,115,697	$558,175	$9,673,872	($105,682)	$9,568,190	($331,929)	$9,341,943
2	Depreciation on CIAC/Advances	($950,910)	$0	($950,910)	$0	($950,910)	$0	($950,910)
3	Total Annual Depreciation Expense	**$8,164,787**	**$558,175**	**$8,722,962**	**($105,682)**	**$8,617,280**	**($331,929)**	**$8,391,033**

I&E Exhibit No. 3
Schedule 7

BUREAU OF INVESTIGATION & ENFORCEMENT DATA REQUESTS

SUEZ WATER PENNSYLVANIA, INC.

Docket No. R-2018-3000834

I&E RB-9-D
(Heppenstall)
June 26, 2018

I&E-RB-9-D Reference SUEZ Exhibit No. CEH-2, Schedule 11 regarding Materials and Supplies. Provide the monthly balance of Materials and Supplies from January 2015 to the most recent month available. Please provide updates to this data request as monthly data becomes available.

Supplemental Response:

Please refer to I&E-RB-9 Supplemental Attachment which corrects errors that were made in 2018 on the original attachment.

SUEZ Water Pennsylvania
Materials and Supplies Inventory Balances

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	427,382	449,336	485,239	585,809	606,550	621,323	695,352	567,468	601,807	601,807	569,987	417,841
2016	417,841	455,455	452,160	458,578	527,495	517,551	457,259	466,397	465,746	467,638	433,480	446,482
2017	440,840	489,854	481,801	476,077	463,267	507,868	441,119	583,376	612,773	618,416	509,708	504,193
2018	501,550	504,926	502,600	566,921	852,810							

I&E Exhibit No. 3
Schedule 9

SUEZ WATER PENNSYLVANIA, INC.
I&E ADJUSTMENTS TO
PLANT MATERIALS AND SUPPLIES

Actual Balances

Line No.	2015 (A)	Amount (B)	2016 (C)	Amount (D)	2017 (E)	Amount (F)	2018 (G)	Amount (H)
1	January	427,382	January	417,841	January	440,840	January	501,550
2	February	449,336	February	455,455	February	489,854	February	504,926
3	March	485,239	March	452,160	March	481,801	March	502,600
4	April	585,809	April	458,578	April	476,077	April	566,921
5	May	606,550	May	527,495	May	463,267	May	852,810
6	June	621,323	June	517,551	June	507,868		
7	July	695,352	July	457,529	July	441,119		
8	August	567,468	August	466,397	August	583,376		
9	September	601,807	September	465,746	September	612,773		
10	October	601,807	October	467,638	October	618,416		
11	November	569,987	November	433,480	November	509,708		
12	December	417,841	December	446,482	December	504,193		
13	SUM:	6,629,901	SUM:	5,566,352	SUM:	6,129,292		

13-Month Average Balances

Line No.	2017 (A)	Amount (B)	2018 (C)	Amount (D)
14	January	462,092	January	510,065
15	February	467,631	February	514,994
16	March	469,658	March	515,975
17	April	471,498	April	522,523
18	May	471,858	May	551,502
19	June	470,348	12-month total:	6,012,807
20	July	464,469	12-month Average:	501,067
21	August	474,150		
22	September	485,409		
23	October	497,153		
24	November	500,389		
25	December	505,829		

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017 AND 2019

Line No.	Customer Classification	Adjusted Revenues, Per Books Present Rates 12/31/2017 (a) (A)	Bill Analysis Revenues, Present Rates (Schedule 5) (B)	Adjustment Factor (C)	Revenues Under Present Rates (D)	Company Pro Forma Adjustments Present Rates (Schedule 5 and 7) (E)	Add Back Annualized DSIC Revenue (F)	Company Total Pro Forma Revenue Present Rates (G)
	METERED SALES							
1	Residential	$ 26,796,924	$ 26,824,015	0.99899003	$ 26,796,924	$ 500,770	$ 2,047,327	$ 29,345,020
2	Commercial	11,045,912	11,048,045	0.99980693	$ 11,045,912	78,401	$ 834,324	$ 11,958,637
3	Industrial	1,278,641	1,278,758	0.99990886	$ 1,278,641	86,299	$ 102,371	$ 1,467,311
4	Public Sales	1,772,512	1,787,388	0.99167720	$ 1,772,512	(64,825)	$ 128,076	$ 1,835,763
5	Total Sales of Water	$ 40,893,989	$ 40,938,206		$ 40,893,989	$ 600,645	$ 3,112,098	$ 44,606,731
6	Private Fire	$ 1,436,836	$ 1,436,836	1.00000000	1,436,836	$ 9,211		1,436,837
7	Public Fire	923,861	923,861	1.00000000	923,861			923,862
8	Other Operating Revenues	405,611	405,611		405,611			405,611
9	Total	$ 43,660,297	$ 43,704,514		$ 43,660,297	$ 609,856	$ 3,112,098	$ 47,373,041

Line No.	Customer Classification	Revenues Under Present Rates (A)	Company Pro Forma Adjustments Present Rates (B)	Adjustment (C)	I&E Pro Forma Adjustments Present Rates (D)	I&E Add Back Annualized DSIC Revenue (E)	Company Total Pro Forma Revenue Present Rates (F)	Adjustment (G)	I&E Total Pro Forma Revenue Present Rates (H)
	METERED SALES								
10	Residential	$ 26,796,924	$ 500,770	$ (461,055)	$ 39,715	$ 2,012,748	$ 29,345,020	$ (495,634)	$ 28,849,387
11	Commercial	11,045,912	78,401	$ (153,214)	(74,813)	$ 822,832	$ 11,958,637	(164,705)	$ 11,793,932
12	Industrial	1,278,641	86,299	$ -	86,299	$ 102,371	$ 1,467,311	-	$ 1,467,311
13	Public Sales	1,772,512	(64,825)	$ 4,052	(60,774)	$ 128,380	$ 1,835,763	4,355	$ 1,840,118
14	Total Sales of Water	$ 40,893,989	$ 600,645	$ (610,217)	$ (9,572)	$ 3,066,331	$ 44,606,731	$ (655,983)	$ 43,950,748
15	Private Fire	1,436,836	$ 9,211	$ -	$ 9,211		1,446,048	-	1,446,048
16	Public Fire	923,861					923,861	-	923,861
17	Other Operating Revenues	405,611					405,611	-	-
18	Total	$ 43,660,297	$ 609,856	$ (610,217)	$ (361)	$ 3,066,331	$ 47,382,250	$ (655,983)	$ 46,320,657

I&E ADJUSTMENTS TO
CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES
FOR THE TEST YEARS ENDING DECEMBER 31, 2017, 2018 AND 2019

	Company Residential (A)	Adjustment (B)	I&E Residential (C)	Company Commercial (D)	Adjustment (E)	I&E Commercial (F)	Company Public Authority (G)	Adjustment (H)	I&E Public Authority (I)	Company Private Fire (J)	Adjustment (K)	I&E Private Fire (L)	Company Total (M)	Adjustment (N)	I&E Total (O)
Historic TY Customer Customer Levels and Rates															
1 Actual Normalized Bills	652,728			56,712			2,952			1,018			714,022		
2 Actual Annualized Bills	656,760			56,712			2,784			1,016			717,884		
3 Average Service Charge	$ 13.75		$ 13.75	$ 28.50		$ 28.50	$ 13.75		$ 13.75	$ 110.98		$110.98			
4 Volume Charge - First Block	7.7506		7.7506	7.7506		7.7506	7.7506		7.7506						
5 Volume Charge - Second Block				5.4321		5.4321	5.4321		5.4321						
Fully Projected Future Test Year Customer Growth Calculation															
6 Forecasted Customer Growth	562.6	-	562.6	28.3	-	28.3	(1.2)	2.3	(1.2)	3.5	-	3.5			
7 Annualized Bills (Line 6 X 12)	6,751	(3,375.5)	3,376	339	(169.5)	170	(14)	7	(7)	42	-	42			
Average Volumes Per Normalization															
8 Priced At First Block	3.34	-	3.34	23.97	-	23.97	25.00	-	25.00	-	-	-			
9 Priced At Second Block	-	-	-	-	-	-	68.35	-	68.35						
10 Total	3.34	-	3.34	23.97	-	23.97	93.35	-	93.35	-	-	-			
11 Normalized Volumes (Line 7 X Line 8)	22,548	(11,274.2)	11,274	8,125	(4,062.7)	4,063	(350)	175	(175)			-			
12 Revenue From Service Charge (Line 7 X Line 3)	$ 92,826	(46,413.1)	$ 46,413	$ 9,662	(4,830.8)	$ 4,831	$ (193)	$ 96	$ (96)	$ 4,661	$ -	$ 4,661	$ 107,149	$ (51,244)	$ 55,905
Revenue from Volumetric Charge (Line 4 X Line 11)															
13 Priced At First Block	$ 174,763	(87,381.6)	$ 87,382	$ 62,977	(31,468.7)	$ 31,469	$ (2,713)	$ 1,356	$ (1,356)			$ -	$ 237,741	$ (118,870)	$ 118,870
14 Priced At Second Block	$ -	-	$ -	$ -	-	$ -	$ (5,198)	$ 2,599	$ (2,599)				$ -	$ -	$ -
15 Total FPFTY Adjustment (Line 12 + Line 13 + Line 14)	$ 267,589	$ (133,795)	$ 133,795	$ 72,639	$ (36,319)	$ 36,319	$ (8,103)	$ 4,052	$ (4,052)	$ 4,661	$ -	$ 4,661	$ 336,786	$ (162,011)	$ 174,775
16 Total Adjustment	$ 615,087	(133,794.7)	$ 481,292	$ 145,278	(36,319.5)	$ 108,958	$ (64,825)	$ 4,052	$ (60,774)	$ 9,211	$ -	$ 9,211	$ 704,751	$ (162,011)	$ 542,740

(a) For residential and commercial, see declining usage workpaper. For Industrial and Public, based on 2017 usage.

	Number of Customers	Residential	Commercial	Public Authority	Private Fire Protection
17	Period Ending 12/31/15	53,269.3	4,669.0	248.5	1,011.1
18	Period Ending 12/31/16	53,804.7	4,686.8	248.2	1,021.9
19	Historic Test Year Period Ending 12/31/17	54,394.4	4,725.6	246.2	1,018.2
20	Increase 2015-2016	535.4	17.8	(0.3)	10.8
21	Increase 2016-2017	589.8	38.8	(2.0)	(3.8)
22	Average Growth/(Decline)	562.6	28.3	(1.2)	3.5

I&E Exhibit No. 3
Schedule 12

SUEZ WATER PENNSYLVANIA
ADJUSTMENT 2 - DECLINING USAGE REVENUE ADJUSTMENT - PRESENT RATES
FOR THE TEST YEAR ENDING DECEMBER 31, 2018
Docket No. R-2018-3000834

	Residential (A)	Commercial (B)
1 Actual Normalized Bills	652,728	56,712
2 Actual 2017 Daily Usage (Gallons)	115.73	817.54
3 Projected Daily Usage in gallons - 2018	113.53	808.25
4 Difference in Daily Usage - Line 3 - Line 2	(2.20)	(9.29)
5 Difference in 1000 gallon Monthly Usage - Line 4 X 30 divided by 1000	(0.07)	(0.28)
6 Annual Declining Usage Adjustment - Line 1 X Line 5	(43,155)	(15,810)
7 Priced At First Block	(43,155)	(15,810)
8 First Block Under Present Rates	$ 7.7506	$ 7.7506
9 Adjustment Under Present Rates	$ (334,479)	$ (122,536)

I&E ADJUSTMENTS TO
DECLINING USAGE REVENUE ADJUSTMENT - PRESENT RATES
FOR THE TEST YEAR ENDING DECEMBER 31, 2019

	Company Residential (A)	Adjustment (B)	I&E Residential (C)	Company Commercial (D)	Adjustment (E)	I&E Commercial (F)
10 Actual Normalized Bills	652,728	-	652,728	56,712	-	56,712
11 Actual 2017 Daily Usage (Gallons)	115.73	-	115.73	817.54	-	817.54
12 Projected Daily Usage in gallons - 2019	111.32	1.10	112.42	798.96	4.64	803.60
13 Difference in Daily Usage - Line 11 - Line 12	(4.41)	1.10	(3.31)	(18.58)	4.64	(13.94)
14 Difference in 1000 gallon Monthly Usage - Line 13 X 30 divided by 1000	(0.13)	0.03	(0.10)	(0.56)	0.14	(0.42)
15 Annual Declining Usage Adjustment - Line 10 X Line 5	(86,356)	21,600	(64,756)	(31,611)	7,901	(23,711)
16 Priced At First Block	(86,356)	21,600	(64,756)	(31,611)	7,901	(23,711)
17 First Block Under Present Rates	$ 7.7506	$ -	$ 7.7506	$ 7.7506	$ -	$ 7.7506
18 Adjustment Under Present Rates	$ (669,310)	$ 167,415	$ (501,895)	$ (245,006)	$ 61,235	$ (183,771)
19 Incremental Adjustment over 2018	$ (334,831)	$ 167,415	$ (167,415)	$ (122,471)	$ 61,235	$ (61,235)

SUEZ WATER PENNSYLVANIA
I&E ADJUSTMENTS TO
ADJUSTMENT 4 - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES FOR TRUNK LINE
FOR THE TEST YEARS ENDING DECEMBER 31, 2017, 2018 AND 2019
Docket No. R-2018-3000834

	Company Residential	Adjustment	I&E Residential	Company Total	Adjustment	I&E Total
FPFTY Customer Growth Calculation - Trunk Line						
1 Projected Estimated Increase in Customers	252	(126)	126	252	(126)	126
2 Annualized Bills	3,024	(1,512)	1,512	3,024	(1,512)	1,512
3 Projected Daily Usage in gallons (a)	111.32	1.10	112.42	111.32	1.10	112.42
4 Monthly Volumes per Normalization (1000 Gallons) Line 3 X30 /10	3.34	0.03	3.37		-	
5 FPFTY Customer Annualized Growth Volumes (Line 4 X Line 2)	10,100	(5,000)	5,100	10,100	(5,000)	5,100
6 Priced At First Block	10,100	(5,000)	5,100	10,100	(5,000)	5,100
7 Priced At Second Block				-		-
FPFTY Customer Growth Revenue Calculation - Trunk Line						
8 Average Service Charge	$ 13.75		$ 13.75	$ 13.75		$ 13.75
9 Revenue From Service Charge (Line 8 X Line 2)	$ 41,580	$ (20,790)	$ 20,790	$ 41,580	$ (20,790)	$ 20,790
10 Volume Charge - First Block	7.7506	0	7.7506		0	
11 Volume Charge - Second Block						
12 Revenue from Volumetric Charge (Line 6 X Line 10)						
13 Priced At First Block	$ 78,282	$ (38,754)	$ 39,528	$ 78,282	$ (38,754)	$ 39,528
14 Priced At Second Block						
15 Total FPFTY Adjustment (Line 9 + Line 12)	$ 119,862	$ (59,544)	$ 60,318	$ 119,862	$ (59,544)	$ 60,318

I&E Exhibit No. 3
Schedule 13

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
SUMMARY OF APPLICATION OF PRESENT RATES TO CUSTOMER BILL ANALYSIS AND PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2017, 2018 AND 2019

Line No.	Rate Zone	Company Residential (A)	Adjustment (B)	I&E Residential (C)	Company Commercial (D)	Adjustment (E)	I&E Commercial (F)	Company Industrial (G)	Adjustment (H)	I&E Industrial (I)
	Present Rate Application, Schedule 6									
1	Total Revenue	$ 26,824,015	$ -	$ 26,824,015	$ 11,048,045	$ -	$ 11,048,045	$ 664,035	$ -	$ 664,035
2	Total	$ 26,824,015	$ -	$ 26,824,015	$ 11,048,045	$ -	$ 11,048,045	$ 664,035	$ -	$ 664,035
	Pro Forma Adjustments - Schedule 9 - 2018									
3	Total Adjustments	$ 13,018	$ -	$ 13,018	$ (49,897)	$ -	$ (49,897)			
4	Subtotal	$ 13,018	$ -	$ 13,018	$ (49,897)	$ -	$ (49,897)	$ -	$ -	$ -
	Pro Forma Adjustments - Schedule 9 - 2019									
5	All	$ (67,241)	$ 33,621	$ (33,621)	$ (49,832)	$ 24,916	$ (24,916)			
6	Trunk Line	$ 119,862	$ (59,544)	$ 60,318		$ -		$ -	$ -	$ -
7	Mahoning Twp	$ 435,131	$ (435,131)	$ -	$ 178,130	$ (178,130)	$ -			
8	Subtotal	$ 487,752	$ (461,055)	$ 26,697	$ 128,298	$ (153,214)	$ (24,916)	$ -	$ -	$ -
9	Total Adjustments	$ 500,770	$ (461,055)	$ 39,715	$ 78,401	$ (153,214)	$ (74,813)	$ -	$ -	$ -

Line No.	Rate Zone	Company Large Industrial (A)	Adjustment (B)	I&E Large Industrial (C)	Company Public Authority (D)	Adjustment (E)	I&E Public Authority (F)	Company Metered Total (G)	Adjustment (H)	I&E Metered Total (I)
	Present Rate Application, Schedule 6									
10	Total Revenue	$ 614,723	$ -	$ 614,723	$ 1,787,388	$ -	$ 1,787,388	$ 40,938,206	$ -	$ 40,938,206
11	Total	$ 614,723	$ -	$ 614,723	$ 1,787,388	$ -	$ 1,787,388	$ 40,938,206	$ -	$ 40,938,206
	Pro Forma Adjustments - Schedule 9 - 2018									
12	Total Adjustments	$ 86,299	$ -	$ 86,299	$ (56,722)	$ -	$ (56,722)	$ (7,302)	$ -	$ (7,302)
13	Subtotal	$ 86,299	$ -	$ 86,299	$ (56,722)	$ -	$ (56,722)	$ (7,302)	$ -	$ (7,302)
	Pro Forma Adjustments - Schedule 9 - 2019									
14	All				$ (8,103)	$ 4,052	$ (4,052)	$ (125,176)	$ 62,588	$ (62,588)
15	Trunk Line					$ -		$ 119,862	$ (59,544)	$ 60,318
16	Mahoning Twp					$ -		$ 613,261	$ (613,261)	$ -
17	Subtotal	$ -	$ -	$ -	$ (8,103)	$ 4,052	$ (4,052)	$ 607,947	$ (610,217)	$ (2,270)
18	Total Adjustments	$ 86,299	$ -	$ 86,299	$ (64,825)	$ 4,052	$ (60,774)	$ 600,645	$ (610,217)	$ (9,572)

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
SUMMARY OF PRO FORMA REVENUES UNDER PROPOSED RATES FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017 AND 2019
AND THE CALCULATION OF THE REVENUE INCREASE UNDER PROPOSED RATES

Line No.	Customer Classification	I&E Pro Forma Revenues Present Rates	I&E Bill Analysis Revenues Proposed Rates	Adjustment Factor	I&E Revenues Proposed Rates	Company Pro Forma Adjustments Proposed Rates	Adjustment	I&E Pro Forma Adjustments Proposed Rates	Company Total Pro Forma Revenue Proposed Rates	Adjustment	I&E Total Pro Forma Revenue Proposed Rates
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
	METERED SALES										
1	Residential	$ 28,849,387	$ 32,053,919	0.99899003	$ 32,021,545	$ 613,893	$ (903,561)	$ (289,668)	$ 32,635,438	$ (903,561)	$ 31,731,877
2	Commercial	11,793,932	13,732,962	0.99980693	13,730,311	231,245	(326,857)	(95,611)	13,961,556	(326,857)	13,634,699
3	Industrial	1,467,311	1,742,130	0.99990886	1,741,971	-	-	-	1,741,971	-	1,741,971
4	Municipal	1,840,118	2,275,357	0.99167720	2,256,420	(83,123)	3,503	(79,620)	2,173,296	3,503	2,176,799
5	Total Metered Sales	43,950,748	49,804,367		49,750,246	762,015	(1,226,915)	(464,900)	50,512,261	(1,226,915)	49,285,347
6	Private Fire	1,446,048	1,681,110	1.00000000	1,681,110	10,778	-	10,778	1,691,887	-	1,691,887
7	Public Fire	923,861	1,008,895	1.00000000	1,008,895				1,008,895	-	1,008,895
8	Other Operating Revenues	405,611	405,611		405,611				405,611	-	405,611
9	Total	$ 46,726,267	$ 52,899,983		$ 52,845,862	$ 772,793	$ (1,226,915)	$ (454,122)	$ 53,618,655	$ (1,226,915)	$ 52,391,740

I&E Exhibit No. 3
Schedule 15

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO PROFORMA ADJUSTMENTS
YEAR ENDED DECEMBER 31, 2017, 2018 AND 2019

Line No	Rate Block 1000 Gallons	Company Number Of Bills	Adjustment	I&E Number Of Bills	Company Total Consumption	Adjustment	I&E Total Consumption	Test Year/Present Rate	Company Present Revenue	Adjustment	I&E Present Revenue
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(G)	(H)
					Residential - Monthly						
	Customer Charge										
1	5/8	18,542	(3,376)	15,167	-	-	-	$ 13.75	$ 254,953	(46,413)	$ 208,539
2	Subtotal	18,542	(3,376)	15,167	-	-	-		254,953	(46,413)	208,539
3	All Usage - Test Year	-		-	(24,426)	(29,056)	(53,481)	7.7506	(189,313)	(225,200)	(414,513)
4	Subtotal	-		-	(24,426)	(29,056)	(53,481)		(189,313)	(225,200)	(414,513)
5	Total Residential	18,542	(3,376)	15,167	(24,426)	(29,056)	(53,481)	-	65,639	(271,613)	(205,974)
					Commercial - Monthly						
	Customer Charge										
6	5/8				-	-	-	13.75	-	-	-
7	3/4				-	-	-	13.75	-	-	-
8	1	678	(170)	509	-	-	-	28.50	19,323	(4,831)	14,492
9	Subtotal	678	(170)	509	-	-	-		19,323	(4,831)	14,492
10	Test Year First Block (First 25)	-	-	-	(15,360)	3,838	(11,522)	7.7506	(119,051)	29,746	(89,305)
11	Test Year Second Block (Over 25)	-	-	-				5.4321	-		-
12	Subtotal	-	-	-	(15,360)	3,838	(11,522)		(119,051)	29,746	(89,305)
13	Total Class	678	(170)	509	(15,360)	3,838	(11,522)		(99,728)	24,915	(74,813)
	Large Industrial - Monthly										
14	Customer Charge										
15	4				-	-	-	305.25	-	-	-
16	6				-	-	-	610.50	-	-	-
17	Subtotal	-	-	-	-	-	-		-	-	-
18	Take or Pay Volume	-	-	-	23,942	-	23,942	3.6045	86,299	-	86,299
19	Subtotal	-	-	-	23,942	-	23,942		86,299	-	86,299
20	Total	-	-	-	23,942	-	23,942		86,299	-	86,299
					Public Authority - Monthly						
	Customer Charge										
21	5/8	(112)	7	(105)	-	-	-	13.75	(1,540)	163,240	161,700
22	Subtotal	(112)	7	(105)	-	-	-		(1,540)	163,240	161,700
23	First Block (First 160)	-	-	-	(2,800)	-	(2,800)	7.7506	(21,702)	-	(21,702)
24	Second Block (Over 160)	-	-	-	(7,655)	478	(7,177)	5.4321	(41,584)	2,599	(38,985)
25	Subtotal	-	-	-	(10,455)	478	(9,977)		(63,286)	2,599	(60,687)
26	Total	(112)	7	(105)	(10,455)	478	(9,977)		(64,826)	165,839	101,013
27	Total	19,108	(3,538)	15,570	(50,241)	(24,739)	(74,980)		(98,915)	(80,859)	(179,774)

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO PROFORMA ADJUSTMENTS
YEAR ENDED DECEMBER 31, 2017, 2018 AND 2019

Line No	Rate Block 1000 Gallons	Company Number Of Bills (A)	Adjustment (B)	I&E Number Of Bills (C)	Company Total Consumption (D)	Adjustment (E)	I&E Total Consumption (F)	I&E Proposed Rate (G)	Company Proposed Revenue (H)	Adjustment (I)	I&E Adjusted Proposed Revenue (J)
	Residential - Monthly										
	Customer Charge										
1	5/8	18,542	(3,376)	15,167	-	-	-	$ 15.00	$ 278,130	(50,633)	$ 227,498
2	Subtotal	18,542	(3,376)	15,167	-	-	-		278,130	(50,633)	227,498
3	All Usage - Test Year	-		-	(24,426)	(29,056)	(53,481)	9.6700	(236,196)	(280,970)	(517,166)
4	Subtotal	-		-	(24,426)	(29,056)	(53,481)		(236,196)	(280,970)	(517,166)
5	Total Residential	18,542	(3,376)	15,167	(24,426)	(29,056)	(53,481)	-	41,934	(331,602)	(289,668)
	Commercial - Monthly										
	Customer Charge										
6	5/8				-	-	-	15.00	-	-	-
7	3/4				-	-	-	15.00	-	-	-
8	1	678	(170)	509	-	-	-	31.09	21,079	(5,270)	15,809
9	Subtotal	678	(170)	509	-	-	-		21,079	(5,270)	15,809
10	Test Year First Block (First 25)	-	-	-	(15,360)	3,838	(11,522)	9.6700	(148,534)	37,113	(111,421)
11	Test Year Second Block (Over 25)	-	-	-				7.1020	-		-
12	Subtotal	-	-	-	(15,360)	3,838	(11,522)		(148,534)	37,113	(111,421)
13	Total Class	678	(170)	509	(15,360)	3,838	(11,522)		(127,455)	31,844	(95,611)
	Large Industrial - Monthly										
14	Customer Charge										
15	4				-	-	-	333.00	-	-	-
16	6				-	-	-	666.00	-	-	-
17	Subtotal	-	-	-	-	-	-		-	-	-
18	Take or Pay Volume	-	-	-	23,942	-	23,942	-	-	-	-
19	Subtotal	-	-	-	23,942	-	23,942		-	-	-
20	Total	-	-	-	23,942	-	23,942		-	-	-
	Public Authority - Monthly										
	Customer Charge										
21	5/8	(112)	7	(105)	-	-	-	15.00	(1,680)	105	(1,575)
22	Subtotal	(112)	7	(105)	-	-	-		(1,680)	105	(1,575)
23	First Block (First 160)	-	-	-	(2,800)	-	(2,800)	9.6700	(27,076)	-	(27,076)
24	Second Block (Over 160)	-	-	-	(7,655)	478	(7,177)	7.1020	(54,367)	3,398	(50,969)
25	Subtotal	-	-	-	(10,455)	478	(9,977)		(81,443)	3,398	(78,045)
26	Total	(112)	7	(105)	(10,455)	478	(9,977)		(83,123)	3,503	(79,620)
27	Total	19,108	(3,538)	15,570	(50,241)	(24,739)	(74,980)		(168,644)	(296,256)	(464,900)

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
SUMMARY OF APPLICATION OF PROPOSED RATES TO CUSTOMER BILL ANALYSIS AND PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2017 AND 2019

Line No.	Rate Zone	Company Residential	Adjustment	I&E Residential	Company Commercial	Adjustment	I&E Commercial	Company Industrial	Adjustment	I&E Industrial
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	Proposed Rate Application									
1	Total Revenue	$ 32,053,919	$ -	$ 32,053,919	$ 13,732,962	$ -	$ 13,732,962	$ 888,772	$ -	$ 888,772
2	Total	$ 32,053,919	$ -	$ 32,053,919	$ 13,732,962	$ -	$ 13,732,962	$ 888,772	$ -	$ 888,772
	Pro Forma Adjustments									
3	All Including Trunk Line	$ 41,934	$ 49,221	$ 91,155	$ (127,455)	$ 31,844	$ (95,611)	$ -	$ -	$ -
4	Mahoning Twp.	$ 571,959	$ (571,959)	$ -	$ 358,700	$ (358,700)	$ -	$ -	$ -	$ -
5	Total	$ 613,893	$ (522,738)	$ 91,155	$ 231,245	$ (326,857)	$ (95,611)	$ -	$ -	$ -

Line No.	Rate Zone	Company Large Industrial	Adjustment	I&E Large Industrial	Company Municipal	Adjustment	I&E Municipal	Company Metered Total	Adjustment	I&E Metered Total
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
	Proposed Rate Application									
6	Total Revenue	$ 853,358	$ -	$ 853,358	$ 2,275,357	$ -	$ 2,275,357	$ 49,804,367	$ -	$ 49,804,367
7	Total	$ 853,358	$ -	$ 853,358	$ 2,275,357	$ -	$ 2,275,357	$ 49,804,367	$ -	$ 49,804,367
	Pro Forma Adjustments									
8	All Including Trunk Line	$ -	$ -	$ -	$ (83,123)	$ 3,503	$ (79,620)	$ (168,644)	$ 84,568	$ (84,076)
8	Mahoning Twp.	$ -	$ -	$ -	$ -	$ -	$ -	$ 930,659	$ (930,659)	$ -
9	Total	$ -	$ -	$ -	$ (83,123)	$ 3,503	$ (79,620)	$ 762,015	$ (846,091)	$ (84,076)

I&E Exhibit No. 3
Schedule 17

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
ANALYSIS OF DIRECT CUSTOMER COSTS
METERS AND SERVICES

Line		Company		Adjustment		I&E	
No.	Description	Meters	Services	Meters	Services	Meters	Services
	Operation and Maintenance Expenses						
	T&D Labor - Operation						
1	Employee Salaries - Supervision	$ 7,978		$ -		$ 7,978	
2	Employee Salaries - Meters	141,836		-		141,836	
3	Fringe Benefits	58,775		-		58,775	
	T&D Labor - Maintenance						
4	Employee Salaries - Supervision		$ 6,408		-		$ 6,408
5	Employee Salaries - Structures and Improvments		19,032		(19,032)		-
6	Employee Salaries - Services		74,524		-		74,524
7	Fringe Benefits		41,018		-		41,018
8	Total Customer Accounting Expenses						
9	Management Fees - Customer Related						
10	Management Fees - Employee Related	10,211	6,959	(10,211)	(6,959)	-	-
11	Transportation Expense	3,666	2,396	(3,666)	(2,396)	-	-
12	Worker's Compensation	3,421	2,236	(3,421)	(2,236)	-	-
13	Advertising Expense	114	74	-	-	114	74
14	Office Rents	1,868	1,221	-	-	1,868	1,221
15	Subtotal	227,868	153,869	(17,298)	(30,624)	210,570	123,245
	Depreciation Expense						
16	Meters	976,632		-		976,632	
17	Services		696,307		-		696,307
18	Office Buildings	7,415	4,847	-	0	7,415	4,847
19	Office Furniture & Equipment	1,026	671	-	0	1,026	671
20	Computer Software - CIS						
21	Subtotal	985,074	701,825	-	0	985,074	701,825
	Taxes Other Than Income						
22	Payroll Taxes	21,847	14,890	-	0	21,847	14,890
23	Assessments	-	-	-	-	-	-
24	Subtotal	21,847	14,890	-	0	21,847	14,890
	Rate Base						
25	Meters	14,543,019		-		14,543,019	
26	Services		27,943,391		-		27,943,391
27	Office Land/Buildings	315,200	206,053	-	-	315,200	206,053
28	Office Furniture and Equipment	10,987	7,183	-	-	10,987	7,183
29	Computer Software - CIS						
30	Materials and Supplies	14,881	9,728	-	-	14,881	9,728
31	Deferred Taxes	(1,092,904)	(2,042,846)	-	0	(1,092,904)	(2,042,846)
32	Subtotal	13,791,184	26,123,508	-	0	13,791,184	26,123,509
33	Return and Income Taxes	1,409,175	2,669,285	-	0	1,409,175	2,669,285
34	Total Direct Customer Costs	2,643,964	3,539,869	(17,298)	(30,623)	2,626,666	3,509,245

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
ANALYSIS OF DIRECT CUSTOMER COSTS
BILLING AND COLLECTING

Line No.	Description	Company Billing & Collecting	Adjustment	I&E Billing & Collecting
	Operation and Maintenance Expenses			
	T&D Labor - Operation			
1	Employee Salaries - Supervision			
2	Employee Salaries - Meters			
3	Fringe Benefits			
	T&D Labor - Maintenance			
4	Employee Salaries - Supervision			
5	Employee Salaries - Structures and Improvments			
6	Employee Salaries - Services			
7	Fringe Benefits			
1	Total Customer Accounting Expenses	$ 1,960,672	(190,523)	$ 1,770,150
2	Management Fees - Customer Related	377,179	(377,179)	-
3	Management Fees - Employee Related	55,857	(55,857)	-
4	Transportation Expense	27,000	(27,000)	-
5	Worker's Compensation	25,199	(25,199)	-
6	Advertising Expense	836	-	836
7	Office Rents	13,759	-	13,759
8	Subtotal	2,460,501	(675,757)	1,784,744
	Depreciation Expense			
9	Meters			
10	Services			
11	Office Buildings	54,617	-	54,617
12	Office Furniture & Equipment	7,560	-	7,560
13	Computer Software - CIS	5,528	-	5,528
14	Subtotal	67,706	-	67,706
	Taxes Other Than Income			
15	Payroll Taxes	119,509	-	119,509
16	Assessments	-	-	-
17	Subtotal	119,509	-	119,509
	Rate Base			
18	Meters			
19	Services			
20	Office Land/Buildings	2,321,667	-	2,321,667
21	Office Furniture and Equipment	80,929	-	80,929
22	Computer Software - CIS	5,528	-	5,528
23	Materials and Supplies	109,611	-	109,611
24	Deferred Taxes	(331,069)	-	(331,069)
25	Subtotal	2,186,666	-	2,186,666
26	Return and Income Taxes	223,432	-	223,432
27	Total Direct Customer Costs	2,871,148	(675,757)	2,195,391

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
CALCULATION OF CUSTOMER COST PER MONTH FOR A 5/8-INCH METER
BASED ON DIRECT COSTS

Cost Function	Direct Cost of Service	Total Units		Cost Per 5/8-inch Meter	Cost Per 5/8-inch Meter Monthly Bill
(1)	(2)	(3)		(4)	(5)
Meters	2,626,666	77,769	5/8-inch Equivalents	$33.78	$2.82
Services	3,509,391	63,972	3/4-inch Equivalents	54.86	4.57
Billing, Collecting and Meter Reading	2,196,290	62,282	Customers	35.26	2.94
Subtotal Customer Costs	$8,332,347				10.33
Unrecovered Public Fire	3,438,063	77,769	5/8-inch Equivalents	44.21	3.68
Total Customer Costs and Public Fire	$11,770,411				$14.01

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA INC**	: : : : : :	**Docket No. R-2018-3000834**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Brenton Grab, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 1-R, and, I&E Exhibit No. 1-R were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same at an Evidentiary Hearing in this matter. This Verification is made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Brenton Grab
Brenton Grab
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: August 30, 2018

I&E Statement No. 1-R
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Rebuttal Testimony

of

Brenton Grab

Bureau of Investigation and Enforcement

Concerning:

CONTRIBUTIONS IN AID OF CONSTRUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brenton Grab, and my business address is Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

Q. ARE YOU THE SAME BRENTON GRAB THAT SUBMITTED DIRECT TESTIMONY IN I&E STATEMENT NO. 1 IN THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the Pennsylvania Builders Association ("PBA") witness Daniel E. Durden (PBA Statement No. 1) regarding Suez Water Pennsylvania Inc.'s ("Suez," "SWPA," or "Company") rate case filed on April 30, 2018. Specifically, Mr. Durden's testimony addresses the proposal of Suez "…insofar as it relates to the impact of the Federal Tax Cuts and Jobs Act ("TCJA") on the requirement for water and sewer utilities to recognize Contributions in Aid of Construction ("CIAC") as taxable income and the associated effect on charges to developers and customers who remit those CIAC charges."[1]

Q. DOES YOUR TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. Yes. I&E Exhibit No. 1-R contains schedules that support my rebuttal testimony.

Q. WHAT IMPACT DOES THE TCJA HAVE ON CIAC FOR WATER COMPANIES?

A. Prior to the TCJA, water utilities were operating under a long-standing exemption that did not require received CIAC to be treated as income for income tax purposes. Implementation of the TCJA eliminated this exemption for water utilities.

Q. SUMMARIZE SUEZ'S PROPOSAL RELATED TO THE IMPACT OF THE TCJA ON THE REQUIREMENT FOR WATER AND SEWER UTILITIES TO RECOGNIZE CIAC AS TAXABLE INCOME.

A. Suez proposes to gross-up the CIAC charged to developers at the net present value of cash flows resulting from the taxability of the CIAC and the future deductibility for income tax purposes of the resulting asset. The Company also proposes that the deferred income tax impact of the transaction be held outside of the

[1] PBA Statement No. 1, p. 2.

ratemaking process so that it does not impact water customers. Lastly, the Company proposes to utilize the capital structure and debt cost rate of its immediate parent, Suez Water Resources, and the water proxy group return on equity amount in effect as of December 31 of each year and update this calculation once per year. This treatment of the contribution requires the contributor to pay for the income taxes associated with the contribution, so that Suez customers do not subsidize the contribution. (SWPA Statement No. 3, pp. 8-9.)

Q, **DOES I&E AGREE WITH THE COMPANY'S PROPOSALS SUMMARIZED ABOVE?**

A. Yes.

Q. **DOES THE PBA AGREE WITH SUEZ'S PROPOSAL RELATED TO THE IMPACT OF THE TCJA ON THE REQUIREMENT FOR WATER AND SEWER UTILITIES TO RECOGNIZE CIAC AS TAXABLE INCOME?**

A. No.

Q. **WHAT IS THE PBA'S RECOMMENDATION REGARDING HOW SUEZ SHOULD ACCOUNT FOR CIAC?**

A. Mr. Durden recommends that Suez adopt the "no gross-up" method to account for CIAC consistent with the proposal of Pennsylvania America Water Company (PAWC) at Docket No. R-2018-3002502, which would allow Suez to record income taxes paid on CIAC to a deferred account and include those taxes in rate base in future base rate proceedings (PBA Statement No. 1, p. 4). Under this method, the contributor of the capital is not charged the income tax associated with the contribution as it is recovered from existing customers.

Q. WHAT IS MR. DURDEN'S BASIS FOR RECOMMENDING THIS ALTERNATE METHOD?

A. Mr. Durden argues that the new financial burden associated with paying the tax on CIAC may deter developers from commencing construction projects of main and line extensions for Suez, which is not in the public interest because Suez should have adequate resources to invest in new infrastructure and capital developments and to increase water accessibility (PBA Statement No. 1, p. 3). Also, he states a larger customer base spreads the overall cost of service to more customers, which lowers the customer cost (PBA Statement No. 1, p. 3). By not allowing the Company to spread fixed costs over a greater number of customers Mr. Durden states it will increase costs in the long run, which is contrary to PUC policy (PBA Statement 1, p. 4). He also argues that by imposing the tax on the new customers or the developer it could create a disincentive to use public utilities to serve new customers' water needs and push them to use wells which will increase customers' costs in the long run (PBA Statement No. 1, p. 4).

Mr. Durden states that under his new proposal customers will benefit from advances that are funded through CIAC and any costs related to taxable CIAC will be offset by additional customers. He also states that the tax expense for Suez will be recovered over the life of the property, which is a better result (PBA Statement No. 1, p. 5).

Q. DID MR. DURDEN PROVIDE ANY OTHER REASONS IN SUPPORT OF HIS ALTERNATE PROPOSAL?

A. Yes. Mr. Durden mentioned that the Commission approved the no gross-up taxable CIAC method for Columbia Gas of Pennsylvania, Inc. (Columbia Gas) and York Water Company (York Water), indicating that the method is lawful, nondiscriminatory, and reasonable (PBA Statement No. 1, p. 5).

Q. DO YOU AGREE WITH MR. DURDEN'S RECOMMENDATION?

A. No.

Q. PLEASE EXPLAIN.

A. I oppose Mr. Durden's request to adopt the no gross-up method because current customers should not be required to subsidize the cost to construct new plant and serve new customers. Suez should be required to continue to use the "gross-up" method as it has proposed where the contributor bears the total uneconomic cost of the extension, including income taxes. Such taxes would not be included in rate base and recovered from current customers as proposed by Mr. Durden. When Contributions and Advances became taxable in the mid-1980s, the Commission extensively addressed this issue and adopted the gross-up method for water and wastewater utilities in an Opinion and Order Entered on June 14, 1989 (1989 Order), which regulated water and wastewater utilities have followed and should continue to follow for future projects (I&E Exhibit No. 1-R, Schedule 1). The 1989 Order was rendered inapplicable regarding CIAC for water and wastewater utilities after the 1996 federal tax law change, since CIAC for water and wastewater utilities were declared tax exempt in the 1996 tax law change. Now that the TCJA eliminated this federal tax exemption, the 1989 Order is again applicable and should be given its full force and effect, and Suez and all water and wastewater utilities should use the gross-up method in calculating CIAC as was previously ordered in the 1989 Order. The Commission stated in the 1989 Order that "The contributor bears the total cost, including taxes of the plant because he also will reap its full benefit" (I&E Exhibit No. 1-R, Sch. 1, p. 25).

Mr. Durden indicated that his no gross-up proposal is consistent with PAWC's proposal at Docket No. R-2018-3002504 (PBA Statement No. 1, p. 4). Note that Mr. Durden's references are to PAWC's wastewater docket; the correct docket for the equivalent water proposal is R-2018-3002502. I&E filed a complaint against both proposals on July 24, 2018, and the Commission suspended PAWC's filing pending a full investigation on August 2, 2018. A proposal in another ongoing contested proceeding has no weight in this Suez proceeding. I should also note that in the 1989 investigation, a great majority of the water and sewer utilities agreed that current customers should be insulated from costs arising from CIAC or Customer Advances for Construction (CAC) (I&E Exhibit No. 1-R, Sch. 1, p. 25). During the 1989 investigation, PAWC indicated that it preferred using the full gross-up method, meaning PAWC agreed with charging the full tax to the contributor and insulating current customers from the cost (I&E Exhibit No. 1-R, Sch. 1, p. 9).

Mr. Durden did not provide any proof such as studies, examples, or documentation to support his claim that including the tax costs with the CIAC will decrease the amount of contributions Suez will receive. Without any kind of support for his assertion, there is no guarantee that developers paying the tax on CIAC will decrease the extension of services to new customers and cause detrimental effects to Suez and its customers. Under the no gross-up method as proposed by Mr. Durden, existing customers would be charged the tax on CIAC as opposed to the developers, which is an unnecessary socialization of line extension costs. His reasoning that the CIAC tax should be paid by customers to avoid a possible detriment experienced by reduced extensions and customer additions is unsound. Under the no gross-up method, current customers are going to experience a detriment from having to pay the tax on CIAC. Further, Mr. Durden presents no substantial evidence that, under the gross-up method, customers or Suez will experience a detriment based on Mr. Durden's belief that developers' willingness to pay CIAC will be reduced. It is reasonable to assume that any additional CIAC paid by a developer due to the tax gross up would simply be passed along to its eventual customers, thereby making the developer whole for its investment.

Q. IS THERE ANY INFORMATION FROM A WATER AND/OR WASTEWATER UTILITY INDICATING THAT THE NO GROSS-UP METHOD WILL CAUSE A SIGNIFICANT INCREASE IN COSTS DESIGNATED TO CUSTOMERS?

A. Yes. In response to TUS Data Request Set 1, R-5 related to Docket No. R-2018-3002502, PAWC compared the net present value ("NPV") of the effect on water customers based on an annual CIAC estimate of $5 million for its no gross-up proposal (CIAC Method 3) and the three gross-up methods (CIAC Method 2, CIAC Modified Method 2, and CIAC Method 5) approved in the Commission's 1989 Order (I&E Exhibit No. 1-R, Sch. 2, pp. 2-3). The Company's no gross-up proposal had an NPV of $931,000, which would be recovered from all customers, while the three gross-up methodologies either decrease rates (CIAC Method 2) or do not affect customer rates (CIAC Modified Method 2 and CIAC Method 5) (I&E Exhibit No. 1-R, Sch. 2, pp. 2-3).

Q. WHAT IS YOUR RESPONSE TO MR. DURDEN'S ARGUMENT THAT HIS PROPOSAL IS JUST, REASONABLE, AND NONDISCRIMINATORY BASED ON THE COMMISSION'S APPROVAL OF THE NO GROSS-UP METHOD FOR COLUMBIA GAS AND YORK WATER?

A. During the 1989 investigation the Commission recognized the value of adopting an appropriate methodology for accounting for CIAC and CAC on an industry-by-industry basis due to different industries and their customers having varying circumstances and needs that necessitate different methodologies (I&E Exhibit No. 1-R, Sch. 1, p. 23). For gas (such as Columbia Gas) and electric industries the Commission approved the no gross-up method, even if existing customers share in the cost (I&E Exhibit No. 1-R, Sch. 1, p. 24). The Commission reasoned that this method promotes growth since electric and gas utilities operate in an energy competitive environment and have the potential to provide a "public benefit" in the form of economic development (I&E Exhibit No. 1-R, Sch. 1, p. 24). However, for water and wastewater the Commission approved the gross-up method since the same considerations did not apply (I&E Exhibit No. 1-R, Sch. 1, p. 25). The Commission stated that for the water and wastewater industry "competition within the industry is not as vital a force as it is in the energy-based industries. Economic development, while an important consideration, is not as sensitive to water utility pricing as it is to energy costs." (I&E Exhibit No. 1-R, Sch. 1, p. 25.) Therefore, Mr. Durden's argument that his no gross-up method proposal is just, reasonable, and nondiscriminatory based on Columbia's utilization of the method does not support its use by Suez or any other water or wastewater company.

Mr. Durden further opines his proposal is nondiscriminatory, just, and reasonable since York Water is using a no gross-up method in accounting for

CIAC (PBA Statement No. 1, p. 5). To my knowledge, York Water is the only jurisdictional water and wastewater Company authorized to use the no gross-up method. Since York Water's CIAC accounting methodology is not uniform with the other Commission regulated water and wastewater utilities, it is I&E's intention to address this in York Water's current base rate case (Docket No. R-2018-3000019) and recommend that York Water utilize the gross-up CIAC accounting method to establish uniformity with the other water and wastewater utilities.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION.

A. I recommend that the Company's proposed gross-up methodology be approved as it appropriately recommended that the contributor, not existing customers, pay for the income taxes associated with the contribution. The PBA's recommendation should be rejected as it shifts the responsibility from the contributor to existing customers, which violates the Commission's 1989 Order and is not the methodology utilized by other regulated water and wastewater utilities.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

I&E Exhibit No. 1-R
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Exhibit to Accompany

the

Rebuttal Testimony

of

Brenton Grab

Bureau of Investigation & Enforcement

Concerning:

CONTRIBUTIONS IN AID OF CONSTRUCTION

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120

Public Meeting held May 11, 1989

Commissioners Present:

Bill Shane, Chairman
William H. Smith, Vice Chairman
Joseph Rhodes, Jr.
Frank Fischl

Investigation of Accounting and Ratemaking Associated with Contributions in Aid of Construction and Customer Advances

Docket No. I-880083

OPINION AND ORDER

BY THE COMMISSION:

I. INTRODUCTION

Contributions in Aid of Construction ("CIAC") and Customer Advances ("CAC") were given taxable status under the Tax Reform Act of 1986 ("TRA86"). On August 10, 1987, the Office of Trial Staff ("OTS") filed a Petition at Docket No. P-870246 requesting that an Investigation be initiated to address the proper accounting and ratemaking treatment of CIAC and CAC, given their new taxable status. The OTS also expressed concern that there was no uniform treatment of CIAC and CAC among jurisdictional utilities and noted that many utilities had no tariffs that specifically covered such charges to ratepayers. The OTS expressed the concern that the taxes now assessed by the Internal Revenue Service on these revenues, would be charged directly to current ratepayers, rather than to the new ratepayers and developers, for whom the new plant was constructed.

In it's Petition, the OTS identified and analyzed six ratemaking methods that could be employed for CIAC and two for

CAC. The analysis included Net Present Value ("NPV") computations of the revenue streams from both current ratepayers and contributors.[1/] (The computations were adjusted slightly in the OTS Reply comments based upon the critique of these calculations by other Respondents in the Investigation. The six CIAC and two CAC methodologies were described as follows.

CIAC Method 1 - The new customer or developer guarantees a certain level of revenues (assumed to be $1000 in order to make the analysis of this method consistent with other CIAC methods). This revenue initially reduces current ratepayers' revenue requirement, however the plant enters rate base and current ratepayers pay a return on it and provide a reimbursement through depreciation expense over the plant life. The cost to the developer under Method 1 is $1000 while the NPV of the effect on existing ratepayers is $232.67.

CIAC Method 2 - The CIAC is "grossed-up" for the full amount of the Federal Income Tax and is charged to the contributor. There would be no rate base inclusion. However, all tax depreciation would be flowed through to the benefit of existing ratepayers over the tax life. Under this method the contributors cost is $1655.90 while the NPV of the effects upon existing customers revenue requirement is ($284.35).

1/ In the analysis the OTS made all assumptions and variables constant across all methods, and assumed the plant to be constructed would be valued at $1000. (The assumptions and variables employed are presented at Page 8 of the original OTS Petition and were adjusted per pages 3 and 4 of the OTS reply comments. The OTS calculations have been reviewed and it has determined that they accurately reflect the NPV of the cash flows produced by each methodology. The costs identified in this Opinion and Order reflect all of the corrections made by the OTS to their NPV analysis. These corrections arose from the Respondents' Initial Comments.

CIAC Method 2 (Modified) - The CIAC is "grossed-up" for the full amount of the Federal Income tax and is charged to the contributor. There would be no rate base inclusion and all tax depreciation benefits would flow back to the contributors as they are realized by the utility. Under this method, the contributor's NPV cost is dependent upon the timing of the realization of the tax depreciation benefits by the utility. In any case, the cost will be lower than under the full gross up methodology of the original CIAC Method 2. Existing customer rates are unaffected under the method.[2/]

CIAC Method 3 - No gross-up of CIAC occurs. The utility pays the tax on the $1000 contribution and the resulting deferred tax debit is added to rate base. It is removed from rate base as the utility receives the tax depreciation effects. The NPV of the effect on current ratepayers is $281.50.

CIAC Method 4 - Full tax effects are currently charged to ratepayers as a result of the base contribution of $1000. Tax benefits are flowed through to current ratepayers over the plant life. The NPV of the effect on current ratepayers is $311.93.

CIAC Method 5 - CIAC is "grossed-up" by the NPV of the tax liability of CIAC, less the tax reductive effects of the tax depreciation that will be received over the plant's life. The resultant contribution is $1363.91. There is no effect on current ratepayers' revenue requirement.

2/ CIAC Method 2 - Modified was first proposed in the Initial Comments of several utilities and was then further addressed by the OTS as a viable option in its Reply Comments.

CIAC Method 6 - No gross-up of CIAC is made. The related tax of $396.63 is a rate base addition. Current Ratepayers pay a return on rate base and for book depreciation. They receive the benefits of the tax depreciation when received. The NPV of the effect on current ratepayers is $280.54.

CAC Method A - A full gross-up method for advances in which the contributor pays $1655.90 in year one, then receives refunds that are fully "grossed-up". The NPV of the costs to contributor using the OTS assumption is $1226.62. The NPV of the increased cost to current ratepayers is $110.41. The increased ratepayer cost results from the effects of refunded amounts entering the rate base of the utility.

CAC Method B - A net of tax gross-up method in which the contributor provides advances of $1655 less the NPV of tax depreciation effects or a total of $1441.06. The contributor receives refunds of $360.00 and the NPV of his cost is $1050.82. The NPV of the ratepayers cost is $325.27. The ratepayer cost is higher than in Method A since in Method B the tax depreciation benefits accrue to the contributors benefit, not the ratepayers.

II. OTS PETITION

In its Petition, the OTS' preferred CIAC method was Method 5. It states:

> Only those methods that leave general revenue requirements unchanged and increase contributor payments should be considered under normal circumstances. This pares the methods down to one, Method 5. Because the revenue requirement remains substantially unchanged using this method, OTS prefers this method with respect to ratepayers interests.... This method holds general ratepayers harmless while minimizing the total CIAC and associated taxes to be paid by contributors....

The OTS states that since CIAC are used to construct plant that is to be employed by new customers, it is those new customers that should bear the rate increase effects. Current ratepayers should not subsidize the addition of new customers.

The OTS also supported CIAC Method 1 of guaranteed revenues in instances where it can be shown that CIAC "gross-up" will create true hardship, and where the plant additions will, to some degree, benefit all ratepayers or where the general populace of the area will benefit through economic development.

As regards Advances, the OTS prefers CAC Method A, a full gross-up method. It is preferred because it "more efficiently assigns costs to the customer/developer to whom the assets are attributable..." and because the full gross-up method is not dependent on the amount or timing of refund forecasts, unlike "net of tax" gross-ups such as CAC Method B. The OTS also concludes with regard to advances, that non gross-up methods could be employed where hardship or public good is a factor.

III. COMMISSION ACTION

In response to the Petition of the OTS we initiated an Investigation on August 18, 1988 at Docket No. I-880083, to consider the appropriate accounting and ratemaking for CIAC and CAC. All jurisdictional fixed utilities were named as respondents and the Office of Consumer Advocate (OCA) was invited to participate. Initial and Reply Comments were solicited from all Respondents: (1) addressing the OTS methodologies; (2) providing alternative methodologies using NPV; (3) providing draft tariff pages for proposed methodologies; and (4) addressing the subject of what free construction allowance should be adopted for future application. A 45 day period for Initial Comments and a 30 day period for Reply Comments was established.

IV. INITIAL COMMENTS

Approximately thirty-five (35) Initial Comments were provided by Respondents to the Investigation. We shall review characterize the comments of each industry below:

A. Electric

Eight major electric utilities were evenly split between support for OTS CIAC Method 3 and OTS CIAC Method 5. Those supporting Method 3 cited the adverse effects upon economic development of gross-up methods such as Method 5; the potential effects of tax law changes on gross-up methods; consistency with Federal Energy Regulatory Commission (FERC) or Generally Accepted Accounting Principles (GAAP) with regard to Method 3; simplified record-keeping; lack of adverse effects on utility earnings with Method 3; and Method 3's minimal impact on current customers. They also cited the insignificant effects in the electric utility industry.

Those electric utilities supporting OTS CIAC Method 5 did so because they believed current general revenue requirements should not be affected by new contributions to the utility and because Method 5 at the same time minimizes the effects upon contributions.

With regard to Advances the eight companies were split between methods requiring no gross-up (i.e. CIAC Method 3), a net gross-up (i.e. CIAC Method 5) and a full gross-up (i.e. CAC Method A).

B. Telecommunications

Initial Comments were received from only a few telecommunication utilities including Bell Telephone Company of Pennsylvania (Bell), Contel, Inc. (Contel) and United Telephone

Company of Pennsylvania (United). All maintained that the effect upon these utilities of CIAC and CAC was either de minimis or nonexistent, and that CIAC and CAC should be handled on a case-by-case basis.

C. Gas

Twenty-one gas distribution companies filed Initial Comments in the CIAC/CAC Investigation. This total includes several companies that were represented by the Pennsylvania Gas Association (PGA) and the various members of the Penn Fuel Gas group.

While the PGA recommends a company-by-company methodology, most of it's membership supported OTS Method 3, in which there is no gross-up and the CIAC related taxes increase rate base. This was supported in the individual comments of several large gas companies including Equitable Gas, T.W. Phillips Gas, UGI Corporation, Columbia Gas and Peoples Gas. Reasons for supporting Method 3 and not Method 5 included:

- Method 3 does not gross-up the contribution. To do so would discourage economic development.
- A gross-up methodology (Method 5) would put the gas industry at a competitive disadvantage with other energy sources.
- Because the cost and circumstances of every project may be vastly different it is easier to employ Method 3 for both CIAC and CAC.
- Gross-up methodologies will dampen new customer activity.
- Method 3 represents a fair balancing of the interests of the existing customers, potential new customers and the utility.

The companies supporting Method 3 for CIAC also support it for use with CAC.

Four major companies, including the Penn Fuel Gas group, Pennsylvania Gas and Water, Pennsylvania and Southern, and National Fuel Gas supported OTS Method 5, the NPV "gross-up". Reasons for supporting Method 5 as opposed to Method 3 included:

- Method 5 properly reimburses companies for the time value of money on the net cost created by the payment of the tax when the CIAC is received and recovery of the tax through the tax depreciation deduction.
- Income tax consequences of CIAC and CAC are kept out of the ratemaking process, thereby insulating existing customers from any increases in rates resulting from the CIAC and CAC.
- Method 5 places the minimum burden on developers while correctly insulating current customers from any rate effects of CIAC and CAC not related to existing customers.

Those firms supporting Method 5 appeared to do so for CAC also.

It should be noted that the gas industry in general believed that the choice of method should be left to each individual company and not mandated by the Commission.

D. Water and Sewer

Water utilities are the largest users of CIAC and CAC accounting of all utility industries. Many water companies indicated in their Initial Comments that the Commission should not impose a generic method on utilities but allow companies the flexibility of an individual choice of methodology. The water utilities did have preferred methodologies, however, which they would choose for their individual firms.

Of those water companies responding the great majority preferred the use of a gross-up methodology. By a 2 to 1 majority the gross-up methodology of choice was OTS Method 2, full gross-up, over OTS Method 5, NPV gross-up. The reasons cited were the simplicity of Method 2's calculation for small companies; non-necessity of predicting future events; and the insulation of current ratepayers. While several water utilities favor OTS Methods 3 or 6 in which rate base is increased by the deferred taxes associated with the CIAC timing difference, in general, small water companies supported Method 2, full gross-up due to its simplicity. The larger water utilities held more varied positions although they too leaned toward gross-up:

York Water Co.	Method 5	NPV gross-up
Philadelphia Suburban Water	Method 5	NPV gross-up
Pennsylvania-American Water	Method 2	Full gross-up
Western Pa. Water	Method 2	Full gross-up
General Waterworks	Method 6	Rate Base Increased By Tax

V. <u>Separate Filings of Citizens Utilities, Docket No. R-881180 through R-881186 and Dauphin Consolidated Water Supply Company, Docket No. A-210700.</u>

A. <u>York Water Company</u>

At Docket No. R-881158, the York Water Company ("York Water") filed Supplement No. 53 to Tariff water-Pa. P.U.C. No. 13 on November 21, 1988, proposing to include within its presently filed tariff, York Water policies concerning extension of facilities, to become effective January 17, 1989. On April 28, 1988, the Commission had previously approved these procedures at Docket Nos. R-870769 and P-870225.

York Water developed the net present value gross-up procedure (OTS Method 5) to increase the amount charged to developers to provide for the effect of the inclusion of CIAC and CAC in taxable income. The procedure results in no increases to rates, holding existing customers harmless from the tax effects of CIAC and CAC.

B. Citizens

On December 23, 1988, the Citizens Utilities (Citizens) group of Stamford, Connecticut filed for changes to the tariffs of its Pennsylvania jurisdictional affiliates with regard to Contributions in Aid of Construction and Customer Advances. On January 24, 1989, the OTS filed a Petition in response as did the OCA on February 1, 1989. The filing of Citizens asked the Commission to allow the adoption of a tariff that reflected the NPV gross-up of OTS Method 5 but with above-the-line ratemaking effects not advanced by the OTS in it's CIAC petition. The Citizens proposal would use a NPV gross-up but also add the deferred tax created by the CIAC tax timing difference to rate base, rather than have it absorbed by the utilities' stockholders or the developers. The OTS replied in it's Petition that this creates substantial additional revenue burden to be borne by current ratepayers and that the burden is more than that calculated by Citizens when ongoing CIAC is assumed. It reiterated that OTS Method 5 should be adopted with all ratemaking accounting below the line as ordered in York Water Company (see Commission Orders at Docket Nos. R-881158, R-870769 and P-579225). The OCA responded in a similar fashion and concurred with the OTS. Citizens filed an Answer to the OTS Petition on February 7, 1989. In that Answer, it agreed with OTS that it's proposed methodology was, in essence, OTS Method 5. Citizens disagreed with OTS as to the ratemaking accounting for OTS Method 5. It reiterated its position that such accounting should be above the line and that the CIAC NPV gross-up method necessitated an increase to rate base for deferred taxes. Citizens concluded, however, that it was willing to have such matters addressed by the Commission in the generic investigation instead of the R-881180 et seq. proceeding. In the Orders at R-881180 et seq. on February 16, 1989 we suspended the filings and indicated that they be consolidated and addressed within the CIAC Investigation at I-880083. On February 28, 1989, Citizens filed a Petition for Special Permission to File Tariff Supplements to Become Effective Upon One Days Notice that would allow their utilities to file Tariffs enabling them to receive CIAC in conformance with OTS Method 5. The Company reasons that without such a tariff on file their contribution-aided construction program would be halted and the public would not be served. By only approving the tariffs, no ratemaking ramifications would be approved and ratemaking treatment would not be resolved until such matters were addressed in the generic investigation. In the Public Meeting of March 30, 1989, we approved the tariff filings of Citizens Utilities allowing that group of companies to immediately adopt Method 5, as an interim measure, pending the outcome of this investigation.

C. Dauphin Consolidated

On August 23, 1988 at Docket No. A-210700, the Dauphin Consolidated Water Company (Dauphin) filed an application to begin to furnish water service to the public in Newberry Township, York County. Included in the Application was a proposal that a system of developer-guaranteed revenues be instituted rather than a CIAC or CAC process. The guaranteed revenues would be treated as part of the revenue requirement of the utility rather than a rate base deduction. There would be no additional tax consequence since the developer supplied revenues would merely be substituted for those of current ratepayers. The proposal was essentially a restatement of OTS Method 1 in which the guaranteed revenues can be assumed to be equal to what CIAC would have been, but the plant enters rate base and the ratepayers bear the relative cost of such.

By Order entered February 3, 1989, we approved Dauphin's Application to provide the water service but denied the request to record Developer payments as revenues. The matter was ordered to be considered in the generic CIAC Investigation.

On February 15, 1989, Dauphin filed a Petition for Rehearing and Reconsideration on the matter requesting evidentiary hearings.

On March 7, 1989, the OTS filed a Response to the Petition for Rehearing and Reconsideration. The OTS opposed Dauphin's Petition because the methodology advanced was the same as OTS Method 1 which the OTS deemed unfair to current ratepayers as compared to other methods under investigation. The OTS noted that OTS method 1 was "almost universally criticized by those utilities which filed Initial Comments on the six CIAC methods identified at I-880083. Dauphin itself criticized Method 1 in its Initial Comments (Initial Comments of Dauphin Consolidated Water Supply Company, et al., Docket no. I-880083, pp. 2-3)".

The OTS further stated:

II. Review of OTS Methods

A. Method 1

> Require usual CIAC (no tax gross-up) but credit such receipts to revenues rather than plant. This reduces rates flowing through CIAC to revenue requirement (reducing it immediately). All customers therefore pay for the CIAC through depreciation over the life of the property. In effect, the utility finances the plant, because the CIAC is given to ratepayers up front in reduced revenue requirement. This procedure avoids any additional current tax liability.

Comments:

1. The major problem with Method 1 is that Company revenue would fluctuate based on the level of CIAC or construction. If, for example, a test year for a rate case were to occur in a year with significant contributions, revenue requirement would be artificially diminished, whereas in a subsequent case, with lower CIAC, revenue requirement would be artificially inflated.

2. An additional problem which impacts this method more than the others is that of timing. In the year in which a utility receives a contribution, tax liability arises because of that contribution. The revenue requirement of the Company will not be reduced by the amount of the contribution until the Company receives a rate award. Thus, unless a rate case is filed for each year in which there is CIAC, there will be additional current tax liability."

The OTS also cited the Initial Comments of other utilities in rejecting CIAC Method 1:

> As indicated in the Initial Comments of Philadelphia Electric Company, PP&L and UGI, among others, Method 1 violates accounting rules as set forth by the FERC in the uniform system of accounts since FERC accounting requires CIAC to be credited against the capital cost of the asset. It also fails to comport with the Uniform System of Accounts for Water Companies (see, Initial Comments of Pennsylvania - American Water Company and Western Pennsylvania Water Company). In addition, Method 1 would require a significant deviation from traditional ratemaking principles (see, e.g., Initial Comments of National Fuel Gas; York Water Company; Reply Comments of Office of Consumer Advocate).
>
> Other criticisms of Method 1 are that it would cause severe revenue fluctuations (see, e.g., Initial Comments of Pennsylvania - American Water Company and Western Pennsylvania Water Company; Philadelphia Suburban Water Company; and Newtown Artesian Water Company and Indian Rock Water Company), it would not provide funds for daily operations since the funds are committed to plant construction (see, e.g., Initial Comments of York Water Company; National Fuel Gas; and Columbia Gas of Pa.), and that it would actually produce permanent increases in rates when viewed over the long run (see, e.g., Initial Comments of National Fuel Gas (NFG); Allied Gas Company, et al.; and York Water Company).

On May 11, 1989, we ordered that the Petition for

Rehearing and Reconsideration be granted and that matter be assigned to the Office of Administrative Law Judge for hearing.

VI. The Reply Comments of the Parties

On February 21, 1989, the OTS filed its Reply Comments in the CIAC/CAC Investigation at Docket No. I-880083.

Based upon the Initial Comments of all Respondents, the OTS first adjusted its original analysis to correct four computational errors. These included a correction of the tax depreciation lives; recognizing the deductibility of State Income taxes prior to the calculation of Federal Income taxes; adjusting the pretax rate of return; adjusting Method 4 to comply with normalization laws and the flow-through of State Income taxes. The revised NPV computations did not change the relative significance of the OTS' initial analysis.

The following is a summarization of the OTS Reply Comments with regard to the various methods reviewed and/or proposed by the Respondents:

> The Six (6) Methods For Reflecting CIAC
>
> Respondents' Initial comments indicated minimal support for Methods 1, 4 and 6. A strong preference was shown for Methods 3 and 5, with York Water Company, National Fuel Gas, West Penn Power Company and Duquesne Light Company, among others, indicating that they had already received Commission approval to use Method 5. There was also some support for Method 2 or a modified version of Method 2, which will be discussed, *infra*.

Much of the Reply Comments of the OTS, regarding the specific Initial Comments by the Respondents on the various methodologies were similar to those observations that were previously set forth. We shall now address and summarize additional comments and criticisms of the various methodologies in the order found in the OTS' Reply Comments:

<u>Method 1</u>: Refer to our previous discussion in this Opinion and Order of the methodology as regards the filing of Dauphin. (Also refer to the OTS Reply Comments page 6.) The OTS recommends rejection of this method.

<u>Method 4</u>: (Refer to pages 7-8 of the OTS Reply Comments). Criticisms included: tax burden on ratepayers rather than developers; wide variations in revenue requirement for small firms; complicated and difficult to implement; and, violates normalization rules. The OTS recommends rejection of this method.

<u>Method 6</u>: (Refer to page 8 of the OTS Reply Comments). Criticisms included; "up-front" payment of the tax on CIAC by small water utilities is burdensome as these utilities would have trouble financing such payment; most electric and gas utilities found this method to be a more complicated version of Method 3. The OTS recommends rejection of this method.

<u>Method 2</u>: (Refer to pages 9 through 11 of the OTS Reply Comments). According to the OTS the full "gross-up" of Method 2 was opposed by most electric, gas and some larger water companies as adversely impacting upon economic development and competition and would unfairly provide tax depreciation benefits to current ratepayers on plant that was CIAC funded and was not in rate base. Several utilities proposed a Modified Method 2, that would be fairer to contributors because the tax depreciation would inure to the benefit of those making the CIAC rather than to current ratepayers as advanced by the original Method 2. The contributor would then bear only the "time value of money" resulting from netting the original gross-up for taxes against the recovery of the benefit of tax depreciation over the asset's tax life.

The OTS observed that many smaller water companies supported the original Method 2 as the only viable CIAC method for small utilities. All other methods would necessitate external financing and increase capital costs. As to whether the original Method 2 or the modified Method 2 was the more desirable, the OTS reported a split in the opinion among the utilities. Some respondents contended that the ratepayers should retain the benefits of tax depreciation (Method 2) because contributors (developers) would recover the full cost from lot purchasers. If the developers were given the tax depreciation they might be tempted to reap a "double benefit." But as the OTS noted not all contributors are developers, and, further, lot prices are driven by the market and as a result, developers might be constrained from recouping the tax benefits. The OTS noted that returning all tax depreciation to contributors (Modified Method 2) could be administratively difficult for small utilities. The OTS concluded that small, financially constrained utilities be allowed to choose between Method 2 and Modified Method 2.

Method 3: (Refer to the OTS Reply Comments, pages 11 through 13). The OTS stated that several large utilities favored this "non-gross-up" method that increased rate base by the deferred taxes associated with CIAC. The method was preferred because of: (1) consistency with FERC accounting; (2) ease of administration; (3) recognition of competition; (4) economic development concurs; (5) understandability; and (6) alleged minimal impact on ratepayers.

The OTS observed , however, that the rate base addition of deferred taxes is a "very costly alternative for ratepayers," as shown by its NPV analysis. The OTS, while recognizing the existence of positive aspects of Method 3, rejects its general use because the cost to current ratepayers outweighs any of the advantages. The OTS does, however, believe that "the Commission could make Method 3 available for use in projects that have demonstrated public benefit" and notes that several Respondents also suggested this approach. The OTS also recommends that if Method 3 is chosen by a utility, that the firm be required to provide advance notice of the choice and be prepared to defend it in a subsequent rate proceeding.

Method 5: (Refer to the OTS Reply Comments, pages 13 through 17). The OTS after considering the Initial Comments of all Respondents still supports the NPV "gross-up" as the preferred primary methodology. In the opinion of the OTS, it achieves a balance among the interests of ratepayers, utilities and contributors. It is the only method that achieves the OTS goal of minimizing the effect of the taxability of contributions while keeping current ratepayers unaffected. The OTS cites the Initial Comments of NFG in this regard:

> First, it excludes entirely from the ratemaking process both taxes paid with respect to Contributions and tax depreciation benefits received with respect to Contributions; as a result, there will be no change to the ratemaking process as a result of TRA-86 changes to the tax treatment of Contributions. Second, this methodology avoids placing on ratepayers any burden related to the income tax expense related to Contributions. Third, it places the "time value of money" burden of a Contribution upon the contributor, while reducing, to a minimum, the amount of Contribution required to be made by the contributor initially.

The OTS acknowledges that more bookkeeping is involved with NPV gross-up than with a rate base addition, but points out that customer advances currently represent the largest portion of monies now received from developers. As such, this type of bookkeeping is already largely in place. Requiring it for CIAC as well would not be unduly burdensome. Further many large utilities (West Penn Power, Duquesne Light Company, NFG, Metropolitan Edison, Penelec and Columbia Gas of PA) already use Method 5 and for the most part did not report that it is burdensome for them to administer. The OTS does not consider determining discount rates or changing tax rates to be important problems in using Method 5. All ratemaking choices are subject to the variability of these factors. One cannot single out their effects on Method 5 without considering their effect upon other methods under consideration or upon all other ratemaking decisions for that matter.

The OTS views Method 5 as middle ground. It does not hinder economic development to the extent of Method 2 (full gross-up). Conversely, Method 5 would cost developers more than Method 3 (rate base tax addition). But Method 5 also does not transfer the full tax effect of TRA86 to ratepayers as Method 3 does.

Customer Advances (CAC):

The OTS set forth the following position with regard to Customer Advances:

> OTS requests that the Commission specify the use of Method 5, as adapted for CAC, for general CAC purposes. For instances where use of Modified Method 2 or Method 3 would be appropriate, OTS requests that use of these methods, as adapted for CAC, be permitted. As with CIAC, the use of Method 5 (or any other "gross-up" method) for CAC in those situations where the Commission's underground service regulations are applicable would likely require revisions to 52 Pa. Code §57.83(4) and 52 Pa. Code §63.41.

OTS Reply comments, Page 19

VII. The OTS Review of Proposed Alternatives From Respondents

In its Reply Comments, the OTS addresses various approaches other than those advanced in the original Petition of the OTS. The OTS addresses these approaches on pages 19 through 25 of its Reply Comments.

(1) The Philadelphia Suburban Water Company (PSWC) proposed an alternative CIAC/CAC method that has contributors pay $1000 to

the utility as a "construction deposit" plus a "tax deposit" to pay the associated tax costs. The "tax deposit" would be in the form of an unsecured, non-interest bearing loan to the utility to be repaid over 15 years. The OTS opposes this methodology because it believes that the "loan" would be considered a true CIAC/CAC by IRS, in accordance with Internal Revenue Bulletin No. 1987-51, since the loan would "lack the economic characteristics of a genuine loan for Federal income tax purposes." The OTS reaches this conclusion primarily because the contributor will benefit from utility services relating to the loan. This would, in OTS' view, trigger taxability under the IRS rules.

(2) Glendale Year-round Water Company and Glendale Yearround Sewer Company filed Initial Comments proposing a method similar to that of PSWC. The OTS rejected the method for the same reasons as stated above.

(3) Citizens Utilities Company proposed to use Method 5 in determining CIAC and CAC, but also proposed a ratemaking rate base addition not contemplated by the OTS in its original presentation of Method 5. A discussion of the Citizens proposal may be found in a prior section of this report. The OTS opposes the above-the-line ratemaking aspects of the Citizens proposal. (Refer to the OTS Reply Comments, pages 21 through 24).

(4) West Penn Power Company (WP) proposed that it is exempt from the Commission's decision in this Investigation due to a settlement provision in the proceeding at R-850220, adopted by the Commission on February 11, 1988. The OTS does not agree that WP is exempt. WP was exempted from the original proceeding at P-870246, but not specifically from the current Investigation at I-880083. Further, the OTS contends that WP cannot claim exemption from future changes in Commission policy or regulations which may be necessitated by this Investigation.

VIII. The OTS Reply Comments Regarding the Application of CIAC/CAC Tax Changes To Telecommunications

The OTS noted that there were very few Initial Comments from telephone utilities and that little insight was received into the proper accounting and ratemaking treatment of CIAC and CAC. The OTS disagrees with the contention of Contel that telephone utilities were exempted from tax on contributions under both the previous IRS Code or the TRA86 based new IRS Code. The OTS based its conclusion on discussions with IRS personnel.

IX. The OTS Conclusions As Regards the CIAC and CAC Methodologies Advanced in It's Petition

The OTS concludes that it must continue to advocate the use of Method 5, (NPV Gross-up) generally, to establish the proper amount of CIAC and CAC to be received from developer/customers and that the example of an acceptable Method 5 tariff was furnished by Citizens Utilities with its Initial Comments.

The OTS is also not opposed to the use of Method 2 (full gross-up with tax benefits to ratepayers) or Modified Method 2 (full gross-up with tax benefits to contributors) by smaller less sophisticated companies that may also have external financing constraints.

Method 3 also appears to be acceptable to the OTS where the utility can demonstrate "public benefit" and would be expected to do so in subsequent rate proceedings.

X. The Reply Comments of Other Respondents

(1) Philadelphia Electric Company (PECO) agrees with the OTS in their rejection of Methods 1 and 4 since both violate FERC accounting, Generally Accepted Accounting Principles (GAAP) and tax normalization and would also result in wide income swings.

PECO reiterates it's preference for Method 3 but contends that each utility should be allowed to adopt the methodology best suited to its particular circumstances.

(2) ALLTEL Pennsylvania, Inc. (ALLTEL) et al. agree with the Initial Comments of CONTEL that TRA86 changes to CIAC do not alter the tax exempt status of Telecommunication industry contributions and advances.

(3) The Small Water and Sewer Companies Group submits that "[m]ethod No. 2 appears to be the best way to insulate small utilities and their customers from the dramatic economic tax effects of CIAC and CAC. The Pennsylvania Public Utility Commission should consider permitting utilities having less than 7,000 customers to use Method No. 2."

Other methods they contend "may result in small companies being forced to borrow significant sums to pay the IRS the margin between what is due to the IRS that year and what [the] utility is allowed to collect from the cost-causer (usually a developer) during such year."

(4) The Pennsylvania Power and Light Company (PP&L) reiterated its Initial Comments and urged "that the Public Utility Commission adopt OTS Method 3 for addressing the income tax liability associated with Contributions in Aid of Construction and implement this recommendation in a manner consistent with the Company's initial comments. In the alternative, PP&L suggests that the Commission adopt a utility-by-utility approach to address these issues."

XI. CONCLUSION

The question of proper regulatory accounting for CIAC and CAC is properly approached by the OTS as a cost-benefit analysis using the net present value of the various cash flows. We should first ask ourselves, however, who should bear the added costs associated with the new taxable status of CIAC and CAC as a result of TRA86. Logic would dictate that where a contributor is a developer who may pass costs on to lot purchasers and all of the dollars contributed are committed to plant that will be used solely to provide utility services to that developer and his future potential clients, the increased tax cost should generally rest with the developer and eventually the new lot owners. Current customers would have no vested interest in such a contribution and would not benefit from it. As such, they should not be responsible for the related income taxes. Similarly, if the contributor is a single large user of utility service, the taxes associated with the contribution are not reasonably assignable to other existing ratepayers, absent special circumstances. Such circumstances could be present in many transactions. Many water utility extension projects involve the construction of upgraded mains and other such backbone facilities that benefit current customers to an extent, as well as the contributor and new customers. Another special circumstance might be where a new large user of utility services will provide a "public good" that will benefit the existing community, at large, including current ratepayers. This "public good" could take the form of increased jobs for the area or even general economic development. In instances such as these, there may be room for a sharing of the additional tax cost even though the new plant is not directly used to the benefit of existing ratepayers. If we accept the premise that costs should be shared in some circumstances and that costs should be fully assignable to developers in others, we can then proceed to examine the various circumstances of the separate utility industry groups and the various methodologies advanced in this Investigation.

We will begin by addressing the case-by-case or ad hoc approach advanced by many Respondents in which each firm would decide how to account for CIAC and CAC based upon their particular circumstances. While we believe that a regulatory agency should not act in such a way as to assume the duties and decision making responsibilities of utility management or board of directors, regulatory bodies are charged with the responsibility to protect the interests of ratepayers by assuring reliable service and reasonable rates. A laisee-faire approach to regulation with regard to this issue will not ensure the accomplishment of those goals. Where the options with respect to a given issue are varied and the rate effects across such options are broad, a regulatory agency must set general policy and guidelines while attempting to retain as much flexibility in setting rates as it can without jeopardizing the interest of ratepayers or effectively bringing financial harm to the utilities it regulates. The CIAC/CAC issue is an instance that necessitates a Commission policy with enough flexibility that such policy creates neither unreasonable rates nor financial burden, that assigns cost to those who will reap benefits and at the same time helps maintain an environment in the Commonwealth that is conducive to economic development and the growth of commerce. Therefore, some degree of consistency and uniformity must be established with regard to this issue in order to maintain fairness in setting utility rates. As such, We have endeavored to formulate a Commission policy which is flexible with regard to this issue, but not so loose as to permit total freedom with regard to the choice of CIAC/CAC methodology.

Establishing a viable methodology for accounting for CIAC and CAC will be approached on an industry basis. The different utility industries and their customers have varying needs and circumstances that may necessitate methodologies that differ.

A. <u>Electric and Gas</u>

Electric and Gas utilities operate in an energy competitive environment. Consumers of these services can quite readily switch between them for heating, cooking and cooling purposes. This is particularly true in the developmental stage of a residential area or in the construction of new factories, shopping centers or other large users of energy. Furthermore, it is the electric and gas utility rates that are the critical utility costs associated with promotion of economic development. For these reasons, our CIAC/CAC methodology should be comparable across these two industries in order to allow a level playing field in the competition to provide energy services. Because these are also the utility industries which have the potential to provide a "public benefit" in the form of economic development, a methodology that promotes such growth should be available. Such a methodology is necessary, therefore, even if existing rate-payers must share in the costs associated with the new plant. OTS Method No. 3, in which deferred taxes associated with a contribution or advance are added to rate base fulfills both requirements of promoting competition and economic growth. It requires only the base contribution or advance and shares the burden of taxes with current ratepayers who may also share in the "public benefits" inherent in the increased economic growth.

This was the methodology favored by most electric and gas utilities in the Initial and Reply Comments and, as such, we anticipate that adoption of Method 3 will also necessitate the least problems with any conversions to this method. An example of a recommended tariff for Method 3 is contained in Appendix A to this Opinion and Order. Those electric or gas utilities, which currently employ Method 5 and do not wish to adopt Method 3, may continue to use Method 5.

Should any electric or gas utility wish to deviate from these methods it must file a petition, complete with proposed tariffs, to deviate from this method. The utility should also be prepared to defend the effect upon rates of the alternative proposed method in any subsequent rate proceedings.

B. Water and Sewer

It is the water and sewer industry that is affected most by the TRA86 changes to CIAC/CAC taxability. A very substantial amount of utility plant is financed in this fashion. However, competition within the industry is not as vital a force as it is in the energy based industries. Economic development, while an important consideration, is not as sensitive to water utility pricing as it is to energy costs. Therefore, a "gross-up" methodology is more appropriate. The contributor bears the total cost, including taxes of the plant because he also will reap its full benefit. A great majority of the Water and Sewer utilities that supplied comments agreed that current ratepayers should be insulated from any costs arising from CIAC or CAC. What was not agreed upon was the "gross-up" method to be used. Larger and more sophisticated companies agreed with the OTS that the NPV "gross-up" (Method 5) properly insulated current ratepayers while minimizing the cost to contributors. Many smaller firms expressed the concern that NPV "gross-up" would be difficult for such firms to use due to the complexity of the records it would necessitate. Many of these smaller utilities, as a result, supported a full "gross-up" (Method 2) in which current ratepayers retained the tax depreciation benefits or the somewhat more balanced full "gross-up" of Modified Method 2 by which over time the tax benefits are returned to contributors as they are realized by the utility. We find modified Method 2 attractive because of its fairness and balance and because it is, at the same time, easier for small firms to employ than Method 5. It does not require net present value calculations nor forecasting discount rates, tax rates or company profitability. Only those tax benefits that are actually achieved are returned to contributors if and when they are realized by the utility.

Given the varying degrees of sophistication in the water and sewer industry we shall authorize a great deal of flexibility. Therefore, we adopt a policy to allow the water and sewer utilities to select one of the following gross up methodologies: OTS Method No. 2, OTS Modified Method No. 2 or OTS Method No. 5. All jurisdictional water and sewer companies are ordered to file the appropriate tariffs supplements necessary to employ one or more of these methodologies. An example of acceptable tariff supplements can be found in Appendix A.

Any departure from the use of one of these three methodologies will require approval, in the fashion described above, in our discussion of the electric and gas industries.

C. Telephone

We are not convinced by the arguments of Contel and ALLTEL that telecommunications utilities are exempt from the taxability of CIAC and CAC as provided by TRA86. Our reading of the Internal Revenue Code both prior to and subsequent to TRA86 does not lead us to the conclusion that telecommunication companies are not to be taxed on such revenues. This is a question to be ultimately decided by the industry and the IRS. Until such time as that question is resolved, Pennsylvania telecommunication utilities must address the potential tax consequences of CIAC and CAC.

Contributions and Advances do not constitute a very large percentage of plant in the telecommunications industry. As a result, the issue is not considered to be one of great import by the industry. Because telecommunications is an industry that is experiencing increased levels of competition, it necessitates a CIAC/CAC methodology which is commensurate with the industry's competitive status. We, therefore, shall allow all jurisdictional telecommunication utilities to employ Method 3. We base this upon many of the same factors expressed above in our discussion of a methodology to be employed in the gas and electric industries.

Telecommunication utilities are directed to immediately file the tariff supplements necessary to employ Method 3. An example of an acceptable tariff supplement can be found in Appendix A.

D. Proceedings That Have Been Incorporated Into This Investigation

At the Public Meeting of January 12, 1989, we permitted the newly tariffed procedures of York Water Company to become effective but subject to the conclusions reached in this generic investigation. Because the method tariffed by York Water comports with OTS Method 5 as allowed for use by water utilities in this Opinion and Order, we shall permit the York Water Main Extension tariffs to remain as approved on January 12, 1989, at Docket No. R-881158.

In the Public Meeting of March 30, 1989, We approved the tariff filings of Citizens Utilities at Docket No. R-881180 through R-881186, allowing that group of water and telephone utilities to immediately adopt Method 5, as an interim measure pending the outcome of this investigation. We now reaffirm that action and approve the continued use of that methodology. We reject for ratemaking purposes, however, the companies' addition to rate base of the deferred taxes associated with any tax timing difference caused by the contribution. Should the Citizens telephone affiliate wish to adopt Method 3 as approved for use for all telecommunications utilities, it is allowed to do so. Any further variance from those specifically approved methods are required to be approved in advance and are subject to review in rate proceedings as we have previously described.

E. Customer Advances

We order that where methods prescribed for general use with CIAC are employed by a utility, a similar methodology, adapted for CAC, be used. Those companies having approval to use alternative CIAC methodologies shall adapt such methodology for use with CAC. All jurisdictional utilities are required to immediately file CAC tariff language with the tariff supplement necessitated by the adoption of the CIAC methodologies.

F. Cash Flow

It may be that non-gross-up methodologies, such as Method 3, present cash flow problems for small companies. This is due to the timing differences between tax liabilities created by CIAC and the related tax depreciation benefits. Should a utility determine that the methodology adopted for its industry creates such cash flow difficulties, the utility may petition for a waiver from that methodology.

XII. Facility Extension Policies - Free Construction Allowances

In the Order that initiated this Investigation, we directed the Respondents to address the subject of free construction allowances. Our analysis of the record indicates the following.

The general basic principles in establishing Extension Policies have been developed by various fixed utility committees, sub-committees and individuals dealing with the subject. The basic principles observed are:

(1) Extension policies should be non-discriminatory.

(2) Extension policies should be based upon business principles.

(3) Extension policies should assure that the extensions will be self-supporting.

(4) Extension policies should provide for developer/customer participation in the financing of extensions, into localities within the utility

service territory and where service is needed, if the anticipated revenue is insufficient to warrant the utility making the extension unassisted.

(5) Extension policies should be implemented by the adoption and promulgation of comprehensive rules.

(6) Extension rules should be reviewed periodically.

We have carefully and thoroughly reviewed the Initial Comments submitted addressing the subject of the existing and/or proposed free construction allowance for future application. The considerations involved in determining the amount of the allowance, and the methods utilized to determine the allowance fall within the general principles stated above.

The term "free construction allowance" ("allowance") used throughout this proceeding is in reality the investment a utility can make in an extension for each bonafide customer taking service from the extension. A bonafide customer is defined as a customer that has made application for service and stands ready to receive service when the extension is completed or takes service within the extension contract period. The allowance should be calculated so that existing customers would not be required to support the revenue requirement of the utilities' investment.

Probably the most controversial allowance rule known as the "Thirty-five Foot Rule" ("Rule") exists in the water industry. This rule simply states that the utility will invest in the extension an amount equal to the cost of thirty-five feet of the extension for each bonafide customer receiving service from the extension. The investment will be made one time for each customer during the length of the contract, usually ten years, in the form of a refund to the party executing the extension deposit agreement.

The Rule, because of its simplicity, has been adopted by the majority of small and medium sized water utilities in

Pennsylvania. However, the largest regulated water utility, Pennsylvania-American, has been using the Rule for many years. In the past, we have accepted the Rule as one of several methods of calculating the allowance.

Historically, the Rule was developed relating to the typical frontage of an average residential lot. The theory was that 35 feet is the approximate length by which a main would have to be extended to serve one additional house in a linear progression on an average residential block.

Pennsylvania-American has presented a justification for the use of the Rule that may also apply to the small water utilities using the Rule. The Rule has been justified economically by the marginal revenue, not marginal expense, required to provide a reasonable after-tax return on the original cost of customer-specific facilities to provide typical residential service. The utility will install without cost a water service line, which is the lateral running from a distribution main to the curb stop, as well as the customer's meter. In addition, the utility will extend an 8" diameter main up to 35 feet for each service connection. Below is an illustration of the economical justification of the use of the Rule.

Average Residential Water Sales			$250
Less Revenue Deductions:			
Variable Operating Expense		$25	
Depreciation		29	
State Income Tax		6	
Federal Income Tax		37	
Total Revenue Deductions			97
Utility Operating Income			$153
Return on Rate Base			11%
Calculation of Rate Base:			
35' - 8" Main	$875		
1 - 3/4" Service	500		
1 - 5/8" Meter	75		
Utility Plant		$1,450	
Accumulated Depreciation		(29)	
Cash Working Capital		5	
Deferred Tax		15	
Total Rate Base		$1,411	

We find that the utilities' comments in response to Docket No. I-880083, specifically the "free construction allowance" considerations, fall within general principles established for the extension of facilities. Since each utility type and each company within a specific type have different variables related to the determination of the allowance, we shall not establish specific equations for the calculation of the allowance. All utilities are ordered to state any allowance rules in their tariffs and be subject to the test of reasonableness in their next formal rate proceeding.

Tariff Considerations:

In the past, Main Extension and Contributions in Aid of Construction procedures were based upon the internal operating decisions of individual utilities and were approved by the Commission on a case-by-case basis. Such approval was granted based upon Commission policy that was formulated over many years of reviewing and approving such transactions. The Main Extension policies adopted by utilities in the past are considered valid until new tariffs are filed based upon our Order in this proceeding. We addressed this issue in our Order pertaining to the Philadelphia Suburban Water Company at C-871234 entered March 18, 1988. The existing practices concerning Main Extensions were accepted as valid and controlling, despite the alternative offered by developers. The utility was ordered to file a tariff that set forth the existing practice. That tariff would be applicable to all past and future Main Extension agreements until such time as the tariff was adjusted.

Many Main Extension Agreements and their related tariffs have, in the past, contained language concerning the collection of costs, by a utility that are attributable to the construction of contributed property. We deem such language to have included a broad range of costs including income taxes, where such income taxes are applicable. As a result, all Main Extension Agreements that have included such cost language are deemed to have provided for the collection of income taxes as well as other costs related to the transfer of or construction of contributed property.

Compliance

All Respondents must comply with this Order in accordance with the alphabetized schedule contained in Appendix B. All Respondents will file their tariffs on sixty days' notice; **THEREFORE:**

IT IS ORDERED:

1. That all Respondents to this Investigation are to comply with the directions given in the Conclusion section of this Opinion and Order.

2. That all Respondents to this Investigation are to file appropriate tariff supplements in compliance with this

Opinion and Order as set forth in Appendix B of this Opinion and Order.

3. That the Secretary serve a copy of this Opinion and Order upon all parties to the investigation.

BY THE COMMISSION,

Jerry Rich

Jerry Rich
Secretary

(SEAL)

ORDER ADOPTED: May 11, 1989

ORDER ENTERED: June 14, 1989

Morgan Lewis

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July 5, 2018

RECEIVED

JUL - 5 2018

PA PUBLIC UTILITY COMMISSION
SECRETARY'S BUREAU

VIA FEDERAL EXPRESS

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

RE: Pennsylvania-American Water Company Supplement No. 6 to Tariff-Water Pa. P.U.C. No. 5
Docket No. R-2018-3002502

Dear Secretary Chiavetta:

Enclosed for filing at the above-referenced docket are the **responses of Pennsylvania-American Water Company ("PAWC" or the "Company") to the data requests issued by the Bureau of Technical Utility Services ("TUS") on June 20, 2018.** As evidenced by the enclosed Certificate of Service, copies of the Company's responses are being served on the Bureau of Investigation and Enforcement, the Office of Consumer Advocate and the Office of Small Business Advocate. Additionally, as requested by TUS, copies of the Company's responses are being sent via e-mail to Paul Zander at pzander@pa.gov.

Very truly yours,

Anthony C. DeCusatis

Anthony C. DeCusatis

ACD/tp
Enclosures

c: Per Certificate of Service (w/encl.)
Paul Zander (via e-mail) (w/encl.)

Pennsylvania-American Water Company's Response to TUS Data Request Set 1 Dated: June 20, 2018

Pennsylvania-American Water Company Supplement No. 6 to Tariff Water–PA P.U.C. No. 5

Docket No. R-2018-3002502

R-5. Please compare PAWC's proposed tariff with CIAC Method No. 2, CIAC Modified Method No. 2, and CIAC Method No. 5 identified in the 1989 Order for the following:

a. Please calculate the net present value of the effect on ratepayers from an average year's contributions and advances; and

b. Please explain the immediate and long-term impact on the amount of PAWC's required contribution for line extensions for bona fide applicants.

Response:

The Company's proposed tariff, which does not require the gross up of CIAC and CAC, is similar to CIAC Method No. 3 as detailed in the Commission Order at Docket No. I-880083, page 3. Under this method, the Company will be able to continue to accept Contributions and Advances from both governmental and non-governmental entities thereby offsetting increases in rate base with the CIAC and having the ability of spreading future upgrades to plant over a larger number of customers added through CAC.

a. See below.

CIAC – Annual estimate of $5 million

- Company's proposal – Method No. 3 please refer to Attachment No. 3 page 1. NPV of $931,000.
- Method No. 2 please refer to Attachment No. 3 page 2. NPV of ($722,000).
- Modified Method No. 2 and Method No. 5 – Please refer to the Commission Order at Docket No. I-880083, page 3. Existing customers' rates are unaffected under these methods. Therefore, no computation was completed and the NPV is $0.

Pennsylvania-American Water Company's Response to TUS Data Request Set 1 Dated: June 20, 2018

Pennsylvania-American Water Company Supplement No. 6 to Tariff Water–PA P.U.C. No. 5

Docket No. R-2018-3002502

R-5 (Continued)

CAC – Annual estimate of $6 million

- Please refer to Attachment No. 3 pages 3 through 5 for an analysis of the impact of the Company's proposed no gross-up - Method No. 3 on CAC. In order to develop the impact on customers, the Company first, on page 4, developed the impact to customers of taxable CAC recorded under method 3 (no-gross up method). Second, as a base line, the Company developed the impact to customers of CAC before the TCJA of 2017. These two amounts were subtracted and resulted in NPV of $621,000 as shown on page 3 of Attachment No. 3

b. Under the Company's proposed no-gross up method the required contributions, which are the project costs above the amount that PAWC will invest per bona fide customers, will not be grossed up. If the Company is ordered to gross up CIAC and CAC any costs borne by the boni fide applicant will increase by the full gross-up factor of 40.631%.

Responsible Witness: John Cox
Director of Rates and Regulations

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA INC**	: : : : : :	**Docket No. R-2018-3000834**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Brenton Grab, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 1-SR, and, I&E Exhibit No. 1-SR were prepared by me or under my direct supervision and control. Furthermore, the facts contained therein are true and correct to the best of my knowledge, information and belief and I expect to be able to prove the same 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.

Brenton Grab
Brenton Grab
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: August 30, 2018

I&E Statement No. 1-SR
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Surrebuttal Testimony

of

Brenton Grab

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES
TAXES
CASH WORKING CAPITAL

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Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Brenton Grab. My business address is Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

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

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Suez Water Pennsylvania (Suez, SWPA, or Company) witnesses Constance E. Heppenstall (SWPA Statement No. 2R), James C. Cagle (SWPA Statement No. 3R), and Harold Walker, III (SWPA Statement No. 4R).

Q. DOES YOUR SURREBUTTAL INCLUDE AN ACCOMPANYING EXHIBIT?

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

Q. HAS SUEZ ACCEPTED ANY OF YOUR RECOMMENDATIONS?

A. Yes. The Company agreed to remove the Mahoning Township Acquisition, my payroll tax adjustment (SWPA Statement No. 2R, p. 2), and my recommendation that rate case expense be normalized (SWPA Statement No. 2R, p. 11). The Company also accepted my recommendations related to employee group health and life insurance, and labor expense but the Company altered my recommended adjustments, which I will discuss below.

Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS AS CONTAINED IN THIS SURREBUTTAL TESTIMONY.

A. The following table summarizes my recommended adjustments to the Company's updated position as claimed in SWPA Exhibit No. CEH-2-R and SWPA Statement No. 4R, Updated Schedule 1.

	Company Revised Claim	I&E Recommended Allowance	I&E Adjustment
O&M Expenses and Taxes:			
Outside Contractors	$1,147,114	$1,027,314	($119,800)
Purchased Water	$182,928	$74,591	($108,337)
Management and Service Fees	$5,219,561	$4,990,062	($229,499)
Real Estate Taxes	$318,178	$304,553	($13,625)
O&M and Tax Expense Adjustments			**($471,261)**
Rate Base Adjustments:			
Cash Working Capital	$843,094	$816,703	**($26,391)**

SUMMARY OF I&E OVERALL UPDATED POSITION

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

A. I&E's updated total recommended revenue requirement for the Company is $46,601,747. This recommended revenue requirement represents an increase of $281,091 to I&E's adjusted present rate revenues of $46,320,656. This total recommended increase incorporates adjustments made in this testimony and those made in the testimonies of all other I&E witnesses.

The following table summarizes the I&E surrebuttal position:

Suez Water Pennsylvania
R-2018-3000834

TABLE I
INCOME SUMMARY

	12/31/19 Proforma Present Rates	INVESTIGATION & ENFORCEMENT Adjustments	Present Rates	Allowances	Proposed
	$	$	$	$	$
Operating Revenue	46,722,995	-402,339	46,320,656	281,091	46,601,747
Deductions:					
O&M Expenses	18,363,318	-457,636	17,905,682	1,001	17,906,683
Depreciation	8,408,315	-486,835	7,921,480		7,921,480
Taxes, Other	962,957	-15,651	947,306	1,415	948,721
Income Taxes					
Current State	1,140,177	92,511	1,232,688	27,840	1,260,528
Current Federal	2,174,145	175,039	2,349,184	52,675	2,401,859
Deferred Taxes	548,301	0	548,301		548,301
ITC	0	0	0		0
Total Deductions	31,597,213	-692,572	30,904,641	82,931	30,987,572
Income Available	15,125,782	290,233	15,416,015	198,160	15,614,175
Measure of Value	237,757,639	-17,218,450	220,539,189	0	220,539,189
Rate of Return	6.36%		6.99%		7.08%

ADJUSTMENTS FOR THE MAHONING TOWNSHIP ACQUISITION

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY RELATED TO ADJUSTMENTS FOR THE MAHONING TOWNSHIP ACQUISITION.

A. I recommended disallowance of the Company's $430,783 claim in its entirety for adjustments related to the Mahoning Township Acquisition (I&E Statement No. 1, p. 6). This claim was improper since the

Application to acquire Mahoning Township was not yet filed or approved by the Commission. Allowing the recovery for costs associated with the Mahoning Township acquisition in this rate proceeding would violate Section 1329 of the Public Utility Code as explained in more detail by Mr. Cline (I&E Statement No. 3, pp. 5-6). Also, Mr. Cline explained that there is no guarantee the Mahoning Township acquisition would be approved before the end of the fully projected future test (FPFTY) ending December 31, 2019 (I&E Statement No. 3, p. 6). Mr. Cline explained that the Mahoning Township customers have had no opportunity to participate in this rate case and the customers have had no notice of a potential rate increase (I&E Statement No. 3, p. 6). For more information on Mr. Cline's recommendations see I&E Statement No. 3 and I&E Statement No. 3-SR.

Q. DID THE COMPANY ACCEPT YOUR RECOMMENDATION?

A. Yes. Suez witness Constance E. Heppenstall (SWPA Statement No. 2R, p. 2) accepted my recommendation.

OTHER ADJUSTMENTS FOR MAHONING TOWNSHIP ACQUISITION

Q. WHAT OTHER ADJUSTMENTS IN YOUR DIRECT TESTIMONY WERE RELATED TO YOUR RECOMMENDED DISALLOWANCE OF MAHONING TOWNSHIP ACQUISITION COSTS?

A. The other sections in my direct testimony recommended removal of $58,635 for the following costs associated with the Mahoning Township acquisition: labor expense (I&E Statement No. 1, pp. 7-10), payroll taxes (I&E Statement No. 1, pp. 10-11), employee group health and life insurance (I&E Statement No. 1, pp. 11-14), and fringe benefits transferred (I&E Statement No. 1, pp. 14-17). The adjustment for these expenses all stemmed from the removal of the employee the Company planned to hire from Mahoning Township after the Mahoning Township acquisition was completed.

Q. DID THE COMPANY ACCEPT YOUR RECOMMENDATION TO REMOVE ALL COSTS RELATED TO THE MAHONING TOWNSHIP ACQUISITION?

A. Yes. Suez witness Constance E. Heppenstall indicated that the Company has agreed to remove all costs related to the Mahoning Township acquisition from the current rate case. This includes all necessary adjustments to labor expense, employee group health and life insurance, payroll taxes, and fringe benefits transferred (SWPA Statement No. 2R. p. 2). These adjustments totaling $52,473 have been included in SWPA Exhibit No. CEH-2R. The Company's adjustment for labor expense is slightly different than my recommended adjustment because the Company incorporated reallocation of overtime in its calculation of the adjustment.

which I did not. Also, the Company's group health and life insurance adjustment is slightly less than mine due to rounding.

Q. DO YOU ACCEPT THE COMPANY'S UPDATES TO LABOR EXPENSE, EMPLOYEE GROUP HEALTH AND LIFE INSURANCE, PAYROLL TAXES, AND FRINGE BENEFITS?

A. Yes. I accept the Company's modified labor amount since it is reasonable to also adjust for reallocation of overtime.

OUTSIDE CONTRACTORS

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR OUTSIDE CONTRACTORS.

A. I recommended an allowance of $922,114 or a reduction of $225,000 ($1,147,114 - $225,000) to the Company's claim based on disallowance of the $150,000 that the Company claimed for the Non-Revenue Water (NRW) study and $75,000 that the Company claimed for the inventory process study included in the outside contractors expense (I&E Statement No. 1, p. 18). I had multiple reasons for my recommendation. First, the Company did not provide supporting documentation from the vendors that it will hire to provide verification for the claimed costs of these studies (I&E Statement No. 1, pp. 18-19).

Second, it appeared the Company was still in the very early planning stages of these projects and as such does not know what these studies will cost or what the studies will entail (I&E Statement No. 1, p. 19). The Company indicated that as of the filing date of its instant rate case (April 30, 2018) it had yet to receive bids for either of these studies (I&E Statement No. 1, pp.19-20). For the NRW study, the Company indicated that it expected to receive bids on June 15, 2018, but it had not provided these bids (I&E Statement No. 1, pp. 19-20). For the inventory process study the Company stated that the study had yet to go out for vendor bids as of June 11, 2018, and the Company had a meeting in July to discuss what the inventory process study would entail (I&E Statement No. 1, p. 19). These factors indicated that the Company is still in the early planning stages of these studies, and the Company does not know what these studies will entail. As such, the related expenses should not be allowed (I&E Statement No. 1, p. 19).

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. Suez witness Constance E. Heppenstall (SWPA Statement No. 2R. p. 10) disagrees with my recommendation.

Q. SUMMARIZE MS. HEPPENSTALL'S RESPONSE IN REBUTTAL TESTIMONY.

A. Ms. Heppenstall states that the reason the Company is performing the NRW study and the inventory process study is because of recommendations listed in the Focused Management and Operations Audit from 2017 and both studies need to be funded in this rate case. She also states that the Company should complete an NRW study every two years until the Company achieves an NRW that is acceptable to the PUC. Also, the Company provided two bids for its NRW study and included these bids in SWPA Exhibit No. CEH-3R. For these reasons the Company disagrees with my recommended adjustment to outside contractors expense (SWPA Statement No. 2R, p. 10).

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY CONCERNING OUTSIDE CONTRACTORS EXPENSE?

A. First, the PUC is not requiring the Company to fund both the NRW study and the inventory process project in the current rate case, so I am uncertain why Ms. Heppenstall states in her rebuttal testimony that both of these studies need to be funded in the current rate case. However, since the Company has provided bids for its NRW study, I am adjusting my recommendation for the NRW study expense based on this new information. Since the Company still has not provided any bids or documentation from vendors to support its cost of $75,000 for its inventory process project, I am not changing my recommendation from direct testimony that the expense related to the inventory process study of $75,000 be disallowed.

Q. WHAT IS YOUR UPDATED RECOMMENDATION REGARDING THE NRW STUDY?

A. I recommend an updated allowance of $105,200 or a reduction of $44,800 ($150,000 - $105,200) to the Company's claim of $150,000 (SWPA Exhibit No. CEH-2-R, Schedule-14) for the NRW study expense based on the bid provided by American Leak Detection on June 13, 2018 (SWPA Exhibit. No. CEH-3R). The reason I am using this bid of the two bids provided is because this bid provides an estimate for the entirety of the project while the other bid only provides an estimate for a portion of the project. The total amount of this bid is $436,800. In the bid, an amount of $16,000 is included for Mahoning Township. As the Company agreed to in rebuttal testimony, all adjustments included in this proceeding related to the Mahoning Township acquisition should be removed, so I am excluding the $16,000 from the NRW study expense. This produces a total NRW study expense of $420.800 ($436,800 - $16.000).

The Company normalized this expense over a two-year period in direct testimony (SWPA Exhibit No. CEH-2, Schedule-14) and continues to recommend a two-year normalization period in rebuttal testimony (SWPA Statement No. 2R, p. 10). I disagree with this normalization period and recommend that a four-year normalization be used instead. This is in line with OCA witness Lafayette K. Morgan, Jr.'s recommendation of a four-year normalization period (OCA Statement No. 1, pp. 27-28). I agree with Mr. Morgan's reasoning that a four-year normalization of this cost should be used to moderate the impact of the projected cost to ratepayers (OCA Statement No. 1, p. 28). Ms. Heppenstall provided rebuttal testimony in response to Mr. Morgan's testimony stating that the Company believes these studies (the NRW study and the inventory process study) should be normalized over a two-year period (SWPA Statement No. 2R, p. 10). She also stated, "The NRW study should be completed every two years until the Company achieves a NRW percentage acceptable to the Pennsylvania PUC…" but she did not provide any support for why this study should be completed every two years. Since the Company did not provide any new information in rebuttal testimony negating Mr. Morgan's four-year normalization period, I am incorporating a four-year normalization period in my updated recommendation for NRW study costs.

Based on the recommended four-year normalization period and the $420,800 calculated from the Company's bid provided in rebuttal testimony, my total recommended NRW study expense is $105,200 ($420,800 / 4 years). This is a reduction of $44,800 ($150,000 - $105,200) to the Company's claimed NRW study expense of $150,000 (SWPA CEH-2R, Schedule-14).

Q. WHAT IS YOUR UPDATED RECOMMENDATION FOR OUTSIDE CONTRACTORS EXPENSE?

A. My updated recommendation for outside contractors expense is $1,027,314 or a reduction of $119,800 ($1,147,114 - $1,027,314) to the Company's claim of $1,147,114 reported on SWPA CEH-2-R, Schedule-14. This recommendation includes my newly recommended decrease of $44,800 (discussed above) related to the NRW study and my continued recommended disallowance of the $75,000 related to the inventory process study.

<u>PURCHASED WATER</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PURCHASED WATER.

A. I recommended an allowance for purchased water expense of $74,591 or a reduction of $108.337 ($182,928 - $74,591) to the Company's claim. which was based on the disallowance of the Susquehanna Area Regional Airport Authority (SARAA) additional purchased water of $105,000 and disallowance of the Company's future test year (FTY) and FPFTY inflationary increases included in the Company's claim (I&E Statement No. 1, p. 22). There were multiple reasons I recommended disallowance of the SARAA additional purchased water. First, in the Company's prior case at Docket No. R-2015-2462723 the Company stated it would purchase water from SARAA but it did not purchase water from it according to the Company's purchased water history (I&E Statement No. 1, p. 22). Second, the Company indicated that it did not purchase water from SARAA in the past several years due to contamination, but the Company indicated this issue will be fixed in the near future and it will start purchasing water from SARAA again. However, the Company provided no supporting documentation from SARAA that this contamination issue will be fixed or when the Company will start purchasing water from SARAA again. Thus, there was no proof provided by the Company indicating that it will or will be able to purchase water from SARAA within the FPFTY (I&E Statement No. 1, p. 23). Lastly, the Company has not purchased water from SARAA in the past several years, and it did not provide documentation to support the need for this water to provide safe and reliable service to customers, or that the lack of water purchases from SARAA caused any detriment to the Company's operations (I&E Statement No. 1, p. 23).

Additionally, I recommended disallowance of the Company's inflation adjustments for the FTY and the FPFTY for computing its FPFTY purchased water allowance because purchased water expense is dependent on rates set by the water suppliers, and the Company did not provide supporting documentation from its water suppliers indicating that the rates will increase in the FTY and the FPFTY (I&E Statement No. 1, p. 24).

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. SWPA witness Constance E. Heppenstall disagrees with both of my adjustments (inflation and elimination of SARAA purchased water) (SWPA Statement No. 2R, p.7).

Q. WHY DOES MS. HEPPENSTALL DISAGREE WITH YOUR RECOMMENDED DISALLOWANCE OF AN INFLATION ADJUSTMENT FOR PURCHASED WATER?

Ms. Heppenstall states that the Company should be able to inflate purchased water expense for the FTY and the FPFTY because according to "Water and Wastewater Annual Price Escalation Rate for Selected Cities across the United States" dated September 2017, the average annual increase for the price of water from 2008 through 2016 was 4.1%, which is higher than the requested 2.3% inflation factor (I&E Exhibit. No. 1, Sch. 6, p. 1 and SWPA Exhibit No. CEH-3R). She also states that purchased water expense showed a decrease in the Company's response to OCA-IV-37 (I&E

Exhibit. No. 1, Sch. 6, p. 2) because the Company was able to buy less water from Steelton (a high cost producer) in 2017 (SWPA Statement No. 2R, p. 7).

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY REGARDING INFLATION OF PURCHASED WATER?

A. My original recommended disallowance of the inflation adjustment for purchased water for the FTY and FPFTY is still valid. My original argument was that purchased water prices are dependent on rates set by the Company's water suppliers, and the Company has not provided documentation from its water supplier indicating these rates are going to increase for the FTY or the FPFTY. The Company did not provide any additional documentation from its water suppliers showing an increase in rates for the FTY and FPFTY in its rebuttal testimony, so my original argument still stands (I&E Statement No. 1, p. 24).

Ms. Heppenstall's assertion that purchased water expense decreased from 2016 to 2017 because the Company decreased the amount of water purchased from Steelton (a high cost producer) (SWPA Statement No. 2R, p. 7) actually supports my point. According to the Company's purchased water history provided in response to OCA-IV-37, the Company's purchased water costs have decreased the last three years (I&E Exhibit

No. 1, Sch. 6, p. 2). For 2015, the purchased water expense was $84,246, for 2016 the purchased water expense was $70,906, and for 2017 the purchased water expense was $68,621 (I&E Exhibit No. 1, Sch. 6, p. 2). Even if the Company's purchased water costs are decreasing because of reduced purchases from Steelton, the fact is that the amount is decreasing, so the Company is not justified in increasing the FTY and FPFTY amounts for inflation. Also, the Company does not indicate that its trend of purchasing less water from Steelton is going to stop in the FTY and FPFTY, so it is safe assume that this trend of purchasing less water from a high cost water supplier will decrease the purchased water expense moving forward into the FTY and FPFTY.

Also, although the Company provided the "Water and Wastewater Annual Price Escalation Rate for Selected Cities across the United States" indicating the average annual increase for the price of water from 2008 through 2016 was 4.1%, which is higher than the requested 2.3% inflation factor used for purchased water by the Company, this document is not specific to Suez. According to Suez's history, the purchased water expense has been decreasing, and the Company has provided no proof of rate increases from its water suppliers. A generic multi-city report should not be the basis for increasing the FTY and FPFTY purchased water costs for inflation.

Q. WHY DOES MS. HEPPENSTALL DISAGREE WITH YOUR RECOMMENDED ADJUSTMENT FOR THE PURCHASED WATER EXPENSE FROM SARAA?

A. Ms. Heppenstall disagrees with my recommended $105,000 decrease to purchased water for the related SARAA expense because, she asserts, the contamination of SARAA water has been resolved, and the Company provided documentation from SARAA indicating that its water is safe for drinking (SWPA Statement No. 2R, p. 7 and SWPA Exhibit No. CEH-3R).

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY REGARDING THE PURCHASED WATER EXPENSE FROM SARAA?

A. Although the Company has provided documentation in rebuttal testimony from SARAA that indicated it resolved its contamination issue (SWPA Exhibit No. CEH-3R). I continue to recommend that the $105,000 in SARAA purchased water expense be disallowed. As stated in my direct testimony, the Company still has not provided documentation indicating that it needs to purchase water from SARAA to provide safe and reliable service to its ratepayers. According to the Company's breakdown of purchased water expense for the last three years provided in response to OCA-IV-37 (I&E Exhibit No. 1. Sch. 6, p. 2), the Company has not been purchasing water from the SARAA for the last three years. The Company has not indicated that the lack of purchased water from this entity has caused any detriment to the Company's operations (I&E Statement No. 1, pp. 23-24).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PURCAHSED WATER?

A. No.

<u>PURCHASED POWER</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR PURCHASED POWER.

A. I recommended an allowance for purchased power of $1,357,874 or a reduction of $212,814 ($1,570,688 - $1,357,874) to the Company's claim (I&E Statement No. 1, p. 25) based on two different adjustments. First, I recommended that the Company's three-year historic average that it used to calculate purchased power in FPFTY be adjusted to reflect more accurate historic information. I recalculated the Company's three-year historic average based on the Company's filing, information the Company provided in discovery, and the Company's annual reports (I&E Statement No. 1, pp. 26-29). Second, I recommended that the Company's inflation adjustments for the FTY and FPFTY be disallowed (I&E Statement No. 1, p. 25).

The reason I recalculated the Company's three-year historic average is because the Company provided convoluted, contradictory, and inconsistent information in its filing and during discovery (I&E Statement No. 1, p. 26-29). I based my calculation on the historic information provided for purchased power in the Company's response to I&E-RE-7 and the Company's reported 2017 purchased power in its filing on SWPA Exhibit No. CEH-2, Schedule-8, since this information was mostly in agreement with the Company's PUC annual reports (I&E Statement No. 1, p. 28).

The reason I recommended disallowance of the inflation adjustment for purchased power expense is because purchased power rates are determined by the Company's supplier, and the Company did not provide support from its electric suppliers indicating that the rate will increase in the FTY or the FPFTY (I&E Statement No. 1, p. 29).

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATIONS?

A. Yes. Suez witness Ms. Heppenstall (SWPA Statement No. 2R, pp. 8-9) submitted rebuttal testimony in response to my recommendations.

Q. DID MS. HEPPENSTALL ACCEPT ANY OF YOUR RECOMMENDED ADJUSTMENTS FOR PURCHASED POWER?

A. Yes. Ms. Heppenstall agrees with my recommendation to disallow the inflationary increases for FTY and FPFTY purchased power expense (SWPA Statement No. 2R, p. 8).

Q. DID MS. HEPPENSTALL ACCEPT YOUR RECOMMENDED THREE-YEAR HISTORY IN CALCULATING PURCHASED POWER?

A. No.

Q. SUMMARIZE MS. HEPPENSTALL'S RESPONSE IN REBUTTAL TESTIMONY TO YOUR RECOMMENDED PURCHASED POWER THREE-YEAR HISTORY.

A. Ms. Heppenstall disagrees with my use of the 2017 historic purchased power amount of $1,242,836 stating that the amount should be $1,404,353 since this includes $161,516 in purchased power expense that was incorrectly included in the fuel for power production in 2017 (SWPA Statement No. 2R, p. 8). The Company shows a corresponding offsetting adjustment to fuel for power production in SWPA Exhibit No. CEH-2-R, Schedule-9.

Ms. Heppenstall agrees with my 2015 and 2016 purchased power expenses used in the calculating the three-year historic average for purchased power expense due to the conflicting information provided by the Company (SWPA Statement No. 2R, p. 9). The 2015 purchased power expense used in the Company's update is $1,363,806, and the 2016 purchased power expense used in the Company's update is $1,466,981 (SWPA Exhibit No. CEH-2-R, Schedule-8). These updated figures along with the corrected 2017 figure of $1,404,353 and no adjustment for inflation produce a FPFTY purchased power claim of $1,411,713 (SWPA Statement No. 2R, p. 9 and SWPA Exhibit No. CEH-2-R, Schedule-8).

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY?

A. I accept Ms. Heppenstall's changes made to purchased power expense.

Q, DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR PURCHASED POWER?

A. Yes. Based on the Company's rebuttal testimony and a misinterpretation on my part in the balances due to reclassifications of fuel for power production, I accept the Company's updated claim for purchased power expense of $1,411,713 (SWPA Exhibit No. CEH-2-R, Schedule-8).

<u>MANAGEMENT AND SERVICE FEES</u>

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR MANAGEMENT AND SERVICE (M&S) FEES.

A. I recommended an allowance of $4,492,483 or a reduction $867,014 to the Company's claim ($5,359,497 - $4,492,483) based on my recommendation that the common asset allocation of $867,017 included in M&S fees be disallowed (I&E Statement No. 1, p. 30). I recommended a disallowance of the common asset allocation because there are too many unknown factors involved with it and it is far too speculative for it to be allowed as part of Suez's M&S fees. Also, in the Company's calculation of the common asset allocation, it claims a rate of return on assets provided by the Company's service company (I&E Statement No. 1, pp. 31-32).

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. Suez witnesses Constance E. Heppenstall (SWPA Statement No. 2R, p. 9) and James C. Cagle (SWPA Statement No. 3R, pp. 11-12) disagree with my recommended adjustment.

Q. SUMMARIZE MS. HEPPENSTALL'S RESPONSE IN REBUTTAL TESTIMONY.

A. Ms. Heppenstall states that adjustments to M&S fees of $101,961 for the FTY and $139.936 for the FPFTY are incorporated into the Company's rebuttal exhibits. This creates an updated FPFTY claim of $5.219,561 for M&S fees (SWPA Exhibit No. CEH-2-R. Schedule-1). She states that Suez witness James C. Cagle addresses M&S fees in his testimony. These adjustments are in line with the Company's response to I&E-RE-1 in which the Company updated the amount for common asset allocation for the FTY to $795,686 and for the FPFTY to $727,078 (I&E Exhibit No. 1, Sch. 14, p. 1).

Q. DO YOU ACCEPT THE COMPANY'S UPDATED AMOUNTS IN REBUTTAL TESTIMONY?

A. No. I continue to recommend an adjustment as discussed below.

Q. SUMMARIZE MR. CAGLE'S RESPONSE IN REBUTTAL TESTIMONY.

A. Mr. Cagle explains the Company's methodology of allocating the cost of common assets. He explains that the common asset allocation "...calculation is made by calculating a "rate base" for the shared services assets and applying the return component, utilizing the same return which is used for ratemaking purposes. By recording the amounts as the Company proposes, ratepayers in each of the Company's states are paying the same amount that would have been paid had the assets been inappropriately split and recorded on the Books of each individual utility."[1]

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[1] SWPA Statement No. 3R, p. 11.

He also states that I proposed in direct testimony a different method for the Company to recognize the common asset allocation of which a percentage based on a one-time allocation factor be applied to the book value of common assets and then recorded on Suez's books (SWPA Statement No. 3R, pp. 11-12).

Mr. Cagle further explains it is appropriate to record common assets as the Company proposes because it is not appropriate to record assets on the books of a company that does not own those assets. He states that this would create a fictitious asset on the books, since Suez does not own the asset. Under the Company's methodology the effects to ratepayers will be the same as if the assets were in rate base because the calculation utilizes the same formula (SWPA Statement No. 3R, p. 12).

Q. WHAT IS YOUR RESPONSE TO THE WITNESSES' TESTIMONY?

A. I continue to disagree with the Company claiming a rate of return on the assets that it is sharing with other affiliates through its service company because it will allow the affiliate to profit on the transaction (I&E Statement No. 1, p. 31-32). The point of using a service company is not to profit but to save the Company money since the service company will have more buying power and ability to negotiate prices when it is buying more of each type of item, then distribute these assets to each company it services (I&E Statement No. 1, p. 32).

Also, in direct testimony I did not propose that a percentage based on a one-time allocation factor be applied to the book value of common assets and then recorded on the books of SWPA as Mr. Cagle states. I also did not recommend that the Company create fictitious assets on its books to make up for the common asset allocation as Mr. Cagle implies. My recommendation was to eliminate the common asset allocation from the M&S fees due to the Commission having limited regulatory oversight on the common asset allocation and because the service company should not receive a profit on assets or services it is providing to Suez (I&E Statement No. 1 pp. 31-32).

Lastly, Suez still has not explained why the deprecation expense amounts on I&E Exhibit No. 1 Sch. 14, p. 4 for the FTY and FPFTY are so much smaller than the depreciation expenses used in its calculation of common asset allocation on I&E Exhibit No. 1 Sch. 14, p. 3, or why the depreciation expense used in the common asset allocation on I&E Exhibit No. 1 Sch. 14, p. 1 is such a large percentage of the accumulated depreciation claimed on the same page (I&E Statement No. 1, p. 33).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR M&S FEES?

A. Yes. I recommend an amount of $497.579 for the common asset allocation included in the M&S fees. This produces an adjustment of $229,499

($727,078 - $497,579) to the Company's claimed common asset allocation of $727,078. Based on the adjustment to the common asset allocation I recommend an allowance of $4,990,062 for M&S fees or an adjustment of $229,499 ($5,219,561 - $4,990,062) to the Company's updated claim.

I am recommending an allowance of $497,579 as the common asset allocation as this was what the Company reported for depreciation expense in response to I&E-RE-1 (I&E Exhibit No. 1, Sch. 14, p. 4). I agree with the assignment of the depreciation expense as it is the standard method by which companies ratably recover the cost of assets over their useful life, but I do not agree with an equity return for service company owned assets.

REAL ESTATE TAXES

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR REAL ESTATE TAXES.

A. I recommended an allowance of $304,553 or a reduction $13,625 to the Company's claim of $318,178 ($318,178 - $304,553) based on my recommendation that FTY and FPFTY inflationary adjustments for PURTA and property tax be disallowed (I&E Statement No. 1, pp. 34-36). I recommended disallowance of the inflationary adjustments for PURTA tax because PURTA is imposed by the PA Department of Revenue based on information it receives from the County Tax Assessor Offices, and the Company did not provide documentation from the PA Department of

Revenue or the County Tax Assessor Offices indicating that the PURTA tax is going to increase within the FTY and the FPFTY (I&E Statement No. 1, pp. 34-35).

I recommended disallowance of the FTY and FPFTY inflationary adjustment for property tax because property tax is imposed by local authorities and the Company did not provide any documentation from those local authorities indicating that property taxes will increase in the FTY or the FPFTY.

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. Suez witness Constance E. Heppenstall (SWPA Statement No. 2R, p. 11) disagrees with my recommendation.

Q. SUMMARIZE MS. HEPPENSTALL'S RESPONSE IN REBUTTAL TESTIMONY.

A. Ms. Heppenstall states in rebuttal testimony that, "Taxes are set by local authorities which experience an inflationary increase in costs year after year just like the Company. These costs are typically passed on to taxpayers in the form of a tax increase often equal to or exceeding the cost of inflation."[2]

[2] SWPA Statement No. 2R, p. 11.

Q. WHAT IS YOUR RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY?

A. I continue to disagree with the Company adjusting real estate taxes by an inflationary adjustment. Although local tax authorities may experience inflation in each year, there is no guarantee that the taxes will increase in the FTY and FPFTY. In fact, according to the most recent PURTA Tax Notice of Determination for the 2016 year provided by the Company in response to I&E-RE-55, PURTA has decreased each year from 2011 to 2016 (2011 in $303,368; 2012 in $290,311; 2013 in $285,486; 2014 in $279,062; 2015 in $251,104; and 2016 in $245,256) (I&E Exhibit. No. 1, Sch. 1, pp. 3-4).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR REAL ESTATE TAXES IN RESPONSE TO MS. HEPPENSTALL'S REBUTTAL TESTIMONY?

A. No.

FEDERAL INCOME TAX ADJUSTMENTS DUE TO TAX CUTS AND JOBS ACT

Q. WHAT ISSUES DID YOU ADDRESS IN DIRECT TESTIMONY RELATED TO THE RECENT ENACTMENT OF THE TAX CUTS AND JOBS ACT (TCJA)?

A. I addressed the Company's over-recovery of 2018 taxes and the excess deferred income taxes associated with the TCJA (I&E Statement No. 1, pp. 39-49).

FTY Over-Recovery

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY REGARDING THE FTY OVER-RECOVERY OF INCOME TAXES.

A. I recommended the Company be required to flow back to ratepayers via a reconcilable 1307 surcharge mechanism (which could be entitled the Federal Tax Adjustment Credit, or FTAC) over a one-year period the net savings associated with the reduction in federal income taxes from January 1, 2018 through the effective date of new rates. I recommended the interest rate on the over or under collection be applied at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et. seq.), in effect on the last day of the month the over collection or under collection occurs. For any over/under credit balance that remains after the twelve-month refund period elapses, I recommended that the Company make a final additional FTAC adjustment in the thirteenth month to ensure the balance is eliminated (I&E Statement No. 1, pp. 42-43).

I also proposed that a reconciliation statement be submitted to the Commission at the end of the twelfth month, and that a final reconciliation statement should be filed with the Commission within 30 days after the final over/under balance has been eliminated in the thirteenth month after the effective date of new rates. The FTAC revenues and reconciliation would then be subject to audit by the Commission's Bureau of Audits (I&E Statement No. 1, p. 43).

Further, I recommended that the Company's claimed amount of $1.7 million (I&E Exhibit No. 1, Sch. 15, p. 1) be increased to reflect the flow back of 2018 excess accumulated deferred income tax (ADIT) of $265,189 (SWPA Exhibit JCC-1) (I&E Statement No. 1, pp. 41-43). This is to ensure that Suez returned any excess FTY taxes collected to ratepayers.

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. Suez witness James C. Cagle (SWPA Statement No. 3R, pp. 8-9) responded to my recommendation.

Q. SUMMARIZE MR. CAGLE'S RESPONSE IN REBUTTAL TESTIMONY.

A. Mr. Cagle states that returning the FTY tax reconciling amount through a surcredit mechanism over 12 months is certainly possible if ordered by the

Commission (SWPA Statement No. 3R, p. 8). He does propose though that any reconciling amount be recorded and addressed in a future rate case (SWPA Statement No. 3R, p. 8). His reasoning for this is that it is more pragmatic than my suggestion to deal with the reconciling amount (i.e., over/under passback) in the thirteenth month which "...would require an immediate recalculation of the surcredit just for the over/under amount which would have to then be implemented without sufficient review by the Commission."[3] He further argues that there will be an additional small amount remaining from that reconciliation which would have to be addressed at a future date (SWPA Statement No. 3R, pp. 8-9). Finally, he opines that an adjustment to the 12-month surcredit for the amortization of excess ADIT (i.e., the TCJA regulatory liability) is unnecessary since the Company will not begin the amortization of the regulatory liability until the resolution of the current rate case (SWPA Statement No. 3R, p. 9).

Q. WHAT IS YOUR RESPONSE TO MR. CAGLE'S PROPOSAL TO RECORD THE OVER/UNDER PASSBACK AND ADDRESS IT IN A FUTURE RATE CASE?

A. I disagree with Mr. Cagle's reasoning that addressing the over/under passback in a future rate case is necessary. This reconciling amount only

[3] SWPA Statement No. 3R, p. 8.

stems from approximately one year of recognizing a higher tax rate of 35%, therefore, it would not be reasonable to wait until the next rate case (possibly years from now) to resolve any reconciling amount. Since the over recovery of the 2018 income tax will only accumulate over approximately one year until new rates go into effect it should not take years to fully resolve any issues related to reconciling and truing it up or down. Also, any interest stemming from this issue would only increase the longer it takes to be reconciled, which causes an inflated and unnecessary expense to ratepayers or to the Company.

Additionally, in terms of the Commission not being able to sufficiently review this thirteenth-month reconciling amount, in direct testimony I stated that a reconciliation statement should be submitted to the Commission at the end of 12-month recovery period and a final reconciliation statement should be filed with the Commission within 30 days after the final over/under balance has been eliminated in the thirteenth month after the effective date of new rates (I&E Statement No. 1, p. 43). I also stated that these documents are subject to audit by the Commission's Bureau of Audits. As long as the Company provides the requested documentation the Commission should be able to sufficiently review the over/under passback.

Q. DO YOU ACCEPT MR. CAGLE'S ASSERTION THAT NO FLOWBACK OF THE EXCESS ADIT IS REQUIRED IN THE SURCHARGE?

A. Yes. I am willing to accept Mr. Cagle's assertion, as long as the Company does not begin amortizing the regulatory liability related to the flowback of excess ADIT prior to the effective date of new rates. Note that this is unclear in that the exhibits of Ms. Heppenstall as referenced by Mr. Cagle reflect an amortization of the excess ADIT in 2018 (SWPA Exhibit No. CEH-2-R, Sch. 1). If this amount has been amortized by the Company in 2018, not including this amount in the surcharge refund will prevent customers from recovering the full amount of excess ADIT that is owed to them.

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FROM DIRECT TESTIMONY?

A. I withdraw my recommendation that the Company's over recovery of 2018 taxes be increased to reflect the flowback of 2018 excess ADIT, subject to confirmation that the amortization did not begin in 2018 as reflected in Company exhibits. I accept the Company's update for the 2018 over recovery of taxes reported on SWPA Exhibit No. JCC-2 Rebuttal, p. 1 of $2,420,245, since this is the 2018 over recovery grossed up for income taxes. However, similar to my recommendation in direct testimony, I continue to recommend that the Company be required to flow back to ratepayers via a reconcilable 1307 surcharge mechanism (which could be entitled the Federal Tax Adjustment Credit, or FTAC) over a one-year period the net savings associated with the reduction in federal income taxes from January 1, 2018 through the effective date of new rates.

Q. DO YOU HAVE CHANGES TO YOUR PROPOSED LANGUAGE FOR THE FTAC FROM YOUR DIRECT TESTIMONY?

A. Yes. I am updating my proposed language (I&E Statement No. 1, pp. 42-43) to take into account the effective date of February 1, 2019 for the Company's new rates. I proposed the following language be adopted, which is modeled on but not identical to, PECO Electric's proposed surcharge (Docket No. R-2018-3000164):

> <u>Federal Tax Adjustment Credit (FTAC)</u>
> A credit value of x.xx% will apply to all Pennsylvania Public Utility Commission jurisdictional distribution charges during the period February 1, 2019 through January 31, 2020 to pass the January 1, 2018 through January 31, 2019 effects of the Tax Cuts and Jobs Act (TCJA) to customers. The FTAC will be computed annually, will be effective ten days after filing, and will continue until the effect of the change in tax rates resulting from the TCJA has been refunded to customers.
>
> The FTAC will be based on the difference in total annual revenue requirement before and after implementing the 2018 and January 2019 effects of the TCJA and the calculation will reflect the reduction in required revenues. The reduction in required revenues will be divided by estimating annual applicable base revenues to develop the FTAC to be applied to customers' bills for service rendered during the twelve-

> month period beginning on the effective date of new rates. The difference between the actual reduction in required revenue and the reduction in revenues produced by the FTAC as applied will be subject to refund or recovery in an annual revision to the FTAC. The interest rate on the over or under collection will be applied at the residential mortgage lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41. P.S. §§ 101, et. seq.), in effect on the last day of the month the over collection or under collection occurs. For any over/under credit balance that remains after the twelve-month refund period elapses, the Company shall propose a final additional FTAC adjustment in the thirteenth month to ensure the balance is eliminated.
>
> A reconciliation statement will be submitted to the Commission at the end of the twelfth month. A final reconciliation statement will be filed with the Commission within 30 days after the final over/under balance has been eliminated in the thirteenth month after the effective date of new rates. The FTAC revenues and reconciliation will be subject to audit by the Commission's Bureau of Audits.

Q. DO YOU HAVE ANY RECOMMENDATIONS IF THE COMMISSION ACCEPTS MR. CAGLE'S PROPOSAL TO ADDRESS THE FTY RECONCILING AMOUNT IN A FUTURE RATE CASE?

A. Yes. If the Commission accepts Mr. Cagle's proposal to wait until the next rate case to reconcile any remaining balance, I recommend that if the Company under refunds the tax credit, the Company should be required to pay interest on the difference to ratepayers. However. if the Company over refunds the tax credit. ratepayers should not be required to pay interest to the Company. Ratepayers should not be penalized for the Company's decision to zero out the remaining balance at some unknown future date.

<u>Excess Accumulated Deferred Income Taxes</u>

Q. SUMMARIZE YOUR RECOMMENDATIONS IN DIRECT TESTIMONY REGARDING A REDUCTION TO RATE BASE FOR THE EXCESS ADIT REMAINING BALANCE.

A. First, I recommended that the Company be required to provide an update showing a breakdown of its excess ADIT between the protected and unprotected balances, since these balances are subject to different requirements in determining the amortization period to refund monies to ratepayers. Second, I recommended that the Company use its claimed 40-year amortization for the protected portion and a five-year amortization for the unprotected portion. My 40-year amortization recommended for the protected portion matches what the Company claimed in its filing. I recommended a five-year amortization of the unprotected balance because it should be returned in a shorter time period than the protected balance, since there is no limitation or requirement on the number of years that companies can take to return the unprotected balance. Finally, I recommended that the Company be required to show the excess ADIT calculations and breakdowns for protected and unprotected balances for the HTY, the FTY, and the FPFTY periods in future filings, and that the

Company be required to continue reducing rate base in future filings for the remaining balance until the full amount is refunded to ratepayers (I&E Statement No. 1, pp. 47-48).

Q. DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?

A. Yes. Suez witness James C. Cagle responded to my recommendations (SWPA Statement No. 3R).

Q. SUMMARIZE MR. CAGLE'S RESPONSE IN REBUTTAL TESTIMONY.

A. Mr. Cagle indicated that the Company completed its review of ADIT balances and incorporated this into SWPA Exhibit No. JCC-1 Rebuttal filed with the Company's rebuttal testimony. The Company indicated that all excess ADIT and ADIT in the current rate case is considered protected (SWPA Statement No. 3R, pp. 3-4 and SWPA Exhibit No. JCC-1 Rebuttal). Mr. Cagle stated that the he provided the amount of ADIT and TCJA regulatory liability to Ms. Heppenstall to include in her rebuttal schedules and these amounts agree with the amounts included in SWPA Exhibit No. JCC-1 Rebuttal (SWPA Statement No. 3R, p. 9). He indicated that since the amortization of the TCJA regulatory liability begins on the first day of the FPFTY, he reduced the balance of the excess by the amount of amortization and made the corresponding change in ADIT to reflect the impact of the amortization (SWPA Statement No. 3R, p. 9).

Mr. Cagle also proposed that the Company is in the process of determining a switch from the Reverse South Georgia Method (RSGM) to the Average Rate Assumption Method (ARAM) for the protected balance and it proposes to determine and track any difference between the methods through the next base rate filing and propose any necessary adjustment at that time in order to be compliant with requirements surrounding the use of accelerated depreciation for income tax purposes (SWPA Statement No. 3R, pp. 3-7).

Q. DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATIONS AS A RESULT OF MR. CAGLE'S REBUTTAL TESTIMONY?

A. Yes. Since Mr. Cagle indicated that the Company completed its review of ADIT, and since this review revealed all excess ADIT is categorized as protected, and since it appears the Company is taking excess ADIT as a reduction to rate base, I accept his assertion that the entire amount should be considered protected for this rate filing and that in the next rate filing the Company produce its findings concerning any proposed adjustment necessary to reclassify amounts related to moving from the RSGM to ARAM. However, I do recommend that in future rate cases the Company provide a clear breakdown of ADIT and a regulatory liability related to excess ADIT and provide a clear calculation of these amounts for the HTY, the FTY, and the FPFTY. Doing so will make it easier to verify that the Company is properly including excess ADIT and ADIT in its calculation of rate base and will reduce the number of interrogatories from the parties in the rate case.

I also recommend, going forward, that if the Company reclassifies any excess ADIT as unprotected, that it should be required to show the breakdown of excess ADIT by protected and unprotected and show how the unprotected excess ADIT is being amortized. This is necessary because the Company indicated there is still uncertainty about whether excess ADIT recognized via ARAM should be viewed as protected or unprotected and that this categorization issue could be revisited in future rate cases (SWPA Statement No. 3R, pp. 3-4).

CASH WORKING CAPITAL

Q. SUMMARIZE YOUR RECOMMENDATION IN DIRECT TESTIMONY FOR CASH WORKING CAPITAL (CWC).

A. I recommended an allowance of $796,364 or reduction of $67,382 ($863,746 - $796,364) to the Company's claim (I&E Exhibit No. 1. Sch. 17). My CWC recommendation adjusted the Company's claim based on all recommended adjustments to O&M expenses as discussed in my direct testimony. Additionally, my recommendation reduced the Company's claimed expenses by the fringe benefits capitalized/transferred out as detailed on line 24 of SWPA Exhibit No. CEH-2, Schedule-1 and further broken down on SWPA Exhibit No. CEH-2, Schedule-25 (I&E Statement No. 1, pp. 50-53).

Q. **DID ANY COMPANY WITNESS SUBMIT REBUTTAL TESTIMONY IN RESPONSE TO YOUR RECOMMENDATION?**

A. No. However, Suez witness Harold Walker, III (SWPA Statement No. 4-R) provided an updated CWC worksheet that incorporated all of the Company's adjustments made in rebuttal testimony (SWPA Statement No. 4R, Updated Schedule 1). Mr. Walker updated the Company's CWC to $843,094 (SWPA Statement No. 4R, Updated Schedule 1)

Q. **DO YOU HAVE ANY CHANGES TO YOUR RECOMMENDATION FOR CWC?**

A. Yes. I recommend an updated allowance of $816,703 or a reduction of $26,391 ($843,094 - $816,703) to the Company's claim (I&E Exhibit No. 1-SR, Sch. 2).

Q. **PLEASE EXPLAIN THE BASIS OF YOUR UPDATED RECOMMENDED ALLOWANCE.**

A. I have updated my CWC recommendation to incorporate all of the changes I made to O&M expenses and taxes. Additionally, I continue to recommend that the fringe benefits transferred (capitalized) included in the CWC calculation by the Company should be removed (I&E Statement No. 1, pp. 51-52). The Company did not remove the duplicative fringe benefits included in expenses and taxes on its updated CWC worksheet, but I continue to reflect these adjustments to expenses and taxes to avoid having the Company earn a return on the capitalized portions and a duplicative CWC allowance on the inflated expenses. Therefore, I removed the 32.84% of employee group health, employee pension benefits, workers compensation, and payroll taxes to eliminate the fringe benefits transferred amounts. All of these changes are incorporated into I&E Exhibit 1-SR, Schedule 2, which is an I&E modified version of SWPA Statement No. 4R, Updated Schedule 1.

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

A. The following recommended adjustments must be incorporated into the CWC calculation on the corresponding line item to arrive at my recommended allowance:

Expense	**(Decrease)**
Outside Contractors	($119,800)
Purchased Water	($108,337)
Management and Service Fees	($229,499)
Real Estate Taxes	($13,625)

All of these recommended adjustments to CWC are incorporated into the Company's workpaper and produce a recommended allowance of $816,703.

Q. IS YOUR RECOMMENDED CWC ALLOWANCE A FINAL RECOMMENDATION?

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

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

I&E Exhibit No. 1-SR
Witness: Brenton Grab

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

Exhibit to Accompany

the

Surrebuttal Testimony

of

Brenton Grab

Bureau of Investigation & Enforcement

Concerning:

OPERATING AND MAINTENANCE EXPENSES
TAXES
CASH WORKING CAPITAL

BUREAU OF INVESTIGATION AND ENFORCEMENT INTERROGATORIES

SUEZ WATER PENNSYLVANIA INC.

Docket No. R-2018-3000834

I&E-RE-55
(Heppenstall)
June 13, 2018

I&E-RE-55 Reference SWPA Exhibit No. CEH-2, Schedule-31, concerning real estate taxes:

A. Provide a copy of the Company's three most recent PURTA Notification of Determination statements in their entirety and indicate payment status for the most recent payment due;

B. If the PURTA tax HTY claim of $245,256 does not match the most recent PURTA Notification, explain why and state the method used to determine the claim, along with supporting calculations and detailed explanations for any allocations;

C. Explain why the Company received a PURTA refund of $34,000 in the HTY;

D. Provide an explanation with supporting documentation for why the Company is excluding the $34,000 HTY PURTA refund from the FTY and FPFTY real estate tax calculation, since the HTY PURTA is being used as the basis for calculating the FTY PURTA and FPFTY PURTA;

E. Provide documentation such as property tax payment reports, bills, or invoices to support the $59,297 in property tax reported for the HTY;

F. Provide the property tax by year for 2015 and 2016;

G. Provide justification for increasing the property tax and PURTA by the FTY and the FPFTY inflation factors when property tax and PURTA rates and amounts are determined by government agencies.

Response:

A. Please see I&E-RE-55A Attachment for copies of three most recent PURTA statements. All three are paid and 90% of the estimated PURTA tax payment was made in May 2018.

B. The PURTA tax HTY claim of $245,256 does match the most recent PURTA Notification.

C. Although the Company did receive refunds in prior years due to overpayment (2014: $41,487 and 2015: $48,435), the adjustment shown on CEH-2, Schedule-31 was to show that the Company made an adjustment in the accounting of the 2017 PURTA Tax to not over accrue. Upon further review, the $245,256 as shown on the 2017 PURTA Notification and the $59,297 actual property taxes total $304,553 and should have been listed as the HTY actual, but it was used in the calculation of the FTY estimated expense of $311,025.

D. Please see the response in "C".

E. Please see I&E-RE-55E Attachment.

F. The 2016 Property Tax was $59,049.

G. Property tax and PURTA tax rates were not determined for the FTY and the FPFTY by the time of the filing. An inflation factor applied to the HTY expense is a reasonable adjustment for property and PURTA tax rates that vary from year to year.

BUREAU OF CORPORATION TAXES
PO BOX 280704
HARRISBURG PA 17128-0704

pennsylvania
DEPARTMENT OF REVENUE

August 1, 2017

UNITED WATER PENNSYLVANIA INC.
200 OLD HOOK ROAD

HRRNGTN PARK, NJ 07640

Re 2016 Pennsylvania Public Utility Realty Tax
Notice of Determination

Dear Taxpayer:

Pursuant to the Public Utility Realty Tax Act, the Department of Revenue herein provides notice of the state taxable values of PURTA realty and the millage rate for tax year 2016 This notice is based on information provided by County Tax Assessor offices. Any discrepancies must be addressed with that agency and not with the Pennsylvania Department of Revenue. Please note, any net liabilities resulting from prior years' adjustments are due and payable along with the current year liability.

Payment of tax is required within 45 days of the mailing date of this notice. Previous payments, adjustments and credits should be taken into consideration Payments and correspondence relevant to the PURTA tax or this notice should be mailed directly to the above address.

All payments of $1,000 or more must be made electronically or by certified or cashier's check remitted in person or by express mail courier. For information on electronic filing options, visit www.etides.state.pa.us.

Thank you for your attention to this matter

Sincerely,

Department of Revenue
Bureau of Corporation Taxes
PURTA Tax Unit

	Tax Year	2016
1)	Total Realty Tax Equivalent (RTE)	$ 28,877,472
2)	Total State Taxable Value (STV) for all utilities.	$ 1,256,835,302
3)	PURTA Millage Rate, including 7 6 mills for PTA.	30 5763 mills
4)	Utility STV:	$8,021,118
5)	Liability (Line 3 x Line 4)	$245,256
6)	Utility Transition Credit:	N/A
7)	Utility Liability Adjustment:	N/A
8)	Utility Transition Credit Adjustment.	N/A

PLEASE SEE PAGE 2
FOR YEARS 1998 - 2015

Account ID: 3508576

Name: UNITED WATER PENNSYLVANIA INC. Account Id: 3508576

SUEZ Water Pennsylvania
Docket No. R-2018-3000834

Details

	Tax Year	2015	2014	2013	2012	2011	2010	2009	2008	2007
					Adjusted Totals					
1)	Total RTE:	$ 29,109,811	$ 28,905,293	$ 31,034,425	$ 30,821,809	$ 30,739,060	$ 30,171,210	$ 31,135,225	$ 30,472,864	$ 28,772,799
2)	Total STV for all utilities	$ 1,247,781,685	$ 1,236,404,466	$ 1,251,010,700	$ 1,264,818,968	$ 1,342,814,786	$ 1,406,722,546	$ 1,530,324,73[illegible]	$ 1,617,969,120	$ 1,643,059,438
3)	PURTA Millage Rate:	30 9293 mills	30.9785 mills	32.4075 mills	31.9686 mills	30.4915 mills	29 0479 mills	27 9455 mills	26.434 mills	25.1117 mills
					Utility Adjustments					
4)	Utility STV.	$8,118,645	$9,008,241	$8,809,262	$9,081,124	$9,949,275	$10,067,602	$12,088,762	$11,739,137	$11,235,256
5)	Liability (Line 3 x Line 4)	$251,104	$279,062	$285,486	$290,311	$303,368	$292,443	$337,826	$310,312	$282,136
6)	Utility Transition Credit:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7)	Utility Liability Adjustment:	($461)	$28	($155)	$105	$104	$8	$29	$18	$10
8)	Transition Credit Adjustment:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Tax Year	2006	2005	2004	2003	2002	2001	2000	1999	1998
					Adjusted Totals					
1)	Total RTE:	$ 30,419,051	$ 30,590,906	$ 29,280,567	$ 29,231,251	$ 28,915,213	$ 28,994,534	$ 27,970,152	$ 38,487,965	$ 40,694,555
2)	Total STV for all utilities:	$ 1,613,550,291	$ 1,517,813,632	$ 1,419,682,028	$ 1,354,657,470	$ 1,348,545,899	$ 1,322,028,254	$ 1,344,824,961	$ 2,032,653,620	$ 2,069,309,124
3)	PURTA Millage Rate:	26 4522 mills	27.7546 mills	28.2247 mills	29.1783 mills	29 0418 mills	29.5319 mills	28.3984 mills	26.5348 mills	71 9693 mills
					Utility Adjustments					
4)	Utility STV:	$9,872,167	$8,835,475	$7,798,008	$7,662,097	$7,724,604	$7,549,335	$7,692,753	$8,039,213	$7,774,519
5)	Liability (Line 3 x Line 4):	$261,141	$245,225	$220,096	$223,567	$224,336	$222,946	$218,462	$213,319	$559,527
6)	Utility Transition Credit:	N/A	N/A	N/A	N/A	N/A	$0	$0	$0	$0
7)	Utility Liability Adjustment:	$18	$17	$17	$18	$20	$17	$3	($11)	$257
8)	Transition Credit Adjustment:	N/A	N/A	N/A	N/A	N/A	$0	$0	$0	$0

If you do not agree with this Notice of Determination for 2016 PURTA, you may file a Petition for Recalculation with the Board of Finance and Revenue pursuant to Section 1109-A of the Tax Reform Code of 1971. The petition must be postmarked by the U.S. Postal Service or received by the Board of Finance and Revenue within 30 days of the mailing date of this notice. Under separate cover you will receive a Statement of Account. Please review it to confirm the status of payments made, transition credits and adjustments to previous tax liabilities or balances still due. Any overpayment is available for transfer within the account, and any net credit balance for the account is available for refund/assignment.

I&E-RE-55A Attachment
Page 2 of 6

I&E Exhibit No. 1
Schedule 1
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SUMMARY OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2017

I&E Modified

Utility Operating Expenses	Revenue Days	Expense Days	Net (Lead) Lag Days	Expense Claim 12-Months Ending 12/31/2017	12-Months Ending 12/31/2017 CWC	Expense Claim Future Test Year 12/31/2018	Future Test Year 12/31/2018 CWC	Expense Claim Fully Projected Year Under Present Rates 12/31/2019	Fully Projected Year Under Present Rates 12/31/2019 CWC	Expense Claim Fully Projected Future Test Year Under Proposed Rates 12/31/2019	Fully Projected Future Test Year Under Proposed Rates 12/31/2019 CWC
Labor Expense	33.3	13.4	19.9	$ 4,579,937	$ 249,701	5095561	$ 277,813	5419097	$ 295,452	5419097	$ 295,452
Employee Group Health & Life	33.3	12.7	20.6	1,323,689	74,707	1336815	75,448	1425129	80,432	957,117	54,018
Employee Pension Benefits	33.3	57.4	(24.1)	1,425,022	(94,091)	1409589	(93,071)	1442010	(95,212)	968,454	(63,944)
Purchased Water	33.3	15.4	17.9	68,621	3,365	76176	3,736	182928	8,971	74,591	3,658
Purchased Power	33.3	27.0	6.3	1,242,836	21,452	1411713	24,367	1411713	24,367	1411713	24,367
Fuel for Power Production	33.3	36.7	(3.4)	184,165	(1,716)	23163	(216)	23696	(221)	23696	(221)
Chemicals	33.3	25.1	8.2	540,682	12,147	586048	13,166	599527	13,469	599527	13,469
Materials and Supplies	33.3	10.5	22.8	254,476	15,896	250065	15,620	255816	15,980	255816	15,980
Management and Service Fees	33.3	14.7	18.6	4,921,757	250,807	5187320	264,340	5219561	265,983	4,990,062	254,288
Lab Testing Fees	33.3	15.5	17.8	114,698	5,594	81888	3,993	83542	4,074	83542	4,074
Outside Contractors	33.3	28.7	4.6	748,644	9,435	979755	12,348	1147114	14,457	1,027,314	12,947
Outside Professional Services	33.3	49.7	(16.4)	64,321	(2,890)	66660	(2,995)	68193	(3,064)	68193	(3,064)
Rental - Building/Real Property	33.3	(14.7)	48.0	60,330	7,934	60476	7,953	30219	3,974	30219	3,974
Rental of Equipment	33.3	(5.1)	38.4	49,175	5,173	50220	5,283	51375	5,405	51375	5,405
Transportation Expense	33.3	31.0	2.3	407,033	2,565	463897	2,923	560322	3,531	560322	3,531
Prop& Gen Liab. Insurance	33.3	(59.6)	92.9	4,732	1,204	4832	1,230	4935	1,256	4935	1,256
Worker Compensation	33.3	13.7	19.6	102,384	5,498	108228	5,812	110717	5,945	74,358	3,993
Regulatory Commission Expense	33.3	(77.0)	110.3	198,665	60,035	219880	66,446	235344	71,119	262302	79,266
Office Expense and Utilities	33.3	4.0	29.3	446,337	35,829	419541	33,678	540894	43,420	540894	43,420
Postage and Air Freight Expense	33.3	30.1	3.2	354,308	3,106	358563	3,144	366358	3,212	366358	3,212
Other O&M	33.3	13.8	19.5	143,806	7,683	199353	10,650	203938	10,895	203938	10,895
Real Estate Tax	33.3	(26.9)	60.2	270,553	44,623	311025	51,298	318178	52,478	304,553	50,230
Payroll	33.3	18.6	14.7	560,626	22,579	597949	24,082	644779	25,968	433,034	17,440
Federal Income Taxes	33.3	37.0	(3.7)	5,168,780	(52,396)	2558166	(25,932)	2722446	(27,597)	3725392	(37,764)
State Income Taxes	33.3	28.8	4.6	1,663,801	20,741	1217505	15,177	1140177	14,213	1670247	20,821
Total					$ 708,981		$ 796,293		$ 838,507		816,703

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA, INC.**	**:** **:** **:** **:** **:** **:**	**Docket No. R-2018-3000770**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, D. C. Patel, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 2-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.

Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: September 7, 2018

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket No. R-2018-3000834

Surrebuttal Testimony

of

D. C. Patel

Bureau of Investigation & Enforcement

Concerning:

Rate of Return

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INTRODUCTION OF WITNESS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is D. C. Patel. My business address is Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

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

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

Q. ARE YOU THE SAME D. C. PATEL WHO IS RESPONSIBLE FOR THE DIRECT TESTIMONY CONTAINED IN I&E STATEMENT NO. 2 AND THE SCHEDULES IN I&E EXHIBIT NO. 2?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address statements made by Suez Water Pennsylvania, Inc. (Suez or Company) witness Dylan D'Ascendis in his rebuttal testimony regarding rate of return topics including the cost of common equity or return on equity (ROE) and the overall fair rate of return, which will be applied to the Company's rate base.

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN ACCOMPANYING EXHIBIT?

A. No. However, I will refer to my direct testimony and exhibit in this surrebuttal testimony (I&E Statement No. 2 and I&E Exhibit No. 2).

<u>SUMMARY OF MR. D'ASCENDIS' REBUTTAL TESTIMONY</u>

Q. SUMMARIZE MR. D'ASCENDIS' RESPONSE IN REBUTTAL TESTIMONY TO YOUR RECOMMENDATIONS MADE IN DIRECT TESTIMONY.

A. Mr. D'Ascendis disputes my criticism of his non-regulated proxy group, business size adjustment, use of the Risk Premium method (RP), and Empirical Capital Asset Pricing Model (ECAPM). He also disagrees with the use of the Discounted Cash Flow (DCF) as a primary method, my Capital Asset Pricing Model (CAPM) risk-free rate, and the use of a geometric mean.

<u>PROXY GROUP</u>

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING HIS USE OF A NON-REGULATED PROXY GROUP?

A. Mr. D'Ascendis claims that he has proven that the companies contained in his non-regulated proxy group have a similar total risk to those in his water utility proxy group based on the unadjusted beta and standard error of the regression being inside the range of the water utility proxy group (Suez Statement No. 5R, p. 30).

Q. HAS MR. D'ASCENDIS PROVEN THAT THE RISKS FACED BY HIS NON-REGULATED PROXY GROUP ARE SIMILAR TO THAT OF HIS REGULATED UTILITY GROUP?

A. No. Mr. D'Ascendis uses historical beta and the standard error of the regression of selected non-regulated companies, which have betas close to his utility proxy group betas, to determine that the non-regulated companies' total risks are similar to the risk of his regulated utility proxy group. For a non-regulated company to be similar to the regulated utility industry, it is not only the past that must be similar but also the future expectations of the industry in which the non-regulated company operates. Mr. D'Ascendis' measures of risk are both completely historical measures and do not include any expectations for whether the industries will be the same in the future.

As stated in I&E Statement No. 2, pages 10-11, the risks faced in each industry for the companies used in Mr. D'Ascendis' unregulated group differ from the risks faced by his regulated water utility group. Mr. D'Ascendis has chosen companies for his non-regulated proxy group from industries such as retail automotive, broker/exchange, restaurant, food processing, hotel, medical services, insurance, industrial services, information services, medical supplies, and the household products industry. The assertion that risk between industries can be evaluated based on beta and standard error regression while ignoring current events and the fact that one group is regulated and the other is not, leads to an incorrect assessment of risk. Although at one point in time, each industry may have a similar degree of risk when compared to the market as a whole, Mr. D'Ascendis has ignored what the industry is expected to face in the future. Mr. D'Ascendis' non-regulated barometer group may have a beta similar to that of his proxy regulated water group, but that does not mean that the proxy water group is expected to face the same business and financial risks and challenges as that of the non-regulated group because each industry has its own industry-specific risk profile, operating platform, and market segment.

Therefore, it is entirely inappropriate to rely on the results of the application of the DCF, RP, and CAPM analyses to the non-price regulated proxy group.

DISCOUNTED CASH FLOW (DCF)

Q. WHAT DID MR. D'ASCENDIS ARGUE IN REBUTTAL TESTIMONY REGARDING YOUR USE OF THE DCF?

A. Mr. D'Ascendis asserts that my recommendation relies in its entirety on the DCF method and that other methods must be relied upon when recommending a cost of common equity. He claims that the Commission's decisions in the 2013 Columbia

Water Company base rate case and in the 2014 Emporium Water Company base rate case are contrary to my recommendation. In addition, Mr. D'Ascendis claims that the market-to-book ratios of the utility proxy group indicate that the DCF result understates the return on equity (Suez Statement No. 5R, pp. 6-13).

Q. WERE ANY METHODS OTHER THAN THE DCF EMPLOYED IN YOUR ANALYSIS?

A. Yes. Although, my recommendation was based primarily on the results of my DCF analyses, I also employed the CAPM and presented results as a comparison to my DCF results. The result of my DCF is 9.13%, which is fair and reasonable as compared with the CAPM results.

Q. ARE THERE ANY OTHER RECENT ORDERS THAT STATE THE METHOD RELIED ON BY THE COMMISSION FOR ITS RETURN ON EQUITY DETERMINATION?

A. Yes. In the *City of Dubois - Bureau of Water* Order entered on March 28, 2017, the Commission relied primarily on the DCF results and rejected giving equal weight to the other methodologies:

> [T]he City's cost of equity in this proceeding should be based upon the use of the DCF methodology, with the other methodology results used as a check on the reasonableness of the DCF results. We note that we have primarily relied upon the DCF methodology in arriving at previous determinations of the proper cost of equity and utilized the results of methods

> other than the DCF, such as the CAPM and RP methods, as a check upon the reasonableness of the DCF derived equity return calculation, tempered by informed judgement. We are not persuaded by the arguments of the City that we should assign equal weight to the multiple methodologies.[1]

Q. DO THE CASES MR. D'ASCENDIS CITED GIVE EQUAL WEIGHT TO THE DCF, CAPM, RP, AND A NON-REGULATED PROXY GROUP FOR WHICH MR. D'ASCENDIS ADVOCATES?

A. No. Mr. D'Ascendis' quote from the Columbia Water base rate case (Docket No. R-2013-2360798) states that the Commission found that the testimony, data, and cost models presented in that case supported a range that used "the DCF method as the foundation"[2] (Suez Statement No. 5R, p. 6). The Emporium Water Company Order (Docket No. R-2014-2402324) quoted by Mr. D'Ascendis also states that the Commission chose a return on equity based on its review of the testimony, data, and cost models presented by the parties[3] (Suez Statement No. 5R, p. 7). I am unaware of any statement in either Order that offers support for Mr. D'Ascendis' method of giving equal weight to the DCF, CAPM, RP, and an un-regulated proxy group. The Commission in its Order in the Emporium Water rate case mentioned that Emporium Water utilized DCF, RP, and CAPM analyses, but

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[1] *Pennsylvania Public Utility Commission v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, pp. 96-97, Order entered March 28, 2017.

[2] *Pennsylvania Public Utility Commission v. The Columbia Water Company*, Docket No. R-2013-2360798, p. 43, Order entered January 23, 2014.

[3] *Pennsylvania Public Utility Commission v. Emporium Water Company*, Docket No. R-2014-2402324, p. 35, Order entered January 28, 2015.

that does not mean the Commission endorsed or approved giving equal weight for determining Emporium's cost of common equity. I am also unaware of any language in either Order that states the DCF should not be used as the primary method with the CAPM used to confirm the reasonableness of the DCF results. To the contrary, as I stated above, in the 2013 Columbia Water rate case, the Commission stated that it used the DCF as the foundation of its determination.[4]

Q. DOES A MARKET-TO-BOOK RATIO ABOVE 1.0 CAUSE THE DCF TO INCORRECTLY ESTIMATE THE INVESTOR-REQUIRED RETURN ON EQUITY?

A. No. Although, there are differences between the book value and market value of water utilities, Mr. D'Ascendis asserts that the difference causes the DCF to undervalue the rate of return when a market based common equity cost rate is applied to a book value rate base (Suez Statement No. 5R, pp. 8-13). The forecasted growth rates used in the DCF are set by analysts based on current conditions and what they expect the future could be for the stock. As Mr. D'Ascendis points out, the current market-to book-ratio of the water proxy group has exceeded the ten-year average market-to-book ratio (above 1.0) (Suez Statement No. 5R, p. 10). In this scenario, no rational investor would invest in a

[4] *Pennsylvania Public Utility Commission v. The Columbia Water Company*, Docket No. R-2013-2360798, p. 43, Order entered January 23, 2014.

utility stock that has been trading above book value for several years and be surprised that rates continue to be set based on the book value capital structure. A market-to-book ratio of above 1.0 for utility stocks reflects their value in the market and implies that investors expect future cash flows to be more valuable than the historical accounting value of the company. Since the stock market is impacted by regulatory policies, and the economic and financial conditions, a market-to-book ratio could be less than 1.0 when the stock market is in a depression phase, so it is inappropriate to evaluate DCF results with the market-to-book ratio.

Q. DID MR. D'ASCENDIS ADVOCATE A SPECIFIC LEVERAGE ADJUSTMENT TO THE DCF RESULT TO COMPENSATE FOR THE DIFFERENCE IN MARKET-TO BOOK RATIO?

A. No.

Q. HAVE YOU CHANGED YOUR METHODS USED TO DETERMINE A RETURN ON EQUITY RECOMMENDATION BASED ON MR. D'ASCENDIS' REBUTTAL TESTIMONY?

A. No. For the reasons discussed in I&E Statement No. 2. the DCF method is the most reliable. and since it is a direct measure of water utilities, it reflects the current conditions of the regulated water utility industry more accurately than the CAPM does with its indirect measurement.

Additionally, I have considered the fact that no method can perfectly predict the return on equity; therefore, I have used the CAPM as a comparison to the DCF results. Although, no single method can capture every factor that influences an investor, including methods less reliable than the DCF does not make the return on equity more reliable or more accurate.

CAPITAL ASSET PRICING MODEL

Q. SUMMARIZE MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING YOUR APPLICATION OF THE CAPM.

A. Mr. D'Ascendis disagrees with my use of a 10-year Treasury Bond as the risk-free rate and my reliance on geometric mean to calculate a market risk premium. He also states that I did not employ the ECAPM (Suez Statement No. 5R, pp. 15-21).

RISK-FREE RATE

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING YOUR USE OF THE YIELD ON THE 10-YEAR U.S. TREASURY BOND?

A. Mr. D'Ascendis claims his use of the yield on a 30-year U.S. Treasury Bond is more appropriate than my use of the yield on a 10-year Treasury Bond because it better reflects the life of the underlying investment. He also claims that not incorporating the longest projection available is inconsistent with the DCF assumption of a constant rate of dividend growth and the assumption that all available information is considered by investors when making investments. Therefore, he opines that the 2024-2028 forecasted data should be included in my CAPM analysis (Suez Statement No. 5R, pp. 15-17).

Q. IS THE LIFE OF THE INVESTMENT THE ONLY FACTOR THAT SHOULD BE CONSIDERED IN THE CHOICE OF A RISK-FREE RATE?

A. No. The risk-free rate is the return that can be earned without accepting any risk, and while the life of the investment can be considered in the choice of risk-free rates, the most important consideration is that the rate be as risk-free as possible. As stated in I&E Statement No. 2, pages 28-29, I chose the 10-year Treasury Bond, a medium-term investment, as it balances the short-comings of the short-term T-Bill and the long-term 30-year Treasury Bond. Although, long-term Treasury Bonds have less risk of being influenced by federal policies, they have substantial maturity risk associated with market risk. In addition, the long-term Treasury Bonds bear the risk of unexpected inflation. As such, my choice of a 10-year Treasury Bond is appropriate and reflects investors' expectation of return.

Q. DOES THE PROJECTED RISK-FREE RATE NEED TO REPRESENT THE LONGEST TIME PERIOD AVAILABLE?

A. No. The time period reflected in a projected risk-free rate should reflect the period in which rates will be in effect. Since Suez is not setting rates for 2024-2028, using projections for six or more years from now is inappropriate. The yield on the 10-year Treasury Note is expected to range between 3.10% and 3.50% from the third quarter of 2018 through the third quarter of 2019 and is forecasted to be 3.60% from 2019-2023 (Suez Statement No. 5R, Schedule 7, p. 2). For my forecasted CAPM analysis I chose 3.35%, which is the average of all the yields I observed. In addition, the further out into the future one forecasts (e.g., 2024-2028), the less reliable and more speculative the estimates become; therefore, to give more weight to less reliable estimates would not be prudent. My calculation provides a balance of historical, measurable, and accurate yields and the future estimates.

GEOMETRIC MEAN

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING THE USE OF AN ARITHMETIC MEAN RATHER THAN A GEOMETRIC MEAN?

A. Mr. D'Ascendis opines that the arithmetic mean should be used instead of the geometric mean in determining an appropriate market return because the geometric mean consists of a rate of return taken from the initial and terminal years' value (1926 and 2017). and a constant rate of return is calculated by geometric average. He claims that geometric mean does not capture year to year variation for the entire 1926 to 2017 time period in returns (Suez Statement No. 5R, p. 19).

Q. IS THE USE OF A GEOMETRIC MEAN FOR THE CALCULATION OF THE HISTORICAL CAPM INAPPROPRIATE AS MR. D'ASCENDIS ASSERTS?

A. No. First, it is important to recognize that I used the geometric mean only in my *historic* CAPM analysis. It is appropriate to calculate the *historic* CAPM this way as it normalizes the returns or yields, and thus, measures the change over more than one period. The arithmetic average is more susceptible to being influenced by outliers, and therefore, is not as good at representing the central tendency of a set of numbers. I have chosen to use the geometric mean to calculate a historical return because I am calculating a historical CAPM. For the historical performance of the market to be a valid representation of the future, a geometric mean should be calculated to minimize the effect of any individual years that deviated from normal years. The arithmetic mean is influenced by any outliers in the data set, and therefore would be a better representation of the volatility of returns than it is of historical performance.

Q. PLEASE CONTINUE.

A. One of the difficulties of calculating the CAPM is that the risk premium is measured by the difference between the return on the market and the risk-free rate, and since the return on the market and the risk-free rate do not always change in the same direction or by the same percent, the risk premium itself is not constant over time. When measuring a historical risk premium, these volatilities, and therefore the potential inaccuracies of the CAPM, are accentuated using the arithmetic mean. The geometric mean more accurately represents the typical value, and as a result is a better representation of the historical market risk premium because it is not as influenced by fluctuation in the market as the arithmetic mean.

Q. DOES MR. D'ASCENDIS' REFERENCE TO THE DUFF & PHELPS 2018 SBBI YEARBOOK (P. 10-22) INVALIDATE YOUR USE OF THE GEOMETRIC MEAN?[5]

A. No. Again, I have only used the geometric mean to find a *historical* return; therefore, Mr. D'Ascendis' reference to the Duff & Phelps 2018 SBBI Yearbook is not applicable. As stated by Roger G. Ibbotson, "The geometric mean is backward-looking."[6]

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[5] Suez Statement No. 5R, p. 18

[6] *2017 SBBI Yearbook Stocks, Bonds, Bills, and Inflation, Duff & Phelps*, p. 6-2.

Q. CAN YOU PROVIDE A SIMPLE EXAMPLE DEMONSTRATING THE SHORTCOMINGS OF APPLYING THE ARITHMETIC MEAN IN A REGULATORY SETTING?

A. Yes. Suppose a hypothetical investor has $100 to invest over a two-year period. The first year the investor earns a 100% return so that his ending wealth at the end of period 1 is $200. The second year the investor has a -50% return (loses $100) so that his ending wealth at the end of period 2 is $100. It is quite clear that the investor has not earned a return since he ends the two-year period with the same $100 that he started with. The calculated geometric return is 0% = ($100/$100)$^{\wedge 1/2}$, which shows the lack of increased wealth. However, the calculated arithmetic return is 25% = (100% - 50%)/2. This means an investor relying on the arithmetic mean would expect to have an ending wealth of $125, but instead would only have an ending wealth of $100. This illustrates the inherent bias of using the arithmetic mean to calculate period results. As a result, it is quite clear that the use of the arithmetic mean for cost of capital purposes in a regulatory setting will produce biased results and that the geometric mean is more accurate and appropriate.

EMPIRICAL CAPITAL ASSET PRICING MODEL

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING YOUR CRITICISM IN DIRECT TESTIMONY OF THE ECAPM?

A. Mr. D'Ascendis claims that the Security Market Line, which is the graphical representation of the CAPM, is flatter than what is described in the traditional CAPM and claims that the Fama and French article I referenced on I&E Statement No. 2, p. 20 describes the poor empirical evidence of the CAPM, thus providing support for the ECAPM (Suez Statement No. 5R, p. 20).

Q. WHY HAVEN'T YOU EMPLOYED THE ECAPM IN YOUR ANALYSIS?

A. I have not employed the ECAPM as it has the same problems as the CAPM that were discussed in I&E Statement No. 2, pages 18-20. The Fama and French article Mr. D'Ascendis references (Suez Statement No. 5R, p. 20) does not support the use of the ECAPM as he asserts. Mr. D'Ascendis has taken the article out of its context of invalidating the CAPM method. The Fama and French article does not conclude that the problems with the CAPM are resolved by the ECAPM but rather states that, "The synthesis of the evidence on the empirical problems of the CAPM provided by Fama and French (1992) serves as a catalyst, marking the point when it is generally acknowledged that the CAPM has potentially fatal problems."[7]

RISK PREMIUM METHOD

Q. WHAT WAS YOUR DIRECT TESTIMONY REGARDING THE RISK PREMIUM METHOD?

A. I stated, among other weaknesses, the RP method does not measure the current rate of return on common equity directly but determines the rate of return on common equity indirectly by observing the cost of debt (I&E statement No. 2, p. 19). Also, the RP method does not measure specific risk of the company (I&E statement No. 2, p. 15).

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING THE LACK OF DIRECT MEASUREMENT IN THE RP METHOD?

A. Mr. D'Ascendis claims that since the Predictive Risk Premium (PRP) method measures the "risk-return relationship directly," my concerns are misplaced (Suez Statement No. 5R, p. 27).

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[7] 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.

Q. DOES MR. D'ASCENDIS' PRP METHOD MEASURE THE COST OF EQUITY DIRECTLY?

A. No. Although, the PRP method does include the historical returns of the utility proxy group, it uses them to develop a market risk premium, not to estimate the cost of equity. To estimate the forecasted cost of equity, the PRP method attempts to measure the difference between the 30-year Treasury Yield and the historical returns of the utility proxy group (Suez Statement No. 5, p. 17), which means that the cost of equity is not directly measured from data specific to the proxy group. The PRP method assumes that there is a constant, predictable relationship between the 30-year Treasury Yield and the returns on the proxy group. In addition, the PRP method produces high estimates of the cost of equity compared to Mr. D'Ascendis' calculations of the return on the market in his CAPM. All companies in the proxy group have betas below one (1.0), which means that the return they earn should reflect less risk than the overall market.

<u>SIZE ADJUSTMENT</u>

Q. WHAT WAS YOUR DIRECT TESTIMONY REGARDING A SIZE ADJUSTMENT?

A. In I&E Statement No. 2, pages 37-39, I stated that Mr. D'Ascendis' 20-basis point size adjustment is unnecessary because none of the technical literature he cited in his direct testimony supporting investment adjustments related to the size of a company is specific to the utility industry. In addition, I presented an article by Dr. Annie Wong that demonstrated there is no need to make an adjustment for the size of a company in utility rate regulation (I&E Statement No. 2, pp. 38-39).

Q. WHAT IS MR. D'ASCENDIS' REBUTTAL TESTIMONY REGARDING A SIZE ADJUSTMENT?

A. Mr. D'Ascendis claims that smaller companies face increased risk due to smaller size; therefore, a size adjustment should be considered in the allowed rate of return on common equity (Suez Statement No. 5R, p. 21).

He states that his study uses data from the exchanges, viz., the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX), and the National Association of Security Dealers Automated Quotation System (NASDAQ), and since all utility companies are traded on one of these exchanges, his size adjustment study includes utilities. Mr. D'Ascendis claims that the Fama and French study confirms that size is a risk factor that should be taken into consideration and references articles by Dr. Thomas Zepp and by Michael A. Paschall, ASA, CFA and George B. Hawkins, ASA, CFA to confirm the existence of a size effect (Suez Statement No. 5R, pp. 22-26).

Q. DOES THE INCLUSION OF UTILITIES IN THE NYSE, AMEX, AND NASDAQ CAUSE STUDIES ON COMPANY SIZE TO BE SPECIFIC TO THE UTILITY INDUSTRY?

A. No. The NYSE alone contains approximately 2,800 companies (approximately 275 of which are classified as public utility companies) while the utility proxy group used by Mr. D'Ascendis and me contains six companies. Mr. D'Ascendis' implication that because the NYSE, AMEX, and NASDAQ include utilities, the size effect studies based on those indexes are applicable to a utility company ignores the fact that it is very unlikely for 275 companies to exhibit any great influence on a study based on 2,800 companies.

Q. DOES THE FAMA/FRENCH STUDY REFUTE DR. WONG'S ARTICLE?

A. No. As discussed in I&E Statement No. 2, pp. 37-39, Dr. Wong's article presents evidence that although a size effect may exist for industrial stocks, it does not exist for utility stocks. As the Fama/French study is not specific to utility stocks, it does not demonstrate that a size effect exists in the utility industry. In addition, the size effect that exists for industrial stocks varies to such an extent that it is difficult to predict. The difficulty in predicting the effect of size is demonstrated in the variance from year to year of the measurement of the difference between the annual returns on the large and small-capitalization stocks of the

NYSE/AMEX/NASDAQ in the Ibbotson *Stocks, Bonds, Bills & Inflation: 2015 Yearbook*. As stated on page 100 of the SBBI Yearbook,

> While the largest stocks actually declined in 2001, the smallest stocks rose more than 30%. A more extreme case occurred in the depression-recovery year of 1933, when the difference between the first and 10th decile returns was far more substantial. The divergence in the performance of small- and large- cap stocks is evident. In 30 of the 89 years since 1926, the difference between the total returns of the largest stocks (decile 1) and the smallest stocks (decile 10) has been greater than 25 percentage points.

Page 109 states,

> In four of the last 10 years, large-capitalization stocks (deciles 1-2 of NYSE/AMEX/NASDAQ) have outperformed small-capitalization stocks (deciles 9-10). This has led some market observers to speculate that there is no size premium. But statistical evidence suggests that periods of underperformance should be expected.

On page 112 under the heading "Small-Cap Returns Are Unpredictable," the SBBI yearbook states, "Because investors cannot predict when small-cap returns will be higher than large-cap returns, it has been argued that they do not expect higher rates of return for small stocks."

Q. DOES DR. ZEPP'S ARTICLE CONTRADICT DR. WONG'S ARTICLE?

A. No. The article Mr. D'Ascendis references by Dr. Zepp does not recreate Dr. Wong's study but instead speculates about other possible reasons for her results and references the results of two other studies. The first study, completed by the California Public Utility Commission's staff in 1991 is not included in the article and, therefore, Mr. Zepp's opinions cannot be properly evaluated. The second study examines the effects of size on only four water utility companies and does not contain enough evidence to refute Dr. Wong's findings. Dr. Wong's article continues to provide the best evidence that a size adjustment is unnecessary in the utility industry.

Q. DOES THE PASCHALL/HAWKINS ARTICLE SUPPORT MR. D'ASCENDIS' SIZE PREMIUM?

A. No. Again, the article is not specific to public utilities and therefore is inapplicable in this situation. Furthermore, the article states,

> There can be unusual circumstances where a small company has risk characteristics that make it far less risky than the average company, warranting the use of a very low equity risk premium. One possible example of this is a private water utility (monopoly situation, very low risk, near-guarantee of payments). The use of a size premium without consideration of the risk of the specific company may subject the appraisal to challenges and rejection on down the road.[8]

Mr. D'Ascendis states that his determination of a size premium is based on the size deciles of the NYSE, AMEX, and NASDAQ listed companies (Suez Statement No. 5. p. 36) and is not. as the article warned against, based on consideration of the risk of Suez.

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[8] Paschall, ASA, CFA, M. A.. & Hawkins. ASA. CFA. G B. (December 1999). *Do Smaller Companies Warrant a Higher Discount Rate for Risk?* Business Valuation Alert. Vol. 1. Issue No. 2.

Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. D'ASCENDIS' PROPOSED SIZE ADJUSTMENT?

A. I continue to recommend that his proposed 0.20% size adjustment to the Suez indicated range of common equity cost rates be rejected.

OVERALL RATE OF RETURN

Q. HAS YOUR OVERALL RATE OF RETURN RECOMMENDATION CHANGED FROM YOUR DIRECT TESTIMONY?

A. No. I continue to support each recommendation made in I&E Statement No. 2.

Q. WHAT IS YOUR OVERALL RATE OF RETURN RECOMMENDATION?

A. I recommend the overall rate of return for Suez Water Pennsylvania, Inc. as shown in the table below:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	45.82%	4.65%	2.13%
Common Equity	54.18%	9.13%	4.95%
Total	100.00%		7.08%

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION **V.** **SUEZ WATER PENNSYLVANIA, INC.**	: : : : : :	**Docket No. R-2018-3000834**

WITNESS VERIFICATION
THE BUREAU OF INVESTIGATION AND ENFORCEMENT

I, Ethan H. Cline, on behalf of the Bureau of Investigation and Enforcement, hereby verify that the documents preliminarily identified as:

I&E Statement No. 3 and 3-SR, and, I&E Exhibit No. 3 and 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.

Ethan H. Cline
Pennsylvania Public Utility Commission
Bureau of Investigation and Enforcement

Dated: September 10, 2018

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Test Year
Average Rate Base
FTY and FPFTY Reporting
Present Rate Revenue
Proposed Rate Revenue
Customer Cost Analysis
Customer Charges
Scale Back of Rates

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

A. My name is Ethan H. Cline. My business address is P.O. Box 3265, Harrisburg, PA 17105-3265.

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 3 AND I&E EXHIBIT NO. 3?

A. Yes.

Q. ARE YOU THE SAME ETHAN H. CLINE THAT SUBMITTED I&E STATEMENT NO. 3 AND I&E EXHIBIT NO. 3 ON JULY 20, 2018?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to address the rebuttal testimony submitted by witness on behalf of SUEZ Water Pennsylvania, Inc. ("SWPA" or "Company") John D. Hollenbach (SWPA St. No. 1R), Constance E. Heppenstall (SWPA St. No. 2R), Paul R. Herbert (SWPA St. No. 6R), and John. J. Spanos (SWPA St. No. 7-R).

Q. DOES YOUR SURREBUTTAL TESTIMONY INCLUDE AN EXHIBIT?

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

<u>MAHONING TOWNSHIP WATER SYSTEM ACQUISITION</u>

Q. PLEASE DESCRIBE THE MAHONING TOWNSHIP WATER SYSTEM ACQUISITION AND THE RELATED BASE RATE CLAIMS.

A. The Mahoning Township Water System ("MTWS") is a water and wastewater system that the Company is attempting to acquire, for an agreed upon purchase price of $9.5 million (SWPA St. No. 1, p. 25). The Company proposed in SWPA Statement No. 1 to include 60% of the $9.5 million[1] purchase price in rate base, though the Company may adjust the claim based on the appraisals (SWPA St. No. 1, p. 25), O&M expenses, and an increase of 1,200 customers in the present filing as a result of the potential acquisition of the MTWS.

Q. DID YOU AGREE WITH THE COMPANY'S PROPOSAL TO INCLUDE THE COSTS ASSOCIATED WITH THE ACQUISITION OF THE MTWS IN THE PRESENT PROCEEDING?

A. No. I did not agree with the Company's proposal to include the costs associated with the MTWS in the present proceeding (I&E St. No. 3, p. 3). Therefore, I

[1] Per the Company's response to OCA-IV-23, attached as I&E Exhibit No. 3, Schedule 5, $5.8 million is the portion of purchase price the Company is claiming in rate base.

recommended that the inclusion of the MTWS in the current base rate proceeding be denied and that all associated costs, expenses, and revenues be removed (I&E St. No. 3, pp. 8-9).

Q. DID THE COMPANY ADDRESS THE PROPOSED MAHONING TOWNSHIP ACQUISITION IN ITS REBUTTAL TESTIMONY?

A. Yes. On page 2 of SWPA Statement No. 1R, the Company stated that "due to the concerns expressed in this proceeding by the Office of Consumer Advocate and the Bureau of Investigation and Enforcement, SWPA is removing any claim for the Mahoning Water System from this case."

Q. DO YOU WISH TO WITHDRAW YOUR RECOMMENDATIONS CONCERNING THE MTWS?

A. Yes. As described below, I would like to withdraw my recommendation regarding the removal of the MTWS and accept the respective adjustments proposed by the Company in rebuttal testimony as described below.

<u>AVERAGE RATE BASE METHODOLOGY</u>

Q. WHAT DID YOU RECOMMEND REGARDING THE AVERAGE RATE BASE METHODOLOGY?

A. I recommended that SWPA's FPFTY year-end rate base amount of $1,954,910,000 be rejected and instead recommended a rate base amount of

$1,899,412,000 based on my recommended use of an average rate base methodology (I&E St. No. 3, p. 42).

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION REGARDING THE USE OF AN AVERAGE RATE BASE METHODOLOGY?

A. Yes. The Company disagreed with my recommended use of the average rate base methodology and witness Heppenstall stated on page 12 of SWPA Statement No. 2R that she is "advised by counsel that Section 315 states that the Commission may permit facilities which are projected to be in service during the fully projected future test year to be included in the rate base."

Q. DO YOU AGREE THAT THE REFERENCES PROVIDED BY WITNESS HEPPENSTALL DEFINITIVELY STATE THAT THE AVERAGE RATE BASE METHODOLOGY IS NOT ACCEPTABLE?

A. The referenced materials are silent on this point. While the language of Act 11, as referenced by the Company, does permit inclusion of plant proposed to be placed into service throughout the FPFTY to be included in rates, it does not indicate a specific or preferred methodology for recovery in rates. I do believe that the average rate base methodology is a more reasonable method for determining rate base in the FPFTY as I stated on pages 13-17 of I&E Statement No. 3.

UTILITY PLANT-IN-SERVICE

Q. WHAT DID YOU RECOMMEND REGARDING UTILITY PLANT-IN-SERVICE?

A. First, I recommended the utility plant-in-service related to the proposed MTWS acquisition be rejected (I&E St. No. 3, p. 21). Second, as I stated on page 22 of I&E Statement No. 3, I recommend that SWPA's FPFTY year-end utility plant-in-service claim not be reflected in rate base. Rather, I recommended a utility plant-in-service amount of $385,642,008 be reflected in rate base (I&E Ex. No. 3, Sch. 1, col. H, line 10). I based my recommendation on the use of an average rate base methodology rather than the year-end rate base contained in the Company's filing as well as several adjustments to the Company's claimed utility plant-in-service as discussed below.

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDATIONS?

A. As discussed above, the Company agreed to remove the MTWS from its utility plant-in-service claim in the FTY and FPFTY. SWPA Exhibits Rebuttal JJS-1 and Rebuttal JJS-2 provide the calculation of the utility plant-in-service, accumulated depreciation, depreciation rates, and annual depreciation expense for the FTY and FPFTY, respectively, excluding the MTWS. The Company's adjusted original cost utility plant in service, as shown on SWPA Exhibit No. CEH-1-R, Schedule 1.1 is $361,574,023 for the FTY and $403,249,792 for the FPFTY.

Q. DO YOU ACCEPT THE COMPANY'S RECALCULATION OF THE END OF YEAR FTY AND FPFTY UTILITY PLANT-IN-SERVICE AMOUNTS?

A. Yes. The recommendation that I provided in I&E Statement No. 3 was an estimation based on the information available at the time. Though the Company did not provide any explanation for why certain plant accounts increased with the removal of the MTWS, I accept the Company's adjusted utility plant-in-service amounts because it is reasonable to assume that the Company has more accurate data regarding the MTWS. Therefore, I will adjust my recommended FPFTY utility plant-in-service calculation using the average rate base methodology using the Company's updated FTY and FPFTY adjusted utility plant-in-service data.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION TO REFLECT ONLY AVERAGE PLANT IN SERVICE?

A. Yes. As I described above, based on the utility plant-in-service data provided by the Company that excludes the MTWS plant-in-service, I recalculated my recommended average utility plant-in-service. As shown on I&E Exhibit No. 3-SR, Schedule 1, line 10, col. H, my recommended utility plant-in-service for the FPFTY based on the average rate base methodology is $382,411,908 (($403,249,792 + $361,574,023) / 2). This represents a reduction of $20,837,885 from the Company's end of year FPFTY adjusted original cost claim of $403,249,792 to $382.411.908.

ANNUAL DEPRECIATION EXPENSE

Q. WHAT DID YOU RECOMMEND REGARDING ANNUAL DEPRECIATION EXPENSE?

A. First, consistent with my recommended removal of the Company's plant-in-service related to the MTWS, the annual depreciation expense must necessarily also be adjusted. Therefore, I recommend that the Company's annual depreciation expense claim in the FPFTY be reduced by $107,323 from $8,724,603 to $8,617,280 (I&E St. No. 3, p. 24). Second, based on my use of average rate base methodology and my FPFTY annual depreciation expense adjustments regarding the MTWS, discussed above, I recommend an annual depreciation expense of $8,391,033 be reflected in this case, which represents a decrease of $331,929 to the Company's annual depreciation expense claim ($8,722,962 - $8,391,033) (I&E St. No. 3, p. 24).

Q. DID THE COMPANY ADJUST ITS CLAIM FOR ANNUAL DEPRECIATION EXPENSE BASED ON THE REMOVAL OF THE MTWS?

A. Yes. Witness Spanos states that the annual depreciation expense could be "approximated by applying the appropriate depreciation rates to the average of the beginning of the year and end of the year plant in service balances for the FPFTY." (SWPA St. No. 7-R, p. 2). Witness Spanos also adjusted the end-of-year annual depreciation expense for the FPFTY based on the removal of the MTWS system, which results in a reduction of approximately $107,500 in depreciation expense (SWPA St. No. 7-R, p. 3).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDED CALCULATION OF THE ANNUAL DEPRECIATION EXPENSE?

A. No. Witness Spanos disagreed both with the use of the average rate base methodology in general and with my proposed calculation of annual depreciation expense based on that methodology (SWPA St. No. 7-R, p. 2).

Q. WOULD YOU LIKE TO CHANGE YOUR RECOMMENDATION TO REFLECT ONLY AVERAGE ANNUAL DEPRECIATION EXPENSE?

A. I continue to recommend the use of the average rate base methodology as discussed in my direct testimony and above. However, based on the testimony provided by witness Spanos, I recalculated my average annual depreciation expense by taking an average of each adjusted plant account in the FTY and FPFTY and multiplying that average by the respective depreciation rate for the FPFTY as shown on I&E Exhibit No. 3-SR, Schedule 2. That number, less the depreciation on CIAC / Advances of $950,910 provides the total annual depreciation expense claim. The result is a reduction of $486,835 of the Company's revised annual depreciation expense described in rebuttal of $8,615,461 to $8.128,626 (I&E Ex. No. 3-SR, Sch. 3).

ACCUMULATED DEPRECIATION

Q. WHAT DID YOU RECOMMEND REGARDING ACCUMULATED DEPRECIATION?

A. First, I recommended the Company's accumulated depreciation in the FPFTY be decreased by $798,576 from $85,360,943 to $84,562,367 in order to remove the accumulated depreciation associated with MTWS plant (I&E St. No. 3, p. 25). Second, based on my use of average rate base methodology and my accumulated depreciation adjustment regarding the MTWS, I recommended an accumulated depreciation of $81,589,693 be reflected in this case (I&E St. No. 3, p. 26).

Q. DID THE COMPANY PROVIDE AN ADJUSTMENT TO IS ACCUMULATED DEPRECIATION CLAIM TO REFLECT THE REMOVAL OF THE MTWS?

A. Yes. SWPA Exhibits Rebuttal JJS-1 and Rebuttal JJS-2 provide the calculation of the accumulated depreciation for the FTY and FPFTY, respectively, excluding the MTWS. The Company's adjusted accumulated depreciation, as shown on SWPA Exhibit No. CEH-1-R, Schedule 1.1 is $78,561,485 for the FTY and $85,189,362 for the FPFTY.

Q. DO YOU ACCEPT THE COMPANY'S RECALCULATION OF THE END OF YEAR FTY AND FPFTY UTILITY PLANT-IN-SERVICE AMOUNTS?

A. Yes. The recommendation that I provided in I&E Statement No. 3 was an estimation based on the information available at the time. Though the Company did not provide any explanation for why certain plant accounts increased with the removal of the MTWS, I accept the Company's adjusted utility plant-in-service amounts because it is reasonable to assume that the Company has more accurate data regarding the MTWS. Therefore, I will adjust my recommended FPFTY utility plant-in-service calculation using the average rate base methodology using the Company's updated FTY and FPFTY adjusted utility plant-in-service data.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION TO REFLECT ONLY AVERAGE ACCUMULATED DEPRECIATION?

A. Yes. As I described above, based on the accumulated depreciation data provided by the Company that excludes the MTWS accumulated depreciation, I recalculated my recommended average accumulated depreciation. As shown on I&E Exhibit No. 3-SR, Schedule 1, line 11, col. H, my recommended utility plant-in-service for the FPFTY based on the average rate base methodology is $81,875,424 (($78,561,485 + $85,189,362) / 2). This represents a reduction of $3,313.939 from the Company's end of year FPFTY adjusted accumulated depreciation claim of $85.189,362 to $81,875,424 (I&E Ex. No. 3-SR, Sch. 1, line 11).

MATERIALS AND SUPPLIES

Q. WHAT DID YOU RECOMMEND REGARDING MATERIALS AND SUPPLIES?

A. I recommended the Company's $481,594 jurisdictional claimed level of Materials and Supplies be increased by $19,474 to $501,067 (I&E St. No. 3, p. 29).

Q. HOW DID YOU DETERMINE YOUR RECOMMENDED LEVEL OF MATERIALS AND SUPPLIES?

A. I updated the thirteen-month average balances of materials and supplies to account for the additional actual balances provided by the Company in its responses to I&E-RB-9 (supplemented on June 26, 2018), attached as I&E Exhibit No. 3, Schedule 8. This update results in a total Company 12-month average material supplies level of $501,067 (I&E St. No. 3, p. 29).

Q. DID THE COMPANY RESPOND TO YOUR MATERIALS AND SUPPLIES RECOMMENDATION?

A. No. However, the materials and supplies claim presented in the Company's rebuttal exhibit SWPA Exhibit No. CEH- has not been adjusted from what the Company claimed in its original filing. Therefore, I will assume that the Company rejected my recommendation.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend a materials and supplies level in the FPFTY of $501,067 (I&E Ex. No. 3-SR, Sch. 1, line 16).

<u>DEFERRED TAXES</u>

Q. WHAT AMOUNT OF DEFERRED TAXES DID THE COMPANY CLAIM IN THE FTY AND FPFTY?

A. The Company's claim for Deferred Taxes is $18,237,542 in the FTY and $18,810,736 in the FPFTY (SWPA Ex. No. CEH-1, Sch. 4.1).

Q. DID THE COMPANY MAKE ANY ADJUSTMENTS TO ITS DEFERRED TAXES CLAIM IN REBUTTAL TESTIMONY?

A. Yes. As shown on SWPA Exhibit No. CEH-1-R, Schedule 1.1, the Company separated the Tax Cut and Jobs Act ("TCJA") regulatory liability from the Deferred Taxes claim in the FTY and FPFTY.

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S CLAIM FOR DEFERRED TAXES?

A. Based on the average rate base methodology, I recommended a $18,524,139 level of Deferred Taxes. This was determined by taking the average of the Company's Deferred Taxes claim for the FTY and the Company's Deferred Taxes claim for the FPFTY (I&E St. No. 3. p. 30).

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION REGARDING DEFERRED TAXES?

A. Yes. I recommend that only the deferred taxes be calculated using the average rate base methodology. My recommended $8,398,470 level of deferred taxes was calculated by taking the average of the Company's rebuttal deferred taxes claims in the FTY and FPFTY (($8,086,056 + $8,710,883) / 2 = $8,398,470). Therefore, my recommended deferred taxes level in the FPFTY is a reduction of $312,414 from the Company's adjusted deferred taxes of $8,710,883 to $8,398,470 (I&E Ex. No. 3-SR, Sch. 1, line 14, col. H).

FTY AND FPFTY REPORTING

Q. WHAT DID YOU RECOMMEND REGARDING REPORTING FTY AND FPFTY PLANT ADDITIONS?

A. I recommended that the Company provide the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement with an update to SWPA Exhibit No. JDH-1, no later than April 1, 2019, which should include actual capital expenditures, plant additions, and retirements by month from January 1, 2017 through December 31, 2018 and an additional update for actuals from January 1, 2019 through December 31, 2019, no later than April 1, 2020.

Q. DID THE COMPANY RESPOND TO YOUR RECOMMENDATION?

A. No. Therefore, I will assume the Company has accepted my recommendation regarding reporting for FTY and FPFTY plant additions.

PRESENT RATE REVENUE

Q. DID THE COMPANY ADJUST ITS PRESENT RATE REVENUES CLAIM TO ACCOUNT FOR THE REMOVAL OF THE MTWS?

A. Yes. The Company stated it will reduce its present rate revenues by $712,877 by eliminating the adjustment for the MTWS acquisition revenues (SWPA St. No. 2-R, p. 2) from $47,382,250. The result is an adjusted total present rate revenue level claim of $46,722,995 (SWPA Exhibit No. CEH-1-R, Schedule 1, line 1, col. 8).

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

A. Yes.

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S CLAIMED PRESENT RATE REVENUE?

A. I recommended the Company's present rate revenue level be decreased by $655.983 from $47,382,250 to $46,320,657 based on using a consistent average methodology (I&E St. No. 3. pp. 35-36).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDED ADJUSTMENT TO PRESENT RATE REVENUE TO BE CONSISTENT WITH THE AVERAGE RATE BASE METHODOLOGY.

A. No. The Company proposed that the average rate base methodology be rejected as a whole, as discussed above, which would include the adjustments to present rate revenue.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend the present rate revenue level of $46,320,657. This is a reduction of $402,338 from the Company's revised present rate revenue level $46,722,995 to $46,320,657.

<u>**REVENUE UNDER PROPOSED RATES**</u>

Q. DID THE COMPANY ADJUST ITS PRESENT RATE REVENUES CLAIM TO ACCOUNT FOR THE REMOVAL OF THE MTWS?

A. Yes. The Company stated it will reduce its present rate revenues by $712,877 by eliminating the adjustment for the MTWS acquisition revenues (SWPA St. No. 2-R. p. 2).

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

A. Yes.

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S CLAIMED PRESENT RATE REVENUE?

A. I recommended the Company's total proposed rate revenue be reduced by $846,091 from $53,618,655 to $52,722,563 (I&E St. No. 3, p. 41).

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDED ADJUSTMENT TO PROPOSED RATE REVENUE TO BE CONSISTENT WITH THE AVERAGE RATE BASE METHODOLOGY.

A. No. The Company proposed that the average rate base methodology be rejected as a whole, as discussed above, which would include the adjustments to proposed rate revenue.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION?

A. No. I continue to recommend that proposed rate revenues be calculated using the number of bills and consumption adjusted for the average rate base methodology as I described on page 42 of I&E Statement No. 3.

<u>**CUSTOMER COST ANALYSIS**</u>

Q. WHAT DID YOU RECOMMEND REGARDING THE COMPANY'S CUSTOMER COST ANALYSIS?

A. I recommended that the following cost accounts be removed from SWPA's customer cost analysis: (1) Operation and Maintenance Expenses: T&D Labor --

Maintenance –Employee Salaries – Structures and Improvements, (2) Transportation Expense, (3) Worker's Compensation, (4) Management Fees – Employee Related, (5) Management Fees – Customer Related, and (6) a part of the Total Customer Accounting Expense (I&E Ex. No. 3, Sch. 18). Additionally, the costs that are a part of the Total Customer Accounting Expense that should not be included in the customer cost analysis because they are not direct customer costs are as follows: Fuel for Power Production, Rental of Equipment, Bad Debt Expense, Miscellaneous Other, Office Expenses, and Utilities and Other. (I&E Exhibit No. 3, Schedule 13, I&E St. No. 3, pp. 45-46). I also recommended a total customer cost and public fire monthly cost per 5/8-inch meter, as a result from my recommended customer cost analysis, of $14.01, which is a reduction of $0.95 from the Company's unit cost per customer of $14.96 (I&E St. No. 3, p. 46).

Q. WHY DID YOU RECOMMEND THE ABOVE COSTS NOT BE INCLUDED IN THE CUSTOMER COST ANALYSIS?

A. As I stated on page 46 of I&E Statement No. 3, these costs do not change with the addition or subtraction of a single customer and, therefore, should not be included in the calculation of the customer charge.

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDATION REGARDING THE CUSTOMER COST ANALYSIS?

A. No.

Q. WHY DID THE COMPANY NOT AGREE WITH YOUR RECOMMENDED CUSTOMER COST ANALYSIS?

A. The Company did not agree with my recommended customer cost analysis for several reasons. First, witness Herbert stated that bad debt was allocated to customer classes based on the number of customers because the level of uncollectible accounts varies with the number of customers and not usage (SWPA St. No. 6-R, p. 4). Second, witness Herbert did not agree with my customer cost analysis because he believes that his proposed customer charges also considered the fully allocated customer cost analysis (SWPA St. No. 6-R, p. 5). Third, witness Herbert disagreed with my recommended exclusion of the costs as described above (SWPA St. No. 6-R, pp. 7-11). Fourth, witness Herbert disagreed with my recommendation regarding the public fire customer charge (SWPA St. No. 6-R, pp. 7-8).

Q. WHAT REASONS DOES WITNESS HERBERT PROVIDE FOR NOT AGREEING WITH YOUR RECOMMENDED EXCLUSION OF THE BAD DEBT EXPENSE FROM YOUR CUSTOMER COST ANALYSIS?

A. Witness Herbert states that bad expense was allocated to customer classes based on the number of customers because the level of uncollectible accounts varies with the number of customers and not usage (SWPA St. No. 6-R, p. 4). Additionally, witness Herbert states that recovering this expense 100% through the usage rate is a total disconnect for how such costs are incurred (SWPA St. No. 6-R. pp. 4-5).

Q. DO YOU AGREE WITH WITNESS HERBERT'S ASSESSMENT OF BAD DEBT EXPENSES?

A. No. I do not agree with witness Herbert's assessment of bad debt expense. Bad debt expense is designed to recover lost revenue generated from customers who do not pay their bill. I disagree that the level of bad debt varies with the number of customers and not usage. Most customers do not cause the Company to incur bad debt expense each month and so, the addition or subtraction of a single customer is not likely to influence the level of bad debt expense. For those customers who do cause the Company to incur uncollectible expenses each month, the expense is generated from the entire bill, not simply from the customer charge. As such, customer with higher usage that does not pay their bill would generate more bad debt expense than a customer with lower usage. Therefore, contrary to witness Herbert's testimony, it is not a "total disconnect" for how bad debt costs are incurred.

Q. WHAT SUPPORT DOES MR. HERBERT PROVIDE FOR HIS RECOMMENDATION REGARDING A FULLY ALLOCATED CUSTOMER COST ANALYSIS?

A. Mr. Herbert references the AWWA M1 Manual[2] and included tables from the AWWA M1 Manual as support for his recommendation regarding a fully allocated

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[2] AWWA Manual of Water Supply Practices M1 Principles of Water Rates, Fees. Charges. Seventh Edition.

customer cost analysis and also states that there is no mention in the M1 Manual of using only direct customer costs for the purposes of calculation the customer charges (SWPA St. No. 6-R, pp. 5-6). He also states that administrative and general costs are fixed costs supporting the entire operation that do not vary based on the amount of water consumed and should, therefore, be included in the customer charge (SWPA St. No. 6-R, p. 6). Witness Herbert also states on page 6 of SWPA St. No. 6-R, p. 6) that "[w]ith consumption charges exceeding $9 per thousand gallons, however, there will be and always has been a price signal for customers to conserve and the Company has certainly experienced such decreases in usage over the last several years."

Q. DO YOU AGREE WITH MR. HERBERT'S RECOMMENDATION?

A. No. First, I disagree because, as he has stated in his rebuttal testimony, the Commission has allocated costs to the customer charge based on whether they are direct customer costs with some indirect costs included. I do not believe it reasonable to suddenly change this practice in order to provide more guaranteed revenue to the Company at the expense of customers. Second, I disagree that the AWWA M1 Manual fully supports Mr. Herbert's position.

Q. WHY DO YOU NOT AGREE THAT THE AWWA MANUAL FULLY SUPPORTS MR. HERBERT'S POSITION?

A. I do not agree that the AWWA M1 Manual fully supports Mr. Herbert's position because he includes costs in his customer cost analysis that are not shown on the AWWA M1 Manual tables that were provided by Mr. Herbert as SWPA Exhibit 6-R-2. These costs include, but may not be limited to Transportation costs, Management Fees, Office Buildings, Office Furniture and Equipment, and Computer Software. Additionally, on page 151 of the AWWA M1 Manual, it states that it is "common practice in the water industry to recover such costs, even those defined as fixed in traditional cost accounting terms, through a consumption charge that varies with the customer's consumption." Therefore, despite the example of the tables, I disagree that the AWWA M1 Manual asserts that a fully allocated cost analysis is recommended or preferable. Therefore, Mr. Herbert's recommendation for the Commission to consider the fully allocated cost analysis in this case, and in future cases, should be rejected.

Q. WHAT REASON DOES MR. HERBERT PROVIDE FOR DISAGREEING WITH YOUR DIRECT CUSTOMER COST RATIONALE FOR EXCLUDING CERTAIN ADMINISTRATIVE AND GENERAL COSTS?

A. Mr. Herbert states that "[a]dministrative and general costs are fixed costs supporting the entire operation that do not vary based on the amount of water consumed. So. if none of the administrative and general costs are allocated to customer related functions, then 100% of these costs will be allocated to consumption charges, which is not logical." (SWPA St. No. 6-R. p. 6).

Q. DO YOU AGREE WITH MR. HERBERT THAT ADMINISTRATIVE AND GENERAL COSTS ARE DIRECT CUSTOMER COSTS BECAUSE THEY ARE RELATED TO THE NUMBER OF CUSTOMERS THAT NEED TO BE SERVED?

A. No. As a water utility, SWPA's entire business is based around serving customers. While the administrative and general costs are indirectly related to the number of customers that need to be served, the total administrative and general costs do not vary by customer. As an example, if the Company gains a customer, it will not need to increase the total cost of management fees or worker's compensation. Therefore, these costs are not direct costs and should not be included in a customer cost analysis.

Q. DOES MR. HERBERT AGREE WITH THE COSTS YOU RECOMMENDED BE EXCLUDED FROM THE DIRECT CUSTOMER COST ANALYSIS?

A. No. Mr. Herbert disagrees with my recommended exclusion of the salaries for maintaining transmission and distribution ("T&D") structures and improvements, management fees associated with customer service and human resources, transportation expense, and worker's compensation (SWPA St. No. 6-R, p. 8). On pages 8-9 of SWPA Statement No. 6-R. pp. 8-9, Mr. Herbert addresses the reasons for why each cost should be included in the direct customer cost analysis.

Q. WHAT SUPPORT FOR INCLUDING MANAGEMENTS FEES ASSOCIATED WITH CUSTOMER SERVICE AND HUMAN RESOURCES IN THE CUSTOMER COST ANALYSIS DOES MR. HERBERT PROVIDE?

A. Mr. Herbert states on pages 8-9 of SWPA Statement No. 6-R that the managements fees that are customer related are those allocated from shared services for various functions. Specifically, the customer service management fees are associated with Customer Service Administration or Customer Care which provides guidance, training, control and management reporting for the Customer Service process and standardizes customer service practices throughout the SUEZ Water regulated business units. Additionally, Mr. Herbert states that the employee related management fees are those shared services that address human resource expenses.

Q. DO YOU AGREE THAT CUSTOMER RELATED AND EMPLOYEE RELATED MANAGEMENT FEES SHOULD BE INCLUDED IN THE CUSTOMER COST ANALYSIS?

A. No. The management fees described by Mr. Herbert are only tangentially related to customer service. The costs for employee salaries and supervision are already included in the customer charge. I do not agree that the costs for human resources or training are direct customer costs as they do not change with the addition or subtraction of a single customer, nor do they directly interact with customers.

Therefore, I continue to recommend management fees be excluded from the customer cost analysis.

Q. WHAT DOES MR. HERBERT STATE IN HIS REBUTTAL TESTIMONY TO SUPPORT HIS POSITION THAT T&D EMPLOYEE SALARIES – STRUCTURES AND IMPROVEMENTS QUALIFY AS A DIRECT CUSTOMER COST?

A. On page 8 of SWPA Statement No. 6-R, Mr. Herbert states that the salaries for maintaining T&D structures and improvements are required since the T&D structures and improvements is where T&D field service employees, meter readers, and customer service personnel report and work from.

Q. DO YOU AGREE THAT THE T&D EMPLOYEE SALARIES – STRUCTURES AND IMPROVEMENTS QUALIFY AS A DIRECT CUSTOMER COST?

A. No. The salaries for the employees who actually are involved with customer service lines, meter reading, and responding to general customer services inquiries are allocated under the Employee Salaries – Meters and Employee Salaries – Services cost accounts and are properly included in a customer cost analysis. The salaries for the employees who maintain the building that the above-mentioned customers work in, based on Mr. Herbert's description, do not interact with customers in any way. This cost would not change with the addition or subtraction of any customers and, therefore, is an indirect cost that should not be included in a customer cost analysis.

Q. WHAT SUPPORT DOES MR. HERBERT PROVIDE TO SUPPORT HIS POSITION THAT WORKERS' COMPENSATION QUALIFIES AS A DIRECT CUSTOMER COST?

A. Mr. Herbert does not provide any additional support. He merely states that "[a]nother employee related expense is workmens' compensation insurance. A portion of this expense is appropriately allocated to customer-related costs, again similar to how payroll taxes are allocated." (SWPA St. No. 6-R, p. 9).

Q. DID MR. HERBERT PROVIDE SUFFICIENT SUPPORT FOR HIS PROPOSAL TO INCLUDE WORKERS' COMPENSATION AS A DIRECT CUSTOMER COST?

A. No. While workers' compensation is employee related, it does not affect every employee, unlike payroll tax. Therefore, it should not be included as a direct customer cost.

Q. DID MR. HERBERT PROVIDE AN EXPLANATION FOR THE TRANSPORTATION EXPENSE?

A. Yes. Mr. Herbert states that the Transportation Expenses are for vehicles that T&D field service employees and meter readers use to perform their jobs (SWPA St. No. 6-R, p. 9).

Q. DO YOU AGREE WITH MR. HERBERT THAT THE TRANSPORTATION EXPENSE ASSOCIATED WITH T&D FIELD SERVICE EMPLOYEES AND METER READERS SHOULD BE INCLUDED IN A CUSTOMER COST ANALYSIS?

A. Yes. Therefore, I have adjusted my customer cost analysis to include the Transportation Expense related to meters and services as shown on I&E Exhibit No. 3-SR, Schedule 5. However, I continue to recommend that the transportation expense related to billing and collecting not be included.

Q. DOES MR. HERBERT CITE TO COMMISSION PRECEDENT TO SUPPORT HIS PROPOSED CUSTOMER COST ANALYSIS?

A. Yes. Mr. Herbert, on pages 9-11 of SWPA Statement No. 6-R, cites to the 2003 Aqua Pennsylvania (formerly Pennsylvania Suburban Water Company) rate case, at Docket No. R-00038805, approved by the Commission, in which he was the witness. He also states that his recommended customer cost methodology was reaffirmed by the Commission in the 2012 PPL case at Docket No. R-2012-2290597.

Q. DO YOU AGREE THAT THE COMMISSION REAFFIRMED MR. HERBERT'S METHODOLOGY IN THE 2012 PPL CASE?

A. No. While the language of the Commission Order in PPL stated that the customer cost calculation was based on Aqua, the actual customer costs used to determine the customer charge in 2012 PPL do not fully match the customer costs that were used in Aqua.

Specifically, the customer cost analysis that was provided in the 2012 PPL case was included as a single page exhibit as part of PPL witness Kleha's rebuttal testimony. It is not possible to determine which costs were included in the Commission approved customer charge in the 2012 PPL case. Therefore, as stated above, I do not agree that the Commission reaffirmed Mr. Herbert's Aqua methodology in the 2012 PPL case.

Q. WHAT DO YOU BELIEVE SHOULD DETERMINE WHETHER A COST SHOULD APPROPRIATELY BE INCLUDED IN A CUSTOMER COST ANALYSIS?

A. As I stated in my direct testimony, only direct customer costs, which are those costs that change with the addition or subtraction of a single customer, should be included in a customer cost analysis. Different utilities make different claims over time, which makes a direct comparison difficult due to changes in expenses claimed and changes in the character of expenses. Thus, while Aqua and PPL are helpful, they are simply guides. When there is a discrepancy. I believe it is reasonable to rely more on whether those costs change with the addition or subtraction of a single customer.

Q. DID MR. HERBERT ADDRESS ANY OTHER COSTS INCLUDED IN THE CUSTOMER COST ANALYSIS?

A. Yes. On page 7 of SWPA Statement No. 6-R, Mr. Herbert references 66 Pa. C.S. §1328 which states that a public utility that furnishes water to or for the public shall be allowed to recover in rates the full cost of service related to public fire hydrants.

Q. DID YOU MAKE A RECOMMENDATION REGARDING THE PUBLIC FIRE CUSTOMER CHARGE?

A. No. I did not make a recommendation regarding the public fire customer charge.

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION REGARDING THE CUSTOMER COST ANALYSIS?

A. Yes. As I stated above, I believe that the Transportation Expense related to meters and services should be included in the customer cost analysis. However, as shown on I&E Exhibit No. 3-SR, Schedule 6 the inclusion of this cost does not alter the $14.01 cost per 5/8-inch meter monthly bill result of my customer cost analysis.

CUSTOMER CHARGES

Q. WHAT DID YOU RECOMMEND REGARDING THE CUSTOMER CHARGE?

A. I recommended a $14.00 customer charge for the residential classes (I&E St. No. 3, p. 48). I recommended the customer charges of the other meter sizes also be increased by approximately 1.8%, consistent with my recommended increase of the 5/8-inch customer charge. My recommended increase to each customer charge by meter size is shown below (I&E St. No. 3, p. 49):

Meter Size	Present Rate	I&E Proposed	Percent Increase
5/8 & 3/4-inch	$13.75	$14.00	1.818%
1-inch	$28.50	$29.00	1.754%
1 ½-inch	$57.00	$58.00	1.754%
2-inch	$97.63	$99.40	1.813%
3-inch	$183.13	$186.50	1.840%
4-inch	$305.25	$310.80	1.818%
6-inch	$610.50	$621.60	1.818%
8-inch	$976.88	$994.60	1.814%

Q. DID THE COMPANY AGREE WITH YOUR RECOMMENDED CUSTOMER CHARGES?

A. No. Base on Mr. Herbert's disagreement with my recommended customer cost analysis, the Company did not agree with my recommended customer charges (SWPA St. No. 6-R, p. 11).

Q. DO YOU WISH TO CHANGE YOUR RECOMMENDATION REGARDING THE CUSTOMER CHARGES?

A. No. I continue to recommend the customer charges shown above, based on my recommended customer cost analysis.

<u>SCALE BACK OF RATES</u>

Q. WHAT DID YOU RECOMMEND SHOULD THE COMMISSION GRANT LESS THAN THE COMPANY'S FULLY REQUESTED INCREASE?

A. Should the Commission grant less than the Company's fully requested increase and approves my recommended customer charges described above, I recommended the usage rates be scaled back prior to the scale back of my recommended customer charge until the usage rates are at present rate levels. However, if the usage rates are scaled back to present rate levels, I recommend the customer charge then be scaled back.

Q. DID MR. HERBERT MAKE A SIMILAR RECOMMENDATION IN HIS REBUTTAL TESTIMONY?

A. Yes. On page 12 of SWPA Statement No. 6-R, Mr. Herbert recommended that the scale-back in the revenue increase should be a proportional scale-back of the Company's original proposal excluding public fire service. He also proposed that the scale-back should be entirely from the consumption charges leaving the proposed customer charges as-filed.

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

A. I agree that the scale back should be proportional excluding public fire service and that the consumption charge should be scaled back first. However, I continue to recommend that if the usage rates are scaled back to present rate levels, the customer charges that I recommended should then be scaled back.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

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

PENNSYLVANIA PUBLIC UTILITY COMMISSION

v.

SUEZ WATER PENNSYLVANIA, INC.

Docket Nos. R-2018-3000834

Exhibit to Accompany

the

Surrebuttal Testimony

of

Ethan H. Cline

Bureau of Investigation and Enforcement

Concerning:

Test Year
Average Rate Base
FTY and FPFTY Reporting
Present Rate Revenue
Proposed Rate Revenue
Customer Cost Analysis
Customer Charges
Scale Back of Rates

SUEZ Water Pennsylvania, Inc.
I&E SURREBUTTAL ADJUSTMENTS TO
RATE BASE
R-2018-3000834

Line No	Description	Company REBUTTAL Rate Base As of December 31 2018 (A)	Adjustments (B)	As of December 31, 2019 (C)
1	Original Cost of Utility Plant in Service	$361,574,023	$41,675,769	$403,249,792
2	Accumulated Depreciation	$78,561,485	$6,627,877	$85,189,362
3	Net Plant in Service	$283 012 538	$35,047,892	$318,060,430
4	CIAC and Contributions	($63 114,693)	$0	($63,114,693)
	Add			
5	**Deferred Taxes**	**($8,086,056)**	**($624,827)**	**($8,710,883)**
6	**TCJA Regulatory Liability**	**($10,065,851)**	**$264,891**	**($9,800,960)**
7	Materials and Supplies	$481,594	$0	$481,594
8	Cash Working Capital	$796,271	$45,880	$842,151
9	Total Rate Base	$203,023,803	$34,733,836	$237,757,639

I&E SURREBUTTAL ADJUSTMENTS TO RATE BASE

Line No	Description	Company Pro Forma December 31, 2018 (A)	Adjusted From Company (B)	I&E Pro Forma December 31, 2018 (C)	Company Pro Forma December 31, 2019 (D)	Adjusted From Company (E)	I&E Pro Forma December 31, 2019 (F)	I&E Adjustments (G)=(H)-(D)	I&E Average (H)
10	Original Cost of Utility Plant in Service	$361,574,023	$0	$361,574,023	$403,249,792	$0	$403,249,792	($20,837,885)	$382,411,908
11	Accumulated Depreciation	$78,561,485	$0	$78,561,485	$85,189,362	$0	$85,189,362	($3,313,939)	$81,875,424
12	Net Plant in Service	$283,012,538	$0	$283,012,538	$318,060,430	$0	$318,060,430	($17,523,946)	$300,536,484
13	CIAC and Contributions	($63,114,693)	$0	($63,114,693)	($63,114,693)	$0	($63,114,693)	$0	($63,114,693)
	Add								
14	**Deferred Taxes**	**($8,086,056)**	**$0**	**($8,086,056)**	**($8,710,883)**	**$0**	**($8,710,883)**	**$312,414**	**($8,398,470)**
15	**TCJA Regulatory Liability**	**($10,065,851)**	**$0**	**($10,065,851)**	**($9,800,960)**	**$0**	**($9,800,960)**	**$0**	**($9,800,960)**
16	Materials and Supplies	$481,594	$19,474	$501,067	$481,594	$19,474	$501,067	$19,474	$501,067
17	***Cash Working Capital***	***$796,271***	***$0***	***$796,271***	***$842,151***	***$0***	***$842,151***	***$0***	***$842,151***
18	Total Rate Base	$203,023,803	$19,474	$203,043,276	$237,757,639	$19,474	$237,777,113	($17,192,059)	$220,565,580

I&E Exhibit No. 3-SR
Schedule 1

SUEZ WATER PENNSYLVANIA, INC.
I&E ADJUSTMENTS TO
TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND
I&E ADJUSTMENTS TO CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WATER PLANT AS OF DECEMBER 31, 2019

Line No		DEPRECIABLE GROUP (A)	COMPANY 2018 OC (B)	COMPANY 2019 OC (C)	ADJUSTMENT (D)	I&E AVERAGE COST (E)	ANNUAL: COMPANY REBUTTAL ACCRUAL (F)	ANNUAL: ADJUSTMENT (G)	ANNUAL: I&E AVERAGE ACCRUAL (H)	COMPANY REBUTTAL: COMPOSITE ACCRUAL RATE (I)	COMPANY REBUTTAL: REMAINING LIFE (J)
	INTANGIBLE PLANT										
1	301	ORGANIZATION	66,399 00	66,399 00	0	66,399 00					
2	302	FRANCHISES AND CONSENTS	64,265 56	64,265 56	0	64,265 56					
3	303	MISCELLANEOUS INTANGIBLE PLANT	4,423,421 87	4,423,421 87	0	4,423,421 87					
4		*TOTAL INTANGIBLE PLANT*	4,554,086 43	4,554,086 43	0	4,554,086 43					
	DEPRECIABLE PLANT										
		STRUCTURES AND IMPROVEMENTS									
5	304 2	PUMPING	3,721,078 15	3,721,078 15	0	3,721,078 15	82,531	0	82,531	2 22	32 5
6	304 3	WATER TREATMENT PLANT								-	
7		BLOOMSBURG TREATMENT PLANT	181,380 86	181,380 86 *	0 *	181,380 86	8,185	0	8,185	4 51	7 3
8		BLOOMSBURG TREATMENT PLANT - NEW	5,829,778 36	5,829,778 36 *	0 *	5,829,778.36	135,084	0	135,084	2 32	40 0
9		SIXTH STREET PLANT	4,160,026.78	4,160,026 78 *	0 *	4,160,026.78	113,621	0	113,621	2.73	21.5
10		RICHARD C RABOLD	1,619,181.24	1,619,181 24 *	0 *	1,619,181 24	40,356	0	40,356	2.49	18 8
11		MARKET STREET	101,359.72	101,359 72 *	0 *	101,359 72	4,432	0	4,432	4.37	4 2
12		OLD HUMMELSTOWN PLANT	86,583 70	86,583 70 *	0 *	86,583 70	0	0	0	-	-
13		HUMMELSTOWN MEMBRANE PLANT	4,410,545 60	4,410,545 60 *	0 *	4,410,545.60	104,571	0	104,571	2.37	30 4
14		OTHER TREATMENT FACILITIES	3,087,574 48	3,087,574 48	0	3,087,574.48	70,316	0	70,316	2 28	36.0
15		TOTAL WATER TREATMENT PLANT	19,476,430 74	19,476,430 74	0	19,476,430 74	476,566	0	476,566	2.45	30 2
16	304 4	TRANSMISSION AND DISTRIBUTION	282,963 06	282,963 06	0	282,963.06	8,220	0	8,220	2 90	31 4
17	304 5	OFFICES									
18		BLOOMSBURG TREATMENT PLANT	9,036,735 87	9,246,555 87 *	(104,910) *	9,141,645 87	214,075	(2,429)	211,646	2 32	40.1
19		OTHER OFFICES	900,933 81	902,220 14	(643)	901,576 98	23,422	(17)	23,405	2 60	28 5
20		TOTAL OFFICES	9,937,669 68	10,148,776 01	(105,553)	10,043,222 85	237,497	(2,446)	235,051	2 34	38 9
21	304 5	STORES, SHOP AND GARAGE									
22		SUMMIT VIEW MAINTENANCE BUILDING	1,377,181 17	3,796,912 64 *	(1,209,866) *	2,587,046 91	155,397	(49,516)	105,881	4 09	21 1
23		OTHER MAINTENANCE BUILDINGS	186,828 31	461,118 08	(137,145)	323,973 20	16,519	(4,913)	11,606	3.58	21 8
24		TOTAL ACCOUNT STORES, SHOP AND GARAGE	1,564,009 48	4,258,030 72	(1,347,011)	2,911,020 10	171,916	(54,429)	117,487	4 04	21 2
25	304 5	MISCELLANEOUS	351,118 10	351,600 45	(241)	351,359 28	16,060	(11)	16,049	4.57	10.5

Line No		DEPRECIABLE GROUP	COMPANY ORIGINAL COST	COMPANY ORIGINAL COST	ADJUSTMENT	I&E ORIGINAL COST	ANNUAL COMPANY ACCRUAL AMOUNT	ANNUAL ADJUSTMENT	ANNUAL I&E ACCRUAL AMOUNT	COMPANY REBUTTAL COMPOSITE ACCRUAL RATE	COMPANY REBUTTAL REMAINING LIFE
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
26		TOTAL STRUCTURES AND IMPROVEMENTS	35,333,269 21	38,238,879 13	(1,452,805)	36,786,074 17	992,790	(56,886)	935,904	2 60	30 6
27	305	COLLECTING AND IMPOUNDING RESERVOIRS	434,632 39	434,632 39	0	434,632 39	7,983	0	7,983	1.84	39 9
28	306	LAKE, RIVER AND OTHER INTAKES									
29		ROCKVILLE INTAKE	1,519,927 27	4,662,260 11 *	(1,571,166) *	3,091,093 69	166,366	(56,065)	110,301	3 57	23 9
30		HUMMELSTOWN INTAKE	1,335,191 80	1,335,191 80 *	0 *	1,335,191 80	29,235	0	29,235	2.19	34 8
31		OTHER INTAKES	509,724 53	509,724 53	0	509,724 53	13,184	0	13,184	2 59	32 3
32		TOTAL LAKE, RIVER AND OTHER INTAKES	3,364,843 60	6,507,176 44	(1,571,166)	4,936,010 02	208,785	(56,065)	152,720	3 21	26 0
33	307	WELLS AND SPRINGS	1,028,041 81	1,028,041 81	0	1,028,041 81	17,514	0	17,514	1 70	27 6
34	308	INFILTRATION GALLERIES AND TUNNELS	13,358 04	13,358 04	0	13,358 04	400	0	400	2 99	26 3
		PUMPING EQUIPMENT									
35	311 2	ELECTRIC PUMPING EQUIPMENT	14,889,846 39	16,323,712 46	(716,933)	15,606,779 43	584,088	(25,653)	558,435	3 58	19 0
36	311 3	OIL ENGINE PUMPING EQUIPMENT	314,155 59	314,155 59	0	314,155 59	3,833	0	3,833	1.22	15 5
37		TOTAL PUMPING EQUIPMENT	15,204,001 98	16,637,868 05	(716,933)	15,920,935 02	587,921	(25,653)	562,268	3 53	19 0
		WATER TREATMENT PLANT									
38	320 1	STRUCTURES AND IMPROVEMENTS									
39		BLOOMSBURG TREATMENT PLANT	338,354.21	338,354 21 *	0 *	338,354 21	1,217	0	1,217	0 36	8 0
40		BLOOMSBURG TREATMENT PLANT - NEW	13,501,911 63	13,979,069.61 *	(238,579) *	13,740,490.62	393,097	(6,709)	386,388	2 81	31 2
41		SIXTH STREET PLANT	10,577,146 38	10,677,577 98 *	(50,216) *	10,627,362.18	220,784	(1,038)	219,746	2 07	20 6
42		RICHARD C RABOLD	1,756,585 15	1,756,585.15 *	0 *	1,756,585.15	27,973	0	27,973	1.59	18 9
43		MARKET STREET	192,621.85	192,621.85 *	0 *	192,621 85	3,522	0	3,522	1 83	4.4
44		OLD HUMMELSTOWN PLANT	858,433 64	858,433 64 *	0 *	858,433 64	0	0	0	-	-
45		HUMMELSTOWN MEMBRANE PLANT	9,469,382 38	9,469,382 38 *	0 *	9,469,382 38	198,548	0	198,548	2 10	28 1
46		OTHER TREATMENT FACILITIES	892,814 19	892,814 19	0	892,814 19	16,326	0	16,326	1 83	24 2
47		TOTAL STRUCTURES AND IMPROVEMENTS	37,587,249 43	38,164,839 01	(288,795)	37,876,044 22	861,467	(7,747)	853,720	-	27 1
48	320 2	PAINTING	447,524 82	447,524 82	0	447,524 82	39,209	0	39,209	8 76	4.7
49	320 3	CHEMICAL EQUIPMENT	6,743,249 88	8,440,371 24	(848,561)	7,591,810 56	572,364	(57,543)	514,821	6 78	12 7
50		TOTAL WATER TREATMENT PLANT	44,778,024 13	47,052,735 07	(1,137,355)	83,791,423 82	1,473,040	(65,290)	1,407,750	-	20 9
51	330	DISTRIBUTION RESERVOIRS AND STANDPIPES	11,140,101 80	13,384,165.34	(1,122,032)	12,262,133.57	370,840	(31,089)	339,751	2 77	26 2
52	331	TRANSMISSION AND DISTRIBUTION MAINS	159,413,414 84	187,429,065 33	(14,007,825)	173,421,240.09	2,924,600	(218,575)	2,706,025	1 56	58 0
53	333	SERVICES	39,848,031 83	40,576,966 71	(364,467)	40,212,499 27	728,191	(6,541)	721,650	1.79	40 9
54	334	METERS	20,103,309 37	21,325,664 84	(611,178)	20,714,487 11	946,838	(27,136)	919,702	4.44	15 2
55	335	HYDRANTS	7,774,000 86	7,868,389 28	(47,194)	7,821,195 07	131,295	(788)	130,508	1 67	40 3
56	339	OTHER PLANT AND MISC EQUIPMENT	539,255 49	539,255 49	0	539,255 49	8,424	0	8,424	1 56	18.0

Line No		DEPRECIABLE GROUP	COMPANY ORIGINAL COST	COMPANY ORIGINAL COST	ADJUSTMENT	I&E ORIGINAL COST	ANNUAL COMPANY ACCRUAL AMOUNT	ANNUAL ADJUSTMENT	ANNUAL I&E ACCRUAL AMOUNT	COMPANY REBUTTAL COMPOSITE ACCRUAL RATE	COMPANY REBUTTAL REMAINING LIFE
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
		OFFICE FURNITURE AND EQUIPMENT									
57	340 1	COMPUTERS AND SOFTWARE	3,298,776 11	2,646,180 68	326,298	2,972,478 40	80,752	9,957	90,710	3 05	1 2
58	340 1	SOFTWARE - LARGE	3,665,579 00	3,665,579 00	0	3,665,579 00	5,653	0	5,653	0 15	1 0
59	340 2	FURNITURE	659,446 10	659,446 10	0	659,446 10	33,197	0	33,197	5 03	10 7
60		TOTAL OFFICE FURNITURE AND EQUIPMENT	7,623,801 21	6,971,205 78	326,298	7,297,503 50	119,602	9,957	129,559	-	3 8
61	341	TRANSPORTATION EQUIPMENT - TRUCKS	1,057 45	1,057 45	0	1,057 45	215	0	215	20 33	2 5
		TOOLS, SHOP AND GARAGE EQUIPMENT									
62	343 1	SHOP AND GARAGE EQUIPMENT	1,147,657 06	1,147,657 06	0	1,147,657 06	49,132	0	49,132	4 28	15 1
63	343 2	TOOLS AND WORK EQUIPMENT	2,066,262 77	2,187,579 26	(60,658)	2,126,921 02	109,862	(3,046)	106,816	5 02	12 9
64		TOTAL TOOLS SHOP AND GARAGE EQUIPMENT	3,213,919 83	3,335,236 32	(60,658)	3,274,578 08	158,994	(3,046)	155,948	-	13 6
65	344	LABORATORY EQUIPMENT	129,279 71	127,367 71	956	128,323.71	4,514	34	4,548	3 54	7 6
66	346	COMMUNICATION EQUIPMENT	6,929,738 85	7,076,786 57	(73,524)	7,003,262 71	554,240	(5,758)	548,482	7 83	5 8
67	347	MISCELLANEOUS EQUIPMENT	147,854 10	147,854 10	0	147,854.10	10,332	0	10,332	6 99	10 4
68		*TOTAL DEPRECIABLE PLANT*	357,019,936 50	398,695,705 85	(25,314,420)	377,857,821 18	9,246,518	(656,661)	8,759,683	-	33 9
69		*AMORTIZATION OF NET SALVAGE*					319,853		319,853		
70		TOTAL UTILITY PLANT IN SERVICE	361,574,022 93	403,249,792 28	(25,314,420)	382,411,907 61	9,566,371	(656,661)	9,079,536		

* Life Span Procedure was used Curve shown is Interim Survivor Curve

SUEZ WATER PENNSYLVANIA, INC.
I&E SURREBUTTAL ADJUSTMENTS TO
ANNUAL DEPRECIATION EXPENSE
R-2018-3000834

Line No.	Description	Company Rebuttal and I&E Recommended			AVERAGE ANNUAL DEPRECIATION	
		Pro Forma December 31, 2018	Adjustments	Pro Forma December 31, 2019	2019 I&E Average Adjustment	I&E Average Annual Depreciation
		(A)	(B)	(C)	(F)	(G)
1	Total Water	$9,004,241	$562,130	$9,566,371	($486,835)	$9,079,536
2	Depreciation on CIAC/Advances	($950,910)	$0	($950,910)	$0	($950,910)
3	Total Annual Depreciation Expense	**$8,053,331**	**$562,130**	**$8,615,461**	**($486,835)**	**$8,128,626**

I&E Exhibit No. 3-SR
Schedule 3

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2017 AND 2019

Line No	Customer Classification	Revenues Under Present Rates	Company Pro Forma Adjustments Present Rates	Adjustment	I&E Pro Forma Adjustments Present Rates	I&E Add Back Annualized DSIC Revenue	Company REBUTTAL Pro Forma Revenue Present Rates	Adjustment	I&E Total Pro Forma Revenue Present Rates
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	METERED SALES								
10	Residential	$ 26,796,924	$ 65,639	$ (25,924)	$ 39,715	$ 2,012,748	$ 28,877,255	$ (27,868)	$ 28,849,387
11	Commercial	11,045,912	(99,728)	$ 24,916	(74,813)	$ 822,832	$ 11,767,147	26,785	$ 11,793,932
12	Industrial	1,278,641	86,299	$ -	86,299	$ 102,371	$ 1,467,311	-	$ 1,467,311
13	Public Sales	1,772,512	(64,825)	$ 4,052	(60,774)	$ 128,380	$ 1,835,763	4,355	$ 1,840,118
						-			
14	Total Sales of Water	$ 40,893,989	$ (12,616)	$ 3,044	$ (9,572)	$ 3,066,331	$ 43,947,476	$ 3,272	$ 43,950,748
15	Private Fire	1,436,836	$ 9,211	$ -	$ 9,211		1,446,048	-	1,446,048
16	Public Fire	923,861					923,861	-	923,861
17	Other Operating Revenues	405,611					405,611	-	-
18	Total	$ 43,660,297	$ (3,404)	$ 3,044	$ (361)	$ 3,066,331	$ 46,722,995	$ (402,339)	$ 46,320,657

I&E Exhibit No. 3-SR
Schedule 4

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
ANALYSIS OF DIRECT CUSTOMER COSTS
METERS AND SERVICES

Line No	Description	Company Meters	Company Services	Adjustment Meters	Adjustment Services	I&E Meters	I&E Services
	Operation and Maintenance Expenses						
	T&D Labor - Operation						
1	Employee Salaries - Supervision	$ 7,978		$ -		$ 7,978	
2	Employee Salaries - Meters	141,836		-		141,836	
3	Fringe Benefits	58,775		-		58,775	
	T&D Labor - Maintenance						
4	Employee Salaries - Supervision		$ 6,408		-		$ 6,408
5	Employee Salaries - Structures and Improvments		19,032		(19,032)		-
6	Employee Salaries - Services		74,524		-		74,524
7	Fringe Benefits		41,018		-		41,018
8	Total Customer Accounting Expenses						
9	Management Fees - Customer Related						
10	Management Fees - Employee Related	10,211	6,959	(10,211)	(6,959)	-	-
11	Transportation Expense	3,666	2,396	(3,666)	(2,396)	-	-
12	Worker's Compensation	3,421	2,236	-	-	3,421	2,236
13	Advertising Expense	114	74	-	-	114	74
14	Office Rents	1,868	1,221	-	-	1,868	1,221
15	Subtotal	227,868	153,869	(13,877)	(28,387)	213,991	125,482
	Depreciation Expense						
16	Meters	976,632		-		976,632	
17	Services		696,307		-		696,307
18	Office Buildings	7,415	4,847	-	0	7,415	4,847
19	Office Furniture & Equipment	1,026	671	-	0	1,026	671
20	Computer Software - CIS						
21	Subtotal	985,074	701,825	-	0	985,074	701,825
	Taxes Other Than Income						
22	Payroll Taxes	21,847	14,890	-	0	21,847	14,890
23	Assessments	-	-	-	-	-	-
24	Subtotal	21,847	14,890	-	0	21,847	14,890
	Rate Base						
25	Meters	14,543,019		-		14,543,019	
26	Services		27,943,391		-		27,943,391
27	Office Land/Buildings	315,200	206,053	-	-	315,200	206,053
28	Office Furniture and Equipment	10,987	7,183	-	-	10,987	7,183
29	Computer Software - CIS						
30	Materials and Supplies	14,881	9,728	-	-	14,881	9,728
31	Deferred Taxes	(1,092,904)	(2,042,846)	-	0	(1,092,904)	(2,042,846)
32	Subtotal	13,791,184	26,123,508	-	0	13,791,184	26,123,509
33	Return and Income Taxes	1,409,175	2,669,285	-	0	1,409,175	2,669,285
34	Total Direct Customer Costs	2,643,964	3,539,869	(13,877)	(28,387)	2,630,087	3,511,482

SUEZ WATER PENNSYLVANIA INC.
I&E ADJUSTMENTS TO
CALCULATION OF CUSTOMER COST PER MONTH FOR A 5/8-INCH METER
BASED ON DIRECT COSTS

Cost Function	Direct Cost of Service	Total Units		Cost Per 5/8-inch Meter	Cost Per 5/8-inch Meter Monthly Bill
(1)	(2)	(3)		(4)	(5)
Meters	2,630,087	77,769	5/8-inch Equivalents	$33.82	$2.82
Services	3,511,482	63,972	3/4-inch Equivalents	54.89	4.57
Billing, Collecting and Meter Reading	2,195,391	62,282	Customers	35.25	2.94
Subtotal Customer Costs	$8,336,960				10.33
Unrecovered Public Fire	3,438,063	77,769	5/8-inch Equivalents	44.21	3.68
Total Customer Costs and Public Fire	$11,775,024				$14.01