

**PENNSYLVANIA-AMERICAN WATER COMPANY**

**2017 GENERAL BASE RATE CASE**

**R-2017-2595853**

**EXHIBIT NO. 3-A**

**REVENUE DEFICIENCY AND ADJUSTMENTS**

**Pennsylvania-American Water Company**

**3-A Combined Water and Wastewater Revenue Requirement - Summary**

	<u>Notes</u>	<u>Total Company</u>	<u>Water Operations</u>	<u>Wastewater Operations Excluding Scranton Wastewater</u>	<u>Scranton Wastewater Operations</u>
Present Rate Revenue	(1)	\$657,296,394	\$611,304,772	\$24,027,897	\$21,963,725
Additional Revenue Requirement	(2)	107,925,808	90,026,323	7,523,773	10,375,712
Act 11 - Wastewater Allocation	(3)	-	13,805,187	(3,429,475)	(10,375,712)
Proposed Revenues		<u>\$765,222,202</u>	<u>\$715,136,282</u>	<u>\$28,122,195</u>	<u>\$21,963,725</u>
Rate Increase/(Decrease)		\$107,925,808	\$103,831,510	\$4,094,298	\$0
		16.4%	17.0%	17.0%	0.0%

**Notes:**

**(1) Present Rate Revenue:** Present Rate Revenue for Water Operations, Wastewater Operations Excluding Scranton Wastewater and Scranton Wastewater Operations are developed in the sections of this Exhibit 3-A that relate to each of those Operations.

**(2) Additional Revenue Requirement:** The Additional Revenue Requirement is developed in subsequent sections of this Exhibit 3-A for Water Operations, Wastewater Operations Excluding Scranton Wastewater and Scranton Wastewater Operations.

**(3) Wastewater Allocation:** The Wastewater Allocation is the allocation between wastewater operations (including Scranton wastewater) and water operations achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates proposed by the Company in this case.

Pennsylvania-American Water Company - Water Operations

Table of Contents

Page No.	Description
1	<b>Income Statement</b>
	<b>Operating Revenues</b>
2	Revenues by Tariff Subdivision
4	Summary of Adjustments
5	Unbilled Adjustment
6	STAS Surcharge Elimination
7	DSIC Annualization Adjustment
8	Private Fire Protection
9	Public Fire Protection
10	Declining Residential Usage
11	Specific Customer Adjustments
12	Rate Decrease for Rate Zone 1
13	Office Rental Income
14	Rental Income
15	Usage Data
16	Change in number of Customers (Historic)
17	Change in number of Customers (Future)
18	Change In Number Of Customers (Fully Forecasted)
19	Number Of Customers Served
20	Penalties
	<b>Rate Base</b>
21	Summary Of Rate Base Adjustments
22	Summary Of Detailed Plant Accounts
23	Contributions In Aid Of Construction
24	Customer Advances For Construction
25	Excluded Property
26	Materials And Supplies
27	Cash Working Capital Requirements
28	Support Of Expense Days
29	Accrued And Prepaid Taxes
30	Calculation Of Lag Days For Accrued & Prepaid Taxes
31	Cash Working Capital Requirements - Interest & Dividends
32	PG&W Acquisition
33	Miscellaneous Acquisitions
34	Unamortized Investment Tax Credit
35	Extension Deposits In Suspense
36	Adjustment for Citizens Utilities CAC and CIAC
37	Calculation Of Deferred Income Taxes

Pennsylvania-American Water Company - Water Operations

Table of Contents

Page No.	Description
	<b>Operating Expenses</b>
38	Summary of Expense Accounts
40	Summary of Operating Expense Adjustments
41	Compensation
42	Group Insurance
43	Other Post Employment Benefits (OPEB)
44	Pension
45	Purchased Power
46	Purchased Water
47	Chemicals
48	Change in Consumption
49	Transportation Expense
50	Insurance Other Than Group
51	Regulatory and Rate Case Expense
52	Service Company
53	Postage
54	Inflation
55	401K, Defined Contribution Plan, and Employee Stock Purchase Plan
56	Rent Expense
57	Miscellaneous Adjustments
58	Uncollectible Accounts
59	Depreciation
60	Amortization Expense
	<b>Taxes, Other Than Income</b>
61	Pennsylvania Property Tax
62	Payroll Taxes
63	Calculation of General Assessment
	<b>Income Tax</b>
64	State and Federal Income taxes under Present and Proposed Rates
65	Calculation of State and Federal Taxes
	<b>Income Deductions</b>
66	Interest under Present and Proposed Rates
67	Application of Income Deductions

Pennsylvania-American Water Company - Water Operations

Pro Forma Statement of Income for the Twelve Months Ending December 31, 2016

December 31, 2017 and December 31, 2018 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES				PRESENT RATES				PRESENT RATES				LINE NO.
		PER BOOKS	ADJUSTMENT	12/31/16 AMOUNT	ADJUSTMENT	12/31/17 AMOUNT	ADJUSTMENT	12/31/18 AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT		
1	Operating Revenue	\$616,234,556	(\$3,693,981)	\$612,540,575	\$3,698,577	\$616,239,152	(\$4,934,380)	\$611,304,772	\$90,026,323	\$701,331,095	1			
2	Operating Revenue Deductions:										2			
3	Operating Expenses	193,265,832	(223,615)	193,042,217	5,446,523	198,488,740	4,219,674	202,708,414	1,335,990	204,044,404	3			
4	Depreciation	95,787,007	14,189,281	109,976,288	2,500,559	112,476,847	8,879,081	121,355,928	0	121,355,928	4			
5	Amortizations	951,162	0	951,162	(147,324)	803,838	0	803,838	0	803,838	5			
6	Taxes, Other Than Income:										6			
7	Local Property And Miscellaneous	1,037,221	0	1,037,221	11,736	1,048,957	205,787	1,254,744	0	1,254,744	7			
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8			
9	Public Utility Realty Taxes	3,400,183	0	3,400,183	38,918	3,439,101	682,409	4,121,510	0	4,121,510	9			
10	Payroll Taxes	4,191,613	0	4,191,613	91,462	4,283,075	110,741	4,393,816	0	4,393,816	10			
11	General Assessment	3,152,644	(63,400)	3,089,244	19,629	3,108,873	(22,894)	3,085,979	460,407	3,546,386	11			
12	State Capital Stock Tax	0	0	0	0	0	0	0	0	0	12			
13	Total Taxes Other Than Income	11,781,661	(63,400)	11,718,261	161,745	11,880,006	976,043	12,856,049	460,407	13,316,456	13			
14	<b>Utility Operating Income Before Income Taxes</b>	<b>314,448,894</b>	<b>(17,596,247)</b>	<b>296,852,647</b>	<b>(4,262,926)</b>	<b>292,589,721</b>	<b>(19,009,178)</b>	<b>273,580,543</b>	<b>88,229,926</b>	<b>361,810,469</b>	14			
15	Income Taxes:										15			
16	State Income Tax	23,892,230	(340,356)	23,551,874	(361,959)	23,189,915	(2,262,141)	20,927,774	8,810,020	29,737,794	16			
17	Federal Income Tax	77,721,249	(1,073,314)	76,647,935	(3,255,238)	73,392,697	(7,624,441)	65,768,256	27,782,429	93,550,685	17			
18	Amortization Of ITC & Excess Deferred Taxes	(271,932)	0	(271,932)	0	(271,932)	0	(271,932)	0	(271,932)	18			
19	Total Income Taxes	101,341,547	(1,413,670)	99,927,877	(3,617,197)	96,310,680	(9,886,582)	86,424,098	36,592,449	123,016,547	19			
20	Total Operating Revenue Deductions	403,127,209	12,488,596	415,615,805	4,344,306	419,960,111	4,188,216	424,148,327	38,388,846	462,537,173	20			
21	<b>Utility Operating Income</b>	<b>213,107,347</b>	<b>(16,182,577)</b>	<b>196,924,770</b>	<b>(645,729)</b>	<b>196,279,041</b>	<b>(9,122,596)</b>	<b>187,156,445</b>	<b>51,637,477</b>	<b>238,793,922</b>	21			
22	Income Deductions:										22			
23	Interest On Long Term Debt	54,653,553	0	54,653,553	8,099,631	62,753,184	5,009,086	67,762,270	41,538	67,803,808	23			
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24			
25	Interest On Notes Payable To Others	3,144,790	0	3,144,790	(3,144,790)	0	0	0	0	0	25			
26	Total Income Deductions	57,798,343	0	57,798,343	4,954,841	62,753,184	5,009,086	67,762,270	41,538	67,803,808	26			
27	<b>Net Income</b>	<b>\$155,309,004</b>	<b>(\$16,182,577)</b>	<b>\$139,126,427</b>	<b>(\$5,600,570)</b>	<b>\$133,525,857</b>	<b>(\$14,131,682)</b>	<b>\$119,394,175</b>	<b>\$51,595,939</b>	<b>\$170,990,114</b>	27			
28	Preferred Dividends	573,955		573,955		490,931		423,298		423,557	28			
29	<b>Net Income To Common</b>	<b>\$154,735,049</b>		<b>\$138,552,472</b>		<b>\$133,034,926</b>		<b>\$118,970,877</b>		<b>\$170,566,557</b>	29			

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2016 AND DECEMBER 31, 2017

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12/31/2016	UNBILLED	STAS ELIMINATION	OTHER REVENUE AND CUSTOMER ADJUSTMENTS	PRO FORMA PRESENT RATES 12/31/2016	OTHER REVENUE AND CUSTOMER ADJUSTMENTS	DECLINING CONSUMPTION	RATE ZONE 1 RATE DECREASE	DSIC ANNUALIZATION	PRO FORMA PRESENT RATES 12/31/2017
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2		METERED SALES										
3	461.1	RESIDENTIAL	\$397,931,831	(\$4,079,644)	\$489,661	\$991,927	\$395,333,775	\$1,204,961	(\$5,642,503)	(\$1,911,934)	\$6,996,148	\$395,980,447
4	461.2	COMMERCIAL	143,771,088	(1,080,431)	147,868	970,624	143,809,149	(3,690)		(466,124)	2,744,905	146,084,240
5	461.3	INDUSTRIAL	27,503,581	(245,048)	30,203	(540,751)	26,747,985				466,188	27,214,173
6	464	MUNICIPAL	19,621,719	(118,436)	24,078	(45,576)	19,481,785	22,211		(101,714)	354,490	19,756,772
7	466	SALES FOR RESALE	2,348,655	(13,220)	900	11,109	2,347,444	30,713			14,260	2,392,417
8		<b>TOTAL METERED SALES</b>	<b>591,176,874</b>	<b>(5,536,779)</b>	<b>692,710</b>	<b>1,387,333</b>	<b>587,720,138</b>	<b>1,254,195</b>	<b>(5,642,503)</b>	<b>(2,479,772)</b>	<b>10,575,991</b>	<b>591,428,049</b>
9		UNMETERED SALES										
10	460	RESIDENTIAL	144,658	0	0	0	144,658	0			10,849	155,507
11	460	COMMERCIAL	0	0	0	0	0	0			0	0
12	460	INDUSTRIAL	0	0	0	0	0	0	0	0	0	0
13	460	MUNICIPAL	0	0	0	0	0	0	0	0	0	0
14	460	MISCELLANEOUS	0	0	0	0	0	0	0	0	0	0
15		<b>TOTAL UNMETERED SALES</b>	<b>144,658</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>144,658</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10,849</b>	<b>155,507</b>
16	462.1	PRIVATE FIRE PROTECTION	3,950,282	(172,218)	5,101	(9,717)	3,773,448	0	0	0	52,021	3,825,469
17	462.2	PUBLIC FIRE PROTECTION	8,537,648	(334,525)	10,347	168,314	8,381,784	41,676	0	0	0	8,423,460
18		<b>TOTAL WATER SALES</b>	<b>603,809,462</b>	<b>(6,043,522)</b>	<b>708,158</b>	<b>1,545,930</b>	<b>600,020,028</b>	<b>1,295,871</b>	<b>(5,642,503)</b>	<b>(2,479,772)</b>	<b>10,638,861</b>	<b>603,832,485</b>
19		OTHER OPERATING REVENUES										
20	469	GUARANTEED REVENUES	1,555,086	0	0	0	1,555,086	0	0	0	0	1,555,086
21	470	LATE PAYMENT FEES	3,921,108	0	0	119,427	4,040,535	25,673	0	0	0	4,066,208
22	471	MISC SERVICE REVENUES	6,239,638	0	0	(23,974)	6,215,664	7,466	0	0	0	6,223,130
23	472	RENTS FROM PROPERTIES	709,262	0	0	0	709,262	(147,019)	0	0	0	562,243
24	474	OTHER WATER REVENUES	0	0	0	0	0	0	0	0	0	0
25		<b>TOTAL OTHER OPERATING REVENUES</b>	<b>12,425,094</b>	<b>0</b>	<b>0</b>	<b>95,453</b>	<b>12,520,547</b>	<b>(113,880)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12,406,667</b>
26		<b>TOTAL OPERATING REVENUES</b>	<b>\$616,234,556</b>	<b>(\$6,043,522)</b>	<b>\$708,158</b>	<b>\$1,641,383</b>	<b>\$612,540,575</b>	<b>\$1,181,991</b>	<b>(\$5,642,503)</b>	<b>(\$2,479,772)</b>	<b>\$10,638,861</b>	<b>\$616,239,152</b>
27												

PENNSYLVANIA-AMERICAN WATER COMPANY - WATER OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2018

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12/31/2017	CUSTOMER ADJUSTMENTS	OTHER OPERATING REVENUES	DECLINING CONSUMPTION	MISC	PRO FORMA PRESENT RATES 12/31/2018	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
			(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1		OPERATING REVENUES									
2		METERED SALES									
3	461.1	RESIDENTIAL	\$395,980,447	\$1,204,961	\$0	(\$5,660,528)		\$391,524,880	14.55%	\$56,955,710	\$448,480,590
4	461.2	COMMERCIAL	146,084,240	(32,787)	0	0		146,051,453	18.11%	26,446,862	172,498,315
5	461.3	INDUSTRIAL	27,214,173	0	0	0		27,214,173	16.09%	4,378,971	31,593,144
6	464	MUNICIPAL	19,756,772	0	0	0		19,756,772	3.49%	689,337	20,446,109
7	466	SALES FOR RESALE	2,392,417	0	0	0		2,392,417	5.10%	121,990	2,514,407
8		<b>TOTAL METERED SALES</b>	<b>591,428,049</b>	<b>1,172,174</b>	<b>0</b>	<b>(5,660,528)</b>	<b>0</b>	<b>586,939,695</b>	<b>15.09%</b>	<b>88,592,870</b>	<b>675,532,565</b>
9		UNMETERED SALES									
10	460	RESIDENTIAL	155,507	0	0	0		155,507	9.22%	14,333	169,840
11	460	COMMERCIAL	0	0	0	0		0	0.00%	0	0
12	460	INDUSTRIAL	0	0	0	0	0	0	0.00%	0	0
13	460	MUNICIPAL	0	0	0	0	0	0	0.00%	0	0
14	460	MISCELLANEOUS	0	0	0	0	0	0	0.00%	0	0
15		<b>TOTAL UNMETERED SALES</b>	<b>155,507</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>155,507</b>	<b>0.00%</b>	<b>14,333</b>	<b>169,840</b>
16	462.1	PRIVATE FIRE PROTECTION	3,825,469	0	0	0	0	3,825,469	15.76%	602,753	4,428,222
17	462.2	PUBLIC FIRE PROTECTION	8,423,460	41,676	0	0	0	8,465,136	2.53%	214,185	8,679,321
18		<b>TOTAL WATER SALES</b>	<b>603,832,485</b>	<b>1,213,850</b>	<b>0</b>	<b>(5,660,528)</b>	<b>0</b>	<b>599,385,807</b>	<b>14.92%</b>	<b>89,424,141</b>	<b>688,809,948</b>
19		OTHER OPERATING REVENUES									
20	469	GUARANTEED REVENUES	1,555,086	0	(457,758)	0	0	1,097,328	0.00%	0	1,097,328
21	470	LATE PAYMENT FEES	4,066,208	0	(29,944)	0	0	4,036,264	14.92%	602,182	4,638,446
22	471	MISC SERVICE REVENUES	6,223,130	0	0	0	0	6,223,130	0.00%	0	6,223,130
23	472	RENTS FROM PROPERTIES	562,243	0	0	0	0	562,243	0.00%	0	562,243
24	474	OTHER WATER REVENUES	0	0	0	0	0	0	0.00%	0	0
25		<b>TOTAL OTHER OPERATING REVENUE</b>	<b>12,406,667</b>	<b>0</b>	<b>(487,702)</b>	<b>0</b>	<b>0</b>	<b>11,918,965</b>	<b>5.05%</b>	<b>602,182</b>	<b>12,521,147</b>
26		<b>TOTAL OPERATING REVENUES</b>	<b>\$616,239,152</b>	<b>\$1,213,850</b>	<b>(\$487,702)</b>	<b>(\$5,660,528)</b>	<b>\$0</b>	<b>\$611,304,772</b>	<b>14.73%</b>	<b>\$90,026,323</b>	<b>\$701,331,095</b>
27											

PENNSYLVANIA-AMERICAN WATER COMPANY

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES	
		ADJUSTMENT	12/31/16 AMOUNT	ADJUSTMENT	12/31/17 AMOUNT	ADJUSTMENT	12/31/18 AMOUNT
1	Per Books		\$616,234,556				
2	Present Rates At 12/31/16				\$612,540,575		
3	Present Rates At 12/31/17						\$616,239,152
4	Unbilled Adjustment	(6,043,522)					
5	STAS Elimination	708,158					
6	DSIC Annualization			10,638,861			
7	Private Fire Protection	(9,717)					
8	Public Fire Protection	168,314		41,676		41,676	
9	Declining Residential Usage			(5,642,503)		(5,660,528)	
10	Specific Customers Adjustment	583,010		82,021			
11	Rate Zone 1 Decrease			(2,479,772)			
12	Other Operating Revenues						
13	470 - Penalties	119,427		25,673		(29,944)	
14	469 - Guaranteed Revenues					(457,758)	
15	471 - Misc Service Revenues	(23,974)		7,466			
16	472 -Rents From Properties			(147,019)			
17	Change In Customers Adjustment	804,323		1,172,174		1,172,174	
18	Pro Forma Adjustment		<u>(3,693,981)</u>		<u>3,698,577</u>		<u>(4,934,380)</u>
19	Pro Forma Present Rates At December 31, 2016		<u>\$612,540,575</u>				
20	Pro Forma Present Rates At December 31, 2017				<u>\$616,239,152</u>		
21	Pro Forma Present Rates At December 31, 2018						<u>\$611,304,772</u>



**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Unbilled Revenue Adjustment**

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended December 31, 2016.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	(\$4,079,644)
3	Commercial	(1,080,431)
4	Industrial	(245,048)
5	Municipal	(118,436)
6	Sales For Resale	(13,220)
7	Miscellaneous	
8	Total Metered Sales	(\$5,536,779)
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	\$0
16	Private Fire Protection	(\$172,218)
17	Public Fire Protection	(334,525)
18	Total Unbilled Water Sales	(\$6,043,522)
19	Other Operating Revenues	\$0
20	Pro Forma Adjustment	(\$6,043,522)

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**State Tax Adjustment Surcharge Adjustment**

In the Company's last base rate filing the Capital Stock tax was calculated at a rate of 0.67 Mills. The actual Capital Stock Tax rate for 2016 was zero. The difference was being refunded to customers. This adjustment removes the effect of the actual tax decrease that was reflected in the STAS revenues, which will be rolled into the Company's proposed base rates.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	\$489,661
3	Commercial	147,868
4	Industrial	30,203
5	Municipal	24,078
6	Sales For Resale	900
7	Miscellaneous	
8	Total Metered Sales	\$692,710
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
15	Total Unmetered Sales	\$0
16	Private Fire Protection	\$5,101
17	Public Fire Protection	10,347
18	Total Unbilled Water Sales	\$708,158
19	Other Operating Revenues	\$0
20	Pro Forma Adjustment	\$708,158

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**DSIC Annualization Adjustment**

This revenue adjustment is being made to reflect the annualization of the Distribution System Improvement Charge revenues for 2017 based on the Company's pro forma level at December 31, 2017 and the 7.50% rate that became effective on January 1, 2017.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>12/31/2016 PER BOOK DSIC REVENUE</b>	<b>12/31/2017 ANNUALIZED DSIC REVENUE</b>	<b>12/31/2017 PRO FORMA ADJUSTMENT</b>
<b>1</b>	<b>Metered Sales</b>			
<b>2</b>	Residential	\$20,630,395	\$27,626,543	\$6,996,148
<b>3</b>	Commercial	7,447,019	10,191,924	2,744,905
<b>4</b>	Industrial	1,278,292	1,744,480	466,188
<b>5</b>	Municipal	1,023,889	1,378,379	354,490
<b>6</b>	Sales For Resale	38,498	52,758	14,260
<b>7</b>	Miscellaneous	0	0	0
<b>8</b>	Total Metered Sales	\$30,418,093	\$40,994,084	\$10,575,991
<b>9</b>	<b>Unmetered Sales</b>			
<b>10</b>	Residential	\$0	\$10,849	\$10,849
<b>11</b>	Commercial	0	0	0
<b>12</b>	Industrial	0	0	0
<b>13</b>	Municipal	0	0	0
<b>14</b>	Sales For Resale	0	0	0
<b>15</b>	Total Unmetered Sales	\$0	\$10,849	\$10,849
<b>16</b>	Private Fire Protection	\$214,872	\$266,893	\$52,021
<b>17</b>	Public Fire Protection	0	0	0
<b>18</b>	Total Unbilled Water Sales	\$30,632,965	\$41,271,826	\$10,638,861
<b>19</b>	Other Operating Revenues	\$0	\$0	\$0
<b>20</b>	Pro Forma Adjustment	\$30,632,965	\$41,271,826	\$10,638,861

Witness: Jo Anne Lontz  
Reference: FR II.2

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Private Fire Protection**

This revenue adjustment is being made to reflect the annualization of rates for private fire service based upon the number of customers receiving such service at December 31, 2016. The Company is not projecting a change in the number of customers for 2017 or 2018. The change in revenues at present rates 2017 is due to the annualization of DSIC revenue at a DSIC rate of 7.50%.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annual Charge For Private Fire Protection			
2	Facilities In Service At 12/31/18, Including DSIC			\$3,825,469
3	Annual Charge For Private Fire Protection			
4	Facilities In Service At 12/31/17, Including DSIC		\$3,825,469	3,825,469
5	Annual Charge For Private Fire Protection			
6	Facilities In Service At 12/31/16, Including DSIC	\$3,773,448	3,773,448	
7	Less: Private Fire Protection Revenue For			
8	The Twelve Months Ended 12/31/16	3,950,282		
9	Unbilled	(172,218)		
10	STAS	5,101		
11	Pro Forma Adjustment	<u>(\$9,717)</u>	<u>\$52,021</u>	<u>\$0</u>

Witness: Jo Anne Lontz  
Reference: FR II.10

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Public Fire Protection**

This adjustment is being made to reflect the annualization of revenues for public fire service based upon the number of customers/hydrants at December 31, 2016 and as projected at December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Annual Charge For Public Fire Protection			
<b>2</b>	Facilities In Service At 12/31/18			\$8,465,136
<b>3</b>	Annual Charge For Public Fire Protection			
<b>4</b>	Facilities In Service At 12/31/17		\$8,423,460	8,423,460
<b>5</b>	Annual Charge For Public Fire Protection			
<b>6</b>	Facilities In Service At 12/31/16	\$8,381,784	8,381,784	
<b>7</b>	Less: Public Fire Protection Revenue For			
<b>8</b>	The Twelve Months Ended 12/31/16	8,537,648		
<b>9</b>	Unbilled	(334,525)		
<b>10</b>	STAS	10,347		
<b>11</b>	Pro Forma Adjustment	<u>\$168,314</u>	<u>\$41,676</u>	<u>\$41,676</u>

Witness: Jo Anne Lontz

Reference: FR II.10

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Declining Residential Usage Adjustment**

This adjustment is being made to address the declining trend in residential usage that has been experienced for many years and is expected to continue to occur. Please refer to the testimony of Gregory Roach (PAWC Statement No. 9).

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
<b>1</b>	<b>Metered Sales</b>		
<b>2</b>	Residential	(\$5,642,503)	(\$5,660,528)
<b>3</b>	Commercial	0	0
<b>4</b>	Industrial	0	0
<b>5</b>	Municipal	0	0
<b>6</b>	Sales For Resale	0	0
<b>7</b>	Miscellaneous	0	0
<b>8</b>	<b>Total Metered Sales</b>	<b>(\$5,642,503)</b>	<b>(\$5,660,528)</b>
<b>9</b>	<b>Unmetered Sales</b>		
<b>10</b>	Residential	\$0	\$0
<b>11</b>	Commercial	0	0
<b>12</b>	Industrial	0	0
<b>13</b>	Municipal	0	0
<b>14</b>	Sales For Resale	0	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>	<b>\$0</b>
<b>16</b>	<b>Private Fire Protection</b>	<b>\$0</b>	<b>\$0</b>
<b>17</b>	<b>Public Fire Protection</b>	<b>0</b>	<b>0</b>
<b>18</b>	<b>Total Water Sales</b>	<b>(\$5,642,503)</b>	<b>(\$5,660,528)</b>
<b>19</b>	<b>Miscellaneous Service Fees</b>	<b>\$0</b>	<b>\$0</b>
<b>20</b>	<b>Rents From Properties</b>	<b>0</b>	<b>0</b>
<b>21</b>	<b>Other Water Revenues</b>	<b>0</b>	<b>0</b>
<b>22</b>	<b>Total Operating Revenues</b>	<b>(\$5,642,503)</b>	<b>(\$5,660,528)</b>

Witness: Jo Anne Lontz  
Reference: FR II.2

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Specific Customer Adjustments**

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2017 AMOUNT
<b>1</b>	<b>Commercial</b>		
2	Gas Drillers	\$1,293,301	
3	Hershey Entertainment and Resorts	36,570	
4	Consolidated Auto	(171,643)	
5	Butler County Summit Academy		\$29,097
<b>6</b>	<b>Industrial</b>		
7	Conagra	32,599	
8	Hershey Foods	(17,526)	
9	United Refining	(532,100)	
10	World Color Atglen	(23,724)	
<b>11</b>	<b>Municipal</b>		
12	Capital City Airport	(45,576)	
13	Susquehanna County Prison		18,668
14	Butler County Elementary School		3,543
<b>15</b>	<b>Sale For Resale</b>		
16	Newtown Artesian Water Company	746	
17	Oakdale Borough	913	
18	Evans City		4,011
19	WACMA		26,702
	Farmington Township	(25,048)	
20	Quarryville Borough	34,498	
<b>21</b>	<b>Total</b>	<b>\$583,010</b>	<b>\$82,021</b>

Witness: Jo Anne Lontz  
Reference: FR II.2

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Rate Zone 1 Decrease**

As the result of a combination of water and wastewater revenue requirements reflected in the Settlement at Docket No. R-2013-2355276, water customers were allocated \$7.8 million of deferred increases to wastewater from previous rate cases, to be recovered by an increase in the water revenue requirement of \$2.6 million per year for 2014, 2015 and 2016. On January 1, 2017, Zone 1 water rates were reduced to remove the \$2.6 million from rates. This adjustment is being made to reflect the result of this rate decrease to present rates 2017. Please refer to the testimony of Jo Anne Lontz for further explanation of this adjustment and the Company's bill analysis for the calculation of the adjustment.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	(\$1,911,934)
3	Commercial	(466,124)
4	Industrial	0
5	Municipal	(101,714)
6	Sales For Resale	0
7	Miscellaneous	0
		<hr/>
<b>8</b>	<b>Total Metered Sales</b>	<b>(\$2,479,772)</b>
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
		<hr/>
15	<b>Total Unmetered Sales</b>	\$0
16	<b>Private Fire Protection</b>	\$0
17	<b>Public Fire Protection</b>	0
		<hr/>
<b>18</b>	<b>Total Water Sales</b>	<b>(\$2,479,772)</b>
19	<b>Miscellaneous Service Fees</b>	\$0
20	<b>Rents From Properties</b>	0
21	<b>Other Water Revenues</b>	0
		<hr/>
<b>22</b>	<b>Total Operating Revenues</b>	<b>(\$2,479,772)</b>

Witness: Jo Anne Lontz  
Reference: Bill Analysis



**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Office Rental Income**

Pennsylvania American collects office rent for the Service Company portion of the Wilkes Barre Scranton office. This adjustment annualizes the office rent income at present rates December 31, 2018 for this office. Pennsylvania American also collects Service Company rent for the lease of equipment and office space by the National Data Center and other Service Company employees of American Water in the Pennsylvania American Water Hershey Office. Pennsylvania American is in the process of building a new Corporate Center in Mechanicsburg and will sell the Hershey office. The new Corporate Center is scheduled to be completed December of 2018. Certain Service Company employees currently working out of the Hershey office, will be moving to the new Corporate Center in Mechanicsburg. The National Data Center will be relocated, which is also scheduled to be completed by the end of December 2018. This adjustment annualizes the Service Company office rental income at present rates December 31, 2018 for the new Corporate Center at the Mechanicsburg office.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2018 AMOUNT
1	Wilkes Barre Scranton Office	\$177,540
2	New Corporate Center in Mechanicsburg	264,180
3	Less: Office Rental Income The Twelve Months Ended 12/31/2016	899,478
4	Pro Forma Adjustment	<u>(\$457,758)</u>
	469 Other Water Revenues	(\$457,758)

Witness: Jo Anne Lontz

	<u>Wilkes Barre Scranton Office</u>	<u>New Corporate Center</u>
Monthly Rent at December 31, 2018	\$14,795	\$22,015
Annual Rent at December 31, 2018	<u>177,540</u>	<u>264,180</u>
Per Books At December 31,2016	<u>165,075</u>	<u>734,403</u>
Adjustment for Present Rates 2018	<u>\$12,465</u>	<u>(\$470,223)</u>

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Rental Income**

The Company receives money from cellular phone providers for the lease of space on top of its water towers for the placement of antennas. This adjustment is being made to adjust for the difference between revenues that were recorded in 2016 and the revenue that is expected to be recorded as cell tower rental income in 2017.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT
1	Annualized Cell Tower Rental Income	\$559,462
2	Less: Cell Tower Rental Income for	
3	The Twelve Months Ended 12/31/2016	706,481
		_____
4	Pro Forma Adjustment	(\$147,019)
		_____
		472 Other Water Revenues

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Usage Data**

During 2016, the Company acquired the wastewater properties of the Scranton Sewer Authority and the Borough of New Cumberland. Prior to the acquisitions, the Company supplied both of these operations systems with usage data. Since the acquisitions, the Company no longer supplies them with the usage data. This adjustment eliminates all revenues associated with the usage data during 2016. In 2017, the Company increased the fees charged to the municipalities for usage data by 2.07%, this adjustment also includes the increase to the usage data fees.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2017 AMOUNT
1	Eliminate Usage Data for Scranton Sewer Authority	(\$21,784)	
2	Eliminate Usage Data for New Cumberland Authority	(2,190)	
3	Rate Increase		\$7,466
4	Pro Forma Adjustment	<u>(\$23,974)</u>	<u>\$7,466</u>
	471 Other Water Revenues	(\$23,974)	\$7,466

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the average change in number of customers during the twelve months ended December 31, 2016.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2016 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$991,927
2	An analysis of residential accounts indicates that		
3	various accounts were lost, added or reclassified during		
4	the test year. Revenue was adjusted by applying the		
5	average annual consumption per residential customer		
6	to the difference between the actual number of customers		
7	at December 2016 and the average number of customers		
8	between December 2015 and December 2016.		
9	<b>Commercial Metered Customers</b>	FR II.2	(187,604)
10	An analysis of commercial accounts indicates that		
11	various accounts were lost, added or reclassified during		
12	the test year. The adjustment was calculated for		
13	customers with meters of 2" and under and average usage		
14	per customer in that group applied to the difference between		
15	the actual number of customers at December 2016		
16	and the average number of customers for the period		
17	December 2015 and December 2016 in that group. Any large		
18	adjustments will be listed as specific customer adjustments.		
19	<b>Industrial, Municipal And Sale For Resale</b>		
20	<b>Metered Customers</b>	FR II.2	
21	Any change to these revenue classes large enough to warrant		
22	an adjustment will be shown as a specific customer adjustment.		
23	Pro Forma Adjustment		<u>\$804,323</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending December 31, 2017. Projections were based on a three year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2017 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$1,204,961
2	Residential revenue was adjusted by applying		
3	the average annual consumption per residential		
4	customer to the projected increase in customers		
5	for the test year 2017.		
6	<b>Residential Unmetered Customers</b>		
7			
8	<b>Commercial Metered Customers</b>	FR II.2	(32,787)
9	The adjustment was calculated for		
10	customers with meters of 2" and under		
11	on average annual consumption per		
12	customer and applied to the projected		
13	decrease in customers for the test year 2017.		
14	Any adjustments to large commercial accounts		
15	would be shown as specific customer adjustments.		
16	<b>Industrial, Municipal And Sale For Resale</b>	FR II.2	
17	<b>Metered Customers</b>		
18	Those large enough to warrant an adjustment are		
19	shown as specific customer adjustments.		
20	Pro Forma Adjustment		<u>\$1,172,174</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending December 31, 2018. Projections were based on a three year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2018 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$1,204,961
2	Residential revenue was adjusted by applying		
3	the average annual consumption per residential		
4	customer to the projected increase in customers		
5	for the test year 2018.		
6	<b>Residential Unmetered Customers</b>		
7	<b>Commercial Metered Customers</b>	FR II.2	(32,787)
8	The adjustment was calculated for		
9	customers with meters of 2" and under		
10	on average annual consumption per		
11	customer and applied to the projected		
12	decrease in customers for the test year 2018.		
13	Any adjustments to large commercial accounts		
14	would be shown as specific customer adjustments.		
15	<b>Industrial, Municipal And Sale For Resale</b>	FR II.2	
16	<b>Metered Customers</b>		
17	Those large enough to warrant an adjustment are		
18	shown as specific customer adjustments.		
19	Pro Forma Adjustment		<u><u>\$1,172,174</u></u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Number of Customers Served**

The following is a list of the number of customers served at December 31, 2015 and 2016, and the estimated number of customers to be served at December 31, 2017 and 2018. Also shown are the number of customers in each class whose bills will increase, decrease or remain unchanged as a result of the rate changes proposed in this filing.

LINE NO.	ACCT. NO.	DESCRIPTION	SERVED AT 12/31/2015	SERVED AT 12/31/2016	TO BE SERVED AT 12/31/2017	TO BE SERVED AT 12/31/2018	INCREASED BILLS	DECREASED BILLS	UNCHANGED BILLS
<b>1</b>		<b>Metered</b>							
2	601.1	Residential	599,161	602,637	604,569	606,501	606,501	0	0
3	601.2	Commercial	44,635	44,812	44,797	44,782	44,782	0	0
4	601.3	Industrial	520	522	522	522	522	0	0
5	606	Municipal	2,254	2,259	2,259	2,259	2,259	0	0
6	607	Resale	22	22	22	22	22	0	0
7	601.4	Miscellaneous	0	0	0	0	0	0	0
<b>8</b>		<b>Metered</b>	<b>646,592</b>	<b>650,252</b>	<b>652,169</b>	<b>654,086</b>	<b>654,086</b>	<b>0</b>	<b>0</b>
<b>9</b>		<b>Unmetered</b>							
10	602.1	Residential	219	219	219	219	219	0	0
11	602.2	Commercial	0	0	0	0	0	0	0
12	602.3	Industrial	0	0	0	0	0	0	0
13	606	Municipal	0	0	0	0	0	0	0
14	602.4	Miscellaneous	0	0	0	0	0	0	0
<b>15</b>		<b>Unmetered</b>	<b>219</b>	<b>219</b>	<b>219</b>	<b>219</b>	<b>219</b>	<b>0</b>	<b>0</b>
16	604	Private Fire	3,965	3,885	3,885	3,885	3,435	0	450
17	605	Public Fire	415	414	414	414	318	0	96
<b>18</b>	<b>Total Customers</b>		<b>651,191</b>	<b>654,770</b>	<b>656,687</b>	<b>658,604</b>	<b>658,058</b>	<b>0</b>	<b>546</b>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Penalties**

The following adjustment reflects the annualization of revenues associated with changes imposed during 2016 and projected to be imposed during 2017 and 2018. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PER BOOKS 12/31/16</b>	<b>PRESENT RATES 12/31/16</b>	<b>PRESENT RATES 12/31/17</b>	<b>PRESENT RATES 12/31/18</b>	<b>PROPOSED RATES</b>
1	Total Billed Water Sales	\$597,765,940	\$600,020,028	\$603,832,485	\$599,385,807	\$688,809,949
2	% Of Penalties To Total					
3	Water Sales - 3 Year Avg	0.6734%	0.6734%	0.6734%	0.6734%	0.6734%
4	Penalties	3,921,108	4,040,535	4,066,208	4,036,264	4,638,446
5	Less: Per Books At 12/31/2016		3,921,108			
6	Less: Present Rates At 12/31/2016			4,040,535		
7	Less: Present Rates At 12/31/2017				4,066,208	
8	Less: Present Rates At 12/31/2018					4,036,264
9	Pro Forma Adjustments		\$119,427	\$25,673	(\$29,944)	\$602,182

Witness: Jo Anne Lontz



**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Summary of Rate Base Adjustments**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>DEPRECIATED ORIGINAL COST 12/31/16</b>	<b>DEPRECIATED ORIGINAL COST 12/31/17</b>	<b>DEPRECIATED ORIGINAL COST 12/31/18</b>	<b>DEPRECIATED ORIGINAL COST PROPOSED</b>	
1	Non-Depreciable Plant	\$23,986,831	\$23,986,831	\$24,724,163	\$24,724,163	
2	Depreciable Plant	4,510,348,541	4,725,300,575	5,129,715,657	5,129,715,657	
3	Total Utility Plant In Service	4,534,335,372	4,749,287,406	5,154,439,820	5,154,439,820	
4	Deduct:					
5	Contributions In Aid Of Construction	192,431,353	196,308,876	200,186,399	200,186,399	
6	Customer Advances For Construction	79,413,574	81,141,959	83,870,344	83,870,344	
7	Excluded Property	1,558,014	1,558,014	1,558,014	1,558,014	
8	Sub-Total	273,402,941	279,008,849	285,614,757	285,614,757	
9	Net Utility Plant In Service	4,260,932,431	4,470,278,557	4,868,825,063	4,868,825,063	
10	Accumulated Depreciation	932,137,018	1,016,007,443	1,095,625,641	1,095,625,641	
11	Depreciated Utility Plant In Service	3,328,795,413	3,454,271,114	3,773,199,422	3,773,199,422	
12	Add:					
13	Materials And Supplies	9,821,042	9,821,042	9,821,042	9,821,042	
14	Cash Working Capital - Expenses	17,529,815	18,130,969	18,552,002	18,552,002	
15	Accrued And Prepaid Taxes	6,780,195	6,664,293	6,426,002	8,193,221	
16	PG& W Acquisition	9,461,094	9,005,138	8,549,182	8,549,182	
17	Other Acquisition Adjustments	546,550	449,565	321,769	321,769	
18	Deduct:					
19	Cash Working Capital - Int And Div	5,861,351	7,077,339	7,643,560	7,648,257	
20	Unamortized Itc (3%)	347,519	331,715	315,911	315,911	
21	Extension Deposits In Suspense	6,459	6,459	6,459	6,459	
22	Citizens Acquisition CIAC & CAC, per settlement	0	20,366,812	20,041,664	20,041,664	
23	Deferred Taxes	805,792,219	884,809,582	913,589,145	913,589,145	
24	Total Rate Base Elements	\$2,560,926,561	\$2,585,750,214	\$2,875,272,680	\$2,877,035,202	
25	Utility Operating Income					
26	Per Books	\$213,107,347	8.32%	8.24%	7.41%	7.41%
27	Present Rates At 12/31/2016	196,924,770	7.69%	-	-	-
28	Present Rates At 12/31/2017	196,279,041	-	7.59%	-	-
29	Present Rates At 12/31/2018	187,156,445	-	-	6.51%	-
30	Proposed Rates	238,793,922	-	-	-	8.30%

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Summary of Detailed Plant Accounts**

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT			ESTIMATED BOOK COST			ESTIMATED BOOK COST		
			12/31/2016	ADDITIONS	RETIREMENTS	12/31/2017	ADDITIONS	RETIREMENTS	12/31/2018		
1	301.00	Organization	\$774,398			\$774,398			\$774,398		
2	302.00	Franchises & Consents	2,404,599			2,404,599			2,404,599		
3	303.00	Miscellaneous Intangible Plant	15,569			15,569		0	15,569		
4											
5		Total Intangible Plant	<u>\$3,194,566</u>	<u>\$0</u>	<u>\$0</u>	<u>\$3,194,566</u>	<u>\$0</u>	<u>\$0</u>	<u>\$3,194,566</u>		
6											
7	303.00	Land & Land Rights	\$20,792,265			\$20,792,265	\$1,540,287	\$802,955	\$21,529,597		
8											
9		Total Land & Land Rights	<u>\$20,792,265</u>	<u>\$0</u>	<u>\$0</u>	<u>\$20,792,265</u>	<u>\$1,540,287</u>	<u>\$802,955</u>	<u>\$21,529,597</u>		
10											
11	303.14	Water Rights - Hibernia	\$1,942,823			\$1,942,823			\$1,942,823		
12	303.35	Waste Handling and Treatment Land	155,025			155,025			155,025		
13	303.99	Comprehensive Planning Studies	9,275,725	301,001	0	9,576,726	344,000	0	9,920,726		
14	304.15	Other Water Source Structures	34,232,490	210,480	0	34,442,970			34,442,970		
15	304.20	Power and Pumping Structures	95,236,081			95,236,081	12,134,126	50,000	107,320,207		
16	304.30	Purification Buildings	237,286,550	6,355,572	106,000	243,536,122	32,014,482	625,500	274,925,104		
17	304.36	Waste Handling Struct. & Improv.	11,733,222			11,733,222			11,733,222		
18	304.61	Office Buildings	17,154,820			17,154,820	26,970,522	4,118,189	40,007,153		
19	304.62	Stores, Shop and Garage Buildings	31,866,916	1,000,000	80,000	32,786,916	22,868,828	420,623	55,235,121		
20	304.63	Miscellaneous Structures and Improvements	2,898,378	660,443	25,000	3,533,821	1,399,553	0	4,933,374		
21	305.00	Collecting and Impounding Reservoirs	82,122,354	23,087,531	211,836	104,998,049	30,035,718	676,000	134,357,767		
22	306.00	Lake, River and Other Intakes	16,947,059	594,990		17,542,049	2,463,821	0	20,005,870		
23	307.00	Wells and Springs	11,241,893			11,241,893			11,241,893		
24	310.00	Other Power Production Equipment	16,311,496		0	16,311,496	1,840,557	0	18,152,053		
25	311.00	Electric Pumping Equipment	76,829,149	406,091	0	77,235,240	10,627,027	10,000	87,852,267		
26	320.00	Purification System	241,519,585	9,691,729	766,200	250,445,114	40,892,005	983,601	290,353,518		
27	320.30	Granular Activated Carbon	8,392,062			8,392,062	311,773	10,000	8,693,835		
28	320.37	Waste Handling and Treatment Equipment	16,075,077			16,075,077			16,075,077		
29	330.00	Distribution Reservoirs and Standpipes	171,241,640	7,398,631	698,980	177,941,291	17,084,514	415,030	194,610,775		
30	331.00	Mains and Accessories	2,405,923,760	117,185,192	2,272,400	2,520,836,552	157,400,124	2,001,904	2,676,234,772		
31	333.00	Services	533,394,148	22,612,298	688,868	555,317,578	24,041,662	758,163	578,601,077		
32	334.00	Meters	181,752,642	17,001,674	6,150,079	192,604,237	16,326,049	5,794,220	203,136,066		
33	335.00	Fire Hydrants	95,503,715	6,430,405	132,750	101,801,370	6,140,170	132,750	107,808,790		
34	340.00	Office Furniture and Equipment	56,970,983	12,589,777	3,921,936	65,638,824	16,887,249	8,193,333	74,332,740		
35	340.31	Computer Software	62,548,895			62,548,895			62,548,895		
36	341.00	Transportation Equipment	34,171,018	5,530,002	1,106,000	38,595,020	6,927,401	1,385,480	44,136,941		
37	342.00	Stores Equipment	402,313		2,240	400,073			400,073		
38	343.00	Tools and Work Equipment	23,227,679	2,625,804	1,434,963	24,418,520	1,950,299	273,457	26,095,362		
39	344.00	Laboratory Equipment	3,323,028			3,323,028			3,323,028		
40	345.00	Power Operated Equipment	2,571,358			2,571,358			2,571,358		
41	346.00	Communication Equipment	11,539,781	1,676,670	3,634,340	9,582,111	2,173,000	957,865	10,797,246		
42	347.00	Miscellaneous Equipment	15,821,466	1,247,112	421,776	16,646,802	1,189,028	800,711	17,035,119		
43	348.00	Other Tangible Equipment	735,410			735,410			735,410		
44											
45		Total Tangible Plant	<u>\$4,510,348,541</u>	<u>\$236,605,402</u>	<u>\$21,653,368</u>	<u>\$4,725,300,575</u>	<u>\$432,021,908</u>	<u>\$27,606,826</u>	<u>\$5,129,715,657</u>		
46											
47		Total Utility Plant In Service	<u><u>\$4,534,335,372</u></u>	<u><u>\$236,605,402</u></u>	<u><u>\$21,653,368</u></u>	<u><u>\$4,749,287,406</u></u>	<u><u>\$433,562,195</u></u>	<u><u>\$28,409,781</u></u>	<u><u>\$5,154,439,820</u></u>		

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Contributions in Aid of Construction (CIAC)**

The Company receives Contributions in Aid of Construction (CIAC) on an annual basis. The Commission's Order dated April 21, 1993, at Docket No. R-922428 approved the use of a three year average to calculate the future test year additions to CIAC. The following adjustment reflects the projected CIAC to be received during the twelve months ended December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Contributions In Aid Of Construction	\$192,431,353	\$196,308,876
2	Plus: Three Year Average Of Contributions	<u>3,877,523</u>	<u>3,877,523</u>
3	Contributions In Aid Of Construction	<u>(\$196,308,876)</u>	<u>(\$200,186,399)</u>

Witness: John Cox  
Reference: FR V.16

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Customer Advances for Construction (CAC)**

The Company requires Customer Advances for Construction (CAC) for all main extensions requested by developers. New projects increase the CAC account and refunds to be made during the future test year to developers for prior year CAC decrease the CAC account. The following adjustment reflects the level of activity (advances and refunds) projected for the twelve months ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Customer Advances For Construction	\$79,413,574	\$81,141,959
<b>2</b>	Plus: Customer Advances For Construction To Be Capitalized	<u>6,728,385</u>	<u>6,728,385</u>
<b>3</b>	Sub-Total	<u>86,141,959</u>	<u>87,870,344</u>
<b>4</b>	Less: Customer Advances For Construction To Be Refunded	<u>5,000,000</u>	<u>4,000,000</u>
<b>5</b>	Customer Advances For Construction	<u><u>(\$81,141,959)</u></u>	<u><u>(\$83,870,344)</u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Excluded Property**

Contained on the Company's records as of December 31, 2016 are several items which the Company excludes for rate-making purposes.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>
<b>1</b>	Excluded Property At 12/31/16	<u><u>(\$1,558,014)</u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Materials and Supplies**

The Company's claim for materials and supplies at December 31, 2017 and December 31, 2018 is calculated on the basis of the average monthly balances in the materials and supplies account during the period December 2015 to December 2016.

LINE NO.	MONTH	DETAIL	PRESENT RATES
			12/31/2017 and 12/31/2018 AMOUNT
1	December, 2015	\$8,878,698	
2	January, 2016	9,150,091	
3	February	9,333,466	
4	March	9,748,892	
5	April	9,718,559	
6	May	9,939,735	
7	June	10,416,275	
8	July	10,847,024	
9	August	10,215,275	
10	September	10,383,557	
11	October	10,018,255	
12	November	9,387,679	
13	December, 2016	9,636,041	
14	Total	<u>\$127,673,547</u>	
15	Average		\$9,821,042
16	Allowance For Materials And Supplies		
17	At 12/31/2017 and 12/31/2018		<u><u>\$9,821,042</u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

Charges for water service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended December 31, 2016, and as annualized under present rates for the twelve months ending December 31, 2016, 2017 and 2018. The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PER BOOK AMOUNT</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>
1	Operating Revenue Billed During The Twelve Months Ended 12/31/2016				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$610,191,034	\$612,540,575	\$616,239,152	\$611,304,772
9	Lag Days	50.1	50.1	50.1	50.1
10	Dollar Days	\$30,570,570,803	\$30,688,282,808	\$30,873,581,515	\$30,626,369,077
11	Total Billed Revenue	\$610,191,034	\$612,540,575	\$616,239,152	\$611,304,772
12	Total Dollar Days	\$30,570,570,803	\$30,688,282,808	\$30,873,581,515	\$30,626,369,077
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.1	50.1	50.1	50.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	15.6	15.4	15.2	15.2
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	34.5	34.7	34.9	34.9
18	<u>Working Capital Requirements</u>				
19	Annual Operating Expenses (Including Payroll Expenses)		\$184,391,457	\$189,621,713	\$194,025,354
20	Operating Expenses Per Day (Line 20 / 365 Days)		505,182	519,512	531,576
21	Cash Working Capital Required				
22	(Line 19 * Line 21)		\$17,529,815	\$18,130,969	\$18,552,002

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Support of Expense Days**

LINE NO.	DESCRIPTION	LAG (LEAD) DAYS	PER BOOKS	PRESENT RATES 12/31/2016		PRESENT RATES 12/31/2017		PRESENT RATES 12/31/2018		
			AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS		
1	Labor and Payroll Taxes	12.33	\$52,354,085	\$645,525,868	\$52,354,085	\$645,525,868	\$56,106,321	\$691,790,938	\$57,740,310	\$711,938,022
2	Group Insurance	10.88	7,940,420	86,421,604	7,940,420	86,421,604	8,485,816	92,357,562	8,679,678	94,467,509
3	OPEB's and VEBA	(2.50)	1,497,535	(3,743,838)	1,497,535	(3,743,838)	1,027,747	(2,569,368)	1,027,747	(2,569,368)
4	Pension	(7.04)	3,243,705	(22,824,607)	3,243,705	(22,824,607)	4,389,351	(30,886,043)	4,389,351	(30,886,043)
5	Purchased Power	25.08	13,456,592	337,547,325	13,456,592	337,547,325	13,189,270	330,841,777	12,903,967	323,685,190
6	Purchased Water	44.87	3,108,243	139,462,918	3,108,243	139,462,918	2,982,920	133,839,834	2,831,954	127,066,181
7	Chemicals	35.51	8,569,034	304,286,397	8,569,034	304,286,397	8,495,524	301,676,057	8,676,131	308,089,412
8	Miscellaneous	47.26	31,400,421	1,484,065,378	30,205,431	1,427,587,050	31,143,182	1,471,907,596	32,130,877	1,518,588,624
9	Transportation	41.31	2,865,784	118,384,804	2,865,784	118,384,804	3,144,465	129,897,045	3,182,646	131,474,293
10	Ins Other Than Group	(71.46)	11,956,381	(854,389,050)	11,956,381	(854,389,050)	12,368,067	(883,807,652)	12,635,977	(902,952,188)
11	Service Company	12.33	43,400,313	535,125,859	43,400,313	535,125,859	42,517,187	524,236,916	44,059,293	543,251,083
12	Waste Disposal	46.23	1,992,600	92,114,637	1,992,600	92,114,637	1,992,600	92,114,637	1,992,600	92,114,637
13	Telephone	2.85	2,614,054	7,445,368	2,614,054	7,445,368	2,614,054	7,445,368	2,614,054	7,445,368
14	Rents	1.89	515,753	972,555	515,753	972,555	493,682	930,936	489,242	922,563
15	Natural Gas	35.31	671,527	23,710,623	671,527	23,710,623	671,527	23,710,623	671,527	23,710,623
16	Totals		\$185,586,447	\$2,894,105,841	\$184,391,457	\$2,837,627,513	\$189,621,713	\$2,883,486,226	\$194,025,354	\$2,946,345,906
17	Average Lag			15.6		15.4		15.2		15.2
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		\$197,457,445		\$197,233,830		\$202,771,815		\$207,102,230	
19	Uncollectibles		8,118,727		9,090,102		9,144,989		9,071,763	
20	Amortizations		3,752,271		3,752,271		4,005,113		4,005,113	
21	Sum Of Other Expenses		154,186,026		154,186,026		158,478,531		161,894,477	
22	Miscellaneous		\$31,400,421		\$30,205,431		\$31,143,182		\$32,130,877	

Witness: John Cox



**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	NET REVENUE LAG DAYS FUTURE	PRESENT RATES 12/31/2016 ACCRUED		PRESENT RATES 12/31/2017 ACCRUED		PRESENT RATES 12/31/2018 ACCRUED		PROPOSED RATES ACCRUED	
			TAXES PAYABLE	TAXES ADJUSTMENT	TAXES PAYABLE	TAXES ADJUSTMENT	TAXES PAYABLE	TAXES ADJUSTMENT	TAXES PAYABLE	TAXES ADJUSTMENT
1	General Assessment	212.5	3,089,244	1,798,532	3,108,873	1,809,960	3,085,979	1,796,632	3,546,386	2,064,677
2	Public Utility Realty Tax	60.4	3,400,183	562,660	3,439,101	569,101	4,121,510	682,025	4,121,510	682,025
3	Local Property Tax	114.7	1,037,221	325,943	1,048,957	329,631	1,254,744	394,299	1,254,744	394,299
4	State Income Tax	20.8	23,551,874	1,342,134	23,189,915	1,321,507	20,927,774	1,192,596	29,737,794	1,694,647
5	Federal Income Tax	13.1	76,647,935	<u>2,750,926</u>	73,392,697	<u>2,634,094</u>	65,768,256	<u>2,360,450</u>	93,550,685	<u>3,357,573</u>
6	Totals			<u>\$6,780,195</u>		<u>\$6,664,293</u>		<u>\$6,426,002</u>		<u>\$8,193,221</u>

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Calculation of Lag Days for Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	TAX PERIOD		PAYMENTS				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
		BEGINNING	ENDING	2016 TAX					
1	General Assessment	7/1/15	6/30/16	6/23/15	10/20/15				
2	Percent Of Payment			82.00%	18.00%				1.0
3	Lag Days			(155.8)	(12.8)			(162.4)	212.5
4	Public Utility Realty Tax	1/1/16	12/31/16	5/1/16	9/15/17				
5	Percent Of Payment			90.00%	10.00%				1.0
6	Lag Days			(54.5)	44.2			(10.3)	60.4
7	Local Property Tax	1/1/16	12/31/16	Lag calculated using expense lag method					
8	Payment								
9	Lag Days							(64.6)	114.7
10	State Income Tax	1/1/16	12/31/16	3/15/16	6/15/16	9/15/16	12/15/16		
11	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
12	Lag Days			(27.1)	(4.1)	18.9	41.6	29.3	20.8
13	Federal Income Tax	1/1/16	12/31/16	4/15/16	6/15/16	9/15/16	12/15/16		
14	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
15	Lag Days			(19.4)	(4.1)	18.9	41.6	37.0	13.1

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18	PROPOSED AMOUNT
1	<b>Average Lag Calculation</b>							
2	Future Revenue Lag Days	50.1	50.1	50.1				
3	Less: Interest Payments Lag Days	91.3	15.2	45.6				
4	Average Lag Between The Payment	(41.2)	34.9	4.5				
5	Of Interest And The Receipt							
6	Of Revenues							
7	<b>Long Term Debt</b>							
8	Working Capital Requirements							
9	Pro Forma Annual Interest Expense	\$54,653,553		\$62,753,184		\$67,762,270		\$67,803,808
10	Interest Expense Per Day							
11	(Line 9 / 365 Days)	149,736		171,927		185,650		185,764
12	Cash Working Capital Required							
13	(Line 4 Col.1 X Line 11)		(6,169,123)			(7,083,392)	(7,648,780)	(7,653,477)
14	<b>Short Term Debt</b>							
15	Working Capital Requirements							
16	Pro Forma Annual Interest Expense	3,144,790		0		0		0
17	Interest Expense Per Day							
18	(Line 16 / 365 Days)	8,616		0		0		0
19	Cash Working Capital Required							
20	(Line 4 Col.2 X Line 18)		300,698			0	0	0
21	<b>Preferred Dividends</b>							
22	Working Capital Requirements							
23	Pro Forma Annual Dividend Expense	573,955		490,931		423,298		423,557
24	Dividend Expense Per Day							
25	(Line 23 / 365 Days)	1,572		1,345		1,160		1,160
26	Cash Working Capital Required							
27	(Line 4 Col.3 X Line 25)		<u>7,074</u>			<u>6,053</u>	<u>5,220</u>	<u>5,220</u>
28	Total Cash Working Capital Required							
29	(Line 13 + Line 20 + Line 27)		<u>(\$5,861,351)</u>			<u>(\$7,077,339)</u>	<u>(\$7,643,560)</u>	<u>(\$7,648,257)</u>

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**PG&W Acquisition**

Pursuant to the Joint Petition for Settlement (Paragraph 10.c.) at Docket No. R-973944, as approved by the Commission, the Utility Plant (Account 100), exclusive of CWIP, acquired by PAWC from PG&W as of February 16, 1996, had an original cost of \$402,170,153 as of that date and associated accrued depreciation as of that same date of \$26,974,385, and PAWC was authorized to include the depreciated original cost of \$375,195,768, as adjusted for subsequent plant and reserve accounting activity, in rate base until recovered from rate payers over the remaining lives or amortization periods of these assets. Of that amount \$18,238,242 was recorded in Account 100.5 (1948 PA PUC Account) and pursuant to the Joint Petition For Settlement, (Appendix B) is being amortized over 40 years. In accordance with the terms of the settlement, the unamortized balance of that amount reflecting amortization through December 31, 2018, is included in the Company's rate base claim.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Acquisition Amount	\$9,461,094	\$9,461,094	\$9,005,138
<b>2</b>	Less: One Year Amortization		455,956	455,956
<b>3</b>	Effect To Rate Base Elements	<u>\$9,461,094</u>	<u>\$9,005,138</u>	<u>\$8,549,182</u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Miscellaneous Acquisitions**

The following adjustment reflects the recognition of the positive Utility Plant Acquisition Adjustments (UPAA) associated with the acquisition of the various water utility assets pursuant to the terms of the Commission-approved settlement of the Company's rate cases at Docket Nos. R-2009-2097323, R-2011-2232243 and R-2013-2355276. In addition, the Company is requesting recognition of the positive UPAA associated with its acquisitions of the water assets of Scott Township Municipal Authority

LINE NO.	DESCRIPTION		PRESENT RATES		PRESENT RATES		PRESENT RATES
			12/31/2016 AMOUNT	2017 Amortizations	12/31/2017 AMOUNT	2018 Amortizations	12/31/2018 AMOUNT
1	Redstone	Approved Docket No. R-2009-2097323	\$92,119	\$32,513	\$59,606	\$32,513	\$27,093
2	Three Lane	Approved Docket No. R-2009-2097323	65,383	23,076	42,307	23,076	19,231
3	Saxonburg	Approved Docket No. R-2011-2232243	212,886	44,046	168,840	44,046	124,794
4	Birch Acres	Approved Docket No. R-2011-2232243	3,020	625	2,395	625	1,770
5	Lake Spangenberg	Approved Docket No. R-2013-2355276	95,961	13,709	82,252	13,709	68,543
6	Fernwood	Approved Docket No. R-2013-2355276	39,412	5,630	33,782	5,630	28,152
7	Olwen Heights	Approved Docket No. R-2013-2355276	37,769	5,396	32,373	5,396	26,977
8	Scott Township	Seeking Approval			28,010	2,801	25,209
9	Effect to Rate Base Element		<u>\$546,550</u>	<u>\$124,995</u>	<u>\$449,565</u>	<u>\$127,796</u>	<u>\$321,769</u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Unamortized Investment Tax Credit (ITC)**

The unamortized balance of the 3% Investment Tax Credit is not allowed as a part of the Rate Base Elements. The following sets forth the unamortized portion of the 3% Investment Tax Credit at December 31, 2016, The unamortized balance at December 31, 2017 and December 31, 2018 reflects one additional year of amortization.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Unamortized 3% ITC	\$347,519	\$331,715
2	Less: 3% ITC Amortization For The Twelve		
3	Months Ending 12/31/17	15,804	
4	Less: 3% ITC Amortization For The Twelve		
5	Months Ending 12/31/18		15,804
6	Effect On Rate Base Elements	<u>(\$331,715)</u>	<u>(\$315,911)</u>

Witness: John Cox  
Reference: FR IV.5

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Extension Deposits in Suspense**

The Company requires customer advances for construction to extend its mains to serve new developments based upon an estimate of construction costs. At the completion of the project, entries are made to adjust estimated costs of construction to actual cost of construction. The difference is charged to the extension deposit in suspense account until it is refunded to the customer. The Commission's Order at Docket No. R-891208 approved an adjustment to rate base of an average of extension deposits in suspense. The following reflects the adjustment to rate base for such an average.

LINE NO.	MONTH	DETAIL	PRESENT RATES
			12/31/2017 and 12/31/2018 AMOUNT
1	December, 2015	(\$4,026)	
2	January, 2016	390	
3	February	(4,630)	
4	March	(1,250)	
5	April	(1,950)	
6	May	(41,109)	
7	June	13,055	
8	July	20,885	
9	August	19,655	
10	September	23,350	
11	October	22,320	
12	November	19,020	
13	December, 2016	<u>18,260</u>	
14	Total	\$83,970	
15	Average		<u>\$6,459</u>
16	Effect On Rate Base Elements		<u><u>(\$6,459)</u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Citizens Utilities Water Company Acquisition**

**Customer Advances for Construction (CAC) and Contributions in Aid of Construction (CIAC) Adjustment**

Paragraph 8.d of the Joint Petition for Settlement at Docket No. R-2009-2097323, which was approved by the Commission in its final order entered November 7, 2009, provides that: "for ratemaking purposes: (i) \$14,147,208, or 40%, of the December 31, 2009 balance of the net customer advances for which Citizens Utilities Water Company of Pennsylvania ("Citizens") retained the refund liability upon the Company's acquisition of Citizens' water utility assets will be deemed deducted from the Company's rate base; (ii) \$8,895,830 (100%) of the December 31, 2009 balance of the net contributions in aid of construction the OCA proposed to attribute to PAWC from its acquisition of Citizens' water assets will be deducted from PAWC's rate base; (iii) in future base rate cases, the foregoing balances, adjusted to reflect accumulated amortization, will be deducted for ratemaking purposes until such balances are fully amortized; and (iv) the applicable depreciation rate for PAWC's transmission and distribution mains will be used to calculate the amortization of such balances for ratemaking purposes to offset the portion of depreciation expense on gross plant in service that is related to these advances and contributions." Shown below are the adjustments that are called for by the settlement at Docket No. R-2009-2097323.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>Advances Acquisition Adjustment</b>	<b>CIAC Acquisition Adjustment</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Amount Established In Case R-2009-2097323	\$14,147,208	\$8,895,830		
2	2010 - Amortization	202,846	152,873		
3	2011 - Amortization	202,846	152,873		
4	2012 - Amortization	186,998	140,930		
5	2013 - Amortization	186,998	140,930		
6	2014 - Amortization	186,998	140,930		
7	2015 - Amortization	186,998	140,930		
8	2016 - Amortization	186,998	140,930		
9	2017 - Amortization	185,413	139,735		
8	Present Rates 12/31/17	<u>\$12,621,113</u>	<u>\$7,745,699</u>	\$20,366,812	
7	2018 - Amortization	185,413	139,735		
8	Present Rates 12/31/18	<u>\$12,435,700</u>	<u>\$7,605,964</u>		\$20,041,664
9	Total Citizens Acquisition Adjustment			<u>(\$20,366,812)</u>	<u>(\$20,041,664)</u>

Witness: John Cox  
Reference: Exhibit No. 3-C



**Pennsylvania-American Water Company - Water Operations**

**Notes to Rate Base Elements**

**Calculation of Deferred Income Taxes**

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	VINTAGE YEARS	TAX BASE PROPERTY	ACCELERATED TAX DEPRECIATION	STRAIGHT-LINE REMAINING LIFE	EXCESS DEPRECIATION		DEFERRED FEDERAL TAXES	
<b>2017</b>								
1	1/1981 - 12/201	\$2,772,654,668	\$140,212,924	\$98,840,763	\$41,372,161		\$14,480,256	
2	Less: Flow Back Of Excess Deferred Income Taxes						38,340	
3	(The Reverse South Georgia Method)						<u>14,441,916</u>	
						Combined State & Federal Rate		
4	Plus: Capitalized Repairs Deduction 2017				\$89,298,065	41.49%	37,049,767	
5	Utilization of Net Operating Loss (NOL) carryforward - State						4,596,837	
6	Utilization of Net Operating Loss (NOL) carryforward - Federal						22,928,843	
7	Balance Of Deferred Income Taxes At 12/31/16						<u>(805,792,219)</u>	
8	Balance Of Deferred Income Taxes At 12/31/17						<u><u>(\$884,809,582)</u></u>	
<b>2018</b>								
9	1/1981 - 12/201	\$3,015,241,653	\$177,166,344	\$108,078,374	\$69,087,970	\$24,180,790		
10	Less: Flow Back Of Excess Deferred Income Taxes						38,340	
	(The Reverse South Georgia Method)						<u>\$24,142,450</u>	<u>\$11,183,797</u>
						Combined State & Federal Rate		
11	Plus: Capitalized Repairs Deduction 2018				\$91,549,676	41.49%	\$37,983,961	17,595,766
12	Balance Of Deferred Income Taxes At 12/31/17						<u>(884,809,582)</u>	
13	Balance Of Deferred Income Taxes At 12/31/18						<u><u>(\$913,589,145)</u></u>	

Witness: John Cox

Reference: FR IV.4

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
<b>1</b>		<b>Source Of Supply Expenses</b>				
<b>2</b>		-Operations-				
<b>3</b>	601.1	Salary And Wages	\$216,991	\$216,991	\$233,501	\$240,371
<b>4</b>	601.2	Salary And Wages	371,625	371,625	399,886	411,645
<b>5</b>	610.1	Purchased Water	3,108,243	3,108,243	2,982,920	2,831,954
<b>6</b>	615.1	Purchased Power	2,842,463	2,842,463	2,798,837	2,757,207
<b>7</b>	616.1	Purchased Fuel	12,038	12,038	12,038	12,038
<b>8</b>	620.1	Materials And Supplies	40,160	40,160	40,160	40,160
<b>9</b>	631.1	Contract Services - Engineering	72,896	72,896	72,896	72,896
<b>10</b>	633.1	Contract Services - Legal	0	0	0	0
<b>11</b>	636.1	Contract Services	540,664	540,664	540,664	540,664
<b>12</b>	641.1	Rental Of Building	100	100	100	100
<b>13</b>	642.1	Rental Of Equipment	113	113	113	113
<b>14</b>	650.1	Transportation	166	166	166	166
<b>15</b>		-Maintenance-				
<b>16</b>	620.2	Materials And Supplies	13,870	13,870	13,870	13,870
<b>17</b>	631.2	Contract Services - Engineering	11,905	11,905	11,905	11,905
<b>18</b>	636.2	Contract Services	97,714	97,714	97,714	97,714
<b>19</b>		-Miscellaneous-				
<b>20</b>	675.1	Miscellaneous Operating Expense	903,552	1,722,802	1,722,802	1,722,802
<b>21</b>	675.2	Miscellaneous Maintenance Expense	(959)	(959)	(959)	(959)
<b>22</b>						
<b>23</b>		Total Source Of Supply Expenses	\$8,231,541	\$9,050,791	\$8,926,613	\$8,752,646
<b>24</b>						
<b>25</b>		<b>Water Treatment</b>				
<b>26</b>		-Operation-				
<b>27</b>	601.3	Salary And Wages	\$9,959,207	\$9,959,207	\$10,716,182	\$11,031,159
<b>28</b>	601.4	Salary And Wages	2,626,445	2,626,445	2,826,067	2,909,130
<b>29</b>	604.3	Employee Pension And Benefits	(483)	(483)	(483)	(483)
<b>30</b>	615.3	Purchased Power	9,985,487	9,985,487	9,832,231	9,685,988
<b>31</b>	618.3	Chemicals	8,569,034	8,569,034	8,434,031	8,525,745
<b>32</b>	620.3	Materials And Supplies	348,220	348,220	348,220	348,220
<b>33</b>	631.3	Contract Services - Engineering	7,260	7,260	7,260	7,260
<b>34</b>	633.3	Contract Services - Legal	0	0	0	0
<b>35</b>	634.3	Contract Services - Management	0	0	0	0
<b>36</b>	635.3	Contract Services - Test	174,575	174,575	174,575	174,575
<b>37</b>	636.3	Contract Services	556,362	556,362	556,362	556,362
<b>38</b>	641.3	Rental Of Building	950	950	950	950
<b>39</b>	642.3	Rental Of Equipment	48,528	48,528	48,528	48,528
<b>40</b>	650.3	Transportation	4,219	4,219	4,219	4,219
<b>41</b>		-Maintenance-				
<b>42</b>	620.4	Materials And Supplies	445,450	445,450	445,450	445,450
<b>43</b>	631.4	Contract Services - Engineering	118,961	118,961	118,961	118,961
<b>44</b>	636.4	Contract Services	669,543	669,543	669,543	669,543
<b>45</b>	650.4	Transportation	1,253	1,253	1,253	1,253
<b>46</b>	675.4	Miscellaneous Maintenance Expense	496,361	496,361	496,361	496,361
<b>47</b>		-Miscellaneous-				
<b>48</b>	675.3	Miscellaneous Operating Expense	5,704,985	5,704,985	5,704,985	5,704,985
<b>49</b>						
<b>50</b>		Total Water Treatment Expense	\$39,716,357	\$39,716,357	\$40,384,695	\$40,728,206
<b>51</b>						
<b>52</b>		<b>Transmission And Distribution</b>				
<b>53</b>		-Operation-				
<b>54</b>	601.5	Salary And Wages	\$6,312,429	\$6,312,429	\$6,792,247	\$6,991,899
<b>55</b>	601.6	Salary And Wages	7,493,651	7,493,651	8,063,231	8,300,233
<b>56</b>	604.5	Employee Pension And Benefits	20,940	20,940	20,940	20,940
<b>57</b>	615.5	Purchased Power	582,930	582,930	573,983	565,446
<b>58</b>	620.5	Materials And Supplies	619,334	619,334	619,334	619,334
<b>59</b>	631.5	Contract Services - Engineering	201,558	201,558	201,558	201,558
<b>60</b>	636.5	Contract Services	346,646	346,646	346,646	346,646
<b>61</b>	641.5	Rental Of Building	34,851	34,851	34,851	34,851
<b>62</b>	642.5	Rental Of Equipment	36,106	36,106	36,106	36,106
<b>63</b>	650.5	Transportation	33,877	33,877	33,877	33,877

Pennsylvania-American Water Company - Water Operations

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
1		-Maintenance-				
2	620.6	Materials And Supplies	\$1,091,032	\$1,091,032	\$1,267,450	\$1,460,773
3	631.6	Contract Services - Engineering	8,998	8,998	8,998	8,998
4	636.6	Contract Services	1,216,769	1,139,992	1,139,992	1,139,992
5	650.6	Transportation	196,469	196,469	196,469	196,469
6	675.6	Miscellaneous Operating Expense	2,911,005	2,911,005	2,911,005	2,924,781
7		-Miscellaneous-				
8	675.5	Miscellaneous Operating Expense	1,648,666	1,648,666	1,648,666	1,648,666
9						
10		Total Transmission And Distribution	\$22,755,261	\$22,678,484	\$23,895,353	\$24,530,569
11						
12		<b>Customer Accounting</b>				
13		-Operation-				
14	601.7	Salary And Wages	\$5,390,496	\$5,390,496	\$5,800,210	\$5,970,692
15	604.7	Employee Pension And Benefits	7,399	7,399	7,399	7,399
16	615.7	Purchased Power	0	0	0	0
17	620.7	Materials And Supplies	8,278	8,278	8,278	8,278
18	631.7	Contract Services - Engineering	0	0	0	0
19	633.7	Contract Services - Legal	0	0	0	0
20	634.7	Contract Services - Management	0	0	0	0
21	636.7	Contract Services	324,515	310,162	310,162	310,162
22	642.7	Rental Of Equipment	0	0	0	0
23	650.7	Transportation	3,960	3,960	3,960	3,960
24	657.7	Insurance	0	0	0	0
25	670.7	Bad Debt	8,142,575	9,113,950	9,168,837	9,095,611
26		-Miscellaneous-				
27	675.7	Miscellaneous Expense	6,630,221	6,630,221	6,596,242	6,654,263
28						
29		Total Customer Accounting	\$20,507,444	\$21,464,466	\$21,895,088	\$22,050,365
30						
31						
32		<b>Administrative And General</b>				
33	601.8	Salary And Wages	\$15,765,425	\$15,681,591	\$16,879,908	\$17,378,528
34	603.8	Salary Of Officers	26,203	26,203	28,180	29,003
35	604.8	Employee Pension And Benefits	15,399,365	15,399,365	16,919,582	17,188,459
36	615.8	Purchased Power	33,675	33,675	33,675	33,675
37	620.8	Materials And Supplies	287,943	287,943	287,943	287,943
38	631.8	Contract Services	73,253	73,253	73,253	73,253
39	632.8	Contract Services - Accounting	565,346	565,346	565,346	565,346
40	633.8	Contract Services - Legal	968,707	968,707	968,707	968,707
41	634.8	Contract Services - Management	43,400,313	43,400,313	42,517,187	44,059,293
42	635.8	Contract Services - Test	0	0	0	0
43	636.8	Contract Services	1,800,596	1,257,964	1,257,964	1,257,964
44	641.8	Rental Of Building	312,072	312,072	290,001	285,561
45	642.8	Rental Of Equipment	83,032	83,032	83,032	83,032
46	650.8	Transportation	2,625,839	2,625,839	2,904,520	2,942,701
47	656.8	Insurance - Vehicles	238,541	238,541	241,582	246,848
48	657.8	Insurance	9,052,801	9,052,801	9,209,780	9,410,559
49	658.8	Workers Compensation	1,370,387	1,370,387	1,618,040	1,653,313
50	659.8	Insurance	1,294,653	1,294,653	1,298,666	1,325,258
51	660.8	Advertising	4,404	4,404	4,404	4,404
52	666.8	Amortization Of Rate Case	398,867	398,867	651,709	651,709
53	667.8	Regulatory Commission	25,528	25,528	25,528	25,528
54		-Miscellaneous-				
55	675.8	Miscellaneous Expense	8,328,279	7,031,635	7,527,984	8,175,544
56						
57		Total Administrative And General	\$102,055,229	\$100,132,119	\$103,386,991	\$106,646,628
58						
59		Total Operating Expenses	\$193,265,832	\$193,042,217	\$198,488,740	\$202,708,414

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Summary of Operating Expense Adjustments**

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES	
		12/31/16 DETAIL	12/31/16 AMOUNT	12/31/17 DETAIL	12/31/17 AMOUNT	12/31/18 DETAIL	12/31/18 AMOUNT
1	Per Books		\$193,265,832				
2	Present Rates At 12/31/2016				\$193,042,217		
3	Present Rates At 12/31/2017						\$198,488,740
4	Compensation			\$3,660,774		\$1,523,248	
5	Group Insurance			545,396		193,862	
6	Other Post Employment Benefits & VEBA			(469,788)		0	
7	Pension			1,145,646		0	
8	Purchased Power			(109,591)		(57,290)	
9	Purchased Water			(125,323)		(150,966)	
10	Chemicals			(73,510)		180,607	
11	Change In Consumption Expense			(157,731)		(228,013)	
12	Transportation Expense			278,681		38,181	
13	Insurance Other Than Group			411,686		267,910	
14	Regulatory Expense (Rate Case Expense)			252,842		0	
15	Service Company Expense			(883,126)		1,542,106	
16	Postage			(48,638)		41,958	
17	Inflation			687,426		753,298	
18	401K & Defined Contribution Plan			298,963		75,015	
19	Rent Expense			(22,071)		(4,440)	
20	Miscellaneous Adjustments	(1,194,990)		0		117,424	
21	Uncollectibles	<u>971,375</u>		<u>54,887</u>		<u>(73,226)</u>	
22	Pro Forma Adjustments		<u>(223,615)</u>		<u>5,446,523</u>		<u>4,219,674</u>
23	Present Rates At 12/31/2016		<u>\$193,042,217</u>				
24	Present Rates At 12/31/2017				<u>\$198,488,740</u>		
25	Present Rates At 12/31/2018						<u>\$202,708,414</u>

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Compensation**

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future annualization was developed by applying pay rates and associated incentive pay that will become effective by December 31, 2017 and December 31, 2018 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Salary and Wages	\$73,911,154	\$76,063,389
2	Annualized Performance Plan	3,421,546	3,549,281
3	Less: 33.19% Capitalized portion not charged to operating expense	<u>25,666,723</u>	<u>26,423,445</u>
4	Sub-Total	51,665,977	53,189,225
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 12/31/16	<u>48,005,203</u>	
7	Less: Amount Charged To Operating Expense		
8	During The Twelve Months Ended 12/31/17		<u>51,665,977</u>
9	Pro Forma Adjustment	<u>\$3,660,774</u>	<u>\$1,523,248</u>
	601.1 Salary and Wages - Source of Supply	\$16,510	\$6,870
	601.2 Salary and Wages - Source of Supply	28,261	11,759
	601.3 Salary and Wages - Water Treatment	756,975	314,977
	601.4 Salary and Wages - Water Treatment	199,622	83,063
	601.5 Salary and Wages - Transmission & Distribution	479,818	199,652
	601.6 Salary and Wages - Transmission & Distribution	569,580	237,002
	601.7 Salary and Wages - Customer Accounting	409,714	170,482
	601.8 Salary and Wages - Administrative and General	1,198,317	498,620
	603.8 Salary and Wages - Salary of Officers	1,977	823

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Group Insurance**

The adjustment of the group insurance cost is based on the January 2017 premiums annualized for the future test year number of employees less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected test year was developed by adjusting the annualized 2017 amount by an inflation factor of 2.18%.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Group Insurance Cost	\$12,701,415	\$12,991,584
2	Less: 33.19% Not Charged To Operating Expense	4,215,600	4,311,907
3	Sub-Total	<u>8,485,815</u>	<u>8,679,677</u>
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	7,940,420	
6	Less: Amount Charged To Operating Expense		
7	During The Twelve Months Ended 12/31/17		<u>8,485,815</u>
8	Pro Forma Adjustment	<u>\$545,396</u>	<u>\$193,862</u>
	604.8 A&G Employees Pension And Benefits	\$545,396	\$193,862

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Other Post Employment Benefits (OPEB)**

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized OPEB Expense	\$1,388,313
2	Annualized VEBA Expense (\$500 x 300 of employees)	150,000
3	Less: 33.19% Capitalized portion not charged to operating expense	510,566
4	Sub-Total	<u>1,027,747</u>
5	Less: Amount Charged To Operating Expenses	
6	For The Twelve Months Ended 12/31/16	<u>1,497,535</u>
7	Pro Forma Adjustment	<u><u>(\$469,788)</u></u>
	604.8 A&G Employees' Welfare Expenses	(\$469,788)

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Pension**

The following adjustment is being made to reflect the Company's projected Pension cost based on ASC715 (formerly FAS87) for PAWC employees.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNT
1	PAWC Pension Costs	\$8,528,320
2	Deferred Pension amortized (10 yrs)	(1,958,418)
3	Less: 33.19% Capitalized portion not charged to operating expense	2,180,551
4	Sub-Total	<u>4,389,351</u>
5	Less: Amount Charged To Operating Expense	
6	During The Twelve Months Ended 12/31/16	<u>3,243,705</u>
7	Pro Forma Adjustment	<u><u>\$1,145,646</u></u>
	604.8 A&G Employee Pension And Benefits	\$1,145,646

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B



**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Purchased Power**

This adjustment reflects the application of rates for purchased power to be in effect as of December 2016 to anticipated billing units for the future and fully projected rate years. Accounts were adjusted for any known rate changes in either the future or fully projected rate years and were also adjusted to reflect 12 monthly bills.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Power Cost	\$13,301,288	13,243,998
2	Less: Amount Charged To Operating Expense	13,410,879	13,301,288
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	<u>(\$109,591)</u>	<u>(57,290)</u>
	615.1 Purchased Power - Source Of Supply	(\$23,228)	(\$12,143)
	615.3 Purchased Power - Water Treatment	(81,599)	(42,657)
	615.5 Purchased Power - Transmission and Distribution	(4,764)	(2,490)

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Purchased Water**

This adjustment reflects the application of rates for purchased water in effect as of December 31, 2016 to anticipated billing units for the future test year. The claimed amount for the fully projected test year (2018) was developed by applying an inflation factor of 2.18% to the 2017 amount.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Purchased Water Cost	\$2,982,920	\$2,831,954
2	Less: Amount Charged To Operating Expense During The 12 Months Ended 12/31/16 And 12/31/17	3,108,243	2,982,920
3	Pro Forma Adjustment	<u>(\$125,323)</u>	<u>(\$150,966)</u>
	610.1 Purchased Water	(\$125,323)	(\$150,966)

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Chemicals**

The annualization of chemical costs was based on the application of contract prices in effect at January 1, 2017 to anticipated 2017 usage. The present rates December 31, 2017 amount was increased by 2.18% (Blue Chip GDP Price Index for 2018) to project 2018 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Chemical Costs	\$8,495,523	\$8,676,130
2	Less: Amount Charged To Operating Expense	8,569,034	8,495,523
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	(\$73,510)	\$180,607
	618.3 Chemicals - Water Treatment	(\$73,510)	\$180,607

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Change in Consumption**

During the future (2017) and fully projected (2018) test years, the Company will experience changes in consumption due to net addition or loss of customers and other factors affecting the usage of specific customers. The calculations shown below reflect estimates of the change in operating expenses that will be realized by these changes in consumption.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PER BOOKS</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Consumption (00 Gallons)	459,762,719.0	456,463,609.0	451,694,487.0
2	Change In Consumption		(3,299,110.0)	(4,769,122.0)
3	Power Costs Per Book	\$13,410,879		
4	Chemical Costs Per Book	8,569,034		
5	Total	<u>\$21,979,913</u>		
6	Rate Of Production Costs (00 Gallons) (Line 5/Line 1)		<u>\$0.04781</u>	<u>\$0.04781</u>
7	Pro Forma Adjustment		<u>(\$157,731)</u>	<u>(\$228,013)</u>
	615.1 Source of Supply - Purchased Power		(\$20,398)	(\$29,487)
	615.3 Water Treatment - Purchased Power		(71,657)	(103,586)
	615.5 Transmission & Distribution - Purchased Power		(4,183)	(6,047)
	618.3 Water Treatment - Chemicals		(61,493)	(88,893)

Witness: Daniel Hunnell

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Transportation Expense**

The following adjustment reflects the annualization of transportation expense for the years ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized Leased Vehicles Expense	\$4,706,578	\$4,763,727
2	Less: 33.19% Not Charged To Operating Expense	1,562,113	1,581,081
3	Sub-Total	<u>3,144,465</u>	<u>3,182,646</u>
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	2,865,784	
6	Less: Present Rates At 12/31/17		<u>3,144,465</u>
7	Pro Forma Adjustment	<u>\$278,681</u>	<u>\$38,181</u>
	650.8 A & G - Miscellaneous General Expense	\$278,681	\$38,181

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Insurance Other Than Group**

The annualizations of Insurance Other Than Group (IOTG) costs were based on the actual and projected IOTG premiums for the twelve months ending December 31, 2017, adjusted for the 5 year average of retroactive adjustments. The Present Rates 12/31/2017 amount was further adjusted by 2.18% (Blue Chip GDP Price Index for 2018).

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Workers Compensation Premium	\$2,421,852	\$2,474,648
2	Less: 33.19% Not Charged To Operating Expense	<u>803,813</u>	<u>821,336</u>
3	Sub-Total	1,618,039	1,653,312
4	Add: Annualized Insurance, Other Than Group And		
5	Workers Compensation	<u>10,750,028</u>	<u>10,982,665</u>
6	Sub-Total	12,368,067	12,635,977
7	Less: Per Books	<u>11,956,381</u>	<u>12,368,067</u>
8	Pro Forma Adjustment	<u><u>\$411,686</u></u>	<u><u>\$267,910</u></u>
	656.8 Vehicle Insurance	55110000 \$3,041	\$5,266
	657.8 General Liability Insurance	55710000 156,979	200,779
	658.8 Workers Compensation	55720000 292,183	52,796
	658.8 Insurance Wc Capitalized Credits	55720100 (44,530)	(17,523)
	659.8 Other Insurance	55730000 4,013	26,592

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Regulatory Expense (Rate Case Expense)**

The following adjustment reflects the estimated cost of this rate case normalized over a three-year period.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT
1	Legal Fees And Expenses	\$900,000
2	Rate Of Return	88,000
3	Bill Frequency Analysis	23,000
4	Depreciation	80,000
5	Cost Of Service And Rate Design	105,000
6	Regulatory Support Services	375,000
7	Miscellaneous	304,000
8	Total	1,875,000
9	Normalized Over 3 Years	625,000
10	Plus 10 year amortization of Demand Study	26,709
	\$267,086	
11	Less: Amount Charged To Operating Expense	
12	During The Twelve Months Ended 12/31/16	398,867
13	Pro Forma Adjustment	\$252,842
	666.8 Regulatory Commission Expense	\$252,842

Witness: John Cox  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Service Company**

This adjustment reflects the cost of services provided by American Water Works Service Company (AWWSC), for the twelve months ended December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Service Company Cost	\$42,517,187	\$44,059,293
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 12/31/16	43,400,313	
4	And Present Rates 12/31/17	<u>42,517,187</u>	<u>42,517,187</u>
5	Pro Forma Adjustment	<u>(\$883,126)</u>	<u>\$1,542,106</u>
	634.8 AG - Contract Services - Management	(\$883,126)	\$1,542,106

Witness: Jamie Hawn



**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Postage**

The following adjustment annualizes the cost of postage to reflect a postal rate increase effective January 22, 2017. The present rates December 31, 2018 amount was calculated by increasing the 2017 Postage rates effective 1/22/2017 by the 12-Month average change in CPI-U for the most recent twelve month period ending January 2017 of 1.36%.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Postage Expense	\$3,095,437	\$3,137,395
2	Less: Amount Charged To Operating Expense		
3	During The Twelve Months Ended 12/31/16 Present Rates At 12/31/17	3,144,075	3,095,437
4	Pro Forma Adjustment	<u>(\$48,638)</u>	<u>\$41,958</u>
	675.7 - Miscellaneous Expense	(\$48,638)	\$41,958

Witness: Daniel Hunnell

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Inflation**

The Company has proposed various pro forma adjustments for specific expense items. The remaining expense items are anticipated to continue to rise due to inflationary increases. The following adjustment captures the estimated increases due to inflation.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Total O & M Expenses Per Books	\$193,265,831	\$193,265,831
2	Less: Adjusted Expenses	<u>159,318,850</u>	<u>159,318,850</u>
3	2017 Expenses Subject To Inflation	33,946,982	33,946,982
4	2017 Inflation		<u>687,426</u>
5	2018 Expenses Subject To Inflation		34,634,408
6	Inflation Factor	<u>2.03%</u>	<u>2.18%</u>
7	Pro Forma Adjustment	<u>\$687,426</u>	<u>\$753,298</u>
	620.6 Materials And Supplies	\$176,418	\$193,323
	675.7 Miscellaneous Expense	14,659	16,063
	675.8 Miscellaneous Expense	496,349	543,911

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense**

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized 401K - Company Match	\$1,755,902	\$1,809,588
2	Annualized DCP	1,797,385	1,852,140
3	Less: 33.19% Not Charged To Operating Expense	1,179,336	1,215,328
4	Sub-Total	<u>2,373,951</u>	<u>2,446,400</u>
5	Annualized ESPP	85,481	88,047
6	Less: Amount Charged To Operating Expense	2,160,470	2,459,432
7	Pro Forma Adjustment	<u>\$298,963</u>	<u>\$75,015</u>
	604.8 Employee Pension And Benefits AG	\$298,963	\$75,015

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Rent Expense**

This adjustment is being made to reflect the Company's claim for the property lease agreements.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Annualized Rent Expense	\$282,155	\$277,715
<b>2</b>	Less: Amount Charged To Operating Expense	304,226	282,155
<b>3</b>	Pro Forma Adjustment	<u>(\$22,071)</u>	<u>(\$4,440)</u>
	641.8 Rents - Real Property - Admin & General	(\$22,071)	(\$4,440)

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Miscellaneous Expense Adjustment**

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	<u>Additions:</u>		
2	DEP Adjustment	\$819,250	
3	DRBC Annual Fee		\$13,775
4	Revolving Credit Line Annual Expense		208,543
5	<u>Deductions:</u>		
6	Donations	(118,222)	
7	Lobbying	(80,316)	
8	Temporary Employees	(633,762)	
9	Severance Pay 3 Year Average	(83,834)	
10	Fines	(71,936)	
11	Injuries And Damages 3 Year Average	(21,908)	
12	Kronos write off	(1,004,262)	
13	Capital Campus		(104,894)
14	Pro Forma Adjustment	<u>(\$1,194,990)</u>	<u>\$117,424</u>
	601.8 Salary & Wages - Admin & General	(\$83,834)	
	636.6 Contract Services - Water Treatment	(76,777)	
	636.7 Contract Service - Ca	(14,353)	
	636.8 Contract Service - Admin & General	(542,632)	
	675.1 Misc Operations SS	819,250	
	675.6 Misc Expense Maintenance TD		\$13,775
	675.8 Misc Expense Admin & General	(1,296,644)	103,649

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Calculation of Uncollectible Accounts Expenses**

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES	PRESENT RATES	PRESENT RATES	PROPOSED
			12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	RATES AMOUNT
1	Total Sales	\$610,191,034	\$612,540,575	\$616,239,152	\$611,304,772	\$701,331,095
2	3 Year Average	1.4840%	1.4840%	1.4840%	1.4840%	1.4840%
3	Annualized Uncollectible Expense		\$9,090,102	\$9,144,989	\$9,071,763	\$10,407,753
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 12-31-16		8,118,727			
6	Less: Present Rates 12/31/2016			9,090,102		
7	Less: Present Rates 12/31/2017				9,144,989	
8	Less: Present Rates 12/31/2018					9,071,763
9	Pro Forma Adjustment		\$971,375	\$54,887	(\$73,226)	\$1,335,990
<b>670.7</b>	<b>Customer Accounting And Collecting - Bad Debt</b>		\$971,375	\$54,887	(\$73,226)	\$1,335,990

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Depreciation**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Annualized Depreciation	\$109,976,288	\$112,801,995	\$121,681,076
<b>2</b>	Less: Citizens Acquisition CIAC & CAC		325,148	325,148
<b>3</b>	Subtotal	<u>109,976,288</u>	<u>112,476,847</u>	<u>121,355,928</u>
<b>4</b>	Book Depreciation	95,787,007	109,976,288	112,476,847
<b>5</b>	Pro Forma Adjustment	<u>\$14,189,281</u>	<u>\$2,500,559</u>	<u>\$8,879,081</u>
	503 Depreciation	\$14,189,281	\$2,500,559	\$8,879,081

Witness: John Cox, John Spanos  
Reference: Exhibit No. 3-C, Exhibits No. 11

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Amortization Expense**

This adjustment is being made to reflect the Company's claim for amortizations.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT
1	Utility Plant Acquisition Adjustments:	
2	PG&W	\$455,956
3	Redstone Water Company	32,513
4	Three Lane Utilities Inc	23,076
5	Saxonburg Area Authority	44,046
6	Birch Acres Waterworks Inc.	625
7	Boggs Township	(27,154)
8	Amwell Municipal Authority	(20,614)
9	Sutton Hills Homeowners Assn	(6,967)
10	Lake Spangenberg Water Co.	13,709
11	Fernwood Community Water System	5,630
12	Olwen Heights Water Service Co.	5,396
13	Indian Rocks Property Owners Assn.	(1,234)
14	North Fayette County Mun Auth.	(62,966)
15	Wildcat Park Corporation	(8,271)
16	Scott Township Mun. Auth.	2,801
17	SFAS 109 Regulatory Assets Afudc	347,292
18	Proforma Expense	803,838
19	Less: Per Books	951,162
20	Pro Forma Adjustment	(\$147,324)

Witness: John Cox  
Reference: Exhibit No. 3-C



**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Pennsylvania Property Tax**

The following adjustment reflects the projected property tax expense, local and PURTA, for the twelve months ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Property Subject to Tax	\$451,355,747	\$459,371,242	\$550,281,773
2	PURTA Tax 2016	\$3,387,896		
3	Property Tax UPIS	1,021,654		
4	Total	<u>\$4,409,550</u>		
5	Rate (Line 4 / Line 1)	\$0.009770	\$0.009770	\$0.009770
6	Projected property tax expense (Line 1 x Line 5)		<u>\$4,488,058</u>	<u>\$5,376,254</u>
7	Less: Amount Charged To Operating Expense			4,488,058
8	During The 12 Months Ended 12/31/16		4,437,403	
9	Pro Forma Adjustment		<u>\$50,654</u>	<u>\$888,196</u>
	408.11 Taxes, Other Than Income - PURTA		\$38,918	\$682,409
	408.2 Taxes, Other Than Income - Property		11,736	205,787
			<u>Total PURTA</u>	<u>\$4,121,510</u>
			<u>Total Local Property Tax</u>	<u>\$1,254,744</u>
			<u>Total</u>	<u>\$5,376,254</u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Payroll Taxes**

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Payroll Taxes (Salary And Hourly)	\$6,149,081	\$6,305,065
2	Plus: Payroll Taxes - APP/LTPP	261,748	271,520
3	Less: 33.19% Not Charged To Operating Expense	2,127,754	2,182,769
4	Sub-Total	4,283,075	4,393,816
5	Less: Amount Charged To Operating Expense	4,191,613	4,283,075
6	Pro Forma Adjustment	\$91,462	\$110,741
	408.12 - Taxes - Payroll	\$91,462	\$110,741

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Calculation of General Assessment by the Pennsylvania Public Utility  
Commission, Consumer Advocate and Small Business Advocate Fees**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
1	Total Water Sales	\$600,020,028	\$603,832,485	\$599,385,807	\$688,809,949
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004398092304	2,638,943	2,655,711	2,636,154	3,029,450
4	Consumer Advocate Fee At 0.000671478022	402,900	405,460	402,474	462,521
5	Small Business Advocate Fee At 0.000078998984	47,401	47,702	47,351	54,415
6	Subtotal	3,089,244	3,108,873	3,085,979	3,546,386
7	Less: Amount Charged To Operating Expenses During				
8	The Twelve Months Ended 12/31/2016	3,152,644			
9	Less: Pro Forma Under Present Rates At 12/31/2016		3,089,244		-
10	Less: Pro Forma Under Present Rates At 12/31/2017			3,108,873	
11	Less: Pro Forma Under Present Rates At 12/31/2018				3,085,979
12	Pro Forma Adjustment	(\$63,400)	\$19,629	(\$22,894)	\$460,407
507.1	507.1 Taxes Other Than Income				\$393,742

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Pro Forma State And Federal Income Taxes Under Present And Proposed Rates**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
1	State Income Tax Per Computation				
2	Shown On Following Page	\$23,551,874	\$23,189,915	\$20,927,774	\$29,737,794
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	23,892,230			
5	Less: Present Rates 12/31/2016		23,551,874		
6	Less: Present Rates 12/31/2017			23,189,915	
7	Less: Present Rates 12/31/2018				20,927,774
8	Pro Forma Adjustment	(\$340,356)	(\$361,959)	(\$2,262,141)	\$8,810,020
9	Federal Income Tax Per Computation				
10	Shown On Following Page	\$76,647,935	\$73,392,697	\$65,768,256	\$93,550,685
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	77,721,249			
13	Less: Present Rates 12/31/2016		76,647,935		
14	Less: Present Rates 12/31/2017			73,392,697	
15	Less: Present Rates 12/31/2018				65,768,256
16	Pro Forma Adjustment	(\$1,073,314)	(\$3,255,238)	(\$7,624,441)	\$27,782,429

Witness: John Cox

**Pennsylvania-American Water Company - Water Operations**  
**Notes to Statement Of Income**  
**Calculation Of State And Federal Income Taxes**

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT	PROPOSED AMOUNT
1	Utility Operating Income Before Taxes	\$314,448,894	\$296,852,647	\$292,589,721	\$273,580,543	\$361,810,469
2	Less: Interest Expense	57,798,343	57,798,343	62,753,184	67,762,270	67,803,808
3	Taxable Operating Income	256,650,551	239,054,304	229,836,537	205,818,273	294,006,661
4	Add: Premature Property Losses / Amortizations	951,162	951,162	803,838	803,838	803,838
5	Depr - Straight Line-Remaining Life (Including COR)	95,787,007	109,976,288	112,476,847	121,355,928	121,355,928
6	Taxable Meals & Entertainment	211,347	211,347	211,347	211,347	211,347
7	Total	96,949,516	111,138,797	113,492,032	122,371,113	122,371,113
	Deduct:					
8	Tax Depreciation:					
9	ADR On Pre 1981 Assets	478,337	478,337	412,678	351,730	351,730
10	ACRS On Post 1980 Assets	0	0		0	0
11	MACRS On Post 1986 Assets -State	103,645,792	103,645,792	100,396,652	108,232,062	108,232,062
12	Cost Of Removal	10,314,475	10,314,475	10,387,955	10,118,367	10,118,367
13	Total	114,438,604	114,438,604	111,197,285	118,702,159	118,702,159
14	State Taxable Income	239,161,463	235,754,497	232,131,284	209,487,227	297,675,615
15	State Income Tax At:					
16	Historic, Future And Fully Projected At 9.99%	23,892,230	23,551,874	23,189,915	20,927,774	29,737,794
17	Taxable Income After State Income Tax	215,269,233	212,202,623	208,941,369	188,559,453	267,937,821
18	Add: Cost Of Removal Non Adr Property					
19	ACRS On Post 1980 Assets	0	0	0	0	0
20	MACRS On Post 1986 Assets - State	103,645,792	103,645,792	100,396,652	108,232,062	108,232,062
21	Deduct: SLRL On Post 1980 Assets & Amortization	96,854,315	96,854,315	99,644,601	108,882,212	108,882,212
22	Income Subject To Federal Income Tax	222,060,710	218,994,100	209,693,420	187,909,303	267,287,671
23	Federal Income Tax @ 35%	77,721,249	76,647,935	73,392,697	65,768,256	93,550,685
24	Consolidated Tax Savings Adjustment		0	0	0	0
25	Federal Tax Liability	\$77,721,249	\$76,647,935	\$73,392,697	\$65,768,256	\$93,550,685
	Witness: John Cox					

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Pro Forma Interest Expense Under Present and Proposed Rates**

LINE NO.	DESCRIPTION	PRESENT RATES			PROPOSED AMOUNT
		12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	\$54,653,553	\$62,753,184	\$67,762,270	\$67,803,808
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	54,653,553			
5	Less: Present Rates At 12/31/2016		54,653,553		
6	Less: Present Rates At 12/31/2017			62,753,184	
7	Less: Present Rates At 12/31/2018				67,762,270
8	Pro Forma Adjustment	\$0	\$8,099,631	\$5,009,086	\$41,538
9	Interest On Short Term Debt Per Computation				
10	Shown On Following Page	\$3,144,790	\$0	\$0	\$0
11	Less: Interest On Short Term Debt As Per Book				
12	Computation On Following Page	3,144,790			
13	Less: Present Rates At 12/31/2016		3,144,790		
14	Less: Present Rates At 12/31/2017			0	
15	Less: Present Rates At 12/31/2018				0
16	Pro Forma Adjustment	\$0	(\$3,144,790)	\$0	\$0

Witness: Ann Bulkley

**Pennsylvania-American Water Company - Water Operations**

**Notes to Statement Of Income**

**Application of Income Deductions**

LINE NO.	DESCRIPTION	PRESENT RATES AT DECEMBER 31, 2016			PRESENT RATES AT DECEMBER 31, 2017			PRESENT RATES AT DECEMBER 31, 2018		
		AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE
<b>1</b>	<b>Capital Structure</b>									
2	Long Term Debt	\$1,082,415,378	37.18%	5.74%	\$1,285,308,047	44.53%	5.45%	\$1,405,413,468	44.89%	5.25%
3	Short Term Debt	387,470,103	13.30%	0.92%	0	0.00%	0.00%	0	0.00%	0.00%
4	Total Debt	1,469,885,481	50.48%		1,285,308,047	44.53%		1,405,413,468	44.89%	
5	Preferred Stock	7,651,500	0.26%	8.62%	6,451,500	0.22%	8.63%	5,251,500	0.17%	8.66%
6	Common Equity	1,434,695,247	49.26%		1,594,560,247	55.25%		1,719,684,247	54.94%	
7	Totals	<u>\$2,912,232,228</u>	<u>100.00%</u>		<u>\$2,886,319,794</u>	<u>100.00%</u>		<u>\$3,130,349,215</u>	<u>100.00%</u>	

	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT	PROPOSED AMOUNT
<b>8 Application Of Long Term Debt Interest:</b>				
9 Original Cost Rate Base		\$2,560,926,561	\$2,585,750,214	\$2,875,272,680
10 Debt Percentage (From Above)		37.18%	44.53%	44.89%
11 Debt Portion Of Rate Base		952,152,495	1,151,434,570	1,290,709,906
12 Interest Cost (From Above)		5.74%	5.45%	5.25%
13 Pro Forma Long Term Interest Deduction		<u>\$54,653,553</u>	<u>\$62,753,184</u>	<u>\$67,762,270</u>
<b>14 Application Of Short Term Debt Interest:</b>				
15 Original Cost Rate Base		\$2,560,926,561	\$2,585,750,214	\$2,875,272,680
16 Debt Percentage (From Above)		13.30%	0.00%	0.00%
17 Debt Portion Of Rate Base		340,603,233	0	0
18 Interest Cost (From Above)		0.92%	0.00%	0.00%
19 Pro Forma Short Term Interest Deduction		<u>\$3,144,790</u>	<u>\$0</u>	<u>\$0</u>

Witness: Ann Bulkley

Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)

Table of Contents

Page No.	Description
1	<b>Income Statement</b>
	<b>Operating Revenues</b>
2	Revenues by Tariff Subdivision
4	Summary of Adjustments
5	Unbilled Adjustment
6	CGCR Surcharge Elimination
7	Annualization Adjustment - New Cumberland WW
8	Annualization Adjustment - Fairview WW
9	Specific Customer Adjustments
10	Change in number of Customers (Historic)
11	Change in number of Customers (Future)
12	Change In Number Of Customers (Fully Forecasted)
13	Number Of Customers Served
14	Penalties
	<b>Rate Base</b>
15	Summary Of Rate Base Adjustments
16	Summary Of Detailed Plant Accounts
17	Contributions In Aid Of Construction
18	Customer Advances For Construction
19	Materials And Supplies
20	Cash Working Capital Requirements
21	Support Of Expense Days
22	Accrued And Prepaid Taxes
23	Calculation Of Lag Days For Accrued & Prepaid Taxes
24	Cash Working Capital Requirements - Interest & Dividends
25	Unrecovered Original Cost of Existing Wastewater Treatment Plant
26	Fairview Township Nitrogen Credits Desposit
27	Miscellaneous Acquisitions
28	Extension Deposits In Suspense
29	Calculation Of Deferred Income Taxes



Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)

Table of Contents

Page No.	Description
	<b>Operating Expenses</b>
30	Summary of Expense Accounts
32	Summary of Operating Expense Adjustments
33	Compensation
34	Group Insurance
35	Purchased Power
36	Waste Disposal
37	Chemicals
38	Transportation Expense
39	Inflation
40	401K, Defined Contribution Plan, and Employee Stock Purchase Plan
41	Miscellaneous Adjustments
42	Uncollectible Accounts
43	Depreciation
44	Amortization Expense
	<b>Taxes, Other Than Income</b>
45	Pennsylvania Property Tax
46	Payroll Taxes
47	Calculation of General Assessment
	<b>Income Tax</b>
48	State and Federal Income taxes under Present and Proposed Rates
49	Calculation of State and Federal Taxes
	<b>Income Deductions</b>
50	Interest under Present and Proposed Rates
51	Application of Income Deductions

Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)

Pro Forma Statement of Income for the Twelve Months Ending December 31, 2016

December 31, 2017 and December 31, 2018 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES		PROPOSED RATES		LINE NO.	
		PER BOOKS	ADJUSTMENT	12/31/16 AMOUNT	ADJUSTMENT	12/31/17 AMOUNT	ADJUSTMENT	12/31/18 AMOUNT	ADJUSTMENT		AMOUNT
1	Operating Revenue	\$22,138,356	\$1,864,587	\$24,002,943	\$12,477	\$24,015,420	\$12,477	\$24,027,897	\$7,523,773	\$31,551,670	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	6,946,190	(381,164)	6,565,026	494,146	7,059,172	32,158	7,091,330	111,653	7,202,983	3
4	Depreciation	5,797,984	(950,290)	4,847,694	398,271	5,245,965	151,712	5,397,677	0	5,397,677	4
5	Amortizations	50,478	0	50,478	241,948	292,426	0	292,426	0	292,426	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	219,902	0	219,902	43,131	263,033	2,512	265,545	0	265,545	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	154,989	0	154,989	(6,684)	148,305	4,227	152,532	0	152,532	10
11	General Assessment	85,068	34,665	119,733	63	119,796	64	119,860	38,400	158,260	11
12	State Capital Stock Tax	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	459,959	34,665	494,624	36,510	531,134	6,803	537,937	38,400	576,337	13
14	<b>Utility Operating Income Before Income Taxes</b>	<b>8,883,745</b>	<b>3,161,376</b>	<b>12,045,121</b>	<b>(1,158,398)</b>	<b>10,886,723</b>	<b>(178,196)</b>	<b>10,708,527</b>	<b>7,373,720</b>	<b>18,082,247</b>	14
15	Income Taxes:										15
16	State Income Tax	354,509	220,887	575,396	(274,294)	301,102	(37,043)	264,059	736,216	1,000,275	16
17	Federal Income Tax	1,681,449	696,570	2,378,019	(365,402)	2,012,617	(46,476)	1,966,141	2,321,662	4,287,803	17
18	Amortization Of ITC & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	2,035,958	917,457	2,953,415	(639,696)	2,313,719	(83,519)	2,230,200	3,057,878	5,288,078	19
20	Total Operating Revenue Deductions	15,290,569	(379,332)	14,911,237	531,179	15,442,416	107,154	15,549,570	3,207,931	18,757,501	20
21	<b>Utility Operating Income</b>	<b>6,847,787</b>	<b>2,243,919</b>	<b>9,091,706</b>	<b>(518,702)</b>	<b>8,573,004</b>	<b>(94,677)</b>	<b>8,478,327</b>	<b>4,315,842</b>	<b>12,794,169</b>	21
22	Income Deductions:										22
23	Interest On Long Term Debt	2,756,209	0	2,756,209	416,535	3,172,744	(23,610)	3,149,134	2,729	3,151,863	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	1,921,930	0	1,921,930	(256,634)	1,665,296	16,701	1,680,541	1,456	1,681,997	25
26	Total Income Deductions	4,678,139	0	4,678,139	159,901	4,838,040	(6,909)	4,829,675	4,185	4,833,860	26
27	<b>Net Income</b>	<b>\$2,169,648</b>	<b>\$2,243,919</b>	<b>\$4,413,567</b>	<b>(\$678,603)</b>	<b>\$3,734,964</b>	<b>(\$87,768)</b>	<b>\$3,648,652</b>	<b>\$4,311,657</b>	<b>\$7,960,309</b>	27
28	Preferred Dividends	29,093		29,093		24,571		19,163		19,179	28
29	<b>Net Income To Common</b>	<b>\$2,140,555</b>		<b>\$4,384,474</b>		<b>\$3,710,393</b>		<b>\$3,629,489</b>		<b>\$7,941,130</b>	29

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS EXCLUDING SCRANTON

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2016 AND DECEMBER 31, 2017

LINE NO.	ACCT. NO.	CUSTOMER CLASS	PER BOOKS 12/31/2016	UNBILLED	CGCR ADJUSTMEN	ANNUALIZATION OF ACQUIRED SYSTEMS	OTHER REVENUE AND CUSTOMER ADJUSTMENTS	PRO FORMA PRESENT RATES 12/31/2016	OTHER REVENUE AND CUSTOMER ADJUSTMENTS	PRO FORMA PRESENT RATES 12/31/2017
1		OPERATING REVENUES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2		METERED SALES								
3	522.1	RESIDENTIAL	\$12,378,673	(\$254,495)	\$201,608	\$1,386,800	\$65,100	\$13,777,686	\$12,369	\$13,790,055
4	522.2	COMMERCIAL	3,175,596	(123,029)	44,059	281,051	0	3,377,677		3,377,677
5	522.3	INDUSTRIAL	1,175,776	(16,120)	19,932		(11,231)	1,168,357		1,168,357
6	522.4	MUNICIPAL	933,259	(27,025)	14,542	21,540	(64,320)	877,996		877,996
7	522.4	MISCELLANEOUS	3,784,955	66,222	202,631		0	4,053,808		4,053,808
8		<b>TOTAL METERED SALES</b>	<b>21,448,259</b>	<b>(354,447)</b>	<b>482,772</b>	<b>1,689,391</b>	<b>(10,451)</b>	<b>23,255,524</b>	<b>12,369</b>	<b>23,267,893</b>
9		UNMETERED SALES								
10	522.1	RESIDENTIAL	0	0	0	0	0	0	0	0
11	522.2	COMMERCIAL	0	0	0	0	0	0	0	0
12	522.3	INDUSTRIAL	0	0	0	0	0	0	0	0
13	522.4	MUNICIPAL	0	0	0	0	0	0	0	0
14	522.4	MISCELLANEOUS	0	0	0	0	0	0	0	0
15		<b>TOTAL UNMETERED SALES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
16		<b>TOTAL WASTEWATER SALES</b>	<b>21,448,259</b>	<b>(354,447)</b>	<b>482,772</b>	<b>1,689,391</b>	<b>(10,451)</b>	<b>23,255,524</b>	<b>12,369</b>	<b>23,267,893</b>
17		OTHER OPERATING REVENUES								
18	530	GUARANTEED REVENUES	0	0	0	0	0	0	0	0
19	532	LATE PAYMENT FEES	146,048	0	0	0	57,322	203,370	108	203,478
20	536	MISC SERVICE REVENUES	544,049	0	0	0	0	544,049	0	544,049
21	534	RENTS FROM PROPERTIES	0	0	0	0	0	0	0	0
22	536	OTHER WASTEWATER REVENUE	0	0	0	0	0	0	0	0
23		<b>TOTAL OTHER OPERATING REVENUES</b>	<b>690,097</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57,322</b>	<b>747,419</b>	<b>108</b>	<b>747,527</b>
24		<b>TOTAL OPERATING REVENUES</b>	<b>\$22,138,356</b>	<b>(\$354,447)</b>	<b>\$482,772</b>	<b>\$1,689,391</b>	<b>\$46,871</b>	<b>\$24,002,943</b>	<b>\$12,477</b>	<b>\$24,015,420</b>
25										

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS EXCLUDING SCRANTON

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2018

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PRO FORMA PRESENT RATES 12/31/2017	CUSTOMER ADJUSTMENT	OTHER OPERATING REVENUES	PRO FORMA PRESENT RATES 12/31/2018	PERCENT	AMOUNT	PRO FORMA PROPOSED RATES
1		OPERATING REVENUES	(9)	(10)	(11)	(12)	(13)	(14)	(15)
2		METERED SALES							
3	522.1	RESIDENTIAL	\$13,790,055	\$12,369	\$0	\$13,802,424	40.55%	\$5,596,341	\$19,398,765
4	522.2	COMMERCIAL	3,377,677	0	0	3,377,677	28.93%	977,045	4,354,722
5	522.3	INDUSTRIAL	1,168,357	0	0	1,168,357	24.89%	290,838	1,459,195
6	522.4	MUNICIPAL	877,996	0	0	877,996	28.74%	252,322	1,130,318
7	522.4	MISCELLANEOUS	4,053,808	0	0	4,053,808	8.44%	342,002	4,395,810
8		<b>TOTAL METERED SALES</b>	<b>23,267,893</b>	<b>12,369</b>	<b>0</b>	<b>23,280,262</b>	<b>32.04%</b>	<b>7,458,548</b>	<b>30,738,810</b>
9		UNMETERED SALES							
10	522.1	RESIDENTIAL	0	0	0	0	0.00%	0	0
11	522.2	COMMERCIAL	0	0	0	0	0.00%	0	0
12	522.3	INDUSTRIAL	0	0	0	0	0.00%	0	0
13	522.4	MUNICIPAL	0	0	0	0	0.00%	0	0
14	522.4	MISCELLANEOUS	0	0	0	0	0.00%	0	0
15		<b>TOTAL UNMETERED SALES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0</b>
16		<b>TOTAL WASTEWATER SALES</b>	<b>23,267,893</b>	<b>12,369</b>	<b>0</b>	<b>23,280,262</b>	<b>32.04%</b>	<b>7,458,548</b>	<b>30,738,810</b>
17		OTHER OPERATING REVENUES							
18	469	GUARANTEED REVENUES	0	0	0	0	0.00%	0	0
19	532	LATE PAYMENT FEES	203,478	0	108	203,586	32.04%	65,225	268,811
20	471	MISC SERVICE REVENUES	544,049	0	0	544,049	0.00%	0	544,049
21	472	RENTS FROM PROPERTIES	0	0	0	0	0.00%	0	0
22	474	OTHER WASTEWATER REVENUE	0	0	0	0	0.00%	0	0
23		<b>TOTAL OTHER OPERATING REVENUE</b>	<b>747,527</b>	<b>0</b>	<b>108</b>	<b>747,635</b>	<b>8.72%</b>	<b>65,225</b>	<b>812,860</b>
24		<b>TOTAL OPERATING REVENUES</b>	<b>\$24,015,420</b>	<b>\$12,369</b>	<b>\$108</b>	<b>\$24,027,897</b>	<b>31.31%</b>	<b>\$7,523,773</b>	<b>\$31,551,670</b>
25									

PENNSYLVANIA-AMERICAN WATER COMPANY - WASTEWATER OPERATIONS EXCLUDING SCRANTON

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/16		PRESENT RATES 12/31/17		PRESENT RATES 12/31/18	
		ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT
1	Per Books		\$22,138,356				
2	Present Rates At 12/31/16				\$24,002,943		
3	Present Rates At 12/31/17						\$24,015,420
4	Unbilled Adjustment	(354,447)					
5	CGCR Adjustment	482,772					
6	Annualization Of Acquired Systems	1,689,391					
7	Specific Customers Adjustment	(75,551)					
8	Other Operating Revenues						
9	470 - Penalties	57,322		108		108	
10	469 - Guaranteed Revenues					0	
11	471 - Misc Service Revenues			0			
12	Change In Customer Adjustments	65,100		12,369		12,369	
13	Pro Forma Adjustment		<u>1,864,587</u>		<u>12,477</u>		<u>12,477</u>
14	Pro Forma Present Rates At December 31, 2016		<u>\$24,002,943</u>				
15	Pro Forma Present Rates At December 31, 2017				<u>\$24,015,420</u>		
16	Pro Forma Present Rates At December 31, 2018						<u>\$24,027,897</u>

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Unbilled Revenue Adjustment**

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended December 31, 2016.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	(\$254,495)
3	Commercial	(123,029)
4	Industrial	(16,120)
5	Municipal	(27,025)
6	Miscellaneous (Bulk Customers)	<u>66,222</u>
7	Total Metered Sales	(\$354,447)
<b>8</b>	<b>Unmetered Sales</b>	
9	Residential	\$0
10	Commercial	0
11	Industrial	0
12	Municipal	0
13	Miscellaneous (Bulk Customers)	<u>0</u>
14	Total Unmetered Sales	\$0
15	Total Unbilled Wastewater Sales	<u>(\$354,447)</u>
16	Other Operating Revenues	\$0
17	Pro Forma Adjustment	<u><u>(\$354,447)</u></u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Customer Growth and Capacity Reservation Fee Adjustment**

In the Company's base rate filing at Docket Number R-2010-2166212, the Public Utility Commission instituted a Customer Growth and Capacity Reservation Fee (CGCR) for the customers in the Coatesville Wastewater service area. This adjustment was designed to credit all customers' bills with revenue from customers added on and after January 1, 2011 and to credit all customers' bills with the revenue requirement effect of Capacity Reservation Fees received on and after January 1, 2011. Changes to the fee were made annually, effective January 1st of the proceeding year. The CGCR in effect on January 1, 2017 will remain in effect until the effective date of new rate base rates as established in the base rate case. This adjustment removes the effect of the actual fees that were reflected in the Company's 2016 revenues.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	\$201,608
3	Commercial	44,059
4	Industrial	19,932
5	Municipal	14,542
6	Sales For Resale	202,631
7	Miscellaneous	
<b>8</b>	<b>Total Metered Sales</b>	<b>\$482,772</b>
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>
<b>16</b>	<b>Total Unbilled Water Sales</b>	<b>\$482,772</b>
17	Other Operating Revenues	\$0
<b>18</b>	<b>Pro Forma Adjustment</b>	<b>\$482,772</b>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Annualization Adjustment - New Cumberland WW**

On October 31, 2016, the Company closed on the acquisition of the wastewater utility property of the Borough of New Cumberland and began providing service to that entity's former customers. The following adjustment annualizes the revenues associated with this acquisition.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>
<b>1</b>	<b>Metered Sales</b>	
<b>2</b>	Residential	\$1,301,636
<b>3</b>	Commercial	240,681
<b>4</b>	Industrial	0
<b>5</b>	Municipal	18,047
<b>6</b>	Sales For Resale	0
<b>7</b>	Miscellaneous	0
<b>8</b>	<b>Total Metered Sales</b>	<b>\$1,560,364</b>
<b>9</b>	<b>Unmetered Sales</b>	
<b>10</b>	Residential	\$0
<b>11</b>	Commercial	0
<b>12</b>	Industrial	0
<b>13</b>	Municipal	0
<b>14</b>	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>
<b>16</b>	<b>Total Wastewater Sales</b>	<b>\$1,560,364</b>
<b>17</b>	<b>Miscellaneous Service Fees</b>	<b>\$0</b>
<b>18</b>	<b>Rents From Properties</b>	<b>0</b>
<b>19</b>	<b>Total Operating Revenues</b>	<b>\$1,560,364</b>

Witness: Jo Anne Lontz  
Reference: FR II. 2



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Annualization Adjustment - Fairview WW**

On December 22, 2015, the Company closed on the acquisition of the wastewater utility property of Fairview Township and began providing service to that entity's former customers. The Company did not bill a full month of revenue for January 2016. The following adjustment annualizes the revenues associated with this acquisition. Also, a journal entry was booked in March 2016 for December 22, 2015 through December 31, 2015 revenues. This adjustment removes the effect of the journal entry pertaining to 2015 revenues.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	\$85,164
3	Commercial	40,370
4	Industrial	0
5	Municipal	3,493
6	Sales For Resale	0
7	Miscellaneous	0
<b>8</b>	<b>Total Metered Sales</b>	<b>\$129,027</b>
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>
<b>16</b>	<b>Total Wastewater Sales</b>	<b>\$129,027</b>
17	Miscellaneous Service Fees	\$0
18	Rents From Properties	0
<b>19</b>	<b>Total Operating Revenues</b>	<b>\$129,027</b>

Witness: Jo Anne Lontz  
Reference: FR II.2

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Specific Customer Adjustments**

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2017 AMOUNT
<b>1</b>	<b>Commercial</b>		
<b>2</b>	<b>Industrial</b>		
<b>3</b>	World Color Atglen	(\$11,231)	
<b>4</b>	<b>Municipal</b>		
<b>5</b>	Capital City Airport	(64,320)	
<b>6</b>	<b>Total</b>	<u><u>(\$75,551)</u></u>	<u><u>\$0</u></u>

Witness: Jo Anne Lontz  
Reference: FR II.2

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the average change in number of customers during the twelve months ended December 31, 2016.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2016 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$65,100
2	An analysis of residential accounts indicates that		
3	various accounts were lost, added or reclassified during		
4	the test year. Revenue was adjusted by applying the		
5	average annual consumption per residential customer		
6	to the difference between the actual number of customers		
7	at December 2016 and the average number of customers		
8	between December 2015 and December 2016.		
9	<b>Commercial Metered Customers</b>	FR II.2	
10	A change to commercial revenues due to change in customers		
11	was not necessary.		
12	<b>Industrial, Municipal And Sale For Resale</b>		
13	<b>Metered Customers</b>	FR II.2	
14	Any change to these revenue classes large enough to warrant		
15	an adjustment will be shown as a specific customer adjustment.		
16	Pro Forma Adjustment		<u>\$65,100</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending December 31, 2017. Projections were based on a three year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2017 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$12,369
2	Residential revenue was adjusted by applying		
3	the average annual consumption per residential		
4	customer to the projected increase in customers		
5	for the test year 2017.		
6	<b>Residential Unmetered Customers</b>		
7	<b>Commercial Metered Customers</b>	FR II.2	
8	No change is being made to commercial customers		
9	for growth.		
10	<b>Industrial, Municipal And Sale For Resale</b>	FR II.2	
11	<b>Metered Customers</b>		
12	Those large enough to warrant an adjustment are		
13	shown as specific customer adjustments.		
14	Pro Forma Adjustment		<u>\$12,369</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Change in Revenues due to change in Number of Customers**

The following adjustment reflects the change in revenues due to the projected change in number of customers during the twelve months ending December 31, 2018. Projections were based on a three year historical growth average exclusive of acquisitions.

LINE NO.	DESCRIPTION	CALCULATION REFERENCE	PRESENT RATES 12/31/2018 REVENUE ADJUSTMENT
1	<b>Residential Metered Customers</b>	FR II.2	\$12,369
2	Residential revenue was adjusted by applying		
3	the average annual consumption per residential		
4	customer to the projected increase in customers		
5	for the test year 2018.		
6	<b>Residential Unmetered Customers</b>		
7	<b>Commercial Metered Customers</b>	FR II.2	
8	No change is being made to commercial customers		
9	for growth.		
10	<b>Industrial, Municipal And Sale For Resale</b>	FR II.2	
11	<b>Metered Customers</b>		
12	Those large enough to warrant an adjustment are		
13	shown as specific customer adjustments.		
14	Pro Forma Adjustment		<u>\$12,369</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Number of Customers Served**

The following is a list of the number of customers served at December 31, 2015 and 2016 and the estimated number of customers to be served at December 31, 2017 and 2018. Also shown are the number of customers in each class whose bills will increase, decrease or remain unchanged as a result of the rate changes proposed in this filing.

<b>LINE NO.</b>	<b>ACCT. NO.</b>	<b>DESCRIPTION</b>	<b>SERVED AT 12/31/2015</b>	<b>SERVED AT 12/31/2016</b>	<b>TO BE SERVED AT 12/31/2017</b>	<b>TO BE SERVED AT 12/31/2018</b>	<b>INCREASED BILLS</b>	<b>DECREASED BILLS</b>	<b>UNCHANGED BILLS</b>
<b>1</b>		<b>Metered</b>							
2	601.1	Residential	15,983	18,893	18,912	18,931	18,681	250	0
3	601.2	Commercial	1,004	1,285	1,285	1,285	1,252	33	0
4	601.3	Industrial	6	3	3	3	3	0	0
5	606	Municipal	64	66	66	66	66	0	0
6	607	Resale	0	0	0	0	0	0	0
7	601.4	Miscellaneous	4	4	4	4	4	0	0
<b>8</b>		<b>Metered</b>	<b>17,061</b>	<b>20,251</b>	<b>20,270</b>	<b>20,289</b>	<b>20,006</b>	<b>283</b>	<b>0</b>
<b>9</b>		<b>Unmetered</b>							
10	602.1	Residential	4,055	4,193	4,193	4,193	4,193	0	0
11	602.2	Commercial	95	63	63	63	63	0	0
12	602.3	Industrial	1	4	4	4	4	0	0
13	606	Municipal	4	5	5	5	5	0	0
14	602.4	Miscellaneous	0	0	0	0	0	0	0
<b>15</b>		<b>Unmetered</b>	<b>4,155</b>	<b>4,265</b>	<b>4,265</b>	<b>4,265</b>	<b>4,265</b>	<b>0</b>	<b>0</b>
16	604	Private Fire	0	0	0	0	0	0	0
17	605	Public Fire	0	0	0	0	0	0	0
<b>18</b>	<b>Total Customers</b>		<b>21,216</b>	<b>24,516</b>	<b>24,535</b>	<b>24,554</b>	<b>24,271</b>	<b>283</b>	<b>0</b>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Revenues**

**Penalties**

The following adjustment reflects the annualization of revenues associated with changes imposed during 2016 and projected to be imposed during 2017 and 2018. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PER BOOKS 12/31/16</b>	<b>PRESENT RATES 12/31/16</b>	<b>PRESENT RATES 12/31/17</b>	<b>PRESENT RATES 12/31/18</b>	<b>PROPOSED RATES</b>
1	Total Billed Wastewater Sales	\$21,093,812	\$23,255,524	\$23,267,893	\$23,280,262	\$30,738,811
2	% Of Penalties To Total					
3	Wastewater Sales - 3 Year Avg	0.8745%	0.8745%	0.8745%	0.8745%	0.8745%
4	Penalties	146,048	203,370	203,478	203,586	268,811
5	Less: Per Books At 12/31/2016		146,048			
6	Less: Present Rates At 12/31/2016			203,370		
7	Less: Present Rates At 12/31/2017				203,478	
8	Less: Present Rates At 12/31/2018					203,586
9	Pro Forma Adjustments		\$57,322	\$108	\$108	\$65,225

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Summary of Rate Base Adjustments**

LINE NO.	DESCRIPTION	DEPRECIATED ORIGINAL COST 12/31/16	DEPRECIATED ORIGINAL COST 12/31/17	DEPRECIATED ORIGINAL COST 12/31/18	DEPRECIATED ORIGINAL COST PROPOSED	
1	Non-Depreciable Plant	\$3,077,709	\$3,077,709	\$3,077,709	\$3,077,709	
2	Depreciable Plant	283,954,492	306,765,917	316,721,947	316,721,947	
3	Total Utility Plant In Service	287,032,201	309,843,626	319,799,656	319,799,656	
4	Deduct:					
5	Contributions In Aid Of Construction	35,750,653	36,123,276	36,495,899	36,495,899	
6	Customer Advances For Construction	371,375	413,150	454,925	454,925	
7	Excluded Property	0	0	0	0	
8	Sub-Total	36,122,028	36,536,426	36,950,824	36,950,824	
9	Net Utility Plant In Service	250,910,173	273,307,200	282,848,832	282,848,832	
10	Accumulated Depreciation	49,146,818	53,203,171	57,877,226	57,877,226	
11	Depreciated Utility Plant In Service	201,763,355	220,104,029	224,971,606	224,971,606	
12	Add:					
13	Materials And Supplies	81,503	81,503	81,503	81,503	
14	Cash Working Capital - Expenses	380,805	399,169	399,431	399,431	
15	Accrued And Prepaid Taxes	256,949	241,794	238,843	386,478	
16	Unrecovered Reserve Coatesville WWTP	92,546	42,069	0	0	
17	Prepaid Deposit - Fairview Township Nitrogen	270,833	258,333	245,833	245,833	
18	Acquistion Adjustments	411,475	2,689,140	2,396,714	2,396,714	
19	Deduct:					
20	Cash Working Capital - Int And Div	527,700	198,595	194,556	194,704	
21	Unamortized Itc (3%)	0	0	0	0	
22	Extension Deposits In Suspense	521,925	521,925	521,925	521,925	
23	Deferred Taxes	48,797,047	55,617,149	57,403,165	57,403,165	
24	Total Rate Base Elements	\$153,410,794	\$167,478,368	\$170,214,284	\$170,361,771	
25	Utility Operating Income					
26						
27	Per Books	\$6,847,787	4.4637%	4.0888%	4.0230%	4.0196%
28	Present Rates At 12/31/2016	9,091,706	5.9264%	-	-	-
29	Present Rates At 12/31/2017	8,573,004	-	5.1189%	-	-
30	Present Rates At 12/31/2018	8,478,327	-	-	4.9810%	-
29	Proposed Rates	12,794,169	-	-	-	7.5100%

Witness: John Cox



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Summary of Detailed Plant Accounts**

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT			ESTIMATED BOOK COST			ESTIMATED BOOK COST
			12/31/2016	ADDITIONS	RETIREMENTS	12/31/2017	ADDITIONS	RETIREMENTS	12/31/2018
1	352.00	Franchises & Consents	\$221,140			\$221,140			\$221,140
2	353.00	Land & Land Rights	2,856,569			2,856,569			2,856,569
3									
4		Total Intangible Plant	\$3,077,709	\$0	\$0	\$3,077,709	\$0	\$0	\$3,077,709
5									
6	354.20	Structures And Improvements - Collection	\$479,297	\$3,066,760	\$0	\$3,546,057			\$3,546,057
7	354.30	Structures And Improvements - SPP	18,169,292	108,850	26,000	18,252,142	567,896	40,000	18,780,038
8	354.40	Structures And Improvements - TDP	50,958,424			50,958,424			50,958,424
9	354.70	Structures And Improvements - General	2,130,770	5,000	400	2,135,370	230,000	400	2,364,970
10	355.00	Power Generation Equipment	4,881,041	850,000	68,000	5,663,041	850,000	68,000	6,445,041
11	360.10	Collection Sewers - Force Mains	30,666,434	2,024,391	0	32,690,825			32,690,825
12	361.10	Collection Sewers - Gravity Mains	73,305,656	11,684,940	465,682	84,524,914	3,735,612	65,682	88,194,844
13	361.20	Manholes	13,045,669	2,022,189	1,500	15,066,358	169,015	1,500	15,233,873
14	363.00	Services	15,575,966	638,000	21,201	16,192,765	640,000	21,201	16,811,564
15	364.00	Flow Measuring Devices	533,522			533,522			533,522
16	365.00	Flow Measuring Installations	20,918			20,918			20,918
17	370.00	Receiving Wells	103,532			103,532			103,532
18	371.00	Pumping Equipment	7,114,659	1,828,090	0	8,942,749	80,948	0	9,023,697
19	380.00	Treatment Equipment	52,675,840	1,079,448	56,300	53,698,988	4,135,443	216,000	57,618,431
20	381.00	Plant Sewers	6,450,917			6,450,917			6,450,917
21	382.00	Outfall Sewer Lines	674,275			674,275			674,275
22	389.10	Other Plant And Miscellaneous Equipment - Intangibles	273,150	49,000	0	322,150	56,000	0	378,150
23	390.00	Office Furniture And Equipment	124,147		3,200	120,947			120,947
24	390.20	Computers & Peripheral	75,528			75,528			75,528
25	391.00	Transportation Equipment	440,470	192,000		632,470			632,470
26	392.00	Stores Equipment	64,250			64,250			64,250
27	393.00	Tools, Shop And Garage Equipment	536,842	33,501	46,862	523,481	45,001	1,699	566,783
28	394.00	Laboratory Equipment	342,758		26,598	316,160			316,160
29	395.00	Power Operated Equipment	532,737			532,737			532,737
30	396.00	Communication Equipment	1,522,349			1,522,349			1,522,349
31	397.00	Miscellaneous Equipment	3,256,052		55,001	3,201,051		139,403	3,061,648
32									
33		Total Tangible Plant	\$283,954,492	\$23,582,169	\$770,744	\$306,765,918	\$10,509,915	\$553,885	\$316,721,948
34									
35		Total Utility Plant In Service	\$287,032,201	\$23,582,169	\$770,744	\$309,843,627	\$10,509,915	\$553,885	\$319,799,657

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Contributions in Aid of Construction (CIAC)**

The Company receives Contributions in Aid of Construction (CIAC) on an annual basis. The Commission's Order dated April 21, 1993, at Docket No. R-922428 approved the use of a three year average to calculate the future test year additions to CIAC. The following adjustment reflects the projected CIAC to be received during the twelve months ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Contributions In Aid Of Construction	\$35,750,653	\$36,123,276
<b>2</b>	Plus: Three Year Average Of Contributions	<u>372,623</u>	<u>372,623</u>
<b>3</b>	Contributions In Aid Of Construction	<u><u>(\$36,123,276)</u></u>	<u><u>(\$36,495,899)</u></u>

Witness: John Cox

Reference: FR V.16

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Customer Advances for Construction (CAC)**

The Company requires Customer Advances for Construction (CAC) for all main extensions requested by developers. New projects increase the CAC account and refunds to be made during the future test year to developers for prior year CAC decrease the CAC account. The following adjustment reflects the level of activity (advances and refunds) projected for the twelve months ended December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Customer Advances For Construction	\$371,375	\$413,150
2	Plus: Customer Advances For Construction To Be Capitalized	41,775	41,775
3	Sub-Total	413,150	454,925
4	Less: Customer Advances For Construction To Be Refunded	_____	_____
5	Customer Advances For Construction	(\$413,150)	(\$454,925)

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Materials and Supplies**

The Company's claim for materials and supplies at December 31, 2017 and December 31, 2018 is calculated on the basis of the average monthly balances in the materials and supplies account during the period December 2015 to December 2016.

LINE NO.	MONTH	DETAIL	PRESENT RATES
			12/31/2017 and 12/31/2018 AMOUNT
1	December, 2015	\$70,992	
2	January, 2016	67,562	
3	February	71,266	
4	March	73,857	
5	April	69,707	
6	May	79,166	
7	June	83,917	
8	July	89,878	
9	August	87,321	
10	September*	87,235	
11	October*	90,792	
12	November	97,011	
13	December, 2016	90,829	
14	Total	<u>\$1,059,535</u>	
15	Average		\$81,503
16	Allowance For Materials And Supplies		
17	At 12/31/2017 and 12/31/2018		<u><u>\$81,503</u></u>

\* Plant material for Sep and Oct 2016 was normalized to reflect the average of the remaining 11 months

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

Charges for wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended December 31, 2016, and as annualized under present rates for the twelve months ending December 31, 2016, 2017 and 2018. The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 12/31/2016				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$21,783,909	\$24,002,943	\$24,015,420	\$24,027,897
9	Lag Days	50.1	50.1	50.1	50.1
10	Dollar Days	\$1,091,373,841	\$1,202,547,444	\$1,203,172,542	\$1,203,797,640
11	Total Billed Revenue	\$21,783,909	\$24,002,943	\$24,015,420	\$24,027,897
12	Total Dollar Days	\$1,091,373,841	\$1,202,547,444	\$1,203,172,542	\$1,203,797,640
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)	50.1	50.1	50.1	50.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses	26.2	28.0	28.6	28.7
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues	23.9	22.1	21.5	21.4
18	<u>Working Capital Requirements</u>				
19	Annual Operating Expenses (Including Payroll Expenses)		\$6,289,298	\$6,776,575	\$6,812,775
20	Operating Expenses Per Day (Line 20 / 365 Days)		17,231	18,566	18,665
21	Cash Working Capital Required				
22	(Line 19 * Line 21)		\$380,805	\$399,169	\$399,431

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Support of Expense Days**

LINE NO.	DESCRIPTION	LAG DAYS	PER BOOKS		PRESENT RATES 12/31/2016		PRESENT RATES 12/31/2017		PRESENT RATES 12/31/2018	
			AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS
1	Labor and Payroll Taxes	12.33	\$2,047,128	\$25,241,088	\$2,047,128	\$25,241,088	\$1,901,655	\$23,447,406	\$1,961,131	\$24,180,745
2	Group Insurance	10.88	341,799	3,720,057	341,799	3,720,057	388,405	4,227,306	396,872	4,319,459
3	OPEB's and VEBA	(2.50)	153,503	(383,758)	0	0	0	0	0	0
4	Pension	(7.04)	126,879	(892,795)	0	0	0	0	0	0
5	Purchased Power	25.08	1,176,832	29,519,844	1,176,832	29,519,844	1,572,297	39,439,752	1,473,523	36,962,089
6	Purchased Water	44.87	0	0	0	0	0	0	0	0
7	Chemicals	35.51	433,875	15,406,901	433,875	15,406,901	414,103	14,704,798	423,110	15,024,636
8	Miscellaneous	47.26	1,377,692	65,113,308	1,261,683	59,630,422	1,446,568	68,368,567	1,503,630	71,065,465
9	Transportation	41.31	33,907	1,400,690	33,907	1,400,690	20,099	830,285	20,203	834,581
10	Ins Other Than Group	(71.46)	50,334	(3,596,809)	0	0	0	0	0	0
11	Service Company	12.33	0	0	0	0	0	0	0	0
12	Waste Disposal	46.23	852,248	39,398,030	852,248	39,398,030	891,622	41,218,238	892,480	41,257,901
13	Telephone	2.85	102,193	291,067	102,193	291,067	102,193	291,067	102,193	291,067
14	Rents	1.89	3,372	6,359	3,372	6,359	3,372	6,359	3,372	6,359
15	Natural Gas	35.31	36,261	1,280,322	36,261	1,280,322	36,261	1,280,322	36,261	1,280,322
16	Totals		<u>\$6,736,023</u>	<u>\$176,504,304</u>	<u>\$6,289,298</u>	<u>\$175,894,780</u>	<u>\$6,776,575</u>	<u>\$193,814,100</u>	<u>\$6,812,775</u>	<u>\$195,222,624</u>
17	Average Lag			<u>26.2</u>		<u>28.0</u>		<u>28.6</u>		<u>28.7</u>
18	Sum. Of Expense Pro Forma Present Rates & Payr		\$7,101,179		\$6,720,015		\$7,207,477		\$7,243,862	
19	Uncollectibles		290,643		356,204		356,389		356,574	
20	Amortizations		74,513		74,513		74,513		74,513	
21	Sum Of Other Expenses		<u>5,358,331</u>		<u>5,027,615</u>		<u>5,330,007</u>		<u>5,309,145</u>	
22	Miscellaneous		<u>\$1,377,692</u>		<u>\$1,261,683</u>		<u>\$1,446,568</u>		<u>\$1,503,630</u>	

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	NET LEAD/ LAG DAYS FUTURE	PRESENT RATES 12/31/2016		PRESENT RATES 12/31/2017		PRESENT RATES 12/31/2018		PROPOSED RATES	
			TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT
1	General Assessment	212.5	119,733	69,708	119,796	69,744	119,860	69,782	158,260	92,138
2	Public Utility Realty Tax	60.4	0	0	0	0	0	0	0	0
3	Local Property Tax	114.7	219,902	69,103	263,033	82,657	265,545	83,447	265,545	83,447
4	State Income Tax	20.8	575,396	32,790	301,102	17,159	264,059	15,048	1,000,275	57,002
5	Federal Income Tax	13.1	2,378,019	<u>85,348</u>	2,012,617	<u>72,234</u>	1,966,141	<u>70,566</u>	4,287,803	<u>153,891</u>
6	Totals			<u>\$256,949</u>		<u>\$241,794</u>		<u>\$238,843</u>		<u>\$386,478</u>

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Calculation of Lag Days for Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	TAX PERIOD		PAYMENTS				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
		BEGINNING	ENDING	2016 TAX					
1	General Assessment	7/1/15	6/30/16	6/23/15	10/20/15				
2	Percent Of Payment			82.00%	18.00%				1.0
3	Lag Days			(155.8)	(12.8)			(162.4)	212.5
4	Public Utility Realty Tax	1/1/16	12/31/16	5/1/16	9/15/17				
5	Percent Of Payment			90.00%	10.00%				1.0
6	Lag Days			(54.5)	44.2			(10.3)	60.4
7	Local Property Tax	1/1/16	12/31/16	Lag calculated using expense lag method					
8	Payment								
9	Lag Days							(64.6)	114.7
10	State Income Tax	1/1/16	12/31/16	3/15/16	6/15/16	9/15/16	12/15/16		
11	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
12	Lag Days			(27.1)	(4.1)	18.9	41.6	29.3	20.8
13	Federal Income Tax	1/1/16	12/31/16	4/15/16	6/15/16	9/15/16	12/15/16		
14	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
15	Lag Days			(19.4)	(4.1)	18.9	41.6	37.0	13.1

Witness: John Cox



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18	PROPOSED AMOUNT
1	<b>Average Lag Calculation</b>							
2	Future Revenue Lag Days	50.1	50.1	50.1				
3	Less: Interest Payments Lag Days	91.3	15.2	45.6				
4	Average Lag Between The Payment	(41.2)	34.9	4.5				
5	Of Interest And The Receipt							
6	Of Revenues							
7	<b>Long Term Debt</b>							
8	Working Capital Requirements							
9	Pro Forma Annual Interest Expense	\$2,756,209		\$3,172,744		\$3,149,134		\$3,151,863
10	Interest Expense Per Day							
11	(Line 9 / 365 Days)	7,551		8,692		8,628		8,635
12	Cash Working Capital Required							
13	(Line 4 Col.1 X Line 11)		(311,101)		(358,110)		(355,474)	(355,762)
14	<b>Long Term Debt - Wastewater Specific</b>							
15	Working Capital Requirements							
16	Pro Forma Annual Interest Expense	1,921,930		1,665,296		1,680,541		1,681,997
17	Interest Expense Per Day							
18	(Line 16 / 365 Days)	5,266		4,562		4,604		4,608
19	Cash Working Capital Required							
20	(Line 4 Col.2 X Line 18)		(216,959)		159,214		160,680	160,819
21	<b>Preferred Dividends</b>							
22	Working Capital Requirements							
23	Pro Forma Annual Dividend Expense	29,093		24,571		19,163		19,179
24	Dividend Expense Per Day							
25	(Line 23 / 365 Days)	80		67		53		53
26	Cash Working Capital Required							
27	(Line 4 Col.3 X Line 25)		<u>360</u>		<u>302</u>		<u>239</u>	<u>239</u>
28	Total Cash Working Capital Required							
29	(Line 13 + Line 20 + Line 27)		<u>(\$527,700)</u>		<u>(\$198,595)</u>		<u>(\$194,556)</u>	<u>(\$194,704)</u>

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Unrecovered Original Cost Of Existing Wastewater Treatment Plant**

In accordance with Commission order at Docket No. R-2008-2032689 adopted November 13, 2008, the Company was authorized to recover the unrecovered original cost of the existing Coatesville wastewater treatment plant property over a period of 10 years, beginning on the effective date of the rates established in that case. The following adjustment reflects the pro forma unrecovered original cost at 12/31/17 (the unrecovered original cost will be fully amortized by 12/31/18).

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Original Amount Established At R-2008-2032689	\$504,775		
2	Amortization			
3	2008	(8,413)		
4	2009	(50,477)		
5	2010	(50,477)		
6	2011	(50,477)		
7	2012	(50,477)		
8	2013	(50,477)		
9	2014	(50,477)		
10	2015	(50,477)		
11	2016	(50,477)		
11	Unrecovered Reserve At 12/31/16	\$92,546	\$92,546	\$42,069
12	Amortization		(50,477)	(42,069)
13	Unrecovered Reserve	\$92,546	\$42,069	\$0

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Fairview Township Nitrogen Credits Deposit**

Fairview Township Wastewater Operations maintains an agreement with the Red Barn Trading Company for the purchase of 20,000 pounds total nitrogen credits per year for 15 years (i.e., 2010 to 2024) to comply with the Chesapeake Bay requirements contained in Fairview Township's North Wastewater Treatment Plant's NPDES Permit No. PA0081868. The Commission is aware of the Company's requirement to maintain this agreement and previously reviewed this agreement when it approved the Company's application to acquire the Fairview Township system at Docket No. A-2015-2486532; Order Adopted and Entered on December 17, 2015.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Present Rates	\$270,833	\$270,833	\$258,333
<b>2</b>	Less: One Year Amortization	<u>                    </u>	<u>          12,500          </u>	<u>          12,500          </u>
<b>3</b>	Effect To Rate Base Elements	<u><u>          \$270,833          </u></u>	<u><u>          \$258,333          </u></u>	<u><u>          \$245,833          </u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Miscellaneous Acquisitions**

The following adjustment reflects the Company's request for recognition of the positive UPAA associated with its acquisitions of the wastewater assets of Clean Treatment Sewage Company which was approved by the Commission at Docket No. R203-2355276, The Company is also requesting recognition of the positive UPAA associated with its acquisitions of Koppel Borough Wastewater, Hamiltonban Municipal Authority, Shipperville Borough and New Cumberland Borough.

LINE NO.	DESCRIPTION		PRESENT RATES		PRESENT RATES		PRESENT RATES
			12/31/2016	2017	12/31/2017	2018	12/31/2018
			AMOUNT	Amortizations	AMOUNT	Amortizations	AMOUNT
1	Clean Treatment Sewage Company	Approved Docket No. R-2013-2355276	\$411,475	\$58,782	\$352,693	\$58,782	\$293,911
2	Koppel Borough Wastewater	Seeking Approval			48,100	4,810	43,290
3	Hamiltonban Township Municipal Authority	Seeking Approval			182,213	18,221	163,992
4	Shipperville Borough	Seeking Approval			221,383	22,138	199,245
5	New Cumberland Borough UPAA	Seeking Approval			1,734,721	173,472	1,561,249
7	New Cumberland Borough Acquisition Costs	Seeking Approval			150,030	15,003	135,027
8	Effect to Rate Base Element		<u>\$411,475</u>	<u>\$58,782</u>	<u>\$2,689,140</u>	<u>\$292,426</u>	<u>\$2,396,714</u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Extension Deposits in Suspense**

Under its wastewater service tariff, the Company imposes a capacity reservation fee on applicants for wastewater service that do meet the criteria of a Bona Fide Service Applicant under Section 65.1 of the Commission’s regulations. Those capacity reservation fees are not subject to refund and are recorded to the CIAC account for ratemaking purposes. PAWC’s acquisition of the wastewater assets of Fairview County, including reservation of capacity agreements with several developers, was approved by the Commission’s Order entered December 17, 2015 at Docket No. A-2015-2486532. The fees paid by developers under those reservation of capacity agreements are subject to refund if the allocated capacity is not used by a date certain. PAWC recorded the capacity reservation fees collected by Fairview Township at the time of closing to the Company’s deposit in suspense account until such fees are refunded to the developer under the terms of the reservation of capacity agreements or charged to the CIAC account.

LINE NO.	MONTH	DETAIL	PRESENT RATES	
			12/31/2017 and 12/31/2018	
			AMOUNT	
1	January, 2016	\$521,925		
2	February	521,925		
3	March	521,925		
4	April	521,925		
5	May	521,925		
6	June	521,925		
7	July	521,925		
8	August	521,925		
9	September	521,925		
10	October	521,925		
11	November	521,925		
12	December, 2016	<u>521,925</u>		
13	Total	\$6,263,100		
14	Average (12 Months)			\$521,925
15	Effect On Rate Base Elements			<u><u>(\$521,925)</u></u>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Rate Base Elements**

**Calculation of Deferred Income Taxes**

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	VINTAGE YEARS	TAX BASE PROPERTY	ACCELERATED TAX DEPRECIATION	STRAIGHT-LINE REMAINING LIFE	EXCESS DEPRECIATION		DEFERRED FEDERAL TAXES
	<u>2017</u>						
1	1/1981 - 12/2017	\$213,496,860	\$15,994,106	\$5,197,087	\$10,797,019		\$3,778,957
2							
3							<u>3,778,957</u>
						Combined State & Federal Rate	
4	Plus: Capitalized Repairs Deduction 2017				\$7,329,826	41.49%	3,041,145
5	Balance Of Deferred Income Taxes At 12/31/16						<u>(48,797,047)</u>
6	Balance Of Deferred Income Taxes At 12/31/17						<u><u>(\$55,617,149)</u></u>
	<u>2018</u>						
7	1/1981 - 12/2018	\$216,668,847	\$10,229,024	\$5,355,670	\$4,873,354	\$1,705,674	
8							
							<u>\$1,705,674</u>
						Combined State & Federal Rate	
9	Plus: Capitalized Repairs Deduction 2018			\$5,181,493		41.49%	\$2,149,801
10	Balance Of Deferred Income Taxes At 12/31/17						<u>(55,617,149)</u>
11	Balance Of Deferred Income Taxes At 12/31/18						<u><u>(\$57,403,165)</u></u>

Witness: John Cox  
Reference: FR IV.4

Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
1		<b>Source Of Supply Expenses</b>				
2		-Operations-				
3	601.1	Salary And Wages	\$0	\$0	\$0	\$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	641.1	Rental Of Building	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22						
23		Total Source Of Supply Expenses	\$0	\$0	\$0	\$0
24						
25		<b>Water Treatment</b>				
26		-Operation-				
27	601.3	Salary And Wages	\$1,116,836	\$1,116,836	\$1,034,916	\$1,067,527
28	601.4	Salary And Wages	221,577	221,577	205,324	211,794
29	604.3	Employee Pension And Benefits	0	0	0	0
30	615.3	Purchased Power	991,113	991,113	1,342,607	1,254,815
31	618.3	Chemicals	433,875	433,875	414,103	423,110
32	620.3	Materials And Supplies	95,893	95,893	92,798	92,798
33	631.3	Contract Services - Engineering	0	0	0	0
34	633.3	Contract Services - Legal	0	0	0	0
35	634.3	Contract Services - Management	0	0	0	0
36	635.3	Contract Services - Test	117,707	117,707	152,159	152,159
37	636.3	Contract Services	191,940	191,940	189,501	189,501
38	641.3	Rental Of Building	0	0	0	0
39	642.3	Rental Of Equipment	1,373	1,373	1,373	1,373
40	650.3	Transportation	33	33	33	33
41		-Maintenance-				
42	620.4	Materials And Supplies	34,646	34,646	34,646	34,646
43	631.4	Contract Services - Engineering	0	0	0	0
44	636.4	Contract Services	122,826	122,826	122,826	122,826
45	650.4	Transportation	258	258	258	258
46	675.4	Miscellaneous Maintenance Expense	22,200	22,200	72,032	72,032
47		-Miscellaneous-				
48	675.3	Miscellaneous Operating Expense	1,111,851	1,111,851	1,149,643	1,150,501
49						
50		Total Water Treatment Expense	\$4,462,128	\$4,462,128	\$4,812,219	\$4,773,373
51						
52		<b>Transmission And Distribution</b>				
53		-Operation-				
54	601.5	Salary And Wages	\$56,446	\$56,446	\$52,306	\$53,954
55	601.6	Salary And Wages	246,720	246,720	228,623	235,827
56	604.5	Employee Pension And Benefits	0	0	0	0
57	615.5	Purchased Power	78,728	78,728	122,699	111,716
58	620.5	Materials And Supplies	11,514	11,514	11,514	11,514
59	631.5	Contract Services - Engineering	0	0	0	0
60	636.5	Contract Services	21,347	21,347	21,347	21,347
61	641.5	Rental Of Building	0	0	0	0
62	642.5	Rental Of Equipment	1,417	1,417	1,417	1,417
63	650.5	Transportation	0	0	0	0

Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
1		-Maintenance-				
2	620.6	Materials And Supplies	\$31,457	\$31,457	\$38,163	\$45,511
3	631.6	Contract Services - Engineering	0	0	0	0
4	636.6	Contract Services	94,718	94,718	94,718	94,718
5	650.6	Transportation	0	0	0	0
6	675.6	Miscellaneous Operating Expense	26,347	26,347	59,570	59,570
7		-Miscellaneous-				
8	675.5	Miscellaneous Operating Expense	91,176	91,176	91,176	91,176
9						
10		Total Transmission And Distribution	\$659,870	\$659,870	\$721,533	\$726,750
11						
12		<b>Customer Accounting</b>				
13		-Operation-				
14	601.7	Salary And Wages	\$581	\$581	\$538	\$555
15	604.7	Employee Pension And Benefits	0	0	0	0
16	615.7	Purchased Power	0	0	0	0
17	620.7	Materials And Supplies	0	0	0	0
18	631.7	Contract Services - Engineering	0	0	0	0
19	633.7	Contract Services - Legal	0	0	0	0
20	634.7	Contract Services - Management	0	0	0	0
21	636.7	Contract Services	0	0	0	0
22	642.7	Rental Of Equipment	0	0	0	0
23	650.7	Transportation	0	0	0	0
24	657.7	Insurance	0	0	0	0
25	670.7	Bad Debt	290,643	356,204	356,389	356,574
26		-Miscellaneous-				
27	675.7	Miscellaneous Expense	9,795	9,795	7,103	7,103
28						
29		Total Customer Accounting	\$301,019	\$366,580	\$364,030	\$364,232
30						
31						
32		<b>Administrative And General</b>				
33	601.8	Salary And Wages	\$249,868	\$249,868	\$231,540	\$238,836
34	603.8	Salary Of Officers	112	112	104	107
35	604.8	Employee Pension And Benefits	740,281	459,899	502,013	513,991
36	615.8	Purchased Power	106,991	106,991	106,991	106,991
37	620.8	Materials And Supplies	14,995	14,995	14,995	14,995
38	631.8	Contract Services	0	0	0	0
39	632.8	Contract Services - Accounting	106	106	106	106
40	633.8	Contract Services - Legal	0	0	0	0
41	634.8	Contract Services - Management	0	0	0	0
42	635.8	Contract Services - Test	0	0	0	0
43	636.8	Contract Services	4,758	4,758	4,758	4,758
44	641.8	Rental Of Building	0	0	0	0
45	642.8	Rental Of Equipment	582	582	582	582
46	650.8	Transportation	33,617	33,617	34,142	34,246
47	656.8	Insurance - Vehicles	0	0	0	0
48	657.8	Insurance	0	0	0	0
49	658.8	Workers Compensation	50,334	0	0	0
50	659.8	Insurance	0	0	0	0
51	660.8	Advertising	0	0	0	0
52	666.8	Amortization Of Rate Case	74,513	0	0	0
53	667.8	Regulatory Commission	0	0	0	0
54		-Miscellaneous-				
55	675.8	Miscellaneous Expense	247,016	205,520	266,159	312,363
56						
57		Total Administrative And General	\$1,523,173	\$1,076,448	\$1,161,390	\$1,226,975
58						
59		Total Operating Expenses	\$6,946,190	\$6,565,026	\$7,059,172	\$7,091,330



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Summary of Operating Expense Adjustments**

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES	
		12/31/16 DETAIL	12/31/16 AMOUNT	12/31/17 DETAIL	12/31/17 AMOUNT	12/31/18 DETAIL	12/31/18 AMOUNT
1	Per Books		\$6,946,190				
2	Present Rates At 12/31/2016				\$6,565,026		
3	Present Rates At 12/31/2017						\$7,059,172
4	Compensation			(\$138,789)		\$55,249	
5	Group Insurance			46,606		8,467	
6	Other Post Employment Benefits & VEBA	(153,503)					
7	Pension	(126,879)					
8	Purchased Power			395,465		(98,774)	
9	Waste Disposal			39,374		858	
10	Chemicals			(19,772)		9,007	
11	Transportation Expense			(13,808)		104	
12	Insurance Other Than Group	(50,334)					
13	Regulatory Expense (Rate Case Expense)	(74,513)					
14	Inflation			45,502		49,861	
15	401K & Defined Contribution Plan			(4,492)		3,511	
16	Miscellaneous Adjustments	(41,496)		143,875		3,690	
17	Uncollectibles	<u>65,561</u>		<u>185</u>		<u>185</u>	
18	Pro Forma Adjustments		<u>(381,164)</u>		<u>494,146</u>		<u>32,158</u>
19	Present Rates At 12/31/2016		<u>\$6,565,026</u>				
20	Present Rates At 12/31/2017				<u>\$7,059,172</u>		
21	Present Rates At 12/31/2018						<u>\$7,091,330</u>

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Compensation**

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future annualization was developed by applying pay rates and associated incentive pay that will become effective by December 31, 2017 and December 31, 2018 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Salary and Wages	\$1,840,672	\$1,898,429
2	Annualized Performance Plan	80,176	82,946
3	Less: 8.72% Capitalized portion not charged to operating expense	<u>167,498</u>	<u>172,776</u>
4	Sub-Total	1,753,350	1,808,599
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 12/31/16	<u>1,892,139</u>	
7	Less: Amount Charged To Operating Expense		
8	During The Twelve Months Ended 12/31/17		<u>1,753,350</u>
9	Pro Forma Adjustment	<u><u>(\$138,789)</u></u>	<u><u>\$55,249</u></u>
	601.3 Salary and Wages - Water Treatment	(\$81,920)	\$32,611
	601.4 Salary and Wages - Water Treatment	(16,253)	6,470
	601.5 Salary and Wages - Transmission & Distribution	(4,140)	1,648
	601.6 Salary and Wages - Transmission & Distribution	(18,097)	7,204
	601.7 Salary and Wages - Customer Accounting	(43)	17
	601.8 Salary and Wages - Administrative and General	(18,328)	7,296
	603.8 Salary and Wages - Salary of Officers	(8)	3

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Group Insurance**

The adjustment of the group insurance cost is based on the January 2017 premiums annualized for the future test year number of employees less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected test year was developed by adjusting the annualized 2017 amount by an inflation factor of 2.18%.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Group Insurance Cost	\$425,509	\$434,785
2	Less: 8.72% Not Charged To Operating Expense	37,104	37,913
3	Sub-Total	388,405	396,872
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	341,799	
6	Less: Amount Charged To Operating Expense		
7	During The Twelve Months Ended 12/31/17		388,405
8	Pro Forma Adjustment	\$46,606	\$8,467
	604.8 A&G Employees Pension And Benefits	\$46,606	\$8,467

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Purchased Power**

This adjustment reflects the application of rates for purchased power to be in effect as of December 2016 to anticipated billing units for the future and fully projected rate years. Accounts were adjusted for any known rate changes in either the future or fully projected rate years and were also adjusted to reflect 12 monthly bills.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT
1	Annualized Power Cost	\$1,465,306	\$1,366,532
2	Less: Amount Charged To Operating Expense	1,069,841	1,465,306
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	\$395,465	(\$98,774)
	615.3 Purchased Power - Water Treatment	\$351,494	(\$87,792)
	615.5 Purchased Power - Transmission and Distribution	43,971	(10,983)

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Waste Disposal**

The wastewater waste disposal adjustment is the result of annualized costs for the New Cumberland Wastewater acquisition that occurred in late 2016. The annualization of waste disposal costs was based on the application of contract prices in effect at January 1, 2017 to anticipated 2017 usage. The present rates December 31, 2017 amount was increased by 2.18% (Blue Chip GDP Price Index for 2018) to project 2018 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Waste Disposal Costs	\$39,374	\$40,233
2	Less: Amount Charged To Operating Expense	0	39,374
3	During The Twelve Months Ended 12/31/16 and 12/31/17	<hr/>	<hr/>
4	Pro Forma Adjustment	<hr/> 39,374	<hr/> 858
	675.3 Waste Disposal	<hr/> <hr/> \$39,374	<hr/> <hr/> \$858

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Chemicals**

The annualization of chemical costs was based on the application of contract prices in effect at January 1, 2017 to anticipated 2017 usage. The present rates December 31, 2017 amount was increased by 2.18% (Blue Chip GDP Price Index for 2018) to project 2018 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Chemical Costs	\$414,103	\$423,110
2	Less: Amount Charged To Operating Expense	433,875	414,103
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	<u>(\$19,772)</u>	<u>\$9,007</u>
	618.3 Chemicals - Water Treatment	<u>(\$19,772)</u>	<u>\$9,007</u>

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Transportation Expense**

The following adjustment reflects the annualization of transportation expense for the years ended December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Leased Vehicles Expense	\$22,019	\$22,133
2	Less: 8.72% Not Charged To Operating Expense	1,920	1,930
3	Sub-Total	20,099	20,203
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	33,907	
6	Less: Present Rates At 12/31/17		20,099
7	Pro Forma Adjustment	(\$13,808)	\$104
	650.8 A & G - Miscellaneous General Expense	(\$13,808)	\$104

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Inflation**

The Company has proposed various pro forma adjustments for specific expense items. The remaining expense items are anticipated to continue to rise due to inflationary increases. The following adjustment captures the estimated increases due to inflation.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Total O & M Expenses Per Books	\$6,946,189	\$6,946,189
2	Less: Adjusted Expenses	4,699,210	4,699,210
3	2017 Expenses Subject To Inflation	2,246,979	2,246,979
4	2017 Inflation		45,501
5	2018 Expenses Subject To Inflation		2,292,480
6	Inflation Factor	2.03%	2.18%
7	Pro Forma Adjustment	\$45,501	\$49,861
	620.6 Materials And Supplies	\$6,706	\$7,348
	675.7 Miscellaneous Expense	0	0
	675.8 Miscellaneous Expense	38,796	42,513

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense**

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized 401K - Company Match	\$43,542	\$44,970
2	Annualized DCP	76,468	78,820
3	Less: 8.72% Not Charged To Operating Expense	10,465	10,794
4	Sub-Total	<u>109,545</u>	<u>112,996</u>
5	Annualized ESPP	1,732	1,792
6	Less: Amount Charged To Operating Expense	115,769	111,277
7	Pro Forma Adjustment	<u><u>(\$4,492)</u></u>	<u><u>\$3,511</u></u>
	604.8 Employee Pension And Benefits AG	(\$4,492)	\$3,511

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Miscellaneous Expense Adjustment**

The following adjustment reflects miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	<u>Additions:</u>			
2	New Cumberland WW Adjustments		\$140,288	
3	<u>Deductions:</u>			
4	Pension	(\$126,879)		
5	OPEB & VEBA	(153,503)		
6	Insurance Other than Group	(50,334)		
7	Regulatory Expense (Rate Case Expense)	(74,513)		
8	Fines	(500)		
9	Red Barn Adjustment	(40,996)	3,587	\$3,690
10	Pro Forma Adjustment	<u>(\$446,725)</u>	<u>\$143,875</u>	<u>\$3,690</u>
	620.3 M&S Oper WT		(\$3,095)	
	635.3 Cont Serv Testing Op		34,452	
	636.3 Cont Serv Other Operating		(2,439)	
	675.3 Misc Exp Oper WT		(1,582)	
	675.4 Misc Exp Maint WT		49,832	
	675.6 Misc Exp Maint TD		33,223	
	604.8 A&G Employee Pension And Benefits	(\$280,382)		
	650.8 Transportation AG		14,333	
	658.8 Insurance Workers Compensation	(50,334)		
	666.8 Regulatory Comission Expense	(74,513)		
	675.7 Misc Exp CA		(2,692)	
	675.8 Misc Expense Admin & General	(41,496)	21,843	\$3,690

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Calculation of Uncollectible Accounts Expenses**

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES	PRESENT RATES	PRESENT RATES	PROPOSED
			12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	RATES AMOUNT
1	Total Sales	\$21,783,909	\$24,002,943	\$24,015,420	\$24,027,897	\$31,551,670
2	3 Year Average	1.4840%	1.4840%	1.4840%	1.4840%	1.4840%
3	Annualized Uncollectible Expense		\$356,204	\$356,389	\$356,574	\$468,227
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 12-31-16		290,643			
6	Less: Present Rates 12/31/2016			356,204		
7	Less: Present Rates 12/31/2017				356,389	
8	Less: Present Rates 12/31/2018					356,574
9	Pro Forma Adjustment		\$65,561	\$185	\$185	\$111,653
<b>670.7</b>	<b>Customer Accounting And Collecting - Bad Debt</b>		\$65,561	\$185	\$185	\$111,653

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Depreciation**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Annualized Depreciation	\$4,847,694	\$5,245,965	\$5,397,677
<b>2</b>	Book Depreciation	<u>5,797,985</u>	<u>4,847,694</u>	<u>5,245,965</u>
<b>3</b>	Pro Forma Adjustment	<u><u>(\$950,291)</u></u>	<u><u>\$398,271</u></u>	<u><u>\$151,712</u></u>
<b>4</b>	503 Depreciation	(\$950,291)	\$398,271	\$151,712

Witness: John Cox, John Spanos

Reference: Exhibit No. 3-C, Exhibits No. 11

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Operating Expenses**

**Amortization Expense**

This adjustment is being made to reflect the Company's claim for amortizations.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNT</b>
1	Clean Treatment Sewage Company	\$58,782
2	Koppel Borough Wastewater	4,810
3	Hamiltonban Township Municipal Authority	18,221
4	Shipperville Borough	22,138
5	New Cumberland Borough UPAA	173,472
6	New Cumberland Borough Acquisition Costs	15,003
7	Proforma Expense	<hr/> 292,426
8	Less: Per Books	50,478
9	Pro Forma Adjustment	<hr/> <hr/> <b>\$241,948</b>

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Pennsylvania Property Tax**

The following adjustment reflects the projected property tax expense for the twelve months ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Property Subject to Tax	\$66,311,204	\$79,322,363	\$80,079,859
<b>2</b>	Property Tax UPIS	\$219,902		
<b>3</b>	Total	<u>\$219,902</u>		
<b>4</b>	Rate (Line 3 / Line 1)	\$0.003316	\$0.003316	\$0.003316
<b>5</b>	Projected property tax expense (Line 1 x Line 4)		<u>\$263,033</u>	<u>\$265,545</u>
<b>6</b>	Less: Amount Charged To Operating Expense			263,033
<b>7</b>	During The 12 Months Ended 12/31/16		219,902	
<b>8</b>	Pro Forma Adjustment		<u>\$43,131</u>	<u>\$2,512</u>
	408.2 Taxes, Other Than Income - Property		\$43,131	\$2,512

Witness: John Cox

Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Payroll Taxes**

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Payroll Taxes (Salary And Hourly)	\$156,339	\$160,757
2	Plus: Payroll Taxes - APP/LTPP	6,134	6,346
3	Less: 8.72% Not Charged To Operating Expense	14,168	14,571
4	Sub-Total	148,305	152,532
5	Less: Amount Charged To Operating Expense	154,989	148,305
6	Pro Forma Adjustment	(\$6,684)	\$4,227
	408.12 - Taxes - Payroll	(\$6,684)	\$4,227

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Calculation of General Assessment by the Pennsylvania Public Utility  
Commission, Consumer Advocate and Small Business Advocate Fees**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
<b>1</b>	Total wastewater Sales	\$23,255,524	\$23,267,893	\$23,280,262	\$30,738,811
<b>2</b>	Estimated General Assessment Fee				
<b>3</b>	Public Utility Commission At 0.004398092304	102,280	102,334	102,389	135,192
<b>4</b>	Consumer Advocate Fee At 0.000671478022	15,616	15,624	15,632	20,640
<b>5</b>	Small Business Advocate Fee At 0.000078998984	1,837	1,838	1,839	2,428
<b>6</b>	Subtotal	119,733	119,796	119,860	158,260
<b>7</b>	Less: Amount Charged To Operating Expenses During				
<b>8</b>	The Twelve Months Ended 12/31/2016	85,068			
<b>9</b>	Less: Pro Forma Under Present Rates At 12/31/2016		119,733		-
<b>10</b>	Less: Pro Forma Under Present Rates At 12/31/2017			119,796	
<b>11</b>	Less: Pro Forma Under Present Rates At 12/31/2018				119,860
<b>12</b>	Pro Forma Adjustment	\$34,665	\$63	\$64	\$38,400
<b>507.1</b>	507.1 Taxes Other Than Income				\$73,192

Witness: John Cox



**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Pro Forma State And Federal Income Taxes Under Present And Proposed Rates**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
1	State Income Tax Per Computation				
2	Shown On Following Page	\$575,396	\$301,102	\$264,059	\$1,000,275
3	Less: State Income Tax Per Book				
4	Computation Shown On Following Page	354,509			
5	Less: Present Rates 12/31/2016		575,396		
6	Less: Present Rates 12/31/2017			301,102	-
7	Less: Present Rates 12/31/2018				264,059
8	Pro Forma Adjustment	\$220,887	(\$274,294)	(\$37,043)	\$736,216
9	Federal Income Tax Per Computation				
10	Shown On Following Page	\$2,378,019	\$2,012,617	\$1,966,141	\$4,287,803
11	Less: Federal Income Tax Per Book				
12	Computation Shown On Following Page	1,681,449			
13	Less: Present Rates 12/31/2016		2,378,019		
14	Less: Present Rates 12/31/2017			2,012,617	
15	Less: Present Rates 12/31/2018				1,966,141
16	Pro Forma Adjustment	\$696,570	(\$365,402)	(\$46,476)	\$2,321,662

Witness: John Cox

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Calculation Of State And Federal Income Taxes**

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES	PRESENT RATES	PRESENT RATES	PROPOSED AMOUNT
			12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	
1	Utility Operating Income Before Taxes	\$8,883,745	\$12,045,121	\$10,886,723	\$10,708,527	\$18,082,247
2	Less: Interest Expense	4,678,139	4,678,139	4,838,040	4,829,675	4,833,860
3	Taxable Operating Income	4,205,606	7,366,982	6,048,683	5,878,852	13,248,387
4	Add: Premature Property Losses / Amortizations	50,478	50,478	292,426	292,426	292,426
5	Depr - Straight Line-Remaining Life	5,797,984	4,847,694	5,245,965	5,397,677	5,397,677
6	Taxable Meals & Entertainment	2,754	2,754	2,754	2,754	2,754
7	Total	5,851,216	4,900,926	5,541,145	5,692,857	5,692,857
	Deduct:					
8	Tax Depreciation:					
9	ADR On Pre 1981 Assets	0	0	0	0	0
10	ACRS On Post 1980 Assets	0	0		0	0
11	MACRS On Post 1986 Assets -State	6,442,963	6,442,963	8,526,916	8,886,469	8,886,469
12	Cost Of Removal	65,222	65,222	48,878	42,007	42,007
13	Total	6,508,185	6,508,185	8,575,794	8,928,476	8,928,476
14	State Taxable Income	3,548,637	5,759,723	3,014,033	2,643,232	10,012,768
15	State Income Tax At:					
16	Historic, Future And Fully Projected At 9.99%	354,509	575,396	301,102	264,059	1,000,275
17	Taxable Income After State Income Tax	3,194,128	5,184,327	2,712,931	2,379,173	9,012,493
18	Add: Cost Of Removal Non Adr Property	0	0	0	0	0
19	ACRS On Post 1980 Assets	0	0	0	0	0
20	MACRS On Post 1986 Assets - State	6,442,963	6,442,963	8,526,916	8,886,469	8,886,469
21	Deduct: SLRL On Post 1980 Assets & Amortization	4,832,950	4,832,950	5,489,513	5,648,096	5,648,096
22	Income Subject To Federal Income Tax	4,804,141	6,794,340	5,750,334	5,617,546	12,250,866
23	Federal Income Tax @ 35%	1,681,449	2,378,019	2,012,617	1,966,141	4,287,803
24	Consolidated Tax Savings Adjustment		0	0	0	0
25	Federal Tax Liability	\$1,681,449	\$2,378,019	\$2,012,617	\$1,966,141	\$4,287,803
	Witness: John Cox					

**Pennsylvania-American Water Company - Wastewater Operations (excluding Scranton Wastewater)**

**Notes to Statement Of Income**

**Pro Forma Interest Expense Under Present and Proposed Rates**

LINE NO.	DESCRIPTION	PRESENT RATES			PROPOSED AMOUNT
		12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	\$2,756,209	\$3,172,744	\$3,149,134	\$3,151,863
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	2,756,209			
5	Less: Present Rates At 12/31/2016		2,756,209		
6	Less: Present Rates At 12/31/2017			3,172,744	
7	Less: Present Rates At 12/31/2018				3,149,134
8	Pro Forma Adjustment	\$0	\$416,535	(\$23,610)	\$2,729
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	\$1,921,930	\$1,665,296	\$1,680,541	\$1,681,997
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	1,921,930			
13	Less: Present Rates At 12/31/2016		1,921,930		
14	Less: Present Rates At 12/31/2017			1,665,296	
15	Less: Present Rates At 12/31/2018				1,680,541
16	Pro Forma Adjustment	\$0	(\$256,634)	\$15,245	\$1,456

Witness: Ann Bulkley

**Pennsylvania-American Water Company - Wastewater Operations**

**Notes to Statement Of Income**

**Application of Income Deductions**

LINE NO.	DESCRIPTION	PRESENT RATES AT DECEMBER 31, 2016			PRESENT RATES AT DECEMBER 31, 2017			PRESENT RATES AT DECEMBER 31, 2018		
		AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE
<b>1</b>	<b>Capital Structure</b>									
2	Long Term Debt	\$79,380,599	31.30%	5.74%	\$111,910,063	34.76%	5.45%	\$113,586,625	35.24%	5.25%
3	Long Term Debt - WW Spec	68,480,841	27.00%	4.64%	70,693,092	21.95%	4.53%	69,324,555	21.51%	4.59%
4	Total Debt	147,861,440	58.30%		182,603,155	56.71%		182,911,180	56.75%	
5	Preferred Stock	555,368	0.22%	8.62%	552,890	0.17%	8.63%	430,157	0.13%	8.66%
6	Common Equity	105,186,698	41.48%		138,850,910	43.12%		139,016,467	43.12%	
7	Totals	<u>\$253,603,506</u>	<u>100.00%</u>		<u>\$322,006,955</u>	<u>100.00%</u>		<u>\$322,357,804</u>	<u>100.00%</u>	
					PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT	PROPOSED AMOUNT		
<b>8</b>	<b>Application Of Long Term Debt Interest:</b>									
9	Original Cost Rate Base				\$153,410,794	\$167,478,368	\$170,214,284	\$170,361,771		
10	Debt Percentage (From Above)				31.30%	34.76%	35.24%	35.24%		
11	Debt Portion Of Rate Base				48,017,579	58,215,481	59,983,514	60,035,488		
12	Interest Cost (From Above)				5.74%	5.45%	5.25%	5.25%		
13	Pro Forma Long Term Interest Deduction				\$2,756,209	\$3,172,744	\$3,149,134	\$3,151,863		
<b>14</b>	<b>Application Of Wastewater Specific Long Term Debt Interest:</b>									
15	Original Cost Rate Base				\$153,410,794	\$167,478,368	\$170,214,284	\$170,361,771		
16	Debt Percentage (From Above)				27.00%	21.95%	21.51%	21.51%		
17	Debt Portion Of Rate Base				41,420,914	36,761,502	36,613,092	36,644,817		
18	Interest Cost (From Above)				4.64%	4.53%	4.59%	4.59%		
19	Pro Forma Wastewater Specific Long Term Interest Deduction				\$1,921,930	\$1,665,296	\$1,680,541	\$1,681,997		

Witness: Ann Bulkley

Pennsylvania-American Water Company - Scranton Wastewater Operations

Table of Contents

Page No.	Description
1	<b>Income Statement</b>
	<b>Operating Revenues</b>
2	Revenues by Tariff Subdivision
3	Summary of Adjustments
4	Unbilled Adjustment
5	Annualization Of Acquired Systems
6	Low Income Discount - Scranton WW
7	Number Of Customers Served
8	Penalties
	<b>Rate Base</b>
9	Summary Of Rate Base Adjustments
10	Summary Of Detailed Plant Accounts
11	Contributions In Aid Of Construction
12	Materials And Supplies
13	Cash Working Capital Requirements
14	Support Of Expense Days
15	Accrued And Prepaid Taxes
16	Calculation Of Lag Days For Accrued & Prepaid Taxes
17	Cash Working Capital Requirements - Interest & Dividends
18	Acquisition Amortizations
19	Calculation Of Deferred Income Taxes

Pennsylvania-American Water Company - Scranton Wastewater Operations

Table of Contents

Page No.	Description
	<b>Operating Expenses</b>
20	Summary of Expense Accounts
22	Summary of Operating Expense Adjustments
23	Compensation
24	Group Insurance
25	Other Post Employment Benefits (OPEB)
26	Purchased Power
27	Waste Disposal
28	Chemicals
29	Transportation Expense
30	Regulatory and Rate Case Expense
31	401K, Defined Contribution Plan, and Employee Stock Purchase Plan
32	Rents
33	Miscellaneous Adjustments
34	Uncollectible Accounts
35	Depreciation
36	Amortization Expense
	<b>Taxes, Other Than Income</b>
37	Pennsylvania Property Tax
38	Payroll Taxes
39	Calculation of General Assessment
	<b>Income Tax</b>
40	State and Federal Income taxes under Present and Proposed Rates
41	Calculation of State and Federal Taxes
	<b>Income Deductions</b>
42	Interest under Present and Proposed Rates
43	Application of Income Deductions

Pennsylvania-American Water Company - Scranton Wastewater Operations

Pro Forma Statement of Income for the Twelve Months Ending December 31, 2016

December 31, 2017 and December 31, 2018 Under Present and Proposed Rates

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/16		PRESENT RATES 12/31/17		PRESENT RATES 12/31/18		PRESENT RATES AND PROPOSED DEFICIENCY		LINE NO.	
		PER BOOKS	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT		
1	Operating Revenue	\$167,571	\$21,605,956	\$21,773,527	\$190,198	\$21,963,725	\$0	\$21,963,725	\$10,375,712	\$32,339,437	1
2	Operating Revenue Deductions:										2
3	Operating Expenses	21,294	323,119	344,413	10,517,585	10,861,998	164,175	11,026,173	153,975	11,180,148	3
4	Depreciation	0	2,783,196	2,783,196	409,924	3,193,120	274,890	3,468,010	0	3,468,010	4
5	Amortizations	0	0	0	638,965	638,965	0	638,965	0	638,965	5
6	Taxes, Other Than Income:										6
7	Local Property And Miscellaneous	0	0	0	234,869	234,869	7,829	242,698	0	242,698	7
8	Federal Environmental Tax	0	0	0	0	0	0	0	0	0	8
9	Public Utility Realty Taxes	0	0	0	0	0	0	0	0	0	9
10	Payroll Taxes	0	0	0	381,507	381,507	6,878	388,385	0	388,385	10
11	General Assessment	0	111,978	111,978	0	111,978	0	111,978	52,957	164,935	11
12	State Capital Stock Tax	0	0	0	0	0	0	0	0	0	12
13	Total Taxes Other Than Income	0	111,978	111,978	616,376	728,354	14,707	743,061	52,957	796,018	13
14	<b>Utility Operating Income Before Income Taxes</b>	<b>146,277</b>	<b>18,387,663</b>	<b>18,533,940</b>	<b>(11,992,652)</b>	<b>6,541,288</b>	<b>(453,772)</b>	<b>6,087,516</b>	<b>10,168,780</b>	<b>16,256,296</b>	<b>14</b>
15	Income Taxes:										15
16	State Income Tax	(535,020)	2,114,969	1,579,949	(1,462,746)	117,203	(115,329)	1,874	1,015,285	1,017,159	16
17	Federal Income Tax	(1,805,018)	6,669,561	4,864,543	(4,008,069)	856,474	(233,942)	622,532	3,201,703	3,824,235	17
18	Amortization Of Itc & Excess Deferred Taxes	0	0	0	0	0	0	0	0	0	18
19	Total Income Taxes	(2,340,038)	8,784,530	6,444,492	(5,470,815)	973,677	(349,271)	624,406	4,216,988	4,841,394	19
20	Total Operating Revenue Deductions	(2,318,744)	12,002,823	9,684,079	6,712,035	16,396,114	104,501	16,500,615	4,423,920	20,924,535	20
21	<b>Utility Operating Income</b>	<b>2,486,315</b>	<b>9,603,133</b>	<b>12,089,448</b>	<b>(6,521,837)</b>	<b>5,567,611</b>	<b>(104,501)</b>	<b>5,463,110</b>	<b>5,951,792</b>	<b>11,414,902</b>	<b>21</b>
22	Income Deductions:										22
23	Interest On Long Term Debt	1,800,082	0	1,800,082	808,011	2,608,093	200,223	2,808,316	3,763	2,812,079	23
24	Amortization Of Debt Discount Expense	0	0	0	0	0	0	0	0	0	24
25	Interest On Notes Payable To Others	1,255,214	0	1,255,214	113,710	1,368,924	131,747	1,498,663	2,008	1,500,671	25
26	Total Income Deductions	3,055,296	0	3,055,296	921,721	3,977,017	331,970	4,306,979	5,771	4,312,750	26
27	<b>Net Income</b>	<b>(\$568,981)</b>	<b>\$9,603,133</b>	<b>\$9,034,152</b>	<b>(\$7,443,558)</b>	<b>\$1,590,594</b>	<b>(\$436,471)</b>	<b>\$1,156,131</b>	<b>\$5,946,021</b>	<b>\$7,102,152</b>	<b>27</b>
28	Preferred Dividends	19,001		19,001		20,198		17,089		17,112	28
29	<b>Net Income To Common</b>	<b>(\$587,982)</b>		<b>\$9,015,151</b>		<b>\$1,570,396</b>		<b>\$1,139,042</b>		<b>\$7,085,040</b>	<b>29</b>

PENNSYLVANIA-AMERICAN WATER COMPANY - SCRANTON WASTEWATER OPERATIONS

TOTAL INCREASE IN REVENUES BY TARIFF SUBDIVISIONS PROJECTED TO

AN ANNUAL BASIS FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2016, December 31, 2017 AND DECEMBER 31, 2018

LINE NO.	ACCT. NO.	CUSTOMER CLASSIFICATION	PER BOOKS 12/31/2016	ANNUALIZATION			PRO FORMA PRESENT RATES 12/31/2016	ADJUSTMENTS	PRO FORMA PRESENT RATES 12/31/2017 & 12/31/2018	REVENUE DEFICIENCY PERCENT	REVENUE DEFICIENCY AMOUNT	PRO FORMA REVENUE WITH DEFICIENCY
				UNBILLED ADJUSTMENTS	OF ACQUIRED SYSTEMS	LOW INCOME DISCOUNT						
1		OPERATING REVENUES	(1)	(2)	(2)	(3)	(4)	(5)	(8)	(9)	(10)	(11)
2		METERED SALES										
3	522.1	RESIDENTIAL	\$106,452	(\$106,452)	\$13,791,700	(\$52,661)	\$13,739,039	\$0	\$13,739,039	48.10%	\$6,607,816	\$20,346,855
4	522.2	COMMERCIAL	51,318	(51,318)	6,430,213		6,430,213	0	\$6,430,213	49.14%	3,159,550	9,589,763
5	522.3	INDUSTRIAL	679	(679)	1,224,470		1,224,470	0	\$1,224,470	28.07%	343,653	1,568,123
6	522.4	MUNICIPAL	9,122	(9,122)	355,634		355,634	0	\$355,634	49.14%	174,744	530,378
7	522.4	MISCELLANEOUS	0	0	0		0	0	\$0	0.00%	0	0
8		<b>TOTAL METERED SALES</b>	<b>167,571</b>	<b>(167,571)</b>	<b>21,802,017</b>	<b>(52,661)</b>	<b>21,749,356</b>	<b>0</b>	<b>21,749,356</b>	<b>47.29%</b>	<b>10,285,763</b>	<b>32,035,119</b>
9		UNMETERED SALES										
10	522.1	RESIDENTIAL	0	0	0		0	0	\$0	0.00%	0	0
11	522.1	AVAILABILITY	0	0	0		0	0	\$0	0.00%	0	0
12	522.2	COMMERCIAL	0	0	0		0	0	\$0	0.00%	0	0
13	522.4	MUNICIPAL	0	0	0		0	0	\$0	0.00%	0	0
14	522.4	MISCELLANEOUS	0	0	0		0	0	\$0	0.00%	0	0
15		<b>TOTAL UNMETERED SALES</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0</b>
16		<b>TOTAL WASTEWATER SALES</b>	<b>167,571</b>	<b>(167,571)</b>	<b>21,802,017</b>	<b>(52,661)</b>	<b>21,749,356</b>	<b>0</b>	<b>21,749,356</b>	<b>47.29%</b>	<b>10,285,763</b>	<b>32,035,119</b>
17		OTHER OPERATING REVENUES										
18	530	GUARANTEED REVENUES	0	0	0		0	0	\$0	0.00%	0	0
19	532	LATE PAYMENT FEES	0	0	0		0	190,198	\$190,198	47.29%	89,949	280,147
20	536	MISC SERVICE REVENUES	0	0	24,171		24,171	0	\$24,171	0.00%	0	24,171
21	534	RENTS FROM PROPERTIES	0	0	0		0	0	\$0	0.00%	0	0
22	536	OTHER WASTEWATER REVENUES	0	0	0		0	0	\$0	0.00%	0	0
23		<b>TOTAL OTHER OPERATING</b>										
24		<b>REVENUE</b>	<b>0</b>	<b>0</b>	<b>24,171</b>	<b>0</b>	<b>24,171</b>	<b>190,198</b>	<b>214,369</b>	<b>41.96%</b>	<b>89,949</b>	<b>304,318</b>
25		<b>TOTAL OPERATING REVENUES</b>	<b>\$167,571</b>	<b>(\$167,571)</b>	<b>\$21,826,188</b>	<b>(\$52,661)</b>	<b>\$21,773,527</b>	<b>\$190,198</b>	<b>\$21,963,725</b>	<b>47.24%</b>	<b>\$10,375,712</b>	<b>\$32,339,437</b>



**PENNSYLVANIA-AMERICAN WATER COMPANY - SCRANTON WASTEWATER OPERATIONS**

**NOTES TO STATEMENT OF INCOME**

**SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES**

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES	
		ADJUSTMENT	12/31/16 AMOUNT	ADJUSTMENT	12/31/2017 & 12/31/2018 AMOUNT
1	Per Books		\$167,571		
2	Present Rates At 12/31/16				\$21,773,527
3	Unbilled Adjustment	(167,571)			
4	Annualization Of Acquired Systems	21,802,017			
5	Low Income Discount	(52,661)			
6	Late Payment Fees	0		190,198	
7	Miscellaneous Service Revenues	24,171			
8	Pro Forma Adjustment		21,605,956		190,198
9	Pro Forma Present Rates At December 31, 2016		<u>\$21,773,527</u>		
10	Pro Forma Present Rates At December 31, 2017 and December 31, 2018				<u>\$21,963,725</u>

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Unbilled Revenue Adjustment**

The following adjustment is being made to eliminate unbilled revenue accrued per books for the twelve months ended December 31, 2016.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	(\$106,452)
3	Commercial	(51,318)
4	Industrial	(679)
5	Municipal	(9,122)
6	Sales For Resale	
7	Miscellaneous	
<b>8</b>	<b>Total Metered Sales</b>	<b>(\$167,571)</b>
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>
<b>16</b>	<b>Total Unbilled Wastewater Sales</b>	<b>(\$167,571)</b>
<b>17</b>	<b>Other Operating Revenues</b>	<b>\$0</b>
<b>18</b>	<b>Pro Forma Adjustment</b>	<b>(\$167,571)</b>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Annualization of Acquired Systems**

On December 29, 2016, the Company closed on the acquisition of the wastewater utility property of the Scranton Sewer Authority and began providing service to that entity's former customers. The following adjustment annualizes the revenues associated with this acquisition.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	\$13,791,700
3	Commercial	6,430,213
4	Industrial	1,224,470
5	Municipal	355,634
6	Sales For Resale	0
7	Miscellaneous	0
<b>8</b>	<b>Total Metered Sales</b>	<b>\$21,802,017</b>
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	<b>\$0</b>
<b>16</b>	<b>Total Wastewater Sales</b>	<b>\$21,802,017</b>
17	Miscellaneous Service Fees	\$24,171
18	Rents From Properties	0
<b>19</b>	<b>Total Operating Revenues</b>	<b>\$21,826,188</b>

Witness: Jo Anne Lontz  
Reference: Scranton Bill Analysis

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Low Income Discount Adjustment - Scranton WW**

On December 29, 2016, the Company closed on the acquisition of the wastewater utility property of the Scranton Sewer Authority and began providing service to that entity's former customers. The following adjustment annualizes the low income discounts that will be given to the customers of the former Scranton Sewer Authority.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2016 AMOUNT
<b>1</b>	<b>Metered Sales</b>	
2	Residential	(\$52,661)
3	Commercial	0
4	Industrial	0
5	Municipal	0
6	Sales For Resale	0
7	Miscellaneous	0
<b>8</b>	<b>Total Metered Sales</b>	(\$52,661)
<b>9</b>	<b>Unmetered Sales</b>	
10	Residential	\$0
11	Commercial	0
12	Industrial	0
13	Municipal	0
14	Sales For Resale	0
<b>15</b>	<b>Total Unmetered Sales</b>	\$0
<b>16</b>	<b>Total Water Sales</b>	(\$52,661)
17	Miscellaneous Service Fees	\$0
18	Rents From Properties	0
<b>19</b>	<b>Total Operating Revenues</b>	(\$52,661)

Witness: Jo Anne Lontz  
Reference: Scranton Bill Analysis

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Number of Customers Served**

The following is a list of the number of customers served at December 31, 2015 and 2016 and the estimated number of customers to be served at December 31, 2017 and 2018. Also shown are the number of customers in each class whose bills will increase, decrease or remain unchanged as a result of the rate changes proposed in this filing.

LINE NO.	ACCT. NO.	DESCRIPTION	SERVED AT 12/31/2015	SERVED AT 12/31/2016	TO BE SERVED AT 12/31/2017	TO BE SERVED AT 12/31/2018	INCREASED BILLS	DECREASED BILLS	UNCHANGED BILLS
<b>1</b>		<b>Metered</b>							
2	601.1	Residential	0	27,318	27,318	27,318	0	0	27,318
3	601.2	Commercial	0	2,766	2,766	2,766	0	0	2,766
4	601.3	Industrial	0	30	30	30	0	0	30
5	606	Municipal	0	61	61	61	0	0	61
6	607	Resale	0	0	0	0	0	0	0
7	601.4	Miscellaneous	0	3	3	3	0	0	3
<b>8</b>		<b>Metered</b>	0	30,178	30,178	30,178	0	0	30,178
<b>9</b>		<b>Unmetered</b>							
10	602.1	Residential	0	0	0	0	0	0	0
11	602.2	Commercial	0	0	0	0	0	0	0
12	602.3	Industrial	0	0	0	0	0	0	0
13	606	Municipal	0	0	0	0	0	0	0
14	602.4	Miscellaneous	0	0	0	0	0	0	0
<b>15</b>		<b>Unmetered</b>	0	0	0	0	0	0	0
16	604	Private Fire	0	0	0	0	0	0	0
17	605	Public Fire	0	0	0	0	0	0	0
<b>18</b>	<b>Total Customers</b>		<u>0</u>	<u>30,178</u>	<u>30,178</u>	<u>30,178</u>	<u>0</u>	<u>0</u>	<u>30,178</u>

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Revenues**

**Penalties**

The following adjustment reflects the annualization of revenues associated with changes imposed during 2016 and projected to be imposed during 2017 and 2018. Additionally, annualized late payment charges are calculated based on revenues at the proposed rate level.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PER BOOKS 12/31/16</b>	<b>PRESENT RATES 12/31/16</b>	<b>PRESENT RATES 12/31/17</b>	<b>PRESENT RATES 12/31/18</b>	<b>PRO FORMA REVENUE WITH DEFICIENCY</b>
1	Total Billed Wastewater Sales	\$0	\$21,749,356	\$21,749,356	\$21,749,356	\$32,035,119
2	% Of Penalties To Total					
3	Wastewater Sales - 3 Year Avg	0.8745%	0.8745%	0.8745%	0.8745%	0.8745%
4	Penalties	0	190,198	190,198	190,198	280,147
5	Less: Per Books At 12/31/2016		0			
6	Less: Present Rates At 12/31/2016			190,198		
7	Less: Present Rates At 12/31/2017				190,198	
8	Less: Present Rates At 12/31/2018					190,198
9	Pro Forma Adjustments		\$190,198	\$0	\$0	\$89,949

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Summary of Rate Base Adjustments**

LINE NO.	DESCRIPTION	DEPRECIATED ORIGINAL COST 12/31/16	DEPRECIATED ORIGINAL COST 12/31/17	DEPRECIATED ORIGINAL COST 12/31/18	DEPRECIATED ORIGINAL COST PROPOSED
1	Non-Depreciable Plant	\$234,253	\$3,234,253	\$12,234,253	\$12,234,253
2	Depreciable Plant	169,363,107	184,850,535	195,906,905	195,906,905
3	Total Utility Plant In Service	169,597,360	188,084,788	208,141,158	208,141,158
4	Deduct:				
5	Contributions In Aid Of Construction	11,454,549	11,454,549	11,454,549	11,454,549
6	Customer Advances For Construction	0	0	0	0
7	Excluded Property	0	0	0	0
8	Sub-Total	11,454,549	11,454,549	11,454,549	11,454,549
9	Net Utility Plant In Service	158,142,811	176,630,239	196,686,609	196,686,609
10	Accumulated Depreciation	57,179,160	59,997,425	63,112,164	63,112,164
11	Depreciated Utility Plant In Service	100,963,651	116,632,814	133,574,445	133,574,445
12	Add:				
13	Materials And Supplies	100,181	100,181	100,181	100,181
14	Cash Working Capital - Expenses	0	725,185	739,588	739,588
15	Accrued And Prepaid Taxes	329,818	176,418	163,910	367,508
16					
17	Acquistion Adjustments	0	25,558,613	24,919,648	24,919,648
18	Deduct:				
19	Cash Working Capital - Int And Div	344,651	163,251	173,482	173,719
20	Unamortized Itc (3%)	0	0	0	0
21	Extension Deposits In Suspense	0	0	0	0
22					
23	Deferred Taxes	856,287	5,357,610	7,531,618	7,531,618
24	Total Rate Base Elements	\$100,192,712	\$137,672,350	\$151,792,672	\$151,996,033
25	Utility Operating Income				
26	Per Books	\$2,486,315	2.4815%	1.8060%	1.6358%
27	Present Rates At 12/31/2016	12,089,448	12.0662%	-	-
28	Present Rates At 12/31/2017	5,567,611	-	4.0441%	-
29	Present Rates At 12/31/2018	5,463,110	-	-	3.5991%
30	Proposed Rates	11,414,902	-	-	7.5100%

Witness: John Cox

Pennsylvania-American Water Company - Scranton Wastewater Operations

Notes to Rate Base Elements

Summary of Detailed Plant Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	AMOUNT			ESTIMATED BOOK COST			ESTIMATED BOOK COST
			12/31/2016	ADDITIONS	RETIREMENTS	12/31/2017	ADDITIONS	RETIREMENTS	12/31/2018
1	352.00	Franchises & Consents	\$0			\$0			\$0
2	353.00	Land & Land Rights	234,253	3,000,000		3,234,253	9,000,000		12,234,253
3									
4		Total Intangible Plant	<u>\$234,253</u>	<u>\$3,000,000</u>	<u>\$0</u>	<u>\$3,234,253</u>	<u>\$9,000,000</u>	<u>\$0</u>	<u>\$12,234,253</u>
5									
6	354.20	Structures And Improvements - Collection							
7	354.30	Structures And Improvements - SPP	\$3,907,437	\$1,227,386	\$0	\$5,134,823	\$1,014,706	\$10,000	\$6,139,529
8	354.40	Structures And Improvements - TDP	50,981,239	2,573,882	45,000	53,510,121	1,011,033	53,060	54,468,094
9	354.70	Structures And Improvements - General				0			0
10	355.00	Power Generation Equipment		1,286,249	0	1,286,249	1,170,500		2,456,749
11	360.10	Collection Sewers - Force Mains	239,206	0	0	239,206	0	0	239,206
12	361.10	Collection Sewers - Gravity Mains	64,071,670	5,990,954	41,435	70,021,189	4,918,312	43,720	74,895,781
13	361.20	Manholes	13,038,597	144,999	2,400	13,181,196	144,999	2,400	13,323,795
14	363.00	Services	9,592,629	220,000	8,000	9,804,629	220,000	8,000	10,016,629
15	364.00	Flow Measuring Devices	401,004	244,167	0	645,171	121,154		766,325
16	365.00	Flow Measuring Installations				0			0
17	370.00	Receiving Wells				0			0
18	371.00	Pumping Equipment	2,569,863	915,641	0	3,485,504	744,118	5,000	4,224,622
19	380.00	Treatment Equipment	14,618,708			14,618,708			14,618,708
20	381.00	Plant Sewers				0			0
21	382.00	Outfall Sewer Lines				0			0
22	389.10	Other Plant And Miscellaneous Equipment - Intangibles	4,142,753	363,000	0	4,505,753	626,000	0	5,131,753
23	390.00	Office Furniture And Equipment	1,117,338	296,696	10,097	1,403,937	60,000		1,463,937
24	390.20	Computers & Peripheral				0			0
25	391.00	Transportation Equipment	3,394,097	427,910	0	3,822,007	0	0	3,822,007
26	392.00	Stores Equipment				0			0
27	393.00	Tools, Shop And Garage Equipment	514,682	412,999		927,681	50,000		977,681
28	394.00	Laboratory Equipment	108,802			108,802			108,802
29	395.00	Power Operated Equipment	665,082			665,082			665,082
30	396.00	Communication Equipment		1,177,477	0	1,177,477	728,977		1,906,454
31	397.00	Miscellaneous Equipment		313,000		313,000	368,751		681,751
32									
33		Total Tangible Plant	<u>\$169,363,107</u>	<u>\$15,594,360</u>	<u>\$106,932</u>	<u>\$184,850,535</u>	<u>\$11,178,550</u>	<u>\$122,180</u>	<u>\$195,906,905</u>
34									
35		Total Utility Plant In Service	<u>\$169,597,360</u>	<u>\$18,594,360</u>	<u>\$106,932</u>	<u>\$188,084,788</u>	<u>\$20,178,550</u>	<u>\$122,180</u>	<u>\$208,141,158</u>



**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Contributions in Aid of Construction (CIAC)**

The following adjustment reflects the projected CIAC to be received during the twelve months ended December 31, 2017 and December 31, 2018. The Company is not projecting any change in CIAC in either the FTY or FPFTY.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Contributions In Aid Of Construction	(\$11,454,549)	(\$11,454,549)

Witness: John Cox  
Reference: FR V.16

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Materials and Supplies**

The Company's claim for materials and supplies at December 31, 2017 and December 31, 2018 is calculated on the basis of the average monthly balances in the material and supplies accounts for PAWC's other wastewater districts for the period of December 2015 to December 2016. This balance was divided by the total number of customers in the other wastewater districts in order to calculate the amount of materials and supplies per customer. This per customer number was then multiplied by the total number of Scranton Wastewater customers to calculate the Company's claim.

LINE NO.	DETAIL	PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNT
1	13-Month average of M&S for PAWC's 15 other WW districts	\$81,503
2	Number of customers in PAWC's 15 other WW districts	24,516
3	Amount of M&S per customer	\$3.32
4	Total number of Scranton WW customers	30,175
5	Allowance for Materials and Supplies At 12/31/2017 and 12/31/2018	\$100,181

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

Charges for Wastewater service are billed in arrears on a monthly basis. The calculation set forth below reflects summarized operating revenues billed for the twelve months ended December 31, 2016, and as annualized under present rates for the twelve months ending December 31, 2016, 2017 and 2018. The calculation further reflects the average lag in receipt of revenues less the lag in payment of operating expenses to determine cash working capital requirements.

LINE NO.	DESCRIPTION	PER BOOK AMOUNT	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT
1	Operating Revenue Billed During The Twelve Months Ended 12/31/2016				
2	Bi-Monthly Billings				
3	Lag Days				
4	Dollar Days				
5	Quarterly				
6	Lag Days				
7	Dollar Days				
8	Monthly Billings	\$0	\$0	\$21,963,725	\$21,963,725
9	Lag Days	50.1	50.1	50.1	50.1
10	Dollar Days	\$0	\$0	\$1,100,382,623	\$1,100,382,623
11	Total Billed Revenue	\$0	\$0	\$21,963,725	\$21,963,725
12	Total Dollar Days	\$0	\$0	\$1,100,382,623	\$1,100,382,623
13	Average Lag In Receipt Of Revenue (Line 12 / Line11)			50.1	50.1
14	Deduct: Average Lag In Payment Of				
15	Operating Expenses			25.8	25.7
16	Average Lag Between Payment Of Operating				
17	Expenses And Receipt Of Revenues			24.3	24.4
18	<u>Working Capital Requirements</u>				
19	Annual Operating Expenses (Including Payroll Expenses)			\$10,892,563	\$11,063,616
20	Operating Expenses Per Day (Line 20 / 365 Days)			29,843	30,311
21	Cash Working Capital Required				
22	(Line 19 * Line 21)		\$0	\$725,185	\$739,588

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Support of Expense Days**

LINE NO.	DESCRIPTION	LAG DAYS	PER BOOKS		PRESENT RATES 12/31/2016		PRESENT RATES 12/31/2017		PRESENT RATES 12/31/2018	
			AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS	AMOUNT	DOLLAR DAYS
1	Labor And Payroll Taxes	12.33	\$0	\$0	\$0	\$0	\$4,842,435	\$59,707,224	\$4,942,603	\$60,942,295
2	Group Insurance	10.88	0	0	0	0	866,382	9,429,491	885,270	9,635,064
3	OPEB's and VEBA	(2.50)	0	0	0	0	21,907	(54,768)	21,907	(54,768)
4	Pension	(7.04)	0	0	0	0	0	0	0	0
5	Purchased Power	25.08	0	0	0	0	640,901	16,076,464	640,901	16,076,464
6	Purchased Water	44.87	0	0	0	0	0	0	0	0
7	Chemicals	35.51	0	0	0	0	991,723	35,216,084	1,013,293	35,982,034
8	Miscellaneous	47.26	21,194	1,001,683	21,194	1,001,683	2,061,459	97,429,887	2,066,967	97,690,209
9	Transportation	41.31	100	4,131	100	4,131	373,211	15,417,251	381,230	15,748,514
10	Ins Other Than Group	(71.46)	0	0	0	0	0	0	0	0
11	Service Company	12.33	0	0	0	0	0	0	0	0
12	Waste Disposal	46.23	0	0	0	0	1,022,245	47,256,713	1,039,145	48,037,973
13	Telephone	2.85	0	0	0	0	0	0	0	0
14	Rents	1.89	0	0	0	0	72,300	136,336	72,300	136,336
15	Natural Gas	35.31	0	0	0	0	0	0	0	0
16	Totals		\$21,294	\$1,005,814	\$21,294	\$1,005,814	\$10,892,563	\$280,614,682	\$11,063,616	\$284,194,121
17	Average Lag			47.2		47.2		25.8		25.7
18	Sum. Of Expense Pro Forma Present Rates & Payroll Taxes		\$21,294		\$344,413		\$11,243,505		\$11,414,558	\$211,445,916
19	Uncollectibles		0		323,119		325,942		325,942	
20	Amortizations		0		0		25,000		25,000	
21	Sum Of Other Expenses		100		100		8,831,104		8,996,649	
22	Miscellaneous		\$21,194		\$21,194		\$2,061,459		\$2,066,967	

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	NET LEAD/ LAG DAYS FUTURE	PRESENT RATES 12/31/2016		PRESENT RATES 12/31/2017		PRESENT RATES 12/31/2018		PROPOSED	
			TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT	TAXES PAYABLE	ACCRUED TAXES ADJUSTMENT
1	General Assessment	212.5	111,978	65,193	111,978	65,193	111,978	65,193	164,935	96,024
2	Public Utility Realty Tax	60.4	0	0	0	0	0	0	0	0
3	Local Property Tax	114.7	0	0	234,869	73,807	242,698	76,267	242,698	76,267
4	State Income Tax	20.8	1,579,949	90,035	117,203	6,679	1,874	107	1,017,159	57,964
5	Federal Income Tax	13.1	4,864,543	<u>174,590</u>	856,474	<u>30,739</u>	622,532	<u>22,343</u>	3,824,235	<u>137,253</u>
6	Totals			<u>\$329,818</u>		<u>\$176,418</u>		<u>\$163,910</u>		<u>\$367,508</u>

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Calculation of Lag Days for Accrued and Prepaid Taxes**

LINE NO.	DESCRIPTION	TAX PERIOD		PAYMENTS				TOTAL TAX LAG DAY	REVENUE LAG LESS TAX LAG
		BEGINNING	ENDING	2016 TAX					
1	General Assessment	7/1/15	6/30/16	6/23/15	10/20/15				
2	Percent Of Payment			82.00%	18.00%				1.0
3	Lag Days			(155.8)	(12.8)			(162.4)	212.5
4	Public Utility Realty Tax	1/1/16	12/31/16	5/1/16	9/15/17				
5	Percent Of Payment			90.00%	10.00%				1.0
6	Lag Days			(54.5)	44.2			(10.3)	60.4
7	Local Property Tax	1/1/16	12/31/16	Lag calculated using expense lag method					
8	Payment								
9	Lag Days							(64.6)	114.7
10	State Income Tax	1/1/16	12/31/16	3/15/16	6/15/16	9/15/16	12/15/16		
11	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
12	Lag Days			(27.1)	(4.1)	18.9	41.6	29.3	20.8
13	Federal Income Tax	1/1/16	12/31/16	4/15/16	6/15/16	9/15/16	12/15/16		
14	Percent Of Payment			25.00%	25.00%	25.00%	25.00%		1.0
15	Lag Days			(19.4)	(4.1)	18.9	41.6	37.0	13.1

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Calculation of Cash Working Capital Requirements**

The payment of interest on the Company's long term debt is made six months in arrears. Payment of interest on the Company's short term debt is made monthly in arrears. The payment of dividends on the Company's preferred stock is made quarterly in arrears. The average lag days of interest and dividend payments and the deduction of the average lag days for the receipt of revenue is calculated below to determine cash working capital requirements.

LINE NO.	DESCRIPTION	LONG TERM INTEREST	SHORT TERM INTEREST	PREFERRED DIVIDEND	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18	PROPOSED AMOUNT
1	<b>Average Lag Calculation</b>							
2	Future Revenue Lag Days	50.1	50.1	50.1				
3	Less: Interest Payments Lag Days	91.3	15.2	45.6				
4	Average Lag Between The Payment	(41.2)	34.9	4.5				
5	Of Interest And The Receipt							
6	Of Revenues							
7	<b>Long Term Debt</b>							
8	Working Capital Requirements							
9	Pro Forma Annual Interest Expense	\$1,800,082		\$2,608,093			\$2,808,316	\$2,812,079
10	Interest Expense Per Day							
11	(Line 9 / 365 Days)	4,932		7,145			7,694	7,704
12	Cash Working Capital Required							
13	(Line 4 Col.1 X Line 11)		(203,198)			(294,374)	(316,993)	(317,405)
14	<b>Long Term Debt - Wastewater Specific</b>							
15	Working Capital Requirements							
16	Pro Forma Annual Interest Expense	1,255,214		1,368,924			1,498,663	1,500,671
17	Interest Expense Per Day							
18	(Line 16 / 365 Days)	3,439		3,750			4,106	4,111
19	Cash Working Capital Required							
20	(Line 4 Col.2 X Line 18)		(141,687)			130,875	143,299	143,474
21	<b>Preferred Dividends</b>							
22	Working Capital Requirements							
23	Pro Forma Annual Dividend Expense	19,001		20,198			17,089	17,112
24	Dividend Expense Per Day							
25	(Line 23 / 365 Days)	52		55			47	47
26	Cash Working Capital Required							
27	(Line 4 Col.3 X Line 25)		234		248		212	212
28	Total Cash Working Capital Required							
29	(Line 13 + Line 20 + Line 27)		(\$344,651)		(\$163,251)		(\$173,482)	(\$173,719)

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes To Rate Base Elements**

**Acquisition Amortizations**

The following adjustment reflects the Company's request for recognition of the positive UPAA associated with its acquisitions of the wastewater assets of the Scranton Sewer authority and the costs associated with the acquisition.

LINE NO.	DESCRIPTION		PRESENT RATES	2018	PRESENT RATES
			12/31/2017	Amortizations	12/31/2018
			AMOUNT		AMOUNT
1	Scranton Sewer Auth - Acquisition Costs	Seeking Approval	\$2,977,445	\$74,436	\$2,903,009
2	Scranton Sewer Auth - UPAA	Seeking Approval	22,581,168	564,529	22,016,639
3	Effect to Rate Base Element		<u>\$25,558,613</u>	<u>\$638,965</u>	<u>\$24,919,648</u>

Witness: John Cox

Reference: Exhibit No. 3-C



**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Rate Base Elements**

**Calculation of Deferred Income Taxes**

The following calculation is being made to reflect the federal tax difference between using accelerated and straight-line depreciation and normalizing the effect of the repairs and maintenance deduction for state and federal tax. This adjustment is carried as a rate base reduction.

LINE NO.	VINTAGE YEARS	TAX BASE PROPERTY	ACCELERATED TAX DEPRECIATION	STRAIGHT-LINE REMAINING LIFE	EXCESS DEPRECIATION		DEFERRED FEDERAL TAXES
	<u>2017</u>						
1	1/1981 - 12/201	\$130,387,474	\$13,115,071	\$3,185,461	\$9,929,610		\$3,475,364
2							
3							<u>3,475,364</u>
						Combined State & Federal Rate	
4	Plus: Capitalized Repairs Deduction 2017				\$2,472,785	<u>41.49%</u>	1,025,959
5	Balance Of Deferred Income Taxes At 12/31/16						<u>(856,287)</u>
6	Balance Of Deferred Income Taxes At 12/31/17						<u><u>(\$5,357,610)</u></u>
	<u>2018</u>						
7	1/1981 - 12/201	\$139,908,091	\$11,752,989	\$3,454,544	\$8,298,445	\$2,904,456	
8							
						<u>41.49%</u>	<u>\$2,904,456</u>
							<u>\$1,345,465</u>
						Combined State & Federal Rate	
9	Plus: Capitalized Repairs Deduction 2018			\$4,310,855		<u>41.49%</u>	\$1,788,574
10	Balance Of Deferred Income Taxes At 12/31/17						<u>(5,357,610)</u>
11	Balance Of Deferred Income Taxes At 12/31/18						<u><u>(\$7,531,618)</u></u>

Witness: John Cox  
Reference: FR IV.4

Pennsylvania-American Water Company - Scranton Wastewater Operations

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
1		<b>Source Of Supply Expenses</b>				
2		-Operations-				
3	601.1	Salary And Wages	\$0	\$0	\$0	\$0
4	601.2	Salary And Wages	0	0	0	0
5	610.1	Purchased Water	0	0	0	0
6	615.1	Purchased Power	0	0	0	0
7	616.1	Purchased Fuel	0	0	0	0
8	620.1	Materials And Supplies	0	0	0	0
9	631.1	Contract Services - Engineering	0	0	0	0
10	633.1	Contract Services - Legal	0	0	0	0
11	636.1	Contract Services	0	0	0	0
12	641.1	Rental Of Building	0	0	0	0
13	642.1	Rental Of Equipment	0	0	0	0
14	650.1	Transportation	0	0	0	0
15		-Maintenance-				
16	620.2	Materials And Supplies	0	0	0	0
17	631.2	Contract Services - Engineering	0	0	0	0
18	636.2	Contract Services	0	0	0	0
19		-Miscellaneous-				
20	675.1	Miscellaneous Operating Expense	0	0	0	0
21	675.2	Miscellaneous Maintenance Expense	0	0	0	0
22						
23		Total Source Of Supply Expenses	\$0	\$0	\$0	\$0
24						
25		<b>Water Treatment</b>				
26		-Operation-				
27	601.3	Salary And Wages	\$0	\$0	\$1,033,033	\$1,054,038
28	601.4	Salary And Wages	0	0	0	0
29	604.3	Employee Pension And Benefits	0	0	0	0
30	615.3	Purchased Power	0	0	616,283	616,283
31	618.3	Chemicals	0	0	991,723	1,013,293
32	620.3	Materials And Supplies	0	0	0	0
33	631.3	Contract Services - Engineering	0	0	0	0
34	633.3	Contract Services - Legal	0	0	0	0
35	634.3	Contract Services - Management	0	0	0	0
36	635.3	Contract Services - Test	0	0	0	0
37	636.3	Contract Services	0	0	41,564	41,564
38	641.3	Rental Of Building	0	0	0	0
39	642.3	Rental Of Equipment	0	0	26,190	26,190
40	650.3	Transportation	0	0	0	0
41		-Maintenance-				
42	620.4	Materials And Supplies	0	0	394,761	394,761
43	631.4	Contract Services - Engineering	0	0	0	0
44	636.4	Contract Services	0	0	0	0
45	650.4	Transportation	0	0	0	0
46	675.4	Miscellaneous Maintenance Expense	0	0	29,690	29,690
47		-Miscellaneous-				
48	675.3	Miscellaneous Operating Expense	5,075	5,075	1,254,301	1,271,201
49						
50		Total Water Treatment Expense	\$5,075	\$5,075	\$4,387,545	\$4,447,020
51						
52		<b>Transmission And Distribution</b>				
53		-Operation-				
54	601.5	Salary And Wages	\$0	\$0	\$0	\$0
55	601.6	Salary And Wages	0	0	2,893,023	2,951,450
56	604.5	Employee Pension And Benefits	0	0	0	0
57	615.5	Purchased Power	0	0	68,861	68,861
58	620.5	Materials And Supplies	0	0	0	0
59	631.5	Contract Services - Engineering	0	0	0	0
60	636.5	Contract Services	0	0	0	0
61	641.5	Rental Of Building	0	0	0	0
62	642.5	Rental Of Equipment	0	0	0	0
63	650.5	Transportation	0	0	0	0

Pennsylvania-American Water Company - Scranton Wastewater Operations

Notes to Statement Of Income

Operating Expenses

Summary of Expense Accounts

LINE NO.	ACCT. NO.	ACCOUNT TITLE	PER BOOKS 12/31/16	PRESENT RATES 12/31/16	PRESENT RATES 12/31/17	PRESENT RATES 12/31/18
1		-Maintenance-				
2	620.6	Materials And Supplies	\$0	\$0	\$114,720	\$114,720
3	631.6	Contract Services - Engineering	0	0	0	0
4	636.6	Contract Services	0	0	0	0
5	650.6	Transportation	0	0	0	0
6	675.6	Miscellaneous Operating Expense	200	200	18,409	18,409
7		-Miscellaneous-				
8	675.5	Miscellaneous Operating Expense	0	0	74,332	74,332
9						
10		Total Transmission And Distribution	\$200	\$200	\$3,169,345	\$3,227,772
11						
12		<b>Customer Accounting</b>				
13		-Operation-				
14	601.7	Salary And Wages	\$0	\$0	\$329,747	\$336,529
15	604.7	Employee Pension And Benefits	0	0	0	0
16	615.7	Purchased Power	0	0	0	0
17	620.7	Materials And Supplies	0	0	0	0
18	631.7	Contract Services - Engineering	0	0	0	0
19	633.7	Contract Services - Legal	0	0	0	0
20	634.7	Contract Services - Management	0	0	0	0
21	636.7	Contract Services	0	0	0	0
22	642.7	Rental Of Equipment	0	0	0	0
23	650.7	Transportation	0	0	0	0
24	657.7	Insurance	0	0	0	0
25	670.7	Bad Debt	0	323,119	325,942	325,942
26		-Miscellaneous-				
27	675.7	Miscellaneous Expense	0	0	36,939	36,939
28						
29		Total Customer Accounting	\$0	\$323,119	\$692,628	\$699,410
30						
31						
32		<b>Administrative And General</b>				
33	601.8	Salary And Wages	\$0	\$0	\$205,125	\$212,201
34	603.8	Salary Of Officers	0	0	0	0
35	604.8	Employee Pension And Benefits	0	0	1,445,765	1,470,161
36	615.8	Purchased Power	0	0	6,688	6,688
37	620.8	Materials And Supplies	7,096	7,096	7,096	7,096
38	631.8	Contract Services	0	0	141,729	141,729
39	632.8	Contract Services - Accounting	0	0	0	0
40	633.8	Contract Services - Legal	0	0	250,000	250,000
41	634.8	Contract Services - Management	0	0	0	0
42	635.8	Contract Services - Test	0	0	0	0
43	636.8	Contract Services	5,847	5,847	5,847	5,847
44	641.8	Rental Of Building	0	0	72,300	72,300
45	642.8	Rental Of Equipment	0	0	6,392	6,392
46	650.8	Transportation	100	100	373,211	381,230
47	656.8	Insurance - Vehicles	0	0	0	0
48	657.8	Insurance	0	0	0	0
49	658.8	Workers Compensation	0	0	0	0
50	659.8	Insurance	0	0	0	0
51	660.8	Advertising	0	0	0	0
52	666.8	Amortization Of Rate Case	0	0	25,000	25,000
53	667.8	Regulatory Commission	0	0	0	0
54		-Miscellaneous-				
55	675.8	Miscellaneous Expense	2,976	2,976	73,327	73,327
56						
57		Total Administrative And General	\$16,019	\$16,019	\$2,612,480	\$2,651,971
58						
59		Total Operating Expenses	\$21,294	\$344,413	\$10,861,998	\$11,026,173

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Summary of Operating Expense Adjustments**

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES	
		12/31/16 DETAIL	12/31/16 AMOUNT	12/31/17 DETAIL	12/31/17 AMOUNT	12/31/18 DETAIL	12/31/18 AMOUNT
1	Per Books		\$21,294				
2	Present Rates At 12/31/2016				\$344,413		
3	Present Rates At 12/31/2017						\$10,861,998
4	Compensation			\$4,460,928		\$93,290	
5	Group Insurance			866,382		18,888	
6	Other Post Employment Benefits & VEBA			21,907			
7							
8	Purchased Power			640,901			
9	Waste Disposal			1,022,245		16,900	
10	Chemicals			991,723		21,570	
11							
12	Transportation Expense			373,111		8,019	
13							
14	Regulatory Expense (Rate Case Expense)			25,000			
15							
16							
17							
18	401K & Defined Contribution Plan			552,161		5,508	
19	Rent Expense			72,300			
20	Miscellaneous Adjustments			1,488,104			
21	Uncollectibles	<u>\$323,119</u>		<u>2,823</u>		<u>0</u>	
22	Pro Forma Adjustments		<u>323,119</u>		<u>10,517,585</u>		<u>164,175</u>
23	Present Rates At 12/31/2016		<u>\$344,413</u>				
24	Present Rates At 12/31/2017				<u>\$10,861,998</u>		
25	Present Rates At 12/31/2018						<u>\$11,026,173</u>

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Compensation**

The following adjustment sets forth a summary of the Company's annualization of labor expense. The pro forma payroll for the future annualization was developed by applying pay rates and associated incentive pay that will become effective by December 31, 2017 and December 31, 2018 to the Company's full complement of employees.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Salary and Wages	\$4,776,725	\$4,875,118
2	Annualized Performance Plan	110,356	114,165
3	Less: 8.72% Capitalized portion not charged to operating expense	<u>426,153</u>	<u>435,065</u>
4	Sub-Total	4,460,928	4,554,218
5	Less: Amount Charged To Operating Expense		
6	During The Twelve Months Ended 12/31/16	<u>0</u>	
7	Less: Amount Charged To Operating Expense		
8	During The Twelve Months Ended 12/31/17		<u>4,460,928</u>
9	Pro Forma Adjustment	<u><u>\$4,460,928</u></u>	<u><u>\$93,290</u></u>
	601.3 Salary and Wages - Water Treatment	\$1,033,033	\$21,005
	601.6 Salary and Wages - Transmission & Distribution	2,893,023	58,427
	601.7 Salary and Wages - Customer Accounting	329,747	6,782
	601.8 Salary and Wages - Administrative and General	205,125	7,076

Witness: Jamie Hawn

Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Group Insurance**

The adjustment of the group insurance cost is based on the January 2017 premiums annualized for the future test year number of employees less the annualized employee contribution, and adjusted for the portion not charged to operations. The fully projected test year was developed by adjusting the annualized 2017 amount by an inflation factor of 2.18%.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized Group Insurance Cost	\$949,148	\$969,840
2	Less: 8.72% Not Charged To Operating Expense	82,766	84,570
3	Sub-Total	<u>866,382</u>	<u>885,270</u>
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	0	
6	Less: Amount Charged To Operating Expense		
7	During The Twelve Months Ended 12/31/17		<u>866,382</u>
8	Pro Forma Adjustment	<u>\$866,382</u>	<u>\$18,888</u>
	604.8 A&G Employees Pension And Benefits	\$866,382	\$18,888

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Other Post Employment Benefits (OPEB)**

The following sets forth the Company's adjustment for post-retirement benefit costs under FAS 106 using the methodology approved by the Commission in the Company's base rate cases since 1992. In addition the Company has included the expense associated with the Company's contributions to the Voluntary Employee Beneficiary Association (VEBA).

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized OPEB Expense	\$0
2	Annualized VEBA Expense (\$500 x 48 of employees)	24,000
3	Less: 8.72% Capitalized portion not charged to operating expense	2,093
4	Sub-Total	<u>21,907</u>
5	Less: Amount Charged To Operating Expenses	
6	For The Twelve Months Ended 12/31/16	<u>0</u>
7	Pro Forma Adjustment	<u><u>\$21,907</u></u>
	604.8 A&G Employees' Welfare Expenses	\$21,907

Witness: Jamie Hawn

Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Purchased Power**

This adjustment reflects the application of rates for purchased power to be in effect as of December 2016 to anticipated billing units for the future and fully projected rate years. Scranton Wastewater power expense was increased by 20% over base year average cost due to new regulatory requirements under the 2016 NPDES permit for the Scranton Wastewater Treatment Plant, which restricts untreated discharges and, therefore requires a larger portion of total system flow to be processed by the Scranton Wastewater Treatment Plant.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT
1	Annualized Power Cost	\$640,901	\$640,901
2	Less: Amount Charged To Operating Expense	0	640,901
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	\$640,901	\$0
	615.3 Purchased Power - Water Treatment	\$572,040	\$0
	615.5 Purchased Power - Transmission and Distribution	68,861	0

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B



**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Waste Disposal**

The annualization of waste disposal costs was based on the application of contract prices in effect at January 1, 2017 and January 1, 2018 to anticipated 2017 usage.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized Waste Disposal Costs	\$1,022,245	\$1,039,145
2	Less: Amount Charged To Operating Expense	0	1,022,245
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	<u>1,022,245</u>	<u>16,900</u>
	675.3 Waste Disposal	<u><u>\$1,022,245</u></u>	<u><u>\$16,900</u></u>

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Chemicals**

The annualization of chemical costs was based on the application of contract prices in effect at January 1, 2017 to anticipated 2017 usage. The present rates December 31, 2017 amount was increased by 2.18% (Blue Chip GDP Price Index for 2018) to project 2018 cost levels.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Chemical Costs	\$991,723	\$1,013,293
2	Less: Amount Charged To Operating Expense	0	991,723
3	During The Twelve Months Ended 12/31/16 and 12/31/17		
4	Pro Forma Adjustment	<u>\$991,723</u>	<u>\$21,570</u>
	618.3 Chemicals - Water Treatment	<u>\$991,723</u>	<u>\$21,570</u>

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Transportation Expense**

The following adjustment reflects the annualization of transportation expense for the years ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized Leased Vehicles Expense	\$408,864	\$417,649
2	Less: 8.72% Not Charged To Operating Expense	35,653	36,419
3	Sub-Total	<u>373,211</u>	<u>381,230</u>
4	Less: Amount Charged To Operating Expense		
5	During The Twelve Months Ended 12/31/16	100	
6	Less: Present Rates At 12/31/17	<u>                    </u>	<u>373,211</u>
7	Pro Forma Adjustment	<u>\$373,111</u>	<u>\$8,019</u>
	650.8 A & G - Miscellaneous General Expense	\$373,111	\$8,019

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Regulatory Expense (Rate Case Expense)**

The following adjustment reflects the estimated cost of this rate case normalized over a three-year period. This adjustment is the cost of service for the separation of Wastewater and StormWater.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT
5	Cost Of Service	\$75,000
8	Total	75,000
9	Normalized Over 3 Years	25,000
11	Less: Amount Charged To Operating Expense	
12	During The Twelve Months Ended 12/31/16	0
13	Pro Forma Adjustment	\$25,000
	666.8 Regulatory Commission Expense	\$25,000

Witness: John Cox  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**401K, Defined Contribution Plan (DCP) and Employee Stock Purchase Plan (ESPP) Expense**

The following adjustment is being made to annualize 401K, DCP contributions and ESPP contributions based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Annualized 401K - Company Match	\$25,131	\$25,999
2	Contribution adjustment	329,000	329,000
3	Annualized DCP	250,778	255,944
4	Less: 8.72% Not Charged To Operating Expense	52,748	53,274
5	Sub-Total	<hr/> 552,161	<hr/> 557,669
6	Less: Amount Charged To Operating Expense	0	552,161
7	Pro Forma Adjustment	<hr/> <u>\$552,161</u>	<hr/> <u>\$5,508</u>
	604.8 Employee Pension And Benefits AG	\$552,161	\$5,508

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Rent Expense**

This adjustment is being made to reflect the Company's claim for the property lease agreements.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNT
1	Annualized Rent Expense	\$72,300
2	Less: Amount Charged To Operating Expense During the Twelve Months Ended 12/31/16	0
3	Pro Forma Adjustment	<u>\$72,300</u>
	641.8 Rents - Real Property - Admin & General	\$72,300

Witness: Daniel Hunnell  
Reference: Exhibit No. 3-B Statement x

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Miscellaneous Expense Adjustment**

The following adjustment is being made to add Scranton WW expenses to pro forma expenses.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNTS</b>
1	Scranton WW Plant Expenses	\$800,368
2	Scranton WW Collection Line Expenses	207,261
3	Scranton WW Administrative Expenses	480,475
4	Pro Forma Adjustment	<u>\$1,488,104</u>
	604.8 Empl Pens & Ben AG	\$5,315
	615.3 Purch Power Oper WT	44,243
	615.8 Purch Power Oper AG	6,688
	620.4 M&S Maint WT	394,761
	620.6 M&S Maint TD	114,720
	631.8 Cont Serv Eng AG	141,729
	633.8 Cont Serv Legal AG	250,000
	636.3 Cont Serv Other Oper	41,564
	642.3 Rents-Equipment Oper	26,190
	642.8 Rents-Equipment AG	6,392
	675.3 Misc Exp Oper WT	226,981
	675.4 Misc Exp Maint WT	29,690
	675.5 Misc Exp Oper TD	74,332
	675.6 Misc Exp Maint TD	18,209
	675.7 Misc Exp CA	36,939
	675.8 Misc Exp AG	70,351

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Calculation of Uncollectible Accounts Expenses**

The following adjustment develops the Company's uncollectible accounts expense claim calculated on the ratio of actual per books revenue to net write-offs. This ratio is applied to pro forma sales at present and proposed rates.

LINE NO	DESCRIPTION	PER BOOKS	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT	PRO FORMA REVENUE WITH DEFICIENCY
1	Total Sales	\$0	\$21,773,527	\$21,963,725	\$21,963,725	\$32,339,437
2	3 Year Average	1.4840%	1.4840%	1.4840%	1.4840%	1.4840%
3	Annualized Uncollectible Expense		\$323,119	\$325,942	\$325,942	\$479,917
4	Less: Amount Charged To Operating Expense					
5	During The Twelve Months Ended 12-31-12		0			
6	Less: Present Rates 12/31/2016			323,119		
7	Less: Present Rates 12/31/2017				325,942	
8	Less: Present Rates 12/31/2018					325,942
9	Pro Forma Adjustment		\$323,119	\$2,823	\$0	\$153,975
<b>670.7</b>	<b>Customer Accounting And Collecting - Bad Debt</b>		\$323,119	\$2,823	\$0	\$153,975

Witness: John Cox



**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Depreciation**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
<b>1</b>	Annualized Depreciation	\$2,783,196	\$3,193,120	\$3,468,010
<b>2</b>	Book Depreciation	<u>2,783,196</u>	<u>2,783,196</u>	<u>3,193,120</u>
<b>3</b>	Pro Forma Adjustment	<u>\$2,783,196</u>	<u>\$409,924</u>	<u>\$274,890</u>
<b>4</b>	503 Depreciation	\$2,783,196	\$409,924	\$274,890

Witness: John Cox, John Spanos

Reference: Exhibit No. 3-C, Exhibits No. 11

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Operating Expenses**

**Amortization Expense**

This adjustment is being made to reflect the Company's claim for amortizations.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/2017 and 12/31/2018 AMOUNT</b>
1	Scranton Sewer Auth - UPAA                      Seeking Approval	\$564,529
2	Scranton Sewer Auth - Acquisition Costs      Seeking Approval	74,436
3	Proforma Expense	<hr/> 638,965
4	Less: Per Books	0
5	Pro Forma Adjustment	<hr/> <hr/> \$638,965

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Pennsylvania Property Tax**

The following adjustment reflects the projected property tax expense for the twelve months ended December 31, 2017 and December 31, 2018.

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>12/31/2016 AMOUNT</b>	<b>PRESENT RATES 12/31/2017 AMOUNT</b>	<b>PRESENT RATES 12/31/2018 AMOUNT</b>
1	Property Subject to Tax	\$55,122,929	\$58,879,197	\$60,841,876
2	Property Tax UPIS	<u>\$219,902</u>		
3	Total	\$219,902		
4	Rate (Line 3 / Line 1)	\$0.003989	\$0.003989	\$0.003989
5	Projected property tax expense (Line 1 x Line 4)		<u>\$234,869</u>	<u>\$242,698</u>
6	Less: Amount Charged To Operating Expense			234,869
7	During The 12 Months Ended 12/31/16		0	
8	Pro Forma Adjustment		<u>\$234,869</u>	<u>\$7,829</u>
	408.2 Taxes, Other Than Income - Property		\$234,869	\$7,829

Witness: John Cox  
Reference: Exhibit No. 3-C

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Taxes, Other than Income**

**Payroll Taxes**

The following adjustment is being made to annualize payroll tax expense based on the annualized compensation claim at December 31, 2017 and December 31, 2018.

LINE NO.	DESCRIPTION	PRESENT RATES 12/31/2017 AMOUNT	PRESENT RATES 12/31/2018 AMOUNT
1	Annualized Payroll Taxes (Salary And Hourly)	\$409,511	\$416,755
2	Plus: Payroll Taxes - APP/LTPP	8,442	8,733
3	Less: 8.72% Not Charged To Operating Expense	36,446	37,103
4	Sub-Total	381,507	388,385
5	Less: Amount Charged To Operating Expense	0	381,507
6	Pro Forma Adjustment	\$381,507	\$6,878
	408.12 - Taxes - Payroll	\$381,507	\$6,878

Witness: Jamie Hawn  
Reference: Exhibit No. 3-B

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Calculation of General Assessment by the Pennsylvania Public Utility  
Commission, Consumer Advocate and Small Business Advocate Fees**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
1	Total Wastewater Sales	\$21,749,356	\$21,749,356	\$21,749,356	\$32,035,119
2	Estimated General Assessment Fee				
3	Public Utility Commission At 0.004398092304	95,656	95,656	95,656	140,893
4	Consumer Advocate Fee At 0.000671478022	14,604	14,604	14,604	21,511
5	Small Business Advocate Fee At 0.000078998984	1,718	1,718	1,718	2,531
6	Subtotal	111,978	111,978	111,978	164,935
7	Less: Amount Charged To Operating Expenses During				
8	The Twelve Months Ended 12/31/2016	0			
9	Less: Pro Forma Under Present Rates At 12/31/2016		111,978		
10	Less: Pro Forma Under Present Rates At 12/31/2017			111,978	
11	Less: Pro Forma Under Present Rates At 12/31/2018				111,978
12	Pro Forma Adjustment	\$111,978	\$0	\$0	\$52,957
507.1	507.1 Taxes Other Than Income				\$164,935

Witness: Jo Anne Lontz

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Pro Forma State And Federal Income Taxes Under Present And Proposed Rates**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>PRESENT RATES 12/31/16 AMOUNT</b>	<b>PRESENT RATES 12/31/17 AMOUNT</b>	<b>PRESENT RATES 12/31/18 AMOUNT</b>	<b>PROPOSED AMOUNT</b>
<b>1</b>	State Income Tax Per Computation				
<b>2</b>	Shown On Following Page	\$1,579,949	\$117,203	\$1,874	\$1,017,159
<b>3</b>	Less: State Income Tax Per Book				
<b>4</b>	Computation Shown On Following Page	(535,020)			
<b>5</b>	Less: Present Rates 12/31/2016		1,579,949		
<b>6</b>	Less: Present Rates 12/31/2017			117,203	
<b>7</b>	Less: Present Rates 12/31/2018				1,874
<b>8</b>	Pro Forma Adjustment	<u>\$2,114,969</u>	<u>(\$1,462,746)</u>	<u>(\$115,329)</u>	<u>\$1,015,285</u>
<b>9</b>	Federal Income Tax Per Computation				
<b>10</b>	Shown On Following Page	\$4,864,543	\$856,474	\$622,532	\$3,824,235
<b>11</b>	Less: Federal Income Tax Per Book				
<b>12</b>	Computation Shown On Following Page	(1,805,018)			
<b>13</b>	Less: Present Rates 12/31/2016		4,864,543		
<b>14</b>	Less: Present Rates 12/31/2017			856,474	
<b>15</b>	Less: Present Rates 12/31/2018				622,532
<b>16</b>	Pro Forma Adjustment	<u>\$6,669,561</u>	<u>(\$4,008,069)</u>	<u>(\$233,942)</u>	<u>\$3,201,703</u>

Witness: John Cox

**Pennsylvania-American Water Company - Scranton Wastewater Operations**  
**Notes to Statement Of Income**  
**Calculation Of State And Federal Income Taxes**

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 12/31/16 AMOUNT	PRESENT RATES 12/31/17 AMOUNT	PRESENT RATES 12/31/18 AMOUNT	PROPOSED AMOUNT
1	Utility Operating Income Before Taxes	\$146,277	\$18,533,940	\$6,541,288	\$6,087,516	\$16,256,296
2	Less: Interest Expense	3,055,296	3,055,296	3,977,017	4,306,979	4,312,750
3	Taxable Operating Income	(2,909,019)	15,478,644	2,564,271	1,780,537	11,943,546
4	Add: Premature Property Losses / Amortizations	0	0	638,965	638,965	638,965
5	Depr - Straight Line-Remaining Life	0	2,783,196	3,193,120	3,468,010	3,468,010
6	Taxable Meals & Entertainment	0	0	0	0	0
7	Total	0	2,783,196	3,832,085	4,106,975	4,106,975
	Deduct:					
8	Tax Depreciation:					
9	ADR On Pre 1981 Assets	0	0	0	0	0
10	ACRS On Post 1980 Assets	0	0	0	0	0
11	MACRS On Post 1986 Assets -State	2,446,534	2,446,534	5,215,499	5,855,284	5,855,284
12	Cost Of Removal	0	0	7,659	13,466	13,466
13	Total	2,446,534	2,446,534	5,223,158	5,868,750	5,868,750
14	State Taxable Income	(5,355,553)	15,815,306	1,173,198	18,762	10,181,771
15	State Income Tax At:					
16	Historic, Future And Fully Projected At 9.99%	(535,020)	1,579,949	117,203	1,874	1,017,159
17	Taxable Income After State Income Tax	(4,820,533)	14,235,357	1,055,995	16,888	9,164,612
18	Add: Cost Of Removal Non ADR Property	0	0	0	0	0
19	ACRS On Post 1980 Assets	0	0	0	0	0
20	MACRS On Post 1986 Assets - State	2,446,534	2,446,534	5,215,499	5,855,284	5,855,284
21	Deduct: SLRL On Post 1980 Assets & Amortization	2,783,196	2,783,196	3,824,426	4,093,509	4,093,509
22	Income Subject To Federal Income Tax	(5,157,195)	13,898,695	2,447,068	1,778,663	10,926,387
23	Federal Income Tax @ 35%	(1,805,018)	4,864,543	856,474	622,532	3,824,235
24	Consolidated Tax Savings Adjustment		0	0	0	0
25	Federal Tax Liability	(\$1,805,018)	\$4,864,543	\$856,474	\$622,532	\$3,824,235
	Witness: John Cox					

**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Pro Forma Interest Expense Under Present and Proposed Rates**

LINE NO.	DESCRIPTION	PRESENT RATES			PROPOSED AMOUNT
		12/31/16 AMOUNT	12/31/17 AMOUNT	12/31/18 AMOUNT	
1	Interest On Long Term Debt Per Computation				
2	Shown On Following Page	\$1,800,082	\$2,608,093	\$2,808,316	\$2,812,079
3	Less: Interest On Long Term Debt As Per Book				
4	Computation On Following Page	1,800,082			
5	Less: Present Rates At 12/31/2016		1,800,082		
6	Less: Present Rates At 12/31/2017			2,608,093	
7	Less: Present Rates At 12/31/2018				2,808,316
8	Pro Forma Adjustment	\$0	\$808,011	\$200,223	\$3,763
9	Interest On Wastewater Specific Long Term Debt Per Computation				
10	Shown On Following Page	\$1,255,214	\$1,368,924	\$1,498,663	\$1,500,671
11	Less: Interest On Wastewater Specific Long Term Debt As Per Book				
12	Computation On Following Page	1,255,214			
13	Less: Present Rates At 12/31/2016		1,255,214		
14	Less: Present Rates At 12/31/2017			1,368,924	
15	Less: Present Rates At 12/31/2018				1,498,663
16	Pro Forma Adjustment	\$0	\$113,710	\$129,739	\$2,008

Witness: Ann Bulkley



**Pennsylvania-American Water Company - Scranton Wastewater Operations**

**Notes to Statement Of Income**

**Application of Income Deductions**

LINE NO.	DESCRIPTION	PRESENT RATES AT DECEMBER 31, 2016			PRESENT RATES AT DECEMBER 31, 2017			PRESENT RATES AT DECEMBER 31, 2018		
		AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE	AMOUNT	CAPITAL STRUCTURE	COST RATE
<b>1</b>	<b>Capital Structure</b>									
2	Long Term Debt	\$79,380,599	31.30%	5.74%	\$111,910,063	34.76%	5.45%	\$113,586,625	35.24%	5.25%
3	Long Term Debt - WW Spec	68,480,841	27.00%	4.64%	70,693,092	21.95%	4.53%	69,324,555	21.51%	4.59%
4	Total Debt	147,861,440	58.30%		182,603,155	56.71%		182,911,180	56.75%	
5	Preferred Stock	555,368	0.22%	8.62%	552,890	0.17%	8.63%	430,157	0.13%	8.66%
6	Common Equity	105,186,698	41.48%		138,850,910	43.12%		139,016,467	43.12%	
7	Totals	<u>\$253,603,506</u>	<u>100.00%</u>		<u>\$322,006,955</u>	<u>100.00%</u>		<u>\$322,357,804</u>	<u>100.00%</u>	
<b>8</b>	<b>Application Of Long Term Debt Interest:</b>									
9	Original Cost Rate Base				\$100,192,712	\$137,672,350	\$151,792,672	\$151,996,033		
10	Debt Percentage (From Above)				31.30%	34.76%	35.24%	35.24%		
11	Debt Portion Of Rate Base				31,360,319	47,854,909	53,491,738	53,563,402		
12	Interest Cost (From Above)				5.74%	5.45%	5.25%	5.25%		
13	Pro Forma Long Term Interest Deduction				<u>\$1,800,082</u>	<u>\$2,608,093</u>	<u>\$2,808,316</u>	<u>\$2,812,079</u>		
<b>14</b>	<b>Application Of Wastewater Specific Long Term Debt Interest:</b>									
15	Original Cost Rate Base				\$100,192,712	\$137,672,350	\$151,792,672	\$151,996,033		
16	Debt Percentage (From Above)				27.00%	21.95%	21.51%	21.51%		
17	Debt Portion Of Rate Base				27,052,032	30,219,081	32,650,604	32,694,347		
18	Interest Cost (From Above)				4.64%	4.53%	4.59%	4.59%		
19	Pro Forma Wastewater Specific Long Term Interest Deduction				<u>\$1,255,214</u>	<u>\$1,368,924</u>	<u>\$1,498,663</u>	<u>\$1,500,671</u>		

Witness: Ann Bulkley