

COMMONWEALTH OF PENNSYLVANIA
PUBLIC UTILITY COMMISSION

- - - - -
WILLIAM FERGUSON

vs.

AQUA PENNSYLVANIA WASTEWATER, INC.

Initial Call In Telephonic Hearing :
- - - - -

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Judge's Chambers
State Office Building
801 Market Street
Philadelphia, PA 19107

Monday, November 25, 2024
Commencing at 10:00 a.m.

BEFORE:

Judge Eranda Vero, Administrative Law Judge

REPORTER:

Lori Frankford

APPEARANCES:

POST & SCHELL, P.C.
BY: GARRETT P. LENT, ESQ.
17 North Second Street, 12th Floor
Harrisburg, PA 17101
717-612-6032
glent@postschell.com
Representing the Respondent

ALSO PRESENT

Erin Feeney
Kimberly Joyce

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Exhibit A

Exhibit A

Docket No. R-2021-3027386
Exhibit 1-G

Schedule C-1
Witness: William C. Packer

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/21	PRESENT RATES 3/31/21	PRESENT RATES 3/31/22	PRESENT RATES 3/31/23
	(1)	(2)	(3)	(4)	(5)	(6)
1		--Collection--				
2		-Operations-				
3	7151	Purchased Power	30,750	30,750	135,832	130,019
4	7161	Purchased Power	203	203	896	858
5		-Maintenance-				
6	7362	OS Other	5,095	25,475	25,921	26,361
7						
8		Total Collection Expense	\$ 36,048	\$ 56,428	\$ 162,649	\$ 157,238
9						
10		--Pumping--				
11		-Operations-				
12	7183	Chemicals	357	1,428	1,428	1,428
13	7203	Supplies	4,988	4,988	5,075	5,161
14		-Maintenance-				
15	7354	OS Lab Testing	670	15,670	15,944	16,215
16	7364	OS Other	19,497	97,485	99,191	100,877
17						
18		Total Pumping Expense	\$ 25,512	\$ 119,571	\$ 121,638	\$ 123,682
19						
20		--Treatment & Disposal--				
21		-Operations-				
22	7105	Purchased Wastewater	249,695	1,200,000	1,200,000	1,200,000
23	7365	OS Other	10,335	51,675	52,579	53,473
24		-Maintenance-				
25	7366	OS Other	20,970	104,850	106,684	108,498
26						
27		Total Treatment & Disposal Expense	\$ 280,999	\$ 1,356,524	\$ 1,359,263	\$ 1,361,970
28						

Exhibit B

Docket No. R-2021-3027386
Exhibit 1-G

Schedule C-7.1
Witness: Christopher M. Henkel

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED WASTEWATER TREATMENT EXPENSE

The Company's claim for purchased wastewater treatment expense is being annualized to give effect of a full twelve months of service for the New Garden Wastewater System. The service provider is Brandysine Septic.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Claimed Purchased Wastewater Expense	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000
2	Less: Amount Charged to Operating Expense			
3	During the Twelve Months Ended 3/31/2021	249,695		
4	Less: Present Rates 3/31/2021		1,200,000	
5	Less: Present Rates 3/31/2022			1,200,000
6	Increase/(Decrease)	<u>\$ 950,305</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	7105	\$ 950,305	\$ -	\$ -

Exhibit C

The following is Aqua's letter to New Garden ratepayers following up on the 21-Nov-2022 public meeting.



December 9, 2022

Dear New Garden Township Aqua Customer,

I want to thank township supervisors for inviting us to their November meeting with you to discuss the sewer system. My colleagues and I appreciated your questions and comments regarding sewer system operations and rates. An important point we shared at the meeting, which is worth repeating, is that our customer rates are set by the Pennsylvania Public Utility Commission (PUC) and that our requested rate adjustment was consistent with the agreement we made with the township including a 5,000-gallon allowance in your quarterly bill. The PUC, however, chose a different proposal presented in the case which is within their authority and they set your rates accordingly.

Other information we shared at the meeting focused on sewer system operations. Once your wastewater is treated, it is disposed of by spraying onto fields dedicated for this purpose. The facilities and spray field condition matter significantly to our operations and ability to protect the environment. Upon taking ownership, the condition of the facilities required that we immediately contact the PA Department of Environmental Protection to enter into an agreement in which we committed to improve operations. Initially, we had to truck excess treated wastewater from one wastewater treatment plant to another which cost more than \$800,000. After several months, we replaced hauling with a pipeline connecting the two treatment plants. It was work our experienced, dedicated, and creative employees completed safely and expeditiously. Over the next 10-years we expect investment needs to be more than \$11 million to sustain operations and environmental compliance. Please know that we will continue to evaluate alternatives that maintain operations, environmental compliance, and reduce capital investment and operational expense. We also discussed our active pursuit of grants and low-interest loans.

In closing, I want to say again that we are proud of the work we do, our commitment to environmental protection, the service we provide and are excited to be your sewer system service provider. I also want to remind you that we are aware how rates impact you and will continue to evaluate repair and replacement of these systems so that we may ensure uninterrupted, quality service and compliance. You can rest assured that we will never minimize our responsibility or avoid a challenge, so that your service is never compromised and the environment in which we operate will not suffer.

Sincerely,

Marc A. Lucca
President, Aqua Pennsylvania

Exhibit D

The following is a page from Aqua's 2021 annual report to the PUC.

Aqua Pennsylvania Wastewater, Inc.

For the Year Ended December 31, 2021

(Company Name)

204. CONSTRUCTION WORK IN PROGRESS - Account No. 105.0

1. Describe the particulars concerning utility plant in process of construction but not ready for service at end of Calendar Year.
2. Describe separately each work order that exceeds an estimated expenditure of \$250,000 or 1%, whichever is lesser, of the book cost of utility plant at the beginning of the year. All other work orders may be grouped by nature of project.

Line No.	Description of Work (a)	Balance End of Year (b)	Estimate Total Cost of Construction (c)	Projected In-Service Date (d)
1	15075081550 Media WWTP Upgrade - Phase II	17,486,621	18,236,621	12/31/21
2	15089491798 Penn Twp WWTP Upgrade I (B1-2)	1,551,373	4,751,373	12/31/22
3	15084087775 Rehab Thornhurst WWTP	772,704	3,772,704	10/31/22
4	15081003127 Pinecrest WWTP Upgrade	6,474	3,656,474	12/31/25
5	15079003128 Rivercrest WWTP Upgrade I	348,056	3,363,056	12/31/22
6	15088006258 Masthope WWTP Add Treatment Train	125,276	3,275,276	12/31/23
7	15087087776 Upgrade Laurel Lakes WWTP	414,727	2,764,727	12/31/23
8	15089216947 Lake Harmony Hydraulic Improvements	1,964,120	2,664,120	12/31/21
9	15070087544 Headworks Improvements-LW (A-1)	2,398,284	2,398,284	12/31/21
10	15025070312 W Springs WWTP Upgrades Phase 1A	506,350	1,923,350	12/31/23
11	15078006637 WH Collection System Imprv (2019)	129,008	1,659,008	12/31/22
12	15068017506 New Garden Spray Field Automation	1,361,970	1,361,970	3/31/22
13	15069214471 PennDot SR202 Sewer Relocation	94,259	1,339,259	12/31/22
14	15090014365 Delcora-Infrastructure	960,204	1,255,604	12/31/21
15	15089476471 Jenners Pond Pump Station Upgrade	1,136,148	1,186,148	12/31/21
16	15069111889 Cheltenham Sewer I&I Program	1,049,708	1,049,708	12/31/22
17	15071006585 Peddlers WWTP Upgrade PLC	1,306	1,011,306	12/31/22
18	15064013170 Stoney Creek Electrical Upgrades	16,954	816,954	12/31/22
19	15089367286 TL West WWTP-Copper TrtmtAdd(WER)	761,945	761,945	6/30/22
20	15070091530 Rehab (6) Process Tanks- LWW	48,819	698,819	12/31/25
21	15068020333 New Garden Dry Line Activation	666,833	666,833	12/31/21
22	15063076694 Repl Effluent Pump Station - WWTP	87,522	637,522	12/31/22
23	15069311220 VCTS Elec Upg @ Wilson Rd PS	616,908	616,908	9/30/22
24	15083076711 ER Relocate & repl Dellacola PS	23,658	603,658	12/31/23
25	15063003132 Cove Village-Ballpark (Stratton) PS	94,252	601,752	12/31/24
26	15063003286 CV Replace Haystack PS	91,893	599,393	12/31/23
27	15078024405 WH Rehab Treatment Train A	595,817	595,817	12/1/21
28	15063003133 Cove Village Princess PS Replace	81,302	588,802	12/31/24

Page 19

Ex. E

ember 7, 2023

Exhibit E

Reference: Formal complaint C-2023-3043109

Via email to:

Pamela McNeal - pmcneal@pa.gov

Michael W Hassell Esquire - mhassell@postschell.com

Garrett P Lent Esquire - glent@postschell.com

From: William Ferguson, Complainant - zzzferg@gmail.com

Attached to this cover letter on pages 4–10 please find the documentation and exhibits I intend to present at my initial hearing on December 12, 2023.

Attached as pages 2–3 is the Certificate of Service I will eFile with the PUC confirming that this document has been served on all parties to this formal complaint.

If anything is incomplete or otherwise needing correction, please let me know promptly so that the issue can be corrected.

Respectfully submitted,

William Ferguson

E x . E

November 6, 2023

Re: William Ferguson v. Aqua Pennsylvania Wastewater, Inc.
Docket No. C-2023-3043109

Via Electronic Filing:

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission

Dear Secretary Chiavetta:

The attached Certificate of Service confirms I have sent the appropriate parties the documents that I intend to use to support my formal complaint at the December 12, 2023 initial hearing.

Respectfully submitted,

William Ferguson, Complainant

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the documents supporting my formal complaint have been served upon the following persons:

Via email:

Pamela McNeal
Legal Assistant for
Administrative Law Judge Arlene Ashton
PA Public Utility Commission
pmcneal@pa.gov

Garrett P. Lent, Esq.
Post & Schell PC
glent@postschell.com
(Counsel for Aqua Pennsylvania)

Michael W. Hassell, Esq.
Post & Schell PC
mhassell@postschell.com
(Counsel for Aqua Pennsylvania)

Summary

This complaint focuses on Aqua's New Garden sewer customers (rate zone 11) being charged with a cost of \$1,200,000/yr that Aqua is not incurring. Aqua filed for a system wide rate increase during August-2021. That filing included a New Garden line item cost of \$1,200,000/yr for "Purchased Wastewater". At the time of filing Aqua knew or should have known that this cost would go to zero shortly after the filing date and many months before the rate increase would take effect. The PUC should not allow Aqua to be collecting revenue from ratepayers for this nonexistent cost.

I am requesting the PUC to investigate this situation. If it confirms this finding, Aqua should be required to refund overcharges incurred to date and to reduce future billings.

Complaint Details

On 20-August-2021 Aqua filed for a general rate increase¹. On 25-August-2021 Aqua then filed volumes 1 - 5 of their rate case documentation². That filing detailed operating expenses for New Garden on their Exhibit 1-G. Schedule C-1, page 1 (pdf page 662). Those expenses include a \$1,200,000/yr cost for "Purchased Wastewater" (Exhibit A). However, the filing never identifies what "Purchased Wastewater" is. Further on in the filing, Schedule C-7.1 (pdf page 682 and my Exhibit B) it notes that the service provider is Brandywine Septic.

On November 12, 2021 during the public comment part of the rate setting process I questioned what was "Purchased Wastewater". It represented over 63% of operating expenses in one line item. Aqua addressed that question in their 1-Jun-2022 Main Brief³ as follows:

¹ This was the PUC's docket case R-2021-3027386.

² Vol 1 – 5 rate case filing - <https://www.puc.pa.gov/pdocs/1716839.pdf>

³ Aqua 1-Jun-2022 Main Brief - <https://www.puc.pa.gov/pdocs/1746285.pdf> (Aqua's page 181 & pdf page 200)

Exh. E

2. Geoffrey Meyer, Peter Mrozinski and Bill Ferguson are neighbors and wastewater customers who testified at the public input hearing. They expressed concerns with the rate application filing and asked several questions. For example, they expressed concerns about purchased wastewater expense for New Garden. Mr. Duerr explained that purchased wastewater expense related to New Garden is costs for pumping and hauling wastewater for treatment at another location.

So that was the cost to truck wastewater from New Garden's South End plant to other locations for disposal. It was well known that New Garden had been trucking wastewater for several years. New Garden had noted that was costing about \$100,000/month.

At the time Aqua filed its rate increase it was working to activate a pipeline to eliminate the trucking operation. That project was complete before the end of 2021. Therefore, Aqua knew or should have known that the trucking expense would go to zero well before any rate increase took effect. Aqua should have been forecasting zero trucking expense in its 3/21/23 pro forma year. The actual forecast Aqua based its costs on is \$1,200,000/year.

Aqua made another major filing for this rate case on 4-Jan-2022⁴. That filing repeated many parts of the original filing including the New Garden cost data of which the \$1,200,000 is a part. That filing references Purchased Wastewater on pdf pages 667, 669, 671, 687 and 1,008. This apparently was an opportunity to update the filing. This filing was clearly after the trucking ended, but the cost was still included.

The following items validate that Aqua had terminated trucking New Garden wastewater by the end of 2021:

- #1 Aqua participated in a New Garden public meeting on 21-Nov-2022. After that meeting the president of Aqua PA sent New Garden ratepayers a letter dated 9-December-2022 (Exhibit C). It states that Aqua spent \$800,000 on trucking while activating a pipeline. He clearly states that the pipeline replaced trucking several months after acquiring the system in December 2020. By the end of 2021 trucking of New Garden wastewater stopped.

⁴ Aqua rate case filing 4-jan-2022 - <https://www.puc.pa.gov/pcdocs/1729409.pdf>

Exh. E

- #2 At the 21-Nov-2022 meeting noted above, Aqua's operations manager discussed the issues with New Garden's South End system. He noted that it took about eight months to activate an existing pipeline. Once that was done, the cost of trucking was eliminated. Here is a link to a video of that meeting:
<https://www.facebook.com/Ginny4PA/videos/1221133465137182>. The relevant part of the video starts at 1:30:00 and continues for about three minutes. At the end of that segment he clearly states that trucking had ended within the first year Aqua owned the system.
- #3 Aqua files annual reports with the PUC. Exhibit D is from Aqua Wastewater's 2021 annual report (New Garden lines highlighted)⁵. It confirms that Aqua invested in two capital projects related to New Garden's South End operations. It indicates that the pipeline project was complete by year end 2021.

Conclusions

Since Aqua's rate increase went into effect in May-2022, Aqua has been collecting \$1,200,000/year from New Garden ratepayers specifically for a cost they are not incurring.

A major part of Aqua's business is running pipeline operations. Relatively few incidents indicates they are very good at it. When Aqua filed for its rate increase it knew or should have known that the trucking expense would be eliminated within a very few months, well before a rate increase would take effect.

It is probably factual that the trucking cost was still being incurred on the date of the rate filing. But the basis for setting rates is a future year forecast. Their trucking cost forecast for their future proof year should have been zero. Yet, they forecast the \$1,200,000/yr for the 23-March-2023 year of operation. This appears to be Aqua taking advantage of the situation to profit above what the PUC allowed Aqua to earn from their New Garden sewer operation.

This should not be acceptable to the PUC. I am requesting the PUC to investigate Aqua's "Purchased Wastewater" expenses. If the excess charge is verified, it should be removed from the revenue Aqua is allowed to collect from New Garden ratepayers. All trucking funds collected so far should be refunded to customers.

⁵ Aqua Wastewater 2021 annual report - <https://www.puc.pa.gov/pdocs/1754255.pdf>

Exh. F

page 1

Exhibit F

For the convenience of the user, this section reproduces the six pages of Aqua's compliance data for New Garden customers (23-May-2022, link previously cited). It is Exhibit 5-B Compliance, pages 87 – 92. In the pdf file it is pages 157 – 162.

Exhibit 5-B Compliance
Page 87

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,080	-	\$ 37.64	\$ 228,826	\$ 45.46	\$ 276,391
Subtotal	6,080	-		228,826		276,391
Allowance (1,667 Gallons)		95,055	-	\$ -	2.3259	\$ 221,088
1st block (up to 5,000 gallons)		121,041	1.5170	183,618	2.3259	281,528
2nd block (Over 5,000 gallons)	-	44,054	1.9650	86,567	3.3435	147,295
Subtotal	-	260,150		270,185		649,911
Total Metered	6,080	260,150		\$ 499,011		\$ 926,302
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	1,177	-	\$ 52.71	\$ 62,041	\$ 62.52	\$ 73,592
Subtotal	1,177	-		62,041		73,592
Allowance (1,667 Gallons)		18,230	-	\$ -	3.4850	\$ 63,533
1st block (up to 5,000 gallons)		16,023	2.3500	37,655	3.4850	55,842
2nd block (Over 5,000 gallons)	-	8,647	3.0150	26,070	4.4868	38,796
Subtotal	-	42,901		63,725		158,171
Total Metered	1,177	42,901		\$ 125,766		\$ 231,763
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	90	-	\$ 64.31	\$ 5,800	\$ 62.52	\$ 5,639
Subtotal	90	-		5,800		5,639
Allowance (1,667 Gallons)		1,450	-	\$ -	4.4580	\$ 6,464
1st block (up to 5,000 gallons)		2,420	3.3020	7,991	4.4580	10,788
2nd block (Over 5,000 gallons)	-	3,400	4.1670	14,168	5.0000	17,000
Subtotal	-	7,270		22,159		34,252
Total Metered	90	7,270		\$ 27,959		\$ 39,891
Total Commercial	1,267	50,171		\$ 153,725		\$ 271,654

Exhibit ~~4~~ ^F – page 2

Exhibit S-8 Compliance
Page 88

AQUA PENNSYLVANIA, INC. WASTEWATER - RATE ZONE 11 NEW GARDEN DIVISION APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 218.32	\$ 655	\$ 311.55	\$ 935
Subtotal	3	-		655		935
Allowance (1,667 Gallons)		250	-	\$ -	3.4850	\$ 871
1st block (up to 5,000 gallons)		48	2.3500	113	3.4850	167
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	298		113		1,038
Total Metered	3	298		\$ 768		\$ 1,973
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	10	-	\$ 180.69	\$ 1,873	\$ 257.85	\$ 2,673
Subtotal	10	-		1,873		2,673
Allowance (1,667 Gallons)		35	-	\$ -	3.4850	\$ 124
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	35		-		124
Total Metered	10	35		\$ 1,873		\$ 2,797
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 165.62	\$ 497	\$ 236.34	\$ 709
Subtotal	3	-		497		709
Allowance (1,667 Gallons)		200	-	\$ -	3.4850	\$ 697
1st block (up to 5,000 gallons)		247	2.3500	580	3.4850	861
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	447		580		1,558
Total Metered	3	447		\$ 1,077		\$ 2,267
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 143.05	\$ 429	\$ 204.14	\$ 612
Subtotal	3	-		429		612
Allowance (1,667 Gallons)		150	-	\$ -	3.4850	\$ 523
1st block (up to 5,000 gallons)		10	2.3500	24	3.4850	35
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	160		24		558
Total Metered	3	160		\$ 453		\$ 1,170

F
Exhibit A – page 3

Exhibit 5-B Compliance
Page 80

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	6	-	\$ 127.98	\$ 768	\$ 182.63	\$ 1,096
Subtotal	6	-		768		1,096
Allowance (1,667 Gallons)		100	-	\$ -	3.4850	\$ 349
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	100		-		349
Total Metered	6	100		\$ 768		\$ 1,445
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 90.34	\$ 1,084	\$ 128.92	\$ 1,547
Subtotal	12	-		1,084		1,547
Allowance (1,667 Gallons)		350	-	\$ -	3.4850	\$ 1,220
1st block (up to 5,000 gallons)		260	2.3500	611	3.4850	906
2nd block (Over 5,000 gallons)	-	170	3.0150	513	4.4868	763
Subtotal	-	780		1,124		2,889
Total Metered	12	780		\$ 2,208		\$ 4,436
Total Combined Residential & Commercial	37	1,820		\$ 7,147		\$ 14,088
Total Commercial & Combined	1,305	51,991		\$ 160,872		\$ 285,742
<u>Public - Monthly</u>						
Customer Charge						
5/8	4	-	\$ 52.71	\$ 198	\$ 62.52	\$ 234
Subtotal	4	-		198		234
Allowance (1,667 Gallons)		61	-	\$ -	2.2849	\$ 140
1st block (up to 5,000 gallons)		82	1.5170	125	2.2849	188
2nd block (Over 5,000 gallons)	-	97	1.9650	190	3.2847	318
Subtotal	-	240		315		646
Total Metered	4	240		\$ 513		\$ 880
Total New Garden Division	7,388	312,381		\$ 660,396		\$ 1,212,924

F
Exhibit 4 – page 4

Exhibit 5-B Compliance
Page 90

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,912	-	\$ 37.64	\$ 636,516	\$ 45.46	\$ 768,826
Subtotal	16,912	-		636,516		768,826
Allowance (1,667 Gallons)		745	-	\$ -	2.3259	\$ 1,733
1st block (up to 5,000 gallons)		57,220	1.5170	86,803	2.3259	133,089
2nd block (Over 5,000 gallons)	-	543,532	1.9650	1,068,040	3.3435	1,817,299
Subtotal	-	601,498		1,154,843		1,952,121
Total Metered	16,912	601,498		\$ 1,791,359		\$ 2,720,947
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	875	-	\$ 52.71	\$ 46,113	\$ 62.52	\$ 54,699
Subtotal	875	-		46,113		54,699
Allowance (1,667 Gallons)		(9,680)	-	\$ -	3.4850	\$ (33,736)
1st block (up to 5,000 gallons)		115,471	2.3500	271,356	3.4850	402,416
2nd block (Over 5,000 gallons)	-	(8,647)	3.0150	(26,070)	4.4868	(38,796)
Subtotal	-	97,144		245,286		329,884
Total Metered	875	97,144		\$ 291,399		\$ 384,583
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	242	-	\$ 64.31	\$ 15,585	\$ 62.52	\$ 15,152
Subtotal	242	-		15,585		15,152
Allowance (1,667 Gallons)		(500)	-	\$ -	4.4580	\$ (2,229)
1st block (up to 5,000 gallons)		17,350	3.3020	57,290	4.4580	77,347
2nd block (Over 5,000 gallons)	-	14,124	4.1670	58,854	5.0000	70,619
Subtotal	-	30,974		116,144		145,737
Total Metered	242	30,974		\$ 131,729		\$ 160,889
Total Commercial	1,117	128,118		\$ 423,128		\$ 545,472

Exhibit F - page 5

Exhibit 5-B Compliance
Page 91

AQUA PENNSYLVANIA, INC. WASTEWATER - RATE ZONE 11 NEW GARDEN DIVISION APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 218.32	\$ (855)	\$ 311.55	\$ (935)
Subtotal	(3)	-		(855)		(935)
Allowance (1,667 Gallons)		(250)	-	\$ -	3.4850	\$ (871)
1st block (up to 5,000 gallons)		(48)	2.3500	(113)	3.4850	(167)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(298)		(113)		(1,038)
Total Metered	(3)	(298)		\$ (768)		\$ (1,973)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(10)	-	\$ 180.09	\$ (1,873)	\$ 257.85	\$ (2,673)
Subtotal	(10)	-		(1,873)		(2,673)
Allowance (1,667 Gallons)		(35)	-	\$ -	3.4850	\$ (124)
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(35)		-		(124)
Total Metered	(10)	(35)		\$ (1,873)		\$ (2,797)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 165.62	\$ (497)	\$ 236.34	\$ (709)
Subtotal	(3)	-		(497)		(709)
Allowance (1,667 Gallons)		(200)	-	\$ -	3.4850	\$ (697)
1st block (up to 5,000 gallons)		(247)	2.3500	(580)	3.4850	(861)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(447)		(580)		(1,558)
Total Metered	(3)	(447)		\$ (1,077)		\$ (2,267)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 143.05	\$ (429)	\$ 204.14	\$ (612)
Subtotal	(3)	-		(429)		(612)
Allowance (1,667 Gallons)		(150)	-	\$ -	3.4850	\$ (523)
1st block (up to 5,000 gallons)		(10)	2.3500	(24)	3.4850	(35)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(160)		(24)		(558)
Total Metered	(3)	(160)		\$ (453)		\$ (1,170)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(6)	-	\$ 127.68	\$ (768)	\$ 182.63	\$ (1,066)
Subtotal	(6)	-		(768)		(1,066)
Allowance (1,667 Gallons)		(100)	-	\$ -	3.4850	\$ (349)
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(100)		-		(349)
Total Metered	(6)	(100)		\$ (768)		\$ (1,445)

F Exhibit A – page 6

Exhibit 5-B Compliance
Page 92

AQUA PENNSYLVANIA, INC. WASTEWATER - RATE ZONE 11 NEW GARDEN DIVISION APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(12)	-	\$ 90.34	\$ (1,084)	\$ 128.92	\$ (1,547)
Subtotal	(12)	-		(1,084)		(1,547)
Allowance (1,667 Gallons)		(350)	-	\$ -	3.4850	\$ (1,220)
1st block (up to 5,000 gallons)		(260)	2.3500	(611)	3.4850	(906)
2nd block (Over 5,000 gallons)	-	(170)	3.0150	(513)	4.4868	(763)
Subtotal	-	(780)		(1,124)		(2,889)
Total Metered	(12)	(780)		\$ (2,208)		\$ (4,436)
Total Combined Residential & Commercial	(37)	(1,820)		\$ (7,147)		\$ (14,088)
Total Commercial & Combined	1,080	126,297		\$ 415,981		\$ 531,384
<u>Public - Monthly</u>						
Customer Charge						
5/8	(4)	-	\$ 52.71	\$ (198)	\$ 62.52	\$ (234)
Subtotal	(4)	-		(198)		(234)
Allowance (1,667 Gallons)		(61)	-	\$ -	2.2849	\$ (140)
1st block (up to 5,000 gallons)		(82)	1.5170	(125)	2.2849	(188)
2nd block (Over 5,000 gallons)	-	(97)	1.9650	(190)	3.2847	(318)
Subtotal	-	(240)		(315)		(648)
Total Metered	(4)	(240)		\$ (513)		\$ (880)
Total New Garden Division	17,988	727,555		\$ 2,206,827		\$ 3,251,451

Exh. G

Exhibit ^G~~B~~ – page 1

Exhibit G

Aqua's Compliance Data Consolidated

The following three pages consolidates Aqua's compliance data (Exhibit A) into the table shown by Exhibit B – page 4. The process for this consolidation is as follows:

1. Aqua's compliance data is divided into two parts: "Consumption Analysis" and "Billing Adjustments". Exhibit B, page 2, compiles Aqua's data on one page. The numbers highlighted in yellow bear a one to one relationship with Aqua's compliance data in Exhibit A.
2. This data is then further consolidated by adding the "Consumption Analysis" and "Billing Adjustments" to produce the table on Exhibit B, page 3. For each category of service this table is a complete summary of the number of bills plus the volumes and revenues for each rate band.
3. Finally, dropping the revenue numbers and data that are all zeroes produces the table shown by Exhibit B, page 4. Those nine volumes in yellow and three billing numbers in pink are the basis for Aqua's tariff setting and compliance calculations.

Exhibit 1 - page 2

Consumption Analysis						Billing Adjustments					
Bold Italic Numbers are data from Aqua's tariff filing						Bold Italic Numbers are data from Aqua's tariff filing					
	# Bills	Gallons	Present Revenue	Proposed Revenue	Increase		# Bills	Gallons	Present Revenue	Proposed Revenue	Increase
Page 157						Page 160					
Residential	6,080		\$228,826	\$276,391	20.8%	Residential	16,912		\$636,516	\$768,826	20.8%
Monthly Fixed			\$0	\$221,088	117.4%	Monthly Fixed			\$0	\$1,733	21.1%
0 - 1667		9,505,500		\$281,528	53.3%	0 - 1667		74,300		\$133,089	53.3%
up to 5,000		12,104,100	\$183,618	\$147,235	70.2%	up to 5,000		5,722,000	\$68,803	\$1,817,299	70.2%
Over 5,000		4,405,400	\$98,587	\$928,302	85.6%	Over 5,000		54,353,200	\$1,068,040	\$2,720,947	51.9%
Totals	6,080	26,015,000	\$489,011			Totals	16,912	60,149,700	\$1,791,359		
Commercial #1						Commercial #1					
Monthly Fixed	1,177		\$62,041	\$73,592	18.6%	Monthly Fixed	875		\$46,113	\$54,659	18.6%
0 - 1667		1,823,000	\$0	\$63,533	121.0%	0 - 1667			\$0	\$33,736	54.5%
up to 5,000		1,602,300	\$37,655	\$55,842	48.3%	up to 5,000		11,547,100	\$271,356	\$402,416	48.3%
Over 5,000		864,700	\$26,070	\$38,766	48.8%	Over 5,000		864,700	\$26,070	\$38,736	48.8%
Totals	1,177	4,290,000	\$125,766	\$231,763	84.3%	Totals	875	9,714,400	\$291,399	\$384,583	32.0%
Commercial #2						Commercial #2					
Monthly Fixed	90		\$5,800	\$5,639	-2.8%	Monthly Fixed	242		\$15,585	\$15,152	-2.8%
0 - 1667		145,000	\$0	\$6,464	106.7%	0 - 1667		50,000	\$0	\$2,229	17.1%
up to 5,000		242,000	\$7,991	\$10,788	35.0%	up to 5,000		1,735,000	\$57,290	\$77,347	35.0%
Over 5,000		340,000	\$14,188	\$17,000	20.0%	Over 5,000		1,412,400	\$58,854	\$70,619	20.0%
Totals	90	727,000	\$27,959	\$39,881	42.7%	Totals	242	3,097,400	\$131,729	\$160,889	22.1%
Total commercial						Total commercial					
1,267						1,117					
\$153,725						\$423,128					
76.7%						28.9%					
P157 Totals						P160 Totals					
7,347						18,029					
\$652,736						\$2,214,487					
83.5%						47.5%					
#'s 1 - 6 all are combined residential and commercial						#'s 1 - 6 all are combined residential and commercial					
Pages 158 & 159						Pages 161 & 162					
#1 p.158	3	28,800	\$768	\$1,973	156.9%	#1 p.161	-3	-29,800	-\$768	-\$1,973	156.9%
#2 p.158	10	3,500	\$1,873	\$2,797	49.3%	#2 p.161	-10	-3,500	-\$1,873	-\$2,797	49.3%
#3 p.158	3	44,700	\$1,077	\$2,257	110.5%	#3 p.161	-3	-44,700	-1,077	-\$2,257	110.5%
#4 p.158	3	18,000	\$453	\$1,170	158.3%	#4 p.161	-3	-16,000	-\$453	-\$1,170	158.3%
#5 p.159	6	10,000	\$768	\$1,445	88.2%	#5 p.161	-6	-10,000	-\$768	-\$1,445	88.2%
#6 p.159	12	78,000	\$2,208	\$4,436	100.9%	#6 p.162	-12	-78,000	-\$2,208	-\$4,436	100.9%
Public p.159	4	24,000	\$513	\$880	71.5%	Public p.162	-4	-24,000	-\$513	-\$880	71.5%
Totals	41	206,000	\$7,660	\$14,968	95.4%	Public p.162	-41	-206,000	-\$7,660	-\$14,968	95.4%
Three page subtotal						Three page subtotal					
7,388						17,988					
\$660,396						\$2,206,827					
Aqua's New Garden totals						Aqua's total New Garden					
7,388						17,988					
\$1,212,924						\$2,206,827					
Difference Vs aqua						Difference Vs aqua					
0						0					
\$0						\$0					

G
Exhibit B – page 3

Combined Consumption and Billing Adjustments					
	# Bills	Annual Gallons	Present Revenue	Proposed Revenue	Increase
Residential					
Monthly Fixed	22,992	0	\$865,342	\$1,045,217	20.8%
0 - 1667		9,580,000	\$0	\$222,821	
1667 - 5,000		17,826,100	\$270,421	\$414,617	53.3%
Over 5,000		58,758,600	\$1,154,607	\$1,964,594	70.2%
Totals	22,992	86,164,700	\$2,290,370	\$3,647,249	59.2%
Commerical #1					
Monthly Fixed	2,052	0	\$108,154	\$128,291	18.6%
0 - 1667		855,000	\$0	\$29,797	46.2%
1667 - 5,000		13,149,400	\$309,011	\$458,258	48.3%
Over 5,000		0	\$0	\$0	#DN/0!
Totals	2,052	14,004,400	\$417,165	\$616,346	47.7%
Commerical #2					
Monthly Fixed	332	0	\$21,385	\$20,791	-2.8%
0 - 1667		95,000	\$0	\$4,235	17.0%
1667 - 5,000		1,977,000	\$65,281	\$88,135	35.0%
Over 5,000		1,752,400	\$73,022	\$87,619	20.0%
Totals	332	3,824,400	\$159,688	\$200,780	25.7%
Grand Total		103,993,500			
Total commercial	2,384	17,828,800	\$576,853	\$817,126	41.7%
Total of combined residential and commercial					
#1	0	0	\$0	\$0	
#2	0	0	\$0	\$0	
#3	0	0	\$0	\$0	
#4	0	0	\$0	\$0	
#5	0	0	\$0	\$0	
#6	0	0	\$0	\$0	
Public	0	0	\$0	\$0	
Total	0	0	\$0	\$0	
Discount to Residential			\$0	-\$64,378	
Other operating revenues			\$17,382	\$26,643	
Grand total	25,376	103,993,500	\$2,884,605	\$4,426,640	53.5%
PUC Authorized for New Garden			\$2,889,080	\$4,428,399	
Difference			-\$4,475	-\$1,759	
			-0.15%	-0.04%	

The data in this table is Aqua's claim that they have demonstrated compliance with the revenue permitted by the PUC. Given the volumes and tariff rates, the math does calculate to the PUC allowed revenue.

G
Exhibit – page 4

The critical data from the Combined Consumption and Billing Adjustments is the volume and billing data. That is reproduced in the table below and is the basis for discussion in the major issues section.

Combined Consumption and Billing Adjustments		
	# Bills	Annual Gallons
Residential		
Monthly Fixed	22,992	
0 - 1667		9,580,000
1667 - 5,000		17,826,100
Over 5,000		58,758,600
Totals	22,992	86,164,700
Commerical #1		
Monthly Fixed	2,052	
0 - 1667		855,000
1667 - 5,000		13,149,400
Over 5,000		0
Totals	2,052	14,004,400
Commerical #2		
Monthly Fixed	332	
0 - 1667		95,000
1667 - 5,000		1,977,000
Over 5,000		1,752,400
Totals	332	3,824,400
Grand Total	25,376	103,993,500

The nine volume numbers highlighted in yellow and the three billing numbers highlighted in pink are Aqua's compliance data condensed into one table.

Exh. H

Exhibit H

Exhibit H - page 1

This section validates the billing and volume data from the table on Exhibit B page 4.

The two tables that follow take the summarized volume and billing data and applies tariff rates to it. A revenue is calculated for each of the twelve data points. That revenue is then compared to Aqua's total revenue for consumption and billing adjustments. In each and every category the difference is rounding error.

This first chart compares revenue without a rate increase. As the green box shows, there is less than a one dollar difference out of almost three million dollars total revenue.

Validation Of The Consumption Volumes Without A Rate Increase							
Revenue Based On Total Compliance Volume				Aqua's Compliance Data			
	Previous Tariff	Annual # Bills (Monthly Basis)	Annual Gallons	Calculated Revenue	Consumption Analysis Revenue	Billing Adjustment Revenue	Total Aqua Revenue
Residential							
Quarterly Fixed	\$112.91	22,992		\$865,342	\$228,826	\$636,516	\$865,342
0 - 5000	\$0.00		9,580,000	\$0	\$0	\$0	\$0
5000 - 15,000	\$15.17		17,826,100	\$270,422	\$183,618	\$86,803	\$270,421
Over 15,000	\$19.65		58,758,600	\$1,154,606	\$86,567	\$1,068,040	\$1,154,607
Totals			86,164,700	\$2,290,371	\$499,011	\$1,791,359	\$2,290,370
Commerical #1							
Quarterly Fixed	\$158.12	2,052		\$108,154	\$62,041	\$46,113	\$108,154
0 - 5000	\$0.00		855,000	\$0	\$0	\$0	\$0
5000 - 15,000	\$23.50		13,149,400	\$309,011	\$37,655	\$271,356	\$309,011
Over 15,000	\$30.15		0	\$0	\$26,070	-\$26,070	\$0
Totals			14,004,400	\$417,165	\$125,766	\$291,399	\$417,165
Commerical #2							
Quarterly Fixed	\$192.92	332.55		\$21,385	\$5,800	\$15,585	\$21,385
0 - 5000	\$0.00		95,000	\$0	\$0	\$0	\$0
5000 - 15,000	\$33.02		1,977,000	\$65,281	\$7,991	\$57,290	\$65,281
Over 15,000	\$41.67		1,752,400	\$73,023	\$14,168	\$58,854	\$73,022
Totals			3,824,400	\$159,688	\$27,959	\$131,729	\$159,688
Grand Total				\$2,867,224	\$652,736	\$2,214,487	\$2,867,223
Aqua's Comm #2 implied Tariff Rate \$193.333 \$193.202 Neither of which = the tariff rate = \$192.92 The numbers balance if the number of Annual Commercial #2 bills = 332.549 90.19 242.35 332.55							

Exhibit ^H – page 2

The following table does the same comparison calculation for Aqua's rate increase. As before, the green box shows only trivial differences between Aqua's data and the composite billing and volume data from the table in Exhibit B page 4.

Validation Of The Consumption Volumes With Aqua's Rate Increase								
Revenue Based On Total Compliance Volume					Aqua's Compliance Data			Revenue Agreement
	New Tariff	Annual # Bills (Monthly Basis)	Annual Gallons	Calculated Revenue	Consumption Analysis Revenue	Billing Adjustment Revenue	Total Aqua Revenue	
Residential								
Quarterly Fixed	\$136.38	22,992		\$1,045,216	\$276,391	\$768,826	\$1,045,217	99.9999%
0 - 5000	\$23.26		9,580,000	\$222,821	\$221,088	\$1,733	\$222,821	
5000 - 15,000	\$23.26		17,826,100	\$414,617	\$281,528	\$133,089	\$414,617	99.9999%
Over 15,000	\$33.44		58,758,600	\$1,964,594	\$147,295	\$1,817,299	\$1,964,594	100.0000%
Totals			86,164,700	\$3,647,249	\$926,302	\$2,720,947	\$3,647,249	100.0000%
Commerical #1								
Quarterly Fixed	\$187.56	2,052		\$128,291	\$73,592	\$54,699	\$128,291	100.0000%
0 - 5000	\$34.85		855,000	\$29,797	\$63,533	-\$33,736	\$29,797	
5000 - 15,000	\$34.85		13,149,400	\$458,257	\$55,842	\$402,416	\$458,258	99.9997%
Over 15,000	\$44.87		0	\$0	\$38,796	-\$38,796	\$0	
Totals			14,004,400	\$616,344	\$231,763	\$384,583	\$616,346	99.9997%
Commerical #2								
Quarterly Fixed	\$187.56	332.55		\$20,791	\$5,639	\$15,152	\$20,791	99.9993%
0 - 5000	\$44.58		95,000	\$4,235	\$6,464	-\$2,229	\$4,235	
5000 - 15,000	\$44.58		1,977,000	\$88,135	\$10,788	\$77,347	\$88,135	99.9996%
Over 15,000	\$50.00		1,752,400	\$87,620	\$17,000	\$70,619	\$87,619	99.9989%
Totals			3,824,400	\$200,781	\$39,891	\$160,889	\$200,780	99.9997%
Grand Total				\$4,464,374	\$1,197,956	\$3,266,419	\$4,464,375	100.0000%
					Aqua's Comm #2 Tariff Rate			
					\$193.333 \$187.835			
					Neither of which = the tariff rate = \$187.56			
					The numbers balance if the number of			
					Annual Commercial #2 bills = 332.549			
					90.20	242.35	332.55	

The conclusion is that the three billing numbers and nine volumes in the table from Exhibit B, page 4 are indeed Aqua's compliance data condensed into twelve numbers.

This section shows the impossibility of the residential consumptions in Aqua's compliance data in the following table:

	# Bills	Annual Gallons
Residential		
Monthly Fixed	22,992	
0 - 1667		9,580,000
1667 - 5,000		17,826,100
Over 5,000		58,758,600
Totals	22,992	86,164,700

First, it must be understood how actual customer bills relate to these rate band volumes. The following is an example for a customer being billed for using 25,000 gallons in one billing period. His use would be distributed in the above table as follows:

Rate Band	Gallons
0 - 1667	1,667
1667 - 5,000	3,333
Over 5,000	20,000
Total Bill	25,000

Large users contributing to multiple rate bands leads to interactions that make for impossible situations. To illustrate, assume the over 5,000 user averages 12,000 gallons/month. That means:

700 customers are needed to fill the over 5,000 rate band
 $[= 58,758,600 / (12,000 - 5,000) / 12]$.

Those 700 customers would contribute 27,980,286 gallons to the "1667 - 5,000" rate band
 $[= 700 \times 3333 \times 12]$.

27,980,286 gallons is far greater than the actual volume for the "1667 - 5,000" rate band. Therefore, it is an impossible situation. This situation persists until the average user in the over 5,000 rate band exceeds 16,000 gallons per month.

I
Exhibit – page 2

When the average bill exceeds 16,000 gallons/month another impossible situation develops. There must be 1,303 customers with zero consumption to make the rate band volumes match. The math here is more involved because multiple rate bands are involved. The following table is an illustration where the over 5,000 user averages 21,000 gallons/month. The next page goes through this table step by step.

Residential Customers Using Over 5,000 gallons/Month				
	Average Monthly Bill	Number Customers Required	Annual Volume	Rate Band
	21,000	306	58,758,600	>5,000
			12,241,375	1667- 5,000
			6,120,688	<1667
			77,120,663	total
Customers Using 1667 - 5,000 gallons/Month				
Remaining 1667 - 5,000	Monthly Bill	Number Customers Required	Annual Volume	Rate Band
Annual Volume	1667- 5,000		0	>5,000
5,584,725	5,000	140	5,584,725	1667- 5,000
			2,792,363	<1667
			8,377,088	total
Customers Using <1667 gallons/Month				
Remaining 0- 1667	Monthly Bill	Number Customers Required	Annual Volume	Rate Band
Annual Volume	0- 1667		0	>5,000
666,950	333	167	666,950	<1667
			666,950	total
613 Customers being billed with consumption > 0				
1,303 Customers with zero consumption				
Billing Consumptions		Annual gallons	Cross Check	
	<1667	9,580,000		0
	1667- 5,000	17,826,100		0
	>5,000	58,758,600		0
		86,164,700		0

For the over 5,000 gallons/month rate band:

306 customers are required to achieve the 58,758,600 gallons/year.
[= 58,758,600/12/(21,000-5,000)].

Those 306 customers also contribute:

12,241,375 gallons to the “1667 - 5,000” rate band [= 306*12*3,333]

6,120,688 gallons to the “0 - 1667” rate band. [= 306*12*1,667]

For the 1,667 - 5,000 gallons/month rate band:

5,584,725 gallons are left to consume. [17,826,100 – 12,241,375]

Assume that all customers in this rate band will use the full 5,000 gallon/month.
This is the most favorable assumption to minimize the number of customers with zero consumption.

140 customers are required [= 5,584,725/12/3333].

These 140 customers also contribute 2,792,363 gallons to the “0 - 1667” rate band.

[= 140*12*1,667]

For the 0 – 1,667 gallons/month rate band:

666,950 gallons are left to consume [9,580,000 – 6,120,688 – 2,792,363].

To minimize the number of zero use customers, assume the lowest use by a customer in this rate band. New Garden customers are billed quarterly in increments of 1,000 gallons. Therefore, the smallest monthly bill would be 333 gallons.

167 customers produce this result [666,950/12/333].

Exhibit I

– page 4

The grand total is that only 613 customers have volumes greater than zero [306 + 140 + 167]. 1,303 must have zero consumption or else the compliance volumes cannot be achieved.

This methodology can be repeated for any monthly usage. As the following table shows, the result is always the same: Therefore, 1,303 customers must have zero consumption or else the compliance volumes cannot be achieved.

Customer usage required for Aqua's Data				
Average				
Monthly	# Customers	# Customers	# Customers	# Customers
Volume	>5,000/mon	1667 - 5,000/mon	<1667/mon	@ zero
16,000	445	1	167	1,303
25,000	245	201	167	1,303
50,000	109	337	167	1,303
100,000	52	394	167	1,303
150,000	34	412	167	1,303
250,000	20	426	167	1,303

New Garden's data in Exhibit E shows only 119 customers with zero consumption. The conclusion is that Aqua's compliance data for residential customers is impossible to achieve.

Exh. J

Exhibit J

Exhibit J

27,000 gallon sewer bill for a Commercial 1 customer

A UA. Service To: **HARROGATE NO CONDO ASSOC** Account Number: **002644629 1498186**
390 SWAN RD NEW GARDEN WASTEWATER
LANDERBERG, PA 19359 2200886 PWSID # WO1556432

Aqua Pennsylvania Wastewater Toll Free: 877.987.2782 Questions about your sewer service? Contact us before the due date.
 762 W. Lancaster Avenue Fax: 866.788.3292 Bill Date: **June 23, 2021** Total Amount Due: **\$ 618.50** Current Charges Due Date: **July 15, 2021**
 Bryn Mawr, PA 19010-3489 AquaAmerica.com

Water Data	Billing Period	Days	Usage	Unit
	04/20/21	32	27,000	Gallons
	01/27/21			
Average Daily Usage = 293 Gallons	Total Days:	32	Total Usage:	27,000 Gallons

Billing Detail

Amount Owed from Last Bill	\$ 789.25
Total Payments Received	1,006.35
Remaining Balance	219.10 Credit
Current Wastewater Charges	47.00
Base User Charge	790.60
Amount Due	\$ 618.50

Message Center (see reverse side for other information)

- The due date refers to current charges and any deferred payment amount only. If you do not pay your bill on time, your service could be subject to interruption. To ensure proper credit, please remember to provide your full 16-digit account number when paying your bill.

A UA. RETURN THIS PORTION WITH YOUR PAYMENT Account Number: **002644629-1498186**

Aqua Pennsylvania Wastewater MAKE CHECK PAYABLE TO: Aqua PA WW
 762 W. Lancaster Avenue - Bryn Mawr, PA 19010-3489

Please do not remit payment to the above address

DUE DATE: **07/15/2021** TOTAL AMOUNT DUE: **\$618.50**

Amount Enclosed \$

*****AUTO**MIXED AADC 187 C 23 P 1 8088 1 AB 0.425

HARROGATE NO CONDO ASSOC
 C/O KIMBERTON PROPERTY MANAGEM
 PO BOX 663
 KIMBERTON PA 19442-0663

00264462914981860000000618506

Exh. K

Exhibit K

The following table quantitatively estimates the rate increase for residential customers. It was prepared from the New Garden volume chart in Exhibit E. It applies the old and new tariff rates for each use volume. The ratio of the total dollars at the bottom gives a dollar weighted average increase for residential customers.

Residential Based on One Quarter of NGT Data						
Billing Volume	Number Bills	Old Bill Amount	Total Dollars	New Bill Amount	Total Dollars	Increase
0	119	\$112.91	\$13,436.29	\$136.38	\$16,229.22	20.8%
1	25	\$112.91	\$2,822.75	\$159.64	\$3,990.98	41.4%
2	45	\$112.91	\$5,080.95	\$182.90	\$8,230.41	62.0%
3	61	\$112.91	\$6,887.51	\$206.16	\$12,575.58	82.6%
4	73	\$112.91	\$8,242.43	\$229.42	\$16,747.37	103.2%
5	98	\$112.91	\$11,065.18	\$252.68	\$24,762.15	123.8%
6	98	\$128.08	\$12,551.84	\$275.93	\$27,041.53	115.4%
7	120	\$143.25	\$17,190.00	\$299.19	\$35,903.16	108.9%
8	117	\$158.42	\$18,535.14	\$322.45	\$37,726.88	103.5%
9	124	\$173.59	\$21,525.16	\$345.71	\$42,868.16	99.2%
10	90	\$188.76	\$16,988.40	\$368.97	\$33,207.30	95.5%
11	97	\$203.93	\$19,781.21	\$392.23	\$38,046.21	92.3%
12	89	\$219.10	\$19,499.90	\$415.49	\$36,978.43	89.6%
13	79	\$234.27	\$18,507.33	\$438.75	\$34,661.01	87.3%
14	75	\$249.44	\$18,708.00	\$462.01	\$34,650.45	85.2%
15	75	\$264.61	\$19,845.75	\$485.27	\$36,394.88	83.4%
16	55	\$284.26	\$15,634.30	\$518.70	\$28,528.50	82.5%
17	38	\$303.91	\$11,548.58	\$552.14	\$20,981.13	81.7%
18	41	\$323.56	\$13,265.96	\$585.57	\$24,008.37	81.0%
19	32	\$343.21	\$10,982.72	\$619.01	\$19,808.16	80.4%
20	14	\$362.86	\$5,080.04	\$652.44	\$9,134.16	79.8%
21	18	\$382.51	\$6,885.18	\$685.88	\$12,345.75	79.3%
22	19	\$402.16	\$7,641.04	\$719.31	\$13,666.89	78.9%
23	18	\$421.81	\$7,592.58	\$752.75	\$13,549.41	78.5%
24	10	\$441.46	\$4,414.60	\$786.18	\$7,861.80	78.1%
25	7	\$461.11	\$3,227.77	\$819.62	\$5,737.31	77.7%
26	5	\$480.76	\$2,403.80	\$853.05	\$4,265.25	77.4%
27	5	\$500.41	\$2,502.05	\$886.49	\$4,432.43	77.2%
28	6	\$520.06	\$3,120.36	\$919.92	\$5,519.52	76.9%
29	5	\$539.71	\$2,698.55	\$953.36	\$4,766.78	76.6%
30	4	\$559.36	\$2,237.44	\$986.79	\$3,947.16	76.4%
31	3	\$579.01	\$1,737.03	\$1,020.23	\$3,060.68	76.2%
32	1	\$598.66	\$598.66	\$1,053.66	\$1,053.66	76.0%
33	3	\$618.31	\$1,854.93	\$1,087.10	\$3,261.29	75.8%
34	3	\$637.96	\$1,913.88	\$1,120.53	\$3,361.59	75.6%
35	5	\$657.61	\$3,288.05	\$1,153.97	\$5,769.83	75.5%
37	1	\$696.91	\$696.91	\$1,220.84	\$1,220.84	75.2%
38	3	\$716.56	\$2,149.68	\$1,254.27	\$3,762.81	75.0%
39	2	\$736.21	\$1,472.42	\$1,287.71	\$2,575.41	74.9%
42	2	\$795.16	\$1,590.32	\$1,388.01	\$2,776.02	74.6%
43	1	\$814.81	\$814.81	\$1,421.45	\$1,421.45	74.5%
44	1	\$834.46	\$834.46	\$1,454.88	\$1,454.88	74.3%
48	1	\$913.06	\$913.06	\$1,588.62	\$1,588.62	74.0%
49	2	\$932.71	\$1,865.42	\$1,622.06	\$3,244.11	73.9%
57	1	\$1,089.91	\$1,089.91	\$1,889.54	\$1,889.54	73.4%
58	2	\$1,109.56	\$2,219.12	\$1,922.97	\$3,845.94	73.3%
69	1	\$1,325.71	\$1,325.71	\$2,290.76	\$2,290.76	72.8%
70	1	\$1,345.36	\$1,345.36	\$2,324.19	\$2,324.19	72.8%
72	1	\$1,384.66	\$1,384.66	\$2,391.06	\$2,391.06	72.7%
84	1	\$1,620.46	\$1,620.46	\$2,792.28	\$2,792.28	72.3%
86	1	\$1,659.76	\$1,659.76	\$2,859.15	\$2,859.15	72.3%
103	1	\$1,993.81	\$1,993.81	\$3,427.55	\$3,427.55	71.9%
125	1	\$2,426.11	\$2,426.11	\$4,163.12	\$4,163.12	71.6%
127	1	\$2,465.41	\$2,465.41	\$4,229.99	\$4,229.99	71.6%
162	2	\$3,153.16	\$6,306.32	\$5,400.21	\$10,800.42	71.3%
194	1	\$3,781.96	\$3,781.96	\$6,470.13	\$6,470.13	71.1%
271	1	\$5,295.01	\$5,295.01	\$9,044.63	\$9,044.63	70.8%
761	1	\$14,923.51	\$14,923.51	\$25,427.78	\$25,427.78	70.4%
848	1	\$16,633.06	\$16,633.06	\$28,336.62	\$28,336.62	70.4%
		\$414,102.61		\$763,410.62		84.4%

Exh. L

The following table is from a Petition For Approval Of Settlement for Aqua's acquisition of New Garden's sewer⁷. It is part of Aqua's William Packer explaining the impact of the acquisition on rates. The relevant volumes are highlighted for convenience.

Aqua Pennsylvania Wastewater, Inc.
Calculation of New Garden Wastewater - Present Revenues

	Usage (Kgals)		Revenue*
1,916 Residential customers ^			
Base rate of \$112.91 per quarter for 0 to 5,000 gallons x 4 quarters	9,580	\$	865,000
Charges per quarter for 5,001 to 15,000 gallons x 4 quarters	17,826	\$	270,422
Charges per quarter over 15,000 gallons x 4 quarters	58,759	\$	1,154,607
Average Monthly Usage - Residential Class	3.75		
	45		
171 Commercial 1 customers ^			
Base rate of \$158.12 per quarter for 0 to 5,000 gallons x 4 quarters	855	\$	108,000
Charges per quarter for 5,001 to 15,000 gallons x 4 quarters	13,149	\$	309,011
Charges per quarter over 15,000 gallons x 4 quarters	0	\$	-
Average Monthly Usage - Commercial 1 Class	6.82		
19 Commercial 2 customers ^			
Base rate of \$192.92 per quarter for 0 to 5,000 gallons x 4 quarters	95	\$	15,000
Charges per quarter for 5,001 to 15,000 gallons x 4 quarters	1,977	\$	65,281
Charges per quarter over 15,000 gallons x 4 quarters	1,752	\$	73,022
Average Monthly Usage - Commercial 2 Class	16.77		
Average Monthly Usage - Commercial 1 & 2 Class	7.82		
0 Industrial customers ^			
Base rate of \$423.50 per quarter for 0 to 5,000 gallons x 4 quarters	0	\$	-
Charges per quarter for 5,001 to 15,000 gallons x 4 quarters	0	\$	-
Charges per quarter over 15,000 gallons x 4 quarters	0	\$	-
Total Annual Projected Revenue		\$	2,860,343

⁷ 21-Feb-2020 Settlement petition for Aqua's purchase of New Garden's sewer system
<https://www.puc.pa.gov/pcdocs/1655518.pdf> PDF page 38

Exh. M

Exhibit M

The data below details the weighted average calculation for an estimated 78% New Garden increase noted in Major Issue #4.

<u>Combined Consumption and Billing Adjustments</u>			
	# Bills	Annual Gallons	Percent of Total Volume
Residential			
Monthly Fixed	22,992		
0 - 1667		9,580,000	
1667 - 5,000		17,826,100	
Over 5,000		58,758,600	
Totals	22,992	86,164,700	82.9%
Commerical #1			
Monthly Fixed	2,052		
0 - 1667		855,000	
1667 - 5,000		13,149,400	
Over 5,000		0	
Totals	2,052	14,004,400	13.5%
Commerical #2			
Monthly Fixed	332		
0 - 1667		95,000	
1667 - 5,000		1,977,000	
Over 5,000		1,752,400	
Totals	332	3,824,400	3.7%
Grand Total	25,376	103,993,500	
Customer Category	Weight	Increase	Contribution
Residential	82.9%	84.0%	69.6%
Commercial 1	13.5%	57.0%	7.7%
Commercial 2	3.7%	28.0%	1.0%
Weighted Average Increase			78.3%

Exh. N

Exhibit N

November 10, 2023

Reference: Formal complaint C-2023-3043108

Via email to:

Pamela McNeal – pmcneal@pa.gov

Michael W Hassell Esquire - mhassell@postschell.com

Garrett P Lent Esquire - glent@postschell.com

From: William Ferguson, Complainant – zzzferg@gmail.com

Attached to this cover letter on pages 4 – 39 please find the documentation and exhibits I intend to present at my initial hearing currently scheduled for December 12, 2023.

Attached as pages 2 – 3 is the Certificate of Service I will Efile with the PUC confirming that this document has been served on all parties to this formal complaint.

If anything is incomplete or otherwise needing correction, please let me know promptly so that the issue can be corrected.

Respectfully submitted,

William Ferguson

Exh. N

November 10, 2023

Re: William Ferguson v. Aqua Pennsylvania Wastewater, Inc.
Docket No. C-2023-3043108

Via Electronic Filing:

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission

Dear Secretary Chiavetta:

The attached Certificate of Service confirms I have sent the appropriate parties the documents that I intend to use to support my formal complaint at the currently scheduled December 12, 2023 initial hearing.

Respectfully submitted,

William Ferguson, Complainant

Exh. N.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the documents supporting my formal complaint have been served upon the following persons:

Pamela McNeal
Legal Assistant for
Administrative Law Judge Arlene Ashton
PA Public Utility Commission
pmcneal@pa.gov

Garrett P. Lent, Esq.
Post & Schell PC
glent@postschell.com
(Counsel for Aqua Pennsylvania)

Michael W. Hassell, Esq.
Post & Schell PC
mhassell@postschell.com
(Counsel for Aqua Pennsylvania)

Summary

On 16-May-2022 the Pennsylvania Public Utilities Commission (PUC) authorized a rate increase for Aqua Pennsylvania Wastewater Inc. (Aqua). This was the PUC's docket case R-2021-3027386. One part of that case granted Aqua the right to prepare a tariff that would collect \$4,428,399/yr from New Garden ratepayers¹. Aqua subsequently filed its revised tariff schedule on 23-May-2022.

This complaint focuses on the parameters Aqua used to set its tariff for New Garden ratepayers. Aqua is required to show that its tariff is in compliance with the revenue permitted by the PUC. Aqua has not met that standard. This is caused by two factors:

1. The compliance data Aqua used to set rates does not reflect actual use by New Garden customers. This complaint will show that the volume data presented by Aqua for residential customers is unrealistic. For two cases of commercial customers the volume usage data is actually mathematically impossible to achieve. It cannot be possible to correctly set rates and show compliance using Aqua's data.
2. Aqua's compliance volume is significantly less than what New Garden Township reported during the last four quarters it operated the system. Volume and revenue are directly related, so this larger volume could significantly increase Aqua's revenue above the permitted amount.

As a result, Aqua is likely to collect more revenue from customers than the \$4,428,399/yr permitted by the PUC.

I am requesting that the PUC require Aqua to:

1. Provide actual use data for its compliance calculations.
2. Revise its tariff for New Garden based on that actual data.
3. Based on the new tariff, recalculate all bills since the rate increase went into effect.
4. Refund all overcharges paid thus far.

¹ 16-May-2022 PUC Opinion & Order - <https://www.puc.pa.gov/pcdocs/1744354.pdf> - PDF pages 64 and 43

Complaint Details

This complaint focuses on the compliance data Aqua used to set its tariff for New Garden. Aqua used a set of consumption volumes to calculate their tariff and show that it complies with the revenue permitted by the PUC. Those volumes are either mathematically impossible or require unrealistic conditions to achieve. Invalid volumes cannot demonstrate compliance. This complaint shows in detail the issues with Aqua's compliance data.

Exhibit A is a copy of Aqua's compliance data and calculations. They are from Aqua's 23-May-2022 sewer tariff filing². They were also a part of Aqua's rate case filing on 25-Aug-2021³. The key volumes and billing data are highlighted in yellow. Exhibit B consolidates Aqua's data into the following key parameters (Exhibit B, page 4):

Combined Consumption and Billing Adjustments		
	# Bills	Annual Gallons
Residential		
Monthly Fixed	22,992	
0 - 1667		9,580,000
1667 - 5,000		17,826,100
Over 5,000		58,758,600
Totals	22,992	86,164,700
Commerical #1		
Monthly Fixed	2,052	
0 - 1667		855,000
1667 - 5,000		13,149,400
Over 5,000		0
Totals	2,052	14,004,400
Commerical #2		
Monthly Fixed	332	
0 - 1667		95,000
1667 - 5,000		1,977,000
Over 5,000		1,752,400
Totals	332	3,824,400
Grand Total	25,376	103,993,500

Those nine volumes in yellow and three billing numbers in pink are the basis for Aqua's tariff setting and compliance calculations.

² 23-May-2022 sewer tariff filing - <https://www.puc.pa.gov/pdocs/1745354.pdf> - Exhibit 5-B Compliance p 87 – 92 or PDF pages 157 – 162; Exhibit A copies the relevant pages for user convenience

³ Aqua's 25-Aug-2021 rate filing - <https://www.puc.pa.gov/pdocs/1716839.pdf> - Schedule NG-3 & Schedule NG-4

Exh. N

Exhibit C validates the combined billing and volume numbers. The two tables apply tariff rates to the consolidated volume and billing data and compares the resulting revenue with Aqua's revenue numbers. Exhibit C, page 1 is revenue without a rate increase. Exhibit C, page 2 is revenue at Aqua's increased rates. The far right column on each table shows the difference to be trivial rounding error in every case. Out of the 24 data points, the least accurate number is in 99.9989% agreement with Aqua's total. Clearly, the table on Exhibit B page 4 represents Aqua's compliance data in just twelve numbers.

The specific issues that follow detail why this data in no way represents actual usage by New Garden customers.

Major Issue #1 – Residential Volume

The following table reproduces Aqua's residential volume data in Exhibit B, page 4.

	# Bills	Annual Gallons
Residential		
Monthly Fixed	22,992	
0 - 1667		9,580,000
1667 - 5,000		17,826,100
Over 5,000		58,758,600
Totals	22,992	86,164,700

The 22,992 bills represent 1,916 customers [$= 22,992/12$]. Aqua cites this 1,916 number in many other places in its filings.

The issue is that Aqua's use volumes require at least 1,303 customers to have zero consumption. That is over 67% of their customers not using any water. That is not realistic. The 1,303 figure is based on the most favorable assumptions. The least favorable assumptions result in 1,437 customers having zero consumption.

These 1,303 zero consumption customers result because the volumes in all three rate bands have to be consistent. Exhibit D is a detailed analysis showing how the rate bands are filled and why 1,303 customers must have zero consumption to achieve consistency.

Confirming the fact that over 1,303 ratepayers do not have zero consumption, New Garden has provided data for their final year of owning the system – See Exhibit E.

Exh. N

Their data shows only 119 customers using zero volume – a much more reasonable figure.

Aqua's compliance volumes do not reflect actual residential use in New Garden. Since, this was the data used to set rates, how can those rates be set correctly?

Major Issue #2 – Commercial 1 Volume

This issue is simple. The following table from Exhibit B, page 4, is a summary of Aqua's data.

	# Bills	Annual Gallons
Commercial #1		
Monthly Fixed	2,052	
0 - 1667		855,000
1667 - 5,000		13,149,400
Over 5,000		0
Totals	2,052	14,004,400

The 2,052 bills represent 171 customers [= 2,052/12].

It is mathematically impossible for 171 customers to consume 13,149,400 gallons in the "1667 - 5,000" rate band. That volume would require 329 customers consuming the full 5,000 gallons in that rate band [= 13,149,400/12/3333]. And, those 329 customers would have to consume 6,581,316 gallons in the "0 – 1667" rate band [= 329 x 1667 x 12]. That is 7.5X Aqua's stated consumption for that rate band.

Clearly this is an impossible set of compliance volumes. How is it possible to correctly set rates from such data?

Exh. N

Major Issue #3 – Commercial 2 Volume

This is also a simple issue similar to the Commercial 1 case. The following table is a summary of Aqua's Commercial 2 data, taken from Exhibit B, page 4.

	# Bills	Annual Gallons
Commercial #2		
Monthly Fixed	332	
0 - 1667		95,000
1667 - 5,000		1,977,000
Over 5,000		1,752,400
Totals	332	3,824,400

The 332 bills represent 27.7 customers [$= 332/12$].

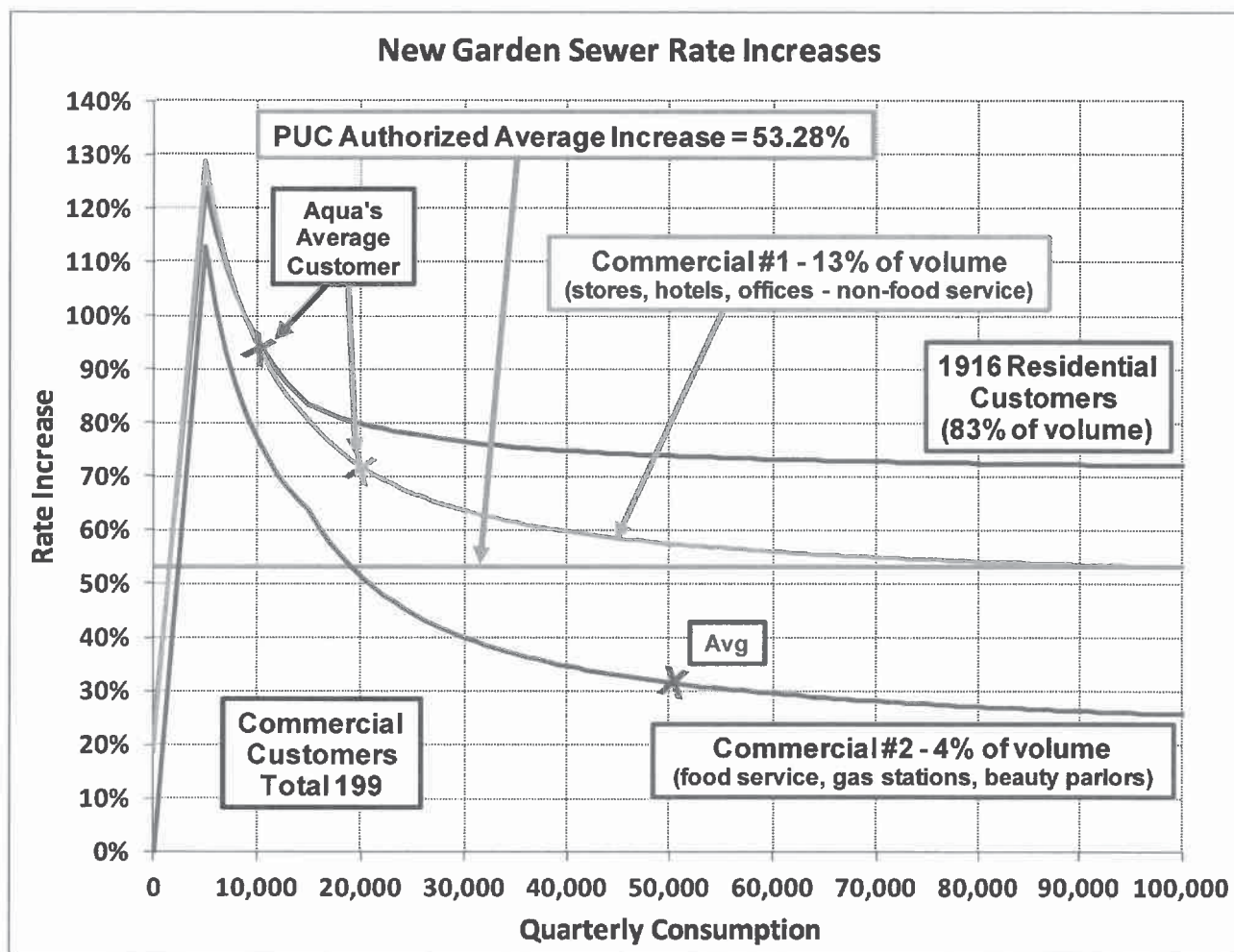
Again, it is mathematically impossible for 27.7 customers to consume 1,977,000 gallons in the "1667 - 5,000" rate band. It would require 49 customers consuming the full 5,000 gallons in that rate band [$= 1,977,000/12/3333$]. And, those 49 customers would have to consume 980,196 gallons in the "0 – 1667" rate band [$= 49 \times 12 \times 1667$]. That is over 10X Aqua's stated consumption for that band.

This is a second impossible situation showing that Aqua's compliance data bears no relationship to actual use.

Exh. N

Major Issue #4 – The Percentage Rate Increases

Aqua claims its New Garden increase is 53.5%⁴. The following chart plots the range of percentage increases customers are actually seeing on their individual bills. This chart simply calculates the cost for each billing volume at the old and new rates. The percentage increase is then calculated.



Aqua's data in Exhibit I states an average use for each customer category. The "X's" on the above chart marks those averages. It is visually obvious that a large majority of bills will be much larger than the 53.28% permitted increase. This is a strong indicator that Aqua is collecting substantially more than the amount permitted by the PUC.

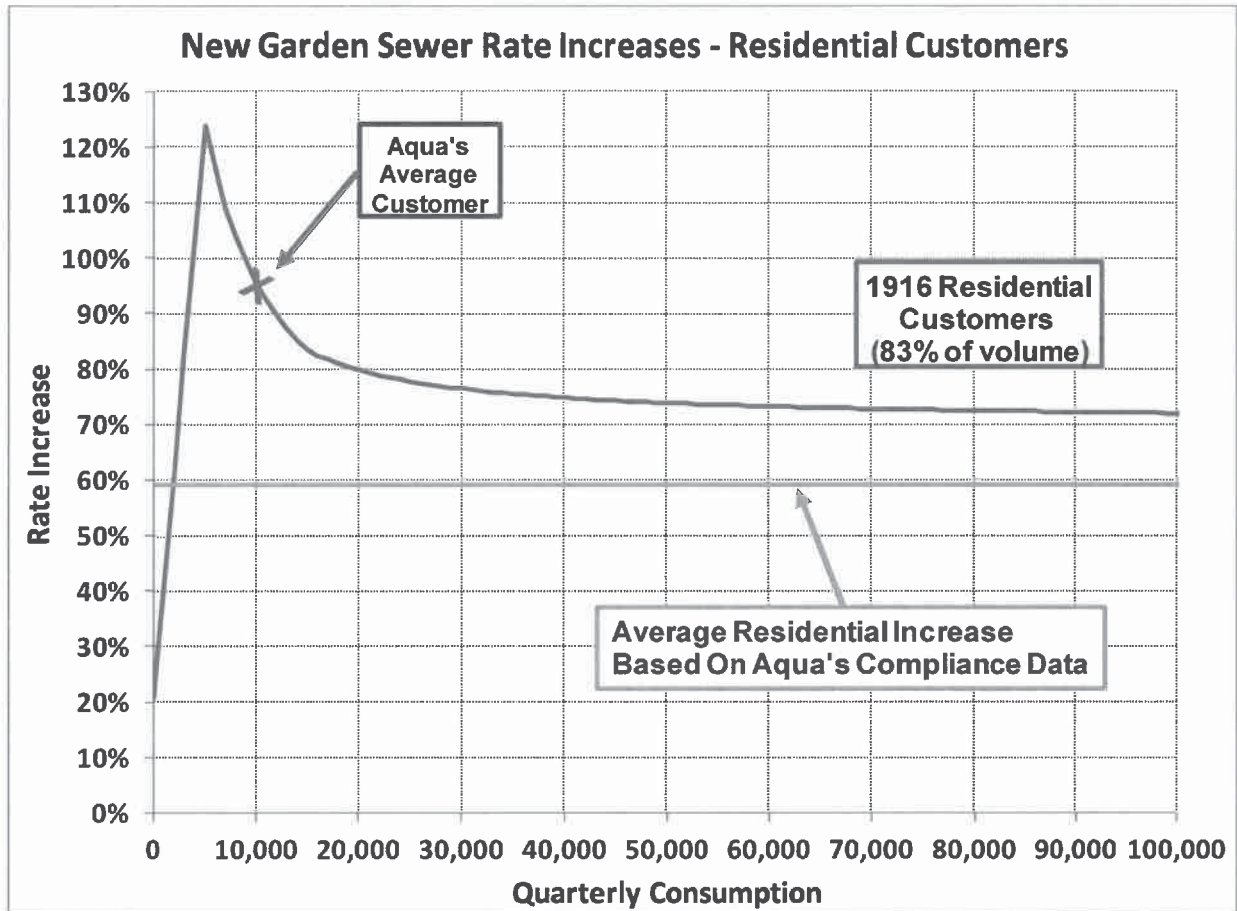
The next three charts look at the customer categories individually.

⁴ Aqua's sewer tariff filing 23-May-2022, pdf page 155; filing page Exhibit 5-B Compliance, Page 85

Exh. N

Major Issue #4 – The Percentage Rate Increases- continued

This chart is for residential customers.



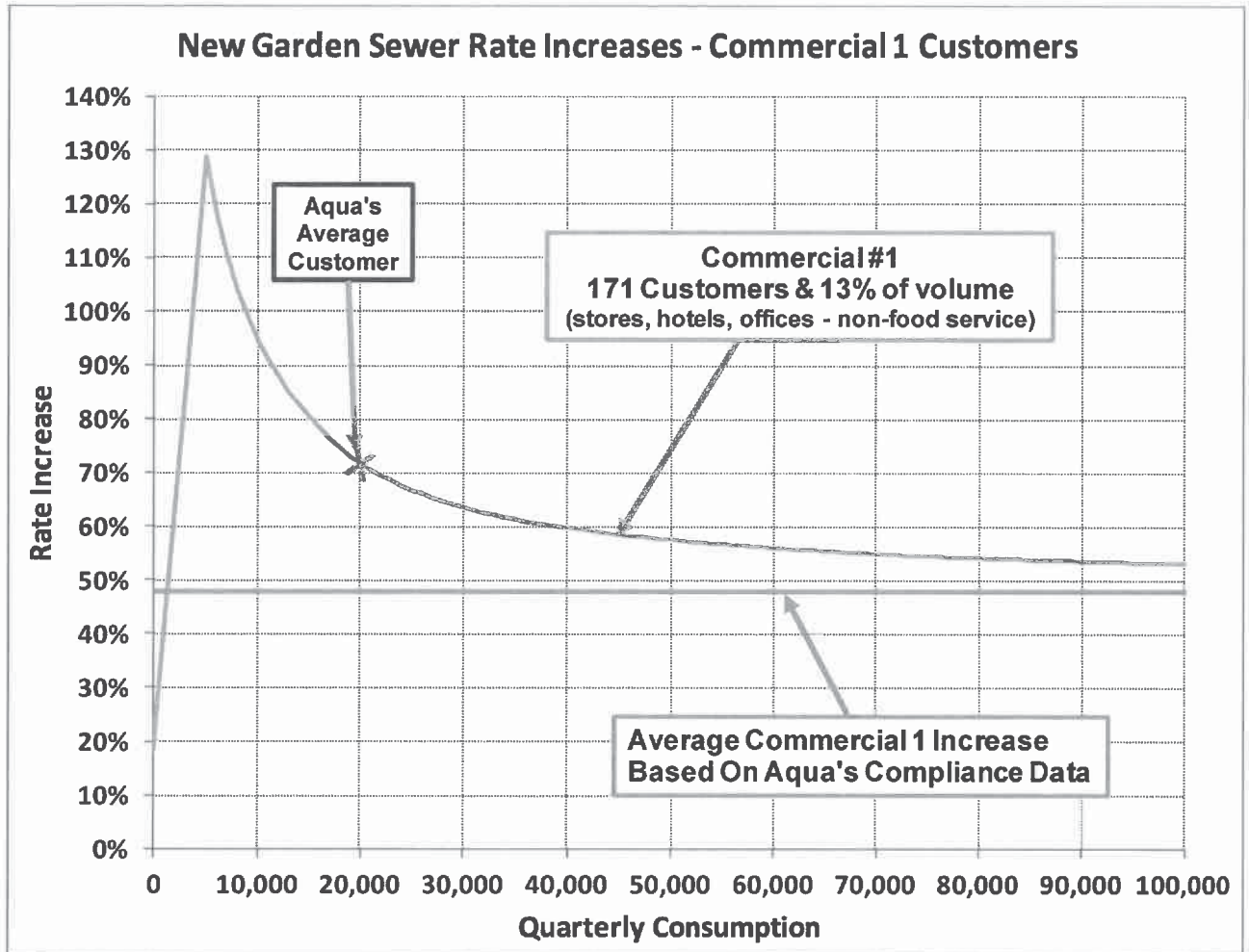
There are two data points on the red line that are below the average increase (green line). One is at zero consumption and the other is 1,000 gallons/quarter. It is visually obvious that the residential rate increase far exceeds the average calculated from Aqua's compliance data. And, at 83% of total volume, it represents the largest share of the rate increase.

It is also visually obvious why Aqua's compliance volumes requires 1,303 customers to use zero volume. The customer at zero volume only sees about a 20% rate increase. That is the only way to mathematically achieve Aqua's average increase for residential customers. 1,303 zero use residential ratepayers is not realistic, but is mathematically demanded to make Aqua's numbers balance. Clearly, the residential increase is much greater than claimed by Aqua.

Ex. N

Major Issue #4 – The Percentage Rate Increases- continued

This chart is for Commercial 1 customers.

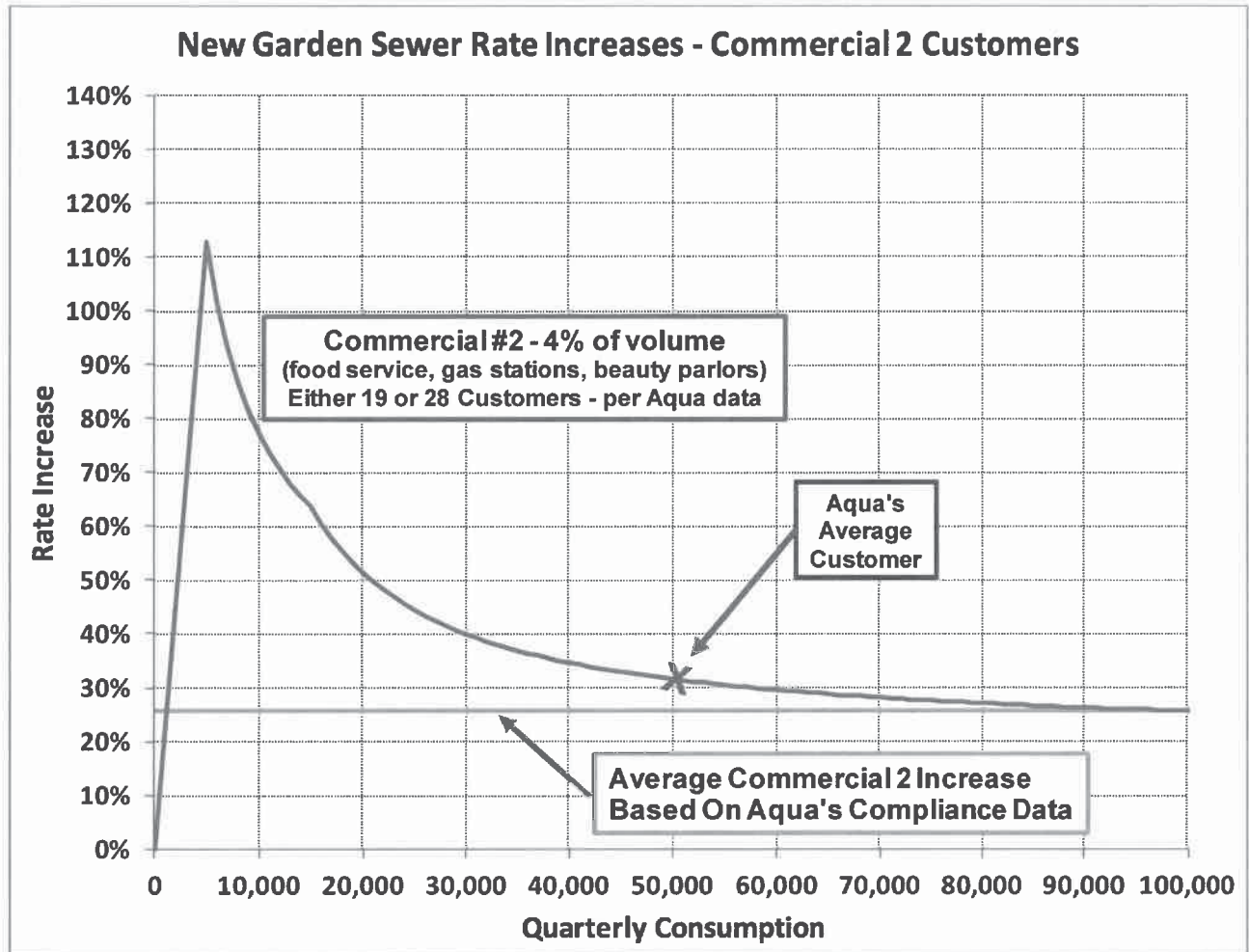


Like the residential chart on the previous page, there are only two data points on the blue line that are below the average increase (green line). One is at zero consumption and the other is 1,000 gallons/quarter. It is visually obvious that the Commercial 1 rate increase far exceeds the average calculated from Aqua's compliance data.

Exh. N

Major Issue #4 – The Percentage Rate Increases- continued

This chart is for Commercial 2 customers.



Like the two previous pages, there are only two data points on the left hand side of the chart that are below the average increase (green line). One is at zero consumption and the other is 1,000 gallons/quarter. However, once the volume exceeds 98,000 gallons/quarter, the increase is slightly below the average. It is still visually obvious that the Commercial 2 rate increase far exceeds the average calculated from Aqua's compliance data.

Major Issue #4 – The Percentage Rate Increases- continued

As the above four charts have shown it is visually obvious that Aqua's rate increase exceeds that permitted by the PUC. The real increase is probably over 78%.

The following table is a more quantitative estimate of the rate increases:

<u>Customer Category</u>	<u>Aqua's Data</u>	<u>Estimated</u>
Residential	59.2%	84%
Commercial 1	47.7%	57%
Commercial 2	25.7%	28%
Total New Garden	53.5%	>78%

The column labeled "Aqua's Data" is taken directly from the table on Exhibit B, page 3. It is literally Aqua's data broken down by the three customer categories. The 53.5% for total New Garden is also noted in Aqua's tariff filing⁵.

The estimated 84% increase for Residential customers is based on actual New Garden billing data. The calculation of this number is detailed in Exhibit G. The Commercial 1 & 2 estimates are based on the asymptotes from the chart at the start of this Major Issue #4. The average commercial increases are not going to be less than those seen by large customers on the right hand side of the chart. These two estimates likely understate the actual increase.

The 78% "Total New Garden" figure is arrived at by taking a weighed average of the three categories based on Aqua's volume data. Exhibit J has the details.

Aqua's collecting \$4,428,399/yr from New Garden customers is based on an average increase of 53.5%. An actual increase of over 78% is another indicator that Aqua will be collecting revenue substantially in excess of that permitted by the PUC.

⁵ 23-May-2022 tariff filing - <https://www.puc.pa.gov/pdocs/1745354.pdf> - PDF page 155

Exh. N

Major Issue #5 – Aqua’s Compliance Volumes Predate the Acquisition

Exhibit I is from a 21-Feb-2020 filing for Aqua’s acquisition of New Garden’s sewer system⁶. It is a Petition For Approval Of Settlement for Aqua’s acquisition of New Garden’s sewer. The table is PDF page 38 of the filing and is part of Aqua’s William Packer explaining the impact of the acquisition on rates.

The usage volumes highlighted in this table are identical to Aqua’s compliance volumes summarized by Exhibit B, page 4. As previously note, these volumes derive from Aqua’s rate filings on 25-Aug-2021 23-May-2022 (links previously cited). But, this table predates the acquisition by 10 months. How was Aqua able to accurately determine usage 10 months before even owning the system?

Aqua did have actual use data from New Garden per the following email:

From: Spencer Address, AICP <thinker@gsi-cpl.com>
Sent: Wednesday, August 14, 2019 12:06 PM EDT
To: Packer, Jr., William C <WCPackerJr@aquaamerica.com>; Rafferty, Thomas F <TFRafferty@aquaamerica.com>
CC: Stahl, Alexander R <AStahl@aquaamerica.com>; Vince Pompo <vpompo@lambmcerlane.com>; Tony Scheivert <tscheivert@newgarden.org>
Subject: RE: Information from Spence
Attachment(s): "New Garden Sewer User Profile.pdf"
Bill,

Attached is my analysis of the revenue stream based on the old rates versus the revenue stream for each of the current/next (2019/2020/2021) three years based on the ordinance adopted last November. The data is from the second quarter 2018. I have not updated it recently but the information has not changed much and the difference would be inconsequential.

There is a lot of information but I think it is formatted in a way that makes it easy to interpret and understand. The sheet showing the accounts does NOT include all accounts but is the summary page for each type of account.

Let me know if you have any questions. Please acknowledge receipt.

Spence

Attached to the above email was the Exhibit E graph and four other tables of use data.

The compliance volumes impact our sewer rates and should be based on actual customer use. When Aqua’s rate case was filed, they had owned the New Garden system about eight months. Between that, New Garden’s data and their other customer experience Aqua should have been able to accurately estimate usage volumes. Instead, they used data that predated the acquisition and does not reflect actual customer use. This should not be acceptable to the PUC.

⁶ PUC docket case No. A-2016-2580061 - 21-Feb-2020 settlement filing
<https://www.puc.pa.gov/pdocs/1655518.pdf>

Exh. N

Major Issue #6 – The Total Volume Used By New Garden Customers

Data provided by New Garden Township (Exhibit H) shows that 126,464,000 gallons were billed during the last four quarters that New Garden owned the system. Aqua's compliance data in Exhibit B, page 3, shows their total annual volume as 103,993,500 gallons. That is 22,470,500 gallons less than actual New Garden experience. At the lowest billing rate, that difference could mean Aqua collecting over \$500,000/year additional revenue. At the highest rate, it would be over \$1,100,000/year.

What is the actual annual billed volume? This is a critical issue in determining Aqua's revenue.

Other Issues related to compliance volumes

1. Aqua's compliance volumes have several coincidences:
 - a. Aqua states that its residential customers use 9,580,000 gallons annually in the 0 - 1667 rate band (see Exhibit B, page 4). That is exactly 5,000 gallons/yr for each of the 1,916 residential customers.
 - b. Aqua also states that its Commercial 1 customers use 855,000 gallons annually in the 0 - 1667 rate band (see Exhibit B, page 4). Again, that is exactly 5,000 gallons/yr for each of the 171 Commercial 1 customers.
 - c. The same 5,000 gallons/yr holds true for that rate band in the Commercial 2 category. This is based on Mr. Packer's table in Exhibit I where he notes that there are 19 customers in that rate band ($95,000/19 = 5,000$).
 - d. It is very seldom that actual data would average exactly 5,000 gallons. Three different and independent categories averaging the same exact number is significantly less likely.
2. Aqua's Commercial 1 data shows zero consumption in the "Over 5,000" gallon rate band. This is highly unlikely. In fact, Exhibit F shows one bill of 27,000 gallons for a Commercial 1 customer. The timing of that bill was before the rate filing in August-2021. Clearly, that rate band is not zero.

Mr. Packer's data in Exhibit I also states a zero consumption for the over 5,000 gallon rate band. His very next line then states that the average Commercial 1 consumption is 6,820 gallons/month. How is possible to average 6,820 gallons/month when not a single customer is using over 5,000 gallons/month?

Exh. N

All these things taken together are additional evidence questioning the accuracy of Aqua's compliance data. It supports that it was not based on actual use data.

Conclusions

In its compliance filing for New Garden, Aqua presents a "Consumption Analysis" and "Billing Adjustments" that they claim shows compliance of their tariff filing with the PUC's allowed revenues. The accuracy of this data is critical to correctly setting rates. If those numbers accurately represented actual New Garden volumes, Aqua would have indeed showed compliance with the revenues allowed by the PUC.

As this complaint has shown in detail, those consumption volumes bear no relationship to actual sewer use by New Garden customers. It does not appear possible that Aqua could demonstrate the necessary compliance.

Recommendations

- #1 The first issue to be resolved is the accuracy of Aqua's compliance data. This could be resolved easily by requiring Aqua to report to the PUC actual billing and volume use data. Aqua has owned the system long enough to have two full twelve month use periods. For both periods they should provide the PUC the data highlighted in the following table:

Reconciliation Data Table				
	# EDU Bills	Annual Billed Gallons	Tariff Rate	Revenue
Residential				
Fixed charge			\$136.380	\$0
0 - 15,000			\$23.259	\$0
Over 15,000			\$33.435	\$0
Totals		0		\$0
Commercial #1				
Fixed charge			\$187.560	\$0
0 - 15,000			\$34.850	\$0
Over 15,000			\$44.868	\$0
Totals		0		\$0
Commercial #2				
Fixed charge			\$187.560	\$0
0 - 15,000			\$44.580	\$0
Over 15,000			\$50.000	\$0
Totals		0		\$0
Grand Total				\$0

- #2 Applying tariff rates to Aqua's data in the above table will enable the PUC to determine whether Aqua is exceeding its allowed revenue.
- #3 Aqua should be required to revise its tariff schedule for New Garden. It should conform to an allowed revenue of \$4,428,399/yr based on actual use volumes.
- #4 From the start of the May-2022 rate increase, the PUC should require Aqua to recalculate all ratepayer bills based on the revised tariffs. All overcharges should be refunded to customers.

These actions are needed to fulfill the PUC's responsibility to ratepayers.

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

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AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDENTABLE OF CONTENTS TO EXHIBIT 1-G WASTEWATER NEW GARDEN

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AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
PRO FORMA STATEMENT OF INCOME FOR THE TWELVE MONTHS ENDING MARCH 31, 2021,
MARCH 31, 2022 AND MARCH 31, 2023 UNDER PRESENT AND PROPOSED RATES

LINE NO.	PRESENT RATES				PRESENT RATES		PRESENT RATES		PROPOSED RATES	
	PER BOOKS	ADJUSTMENT	3/31/21 AMOUNT	ADJUSTMENT	3/31/22 AMOUNT	ADJUSTMENT	3/31/23 AMOUNT	ADJUSTMENT	RATES AMOUNT	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Operating Revenues	\$ 895,540	\$ (234,720)	\$ 660,820	\$ 2,210,878	\$ 2,871,698	\$ -	\$ 2,871,698	\$ 2,750,907	\$ 5,622,606
2	Operating Expenses	384,441	1,308,816	1,693,257	148,805	1,842,062	6,828	1,848,890	32,843	1,881,734
3	Depreciation	-	716,886	716,886	14,231	731,117	4,717	735,834		735,834
4	Taxes, other than income :									
5	PUC assessment	-	2,989	2,989	10,001	12,991	-	12,991	12,444	25,435
6	OCA & SBA assessments	-	1,215	1,215	4,064	5,279	-	5,279	5,057	10,335
7	Public Utility Realty tax	-	-	-	-	-	-	-	-	-
8	State Capital Stock tax	-	-	-	-	-	-	-	-	-
9	Local property taxes & misc.	-	-	-	-	-	-	-	-	-
10	Federal & State payroll tax	-	-	-	-	-	-	-	-	-
11	Total Taxes, other than income	-	4,204	4,204	14,065	18,270	-	18,270	17,501	35,771
12	Utility Operating Income Before Tax	511,099	(2,264,626)	(1,753,527)	2,033,776	280,249	(11,545)	268,704	2,700,563	2,969,267
13	Income Taxes:									
14	Federal Tax-Current	-	(538,659)	(538,659)	395,370	(143,289)	(3,133)	(146,422)	510,463	364,041
15	Pa. CNI Tax-Current	-	(284,688)	(284,688)	208,958	(75,730)	(1,656)	(77,386)	269,786	192,400
16	Federal Tax-Deferred	-	105,695	105,695	(1,714)	103,981	(1,943)	102,038	-	102,038
17	Pa. CNI Tax-Deferred	-	-	-	-	-	-	-	-	-
18	ITC-Current	-	-	-	-	-	-	-	-	-
19	ITC-Amortized	-	-	-	-	-	-	-	-	-
20	Total Income Taxes	-	(717,652)	(717,652)	602,614	(115,037)	(6,732)	(121,770)	780,249	658,480
21	Total Operating Revenue Deductions	384,441	1,312,255	1,696,695	779,716	2,476,412	4,813	2,481,224	830,594	3,311,818
22	Utility Operating Income	511,099	(1,546,975)	(1,035,875)	1,431,162	395,287	(4,813)	390,474	1,920,314	2,310,787
23	Income Deductions:									
24	Interest on Long-Term debt	-	592,893	592,893	(49,735)	543,158	14,283	557,441		557,441
25	Amort. Of debt discount & expense	-	-	-	-	-	-	-	-	-
26	Other interest charges	-	-	-	-	-	-	-	-	-
27	Interest during Construction	-	-	-	-	-	-	-	-	-
28	Total Income Deductions	-	592,893	592,893	(49,735)	543,158	14,283	557,441	-	557,441
29	Net Income	\$ 511,099	\$ (2,139,867)	\$ (1,628,768)	\$ 1,480,897	\$ (147,871)	\$ (19,096)	\$ (166,967)	\$ 1,920,314	\$ 1,753,346
30	Preferred Dividend									
31	Net Income-Common	\$ 511,099	\$ (2,139,867)	\$ (1,628,768)	\$ 1,480,897	\$ (147,871)	\$ (19,096)	\$ (166,967)	\$ 1,920,314	\$ 1,753,346

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NUMBER OF CUSTOMERS SERVED
AND WHOSE BILLS WILL BE CHANGED

LINE NO.	CUSTOMER CLASS	SERVED AT 3/31/2020 (1)	SERVED AT 3/31/2021 (2)	TO BE SERVED AT 3/31/2022 (3)	TO BE SERVED AT 3/31/2023 (4)	INCREASED BILLS (5)	DECREASED BILLS (6)	UNCHANGED BILLS (7)
1	Residential	-	1,811	1,811	1,811	1,811	-	-
2	Commercial	-	159	159	159	159	-	-
3	Industrial	-	-	-	-	-	-	-
4	Public	-	3	3	3	3	-	-
5	Miscellaneous	-	-	-	-	-	-	-
6	Availability Charge	-	-	-	-	-	-	-
7	Total Customers	-	1,973	1,973	1,973	1,973	-	-

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
CALCULATION OF REVENUE DEFICIENCY AND RATE OF RETURN
AT CURRENT AND PROPOSED RATES MARCH 31, 2023

LINE NO.	DESCRIPTION	REFERENCE		
1	Pro Forma Rate Base	Schedule G-1	\$	30,246,226
2	Recommended Rate of Return	Schedule E-1	X	7.64%
3	Operating Income, Pro Forma Proposed Rates		= \$	2,310,787
4	Operating Income, Pro Forma Present Rates	Schedule A-1	\$	390,474
5	Operating Income Deficit		= \$	1,920,314
6	Gross Revenue Conversion Factor	Schedule A-5	X	1.4325
7	Revenue Deficit		= \$	2,750,907

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
STATEMENT OF UTILITY'S CALCULATION OF RATE OF RETURN
EARNED IN THE YEAR ENDED MARCH 31, 2021 AND
ANTICIPATED UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEARS ENDED MARCH 31, 2022 AND MARCH 31, 2023

LINE NO.		NET UTILITY OPERATING INCOME	VALUATION AT ORIGINAL COST	RATE OF RETURN
1	Present Rates March 31, 2021	\$ (1,035,875)	\$ 30,413,882	-3.41%
2	Present Rates March 31, 2022	\$ 395,287	\$ 30,461,660	1.30%
3	Present Rates March 31, 2023	\$ 390,474	\$ 30,246,226	1.29%
4	Proposed Rates March 31, 2023	\$ 2,310,787	\$ 30,246,226	7.64%

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
CALCULATION OF GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	RATE
1	Dollar (Taxable income)	\$ 1.0000
2	Less:	
3	Gross Receipts Tax	0.000% N/A
4	PUC Assessments	0.636% Schedule D-2.1 & Schedule D-2.2
5	Bad Debt	1.194% Schedule C-4.2.i
6	Subtotal (Taxable income)	\$ 0.9817
7	State Tax Rate	9.990%
8	State Tax \$\$ =====>	\$ 0.0981
9	State Factor	\$ 0.8836
10	Federal Tax Rate	21.00%
11	Fed Tax \$\$ =====>	\$ 0.1856
12	Combined Income Tax Factor on Gross Revenues	28.36%
13	Net Operating Income Factor	69.81%
14	Gross Revenue Conversion Factor	1.43253

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
STATEMENT OF OPERATING REVENUE FOR THE TWELVE MONTHS ENDING MARCH 31, 2021,
MARCH 31, 2022 AND MARCH 31, 2023 UNDER PRESENT AND PROPOSED RATES

LINE NO.	CUSTOMER CLASS	REVENUE FOR 12 MOS. ENDED		PRESENT RATES		PRESENT RATES		PRESENT RATES		REVENUE RATE INCREASE		PROPOSED RATES	
		3/31/21	ADJUSTMENT	3/31/21	ADJUSTMENT	3/31/22	ADJUSTMENT	3/31/23	ADJUSTMENT	%	\$	AMOUNT	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1	Residential	\$ 646,205	\$ (146,526)	\$ 499,679	\$ 1,791,359	\$ 2,291,038	\$ -	\$ 2,291,038	96.0%	\$ 2,200,371	\$ 4,491,409		
2	Commercial	249,335	(88,194)	161,141	419,519	580,660	-	580,660	94.8%	550,537	1,131,197		
3	Industrial	-	-	-	-	-	-	-	0.0%	-	-		
4	Public	-	-	-	-	-	-	-	0.0%	-	-		
5	Other	-	-	-	-	-	-	-	0.0%	-	-		
6	Availability Charge	-	-	-	-	-	-	-	0.0%	-	-		
7	Total Sales to General Customers	895,540	(234,720)	660,820	2,210,878	2,871,698	-	2,871,698	95.8%	2,750,907	5,622,606		
8	Forfeited Discounts	-	-	-	-	-	-	-	0.0%	-	-		
9	Other WW Revenues	-	-	-	-	-	-	-	0.0%	-	-		
10	Miscellaneous WW Service Revenues	-	-	-	-	-	-	-	0.0%	-	-		
11	Total Other WW Revenues	-	-	-	-	-	-	-	0.0%	-	-		
12	Total Operating Revenue	\$ 895,540	\$ (234,720)	\$ 660,820	\$ 2,210,878	\$ 2,871,698	\$ -	\$ 2,871,698	95.8%	\$ 2,750,907	\$ 5,622,606		

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING REVENUES

LINE NO.	DESCRIPTION	REFERENCE	ADJUSTMENT	PRESENT RATES 3/31/21 AMOUNT	ADJUSTMENT	PRESENT RATES 3/31/22 AMOUNT	ADJUSTMENT	PRESENT RATES 3/31/23 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Per Books			\$ 895,540				
2	Present Rates at 3/31/21					\$ 660,820		
3	Present Rates at 3/31/22							\$ 2,871,698
4	Unbilled Revenue Adjustment	Schedule B-3	(234,720)		-		-	
5	Page Held For Future Use	Schedule B-4	-		-		-	
6	Annualization Of Acquisition	Schedule B-5	-		2,210,878		-	
7	Pro Forma Adjustment			<u>(234,720)</u>		<u>2,210,878</u>		<u>-</u>
8	Pro Forma Present Rates at March 31, 2021			<u>\$ 660,820</u>				
9	Pro Forma Present Rates at March 31, 2022					<u>\$ 2,871,698</u>		
10	Pro Forma Present Rates at March 31, 2023							<u>\$ 2,871,698</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

UNBILLED REVENUE ADJUSTMENT

The following adjustment is being made to eliminate the unbilled revenue accrued per books for the historic test year.

LINE NO.	DESCRIPTION	PER BOOK 3/31/2021 AMOUNT
1	Residential	\$ 146,526
2	Commercial	88,194
3	Industrial	-
4	Public	-
5	Other	
6	Availability Charge	
7	Total Sales to General Customers	<u>234,720</u>
8	Forfeited Discounts	
9	Other WW Revenues	
10	Miscellaneous WW Service Revenues	
11	Total Other WW Revenues	<u>-</u>
12	Total Operating Revenue	<u>\$ 234,720</u>

Docket No. R-2021-3027386
Exhibit 1-G

Schedule B-4
Witness: Erin M. Feeney

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

PAGE HELD FOR FUTURE USE

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING REVENUES

ANNUALIZATION OF ACQUISITION

The following adjustment is to annualize the additional revenue from
the New Garden Acquisition to give effect of a full twelve months of service.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2022	
		ADJUSTMENT	
1	Residential	\$	1,791,359
2	Commercial		419,519
3	Industrial		
4	Public		
5	Other		
6	Availability Charge		
7	Total Sales to General Customers		<u>2,210,878</u>
8	Forfeited Discounts		
9	Other WW Revenues		
10	Miscellaneous WW Service Revenues		
11	Total Other WW Revenues		<u>-</u>
12	Total Operating Revenue	\$	<u>2,210,878</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/21 (3)	PRESENT RATES 3/31/21 (4)	PRESENT RATES 3/31/22 (5)	PRESENT RATES 3/31/23 (6)
1	(1)	(2)				
2		--Collection--				
3		-Operations-				
4	7151	Purchased Power	30,750	30,750	135,832	130,019
5	7161	Purchased Power	203	203	896	858
6		-Maintenance-				
7	7362	OS Other	5,095	25,475	25,921	26,361
8		Total Collection Expense	\$ 36,048	\$ 56,428	\$ 162,649	\$ 157,238
9						
10		--Pumping--				
11		-Operations-				
12	7183	Chemicals	357	1,428	1,428	1,428
13	7203	Supplies	4,988	4,988	5,075	5,161
14		-Maintenance-				
15	7354	OS Lab Testing	670	15,670	15,944	16,215
16	7364	OS Other	19,497	97,485	99,191	100,877
17		Total Pumping Expense	\$ 25,512	\$ 119,571	\$ 121,638	\$ 123,682
18						
19		--Treatment & Disposal--				
20		-Operations-				
21	7105	Purchased Wastewater	249,695	1,200,000	1,200,000	1,200,000
22	7365	OS Other	10,335	51,675	52,579	53,473
23		-Maintenance-				
24	7366	OS Other	20,970	104,850	106,684	108,498
25		Total Treatment & Disposal Expense	\$ 280,999	\$ 1,356,524	\$ 1,359,263	\$ 1,361,970
26						
27						
28						

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EXPENSE DETAIL ACCOUNTS

LINE NO.	Acct. No.	Account Title	PER BOOKS 3/31/21	PRESENT RATES 3/31/21	PRESENT RATES 3/31/22	PRESENT RATES 3/31/23
	(1)	(2)	(3)	(4)	(5)	(6)
29		--Customer Accounting--				
30	7367	OS Other	7,341	25,208	27,830	28,571
31	7707	Bad Debt	148	7,890	34,286	34,286
32						
33		Total Customer Accounting Expense	\$ 7,489	\$ 33,098	\$ 62,115	\$ 62,856
34						
35		--Administrative and General--				
36	7018	Labor	10,607	10,607	11,757	12,112
37	7048	Employee Benefits	-	5,916	4,826	4,904
38	7328	OS Accounting	779	779	792	806
39	7349	Management Fees	18,485	80,812	83,072	85,388
40	7368	OS Other	2,836	2,836	2,885	2,934
41	7578	Insurance	1,159	1,159	5,310	5,627
42	7588	Insurance	108	108	494	524
43	7598	Insurance	392	392	1,794	1,901
44	7758	Other	29	25,029	25,467	25,900
45	7668	Amortization of Rate Case	-	-	-	3,049
46						
47		Total Admin & General Expense	\$ 34,393	\$ 127,637	\$ 136,397	\$ 143,144
48						
49		Total Operating Expenses	\$ 384,441	\$ 1,693,257	\$ 1,842,062	\$ 1,848,890

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

SUMMARY OF EXPENSE ACCOUNTS

LINE NO.	PER BOOKS 3/31/21	ADJUSTMENTS 3/31/21	PRESENT RATES 3/31/21	ADJUSTMENTS 3/31/22	PRESENT RATES 3/31/22	ADJUSTMENTS 3/31/23	PRESENT RATES 3/31/23
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Labor	\$ 10,607	\$ -	\$ 10,607	\$ 1,151	\$ 11,757	\$ 355	\$ 12,112
2 Employee Benefits	-	5,916	5,916	(1,090)	4,826	78	4,904
3 Purchased Water	-	-	-	-	-	-	-
4 Purchased Wastewater	249,695	950,305	1,200,000	-	1,200,000	-	1,200,000
5 Sludge	-	-	-	-	-	-	-
6 Purchased Power	30,953	-	30,953	105,775	136,728	(5,851)	130,877
7 Chemicals	357	1,071	1,428	-	1,428	-	1,428
8 Supplies	4,988	-	4,988	87	5,075	86	5,161
9 OS Engineer	-	-	-	-	-	-	-
10 OS Accounting	779	-	779	14	792	13	806
11 OS Legal	-	-	-	-	-	-	-
12 OS Lab Testing	670	15,000	15,670	274	15,944	271	16,215
13 OS Other	66,073	241,455	307,528	7,562	315,091	5,624	320,715
14 Management Fees	18,485	62,327	80,812	2,259	83,072	2,316	85,388
15 Leases	-	-	-	-	-	-	-
16 Transportation	-	-	-	-	-	-	-
17 Insurance	1,658	-	1,658	5,939	7,598	454	8,051
18 Other	29	25,000	25,029	438	25,467	433	25,900
19 Bad Debt	148	7,742	7,890	26,396	34,286	-	34,286
20 Amortization of Rate Case	-	-	-	-	-	3,049	3,049
21 Amortization of UPAA	-	-	-	-	-	-	-
22 Amortization of Tank Painting	-	-	-	-	-	-	-
23 Amortization Other	-	-	-	-	-	-	-
24 Total Operating Expenses	\$ 384,441		\$ 1,693,257		\$ 1,842,062		\$ 1,848,890
25 Pro Forma Adjustments		\$ 1,308,816		\$ 148,805		\$ 6,828	
26 Uncollectibles @ Proposed Rates							\$ 32,843
27 Proposed Rates @ 3/31/23							<u>\$ 1,881,734</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO OPERATING EXPENSES

LINE NO.	DESCRIPTION	REFERENCE	ADJUSTMENT	PRESENT RATES 3/31/21 AMOUNT	ADJUSTMENT	PRESENT RATES 3/31/22 AMOUNT	ADJUSTMENT	PRESENT RATES 3/31/23 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Per Books			\$ 384,441				
2	Present Rates at 3/31/21					\$ 1,693,257		
3	Present Rates at 3/31/22							\$ 1,842,062
4	General Price Level Adjustment	Schedule C-4.1	-		6,390		6,316	
5	Uncollectible Accounts	Schedule C-4.2	7,742		26,396		-	
6	Page Held For Future Use	Schedule C-4.3	-		-		-	
7	Rate Case Expense	Schedule C-4.4	-		-		3,049	
8	Payroll	Schedule C-4.5	-		1,152		356	
9	Insurance Expense	Schedule C-4.6	(497)		4,157		318	
10	Management Service & Sundry	Schedule C-4.7	62,327		1,763		1,825	
11	Customer Service & Sundry	Schedule C-4.8	17,867		2,481		602	
12	Miscellaneous Expense Adjustments	Schedule C-4.9	263,588		-		-	
13	Specific Expenses Not Subject To Inflation	Schedule C-4.10	-		-		-	
14	Page Held For Future Use	Schedule C-5.1	-		-		-	
15	Purchased Power Expense	Schedule C-6.1	-		105,775		(5,851)	
16	Chemicals	Schedule C-6.2	1,071		-		-	
17	Purchased Wastewater Treatment Expense	Schedule C-7.1	950,305		-		-	
18	Employee Benefits	Schedule C-8.1	6,414		691		214	
19	Pro Forma Adjustments			<u>\$ 1,308,816</u>		<u>\$ 148,805</u>		<u>\$ 6,828</u>
20	Pro Forma Present Rates at March 31, 2021			<u>\$ 1,693,257</u>				
21	Pro Forma Present Rates at March 31, 2022					<u>\$ 1,842,062</u>		
22	Pro Forma Present Rates at March 31, 2023							<u>\$ 1,848,890</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

GENERAL PRICE LEVEL ADJUSTMENT

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Total Operations and Maintenance Expenses:		
2	Present Rates 3/31/2021	\$ 1,693,257	
3	Present Rates 3/31/2022		\$ 1,842,062
4	Less amounts specifically adjusted in this filing or not otherwise subject to inflation:		
5	Labor	10,690	11,842
6	Employee Benefits	5,916	4,826
7	Purchased Wastewater	1,200,000	1,200,000
8	Sludge	-	-
9	Purchased Power	30,953	136,728
10	Chemicals	1,428	1,428
11	Supplies	-	-
12	OS Engineer	-	-
13	OS Accounting	-	-
14	OS Legal	-	-
15	OS Lab Testing	-	-
16	OS Other	17,165	19,645
17	Management Fees	52,441	54,204
18	Leases	-	-
19	Transportation	-	-
20	Insurance	1,658	7,598
21	Other	-	-
22	Bad Debt	7,890	34,286
23	Amortization of Rate Case	-	-
24	Amortization of UPAA	-	-
25	Amortization of Tank Painting	-	-
26	Amortization Other	-	-
27	Total Operating Expenses Adjusted/Unadjusted for Separately	\$ 1,328,140	\$ 1,470,556
28	Total Operating Expenses Subject to Effects of Inflation	\$ 365,117	\$ 371,506
29	Inflation Factor - Schedule C-4.1.i	1.750%	1.700%
30	Estimated Effect of Inflation at Annual Rate Pro Forma Adjustment	\$ 6,390	\$ 6,316

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

INFLATION FACTOR CALCULATION

LINE NO.	GDP Chained Price Index (% Change From Same Quarter Prior Year)			
1	Second Quarter	2021	1.900%	(a)
2	Third Quarter	2021	1.700%	(a)
3	Fourth Quarter	2021	1.700%	(a)
4	First Quarter	2022	1.700%	(b)
5	Annual Average for the Period Ending 3/31/2022			1.750%
6	Second Quarter	2022	1.700%	(b)
7	Third Quarter	2022	1.700%	(b)
8	Fourth Quarter	2022	1.700%	(b)
9	First Quarter	2023	1.700%	(c)
10	Annual Average for the Period Ending 3/31/2023			1.700%

Source:

- (a) Blue Chip Economic Indicators Volume 45, No. 10, October 10, 2020, Page 5, Forecasted Future Periods
- (b) 2022 not available in Blue Chip Report. Used Prior Quarter, Q4-2021.
- (c) First Quarter of 2023 not available in Blue Chip Report. Used Prior Quarter, Q4-2021.

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

UNCOLLECTIBLE ACCOUNTS

For the three years ended March 31, 2021, the Company experienced an average uncollectible accounts factor of 1.19391% with regard to sales to general customers.

LINE NO.	DESCRIPTION	PER BOOKS	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Sales to General Customers Excluding Forfeited Discounts and Misc Revenue	\$ 895,540	\$ 660,820	\$ 2,871,698	\$ 2,871,698
2	Annualized Uncollectible Accounts based on Experience Factor @ 1.19391%		7,890	34,286	34,286 ‡
3	Less: Amount Charged to Operating Expense				
4	During the Twelve Months Ended 3/31/2021		148		
5	Less: Present Rates 3/31/2021			7,890	
6	Less: Present Rates 3/31/2022				34,286
7	Increase/(Decrease)		<u>\$ 7,742</u>	<u>\$ 26,396</u>	<u>\$ -</u>
8	Pro Forma Adjustment:				
9	7707		\$ 7,742	\$ 26,396	\$ -

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PAGE HELD FOR FUTURE USE

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

RATE CASE EXPENSE

The following adjustment reflects the estimated cost of this rate case as summarized below. The total cost is being allocated based on the ratio of wastewater customers served to total water and wastewater customers. The Company proposes to normalize this cost over a thirty-six month period, which is consistent with the rate treatment in previous cases.

LINE NO.	DESCRIPTION				
1	Engineering, Cost Allocation and Depreciation	\$	400,000		
2	Legal		1,200,000		
3	Other Consultants		100,000		
4	Rate of Return		95,000		
5	Notices and Postage		340,000		
6	Miscellaneous		65,000		
7	Total	\$	2,200,000		
8	Allocation of Total Rate Case Expense		Total	Annual Amortization	
9	Water	91.51%	\$ 2,013,220	\$ 671,073	
10	Wastewater	8.49%	\$ 186,780	\$ 62,260	
11	Wastewater - Current Exhibit	0.42%	\$ 9,147	\$ 3,049	
12	Normalization Period		36 Months		
13		PRESENT RATES	PRESENT RATES		
14		3/31/2022	3/31/2023		
15		AMOUNT	AMOUNT		
16	Annual Expense on a 36 Month Normalized Basis	\$	-	\$ 3,049	‡
17	Less: Amount Charged to Operating Expense				
18	During the Twelve Months Ended 3/31/2021		-		
19	Less: Present Rates 3/31/2022			-	
20	Increase/(Decrease)	\$	-	\$ 3,049	
21	Pro Forma Adjustment:				
22	7668			\$ 3,049	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PAYROLL

The following amounts summarize the Company's estimated annualized payroll expense. This results from the calculation of employee compensation levels expected to be in effect by March 31, 2022 and March 31, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	<u>Non-Union Payroll</u>				
2	Gross Payroll	\$ 10,690	\$ 11,842	\$ 12,198	
3	Capital Payroll	-	-	-	
4	Non-Operating Payroll	-	-	-	
5	Expense Payroll	10,690	11,842	12,198	‡
6	Non-Union Expense Payroll Increase/(Decrease)		\$ 1,152	\$ 356	
7	<u>Union Payroll</u>				
8	Gross Payroll	\$ -	\$ -	\$ -	
9	Capital Payroll	-	-	-	
10	Non-Operating Payroll	-	-	-	
11	Expense Payroll	-	-	-	‡
12	Union Expense Payroll Increase/(Decrease)		\$ -	\$ -	
13	Total Expense Payroll Increase/(Decrease)		<u>\$ 1,152</u>	<u>\$ 356</u>	
14	Pro Forma Adjustment:				
15	7013		\$ -	\$ -	
16	7014		\$ -	\$ -	
17	7015		\$ -	\$ -	
18	7017		\$ -	\$ -	
19	7018		\$ 1,152	\$ 356	
20	75052		\$ -	\$ -	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

INSURANCE EXPENSE

The Company's self insured policies for General Liability, Workers Compensation, Vehicle, and Other are evaluated annually by a third party insurance broker, using multiple year claims history. The Company has based its expense claim on the actual and projected premiums for the twelve months ending March 31, 2022 and March 31, 2023.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	General Liability	\$ 1,159	\$ 5,310	\$ 5,627	
2	Workers Compensation	108	494	524	
3	Other (Exec Risk, Property, Surety Bond)	392	1,794	1,901	
4		<u>1,658</u>	<u>7,598</u>	<u>8,051</u>	‡
5	Capitalized portion not charged to operating expense	30.00% (497)	(2,279)	(2,415)	‡
6	Subtotal Insurance	<u>\$ 1,161</u>	<u>\$ 5,318</u>	<u>\$ 5,636</u>	
7	Less: Amount Charged to Operating Expense				
8	During the Twelve Months Ended 3/31/2021	1,658			
9	Less: Present Rates 3/31/2021		1,161		
10	Less: Present Rates 3/31/2022			5,318	
11	Increase/(Decrease)	<u>\$ (497)</u>	<u>\$ 4,157</u>	<u>\$ 318</u>	
12	Pro Forma Adjustment:				
13	7578	\$ -	\$ 4,151	\$ 317	
14	7588	\$ -	\$ 386	\$ 30	
15	7598	\$ -	\$ 1,402	\$ 107	
16	7048	\$ (497)	\$ (1,782)	\$ (136)	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

MANAGEMENT SERVICE & SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related premiums of the Aqua Services, Inc. employees whose time was charged to Aqua Pennsylvania Wastewater during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	Management Fees Labor & Benefits	\$ 52,441	\$ 52,441	\$ 54,204	‡
2	Payroll Increase		1,289	1,327	‡
3	Employee Benefit Insurance Increase		474	498	‡
4	Management Fees All Other	28,371	28,371	28,371	
5	Total Expense Claim	\$ 80,812	\$ 82,575	\$ 84,400	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2021	18,485			
8	Less: Present Rates 3/31/2021		80,812		
9	Less: Present Rates 3/31/2022			82,575	
10	Increase/(Decrease)	\$ 62,327	\$ 1,763	\$ 1,825	
11	Pro Forma Adjustment:				
12	7349	\$ 62,327	\$ 1,763	\$ 1,825	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

CUSTOMER SERVICE & SUNDRY

The following amounts summarize the estimated additional annualized payroll expense and the company portion of employee benefit related premiums of the Aqua Customer Operations employees whose time was charged to Aqua Pennsylvania Wastewater during the test year.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	Customer Operations Labor & Benefits	\$ 17,165	\$ 17,165	\$ 19,645	‡
2	Payroll Increase		1,725	442	‡
3	Employee Benefit Increase		756	160	‡
4	Customer Operations All Other	5,883	5,883	5,883	
5	Total Expense Claim	\$ 23,048	\$ 25,528	\$ 26,130	
6	Less: Amount Charged to Operating Expense				
7	During the Twelve Months Ended 3/31/2021	5,181			
8	Less: Present Rates 3/31/2021		23,048		
9	Less: Present Rates 3/31/2022			25,528	
10	Increase/(Decrease)	\$ 17,867	\$ 2,481	\$ 602	
11	Pro Forma Adjustment:				
12	7367	\$ 17,867	\$ 2,481	\$ 602	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

MISCELLANEOUS EXPENSE ADJUSTMENTS

The following adjustments reflect miscellaneous additions or deductions from pro forma expenses.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Additions:			
2	Annualization of OM Lab Testing	15,000		
3	Annualization of OM OS Other Maintenance	223,588		
4	Annualization of OM Other	25,000		
5	Deductions:			
6	Increase/(Decrease)	\$ 263,588	\$ -	\$ -
7	Pro Forma Adjustment:			
8	7354	\$ 15,000		
9	7362	\$ 20,380		
10	7364	\$ 77,988		
11	7366	\$ 83,880		
12	7365	\$ 41,340		
13	7758	\$ 25,000		

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

SPECIFIC EXPENSES NOT SUBJECT TO INFLATION

The following amounts reflect specific expenses that are not separately adjusted for and are not subject to growth from inflation. These amounts are eliminated from the eligible Operating Expenses subject to inflation on Schedule C-4.1.

LINE NO.	DESCRIPTION	PRESENT RATES		PRESENT RATES		PRESENT RATES	
		3/31/2021 AMOUNT		3/31/2022 AMOUNT		3/31/2023 AMOUNT	
1	Leases	\$	-	\$	-	\$	-

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PAGE HELD FOR FUTURE USE

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER EXPENSE

This adjustment summarizes the Company's purchased power expense claim as detailed on Schedule C-6.1.i & Schedule C-6.1.ii.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	Claimed Purchased Power Expense - Electric	\$ 30,716	\$ 136,249	\$ 130,392	
2	Claimed Purchased Power Expense - Gas	237	479	485	
3		<u>\$ 30,953</u>	<u>\$ 136,728</u>	<u>\$ 130,877</u>	‡
4	Less: Amount Charged to Operating Expense				
5	During the Twelve Months Ended 3/31/2021	30,953			
6	Less: Present Rates 3/31/2021		30,953		
7	Less: Present Rates 3/31/2022			136,728	
8	Increase/(Decrease)	<u>\$ -</u>	<u>\$ 105,775</u>	<u>\$ (5,851)</u>	
9	Pro Forma Adjustment:				
10	7151	\$ -	\$ 105,082	\$ (5,813)	
11	7153	\$ -	\$ -	\$ -	
12	7155	\$ -	\$ -	\$ -	
13	7158	\$ -	\$ -	\$ -	
14	7161	\$ -	\$ 693	\$ (38)	
15	7163	\$ -	\$ -	\$ -	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER - ELECTRIC

LINE NO.	UTILITY	LOCATION	HISTORIC KW HOURS	PRESENT RATES 3/31/2021 AMOUNT	FUTURE KW HOURS	PRESENT RATES 3/31/2022 AMOUNT	FULLY PROJECTED FUTURE KW HOURS	PRESENT RATES 3/31/2023 AMOUNT
1	PECO	New Garden	287,367	\$ 30,716	1,763,934	\$ 136,249	1,763,934	\$ 130,392
2				\$ 30,716		\$ 136,249		\$ 130,392

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED POWER - GAS

LINE NO.	UTILITY	LOCATION	HISTORIC THERMS	PRESENT RATES 3/31/2021 AMOUNT	FUTURE THERMS	PRESENT RATES 3/31/2022 AMOUNT	FULLY PROJECTED FUTURE THERMS	PRESENT RATES 3/31/2023 AMOUNT
1	PECO	New Garden	32	\$ 237	64	\$ 479	64	\$ 485
2				<u>\$ 237</u>		<u>\$ 479</u>		<u>\$ 485</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

CHEMICALS

The chemical expense claim was based on the annualized expense to reflect a full twelve months of service.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	Chemical Expense Claim (Annualized)	\$ 1,428	\$ 1,428	\$ 1,428	‡
2	Less: Amount Charged to Operating Expense				
3	During the Twelve Months Ended 3/31/2021	357			
4	Less: Present Rates 3/31/2021		1,428		
5	Less: Present Rates 3/31/2022			1,428	
6	Increase/(Decrease)	<u>\$ 1,071</u>	<u>\$ -</u>	<u>\$ -</u>	
7	Pro Forma Adjustment:				
8	7183	\$ 1,071	\$ -	\$ -	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

PURCHASED WASTEWATER TREATMENT EXPENSE

The Company's claim for purchased wastewater treatment expense is being annualized to give effect of a full twelve months of service for the New Garden Wastewater System. The service provider is Brandywine Septic.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	
1	Claimed Purchased Wastewater Expense	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000	‡
2	Less: Amount Charged to Operating Expense				
3	During the Twelve Months Ended 3/31/2021	249,695			
4	Less: Present Rates 3/31/2021		1,200,000		
5	Less: Present Rates 3/31/2022			1,200,000	
6	Increase/(Decrease)	<u>\$ 950,305</u>	<u>\$ -</u>	<u>\$ -</u>	
7	Pro Forma Adjustment:				
8	7105	\$ 950,305	\$ -	\$ -	

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OPERATING EXPENSES

EMPLOYEE BENEFITS

Aqua Pennsylvania Water Operations charges a portion of employee benefits and other related overheads to Aqua Pennsylvania Wastewater through an intracompany transaction which is calculated based on approximately 60% of wastewater payroll expense.
Refer to Exhibit 1-A Water, Schedule C-8.5 for the corresponding entry.

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Wastewater Intracompany Benefits	\$ 6,414	\$ 7,105	\$ 7,319
2	Less: Amount Charged to Operating Expense			
3	During the Twelve Months Ended 3/31/2021	-		
4	Less: Present Rates 3/31/2021		6,414	
5	Less: Present Rates 3/31/2022			7,105
6	Increase/(Decrease)	<u>\$ 6,414</u>	<u>\$ 691</u>	<u>\$ 214</u>
7	Pro Forma Adjustment:			
8	7048	\$ 6,414	\$ 691	\$ 214

‡ : Amount removed for Inflation Adjustment (Schedule C-4.1)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

STATEMENT OF DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES	PRESENT RATES	PRESENT RATES
		3/31/21 AMOUNT	3/31/22 AMOUNT	3/31/23 AMOUNT
	(1)	(2)	(3)	(4)
1	Annualized Depreciation Expense	\$ 716,886	\$ 731,117	\$ 735,834
2	Less: Amount Charged to Depreciation Expense			
3	During the Twelve Months Ended 3/31/2021	-		
4	Less: Present Rates 3/31/2021		716,886	
5	Less: Present Rates 3/31/2022			731,117
6	Increase/(Decrease)	<u>\$ 716,886</u>	<u>\$ 14,231</u>	<u>\$ 4,717</u>
7	Pro Forma Adjustment:			
8		\$ 716,886	\$ 14,231	\$ 4,717

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO TAXES OTHER THAN INCOME

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/21		PRESENT RATES 3/31/22		PRESENT RATES 3/31/23		PROPOSED RATES	
		ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT	ADJUSTMENT	AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Per Books		\$ -						
2	Present Rates at 3/31/21				\$ 4,204				
3	Present Rates at 3/31/22						\$ 18,270		
4	Present Rates at 3/31/23								\$ 18,270
5	General Assessment Fees By The Pennsylvania Public Utility Commission	2,989		10,001		-		12,444	
6	General Assessment Fees By The Consumer Advocate, Small Business Advocate, And Damage Prevention Committee	1,215		4,064		-		5,057	
7	Public Utility Realty Tax	-		-		-			
8	Pennsylvania Property Tax	-		-		-			
9									
10	Pro Forma Adjustment		<u>\$ 4,204</u>		<u>\$ 14,065</u>		<u>\$ -</u>		<u>\$ 17,501</u>
11	Pro Forma Present Rates at March 31, 2021		<u>\$ 4,204</u>						
12	Pro Forma Present Rates at March 31, 2022				<u>\$ 18,270</u>				
13	Pro Forma Present Rates at March 31, 2023						<u>\$ 18,270</u>		
14	Pro Forma Proposed Rates at March 31, 2023								<u>\$ 35,771</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 660,820	\$ 2,871,698	\$ 2,871,698	\$ 5,622,606
2	Estimated General Assessment Fee:				
3	Public Utility Commission Fee At 0.004523752666	2,989	12,991	12,991	25,435
4	Total General Assessment Fees	\$ 2,989	\$ 12,991	\$ 12,991	\$ 25,435
5	Less: Amount Charged to Taxes Other Than Income				
6	During the Twelve Months Ended 3/31/2021	-			
7	Less: Present Rates 3/31/2021		2,989		
8	Less: Present Rates 3/31/2022			12,991	
9	Less: Present Rates 3/31/2023				12,991
10	Increase/(Decrease)	\$ 2,989	\$ 10,001	\$ -	\$ 12,444
11	Pro Forma Adjustment:				
12	4081	\$ 2,989	\$ 10,001	\$ -	\$ 12,444

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

GENERAL ASSESSMENT FEES BY THE CONSUMER ADVOCATE, SMALL BUSINESS ADVOCATE, AND DAMAGE PREVENTION COMMITTEE

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT	PROPOSED RATES AMOUNT
1	Gross Utility Water Revenues	\$ 660,820	\$ 2,871,698	\$ 2,871,698	\$ 5,622,606
2	Estimated General Assessment Fee:				
3	Consumer Advocate Fee At 0.001625725256	1,074	4,669	4,669	9,141
4	Small Business Advocate Fee At 0.000184760982	122	531	531	1,039
5	Damage Prevention Fee At 0.000027700326	18	80	80	156
6	Total General Assessment Fees	\$ 1,215	\$ 5,279	\$ 5,279	\$ 10,335
7	Less: Amount Charged to Taxes Other Than Income				
8	During the Twelve Months Ended 3/31/2021	-			
9	Less: Present Rates 3/31/2021		1,215		
10	Less: Present Rates 3/31/2022			5,279	
11	Less: Present Rates 3/31/2023				5,279
12	Increase/(Decrease)	<u>\$ 1,215</u>	<u>\$ 4,064</u>	<u>\$ -</u>	<u>\$ 5,057</u>
13	Pro Forma Adjustment:				
14	4081	\$ 1,215	\$ 4,064	\$ -	\$ 5,057

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

PUBLIC UTILITY REALTY TAX

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	PURTA Liability	\$ -	\$ -	\$ -
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2021	-		
4	Less: Present Rates 3/31/2021		-	
5	Less: Present Rates 3/31/2022			-
6	Increase/(Decrease)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4082	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

TAXES OTHER THAN INCOME

PENNSYLVANIA PROPERTY TAX

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Claimed Property Tax Expense	\$ -	\$ -	\$ -
2	Less: Amount Charged to Taxes Other Than Income			
3	During the Twelve Months Ended 3/31/2021	-		
4	Less: Present Rates 3/31/2021		-	
5	Less: Present Rates 3/31/2022			-
6	Increase/(Decrease)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
7	Pro Forma Adjustment:			
8	4081	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
INTEREST ON LONG-TERM DEBT

For the purposes of calculating long-term debt interest expense, the Company is using the pro-forma capital structure and cost rates as noted below:

LINE NO.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	PRESENT RATES @ 3/31/21			PRESENT RATES @ 3/31/22			PRESENT RATES @ 3/31/23			
2 Capital Structure	\$	%	Cost Rate	\$	%	Cost Rate	\$	%	Cost Rate	
3 Long-term Debt	\$ 1,825,756,444	48.25%	4.04%	\$ 1,814,246,887	44.47%	4.01%	\$ 1,988,887,917	46.08%	4.00%	
4 Common Equity	\$ 1,957,971,316	51.75%	10.75%	\$ 2,265,829,316	55.53%	10.75%	\$ 2,327,719,016	53.92%	10.75%	
5	\$ 3,783,727,759	100.00%	7.51%	\$ 4,080,076,202	100.00%	7.75%	\$ 4,316,606,932	100.00%	7.64%	
6	PRESENT RATES			PRESENT RATES			PRESENT RATES			
7 Calculation of Interest:	3/31/21			3/31/22			3/31/23			
8 Original Cost Rate Base	Schedule G-1 Col 3, Row 15	\$ 30,413,882		Schedule G-1 Col 4, Row 15	\$ 30,461,660		Schedule G-1 Col 5, Row 15	\$ 30,246,226		
9 Applicable Percentage		48.25%			44.47%			46.08%		
10 Applicable Portion of Rate Base		\$ 14,675,565			\$ 13,545,083			\$ 13,936,028		
11 Cost Rate		4.04%			4.01%			4.00%		
12 Pro-Forma Long-term Interest Expense		\$ 592,893			\$ 543,158			\$ 557,441		
13 Less: Interest on Long Term Debt Per Books 3/31/21		-								
14 Less: Interest on Long Term Debt Present Rates at 3/31/21					592,893					
15 Less: Interest on Long Term Debt Present Rates at 3/31/22								543,158		
16 Long Term Debt Pro Forma Adjustment		\$ 592,893			\$ (49,735)			\$ 14,283		

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

AMORTIZATION OF DEBT ISSUANCE & PREMIUM/DISCOUNT ON DEBT

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Amortization of Debt Discount and Expense Per Books	\$ -	\$ -	\$ -
2	Eliminate Amortization of Debt Discount and Expense	-	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4276	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

OTHER INTEREST CHARGES

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Other Interest Charges Per Books	\$ -	\$ -	\$ -
2	Eliminate Other Interest Charges	-	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4190	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

INTEREST DURING CONTRUCTION

The Company eliminates interest during construction to allow for full recovery of the Company's interest expense claim (weighted cost of debt times rate base).

LINE NO.	DESCRIPTION	PER BOOKS 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Interest During Construction Per Books	\$ -	\$ -	\$ -
2	Eliminate Interest During Construction	-	-	-
3	Sub-Total	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
4	Pro Forma Adjustment:			
5	4200	\$ -	\$ -	\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO STATEMENT OF INCOME

SUMMARY OF ADJUSTMENTS TO INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/21 AMOUNT	PRESENT RATES 3/31/22 AMOUNT	PRESENT RATES 3/31/23 AMOUNT	PROPOSED RATES 3/31/23 AMOUNT
	(1)	(2)	(3)	(4)	(5)	(6)
1	Federal Income Tax - Current	Schedule F-2	\$ (538,659)	\$ (143,289)	\$ (146,422)	\$ 364,041
2	Less: Per Book	Schedule A-1	-			
3	Less: Present Rates at 3/31/21			(538,659)		
4	Less: Present Rates at 3/31/22				(143,289)	
5	Less: Present Rates at 3/31/23					(146,422)
6	Pro Forma Adjustment		<u>\$ (538,659)</u>	<u>\$ 395,370</u>	<u>\$ (3,133)</u>	<u>\$ 510,463</u>
7	State Income Tax - Current	Schedule F-2	\$ (284,688)	\$ (75,730)	\$ (77,386)	\$ 192,400
8	Less: Per Book	Schedule A-1	-			
9	Less: Present Rates at 3/31/21			(284,688)		
10	Less: Present Rates at 3/31/22				(75,730)	
11	Less: Present Rates at 3/31/23					(77,386)
12	Pro Forma Adjustment		<u>\$ (284,688)</u>	<u>\$ 208,958</u>	<u>\$ (1,656)</u>	<u>\$ 269,786</u>
13	Federal Income Tax - Deferred	Schedule F-2	\$ 105,695	\$ 103,981	\$ 102,038	\$ 102,038
14	Less: Per Book	Schedule A-1	-			
15	Less: Present Rates at 3/31/21			105,695		
16	Less: Present Rates at 3/31/22				103,981	
17	Less: Present Rates at 3/31/23					102,038
18	Pro Forma Adjustment		<u>\$ 105,695</u>	<u>\$ (1,714)</u>	<u>\$ (1,943)</u>	<u>\$ -</u>
19	State Income Tax - Deferred	Schedule F-2	\$ -	\$ -	\$ -	\$ -
20	Less: Per Book	Schedule A-1	-			
21	Less: Present Rates at 3/31/21			-		
22	Less: Present Rates at 3/31/22				-	
23	Less: Present Rates at 3/31/23					-
24	Pro Forma Adjustment		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

COMPUTATION OF FEDERAL AND STATE INCOME TAXES

UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	PRESENT RATES 3/31/21		PRESENT RATES 3/31/22		PRESENT RATES 3/31/23		PROPOSED RATES 3/31/23	
		FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1 Utility Operating Income Before Tax	Schedule A-1	\$ (1,753,527)	\$ (1,753,527)	\$ 280,249	\$ 280,249	\$ 268,704	\$ 268,704	\$ 2,969,267	\$ 2,969,267
2 Interest Expense	Schedule A-1	(592,893)	(592,893)	(543,158)	(543,158)	(557,441)	(557,441)	(557,441)	(557,441)
3 State Income Tax	[11]	284,688		75,730		77,386		(192,400)	
4 Tax Repair Deduction		-	-	-	-	-	-	-	-
5 Book Depreciation	Schedule A-1	716,886	716,886	731,117	731,117	735,834	735,834	735,834	735,834
6 Tax Depreciation		(1,220,195)	(1,220,195)	(1,226,266)	(1,226,266)	(1,221,730)	(1,221,730)	(1,221,730)	(1,221,730)
7 Taxable Income	Sum of Lines [1] : [6]	<u>\$ (2,565,041)</u>	<u>\$ (2,849,729)</u>	<u>\$ (682,327)</u>	<u>\$ (758,057)</u>	<u>\$ (697,247)</u>	<u>\$ (774,633)</u>	<u>\$ 1,733,530</u>	<u>\$ 1,925,930</u>
8 Income Tax Rate		<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>
9 Pro Forma Income Tax : Current	[7] * [8]	(538,659)	(284,688)	(143,289)	(75,730)	(146,422)	(77,386)	364,041	192,400
10 Other									
11 Total - Current Income Tax	[9] + [10]	<u>\$ (538,659)</u>	<u>\$ (284,688)</u>	<u>\$ (143,289)</u>	<u>\$ (75,730)</u>	<u>\$ (146,422)</u>	<u>\$ (77,386)</u>	<u>\$ 364,041</u>	<u>\$ 192,400</u>
12 Deferred Income Tax:									
13 Catch Up Adjustment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14 Income Tax Rate		<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>
15 Deferred Income Tax - Repair Adjustment	[13] * [14]	-	-	-	-	-	-	-	-
16 Normalized Book Depreciation		(716,886)		(731,117)		(735,834)		(735,834)	
17 Normalized Tax Depreciation		1,220,195		1,226,266		1,221,730		1,221,730	
18 Income Tax Rate		<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>	<u>21.00%</u>	<u>9.99%</u>
19 Deferred Income Tax - Tax/Book Depreciation	([16] + [17]) * [18]	105,695	-	103,981	-	102,038	-	102,038	-
20 Flowback of TRA-86		-		-		-		-	
21 Flowback of TCJA 2017 (ARAM) - Protected		-		-		-		-	
22 Flowback of TCJA 2017 - 10 Years		-		-		-		-	
23 Total Flow Through		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
24 Total - Deferred Income Tax	[15] + [19] + [23]	<u>\$ 105,695</u>	<u>\$ -</u>	<u>\$ 103,981</u>	<u>\$ -</u>	<u>\$ 102,038</u>	<u>\$ -</u>	<u>\$ 102,038</u>	<u>\$ -</u>
25 Amortization of Income Tax Credit		<u>-</u>		<u>-</u>		<u>-</u>		<u>-</u>	
26 Total - Income Tax	[11] + [24] + [25]	<u>\$ (432,964)</u>	<u>\$ (284,688)</u>	<u>\$ (39,308)</u>	<u>\$ (75,730)</u>	<u>\$ (44,384)</u>	<u>\$ (77,386)</u>	<u>\$ 466,079</u>	<u>\$ 192,400</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

RATE BASE AS OF MARCH 31, 2021,

MARCH 31, 2022 AND MARCH 31, 2023 UNDER PRESENT AND PROPOSED RATES

LINE NO.	REFERENCE	ORIGINAL COST 3/31/21	ORIGINAL COST 3/31/22	ORIGINAL COST 3/31/23
(1)	(2)	(3)	(4)	(5)
1 Utility Plant in Service	Schedule G-2	\$ 58,977,747	\$ 59,707,158	\$ 60,289,702
2 Utility Plant Acquisition Adjustment	Schedule G-3	-	-	-
3		58,977,747	59,707,158	60,289,702
4 Less: Accumulated Depreciation	Schedule G-2	(28,472,865)	(29,050,517)	(29,746,456)
5 Net Plant in Service		30,504,882	30,656,641	30,543,245
6 Additions:				
7 Materials & Supplies	Schedule G-4	-	-	-
8 Cash Working Capital	Schedule G-5	(91,000)	(91,000)	(91,000)
9		(91,000)	(91,000)	(91,000)
10 Deductions:				
Contributions in Aid of Construction and				
11 Customer Advances for Construction	Schedule G-6	-	-	-
12 Deferred Income Taxes	Schedule G-7	-	(103,981)	(206,019)
13 Investment Tax Credit		-	-	-
14		-	(103,981)	(206,019)
15 Total Rate Base		\$ 30,413,882	\$ 30,461,660	\$ 30,246,226

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

UTILITY PLANT IN SERVICE & ACCUMULATED DEPRECIATION

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Utility Plant in Service	\$ 58,977,747	\$ 58,977,747	\$ 59,707,158
2	Plus: Additions		869,853	625,000
3	Less: Retirements		(140,443)	(42,456)
4	Utility Plant in Service	<u>\$ 58,977,747</u>	<u>\$ 59,707,158</u>	<u>\$ 60,289,702</u>
5	Accumulated Depreciation	<u>(28,472,865)</u>	<u>(29,050,517)</u>	<u>(29,746,456)</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN
NOTES TO RATE BASE ELEMENTS
UTILITY PLANT ACQUISITION ADJUSTMENTS

LINE NO.	DESCRIPTION	DOCKET NO.	ORIGINAL	DATE	AMORTIZATION	PRESENT RATES		FTY	PRESENT RATES		FPFTY	PRESENT RATES	
			ACQUISITION ADJUSTMENT		PERIOD	3/31/2021			3/31/2022			3/31/2023	
				CLOSED	20 YEARS	BALANCE		AMORTIZATIONS	BALANCE		AMORTIZATIONS	BALANCE	

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

MATERIALS AND SUPPLIES

LINE NO.	MONTH	YEAR	BALANCE
1	March	2020	\$ -
2	April	2020	-
3	May	2020	-
4	June	2020	-
5	July	2020	-
6	August	2020	-
7	September	2020	-
8	October	2020	-
9	November	2020	-
10	December	2020	-
11	January	2021	-
12	February	2021	-
13	March	2021	-
14	Total		\$ -
15	13 Month Average		\$ -
16	Allowance for Materials & Supplies		
17	At 3/31/2022 and 3/31/2023		\$ -

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL SUMMARY

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Cash Working Capital - Expenses	Schedule G-5.2	\$ (7,000)	\$ (7,000)	\$ (7,000)
2	Cash Working Capital - Taxes	Schedule G-5.3	20,000	20,000	20,000
3	Cash Working Capital - Interest	Schedule G-5.4	(104,000)	(104,000)	(104,000)
4	Total Cash Working Capital Requirement		\$ (91,000)	\$ (91,000)	\$ (91,000)

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN RECEIPT OF REVENUE

The time between rendering of a bill and receipt of payment is determined by dividing the average accounts receivable balances for the test year by the average daily billing as follows:

LINE NO.	MONTH (1)	YEAR (2)	BALANCE (3)
1	March	2020	\$ -
2	April	2020	-
3	May	2020	-
4	June	2020	-
5	July	2020	-
6	August	2020	-
7	September	2020	-
8	October	2020	-
9	November	2020	-
10	December	2020	-
11	January	2021	148
12	February	2021	148
13	March	2021	657,663
14	Total		<u>\$ 657,958</u>
15	Average Accounts Receivable Balance		\$ 50,612
16	Gross Utility Water Revenues recorded		
17	During the Twelve Months Ended 3/31/2021		<u>\$ 895,540</u>
16	Average Daily Billing	101 days	\$ 8,867
18	Lag in Receipt of Payment		5.7
19	Average Use Period (a)		15.2
20	Bill Issue Period		2.0
21	Lag Days in Receipt of Revenue		<u><u>22.9</u></u>

Reference:

(a) One-half of monthly billing period.

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF EXPENSES

LINE NO.	ITEM	AMOUNT	LAG DAYS	Ref. #	DOLLAR DAYS
	(1)	(2)	(3)	(4)	(5)
1	Hourly Labor	\$ -	7.5	(a)	\$ -
2	Non-Union Labor	12,198	11.0	(b)	134,182
3	Management Fee	85,388	16.0	(d)	1,366,203
4	Electric Power	130,877	20.7	(c)	2,712,602
5					
6	Employee Group Insurance	7,319	16.0	(d)	117,104
7	Liability Insurance	8,051	(1.4)	(c)	(11,029)
8	SFI Postage	6,110	(8.0)	(c)	(48,642)
9	Pension	0	300.6	(c)	0
10	SFAS106	0	365.7	(e)	0
11	All Other Expenses (g)	1,561,613	25.5	(f)	39,821,124
12	Total	<u>\$ 1,811,556</u>			<u>\$ 44,091,543</u>
13	Average Lag Days in Payment of Expenses		<u>24.3</u>	Col 5, Row 12 / Col 2, Row 12	
14	Average Lag Days in Receipt of Revenues		<u>22.9</u>	Schedule G-5.1	
15	Average Lag Days between Payment of Expenses				
16	and Receipt of Revenue		<u>(1.4)</u>	[14] - [13]	
17	WORKING CAPITAL REQUIREMENT				
18	Pro-forma Annual Expense Per Day		\$ 4,963	Col 2, Row 12 / 365	
19	Cash Working Capital Required		\$ (6,948)	[16] * [18]	
20	USE		<u>\$ (7,000)</u>	* Rounded to nearest thousandth	

Reference:

- (a) Weekly payroll paid on Thursday for preceding weeks work.
- (b) Bi-weekly payroll paid on Thursday for the preceding two weeks work.
- (c) Calculated based on test year actual experience.
- (d) Based on normal payment schedule & Intercompany settlement (1st of each month)
- (e) Payment made last week of calendar year
- (f) Assumes service rendered on 15th of the month, paid 10th of the following month. (Same procedure as prior rate cases.)
- (g) Less annual uncollectible accounts expense and other non-cash items

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF TAXES

LINE NO.	ITEM	AMOUNT	LAG DAYS	Ref. #	DOLLAR DAYS
	(1)	(2)	(3)	(4)	(5)
1	PA PUC - General Assessments	\$ 12,991	(197.5)	(a)	\$ (2,565,693)
2	OCA & SBA - General Assessments	5,279	(197.5)	(a)	(1,042,547)
3	Public Utility Realty Tax	-	(11.3)	(a)	-
4	Local, County, School, & Municipal Tax	-	(167.0)	(a)	-
5	FICA Taxes - Hourly	-	8.5		-
6	FICA Taxes - Executive & Exempt	-	12.0		-
7	Federal Unemployment Tax	-	75.0		-
8	PA Unemployment Tax	-	75.0		-
9	PA State Income Tax	(77,386)	45.2	(a)	(3,497,838)
10	Federal Income Tax	(146,422)	33.4	(a)	(4,890,489)
11	Total	<u>\$ (205,538)</u>			<u>\$ (11,996,567)</u>
12	Average Lag Days in Payment of Taxes		<u>58.4</u>	Col 5, Row 11 / Col 2, Row 11	
13	Average Lag Days in Receipt of Revenues		<u>22.9</u>	Schedule G-5.1	
14	Average Lag Days between Payment of Taxes				
15	and Receipt of Revenue		<u>(35.5)</u>	[13] - [12]	
16	WORKING CAPITAL REQUIREMENT				
17	Pro-forma Annual Tax Expense Per Day		\$ (563)	Col 2, Row 11 / 365	
18	Cash Working Capital Required		\$ 19,991	[15] * [17]	
19	USE		<u>\$ 20,000</u>	* Rounded to nearest thousandth	

Reference:

(a) The lag days are based on current tax regulation.

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CASH WORKING CAPITAL

CALCULATION OF LAG DAYS IN PAYMENT OF INTEREST

LINE NO.	ITEM (1)	AMOUNT (2)	LAG DAYS (3)	Ref. # (4)	DOLLAR DAYS (5)
1	Long Term Debt- Interest	\$ 557,441	91.3	(a)	\$ 50,866,501
2	PennVest-Interest	-	15.2	(b)	-
3	Total	<u>\$ 557,441</u>			<u>\$ 50,866,501</u>
4	Average Lag Days in Payment of Interest		<u>91.3</u>	Col 5, Row 3 / Col 2, Row 3	
5	Average Lag Days in Receipt of Revenues		<u>22.9</u>	Schedule G-5.1	
6	Average Lag Days between Payment of Interest				
7	and Receipt of Revenue		<u>(68.4)</u>	[5] - [4]	
8	WORKING CAPITAL REQUIREMENT				
9	Pro-forma Annual Interest Expense Per Day		\$ 1,527		
10	Cash Working Capital Required		\$ (104,463)		
11	USE		<u>\$ (104,000)</u>	* Rounded to nearest thousandth	

Reference:
(a) Paid Semi-Annually
(b) Paid Monthly

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

NOTES TO RATE BASE ELEMENTS

CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) AND CUSTOMER ADVANCES FOR CONSTRUCTION (CAC)

LINE NO.	DESCRIPTION	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Customer Advances and Contributions In Aid Of Construction	\$ -	\$ -	\$ -
2	Plus: Contributions		-	-
3	Less: Amortization		-	-
4	Customer Advances and Contributions In Aid Of Construction	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

AQUA PENNSYLVANIA WASTEWATER, INC. - NEW GARDEN

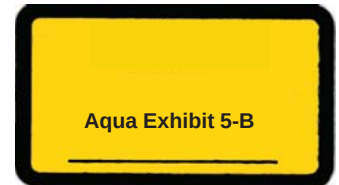
NOTES TO RATE BASE ELEMENTS

DEFERRED INCOME TAXES

LINE NO.	DESCRIPTION	REFERENCE	PRESENT RATES 3/31/2021 AMOUNT	PRESENT RATES 3/31/2022 AMOUNT	PRESENT RATES 3/31/2023 AMOUNT
1	Deferred Income Taxes		\$ -	\$ -	\$ 103,981
2	Change in Deferred Tax	Schedule F-2		103,981	102,038
3	Deferred Income Taxes		<u>\$ -</u>	<u>\$ (103,981)</u>	<u>\$ (206,019)</u>

Exhibit 5-B, Part I
Docket No. R-2021-3027385
Docket No. R-2021-3027386
Witness: C.E. Heppenstall

AQUA PENNSYLVANIA, INC.
BRYN MAWR, PENNSYLVANIA



WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATION STUDY
AS OF MARCH 31, 2023



Excellence Delivered **As Promised**

Exhibit No. 5-B, Part I
Docket No. R-2021-3027385
Docket No. R-2021-3027386
Witness: C.E. Heppenstall

AQUA PENNSYLVANIA, INC.
Bryn Mawr, Pennsylvania

WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATION STUDY
AS OF MARCH 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Camp Hill, Pennsylvania

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PART I

WASTEWATER
COST OF SERVICE ALLOCATION STUDY

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATION
WASTEWATER COST OF SERVICE ALLOCATION STUDIES
AS OF MARCH 31, 2023
AND PROPOSED CUSTOMER RATES

PLAN OF REPORT

The reports set forth the results of the cost of service allocation studies for the Wastewater Operations based on pro forma costs as of March 31, 2023, for Aqua Pennsylvania, Inc. The studies include cost of service studies for the Company's Wastewater Base Operations and separately for the wastewater divisions of Limerick, East Bradford, Cheltenham, East Norriton and New Garden. The introduction contains statements with respect to the basis of the study, the procedures employed, and a summary of the results of the study. Schedule A of each study summarizes the cost allocation for the wastewater operations and total revenues under present and proposed rates. Cost of Service by Customer Classification of each area presents detailed schedules of the allocation of costs to customer classifications, as well as the basis for the allocations. Schedule WW-F, Comparisons of Present and Proposed Customer Rates, sets forth the proposed rate schedules for wastewater service.

BASIS OF STUDY

The method used for the allocation of wastewater cost of service incorporates the functional cost allocation methodology described in the text "Financing and Charges for Wastewater Systems", Manual of Practice No. 27, published by the Water Environment

Federation. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services. It is generally accepted as a sound method for allocating the cost of wastewater service. Under the functional cost method, costs are assigned to cost components using predominant operational purposes as cost-causative factors.

Each element of the cost of service is allocated to customer classifications according to the functional categories. The cost functions are flow, infiltration and inflow (I&I), customer facilities and customer accounting. The functional costs are allocated to customer classifications based on the amount of flow contributed to the system, the amount of I&I allocated to each class, and the number and relative size of customers.

The results of the allocation of wastewater cost of service is summarized on Schedule A of each study, column 4. The cost allocation results can be compared with revenues under present and proposed rates in columns 6 and 8 of Schedule A. The proposed increase and percentage increase in revenues are shown in columns 10 and 11.

The cost of service by customer classification is developed in Schedule D of each study. The allocation factors referenced in column 2 are applied to the costs by account in column 3. The allocation factors are set forth in Schedule E of each study.

The comparison of present and proposed wastewater rates by wastewater service areas are shown in Schedule WW-F for all areas.

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification (1)	Cost of Service			Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (2)	Act 11 (3)	Revised COS (4)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 27,146,216	\$ (11,090,005)	\$ 16,056,211	\$ 13,419,396	77.1%	\$ 16,055,344	77.3%	\$ 2,635,948	19.6%
Non-Residential	7,066,927	\$ (2,361,993)	\$ 4,704,934	3,976,097	22.9%	4,704,934	22.7%	728,838	18.3%
Total Sales	34,213,143	(13,451,997)	20,761,146	17,395,492	100.0%	20,760,278	100.0%	3,364,786	19.3%
Contract and Third Party Other Revenues*	1,701,444 23,436		1,701,444 23,436	1,592,785 23,436		1,701,444 23,436		108,659 -	0.0%
Total	\$ 35,938,023		\$ 22,486,026	\$ 19,011,714		\$ 22,485,158		\$ 3,473,445	18.3%

* Includes Contract Revenue.

AQUA PENNSYLVANIA, INC

WASTEWATER BASE OPERATIONS

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities (5)	Customer Accounting (6)	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 6,799,715	\$ 9,722,403	\$ 14,882,763	\$ 896,733	\$ 1,911,529	\$ 34,213,142
Factor Reference	A	A1	C	B	B	
Residential Factor	0.7292	0.7292	0.8443	0.9019	0.9019	
Cost of Service	\$ 4,958,352	\$ 7,089,576	\$ 12,565,516	808,764	1,724,008	27,146,216
Non-Residential Factor	0.2708	0.2708	0.1557	0.0981	0.0981	
Cost of Service	\$ 1,841,363	\$ 2,632,827	\$ 2,317,246	87,970	187,521	\$ 7,066,927
Total	6,799,715	9,722,403	14,882,762	896,734	1,911,529	34,213,143

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Classification (1)	Average Daily Consumption, 100 gallons (2)	Allocation Factor (3)
Residential	17,247	0.7292
Non-Residential	6,404	0.2708
Total	<u>23,651</u>	<u>1.0000</u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

Classification (1)	Average Daily Consumption, 100 gallons (2)	Allocation Factor (3)
Residential	17,247	0.7292
Non-Residential	6,404	0.2708
Total	<u>23,651</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	15,857	0.9019
Non-Residential	1,726	0.0981
Total	17,582	1.0000

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.7292	0.2430	0.9019	0.6013	0.8443
Non-Residential	0.2708	0.0903	0.0981	0.0654	0.1557
Total	1.0000	0.3333	1.0000	0.6667	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
OPERATION AND MAINTENANCE EXPENSES								
COLLECTION								
Purchased Power	1	831,466	437,434		0	394,032	0	0
Purchased Power	1	51,848	27,277		0	24,571	0	0
Supplies	1	88	46		0	42	0	0
OS Other	1	184,809	97,228		0	87,581	0	0
TOTAL COLLECTION EXPENSE		1,068,211	561,986		0	506,225	0	0
PUMPING								
Labor	1	154,324	81,190		0	73,134	0	0
Purchased Power	1	462	243		0	219	0	0
Purchased Power	1	4,750	2,499		0	2,251	0	0
Supplies	1	133,260	70,108		0	63,152	0	0
OS Other	1	339,783	178,760		0	161,023	0	0
Other	1	1,211	637		0	574	0	0
		633,791	333,437		0	300,353	0	0
SEWAGE TREATMENT								
Salary and Wages	1A	55,981	0		29,452	26,529	0	0
Purchased Wastewater	1A	819,648	0		431,217	388,431	0	0
Chemicals	1A	541,099	0		284,672	256,427	0	0
Sludge Disposal	1A	1,019,503	0		536,361	483,142	0	0
Lab Testing	1A	415,561	0		218,627	196,934	0	0
Supplies	1A	1,079	0		568	511	0	0
Transporation	1A	33,286	0		17,512	15,774	0	0
OS Other	1A	1,159,917	0		610,232	549,685	0	0
RECLAIMED WATER TREATMENT								
OS Other	1	166	87		0	78	0	0
TOTAL SEWAGE TREATMENT EXPENSE								
		4,046,238	87		2,128,639	1,917,512	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
CUSTOMER ACCOUNTS							
Salary and Wages	3	6,381	0	0	0	0	6,381
Other	3	359,192	0	0	0	0	359,192
Uncollectible Accounts	3	428,675	0	0	0	0	428,675
TOTAL CUSTOMER ACCOUNTING EXPENSE			0	0	0	0	794,248
ADMINISTRATIVE AND GENERAL EXPENSES							
Salaries and Wages	4	1,889,852	258,910	497,976	681,670	0	451,297
Employee Benefits	5	1,243,433	200,690	311,356	461,189	0	270,198
Supplies	4		0	0	0	0	0
Accounting	4	37,300	5,110	9,829	13,454	0	8,907
Legal	4	(7,828)	(1,072)	(2,063)	(2,824)	0	(1,869)
Management Fees	4	714,262	97,854	188,208	257,634	0	170,566
Leases	4	74,992	10,274	19,760	27,050	0	17,908
Transportation	4	2,579	353	680	930	0	616
Insurance other than Group	4	67,350	9,227	17,747	24,293	0	16,083
OS Other	4	370,253	50,725	97,562	133,550	0	88,416
Amortization of Rate Case Expense	8	25,907	5,132	7,340	11,236	663	1,536
Other	4	271,776	37,233	71,613	98,030	0	64,900
Employee Benefits	5	(1,155,917)	(186,565)	(289,442)	(428,730)	0	(251,181)
TOTAL A & G EXPENSE			487,871	930,564	1,277,483	663	837,377
Total Operation & Maintenance Expenses			1,383,381	3,059,203	4,001,573	663	1,631,625

DEPRECIATION EXPENSE							
Structures and Improvements							
Collection	1	598,802	315,030	-	283,772	-	-
Pumping	1	121,403	63,870	-	57,533	-	-
Treatment and Disposal	1A	1,040,622	-	547,471	493,151	-	-
Reclaimed Water Treatment	1A	616	-	324	292	-	-
General	4	9,983	1,368	2,631	3,601	-	2,384

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow (4)		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
Power Operating Equipment								
Collection	1	4,411	2,321	-	-	2,090	-	-
Pumping	1	24,383	12,828	-	-	11,555	-	-
Treatment and Disposal	1A	167,342	-	88,039	-	79,303	-	-
Collection Mains - Gravity	1	273,760	144,025	-	-	129,735	-	-
Collection Mains - Force	1	747,291	393,150	-	-	354,141	-	-
Special Collecting Structures	1	426	224	-	-	202	-	-
Services	2	164,004	-	-	-	-	164,004	-
Meters	2	36,687	-	-	-	-	36,687	-
Receiving Wells	1	13,171	6,929	-	-	6,242	-	-
Pumping Equipment	1	711,253	374,190	-	-	337,063	-	-
RWT Pumping Equipment	1A	8,734	-	4,595	-	4,139	-	-
Treatment and Disposal Equipment	1A	2,829,214	-	1,488,449	-	1,340,765	-	-
Plant Sewers								
Treatment and Disposal	1A	3,561	-	1,873	-	1,688	-	-
Reclaimed Water Treatment Equipment	1A	189	-	99	-	90	-	-
Outfall Lines	1	6,448	3,392	-	-	3,056	-	-
Other Plant and Misc. Equipment								
Collection	1	34,970	18,398	-	-	16,572	-	-
Pumping	1	3,484	1,833	-	-	1,651	-	-
Treatment and Disposal	1A	347	-	183	-	164	-	-
Office Furniture	4	2,036	279	536	-	734	-	486
Office Equipment	4	42,752	5,857	11,265	-	15,421	-	10,209
Computer Hardware	4	233,164	31,943	61,439	-	84,102	-	55,680
Computer Software	4	104,329	14,293	27,491	-	37,631	-	24,914
Transportation Equipment	4	88,068	12,065	23,206	-	31,766	-	21,031
Stores Equipment	4	569	78	150	-	205	-	136
Tools, Shop and Gargage Equipment	4	59,409	8,139	15,654	-	21,429	-	14,187
Laboratory Equipment	1A	32,047	-	16,860	-	15,187	-	-
Power Operated Equipment	4	5,946	815	1,567	-	2,145	-	1,420
Communication Equipment								
General	4	81,894	11,219	21,579	-	29,539	-	19,556

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
SCADA	4	327,788	44,907		86,372	118,233	-	78,276
Miscellaneous Equipment	4	913	125		241	329	-	218
Other Tangible Plant	4	-	-		-	-	-	-
Total Depreciation Expense		7,780,016	1,467,278		2,400,024	3,483,527	200,691	228,496
Taxes Other Than Income								
PUC Assessment	7	162,575	38,579		42,725	73,240	6,649	1,382
OCA, OSBA Assessment	7	66,061	15,676		17,361	29,760	2,702	562
Local Property Tax	7	175,853	41,730		46,214	79,222	7,192	1,495
Total Taxes, Other Than Income		404,489	95,985		106,300	182,222	16,544	3,438
Total Operating Expense		18,260,950	2,946,644		5,565,527	7,667,322	217,898	1,863,559
Income Taxes	7	2,521,534	598,360		662,659	1,135,951	103,131	21,433
Utility Income Available for Return	7	15,155,537	3,596,409		3,982,875	6,827,570	619,861	128,822
Total Cost of Service		35,938,022	7,141,413		10,211,061	15,630,843	940,890	2,013,814
Less: Other Revenues								
Contract Revenue	8	331,800	65,730		93,999	143,902	8,494	19,676
Third Party Sales	8	1,369,644	271,326		388,020	594,014	35,063	81,220
Other Operating Revenues	8	23,436	4,643		6,640	10,164	600	1,390
Total Cost of Service Related to Sales of Wastewater Services		34,213,142	6,799,715		9,722,403	14,882,763	896,733	1,911,529

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow	Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
Factor 1 - Flow and I&I	0.5261	0.4739			1.0000
Factor 2 - Customer Facilities			1.0000		1.0000
Factor 3 - Customer Accounting				1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals					
Cost	455,334	1,199,589	0	794,248	3,325,560
Factor	0.1370	0.3607	0.0000	0.2388	1.0000
Factor 5 - Labor Expense					
Cost	340,099	781,333	0	457,678	2,106,538
Factor	0.1614	0.3709	0.0000	0.2173	1.0000
Factor 6 - Rate Base less Allocated Costs					
Cost	48,726,722	92,431,940	8,417,448	1,662,370	205,125,541
Factor	0.2376	0.4506	0.0410	0.0081	1.0000
Factor 7 - Rate Base					
Cost	47,068,081	89,358,720	8,117,880	1,694,874	198,373,000
Factor	0.2373	0.4505	0.0409	0.0085	1.0000
Factor 8 - Total Cost of Service					
Cost	7,272,122	15,914,786	940,227	2,175,042	36,697,779
Factor	0.1981	0.4337	0.0256	0.0593	1.0000
Factor 9 - O&M Exp					
Cost	1,514,089	4,285,517	0	1,792,853	10,836,202
Factor	0.1397	0.3955	0.0000	0.1655	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow (4)		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
<u>RATE BASE</u>								
Organization	1	1,563,234	822,418	0	0	740,817	0	0
Land and Land Rights - Collection	1	42,731	22,481	0	0	20,250	0	0
Land and Land Rights - Pumping	1	573,539	301,739	0	0	271,800	0	0
Land and Land Rights - Treatment and Disp.	1A	897,482	0	472,165	0	425,317	0	0
Structures and Improvements								
Collection	1	21,744,079	11,439,560	0	0	10,304,519	0	0
Pumping	1	4,659,508	2,451,367	0	0	2,208,141	0	0
Treatment and Disposal	1A	28,121,463	0	14,794,702	0	13,326,761	0	0
Reclaimed Water Treatment	1A	23,702	0	12,470	0	11,232	0	0
General	4	250,542	34,324	66,018	0	90,370	0	59,829
Power Operating Equipment								
Collection	1	50,294	26,460	0	0	23,834	0	0
Pumping	1	300,558	158,124	0	0	142,434	0	0
Treatment and Disposal	1A	2,809,659	0	1,478,162	0	1,331,497	0	0
Collection Mains - Gravity	1	12,779,577	6,723,335	0	0	6,056,242	0	0
Collection Mains - Force	1	39,020,795	20,528,840	0	0	18,491,955	0	0
Special Collecting Structures	1	5,933	3,121	0	0	2,812	0	0
Services	2	7,792,176	0	0	0	0	7,792,176	0
Meters	2	625,272	0	0	0	0	625,272	0
Receiving Wells	1	213,745	112,451	0	0	101,294	0	0
Pumping Equipment	1	9,429,456	4,960,837	0	0	4,468,619	0	0
RWT Pumping Equipment	1A	102,889	0	54,130	0	48,759	0	0
Treatment and Disposal Equipment	1A	66,308,452	0	34,884,877	0	31,423,575	0	0
Plant Sewers								
Treatment and Disposal	1A	82,399	0	43,350	0	39,049	0	0
Reclaimed Water Treatment Equipment	1A	4,435	0	2,333	0	2,102	0	0
Outfall Lines	1	173,111	91,074	0	0	82,037	0	0
Other Plant and Misc. Equipment								
Collection	1	221,024	116,281	0	0	104,743	0	0
Pumping	1	28,378	14,930	0	0	13,448	0	0
Treatment and Disposal	1A	3,619	0	1,904	0	1,715	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER BASE OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Office Furniture	4	35,992	4,931		9,484	12,982	0	8,595
Office Equipment	4	135,005	18,496		35,574	48,696	0	32,239
Computer Hardware	4	661,250	90,591		174,239	238,513	0	157,907
Computer Software	4	838,447	114,867		220,931	302,428	0	200,221
Transportation Equipment	4	917,791	125,737		241,838	331,047	0	219,168
Stores Equipment	4	2,382	326		628	859	0	569
Tools, Shop and Garage Equipment	4	913,716	125,179		240,764	329,577	0	218,195
Laboratory Equipment	1A	586,681	0		308,653	278,028	0	0
Power Operated Equipment	4	39,528	5,415		10,416	14,258	0	9,439
Communication Equipment								
General	4	871,424	119,385		229,620	314,323	0	208,096
SCADA	4	2,282,223	312,665		601,366	823,198	0	544,995
Miscellaneous Equipment	4	13,049	1,788		3,438	4,707	0	3,116
Other Tangible Plant	4	0	0		0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER		\$ 205,125,541	\$ 48,726,722		\$ 53,887,060	\$ 92,431,940	\$ 8,417,448	\$ 1,662,370
Other Rate Base Items:								
Acquisition Adjustment	6	1,335,224	317,249		350,763	601,652	54,744	10,815
Working Capital	9	554,000	77,394		165,812	219,107	0	91,687
Customer Contributions	6	(8,641,765)	(2,053,283)		(2,270,192)	(3,893,979)	(354,312)	(69,998)
Total Other Rate Base Elements		(6,752,541)	(1,658,640)		(1,753,616)	(3,073,220)	(299,568)	32,504
Total Original Cost Measure of Value		198,373,000	47,068,081		52,133,444	89,358,720	8,117,880	1,694,874

Aqua Pennsylvania, Inc. Current and Proposed Rates	RZ-1 - Meter Size				RZ-1 - EDU				RZ-1A			
	Media Division				Bridlewood and Eagle Rock Divisions				Treasure Lake, Village at Valley Forge and Bunker Hill Divisions			
	Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change	
Residential	\$	31.00	\$	39.10	\$	31.00	\$	39.10	\$	31.00	\$	39.10
EDU Charge												
Non-Residential												
					</							

Consumption Charges:

Aqua Pennsylvania, Inc.
Current and Proposed Rates

	SEASONAL RZ-6				RZ-7				RZ-8			
	Masthope Division				Limerick Division				East Bradford Division			
	Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change	
Residential												
EDU Charge	\$ 39.64	\$ 50.10	26.4%		\$ 28.10	\$ 39.48	40.5%		\$ 26.00	\$ 39.10	50.4%	
Non-Residential												
	Per EDU				Per EDU				Per EDU			
5/8	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
3/4	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
1	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
1-1/2	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
2	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
3	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
4	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
6	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
8	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
10	39.64	50.10	26.4%		28.10	39.48	40.5%		26.00	39.10	50.4%	
Flat Rate Customer Charges	43.64	55.15	26.4%		28.33	72.94	157.5%		68.09	83.42	22.5%	
									52.72	83.42	58.2%	
Consumption Charges:					Monthly				Allowance			
1st block	0.1000	0.1263	26.3%		Allowance - 2,493 gallons (KG)				-	1,1080		
2nd block					0.8366	0.8366			0.6900	1,1080	60.6%	
3rd block					0.6460	0.8366	29.5%					
Block Size (100 gallons)												
First									20	20	0.0%	
Over									Birmingham			
									68.09	68.09		
SPECIAL CHARGES												
Customer Charges:									NonResidential (First 10 EDU)			
									68.40	83.42	22.0%	
									Additional Charge - After 10 EDU			
									34.20	83.42	143.9%	
Consumption Charges:												
All Usage												

Aqua Pennsylvania, Inc.
Current and Proposed Rates

		RZ-9		RZ-10	
		Cheltenham Township Division		East Norriton, Whitpain Division	
		Current Rates	Proposed Rates	Current Rates	Proposed Rates
		Change		Change	
Residential	EDU Charge	\$ 20.89	\$ 28.21	\$	\$ 32.37
Non-Residential		Per EDU		Per EDU	
5/8		20.89	28.21	21.08	32.37
3/4		20.89	28.21	21.08	32.37
1		20.89	28.21	21.08	32.37
1-1/2		20.89	28.21	21.08	32.37
2		20.89	28.21	21.08	32.37
3		20.89	28.21	21.08	32.37
4		20.89	28.21	21.08	32.37
6		20.89	28.21	21.08	32.37
8		20.89	28.21	21.08	32.37
10		20.89	28.21	21.08	32.37
Flat Rate Customer Charges			49.34	38.53	58.53
					51.9%
Consumption Charges:				Allowance	
1st block		0.3910	0.5283	-	0.6540
2nd block				0.6540	0.6540
3rd block					0.0%
Block Size (100 gallons)					
	First			13.33	13.33
	Over				0.0%
SPECIAL CHARGES					
Customer Charges:					
				SPECIAL CHARGES - WHITPAIN	
				Residential - Under 6,666 Gals.	
				31.66	
				Residential - Over 6,666 Gals.	
				39.57	
				NonResidential - Up to 4,000 Gals.	
				56.00	
Consumption Charges:				NonResidential - Over 4,000 Gals.	
All Usage				Allowance	
				-	0.6540
				0.6000	0.6540
					-18.3%

Consumption Charges:

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - LIMERICK DIVISION
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification	Cost of Service			Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (2)	Act 11 (3)	Revised COS (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10) Percent Increase (11)
Residential	\$ 7,001,669	\$ (2,032,364)	\$ 4,969,305	71.6%	\$ 2,758,337	69.5%	\$ 4,968,786	71.6%	\$ 2,210,449 80.1%
Non-Residential	2,915,191	\$ (945,336)	\$ 1,969,855	28.4%	1,211,427	30.5%	1,969,855	28.4%	758,428 62.6%
Total Sales	9,916,860	(2,977,700)	6,939,160	100.0%	3,969,765	100.0%	6,938,641	100.0%	2,968,877 74.8%
Other Revenues	8,808		8,808		8,808		8,808		- 0.0%
Total	<u>\$ 9,925,668</u>		<u>\$ 6,947,968</u>		<u>\$ 3,978,573</u>		<u>\$ 6,947,449</u>		<u>\$ 2,968,877 74.6%</u>

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS- LIMERICK DIVISION

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities (5)	Customer Accounting (6)	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 3,025,921	\$ 1,762,333	\$ 4,313,265	\$ 188,094	\$ 627,247	\$ 9,916,859
Factor Reference	A	A1	C	B	B	
Residential Factor	0.6793	0.6793	0.7272	0.7511	0.7511	
Cost of Service	\$ 2,055,508	\$ 1,197,153	\$ 3,136,606	141,277	471,125	7,001,669
Non-Residential Factor	0.3207	0.3207	0.2728	0.2489	0.2489	
Cost of Service	\$ 970,413	\$ 565,180	\$ 1,176,659	46,817	156,122	\$ 2,915,191
Total	3,025,921	1,762,333	4,313,265	188,094	627,247	9,916,860

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - LIMERICK DIVISION
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	7,612	0.6793
Non-Residential	<u>3,594</u>	<u>0.3207</u>
Total	<u><u>11,206</u></u>	<u><u>1.0000</u></u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	7,612	0.6793
Non-Residential	<u>3,594</u>	<u>0.3207</u>
Total	<u><u>11,206</u></u>	<u><u>1.0000</u></u>

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	5,598	0.7511
Non-Residential	1,855	0.2489
Total	7,453	1.0000

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.6793	0.2264	0.7511	0.5008	0.7272
Non-Residential	0.3207	0.1069	0.2489	0.1659	0.2728
Total	1.0000	0.3333	1.0000	0.6667	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
OPERATION AND MAINTENANCE EXPENSES							
COLLECTION							
Purchased Power	1	246,217	129,535	0	116,682	0	0
Purchased Power	1	2,822	1,484	0	1,337	0	0
Supplies	1		0	0	0	0	0
OS Other	1	22,509	11,842	0	10,667	0	0
TOTAL COLLECTION EXPENSE		271,548	142,861	0	128,687	0	0
PUMPING							
Labor	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Supplies	1	32,180	16,930	0	15,250	0	0
OS Other	1	12,619	6,639	0	5,980	0	0
Other	1	50,033	26,322	0	23,711	0	0
		94,831	49,891	0	44,941	0	0
SEWAGE TREATMENT							
Salary and Wages	1A	124,410	0	65,452	58,958	0	0
Purchased Wastewater	1A	47,640	0	25,064	22,577	0	0
Chemicals	1A	18,111	0	9,528	8,583	0	0
Sludge Disposal	1A	136,349	0	71,733	64,616	0	0
Lab Testing	1A	58,268	0	30,655	27,613	0	0
Supplies	1A		0	0	0	0	0
Transporation	1A		0	0	0	0	0
OS Other	1A	68,612	0	36,097	32,515	0	0
RECLAIMED WATER TREATMENT							
OS Other	1A		0	0	0	0	0
TOTAL SEWAGE TREATMENT EXPENSE		453,391	0	238,529	214,862	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
CUSTOMER ACCOUNTS							
Salary and Wages	3		0	0	0	0	0
Other	3	103,838	0	0	0	0	103,838
Uncollectible Accounts	3	118,398	0	0	0	0	118,398
TOTAL CUSTOMER ACCOUNTING EXPENSE		222,237	0	0	0	0	222,237
ADMINISTRATIVE AND GENERAL EXPENSES							
Salaries and Wages	4	349,754	37,249	77,890	103,702	0	130,913
Employee Benefits	5	278,473	21,888	84,182	95,516	0	76,886
Supplies	4		0	0	0	0	0
Accounting	4	9,509	1,013	2,118	2,819	0	3,559
Legal	4	155	17	35	46	0	58
Management Fees	4	245,560	26,152	54,686	72,808	0	91,913
Leases	4		0	0	0	0	0
Transportation	4		0	0	0	0	0
Insurance other than Group	4	23,155	2,466	5,157	6,865	0	8,667
OS Other	4	101,917	10,854	22,697	30,218	0	38,147
Amortization of Rate Case Expense	8	8,768	2,694	1,554	3,826	168	526
Other	4	67,219	7,159	14,970	19,930	0	25,160
Employee Benefits	5		0	0	0	0	0
TOTAL A & G EXPENSE		1,084,510	109,491	263,288	335,733	168	375,830
Total Operation & Maintenance Expenses		2,126,516	302,243	501,817	724,222	168	598,067

DEPRECIATION EXPENSE							
Structures and Improvements							
Collection	1	-	-	-	-	-	-
Pumping	1	141,423	74,403	-	67,020	-	-
Treatment and Disposal	1A	188,515	-	99,178	89,337	-	-
Reclaimed Water Treatment	1A	28,028	-	14,746	13,282	-	-
General	4	11,625	1,238	2,589	3,447	-	4,351

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Power Operating Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	48,318	-	25,420	22,898	-	-	-
Collection Mains - Gravity	1	717,040	377,235	-	339,805	-	-	-
Collection Mains - Force	1	16,720	8,796	-	7,924	-	-	-
Special Collecting Structures	1	2,463	1,296	-	1,167	-	-	-
Services	2	(5,134)	-	-	-	-	(5,134)	-
Meters	2	90,564	-	-	-	-	90,564	-
Receiving Wells	1	-	-	-	-	-	-	-
Pumping Equipment	1	227,300	119,583	-	107,717	-	-	-
RWT Pumping Equipment	1A	-	-	-	-	-	-	-
Treatment and Disposal Equipment	1A	491,227	-	258,435	232,792	-	-	-
Plant Sewers								
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment Equipment	1A	-	-	-	-	-	-	-
Outfall Lines	1	9,440	4,966	-	4,474	-	-	-
Other Plant and Misc. Equipment								
Collection	1	5,060	2,662	-	2,398	-	-	-
Pumping	1	517	272	-	245	-	-	-
Treatment and Disposal	1A	73	-	38	35	-	-	-
Office Furniture	4	-	-	-	-	-	-	-
Office Equipment	4	-	-	-	-	-	-	-
Computer Hardware	4	3,784	403	843	1,122	-	-	1,416
Computer Software	4	-	-	-	-	-	-	-
Transportation Equipment	4	2,031	216	452	602	-	-	760
Stores Equipment	4	-	-	-	-	-	-	-
Tools, Shop and Gargage Equipment	4	2,551	272	568	756	-	-	955
Laboratory Equipment	1A	1,346	-	708	638	-	-	-
Power Operated Equipment	4	-	-	-	-	-	-	-
Communication Equipment								
General	4	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)		Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
SCADA	4	15,990	1,703	3,561	4,741		-	5,985
Miscellaneous Equipment	4	-	-	-	-		-	-
Other Tangible Plant	4	-	-	-	-		-	-
Total Depreciation Expense		1,998,881	593,045	406,537	900,401		85,430	13,468
Taxes Other Than Income								
PUC Assessment	7	44,901	16,515	6,623	20,843		795	126
OCA, OSBA Assessment	7	18,245	6,711	2,691	8,469		323	51
Local Property Tax	7	0	-	-	-		-	-
Total Taxes, Other Than Income		63,146	23,225	9,314	29,313		1,118	177
Total Operating Expense		4,188,544	918,513	917,668	1,653,936		86,716	611,711
Income Taxes	7	1,325,309	487,449	195,483	615,209		23,458	3,711
Utility Income Available for Return	7	4,411,814	1,622,665	650,743	2,047,964		78,089	12,353
Total Cost of Service		9,925,667	3,028,626	1,763,894	4,317,108		188,263	627,775
Less: Other Revenues								
Other Operating Revenues	8	8,808	2,706	1,561	3,844		169	528
Total Cost of Service Related to Sales of Wastewater Services		9,916,859	3,025,921	1,762,333	4,313,265		188,094	627,247

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - LIMERICK DIVISION

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
	Treatment	Collection				
Factor 1 - Flow and I&I	0.5261		0.4739			1.0000
Factor 2 - Customer Facilities				1.0000		1.0000
Factor 3 - Customer Accounting					1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals						
Cost	63,217	132,204	176,031	0	222,237	593,689
Factor	0.1065	0.2227	0.2965	0.0000	0.3743	1.0000
Factor 5 - Labor Expense						
Cost	37,249	143,342	162,660	0	130,913	474,164
Factor	0.0786	0.3023	0.3430	0.0000	0.2761	1.0000
Factor 6 - Rate Base less Allocated Costs						
Cost	21,283,150	8,520,886	26,846,844	1,021,867	146,725	57,819,471
Factor	0.3681	0.1474	0.4643	0.0177	0.0025	1.0000
Factor 7 - Rate Base						
Cost	21,243,602	8,515,284	26,806,183	1,019,573	162,218	57,746,861
Factor	0.3678	0.1475	0.4642	0.0177	0.0028	1.0000
Factor 8 - Total Cost of Service						
Cost	3,015,079	1,739,643	4,283,064	188,095	589,102	9,814,982
Factor	0.3072	0.1772	0.4364	0.0192	0.0600	1.0000
Factor 9 - O&M Exp						
Cost	288,695	477,566	690,177	0	559,393	2,015,831
Factor	0.1432	0.2369	0.3424	0.0000	0.2775	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<u>RATE BASE</u>							
Organization	1	399,244	210,042	0	189,202	0	0
Land and Land Rights - Collection	1	0	0	0	0	0	0
Land and Land Rights - Pumping	1	365,005	192,029	0	172,976	0	0
Land and Land Rights - Treatment and Disp.	1A	481,147	0	253,131	228,016	0	0
Structures and Improvements							
Collection	1	0	0	0	0	0	0
Pumping	1	4,066,114	2,139,183	0	1,926,931	0	0
Treatment and Disposal	1A	4,212,746	0	2,216,326	1,996,420	0	0
Reclaimed Water Treatment	1A	797,297	0	419,458	377,839	0	0
General	4	187,870	20,008	41,839	55,703	0	70,320
Power Operating Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	285,402	0	150,150	135,252	0	0
Collection Mains - Gravity	1	31,682,303	16,668,060	0	15,014,243	0	0
Collection Mains - Force	1	935,683	492,263	0	443,420	0	0
Special Collecting Structures	1	155,275	81,690	0	73,585	0	0
Services	2	(343,769)	0	0	0	(343,769)	0
Meters	2	1,365,636	0	0	0	1,365,636	0
Receiving Wells	1	0	0	0	0	0	0
Pumping Equipment	1	2,502,560	1,316,597	0	1,185,963	0	0
RWT Pumping Equipment	1A	0	0	0	0	0	0
Treatment and Disposal Equipment	1A	10,221,266	0	5,377,408	4,843,858	0	0
Plant Sewers							
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment Equipment	1A	0	0	0	0	0	0
Outfall Lines	1	173,796	91,434	0	82,362	0	0
Other Plant and Misc. Equipment							
Collection	1	86,412	45,461	0	40,951	0	0
Pumping	1	8,825	4,643	0	4,182	0	0
Treatment and Disposal	1A	1,602	0	843	759	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2020

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Office Furniture	4	0	0	0	0	0	0	0
Office Equipment	4	0	0	0	0	0	0	0
Computer Hardware	4	12,972	1,382	2,889	3,846	0	0	4,855
Computer Software	4	0	0	0	0	0	0	0
Transportation Equipment	4	12,601	1,342	2,806	3,736	0	0	4,717
Stores Equipment	4	0	0	0	0	0	0	0
Tools, Shop and Garage Equipment	4	44,001	4,686	9,799	13,046	0	0	16,470
Laboratory Equipment	1A	30,929	0	16,272	14,657	0	0	0
Power Operated Equipment	4	0	0	0	0	0	0	0
Communication Equipment								
General	4	0	0	0	0	0	0	0
SCADA	4	134,554	14,330	29,965	39,895	0	0	50,364
Miscellaneous Equipment	4	0	0	0	0	0	0	0
Other Tangible Plant	4	0	0	0	0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER		\$ 57,819,471	\$ 21,283,150	\$ 8,520,886	\$ 26,846,844	\$ 1,021,867	\$ 146,725	
Other Rate Base Items:								
Customer Contributions	6	(129,610)	(47,710)	(19,105)	(60,178)	(2,294)	(324)	
Working Capital	9	57,000	8,162	13,503	19,517	0	15,818	
Total Other Rate Base Elements		(72,610)	(39,547)	(5,601)	(40,661)	(2,294)	15,493	
Total Original Cost Measure of Value		57,746,861	21,243,602	8,515,284	26,806,183	1,019,573	162,218	

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification (1)	Cost of Service			Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase		
	Amount (2)	Act 11 (3)	Revised COS (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 1,505,380	\$ (359,852)	\$ 1,145,528	84.4%	\$ 864,242	86.6%	\$ 1,144,892	84.4%	\$ 280,650	32.5%
Non-Residential	309,687	\$ (98,010)	\$ 211,677	15.6%	133,949	13.4%	211,677	15.6%	77,729	58.0%
Total Sales	1,815,067	(457,861)	1,357,206	100.0%	998,190	100.0%	1,356,569	100.0%	358,379	35.9%
Other Revenues*	16,378		16,378		16,378		16,378		-	0.0%
Total	\$ 1,831,445		\$ 1,373,584		\$ 1,014,569		\$ 1,372,948		\$ 358,379	35.3%

* Includes Contract revenues.

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 433,096	\$ 470,123	\$ 813,572	\$ 32,689	\$ 65,588	\$ 1,815,068
Factor Reference	A	A1	C	B	B	
Residential Factor	0.7515	0.7515	0.8986	0.9721	0.9721	
Cost of Service	\$ 325,472	\$ 353,297	\$ 731,076	31,777	63,758	1,505,380
Non-Residential Factor	0.2485	0.2485	0.1014	0.0279	0.0279	
Cost of Service	\$ 107,624	\$ 116,825	\$ 82,496	912	1,830	\$ 309,687
Total	433,096	470,122	813,572	32,689	65,588	1,815,067

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	1,461	0.7515
Non-Residential	<u>483</u>	<u>0.2485</u>
Total	<u><u>1,944</u></u>	<u><u>1.0000</u></u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	1,461	0.7515
Non-Residential	<u>483</u>	<u>0.2485</u>
Total	<u><u>1,944</u></u>	<u><u>1.0000</u></u>

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	14,487	0.9721
Non-Residential	416	0.0279
Total	14,903	1.0000

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.7515	0.2505	0.9721	0.6481	0.8986
Non-Residential	0.2485	0.0828	0.0279	0.0186	0.1014
Total	1.0000	0.3333	1.0000	0.6667	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
OPERATION AND MAINTENANCE EXPENSES							
COLLECTION							
Purchased Power	1	12,168	6,402	0	5,766	0	0
Purchased Power	1		0	0	0	0	0
Supplies	1		0	0	0	0	0
OS Other	1	262	138	0	124	0	0
TOTAL COLLECTION EXPENSE		12,430	6,540	0	5,891	0	0
PUMPING							
Labor	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Supplies	1	189	99	0	89	0	0
OS Other	1	160,971	84,687	0	76,284	0	0
Other	1		0	0	0	0	0
		161,159	84,786	0	76,373	0	0
SEWAGE TREATMENT							
Salary and Wages	1A		0	0	0	0	0
Purchased Wastewater	1A	834,514	0	439,038	395,476	0	0
Chemicals	1A		0	0	0	0	0
Sludge Disposal	1A		0	0	0	0	0
Lab Testing	1A		0	0	0	0	0
Supplies	1A		0	0	0	0	0
Transporation	1A		0	0	0	0	0
OS Other	1A	1,293	0	680	613	0	0
RECLAIMED WATER TREATMENT							
OS Other	1		0	0	0	0	0
TOTAL SEWAGE TREATMENT EXPENSE		835,807	0	439,718	396,089	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
CUSTOMER ACCOUNTS							
Salary and Wages	3		0	0	0	0	0
Other	3	22,834	0	0	0	0	22,834
Uncollectible Accounts	3	21,670	0	0	0	0	21,670
TOTAL CUSTOMER ACCOUNTING EXPENSE		44,504	0	0	0	0	44,504
ADMINISTRATIVE AND GENERAL EXPENSES							
Salaries and Wages	4	162	66	1	60	0	35
Employee Benefits	5	(1,426)	(585)	(5)	(531)	0	(306)
Supplies	4		0	0	0	0	0
Accounting	4	2,103	862	7	783	0	452
Legal	4	5,063	2,075	17	1,884	0	1,088
Management Fees	4	53,881	22,081	178	20,049	0	11,574
Leases	4		0	0	0	0	0
Transportation	4		0	0	0	0	0
Insurance other than Group	4	5,081	2,082	17	1,891	0	1,091
OS Other	4	1,370	561	5	510	0	294
Amortization of Rate Case Expense	8	1,924	459	499	863	35	69
Other	4	3,218	1,319	11	1,198	0	691
Employee Benefits	5		0	0	0	0	0
TOTAL A & G EXPENSE		71,376	28,920	728	26,706	35	14,988
Total Operation & Maintenance Expenses		1,125,277	120,246	440,446	505,059	35	59,492
DEPRECIATION EXPENSE							
Structures and Improvements							
Collection	1	44,714	23,524	-	21,190	-	-
Pumping	1	7,498	3,945	-	3,553	-	-
Treatment and Disposal	1A	-	-	-	-	-	-
Reclaimed Water Treatment	1A	-	-	-	-	-	-
General	4	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Power Operating Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	4,804	-	-	2,527	2,277	-	-
Collection Mains - Gravity	1	9,269	4,876	-	-	4,393	-	-
Collection Mains - Force	1	48,874	25,713	-	-	23,161	-	-
Special Collecting Structures	1	-	-	-	-	-	-	-
Services	2	5,766	-	-	-	-	5,766	-
Meters	2	1,336	-	-	-	-	1,336	-
Receiving Wells	1	-	-	-	-	-	-	-
Pumping Equipment	1	4,691	2,468	-	-	2,223	-	-
RWT Pumping Equipment	1A	-	-	-	-	-	-	-
Treatment and Disposal Equipment	1A	14,496	-	-	7,626	6,870	-	-
Plant Sewers								
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment Equipment	1A	-	-	-	-	-	-	-
Outfall Lines	1	-	-	-	-	-	-	-
Other Plant and Misc. Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Office Furniture	4	-	-	-	-	-	-	-
Office Equipment	4	-	-	-	-	-	-	-
Computer Hardware	4	-	-	-	-	-	-	-
Computer Software	4	-	-	-	-	-	-	-
Transportation Equipment	4	-	-	-	-	-	-	-
Stores Equipment	4	-	-	-	-	-	-	-
Tools, Shop and Garage Equipment	4	-	-	-	-	-	-	-
Laboratory Equipment	1A	-	-	-	-	-	-	-
Power Operated Equipment	4	-	-	-	-	-	-	-
Communication Equipment								
General	4	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
SCADA	4	17,104	7,009	56	6,364	-	3,674
Miscellaneous Equipment	4	-	-	-	-	-	-
Other Tangible Plant	4	-	-	-	-	-	-
Total Depreciation Expense		158,552	67,535	10,210	70,031	7,102	3,674
Taxes Other Than Income							
PUC Assessment	7	8,285	3,771	359	3,719	391	46
OCA, OSBA Assessment	7	3,367	1,532	146	1,511	159	19
Local Property Tax	7	4,600	2,093	199	2,065	217	25
Total Taxes, Other Than Income		16,251	7,396	704	7,295	767	89
Total Operating Expense		1,300,080	195,177	451,360	582,385	7,904	63,255
Income Taxes	7	120,550	54,862	5,220	54,115	5,690	663
Utility Income Available for Return	7	410,814	186,962	17,788	184,414	19,390	2,259
Total Cost of Service		1,831,445	437,001	474,368	820,914	32,984	66,178
Less: Other Revenues							
Other Operating Revenues	8	16,378	3,905	4,245	7,342	295	590
Total Cost of Service Related to Sales of Wastewater Services		1,815,067	433,096	470,123	813,572	32,689	65,588

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
	Treatment	Collection				
Factor 1 - Flow and I&I	0.5261		0.4739			1.0000
Factor 2 - Customer Facilities				1.0000		1.0000
Factor 3 - Customer Accounting					1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals						
Cost	84,924	680	77,110	0	44,504	207,219
Factor	0.4098	0.0033	0.3721	0.0000	0.2148	1.0000
Factor 5 - Labor Expense						
Cost	66	1	60	0	35	162
Factor	0.4098	0.0033	0.3721	0.0000	0.2148	1.0000
Factor 6 - Rate Base less Allocated Costs						
Cost	2,451,142	209,202	2,396,382	255,010	26,637	5,338,372
Factor	0.4591	0.0392	0.4489	0.0478	0.0050	1.0000
Factor 7 - Rate Base						
Cost	2,447,097	232,604	2,413,814	253,903	29,788	5,377,207
Factor	0.4551	0.0433	0.4489	0.0472	0.0055	1.0000
Factor 8 - Total Cost of Service						
Cost	435,980	473,865	819,542	32,949	65,814	1,828,151
Factor	0.2384	0.2592	0.4483	0.0180	0.0360	0.9999
Factor 9 - O&M Exp						
Cost	119,226	439,943	503,686	0	59,128	1,121,983
Factor	0.1063	0.3921	0.4489	0.0000	0.0527	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<u>RATE BASE</u>							
Organization	1	324,740	170,846	0	153,894	0	0
Land and Land Rights - Collection	1	0	0	0	0	0	0
Land and Land Rights - Pumping	1	57,798	30,407	0	27,390	0	0
Land and Land Rights - Treatment and Disp.	1A	0	0	0	0	0	0
Structures and Improvements							
Collection	1	1,488,975	783,350	0	705,625	0	0
Pumping	1	241,368	126,984	0	114,384	0	0
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment	1A	0	0	0	0	0	0
General	4	0	0	0	0	0	0
Power Operating Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	52,837	0	27,798	25,039	0	0
Collection Mains - Gravity	1	395,795	208,228	0	187,567	0	0
Collection Mains - Force	1	1,991,663	1,047,814	0	943,849	0	0
Special Collecting Structures	1	0	0	0	0	0	0
Services	2	232,165	0	0	0	232,165	0
Meters	2	22,845	0	0	0	22,845	0
Receiving Wells	1	0	0	0	0	0	0
Pumping Equipment	1	62,148	32,696	0	29,452	0	0
RWT Pumping Equipment	1A	0	0	0	0	0	0
Treatment and Disposal Equipment	1A	344,032	0	180,995	163,037	0	0
Plant Sewers							
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment Equipment	1A	0	0	0	0	0	0
Outfall Lines	1	0	0	0	0	0	0
Other Plant and Misc. Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	0	0	0	0	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)						
Office Furniture	4	0	0	0	0	0	0	0	0
Office Equipment	4	0	0	0	0	0	0	0	0
Computer Hardware	4	0	0	0	0	0	0	0	0
Computer Software	4	0	0	0	0	0	0	0	0
Transportation Equipment	4	0	0	0	0	0	0	0	0
Stores Equipment	4	0	0	0	0	0	0	0	0
Tools, Shop and Garage Equipment	4	0	0	0	0	0	0	0	0
Laboratory Equipment	1A	0	0	0	0	0	0	0	0
Power Operated Equipment	4	0	0	0	0	0	0	0	0
Communication Equipment									
General	4	0	0	0	0	0	0	0	0
SCADA	4	124,007	50,818	409	46,143	26,637	0	0	0
Miscellaneous Equipment	4	0	0	0	0	0	0	0	0
Other Tangible Plant	4	0	0	0	0	0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER		\$ 5,338,372	\$ 2,451,142	\$ 209,202	\$ 2,396,382	\$ 255,010	\$ 26,637		
Other Rate Base Items:									
Deferred Taxes	6	0	0	0	0	0	0	0	0
Working Capital	9	62,000	6,591	24,310	27,832	3,267	0	0	0
Customer Advances	6	(23,166)	(10,635)	(908)	(10,399)	(116)	(1,107)	(116)	
Total Other Rate Base Elements		38,834	(4,045)	23,402	17,433	3,152	(1,107)	3,152	
Total Original Cost Measure of Value		5,377,207	2,447,097	232,604	2,413,814	253,903	29,788		

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification (1)	Cost of Service				Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (2)	Act 11 (3)	Revised COS (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 6,401,448	\$ (435,570)	\$ 5,965,878	61.0%	\$ 4,415,789	61.0%	\$ 5,965,654	61.0%	\$ 1,549,865	35.1%
Non-Residential	3,894,248	\$ (80,234)	\$ 3,814,014	39.0%	2,822,573	39.0%	3,814,014	39.0%	991,441	35.1%
Total Sales	10,295,696	(515,804)	9,779,892	100.0%	7,238,362	100.0%	9,779,668	100.0%	2,541,306	35.1%
Other Revenues	20,377		20,377		20,377		20,377		-	0.0%
Total	\$ 10,316,073		\$ 9,800,270		\$ 7,258,739		\$ 9,800,046		\$ 2,541,306	35.0%

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM TOWNSHIP DIVISION

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 2,991,308	\$ 1,708,434	\$ 4,233,145	\$ 114,894	\$ 1,247,916	\$ 10,295,696
Factor Reference	A	A1	C	B	B	
Residential Factor	0.6486	0.6486	0.6046	0.5825	0.5825	
Cost of Service	\$ 1,940,162	\$ 1,108,090	\$ 2,559,359	66,926	726,911	6,401,448
Non-Residential Factor	0.3514	0.3514	0.3954	0.4175	0.4175	
Cost of Service	\$ 1,051,146	\$ 600,344	\$ 1,673,785	47,968	521,005	\$ 3,894,248
Total	2,991,308	1,708,434	4,233,144	114,894	1,247,916	10,295,696

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	13,706	0.6486
Non-Residential	<u>7,427</u>	<u>0.3514</u>
Total	<u><u>21,133</u></u>	<u><u>1.0000</u></u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	13,706	0.6486
Non-Residential	<u>7,427</u>	<u>0.3514</u>
Total	<u><u>21,133</u></u>	<u><u>1.0000</u></u>

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	9,817	0.5825
Non-Residential	7,036	0.4175
Total	16,853	1.0000

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.6486	0.2162	0.5825	0.3884	0.6046
Non-Residential	0.3514	0.1171	0.4175	0.2783	0.3954
Total	1.0000	0.3333	1.0000	0.6667	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
OPERATION AND MAINTENANCE EXPENSES								
COLLECTION								
Leases	1	36,751	19,335	0	0	17,416	0	0
Purchased Power	1		0	0	0	0	0	0
Supplies	1		0	0	0	0	0	0
OS Other	1		0	0	0	0	0	0
TOTAL COLLECTION EXPENSE		36,751	19,335	0	0	17,416	0	0
PUMPING								
Labor	1		0	0	0	0	0	0
Purchased Power	1		0	0	0	0	0	0
Purchased Power	1		0	0	0	0	0	0
Supplies	1		0	0	0	0	0	0
OS Other	1		0	0	0	0	0	0
Other	1	0	0	0	0	0	0	0
SEWAGE TREATMENT								
Salary and Wages	1A		0	0	0	0	0	0
Purchased Wastewater	1A	3,176,062	0	1,670,926	0	1,505,136	0	0
Chemicals	1A		0	0	0	0	0	0
Sludge Disposal	1A		0	0	0	0	0	0
Lab Testing	1A		0	0	0	0	0	0
Supplies	1A	8,309	0	4,371	0	3,938	0	0
Transporation	1A		0	0	0	0	0	0
OS Other	1A	3,075	0	1,618	0	1,457	0	0
RECLAIMED WATER TREATMENT								
OS Other	1		0	0	0	0	0	0
TOTAL SEWAGE TREATMENT EXPENSE		3,187,446	0	1,676,915	0	1,510,531	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
CUSTOMER ACCOUNTS								
Salary and Wages	3		0	0	0	0	0	0
Other	3	181,966	0	0	0	0	0	181,966
Uncollectible Accounts	3	122,921	0	0	0	0	0	122,921
TOTAL CUSTOMER ACCOUNTING EXPENSE		304,887	0	0	0	0	0	304,887
ADMINISTRATIVE AND GENERAL EXPENSES								
Salaries and Wages	4	367,197	20,122	6,242	0	23,721	0	317,112
Employee Benefits	5	209,194	11,464	3,556	0	13,514	0	180,660
Supplies	4		0	0	0	0	0	0
Accounting	4	16,767	919	285	0	1,083	0	14,480
Legal	4		0	0	0	0	0	0
Management Fees	4	429,319	23,527	7,298	0	27,734	0	370,760
Leases	4		0	0	0	0	0	0
Transportation	4	28	2	0	0	2	0	24
Insurance other than Group	4	40,482	2,218	688	0	2,615	0	34,960
OS Other	4	695	38	12	0	45	0	601
Amortization of Rate Case Expense	8	15,330	4,455	2,543	0	6,304	172	1,858
Other	4	4,330	237	74	0	280	0	3,739
Employee Benefits	5		0	0	0	0	0	0
TOTAL A & G EXPENSE		1,083,342	62,982	20,699	0	75,297	172	924,193
Total Operation & Maintenance Expenses		4,612,426	82,317	1,697,615	0	1,603,244	172	1,229,080

DEPRECIATION EXPENSE								
Structures and Improvements								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment	1A	-	-	-	-	-	-	-
General	4	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
Power Operating Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Collection Mains - Gravity	1	-	-	-	-	-	-	-
Collection Mains - Force	1	950,529	500,073	-	-	450,456	-	-
Special Collecting Structures	1	-	-	-	-	-	-	-
Services	2	53,956	-	-	-	-	53,956	-
Meters	2	-	-	-	-	-	-	-
Receiving Wells	1	-	-	-	-	-	-	-
Pumping Equipment	1	-	-	-	-	-	-	-
RWT Pumping Equipment	1A	-	-	-	-	-	-	-
Treatment and Disposal Equipment	1A	-	-	-	-	-	-	-
Plant Sewers								
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment Equipment	1A	-	-	-	-	-	-	-
Outfall Lines	1	-	-	-	-	-	-	-
Other Plant and Misc. Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Office Furniture	4	-	-	-	-	-	-	-
Office Equipment	4	-	-	-	-	-	-	-
Computer Hardware	4	-	-	-	-	-	-	-
Computer Software	4	-	-	-	-	-	-	-
Transportation Equipment	4	4,162	228	71	-	269	-	3,594
Stores Equipment	4	-	-	-	-	-	-	-
Tools, Shop and Gargage Equipment	4	72	4	1	-	5	-	62
Laboratory Equipment	1A	-	-	-	-	-	-	-
Power Opreated Equipment	4	-	-	-	-	-	-	-
Communication Equipment								
General	4	498	27	8	-	32	-	430

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref.	Cost of Service (3)	Flow		Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
SCADA	4	2,553	140	43	-	165	-	2,205
Miscellaneous Equipment	4	-	-	-	-	-	-	-
Other Tangible Plant	4	-	-	-	-	-	-	-
Total Depreciation Expense		1,011,770	500,473	124	0	450,926	53,956	6,291
Taxes Other Than Income								
PUC Assessment	7	46,667	24,015	140	-	21,756	607	149
OCA, OSBA Assessment	7	18,963	9,758	57	-	8,840	247	61
Local Property Tax	7	0	-	-	-	-	-	-
Total Taxes, Other Than Income		65,630	33,773	197	0	30,597	853	210
Total Operating Expense		5,689,826	616,562	1,697,935	0	2,084,767	54,981	1,235,582
Income Taxes	7	1,015,684	522,671	3,047	0	473,512	13,204	3,250
Utility Income Available for Return	7	3,610,563	1,857,996	10,832	0	1,683,245	46,937	11,554
Total Cost of Service		10,316,074	2,997,229	1,711,814	0	4,241,524	115,122	1,250,386
Less: Other Revenues								
Other Operating Revenues	8	20,377	5,922	3,381	-	8,379	228	2,470
Total Cost of Service Related to Sales of Wastewater Services		10,295,696	2,991,308	1,708,434	0	4,233,145	114,894	1,247,916

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - CHELTENHAM

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
	Treatment	Collection				
Factor 1 - Flow and I&I	0.5261		0.4739			1.0000
Factor 2 - Customer Facilities				1.0000		1.0000
Factor 3 - Customer Accounting					1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals						
Cost	19,335	5,989	22,811	0	304,887	353,022
Factor	0.0548	0.0170	0.0646	0.0000	0.8636	1.0000
Factor 5 - Labor Expense						
Cost	20,122	6,242	23,721	0	317,112	367,197
Factor	0.0548	0.0170	0.0646	0.0000	0.8636	1.0000
Factor 6 - Rate Base less Allocated Costs						
Cost	24,500,687	1,006	22,070,614	619,414	51,090	47,242,810
Factor	0.5186	0.0000	0.4672	0.0131	0.0011	1.0000
Factor 7 - Rate Base						
Cost	24,320,536	139,675	22,033,216	614,703	151,049	47,259,177
Factor	0.5146	0.0030	0.4662	0.0130	0.0032	1.0000
Factor 8 - Total Cost of Service						
Cost	2,992,737	1,709,259	4,235,175	114,950	1,247,927	10,300,049
Factor	0.2906	0.1659	0.4112	0.0112	0.1212	1.0001
Factor 9 - O&M Exp						
Cost	77,824	1,695,060	1,596,896	0	1,226,622	4,596,401
Factor	0.0169	0.3688	0.3474	0.0000	0.2669	1.0000

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<u>RATE BASE</u>							
Organization	1	324,740	170,846	0	153,894	0	0
Land and Land Rights - Collection	1	0	0	0	0	0	0
Land and Land Rights - Pumping	1	57,798	30,407	0	27,390	0	0
Land and Land Rights - Treatment and Disp.	1A	0	0	0	0	0	0
Structures and Improvements							
Collection	1	1,488,975	783,350	0	705,625	0	0
Pumping	1	241,368	126,984	0	114,384	0	0
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment	1A	0	0	0	0	0	0
General	4	0	0	0	0	0	0
Power Operating Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	52,837	0	27,798	25,039	0	0
Collection Mains - Gravity	1	395,795	208,228	0	187,567	0	0
Collection Mains - Force	1	1,991,663	1,047,814	0	943,849	0	0
Special Collecting Structures	1	0	0	0	0	0	0
Services	2	232,165	0	0	0	232,165	0
Meters	2	22,845	0	0	0	22,845	0
Receiving Wells	1	0	0	0	0	0	0
Pumping Equipment	1	62,148	32,696	0	29,452	0	0
RWT Pumping Equipment	1A	0	0	0	0	0	0
Treatment and Disposal Equipment	1A	344,032	0	180,995	163,037	0	0
Plant Sewers							
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment Equipment	1A	0	0	0	0	0	0
Outfall Lines	1	0	0	0	0	0	0
Other Plant and Misc. Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	0	0	0	0	0	0

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST BRADFORD
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Office Furniture	4	0	0		0	0	0	0
Office Equipment	4	0	0		0	0	0	0
Computer Hardware	4	0	0		0	0	0	0
Computer Software	4	0	0		0	0	0	0
Transportation Equipment	4	0	0		0	0	0	0
Stores Equipment	4	0	0		0	0	0	0
Tools, Shop and Gargage Equipment	4	0	0		0	0	0	0
Laboratory Equipment	1A	0	0		0	0	0	0
Power Opreated Equipment	4	0	0		0	0	0	0
Communication Equipment								
General	4	0	0		0	0	0	0
SCADA	4	124,007	50,818		409	46,143	0	26,637
Miscellaneous Equipment	4	0	0		0	0	0	0
Other Tangible Plant	4	0	0		0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER			\$ 2,451,142	\$ 209,202	\$ 2,396,382		\$ 255,010	\$ 26,637
Other Rate Base Items:								
Deferred Taxes	6	0	0		0	0	0	0
Working Capital	9	62,000	6,591		24,310	27,832	0	3,267
Customer Advances	6	(23,166)	(10,635)	(908)		(10,399)	(1,107)	(116)
Total Other Rate Base Elements			(4,045)	23,402	17,433		(1,107)	3,152
Total Original Cost Measure of Value			2,447,097	232,604	2,413,814		253,903	29,788

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification (1)	Cost of Service		Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase			
	Amount (2)	Act 11 (3)	Revised COS (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 4,380,035	\$ (1,201,528)	\$ 3,178,507	78.0%	\$ 2,099,876	72.0%	\$ 3,178,473	78.0%	\$ 1,078,598	51.4%
Non-Residential	1,443,466	\$ (547,753)	\$ 895,713	22.0%	816,460	28.0%	895,713	22.0%	79,253	9.7%
Total Sales	5,823,501	(1,749,281)	4,074,220	100.0%	2,916,336	100.0%	4,074,187	100.0%	1,157,851	39.7%
Other Revenues	7,435		7,435		7,435		7,435		-	0.0%
Total	\$ 5,830,936		\$ 4,081,655		\$ 2,923,770		\$ 4,081,621		\$ 1,157,851	39.6%

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - EAST NORRITON

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 1,917,646	\$ 760,396	\$ 2,412,480	\$ 320,592	\$ 412,386	\$ 5,823,501
Factor Reference	A	A1	C	B	B	
Residential Factor	0.6344	0.6344	0.8296	0.9273	0.9273	
Cost of Service	\$ 1,216,555	\$ 482,395	\$ 2,001,394	297,285	382,406	4,380,035
Non-Residential Factor	0.3656	0.3656	0.1704	0.0727	0.0727	
Cost of Service	\$ 701,091	\$ 278,001	\$ 411,087	23,307	29,980	\$ 1,443,466
Total	1,917,646	760,396	2,412,481	320,592	412,386	5,823,501

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	6,063	0.6344
Non-Residential	<u>3,494</u>	<u>0.3656</u>
Total	<u><u>9,557</u></u>	<u><u>1.0000</u></u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer

<u>Classification</u> (1)	<u>Average Daily Consumption, 100 gallons</u> (2)	<u>Allocation Factor</u> (3)
Residential	6,063	0.6344
Non-Residential	<u>3,494</u>	<u>0.3656</u>
Total	<u><u>9,557</u></u>	<u><u>1.0000</u></u>

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	4,601	0.9273
Non-Residential	361	0.0727
Total	4,961	1.0000

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.6344	0.2114	0.9273	0.6182	0.8296
Non-Residential	0.3656	0.1219	0.0727	0.0485	0.1704
Total	1.0000	0.3333	1.0000	0.6667	1.0000

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
OPERATION AND MAINTENANCE EXPENSES							
COLLECTION							
Purchased Power	1	122,439	64,415	0	58,024	0	0
Purchased Power	1		0	0	0	0	0
Supplies	1		0	0	0	0	0
OS Other	1	129,350	68,051	0	61,299	0	0
TOTAL COLLECTION EXPENSE		251,789	132,466	0	119,323	0	0
PUMPING							
Labor	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Purchased Power	1		0	0	0	0	0
Supplies	1		0	0	0	0	0
OS Other	1	0	0	0	0	0	0
Other	1	310	163	0	147	0	0
		310	163	0	147	0	0
SEWAGE TREATMENT							
Salary and Wages	1A		0	0	0	0	0
Purchased Wastewater	1A	1,432,326	0	753,547	678,779	0	0
Chemicals	1A		0	0	0	0	0
Sludge Disposal	1A		0	0	0	0	0
Lab Testing	1A		0	0	0	0	0
Supplies	1A	2,225	0	1,171	1,055	0	0
Transporation	1A		0	0	0	0	0
OS Other	1A		0	0	0	0	0
RECLAIMED WATER TREATMENT							
OS Other	1		0	0	0	0	0
TOTAL SEWAGE TREATMENT EXPENSE		1,434,552	0	754,718	679,834	0	0

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)						
CUSTOMER ACCOUNTS									
Salary and Wages	3		0	0	0	0	0	0	0
Other	3	86,245	0	0	0	0	0	0	86,245
Uncollectible Accounts	3	69,527	0	0	0	0	0	0	69,527
TOTAL CUSTOMER ACCOUNTING EXPENSE		155,773	0	0	0	0	0	0	155,773
ADMINISTRATIVE AND GENERAL EXPENSES									
Salaries and Wages	4	137,735	32,657	565	29,930	0	74,584		
Employee Benefits	5	77,148	18,292	316	16,764	0	41,775		
Supplies	4		0	0	0	0	0		0
Accounting	4	6,032	1,430	25	1,311	0	3,267		
Legal	4	0	0	0	0	0	0		0
Management Fees	4	215,006	50,978	882	46,721	0	116,425		
Leases	4		0	0	0	0	0		0
Transportation	4		0	0	0	0	0		0
Insurance other than Group	4	20,274	4,807	83	4,405	0	10,978		
OS Other	4	4,136	981	17	899	0	2,239		
Amortization of Rate Case Expense	8	7,677	2,528	1,003	3,181	423	541		
Other	4	7,402	1,755	30	1,609	0	4,008		
Employee Benefits	5		0	0	0	0	0		0
TOTAL A & G EXPENSE		475,410	113,427	2,921	104,820	423	253,818		
Total Operation & Maintenance Expenses		2,317,833	246,057	757,639	904,124	423	409,591		

DEPRECIATION EXPENSE									
Structures and Improvements									
Collection	1	-	-	-	-	-	-	-	-
Pumping	1	63,086	33,190	-	29,896	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-	-
Reclaimed Water Treatment	1A	-	-	-	-	-	-	-	-
General	4	-	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow (4)		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
Power Operating Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	32,805	17,259	-	-	15,546	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Collection Mains - Gravity	1	33,547	17,649	-	-	15,898	-	-
Collection Mains - Force	1	509,816	268,214	-	-	241,602	-	-
Special Collecting Structures	1	-	-	-	-	-	-	-
Services	2	92,628	-	-	-	-	92,628	-
Meters	2	12,104	-	-	-	-	12,104	-
Receiving Wells	1	-	-	-	-	-	-	-
Pumping Equipment	1	205,079	107,892	-	-	97,187	-	-
RWT Pumping Equipment	1A	-	-	-	-	-	-	-
Treatment and Disposal Equipment	1A	-	-	-	-	-	-	-
Plant Sewers								
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment Equipment	1A	-	-	-	-	-	-	-
Outfall Lines	1	-	-	-	-	-	-	-
Other Plant and Misc. Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Office Furniture	4	-	-	-	-	-	-	-
Office Equipment	4	-	-	-	-	-	-	-
Computer Hardware	4	-	-	-	-	-	-	-
Computer Software	4	-	-	-	-	-	-	-
Transportation Equipment	4	-	-	-	-	-	-	-
Stores Equipment	4	-	-	-	-	-	-	-
Tools, Shop and Gargage Equipment	4	-	-	-	-	-	-	-
Laboratory Equipment	1A	1,229	-	647	-	582	-	-
Power Opreated Equipment	4	74	18	0	-	16	-	40
Communication Equipment								
General	4	2,136	506	9	-	464	-	1,157

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
SCADA	4	-	-	-	-	-	-
Miscellaneous Equipment	4	137	32	1	30	-	74
Other Tangible Plant	4	-	-	-	-	-	-
Total Depreciation Expense		952,641	444,760	656	401,222	104,732	1,271
Taxes Other Than Income							
PUC Assessment	7	26,378	12,664	32	11,437	2,224	21
OCA, OSBA Assessment	7	10,718	5,146	13	4,647	904	9
Local Property Tax	7	0	-	-	-	-	-
Total Taxes, Other Than Income		37,096	17,810	45	16,085	3,127	30
Total Operating Expense		3,307,570	708,627	758,340	1,321,430	108,282	410,892
Income Taxes	7	589,846	283,185	708	255,757	49,724	472
Utility Income Available for Return	7	1,933,519	928,282	2,320	838,374	162,996	1,547
Total Cost of Service		5,830,935	1,920,094	761,368	2,415,561	321,002	412,910
Less: Other Revenues							
Contract Revenue	8	-	-	-	-	-	-
Third Party Sales	8	-	-	-	-	-	-
Other Operating Revenues	8	7,435	2,448	972	3,081	410	524
Total Cost of Service Related to Sales of Wastewater Services		5,823,501	1,917,646	760,396	2,412,480	320,592	412,386

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
	Treatment	Collection				
Factor 1 - Flow and I&I	0.5261		0.4739			1.0000
Factor 2 - Customer Facilities				1.0000		1.0000
Factor 3 - Customer Accounting					1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals						
Cost	68,214	1,171	62,501	0	155,773	287,658
Factor	0.2371	0.0041	0.2173	0.0000	0.5415	1.0000
Factor 5 - Labor Expense						
Cost	32,657	565	29,930	0	74,584	137,735
Factor	0.2371	0.0041	0.2173	0.0000	0.5415	1.0000
Factor 6 - Rate Base less Allocated Costs						
Cost	12,140,042	5,149	10,940,137	2,132,187	6,708	25,224,222
Factor	0.4813	0.0002	0.4337	0.0845	0.0003	1.0000
Factor 7 - Rate Base						
Cost	12,150,326	31,397	10,973,044	2,132,515	20,821	25,308,103
Factor	0.4801	0.0012	0.4336	0.0843	0.0008	1.0000
Factor 8 - Total Cost of Service						
Cost	1,916,585	760,347	2,411,481	320,579	410,130	5,819,122
Factor	0.3293	0.1307	0.4144	0.0551	0.0705	1.0000
Factor 9 - O&M Exp						
Cost	242,548	756,618	900,043	0	406,810	2,306,020
Factor	0.1052	0.3281	0.3903	0.0000	0.1764	1.0000

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)			
<u>RATE BASE</u>							
Organization	1	340,540	179,158	0	161,382	0	0
Land and Land Rights - Collection	1	0	0	0	0	0	0
Land and Land Rights - Pumping	1	171	90	0	81	0	0
Land and Land Rights - Treatment and Disp.	1A	0	0	0	0	0	0
Structures and Improvements							
Collection	1	0	0	0	0	0	0
Pumping	1	1,677,278	882,416	0	794,862	0	0
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment	1A	0	0	0	0	0	0
General	4	0	0	0	0	0	0
Power Operating Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	224,657	118,192	0	106,465	0	0
Treatment and Disposal	1A	0	0	0	0	0	0
Collection Mains - Gravity	1	983,739	517,545	0	466,194	0	0
Collection Mains - Force	1	17,709,005	9,316,708	0	8,392,297	0	0
Special Collecting Structures	1	0	0	0	0	0	0
Services	2	2,068,168	0	0	0	2,068,168	0
Meters	2	64,019	0	0	0	64,019	0
Receiving Wells	1	0	0	0	0	0	0
Pumping Equipment	1	2,134,567	1,122,996	0	1,011,571	0	0
RWT Pumping Equipment	1A	0	0	0	0	0	0
Treatment and Disposal Equipment	1A	0	0	0	0	0	0
Plant Sewers							
Treatment and Disposal	1A	0	0	0	0	0	0
Reclaimed Water Treatment Equipment	1A	0	0	0	0	0	0
Outfall Lines	1	0	0	0	0	0	0
Other Plant and Misc. Equipment							
Collection	1	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0
Treatment and Disposal	1A	0	0	0	0	0	0

AQUA PENNSYLVANIA, INC
AQUA PENNSYLVANIA WASTEWATER OPERATIONS - EAST NORRITON
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Treatment (5)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)					
Office Furniture	4	0	0	0	0	0	0	0
Office Equipment	4	0	0	0	0	0	0	0
Computer Hardware	4	0	0	0	0	0	0	0
Computer Software	4	0	0	0	0	0	0	0
Transportation Equipment	4	0	0	0	0	0	0	0
Stores Equipment	4	0	0	0	0	0	0	0
Tools, Shop and Gargage Equipment	4	0	0	0	0	0	0	0
Laboratory Equipment	1A	9,690	0	5,098	4,592	0	0	0
Power Opreated Equipment	4	1,147	272	5	249	621	0	0
Communication Equipment								
General	4	9,076	2,152	37	1,972	4,915	0	4,915
SCADA	4	0	0	0	0	0	0	0
Miscellaneous Equipment	4	2,165	513	9	470	1,172	0	1,172
Other Tangible Plant	4	0	0	0	0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER		\$ 25,224,222	\$ 12,140,042	\$ 5,149	\$ 10,940,137	\$ 2,132,187	\$ 6,708	
Other Rate Base Items:								
Deferred Taxes	6	0	0	0	0	0	0	0
Working Capital	9	80,000	8,416	26,248	31,224	14,112	0	14,112
Customer Advances	6	3,881	1,868	1	1,683	1	328	1
Total Other Rate Base Elements		83,881	10,284	26,249	32,907	14,113	328	
Total Original Cost Measure of Value		25,308,103	12,150,326	31,397	10,973,044	2,132,515	20,821	

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COMPARISON OF COST OF SERVICE WITH REVENUES UNDER PRESENT AND PROPOSED RATES - WASTEWATER
FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Customer Classification (1)	Cost of Service				Revenues, Present Rates		Revenues, Proposed Rates		Proposed Increase	
	Amount (2)	Act 11 (3)	Revised COS (4)	Percent (5)	Amount (6)	Percent (7)	Amount (8)	Percent (9)	Amount (10)	Percent Increase (11)
Residential	\$ 4,844,816	\$ (1,686,782)	\$ 3,158,034	80.2%	\$ 2,291,038	79.8%	\$ 3,147,825	80.0%	\$ 856,787	37.4%
Non-Residential	777,787	\$ -	\$ 777,787	19.8%	580,660	20.2%	787,612	20.0%	206,952	35.6%
Total Sales	5,622,603	(1,686,782)	3,935,821	100.0%	2,871,698	100.0%	3,935,437	100.0%	1,063,739	37.0%
Total	\$ 5,622,603		\$ 3,935,821		\$ 2,871,698		\$ 3,935,437		\$ 1,063,739	37.0%

AQUA PENNSYLVANIA, INC
WASTEWATER OPERATIONS - NEW GARDEN

ALLOCATION OF COST OF SERVICE BY FUNCTION TO CUSTOMER CLASSIFICATIONS

Description (1)	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total (7)
	Collection (2)	Treatment				
Total Cost of Service	\$ 824,091	\$ 1,347,532	\$ 3,117,584	\$ 198,692	\$ 134,707	\$ 5,622,606
Factor Reference	A	A1	C	B	B	
Residential Factor	0.8284	0.8284	0.8801	0.9060	0.9060	
Cost of Service	\$ 682,677	\$ 1,116,295	\$ 2,743,785	180,015	122,044	4,844,816
Non-Residential Factor	0.1716	0.1716	0.1199	0.0940	0.0940	
Cost of Service	\$ 141,414	\$ 231,236	\$ 373,798	18,677	12,662	\$ 777,787
Total	824,091	1,347,531	3,117,583	198,692	134,706	5,622,603

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR A. ALLOCATION OF FLOW COLLECTION COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Classification (1)	Average Daily Consumption, 100 gallons (2)	Allocation Factor (3)
Residential	2,361	0.8284
Non-Residential	489	0.1716
Total	<u>2,850</u>	<u>1.0000</u>

FACTOR A1. ALLOCATION OF FLOW TREATMENT COSTS.

Factors are based on the pro forma test year average daily consumption for each customer classification.

Classification (1)	Average Daily Consumption, 100 gallons (2)	Allocation Factor (3)
Residential	2,361	0.8284
Non-Residential	489	0.1716
Total	<u>2,850</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
FACTORS FOR ALLOCATING COSTS BY FUNCTION TO CUSTOMER CLASSIFICATIONS

FACTOR B. ALLOCATION OF COSTS ASSOCIATED WITH BILLING AND COLLECTING.

Factors are based on the number of customers.

Customer Classification (1)	Number of Customers (2)	Allocation Factor (3)
Residential	1,916	0.9060
Non-Residential	199	0.0940
Total	<u>2,115</u>	<u>1.0000</u>

FACTOR C. ALLOCATION OF COSTS ASSOCIATED WITH INFILTRATION AND INFLOW.

Factors are based on a 1/3-2/3 weighting of flow and number of customers.

Customer Classification (1)	Average Daily Flow		Number of Bills		Allocation Factor (6)=(3)+(5)
	Factor A (2)	Weight (3)=(2) x 0.3333	Factor C (4)	Weight (5)=(4) x 0.6667	
Residential	0.8284	0.2761	0.9060	0.6040	0.8801
Non-Residential	0.1716	0.0572	0.0940	0.0627	0.1199
Total	<u>1.0000</u>	<u>0.3333</u>	<u>1.0000</u>	<u>0.6667</u>	<u>1.0000</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
OPERATION AND MAINTENANCE EXPENSES								
COLLECTION								
Purchased Power	1	130,019	53,386	0	0	76,633	0	0
Purchased Power	1	858	352	0	0	506	0	0
Supplies	1		0	0	0	0	0	0
OS Other	1	26,361	10,824	0	0	15,537	0	0
TOTAL COLLECTION EXPENSE		157,238	64,562	0	0	92,676	0	0
PUMPING								
Labor	1		0	0	0	0	0	0
Purchased Power	1		0	0	0	0	0	0
Purchased Power	1		0	0	0	0	0	0
Supplies	1	5,161	2,119	0	0	3,042	0	0
OS Other	1	100,877	41,420	0	0	59,457	0	0
Other	1		0	0	0	0	0	0
SEWAGE TREATMENT		106,038	43,539	0	0	62,499	0	0
SEWAGE TREATMENT								
Salary and Wages	1A		0	0	0	0	0	0
Purchased Wastewater	1A	1,200,000	0	492,720	0	707,280	0	0
Chemicals	1A	1,428	0	586	0	842	0	0
Sludge Disposal	1A		0	0	0	0	0	0
Lab Testing	1A	16,215	0	6,658	0	9,557	0	0
Supplies	1A		0	0	0	0	0	0
Transporation	1A		0	0	0	0	0	0
OS Other	1A	161,971	0	66,505	0	95,466	0	0
RECLAIMED WATER TREATMENT								
OS Other	1		0	0	0	0	0	0
TOTAL SEWAGE TREATMENT EXPENSE								
		1,379,614	0	566,469	0	813,144	0	0
								Schedu Pa

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
CUSTOMER ACCOUNTS								
Salary and Wages	3		0	0	0	0	0	0
Other	3	28,571	0	0	0	0	0	28,571
Uncollectible Accounts	3	67,129	0	0	0	0	0	67,129
TOTAL CUSTOMER ACCOUNTING EXPENSE		95,700	0	0	0	0	0	95,700
ADMINISTRATIVE AND GENERAL EXPENSES								
Salaries and Wages	4	12,112	1,627	2,177	0	5,461	0	2,848
Employee Benefits	5	4,904	659	881	0	2,211	0	1,153
Supplies	4		0	0	0	0	0	0
Accounting	4	806	108	145	0	363	0	189
Legal	4		0	0	0	0	0	0
Management Fees	4	85,388	11,468	15,344	0	38,501	0	20,075
Leases	4		0	0	0	0	0	0
Transportation	4		0	0	0	0	0	0
Insurance other than Group	4	8,051	1,081	1,447	0	3,630	0	1,893
OS Other	4	2,934	394	527	0	1,323	0	690
Amortization of Rate Case Expense	8	3,049	447	731	0	1,691	108	73
Other	4	25,900	3,478	4,654	0	11,678	0	6,089
Employee Benefits	5		0	0	0	0	0	0
TOTAL A & G EXPENSE		143,144	19,262	25,906	0	64,859	108	33,009
Total Operation & Maintenance Expenses		1,881,734	127,363	592,375	0	1,033,179	108	128,709

DEPRECIATION EXPENSE								
Structures and Improvements								
Collection	1	-	-	-	-	-	-	-
Pumping	1	57,803	23,734	-	-	34,069	-	-
Treatment and Disposal	1A	318,329	-	130,706	-	187,623	-	-
Reclaimed Water Treatment	1A	-	-	-	-	-	-	-
General	4	6,063	814	1,090	-	2,734	-	1,425

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
Power Operating Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	26,477	10,871	-	-	15,606	-	-
Treatment and Disposal	1A	4,931	-	2,025	-	2,906	-	-
Collection Mains - Gravity	1	51,288	21,059	-	-	30,229	-	-
Collection Mains - Force	1	162,459	66,706	-	-	95,753	-	-
Special Collecting Structures	1	-	-	-	-	-	-	-
Services	2	37,543	-	-	-	-	37,543	-
Meters	2	4,779	-	-	-	-	4,779	-
Receiving Wells	1	-	-	-	-	-	-	-
Pumping Equipment	1	29,734	12,209	-	-	17,525	-	-
RWT Pumping Equipment	1A	-	-	-	-	-	-	-
Treatment and Disposal Equipment	1A	29,759	-	12,219	-	17,540	-	-
Plant Sewers								
Treatment and Disposal	1A	-	-	-	-	-	-	-
Reclaimed Water Treatment Equipment	1A	-	-	-	-	-	-	-
Outfall Lines	1	-	-	-	-	-	-	-
Other Plant and Misc. Equipment								
Collection	1	-	-	-	-	-	-	-
Pumping	1	-	-	-	-	-	-	-
Treatment and Disposal	1A	-	-	-	-	-	-	-
Office Furniture	4	-	-	-	-	-	-	-
Office Equipment	4	-	-	-	-	-	-	-
Computer Hardware	4	-	-	-	-	-	-	-
Computer Software	4	-	-	-	-	-	-	-
Transportation Equipment	4	-	-	-	-	-	-	-
Stores Equipment	4	-	-	-	-	-	-	-
Tools, Shop and Gargage Equipment	4	513	69	92	-	231	-	121
Laboratory Equipment	1A	-	-	-	-	-	-	-
Power Opreated Equipment	4	6,156	827	1,106	-	2,776	-	1,447
Communication Equipment								
General	4	-	-	-	-	-	-	-

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
SCADA	4	-	-	-	-	-	-	-
Miscellaneous Equipment	4	-	-	-	-	-	-	-
Other Tangible Plant	4	-	-	-	-	-	-	-
Total Depreciation Expense		735,834	136,289	147,238	0	406,993	42,322	2,993
Taxes Other Than Income								
PUC Assessment	7	25,435	4,744	5,146	-	14,198	1,323	25
OCA, OSBA Assessment	7	10,335	1,928	2,091	-	5,769	537	10
Local Property Tax	7	0	-	-	-	-	-	-
Total Taxes, Other Than Income		35,771	6,671	7,236	0	19,967	1,860	36
Total Operating Expense		2,653,338	270,323	746,849	0	1,460,139	44,290	131,738
Income Taxes	7	658,480	122,806	133,210	0	367,563	34,241	658
Utility Income Available for Return	7	2,310,787	430,962	467,472	0	1,289,882	120,161	2,311
Total Cost of Service		5,622,606	824,091	1,347,532	0	3,117,584	198,692	134,707
Total Cost of Service Related to Sales of Wastewater Services		5,622,606	824,091	1,347,532	0	3,117,584	198,692	134,707

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION

FACTORS FOR ALLOCATING COST OF SERVICE TO COST FUNCTIONS

Reference	Flow		Infiltration & Inflow	Customer Facilities	Customer Accounting	Total
	Treatment	Collection				
Factor 1 - Flow and I&I	0.4106		0.5894			1.0000
Factor 2 - Customer Facilities				1.0000		1.0000
Factor 3 - Customer Accounting					1.0000	1.0000
Factor 4 - O&M Exp less Power and Chemicals						
Cost	54,716	73,163	183,565	0	95,700	407,144
Factor	0.1343	0.1797	0.4509	0.0000	0.2351	1.0000
Factor 5 - Labor Expense						
Cost	1,627	2,177	5,461	0	2,848	12,112
Factor	0.1343	0.1797	0.4509	0.0000	0.2351	1.0000
Factor 6 - Rate Base less Allocated Costs						
Cost	5,686,777	6,189,085	17,047,354	1,583,528	36,503	30,543,246
Factor	0.1863	0.2026	0.5581	0.0518	0.0012	1.0000
Factor 7 - Rate Base						
Cost	5,642,253	6,118,671	16,882,397	1,572,856	30,050	30,246,227
Factor	0.1865	0.2023	0.5582	0.0520	0.0010	1.0000
Factor 8 - Total Cost of Service						
Cost	823,250	1,346,274	3,114,570	198,584	133,944	5,616,622
Factor	0.1466	0.2397	0.5545	0.0354	0.0238	1.0000
Factor 9 - O&M Exp						
Cost	126,522	591,117	1,030,165	0	127,946	1,875,750
Factor	0.0675	0.3151	0.5492	0.0000	0.0682	1.0000

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Flow		Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
			Collection (4)	Treatment (5)				
<u>RATE BASE</u>								
Organization	1	1,004,882	412,605	0	0	592,277	0	0
Land and Land Rights - Collection	1	0	0	0	0	0	0	0
Land and Land Rights - Pumping	1	1,125,227	462,018	0	0	663,209	0	0
Land and Land Rights - Treatment and Disp.	1A	6,150,273	0	2,525,302	0	3,624,971	0	0
Structures and Improvements								
Collection	1	0	0	0	0	0	0	0
Pumping	1	1,844,247	757,248	0	0	1,086,999	0	0
Treatment and Disposal	1A	8,097,068	0	3,324,656	0	4,772,412	0	0
Reclaimed Water Treatment	1A	0	0	0	0	0	0	0
General	4	109,505	14,707	19,678	0	49,376	0	25,745
Power Operating Equipment								
Collection	1	0	0	0	0	0	0	0
Pumping	1	175,715	72,149	0	0	103,566	0	0
Treatment and Disposal	1A	51,641	0	21,204	0	30,437	0	0
Collection Mains - Gravity	1	2,279,145	935,817	0	0	1,343,328	0	0
Collection Mains - Force	1	7,028,994	2,886,105	0	0	4,142,889	0	0
Special Collecting Structures	1	0	0	0	0	0	0	0
Services	2	1,498,996	0	0	0	0	1,498,996	0
Meters	2	84,532	0	0	0	0	84,532	0
Receiving Wells	1	0	0	0	0	0	0	0
Pumping Equipment	1	340,924	139,983	0	0	200,941	0	0
RWT Pumping Equipment	1A	0	0	0	0	0	0	0
Treatment and Disposal Equipment	1A	706,336	0	290,022	0	416,314	0	0
Plant Sewers								
Treatment and Disposal	1A	0	0	0	0	0	0	0
Reclaimed Water Treatment Equipment	1A	0	0	0	0	0	0	0
Outfall Lines	1	0	0	0	0	0	0	0
Other Plant and Misc. Equipment								
Collection	1	0	0	0	0	0	0	0
Pumping	1	0	0	0	0	0	0	0
Treatment and Disposal	1A	0	0	0	0	0	0	0

AQUA PENNSYLVANIA, INC.
WASTEWATER OPERATIONS - NEW GARDEN DIVISION
COST OF SERVICE ALLOCATED TO COST FUNCTIONS FOR THE TWELVE MONTHS ENDING MARCH 31, 2023

Account (1)	Factor Ref. (2)	Cost of Service (3)	Collection (4)	Flow Treatment (5)	Max Hour (6)	Infiltration & Inflow (7)	Customer Facilities (8)	Customer Accounting (8)
Office Furniture	4	0	0	0	0	0	0	0
Office Equipment	4	0	0	0	0	0	0	0
Computer Hardware	4	0	0	0	0	0	0	0
Computer Software	4	0	0	0	0	0	0	0
Transportation Equipment	4	0	0	0	0	0	0	0
Stores Equipment	4	0	0	0	0	0	0	0
Tools, Shop and Gargage Equipment	4	9,500	1,276	1,707	0	4,284	0	2,233
Laboratory Equipment	1A	0	0	0	0	0	0	0
Power Operated Equipment	4	36,261	4,870	6,516	0	16,350	0	8,525
Communication Equipment								
General	4	0	0	0	0	0	0	0
SCADA	4	0	0	0	0	0	0	0
Miscellaneous Equipment	4	0	0	0	0	0	0	0
Other Tangible Plant	4	0	0	0	0	0	0	0
TOTAL UTILITY PLANT IN SERVICE SEWER		\$ 30,543,246	\$ 5,686,777	\$ 6,189,085	\$ -	\$ 17,047,354	\$ 1,583,528	\$ 36,503
Other Rate Base Items:								
Deferred Taxes	6	0	0	0	0	0	0	0
Working Capital	9	(91,000)	(6,143)	(28,674)	0	(49,977)	0	(6,206)
Customer Advances	6	(206,019)	(38,381)	(41,740)	0	(114,979)	(10,672)	(247)
Total Other Rate Base Elements		(297,019)	(44,524)	(70,414)	0	(164,957)	(10,672)	(6,453)
Total Original Cost Measure of Value		30,246,227	5,642,253	6,118,671	0	16,882,397	1,572,856	30,050

Exhibit No. 5-B Part II
Docket No. R-2021-3027385
Docket No. R-2021-3027386
Witness: C.E. Heppenstall

AQUA PENNSYLVANIA, INC.

BRYN MAWR, PENNSYLVANIA

OPERATING REVENUE FROM SALES OF
WASTEWATER

FOR THE TWELVE MONTHS

ENDED MARCH 31, 2023



Gannett Fleming

Excellence Delivered **As Promised**

Exhibit No. 5-B Part II
Docket No. R-2021-3027385
Docket No. R-2021-3027386
Witness: C.E. Heppenstall

AQUA PENNSYLVANIA, INC.
BRYN MAWR, PENNSYLVANIA

OPERATING REVENUE FROM SALES OF
WASTEWATER
FOR THE TWELVE MONTHS ENDED MARCH 31, 2023

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC
Camp Hill, Pennsylvania

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AQUA PENNSYLVANIA, INC.

OPERATING REVENUE FROM SALES OF WASTEWATER
FOR THE TWELVE MONTHS ENDED MARCH 31, 2023

PLAN OF EXHIBIT

Exhibit 5-B sets forth the summaries of the results of applying the present rates for sales of wastewater to a detailed analysis of water customers' consumption, and the application of proposed rates to the consumption analysis.

WASTEWATER BASE OPERATIONS

Schedule WW-1 presents a summary of the pro forma revenues for the consolidated divisions under proposed rates, for the twelve months ending March 31, 2023. The revenues under proposed rates are developed in Schedule 2 for the several divisions. Schedule WW-3 presents a summary of the proforma revenues for the consolidated divisions under present rates, for the twelve months ending March 31, 2023. The revenues under present rates are developed in Schedule WW-4 for the several divisions. The application of proposed rates to the consumption analysis for each division are presented on Schedule WW-5. Schedule WW-6 presents adjustments to the application of present and proposed rates to account for customer growth.

The results of the application of proposed rates are summarized in Schedule WW-2 of Exhibit No. 5-B are brought forward to column 3 of Schedule WW-1. Schedule WW-5 sets forth the application of proposed rates to the detailed analysis of bill and consumption by meter size and customer classification for each rate division. The revenues in column 3 of Schedule 1 are adjusted for changes during the twelve months

ended March 31, 2023 (column 6), to develop the total revenues projected for the twelve months ended March 31, 2023, under proposed, in column 8 of Schedule 1.

A comparison of the present and proposed rates for sales of water for each division is provided in the response to Standard Data Request No. OR-3 and is included in Schedule 7. The response also provides a comparison of the billing for various levels of consumption under present (including DSIC surcharge) and proposed rates for 5/8-inch customers in each division.

LIMERICK DIVISION

Schedule LMK-1 presents a summary of the pro forma revenues for the Limerick Division under proposed rates, for the twelve months ending March 31, 2023. Schedule LMK-2 presents a summary of the proforma revenues under present rates, for the twelve months ending March 31, 2023. The application of present and proposed rates to the consumption analysis are presented on Schedule LMK-3.

EAST BRADFORD DIVISION

Schedule EB-1 presents a summary of the pro forma revenues for the East Bradford Division under proposed rates, for the twelve months ending March 31, 2023. Schedule EB-2 presents a summary of the proforma revenues under present rates, for the twelve months ending March 31, 2023. The application of present and proposed rates to the consumption analysis are presented on Schedule EB-3. The application of present and proposed rates to the pro forma adjustments to annualize revenues from the acquisition are presented on Schedule EB-4.

CHELTHENHAM DIVISION

Schedule CH-1 presents a summary of the pro forma revenues for the Cheltenham Division under proposed rates, for the twelve months ending March 31, 2023. Schedule CH-2 presents a summary of the proforma revenues under present rates, for the twelve months ending March 31, 2023. The application of present and proposed rates to the consumption analysis are presented on Schedule CH-3.

EAST NORRITON OPERATIONS

Schedule EN-1 presents a summary of the pro forma revenues for the under proposed rates, for the twelve months ending March 31, 2023. The revenues under proposed rates are developed in Schedule 2. Schedule EN-3 presents a summary of the proforma revenues for the consolidated divisions under present rates, for the twelve months ending March 31, 2023. The revenues under present rates are developed in Schedule EN-4. The application of proposed rates to the consumption analysis for each division are presented on Schedule EN-5. Schedule EN-6 presents adjustments to the application under present and proposed rates to annualize revenues from the acquisition.

The results of the application of proposed rates are summarized in Schedule EN-2 are brought forward to column 3 of Schedule EN-1. Schedule EN-5 sets forth the application of proposed rates to the detailed analysis of bill and consumption by meter size and customer classification for each rate division. The revenues in column 3 of Schedule 1 are adjusted for changes during the twelve months ended March 31, 2023 (column 6), to develop the total revenues projected for the twelve months ended March 31, 2023, under proposed, in column 8 of Schedule 1.

NEW GARDEN DIVISION

Schedule NG-1 presents a summary of the pro forma revenues for the New Garden Division under proposed rates, for the twelve months ending March 31, 2023. Schedule NG-2 presents a summary of the proforma revenues under present rates, for the twelve months ending March 31, 2023. The application of present and proposed rates to the consumption analysis are presented on Schedule NG-3. The application of present and proposed rates to the pro forma adjustments to annualize revenues from the acquisition are presented on Schedule NG-4.

AQUA PENNSYLVANIA INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 2) (3)	Ref.	Adjustment Factor (Schedule 3) (4)	Revenues Under Proposed Rates (5)=(3)X(4) (5)	Pro Forma Adjustments Proposed Rates (Schedule 2) (6)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6) (7)	Proposed Increase (8)=(7)-(2) (8)	Percent Increase (9) (9)
METERED SALES									
Residential	\$ 13,419,396	\$ 15,935,124	Sch. 2	0.99508753	\$ 15,856,843	\$ 198,501	\$ 16,055,344	\$ 2,635,948	19.6%
Commercial	3,833,635	4,534,197	Sch. 2	0.99988844	4,533,691	-	4,533,691	700,056	18.3%
Industrial	743	893	Sch. 2	0.99988701	893	-	893	150	20.2%
Public Authority	141,718	170,438	Sch. 2	0.99948458	170,350	-	170,350	28,632	20.2%
Third Party Sales	1,280,031	1,370,910	Sch. 2	0.99907624	1,369,644	-	1,369,644	89,612	7.0%
Total Sales Related to Wastewater	\$ 18,675,524	\$ 22,011,562			\$ 21,931,421	\$ 198,501	\$ 22,129,922	\$ 3,454,398	18.5%
Contract Revenues	312,754	298,187		1.01363557	302,253	29,547	331,800	19,046	6.1%
Other Operating Revenues	23,436	23,436			23,436		23,436	-	0.0%
Total Wastewater Revenue	\$ 19,011,714	\$ 22,333,186			\$ 22,257,110	\$ 228,048	\$ 22,485,158	\$ 3,473,445	18.3%

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PROPOSED RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division	Rate Zone PUC Pg.	Residential	Commercial	Industrial	Public	Bulk Sales	Total Sales
(1)		(2)	(3)	(4)	(5)	(6)	(7)
RZ 1 - Media Division	1	\$ 1,533,561	\$ 1,148,570	\$ 893	\$ 170,438		\$ 2,853,462
RZ 1 - Bridlewood, Eagle Rock	1	1,065,908	53,697				1,119,605
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill	1A	1,950,193	932,994				2,883,187
RZ 1B - Penn Township	1B	674,992	409,015				1,084,007
RZ 2 - Emlenton, Rivercrest, White Haven	2	1,500,802	468,405				1,969,207
RZ 2 - Pinecrest	2		65,646				65,646
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laure	3	3,512,807	336,399				3,849,206
RZ 3 - Woodloch Springs	3 - WS		11,115				11,115
RZ 4 - Honeycroft Village, Lake Harmony, New Dale	4	3,773,214	954,182				4,727,396
RZ 5 - Avon Grove School, East Bradford, Little Wa	5	953,277	140,985				1,094,262
RZ 5 - Newlin Green	5-NG	106,105					106,105
RZ 6 - Masthope Division	6	864,265	13,189				877,454
Total Sales Related to Wastewater		\$ 15,935,124	\$ 4,534,197	\$ 893	\$ 170,438	\$ -	\$ 20,640,652
Contract Sales			298,187				298,187
Total Sales with Contract		\$ 15,935,124	\$ 4,832,384	\$ 893	\$ 170,438	\$ -	\$ 20,938,839
<u>Third Party Revenues</u>							
Southdown Homes						\$ 84,692	84,692
East Brandywine						1,404	1,404
Foster Township						270,222	270,222
Dennison						58,023	58,023
Upper Providence						619,092	619,092
Elwyn						112,368	112,368
Penn Lake						135,940	135,940
East Side						89,169	89,169
Total Third Party Revenues		-	-	-	-	1,370,910	1,370,910
Total Sales with Contract and Third Party		15,935,124	4,832,384	893	170,438	1,370,910	22,309,749
<u>Pro Forma Adjustments</u>							
<u>Customer Growth/Decline Adjustments</u>							
RZ 1 - Media Division		(1,560)					(1,560)
RZ 1 - Bridlewood, Eagle Rock		28,542					28,542
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill							-
RZ 1B - Penn Township		24,034					24,034
RZ 2 - Emlenton, Rivercrest, White Haven		6,334					6,334
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Link		60,781					60,781
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddler		46,270					46,270
RZ 5 - Avon Grove School, East Bradford, Little Washington, Gre		(1,588)					(1,588)
RZ 6 - Masthope Division		35,687					35,687
Subtotal Adjustments		198,501	-	-	-	-	198,501
Total Pro Forma Revenues							
Under Proposed Rates		\$ 16,133,625	\$ 4,832,384	\$ 893	\$ 170,438	\$ 1,370,910	\$ 22,508,250

AQUA PENNSYLVANIA INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Adjustment to Per Books Revenue 3/31/2021 (3)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (4)	Bill Analysis Revenues, Present Rates (Schedule 4) (5)	Ref.	Adjustment Factor (6)=(4)/(5) (6)=(4)/(5)	Revenues Under Present Rates (7)=(5)X(6) (7)=(5)X(6)	Pro Forma Adjustments Present Rates (Schedule 4 and 6) (8)	Add Back Annualized DSIC Revenue (9) (9)	Total Pro Forma Revenue Present Rates (10)=(7)+(8)+(9) (10)=(7)+(8)+(9)
METERED SALES										
Residential	\$ 12,843,779	\$ (219,836)	\$ 12,623,943	\$ 12,686,264	Sch. 4	0.99508753	\$ 12,623,943	\$ 161,140	\$ 634,313	\$ 13,419,396
Commercial	3,653,956	(2,895)	3,651,062	3,651,469	Sch. 4	0.99988844	3,651,062	-	182,573	3,833,635
Industrial	708		708	708	Sch. 4	0.99988701	708	-	35	743
Public Authority	134,966		134,966	135,036	Sch. 4	0.99948458	134,966	-	6,752	141,718
Third Party Sales	1,094,369		1,094,369	1,095,381	Sch. 4	0.99907624	1,094,369	185,662		1,280,031
Total Sales Related to Wastewater	\$ 17,727,779	\$ (222,731)	\$ 17,505,048	\$ 17,568,858	Sch. 4		\$ 17,505,048	\$ 346,802	\$ 823,674	\$ 18,675,524
Contract Revenues	284,903		284,903	281,070		1.01363557	284,903	27,851		312,754
Other Operating Revenues	23,436		23,436	23,436			23,436			23,436
Total Wastewater Revenue	\$ 18,036,118	\$ (222,731)	\$ 17,813,387	\$ 17,873,364		0.99664432	\$ 17,813,387	\$ 374,653	\$ 823,674	\$ 19,011,713

(a) Excludes DSIC, STAS and Unbilled Revenue.
(b) Adjusted to eliminate North Heidelberg Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PRESENT RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division	Div. Ref.	Residential	Commercial	Industrial	Public	Bulk Sales	Total Sales
(1)		(2)	(3)	(4)	(5)	(6)	(7)
RZ 1 - Media Division	1	\$ 1,215,176	\$ 909,951	\$ 708	\$ 135,036		\$ 2,260,871
RZ 1 - Bridlewood, Eagle Rock	1	844,664	42,540				887,204
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill	1A	1,427,269	632,577				2,059,846
RZ 1B - Penn Township	1B	520,083	438,977				959,060
RZ 2 - Emlenton, Rivercrest, White Haven	2	1,327,924	410,612				1,738,536
RZ 2 - Pinecrest	2		65,646				65,646
RZ 3 - Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes	3	2,780,481	257,372				3,037,853
RZ 3 - Woodloch Springs	3 - WS		8,801				8,801
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Pe	4	3,018,571	763,345				3,781,916
RZ 5 - Avon Grove School, East Bradford, Little Washingto	5	771,916	111,206				883,122
RZ 5 - Newlin Green	5-NG	96,334					96,334
RZ 6 - Masthope Division	6	683,846	10,442				694,288
Total		<u>\$ 12,686,264</u>	<u>\$ 3,651,469</u>	<u>\$ 708</u>	<u>\$ 135,036</u>	<u>\$ -</u>	<u>\$ 16,473,477</u>
Contract Sales			281,070				281,070
Total Sales with Contract		\$ 12,686,264	\$ 3,932,539	\$ 708	\$ 135,036	\$ -	16,754,547
<u>Third Party Revenues</u>							
Southdown Homes						\$ 84,692	84,692
East Brandywine						1,404	1,404
Foster Twp						170,172	170,172
Dennison						36,540	36,540
Upper Providence						543,032	543,032
Elwyn						98,561	98,561
Penn Lake						85,608	85,608
East Side						75,372	75,372
Total Third Party Revenues		-	-	-	-	1,095,381	1,095,381
Total Sales with Contract and Third Party		12,686,264	3,932,539	708	135,036	1,095,381	17,849,928
Plus 5% DSIC excluding Ineligible Service Areas		634,313	182,573	35	6,752		823,674
Total Present Wastewater Revenue		13,320,577	4,115,112	743	141,788	1,095,381	18,673,602
<u>Pro Forma Adjustments</u>							
<u>Customer Growth/Decline Adjustments</u>							
RZ 1 - Media Division		(1,236)					(1,236)
RZ 1 - Bridlewood, Eagle Rock		22,619					22,619
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill							-
RZ 1B - Penn Township		21,594					21,594
RZ 2 - Emlenton, Rivercrest, White Haven		5,832					5,832
RZ 3 - Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes, Links at Ge		48,335					48,335
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View,		37,016					37,016
RZ 5 - Avon Grove School, East Bradford, Little Washington, Greens at		(1,257)					(1,257)
RZ 6 - Masthope Division		28,237					28,237
		161,140	-	-	-	-	161,140
Total Pro Forma Revenues							
Under Present Rates		<u>\$ 13,481,717</u>	<u>\$ 4,115,112</u>	<u>\$ 743</u>	<u>\$ 141,788</u>	<u>\$ 1,095,381</u>	<u>\$ 18,834,741</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
MEDIA DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	19,861	-	\$ 31.00	\$ 615,694	\$ 39.10	\$ 776,569
3/4	84	-	46.50	3,925	58.65	4,950
1	419	-	77.50	32,465	97.75	40,947
1-1/2	108	-	155.00	16,740	195.50	21,114
2	12	-	248.00	2,976	312.80	3,754
Subtotal	20,484	-		671,800		847,334
1st block	-	714,968	0.7600	\$ 543,376	0.9598	\$ 686,227
Subtotal	-	714,968		543,376		686,227
Total Metered	20,484	714,968		\$ 1,215,176		\$ 1,533,561
TOTAL RESIDENTIAL	20,484	714,968		\$ 1,215,176		\$ 1,533,561
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,435	-	\$ 31.00	\$ 75,485	\$ 39.10	\$ 95,209
3/4	48	-	46.50	2,232	58.65	2,815
1	539	-	77.50	41,780	97.75	52,697
1-1/2	322	-	155.00	49,957	195.50	63,010
2	184	-	248.00	45,508	312.80	57,399
3	84	-	465.00	39,060	586.50	49,266
4	48	-	775.00	37,200	977.50	46,920
Subtotal	3,660	-		291,222		367,316
1st block	-	596,954	0.7600	\$ 453,685	0.9598	\$ 572,956
Subtotal	-	596,954		453,685		572,956
Total Metered	3,660	596,954		\$ 744,907		\$ 940,272
<u>Commercial - Unmetered</u>						
Customer Charge						
Apartment Complex	12	-	\$ 13,323.80	\$ 159,886	\$ 16,815.76	\$ 201,789
Day Care	12	-	429.80	5,158	542.44	6,509
Subtotal	24	-		165,044		208,298
TOTAL COMMERCIAL	3,684	596,954		\$ 909,951		\$ 1,148,570
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 31.00	\$ 372	\$ 39.10	\$ 469
Subtotal	12	-		372		469
1st block	-	442	0.7600	\$ 336	0.9598	\$ 424
Subtotal	-	442		336		424
TOTAL INDUSTRIAL	12	442		\$ 708		\$ 893

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
MEDIA DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	169	-	\$ 31.00	\$ 5,233	\$ 39.10	\$ 6,600
3/4	12	-	46.50	558	58.65	704
1	108	-	77.50	8,370	97.75	10,557
1-1/2	36	-	155.00	5,580	195.50	7,038
2	24	-	248.00	5,952	312.80	7,507
3	36	-	465.00	16,740	586.50	21,114
4	24	-	775.00	18,755	977.50	23,656
Subtotal	409	-		61,188		77,176
1st block		97,168	0.7600	\$ 73,848	0.9598	\$ 93,262
Subtotal	-	97,168		73,848		93,262
TOTAL PUBLIC	409	97,168		\$ 135,036		\$ 170,438
TOTAL DIVISION	<u>24,589</u>	<u>1,409,532</u>		<u>\$ 2,260,871</u>		<u>\$ 2,853,462</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
BRIDLEWOOD AND EAGLE ROCK DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,286	-	\$ 31.00	\$ 504,863	\$ 39.10	\$ 636,779
3/4	24	-	31.00	744	\$ 39.10	938
1	37	-	31.00	1,147	\$ 39.10	1,447
Subtotal	16,347	-		506,754		639,164
1st block	-	443,649	0.7600	\$ 337,173	0.9598	\$ 425,814
Subtotal	-	443,649		337,173		425,814
Total Metered	16,347	443,649		\$ 843,927		\$ 1,064,978
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 61.40	\$ 737	\$ 77.49	\$ 930
TOTAL RESIDENTIAL	16,359	443,649		\$ 844,664		\$ 1,065,908
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	69	-	\$ 31.00	\$ 2,145	\$ 39.10	\$ 2,706
1	222	-	31.00	6,891	39.10	8,692
1-1/2	60	-	31.00	1,860	39.10	2,346
2	199	-	31.00	6,154	39.10	7,761
Subtotal	550	-		17,050		21,505
1st block		33,540	0.7600	\$ 25,490	0.9598	\$ 32,192
Subtotal		33,540		25,490		32,192
TOTAL COMMERCIAL	550	33,540		\$ 42,540		\$ 53,697
TOTAL DIVISION	16,909	477,189		\$ 887,204		\$ 1,119,605

AQUA PENNSYLVANIA, INC
WASTEWATER - RATE ZONE 1A
TREASURE LAKE, VILLAGE AT VALLEY FORGE, AND BUNKER HILL DIVISIO
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYS
FOR THE TWELVE MONTHS ENDED MARCH 31, 202

Rate Block 100 Gallons	Number of Bills	Consumption 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	25,57	-	\$ 31.00	\$ 792,75	\$ 39.10	\$ 999,88
3/4	12	-	31.00	372	39.10	468
1	24	-	31.00	744	39.10	938
Subtotal	25,60	-		793,86		1,001,29
1st bloc		828,86	0.6300	\$ 522,18	0.9598	\$ 795,54
Subtotal Consumptic		828,86		522,18		795,54
Total Meterec	25,60	828,86		\$ 1,316,04		\$ 1,796,83
<u>Residential - Unmetered - Month</u>						
Customer Charge						
Unmeterec	1,15	-	\$ 56.20	\$ 64,64	\$ 77.48	\$ 89,13
<u>Bunker Hill - Unmetered - Month</u>						
Customer Charge						
Unmeterec	82	-	\$ 56.20	\$ 46,57	\$ 77.48	\$ 64,21
TOTAL RESIDENTIAL	27,58	828,86		\$ 1,427,26		\$ 1,950,19
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	25	-	\$ 31.00	\$ 7,74	\$ 39.10	\$ 9,77
1	42	-	31.00	1,29	39.10	1,63
2	192	-	99.20	19,04	125.12	24,02
3	36	-	186.00	6,69	234.60	8,44
4	12	-	310.00	39,06	391.00	49,26
6	83	-	500.00	41,50	630.60	52,34
Subtotal	72	-		115,34		145,48
1st bloc		815,63	0.6300	\$ 513,85	0.9598	\$ 782,84
Subtotal Consumptic		815,63		513,85		782,84
Total Meterec	72	815,63		\$ 629,19		\$ 928,32
<u>Commercial - Unmetere</u>						
Customer Charge						
Unmeterec	60	-	\$ 56.20	\$ 3,38	\$ 77.48	\$ 4,66
TOTAL COMMERCIAL	78	815,63		\$ 632,57		\$ 932,99
TOTAL DIVISION	28,37	1,644,49		\$ 2,059,84		\$ 2,883,18

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1B
PENN TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	9,161	-	\$ 31.00	\$ 283,976	\$ 39.10	\$ 358,176
1	193	-	31.00	5,977	39.10	7,538
Subtotal	9,353	-		289,953		365,714
Allowance (1,000 Gallons)		92,102	-	\$ -	0.9598	\$ 88,399
1st block		230,130	1.0000	230,130	0.9598	220,879
Subtotal	-	322,232		230,130		309,278
Total Metered	9,353	322,232		\$ 520,083		\$ 674,992
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	-	-	\$ 80.00	\$ -	\$ 77.49	\$ -
TOTAL RESIDENTIAL	9,353	322,232		\$ 520,083		\$ 674,992
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	180	-	\$ 67.50	\$ 12,170	\$ 39.10	\$ 7,050
3/4	22	-	67.50	1,499	39.10	868
1	88	-	67.50	5,933	39.10	3,437
1 1/2	81	-	67.50	5,461	39.10	3,163
2	44	-	67.50	2,936	39.10	1,701
3	9	-	67.50	621	39.10	360
4	9	-	67.50	621	39.10	360
6	24	-	67.50	1,620	39.10	938
8	23	-	67.50	1,546	39.10	895
Subtotal	480	-		32,407		18,772
1st block		404,650	1.0000	\$ 404,650	0.9598	\$ 388,383
Subtotal Consumption	-	404,650		404,650		388,383
Total Metered	480	404,650		\$ 437,057		\$ 407,155
<u>Commercial - Unmetered</u>						
Customer Charge Unmetered	24	-	\$ 80.00	\$ 1,920	\$ 77.49	\$ 1,860
TOTAL COMMERCIAL	504	404,650		\$ 438,977		\$ 409,015
TOTAL DIVISION	9,857	726,882		\$ 959,060		\$ 1,084,007

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 2
EMLENTON, RIVERCREST AND WHITE HAVEN (KIDDER) DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	10,968	-	\$ 36.00	\$ 394,859	\$ 39.10	\$ 428,861
1	24	-	36.00	864	39.10	938
1 1/2	12	-	36.00	432	39.10	469
O	84	-	36.00	3,024	39.10	3,284
Subtotal	11,088	-		399,179		433,552
1st block	-	357,288	0.8100	\$ 289,403	0.9598	\$ 342,925
Subtotal	-	357,288		289,403		342,925
Total Metered	11,088	357,288		\$ 688,582		\$ 776,477
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	9,347	-	\$ 68.40	\$ 639,342	\$ 77.49	\$ 724,325
TOTAL RESIDENTIAL	20,435	357,288		\$ 1,327,924		\$ 1,500,802
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	407		\$ 36.00	\$ 14,645	\$ 39.10	\$ 15,906
3/4	36		36.00	1,296	39.10	1,408
1	96		36.00	3,456	39.10	3,754
1 1/2	24		36.00	868	39.10	942
8	12		2,880.00	34,560	3,088.90	37,067
Subtotal	575	-		54,825		59,077
1st block	-	148,266	0.8100	\$ 120,095	0.9598	\$ 142,306
Subtotal	-	148,266		120,095		142,306
Total Metered	575	148,266		\$ 174,920		\$ 201,383
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	3,110	-	\$ 68.40	\$ 212,710	\$ 77.49	\$ 240,985
Bridgeview Apartments	12		1,915.20	22,982	2,169.78	26,037
	3,122	-		235,692		267,022
TOTAL COMERCIAL	3,697	148,266		\$ 410,612		\$ 468,405
TOTAL DIVISION	24,132	505,554		\$ 1,738,536		\$ 1,969,207

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 2
PINECREST DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	24		\$ -	\$ -	\$ -	\$ -
2	12		-	-	-	-
4	12		-	-	-	-
Subtotal	48	-		-		-
1st block	-	21,882	3.0000	\$ 65,646	3.0000	\$ 65,646
Subtotal	-	21,882		65,646		65,646
Total Commercial	48	21,882		\$ 65,646		\$ 65,646
TOTAL DIVISION	48	21,882		65,646		65,646

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 3

BEECH MOUNTAIN LAKES, DEERFIELD KNOLL, LAUREL LAKES, LINKS AT GETTYSBURG, STONEY CREEK,
THORNHURST, AND WILLISTOWN WOODS DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	23,821	-	\$ 46.00	\$ 1,095,766	\$ 58.09	\$ 1,383,762
3/4	4	-	46.00	175	58.09	221
1	2,376	-	46.00	109,273	58.09	137,993
1 1/2	12	-	46.00	557	58.09	703
O	12	-	46.00	552	58.09	697
Subtotal	26,224	-		1,206,323.0		1,523,376.0
1st block	-	771,376	0.8500	\$ 655,670	1.0734	\$ 827,995
Subtotal	-	771,376		655,670		827,995
Total Metered	26,224	771,376		\$ 1,861,993		\$ 2,351,371
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	11,352	-	\$ 80.00	\$ 908,192	\$ 101.03	\$ 1,146,888
Special Charges	144	-	71.50	10,296	101.03	14,548
Subtotal	11,496	-		918,488		1,161,436
TOTAL RESIDENTIAL	37,721	771,376		\$ 2,780,481		\$ 3,512,807
<u>Commercial - Monthly</u>						
Customer Charge						
1	24		\$ 46.00	\$ 1,104	\$ 58.09	\$ 1,394
2	972		46.00	44,712	58.09	56,463
3	456		46.00	20,976	58.09	26,489
Subtotal	1,452	-		66,792		84,346
1st block	-	51,420	0.8500	\$ 43,707	1.0734	\$ 55,194
Subtotal	-	51,420		43,707		55,194
Total Metered	1,452	51,420		\$ 110,499		\$ 139,540
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	888	-	\$ 80.00	\$ 71,040	\$ 101.03	\$ 89,711
Special Charges	1,061	-	71.50	75,833	101.03	107,148
Subtotal	1,949	-		146,873		196,859
TOTAL COMERCIAL	3,401	51,420		\$ 257,372		\$ 336,399
TOTAL DIVISION	41,121	822,796		\$ 3,037,853		\$ 3,849,206

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 3
WOODLOCH SPRINGS DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Commercial - Monthly</u>						
Customer Charge						
2	<u>24</u>		\$ 282.21	<u>\$ 6,773</u>	\$ 356.40	<u>\$ 8,554</u>
Subtotal	24	-		6,773		8,554
1st block	<u>-</u>	<u>16,904</u>	0.1200	<u>\$ 2,028</u>	0.1515	<u>\$ 2,561</u>
Subtotal	-	16,904		2,028		2,561
Total Metered	24	16,904		\$ 8,801		\$ 11,115
Total Commercial	24	16,904		\$ 8,801		\$ 11,115

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 4

HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE, PEDDLERS VIEW, TOBYHANNA, AND TWIN HILLS DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,514	-	\$ 62.00	\$ 403,843	\$ 77.50	\$ 504,804
1	12	-	62.00	744	77.50	930
Subtotal	6,526	-		404,587		505,734
1st block	-	289,520	0.9500	\$ 275,044	1.1875	\$ 343,805
Subtotal	-	289,520		275,044		343,805
Total Metered	6,526	289,520		\$ 679,631		\$ 849,539
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	23,389	-	\$ 100.00	\$ 2,338,940	\$ 125.00	\$ 2,923,675
TOTAL RESIDENTIAL	29,915	289,520		\$ 3,018,571		\$ 3,773,214
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	1,007	-	\$ 62.00	\$ 62,409	\$ 77.50	\$ 78,012
1	181	-	62.00	11,203	77.50	14,004
1 1/2	168	-	62.00	10,416	77.50	13,020
3	204	-	62.00	12,648	77.50	15,810
Subtotal	1,559	-		96,676		120,846
1st block	-	84,125	0.9500	\$ 79,919	1.1875	\$ 99,898
Subtotal	-	84,125		79,919		99,898
Total Metered	1,559	84,125		\$ 176,595		\$ 220,744
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	5,868	-	\$ 100.00	\$ 586,750	\$ 125.00	\$ 733,438
TOTAL COMMERCIAL	7,427	84,125		\$ 763,345		\$ 954,182
TOTAL DIVISION	<u>37,342</u>	<u>373,645</u>		<u>\$ 3,781,916</u>		<u>\$ 4,727,396</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 5
AVON GROVE SCHOOL, EAST BRADFORD, LITTLE WASHINGTON, GREENS AT PENN OAKS, SAGE HILL AND PLUMSOCK DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,311	-	\$ 74.00	\$ 466,977	\$ 93.45	\$ 589,716
3/4	69	-	74.00	5,091	93.45	6,429
1	36	-	74.00	2,664	93.45	3,364
Subtotal	6,415	-		474,732		599,509
1st block		260,893	0.9600	\$ 250,457	1.2123	\$ 316,281
Subtotal		260,893		250,457		316,281
Total Metered	6,415	260,893		\$ 725,189		\$ 915,790
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 112.40	\$ 1,349	\$ 141.94	\$ 1,703
Sage Hill	252	-	180.00	45,378	141.94	35,784
Subtotal	264	-		46,727		37,487
TOTAL RESIDENTIAL	6,679	260,893		\$ 771,916		\$ 953,277
<u>Commercial - Monthly</u>						
Customer Charge						
1	30	-	\$ 74.00	\$ 2,220	\$ 93.45	\$ 2,804
3	12	-	370.00	4,477	467.25	5,654
Subtotal	42	-		6,697		8,458
1st block	-	5,348	0.9600	\$ 5,134	1.2123	\$ 6,483
Subtotal		5,348		5,134		6,483
Total Metered	42	5,348		\$ 11,831		\$ 14,941
<u>Commercial - Unmetered</u>						
Customer Charge						
Avon Grove School	12	-	\$ 8,281.25	\$ 99,375	\$ 10,503.71	\$ 126,044
TOTAL COMMERCIAL	54	5,348		\$ 111,206		\$ 140,985
TOTAL DIVISION	6,734	266,241		\$ 883,122		\$ 1,094,262

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 5
NEWLIN GREEN

APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Newlin Green - Residential - Monthly</u>						
Customer Charge						
5/8	564	-	\$ 110.00	\$ 62,051	\$ 93.45	\$ 52,715
3/4	12	-	110.00	1,320	93.45	1,121
1	12	-	110.00	1,320	93.45	1,121
	<u>588</u>	<u>-</u>		<u>64,691</u>		<u>54,957</u>
1st block		42,191	0.7500	\$ 31,643	1.2123	\$ 51,148
Subtotal		<u>42,191</u>		<u>31,643</u>		<u>51,148</u>
Total Residential	588	42,191		\$ 96,334		\$ 106,105
TOTAL NEWLIN GREEN	588	42,191		\$ 96,334		\$ 106,105

Check

See tab "RZ5"

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 6
MASTHOPE DIVISION

APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,432	-	\$ 39.64	\$ 651,380	\$ 50.10	\$ 823,263
3/4	8	-	39.64	317	50.10	401
1	12	-	39.64	476	50.10	601
Subtotal	16,452	-		652,173		824,265
1st block		301,022	0.1000	30,102	0.1263	\$ 38,015
Subtotal		301,022		30,102		38,015.00
Total Metered	16,452	301,022		\$ 682,275		\$ 862,280
<u>Residential - Unmetered</u>						
Customer Charge Unmetered	36	-	\$ 43.64	\$ 1,571	\$ 55.15	\$ 1,985
TOTAL RESIDENTIAL	16,488	301,022		\$ 683,846		\$ 864,265
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 39.64	\$ 476	\$ 50.10	\$ 601
1 1/2	12	-	39.64	476	50.10	601
2	72	-	39.64	2,854	50.10	3,607
Subtotal	96	-		3,806		4,809
1st block	-	61,118	0.1000	\$ 6,112	0.1263	\$ 7,718
Subtotal		61,118		6,112		7,718
Total Metered	96	61,118		\$ 9,918		\$ 12,527
<u>Commercial - Unmetered</u>						
Customer Charge Unmetered	12	-	\$ 43.64	\$ 524	\$ 55.15	\$ 662
TOTAL COMMERCIAL	108	61,118		\$ 10,442		\$ 13,189
TOTAL DIVISION	16,596	362,140		\$ 694,288		\$ 877,454

AQUA PENNSYLVANIA, INC.
WASTEWATER
CONTRACT SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
Flat Rate						
April '20 to December '20	11	-	25,551.80	281,070	27,107.90	298,187
January '21 to March '21	-		26,318.35	-	27,921.14	-
	<u>11</u>	<u>-</u>		<u>281,070</u>		<u>298,187</u>
TOTAL DIVISION	<u>11</u>	<u>-</u>		<u>\$ 281,070</u>		<u>\$ 298,187</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Quarterly - White Haven Division - Dennison Township</u>						
Customer Charge Flat Rate	420	-	\$ 87.00	\$ 36,540	\$ 138.15	\$ 58,023
Total Dennison	<u>420</u>	<u>-</u>		<u>\$ 36,540</u>		<u>\$ 58,023</u>
<u>Bulk - Quarterly - White Haven Division - East Side Borough</u>						
Customer Charge (EDUs)						
Flat Rate	596	-	\$ 115.00	\$ 68,540	\$ 138.15	\$ 82,337
Flat Rate	244		28.00	6,832	28.00	6,832
Subtotal	<u>840</u>	<u>-</u>		<u>75,372</u>		<u>89,169</u>
Total East Side	<u>840</u>	<u>-</u>		<u>\$ 75,372</u>		<u>\$ 89,169</u>
<u>Bulk - Monthly - White Haven Division - Penn Lake Borough</u>						
Customer Charge (EDUs)						
Flat Rate	2,952		\$ 29.00	\$ 85,608	\$ 46.05	\$ 135,940
Subtotal	<u>2,952</u>	<u>-</u>		<u>85,608</u>		<u>135,940</u>
Total Foster Township	<u>2,952</u>	<u>-</u>		<u>\$ 85,608</u>		<u>\$ 135,940</u>
<u>Bulk - Monthly - Southdown Homes</u>						
Customer Charge All Usage	12	113,074	\$ 0.7490	84,692	\$ 0.7490	84,692
Total Southdown Homes	<u>12</u>	<u>113,074</u>		<u>84,692</u>		<u>84,692</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Quarterly - East Brandywine</u>						
Customer Charge						
Flat Rate	4		\$ 351.00	1,404	\$ 351.00	1,404
Total East Brandywine	<u>4</u>	<u>-</u>		<u>1,404</u>		<u>1,404</u>
<u>Bulk - Quarterly - Upper Providence</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 135,289.00	\$ 405,867	\$ 154,773.04	\$ 464,319
January '18 to March '18	<u>1</u>	<u>-</u>	<u>\$ 137,165.00</u>	<u>137,165</u>	<u>\$ 154,773.04</u>	<u>154,773</u>
	4	-		543,032		619,092
Total Upper Providence	<u>4</u>	<u>-</u>		<u>\$ 543,032</u>		<u>\$ 619,092</u>
<u>Bulk - Quarterly - Elwyn</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 24,555.00	\$ 73,665	\$ 28,091.93	\$ 84,276
January '18 to March '18	<u>1</u>	<u>-</u>	<u>\$ 24,896.00</u>	<u>24,896</u>	<u>\$ 28,091.93</u>	<u>28,092</u>
	4	-		98,561		112,368
Total Elwyn	<u>4</u>	<u>-</u>		<u>\$ 98,561</u>		<u>\$ 112,368</u>
<u>Bulk - Quarterly - Foster Township</u>						
Customer Charge (EDUs)						
Hickory Hills Customers	1,352		\$ 87.00	\$ 117,624	\$ 138.15	\$ 186,779
AgMar Customers	424		87.00	36,888	138.15	58,576
Valley Gorge Customers	140		87.00	12,180	138.15	19,341
Route 940 Customers	<u>40</u>	<u>-</u>	<u>87.00</u>	<u>3,480</u>	<u>138.15</u>	<u>5,526</u>
Subtotal	1,956	-		170,172		270,222
Total Foster Township	<u>1,956</u>	<u>-</u>		<u>\$ 170,172</u>		<u>\$ 270,222</u>
TOTAL BULK SALES	<u>6,192</u>	<u>113,074</u>		<u>\$ 1,095,381</u>		<u>\$ 1,370,910</u>

AQUA PENNSYLVANIA, INC.
ADJUSTMENT - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT AND PROPOSED RATES
FOR THE TEST YEARS ENDING MARCH 31, 2021, 2022 AND 2023

	RZ 1	RZ 1EDU	RZ 1A	RZ 1B	RZ 2	RZ 3	RZ 3 - Woodloch Springs UNMETERED	RZ 4	RZ 5	RZ 6
<u>Historic TV Customer Growth Calculation - Residential</u>										
1 Number of Customers as of 3/31/21	1,719	1,379	69	814	1,709	2,764	417	2,459	606	1,382
2 Number of Customer as of 3/31/20	1,719	1,366	69	805	1,706	2,736	419	2,448	606	1,354
3 Projected Daily Usage in gallons	89	72	89	99	89	82	-	132	122	33
4 Monthly Volumes per Normalization (Gallons) Line 3 X (365 Days/12 Months)	2,700	2,200	2,700	3,000	2,700	2,500	-	4,000	3,700	1,000
5 HTY Customer Annualized Growth Bills (Line 2-Line 1) X 12 Divided by 2	-	78	-	54	18	168	(12)	66	-	168
6 HTY Customer Annualized Growth Volumes (HG) (Line 4 X Line 5 / 100)	-	1,716	-	1,620	486	4,200	-	2,640	-	1,680
<u>Future Test Year Customer Growth Calculation</u>										
7 Forecasted Customer Growth	(1)	17	-	13	6	24	(1)	14	(1)	22
8 Annualized Bills (Line 7 X 12)	(12)	198	-	150	72	288	(6)	162	(6)	258
9 HTY Customer Annualized Growth Volumes (HG) (Line 4 X Line 8)	(324)	4,356	-	4,500	1,944	7,200	-	4,374	(162)	6,966
10 Average Volumes Per Normalization										
<u>Fully Projected Future Test Year Customer Growth Calculation</u>										
11 Monthly Volumes per Normalization (Gallons) Line 3 X (366 Days/12 Months)	2,700	2,200	2,700	3,000	2,700	2,507	-	4,011	3,710	1,003
12 Forecasted Customer Growth	(1)	17	-	13	6	24	(1)	14	(1)	22
13 Annualized Bills (Line 12 X 12)	(12)	198	-	150	72	288	(6)	162	(6)	258
14 HTY Customer Annualized Growth Volumes (HG) (Line 11 X Line 12)	(324)	4,356	-	4,500	1,944	7,220	-	6,498	(223)	2,587
15 Average Volumes Per Normalization										
<u>Total Customer Growth Calculation</u>										
22 Total Bills	(24)	474	-	354	162	744	(24)	390	(12)	684
23 Priced for All Usage	(646)	10,428	-	10,620	4,374	18,620	-	13,512	(385)	11,233
<u>Number of Customers</u>										
29 Period Ending 3/31/19	1,721.0	1,346.0	69.0	789.0	1,697.0	2,716.0	418.0	2,432.0	607.0	1,339.0
30 Period Ending 3/31/20	1,719.0	1,366.0	69.0	805.0	1,706.0	2,736.0	419.0	2,448.0	606.0	1,354.0
31 Historic Test Year Period Ending 3/31/21	1,719.0	1,379.0	69.0	814.0	1,709.0	2,764.0	417.0	2,459.0	606.0	1,382.0
32 Increase 2019-2020	(2.0)	20.0	-	16.0	9.0	20.0	1.0	16.0	(1.0)	15.0
33 Increase 2020-2021	-	13.0	-	9.0	3.0	28.0	(2.0)	11.0	-	28.0
34 Average Growth/(Decline)	(1.0)	16.5	-	12.5	6.0	24.0	(0.5)	13.5	(0.5)	21.5
<u>Total Adjustment Revenue - Under Present</u>	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Total Adjustment Revenue - Under Present	(1,236.48)	22,619.28	-	21,594.00	5,832.00	50,050.77	(1,716.00)	37,016.17	(1,257.22)	28,237.07
Total Adjustment Revenue - Under Proposed	(1,560.35)	28,542.19	-	24,034.48	6,334.20	63,205.38	(2,424.62)	46,270.21	(1,587.66)	35,686.98

AQUA PENNSYLVANIA INC.
RATE ZONE 1 - MEDIA DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 32.55	\$ 39.10	\$ 6.55	20.12%
1,000	\$ 40.53	\$ 48.70	\$ 8.17	20.15%
2,000	\$ 48.51	\$ 58.30	\$ 9.79	20.17%
3,000	\$ 56.49	\$ 67.89	\$ 11.40	20.19%
3,700	\$ 62.08	\$ 74.61	\$ 12.54	20.20%
4,000	\$ 64.47	\$ 77.49	\$ 13.02	20.20%
5,000	\$ 72.45	\$ 87.09	\$ 14.64	20.21%
6,000	\$ 80.43	\$ 96.69	\$ 16.26	20.21%
7,000	\$ 88.41	\$ 106.29	\$ 17.88	20.22%
8,000	\$ 96.39	\$ 115.88	\$ 19.49	20.22%
9,000	\$ 104.37	\$ 125.48	\$ 21.11	20.23%
10,000	\$ 112.35	\$ 135.08	\$ 22.73	20.23%
11,000	\$ 120.33	\$ 144.68	\$ 24.35	20.23%
12,000	\$ 128.31	\$ 154.28	\$ 25.97	20.24%
13,000	\$ 136.29	\$ 163.87	\$ 27.58	20.24%
14,000	\$ 144.27	\$ 173.47	\$ 29.20	20.24%
15,000	\$ 152.25	\$ 183.07	\$ 30.82	20.24%
16,000	\$ 160.23	\$ 192.67	\$ 32.44	20.24%
17,000	\$ 168.21	\$ 202.27	\$ 34.06	20.25%
18,000	\$ 176.19	\$ 211.86	\$ 35.67	20.25%
19,000	\$ 184.17	\$ 221.46	\$ 37.29	20.25%
20,000	\$ 192.15	\$ 231.06	\$ 38.91	20.25%
25,000	\$ 232.05	\$ 279.05	\$ 47.00	20.25%
30,000	\$ 271.95	\$ 327.04	\$ 55.09	20.26%
35,000	\$ 311.85	\$ 375.03	\$ 63.18	20.26%
40,000	\$ 351.75	\$ 423.02	\$ 71.27	20.26%
45,000	\$ 391.65	\$ 471.01	\$ 79.36	20.26%
50,000	\$ 431.55	\$ 519.00	\$ 87.45	20.26%
60,000	\$ 511.35	\$ 614.98	\$ 103.63	20.27%
70,000	\$ 591.15	\$ 710.96	\$ 119.81	20.27%
80,000	\$ 670.95	\$ 806.94	\$ 135.99	20.27%
90,000	\$ 750.75	\$ 902.92	\$ 152.17	20.27%
100,000	\$ 830.55	\$ 998.90	\$ 168.35	20.27%
110,000	\$ 910.35	\$ 1,094.88	\$ 184.53	20.27%
120,000	\$ 990.15	\$ 1,190.86	\$ 200.71	20.27%
130,000	\$ 1,069.95	\$ 1,286.84	\$ 216.89	20.27%
140,000	\$ 1,149.75	\$ 1,382.82	\$ 233.07	20.27%
150,000	\$ 1,229.55	\$ 1,478.80	\$ 249.25	20.27%
160,000	\$ 1,309.35	\$ 1,574.78	\$ 265.43	20.27%
170,000	\$ 1,389.15	\$ 1,670.76	\$ 281.61	20.27%
180,000	\$ 1,468.95	\$ 1,766.74	\$ 297.79	20.27%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1 - BRIDLEWOOD AND EAGLE ROCK DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 32.55	\$ 39.10	\$ 6.55	20.12%
1,000	\$ 40.53	\$ 48.70	\$ 8.17	20.15%
2,000	\$ 48.51	\$ 58.30	\$ 9.79	20.17%
3,000	\$ 56.49	\$ 67.89	\$ 11.40	20.19%
3,700	\$ 62.08	\$ 74.61	\$ 12.54	20.20%
4,000	\$ 64.47	\$ 77.49	\$ 13.02	20.20%
5,000	\$ 72.45	\$ 87.09	\$ 14.64	20.21%
6,000	\$ 80.43	\$ 96.69	\$ 16.26	20.21%
7,000	\$ 88.41	\$ 106.29	\$ 17.88	20.22%
8,000	\$ 96.39	\$ 115.88	\$ 19.49	20.22%
9,000	\$ 104.37	\$ 125.48	\$ 21.11	20.23%
10,000	\$ 112.35	\$ 135.08	\$ 22.73	20.23%
11,000	\$ 120.33	\$ 144.68	\$ 24.35	20.23%
12,000	\$ 128.31	\$ 154.28	\$ 25.97	20.24%
13,000	\$ 136.29	\$ 163.87	\$ 27.58	20.24%
14,000	\$ 144.27	\$ 173.47	\$ 29.20	20.24%
15,000	\$ 152.25	\$ 183.07	\$ 30.82	20.24%
16,000	\$ 160.23	\$ 192.67	\$ 32.44	20.24%
17,000	\$ 168.21	\$ 202.27	\$ 34.06	20.25%
18,000	\$ 176.19	\$ 211.86	\$ 35.67	20.25%
19,000	\$ 184.17	\$ 221.46	\$ 37.29	20.25%
20,000	\$ 192.15	\$ 231.06	\$ 38.91	20.25%
25,000	\$ 232.05	\$ 279.05	\$ 47.00	20.25%
30,000	\$ 271.95	\$ 327.04	\$ 55.09	20.26%
35,000	\$ 311.85	\$ 375.03	\$ 63.18	20.26%
40,000	\$ 351.75	\$ 423.02	\$ 71.27	20.26%
45,000	\$ 391.65	\$ 471.01	\$ 79.36	20.26%
50,000	\$ 431.55	\$ 519.00	\$ 87.45	20.26%
60,000	\$ 511.35	\$ 614.98	\$ 103.63	20.27%
70,000	\$ 591.15	\$ 710.96	\$ 119.81	20.27%
80,000	\$ 670.95	\$ 806.94	\$ 135.99	20.27%
90,000	\$ 750.75	\$ 902.92	\$ 152.17	20.27%
100,000	\$ 830.55	\$ 998.90	\$ 168.35	20.27%
110,000	\$ 910.35	\$ 1,094.88	\$ 184.53	20.27%
120,000	\$ 990.15	\$ 1,190.86	\$ 200.71	20.27%
130,000	\$ 1,069.95	\$ 1,286.84	\$ 216.89	20.27%
140,000	\$ 1,149.75	\$ 1,382.82	\$ 233.07	20.27%
150,000	\$ 1,229.55	\$ 1,478.80	\$ 249.25	20.27%
160,000	\$ 1,309.35	\$ 1,574.78	\$ 265.43	20.27%
170,000	\$ 1,389.15	\$ 1,670.76	\$ 281.61	20.27%
180,000	\$ 1,468.95	\$ 1,766.74	\$ 297.79	20.27%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1A - TREASURE LAKE, VILLAFE AT VALLEY FORGE AND
BUNKER HILL DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 32.55	\$ 39.10	\$ 6.55	20.12%
1,000	\$ 39.17	\$ 48.70	\$ 9.53	24.34%
2,000	\$ 45.78	\$ 58.30	\$ 12.52	27.34%
3,000	\$ 52.40	\$ 67.89	\$ 15.50	29.58%
3,700	\$ 57.03	\$ 74.61	\$ 17.59	30.84%
4,000	\$ 59.01	\$ 77.49	\$ 18.48	31.32%
5,000	\$ 65.63	\$ 87.09	\$ 21.47	32.71%
6,000	\$ 72.24	\$ 96.69	\$ 24.45	33.84%
7,000	\$ 78.86	\$ 106.29	\$ 27.43	34.79%
8,000	\$ 85.47	\$ 115.88	\$ 30.41	35.58%
9,000	\$ 92.09	\$ 125.48	\$ 33.40	36.27%
10,000	\$ 98.70	\$ 135.08	\$ 36.38	36.86%
11,000	\$ 105.32	\$ 144.68	\$ 39.36	37.38%
12,000	\$ 111.93	\$ 154.28	\$ 42.35	37.83%
13,000	\$ 118.55	\$ 163.87	\$ 45.33	38.24%
14,000	\$ 125.16	\$ 173.47	\$ 48.31	38.60%
15,000	\$ 131.78	\$ 183.07	\$ 51.30	38.93%
16,000	\$ 138.39	\$ 192.67	\$ 54.28	39.22%
17,000	\$ 145.01	\$ 202.27	\$ 57.26	39.49%
18,000	\$ 151.62	\$ 211.86	\$ 60.24	39.73%
19,000	\$ 158.24	\$ 221.46	\$ 63.23	39.96%
20,000	\$ 164.85	\$ 231.06	\$ 66.21	40.16%
25,000	\$ 197.93	\$ 279.05	\$ 81.12	40.99%
30,000	\$ 231.00	\$ 327.04	\$ 96.04	41.58%
35,000	\$ 264.08	\$ 375.03	\$ 110.96	42.02%
40,000	\$ 297.15	\$ 423.02	\$ 125.87	42.36%
45,000	\$ 330.23	\$ 471.01	\$ 140.79	42.63%
50,000	\$ 363.30	\$ 519.00	\$ 155.70	42.86%
60,000	\$ 429.45	\$ 614.98	\$ 185.53	43.20%
70,000	\$ 495.60	\$ 710.96	\$ 215.36	43.45%
80,000	\$ 561.75	\$ 806.94	\$ 245.19	43.65%
90,000	\$ 627.90	\$ 902.92	\$ 275.02	43.80%
100,000	\$ 694.05	\$ 998.90	\$ 304.85	43.92%
110,000	\$ 760.20	\$ 1,094.88	\$ 334.68	44.03%
120,000	\$ 826.35	\$ 1,190.86	\$ 364.51	44.11%
130,000	\$ 892.50	\$ 1,286.84	\$ 394.34	44.18%
140,000	\$ 958.65	\$ 1,382.82	\$ 424.17	44.25%
150,000	\$ 1,024.80	\$ 1,478.80	\$ 454.00	44.30%
160,000	\$ 1,090.95	\$ 1,574.78	\$ 483.83	44.35%
170,000	\$ 1,157.10	\$ 1,670.76	\$ 513.66	44.39%
180,000	\$ 1,223.25	\$ 1,766.74	\$ 543.49	44.43%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1B - PENN TOWNSHIP DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 32.55	\$ 39.10	\$ 6.55	20.12%
1,000	\$ 32.55	\$ 48.70	\$ 16.15	49.61%
2,000	\$ 43.05	\$ 58.30	\$ 15.25	35.41%
3,000	\$ 53.55	\$ 67.89	\$ 14.34	26.79%
3,700	\$ 60.90	\$ 74.61	\$ 13.71	22.52%
4,000	\$ 64.05	\$ 77.49	\$ 13.44	20.99%
5,000	\$ 74.55	\$ 87.09	\$ 12.54	16.82%
6,000	\$ 85.05	\$ 96.69	\$ 11.64	13.68%
7,000	\$ 95.55	\$ 106.29	\$ 10.74	11.24%
8,000	\$ 106.05	\$ 115.88	\$ 9.83	9.27%
9,000	\$ 116.55	\$ 125.48	\$ 8.93	7.66%
10,000	\$ 127.05	\$ 135.08	\$ 8.03	6.32%
11,000	\$ 137.55	\$ 144.68	\$ 7.13	5.18%
12,000	\$ 148.05	\$ 154.28	\$ 6.23	4.21%
13,000	\$ 158.55	\$ 163.87	\$ 5.32	3.36%
14,000	\$ 169.05	\$ 173.47	\$ 4.42	2.62%
15,000	\$ 179.55	\$ 183.07	\$ 3.52	1.96%
16,000	\$ 190.05	\$ 192.67	\$ 2.62	1.38%
17,000	\$ 200.55	\$ 202.27	\$ 1.72	0.86%
18,000	\$ 211.05	\$ 211.86	\$ 0.81	0.39%
19,000	\$ 221.55	\$ 221.46	\$ (0.09)	-0.04%
20,000	\$ 232.05	\$ 231.06	\$ (0.99)	-0.43%
25,000	\$ 284.55	\$ 279.05	\$ (5.50)	-1.93%
30,000	\$ 337.05	\$ 327.04	\$ (10.01)	-2.97%
35,000	\$ 389.55	\$ 375.03	\$ (14.52)	-3.73%
40,000	\$ 442.05	\$ 423.02	\$ (19.03)	-4.30%
45,000	\$ 494.55	\$ 471.01	\$ (23.54)	-4.76%
50,000	\$ 547.05	\$ 519.00	\$ (28.05)	-5.13%
60,000	\$ 652.05	\$ 614.98	\$ (37.07)	-5.69%
70,000	\$ 757.05	\$ 710.96	\$ (46.09)	-6.09%
80,000	\$ 862.05	\$ 806.94	\$ (55.11)	-6.39%
90,000	\$ 967.05	\$ 902.92	\$ (64.13)	-6.63%
100,000	\$ 1,072.05	\$ 998.90	\$ (73.15)	-6.82%
110,000	\$ 1,177.05	\$ 1,094.88	\$ (82.17)	-6.98%
120,000	\$ 1,282.05	\$ 1,190.86	\$ (91.19)	-7.11%
130,000	\$ 1,387.05	\$ 1,286.84	\$ (100.21)	-7.22%
140,000	\$ 1,492.05	\$ 1,382.82	\$ (109.23)	-7.32%
150,000	\$ 1,597.05	\$ 1,478.80	\$ (118.25)	-7.40%
160,000	\$ 1,702.05	\$ 1,574.78	\$ (127.27)	-7.48%
170,000	\$ 1,807.05	\$ 1,670.76	\$ (136.29)	-7.54%
180,000	\$ 1,912.05	\$ 1,766.74	\$ (145.31)	-7.60%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 2 - EMLENTON, RIVERCREST AND WHITE HAVEN DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 37.80	\$ 39.10	\$ 1.30	3.44%
1,000	\$ 46.31	\$ 48.70	\$ 2.39	5.17%
2,000	\$ 54.81	\$ 58.30	\$ 3.49	6.36%
3,000	\$ 63.32	\$ 67.89	\$ 4.58	7.23%
3,700	\$ 69.27	\$ 74.61	\$ 5.34	7.72%
4,000	\$ 71.82	\$ 77.49	\$ 5.67	7.90%
5,000	\$ 80.33	\$ 87.09	\$ 6.77	8.42%
6,000	\$ 88.83	\$ 96.69	\$ 7.86	8.85%
7,000	\$ 97.34	\$ 106.29	\$ 8.95	9.20%
8,000	\$ 105.84	\$ 115.88	\$ 10.04	9.49%
9,000	\$ 114.35	\$ 125.48	\$ 11.14	9.74%
10,000	\$ 122.85	\$ 135.08	\$ 12.23	9.96%
11,000	\$ 131.36	\$ 144.68	\$ 13.32	10.14%
12,000	\$ 139.86	\$ 154.28	\$ 14.42	10.31%
13,000	\$ 148.37	\$ 163.87	\$ 15.51	10.45%
14,000	\$ 156.87	\$ 173.47	\$ 16.60	10.58%
15,000	\$ 165.38	\$ 183.07	\$ 17.70	10.70%
16,000	\$ 173.88	\$ 192.67	\$ 18.79	10.81%
17,000	\$ 182.39	\$ 202.27	\$ 19.88	10.90%
18,000	\$ 190.89	\$ 211.86	\$ 20.97	10.99%
19,000	\$ 199.40	\$ 221.46	\$ 22.07	11.07%
20,000	\$ 207.90	\$ 231.06	\$ 23.16	11.14%
25,000	\$ 250.43	\$ 279.05	\$ 28.62	11.43%
30,000	\$ 292.95	\$ 327.04	\$ 34.09	11.64%
35,000	\$ 335.48	\$ 375.03	\$ 39.55	11.79%
40,000	\$ 378.00	\$ 423.02	\$ 45.02	11.91%
45,000	\$ 420.53	\$ 471.01	\$ 50.49	12.01%
50,000	\$ 463.05	\$ 519.00	\$ 55.95	12.08%
60,000	\$ 548.10	\$ 614.98	\$ 66.88	12.20%
70,000	\$ 633.15	\$ 710.96	\$ 77.81	12.29%
80,000	\$ 718.20	\$ 806.94	\$ 88.74	12.36%
90,000	\$ 803.25	\$ 902.92	\$ 99.67	12.41%
100,000	\$ 888.30	\$ 998.90	\$ 110.60	12.45%
110,000	\$ 973.35	\$ 1,094.88	\$ 121.53	12.49%
120,000	\$ 1,058.40	\$ 1,190.86	\$ 132.46	12.52%
130,000	\$ 1,143.45	\$ 1,286.84	\$ 143.39	12.54%
140,000	\$ 1,228.50	\$ 1,382.82	\$ 154.32	12.56%
150,000	\$ 1,313.55	\$ 1,478.80	\$ 165.25	12.58%
160,000	\$ 1,398.60	\$ 1,574.78	\$ 176.18	12.60%
170,000	\$ 1,483.65	\$ 1,670.76	\$ 187.11	12.61%
180,000	\$ 1,568.70	\$ 1,766.74	\$ 198.04	12.62%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 2 - PINECREST DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
COMMERCIAL - MONTHLY
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ -	\$ -	\$ -	#DIV/0!
1,000	\$ 31.50	\$ 30.00	\$ (1.50)	-4.76%
2,000	\$ 63.00	\$ 60.00	\$ (3.00)	-4.76%
3,000	\$ 94.50	\$ 90.00	\$ (4.50)	-4.76%
3,700	\$ 116.55	\$ 111.00	\$ (5.55)	-4.76%
4,000	\$ 126.00	\$ 120.00	\$ (6.00)	-4.76%
5,000	\$ 157.50	\$ 150.00	\$ (7.50)	-4.76%
6,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
7,000	\$ 220.50	\$ 210.00	\$ (10.50)	-4.76%
8,000	\$ 252.00	\$ 240.00	\$ (12.00)	-4.76%
9,000	\$ 283.50	\$ 270.00	\$ (13.50)	-4.76%
10,000	\$ 315.00	\$ 300.00	\$ (15.00)	-4.76%
11,000	\$ 346.50	\$ 330.00	\$ (16.50)	-4.76%
12,000	\$ 378.00	\$ 360.00	\$ (18.00)	-4.76%
13,000	\$ 409.50	\$ 390.00	\$ (19.50)	-4.76%
14,000	\$ 441.00	\$ 420.00	\$ (21.00)	-4.76%
15,000	\$ 472.50	\$ 450.00	\$ (22.50)	-4.76%
16,000	\$ 504.00	\$ 480.00	\$ (24.00)	-4.76%
17,000	\$ 535.50	\$ 510.00	\$ (25.50)	-4.76%
18,000	\$ 567.00	\$ 540.00	\$ (27.00)	-4.76%
19,000	\$ 598.50	\$ 570.00	\$ (28.50)	-4.76%
20,000	\$ 630.00	\$ 600.00	\$ (30.00)	-4.76%
25,000	\$ 787.50	\$ 750.00	\$ (37.50)	-4.76%
30,000	\$ 945.00	\$ 900.00	\$ (45.00)	-4.76%
35,000	\$ 1,102.50	\$ 1,050.00	\$ (52.50)	-4.76%
40,000	\$ 1,260.00	\$ 1,200.00	\$ (60.00)	-4.76%
45,000	\$ 1,417.50	\$ 1,350.00	\$ (67.50)	-4.76%
50,000	\$ 1,575.00	\$ 1,500.00	\$ (75.00)	-4.76%
60,000	\$ 1,890.00	\$ 1,800.00	\$ (90.00)	-4.76%
70,000	\$ 2,205.00	\$ 2,100.00	\$ (105.00)	-4.76%
80,000	\$ 2,520.00	\$ 2,400.00	\$ (120.00)	-4.76%
90,000	\$ 2,835.00	\$ 2,700.00	\$ (135.00)	-4.76%
100,000	\$ 3,150.00	\$ 3,000.00	\$ (150.00)	-4.76%
110,000	\$ 3,465.00	\$ 3,300.00	\$ (165.00)	-4.76%
120,000	\$ 3,780.00	\$ 3,600.00	\$ (180.00)	-4.76%
130,000	\$ 4,095.00	\$ 3,900.00	\$ (195.00)	-4.76%
140,000	\$ 4,410.00	\$ 4,200.00	\$ (210.00)	-4.76%
150,000	\$ 4,725.00	\$ 4,500.00	\$ (225.00)	-4.76%
160,000	\$ 5,040.00	\$ 4,800.00	\$ (240.00)	-4.76%
170,000	\$ 5,355.00	\$ 5,100.00	\$ (255.00)	-4.76%
180,000	\$ 5,670.00	\$ 5,400.00	\$ (270.00)	-4.76%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 3 - BEECH MOUNTAIN LAKES, DEERFIELD KNOLL, LAUREL
LAKES, LINKS AT GETTYSBURG, STONEY CREEK, THORNHURST, AND
WILLSITOWN WOODS DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 48.30	\$ 58.09	\$ 9.79	20.27%
1,000	\$ 57.23	\$ 68.82	\$ 11.60	20.27%
2,000	\$ 66.15	\$ 79.56	\$ 13.41	20.27%
3,000	\$ 75.08	\$ 90.29	\$ 15.22	20.27%
3,700	\$ 81.32	\$ 97.81	\$ 16.48	20.27%
4,000	\$ 84.00	\$ 101.03	\$ 17.03	20.27%
5,000	\$ 92.93	\$ 111.76	\$ 18.84	20.27%
6,000	\$ 101.85	\$ 122.49	\$ 20.64	20.27%
7,000	\$ 110.78	\$ 133.23	\$ 22.45	20.27%
8,000	\$ 119.70	\$ 143.96	\$ 24.26	20.27%
9,000	\$ 128.63	\$ 154.70	\$ 26.07	20.27%
10,000	\$ 137.55	\$ 165.43	\$ 27.88	20.27%
11,000	\$ 146.48	\$ 176.16	\$ 29.69	20.27%
12,000	\$ 155.40	\$ 186.90	\$ 31.50	20.27%
13,000	\$ 164.33	\$ 197.63	\$ 33.31	20.27%
14,000	\$ 173.25	\$ 208.37	\$ 35.12	20.27%
15,000	\$ 182.18	\$ 219.10	\$ 36.93	20.27%
16,000	\$ 191.10	\$ 229.83	\$ 38.73	20.27%
17,000	\$ 200.03	\$ 240.57	\$ 40.54	20.27%
18,000	\$ 208.95	\$ 251.30	\$ 42.35	20.27%
19,000	\$ 217.88	\$ 262.04	\$ 44.16	20.27%
20,000	\$ 226.80	\$ 272.77	\$ 45.97	20.27%
25,000	\$ 271.43	\$ 326.44	\$ 55.01	20.27%
30,000	\$ 316.05	\$ 380.11	\$ 64.06	20.27%
35,000	\$ 360.68	\$ 433.78	\$ 73.11	20.27%
40,000	\$ 405.30	\$ 487.45	\$ 82.15	20.27%
45,000	\$ 449.93	\$ 541.12	\$ 91.19	20.27%
50,000	\$ 494.55	\$ 594.79	\$ 100.24	20.27%
60,000	\$ 583.80	\$ 702.13	\$ 118.33	20.27%
70,000	\$ 673.05	\$ 809.47	\$ 136.42	20.27%
80,000	\$ 762.30	\$ 916.81	\$ 154.51	20.27%
90,000	\$ 851.55	\$ 1,024.15	\$ 172.60	20.27%
100,000	\$ 940.80	\$ 1,131.49	\$ 190.69	20.27%
110,000	\$ 1,030.05	\$ 1,238.83	\$ 208.78	20.27%
120,000	\$ 1,119.30	\$ 1,346.17	\$ 226.87	20.27%
130,000	\$ 1,208.55	\$ 1,453.51	\$ 244.96	20.27%
140,000	\$ 1,297.80	\$ 1,560.85	\$ 263.05	20.27%
150,000	\$ 1,387.05	\$ 1,668.19	\$ 281.14	20.27%
160,000	\$ 1,476.30	\$ 1,775.53	\$ 299.23	20.27%
170,000	\$ 1,565.55	\$ 1,882.87	\$ 317.32	20.27%
180,000	\$ 1,654.80	\$ 1,990.21	\$ 335.41	20.27%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 3 - WOODLOCH SPRINGS DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
FLAT RATE

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 296.32	\$ 356.40	\$ 60.08	20.28%
1,000	\$ 297.58	\$ 357.92	\$ 60.33	20.28%
2,000	\$ 298.84	\$ 359.43	\$ 60.59	20.27%
3,000	\$ 300.10	\$ 360.95	\$ 60.84	20.27%
3,700	\$ 300.98	\$ 362.01	\$ 61.02	20.27%
4,000	\$ 301.36	\$ 362.46	\$ 61.10	20.27%
5,000	\$ 302.62	\$ 363.98	\$ 61.35	20.27%
6,000	\$ 303.88	\$ 365.49	\$ 61.61	20.27%
7,000	\$ 305.14	\$ 367.01	\$ 61.86	20.27%
8,000	\$ 306.40	\$ 368.52	\$ 62.12	20.27%
9,000	\$ 307.66	\$ 370.04	\$ 62.37	20.27%
10,000	\$ 308.92	\$ 371.55	\$ 62.63	20.27%
11,000	\$ 310.18	\$ 373.07	\$ 62.88	20.27%
12,000	\$ 311.44	\$ 374.58	\$ 63.14	20.27%
13,000	\$ 312.70	\$ 376.10	\$ 63.39	20.27%
14,000	\$ 313.96	\$ 377.61	\$ 63.65	20.27%
15,000	\$ 315.22	\$ 379.13	\$ 63.90	20.27%
16,000	\$ 316.48	\$ 380.64	\$ 64.16	20.27%
17,000	\$ 317.74	\$ 382.16	\$ 64.41	20.27%
18,000	\$ 319.00	\$ 383.67	\$ 64.67	20.27%
19,000	\$ 320.26	\$ 385.19	\$ 64.92	20.27%
20,000	\$ 321.52	\$ 386.70	\$ 65.18	20.27%
25,000	\$ 327.82	\$ 394.28	\$ 66.45	20.27%
30,000	\$ 334.12	\$ 401.85	\$ 67.73	20.27%
35,000	\$ 340.42	\$ 409.43	\$ 69.00	20.27%
40,000	\$ 346.72	\$ 417.00	\$ 70.28	20.27%
45,000	\$ 353.02	\$ 424.58	\$ 71.55	20.27%
50,000	\$ 359.32	\$ 432.15	\$ 72.83	20.27%
60,000	\$ 371.92	\$ 447.30	\$ 75.38	20.27%
70,000	\$ 384.52	\$ 462.45	\$ 77.93	20.27%
80,000	\$ 397.12	\$ 477.60	\$ 80.48	20.27%
90,000	\$ 409.72	\$ 492.75	\$ 83.03	20.26%
100,000	\$ 422.32	\$ 507.90	\$ 85.58	20.26%
110,000	\$ 434.92	\$ 523.05	\$ 88.13	20.26%
120,000	\$ 447.52	\$ 538.20	\$ 90.68	20.26%
130,000	\$ 460.12	\$ 553.35	\$ 93.23	20.26%
140,000	\$ 472.72	\$ 568.50	\$ 95.78	20.26%
150,000	\$ 485.32	\$ 583.65	\$ 98.33	20.26%
160,000	\$ 497.92	\$ 598.80	\$ 100.88	20.26%
170,000	\$ 510.52	\$ 613.95	\$ 103.43	20.26%
180,000	\$ 523.12	\$ 629.10	\$ 105.98	20.26%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 4 - HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE,
PEDDLERS VIEW, TOBYHANNA TOWNSHIP, TWIN HILLS DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 65.10	\$ 77.50	\$ 12.40	19.05%
1,000	\$ 75.08	\$ 89.38	\$ 14.30	19.05%
2,000	\$ 85.05	\$ 101.25	\$ 16.20	19.05%
3,000	\$ 95.03	\$ 113.13	\$ 18.10	19.05%
3,700	\$ 102.01	\$ 121.44	\$ 19.43	19.05%
4,000	\$ 105.00	\$ 125.00	\$ 20.00	19.05%
5,000	\$ 114.98	\$ 136.88	\$ 21.90	19.05%
6,000	\$ 124.95	\$ 148.75	\$ 23.80	19.05%
7,000	\$ 134.93	\$ 160.63	\$ 25.70	19.05%
8,000	\$ 144.90	\$ 172.50	\$ 27.60	19.05%
9,000	\$ 154.88	\$ 184.38	\$ 29.50	19.05%
10,000	\$ 164.85	\$ 196.25	\$ 31.40	19.05%
11,000	\$ 174.83	\$ 208.13	\$ 33.30	19.05%
12,000	\$ 184.80	\$ 220.00	\$ 35.20	19.05%
13,000	\$ 194.78	\$ 231.88	\$ 37.10	19.05%
14,000	\$ 204.75	\$ 243.75	\$ 39.00	19.05%
15,000	\$ 214.73	\$ 255.63	\$ 40.90	19.05%
16,000	\$ 224.70	\$ 267.50	\$ 42.80	19.05%
17,000	\$ 234.68	\$ 279.38	\$ 44.70	19.05%
18,000	\$ 244.65	\$ 291.25	\$ 46.60	19.05%
19,000	\$ 254.63	\$ 303.13	\$ 48.50	19.05%
20,000	\$ 264.60	\$ 315.00	\$ 50.40	19.05%
25,000	\$ 314.48	\$ 374.38	\$ 59.90	19.05%
30,000	\$ 364.35	\$ 433.75	\$ 69.40	19.05%
35,000	\$ 414.23	\$ 493.13	\$ 78.90	19.05%
40,000	\$ 464.10	\$ 552.50	\$ 88.40	19.05%
45,000	\$ 513.98	\$ 611.88	\$ 97.90	19.05%
50,000	\$ 563.85	\$ 671.25	\$ 107.40	19.05%
60,000	\$ 663.60	\$ 790.00	\$ 126.40	19.05%
70,000	\$ 763.35	\$ 908.75	\$ 145.40	19.05%
80,000	\$ 863.10	\$ 1,027.50	\$ 164.40	19.05%
90,000	\$ 962.85	\$ 1,146.25	\$ 183.40	19.05%
100,000	\$ 1,062.60	\$ 1,265.00	\$ 202.40	19.05%
110,000	\$ 1,162.35	\$ 1,383.75	\$ 221.40	19.05%
120,000	\$ 1,262.10	\$ 1,502.50	\$ 240.40	19.05%
130,000	\$ 1,361.85	\$ 1,621.25	\$ 259.40	19.05%
140,000	\$ 1,461.60	\$ 1,740.00	\$ 278.40	19.05%
150,000	\$ 1,561.35	\$ 1,858.75	\$ 297.40	19.05%
160,000	\$ 1,661.10	\$ 1,977.50	\$ 316.40	19.05%
170,000	\$ 1,760.85	\$ 2,096.25	\$ 335.40	19.05%
180,000	\$ 1,860.60	\$ 2,215.00	\$ 354.40	19.05%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.

RATE ZONE 4 - HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE,
PEDDLERS VIEW, TOBYHANNA TOWNSHIP, TWIN HILLS DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
1,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
2,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
3,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
3,700	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
4,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
5,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
6,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
7,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
8,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
9,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
10,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
11,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
12,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
13,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
14,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
15,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
16,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
17,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
18,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
19,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
20,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
25,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
30,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
35,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
40,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
45,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
50,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
60,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
70,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
80,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
90,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
100,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
110,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
120,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
130,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
140,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
150,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
160,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
170,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%
180,000	\$ 100.00	\$ 125.00	\$ 25.00	25.00%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - EAST BRADFORD, LITTLE WASHINGTON, GREENS AT PENN
OAKS, AND PLUMSOCK DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 77.70	\$ 93.45	\$ 15.75	20.27%
1,000	\$ 87.78	\$ 105.57	\$ 17.79	20.27%
2,000	\$ 97.86	\$ 117.70	\$ 19.84	20.27%
3,000	\$ 107.94	\$ 129.82	\$ 21.88	20.27%
3,700	\$ 115.00	\$ 138.31	\$ 23.31	20.27%
4,000	\$ 118.02	\$ 141.94	\$ 23.92	20.27%
5,000	\$ 128.10	\$ 154.07	\$ 25.97	20.27%
6,000	\$ 138.18	\$ 166.19	\$ 28.01	20.27%
7,000	\$ 148.26	\$ 178.31	\$ 30.05	20.27%
8,000	\$ 158.34	\$ 190.43	\$ 32.09	20.27%
9,000	\$ 168.42	\$ 202.56	\$ 34.14	20.27%
10,000	\$ 178.50	\$ 214.68	\$ 36.18	20.27%
11,000	\$ 188.58	\$ 226.80	\$ 38.22	20.27%
12,000	\$ 198.66	\$ 238.93	\$ 40.27	20.27%
13,000	\$ 208.74	\$ 251.05	\$ 42.31	20.27%
14,000	\$ 218.82	\$ 263.17	\$ 44.35	20.27%
15,000	\$ 228.90	\$ 275.30	\$ 46.40	20.27%
16,000	\$ 238.98	\$ 287.42	\$ 48.44	20.27%
17,000	\$ 249.06	\$ 299.54	\$ 50.48	20.27%
18,000	\$ 259.14	\$ 311.66	\$ 52.52	20.27%
19,000	\$ 269.22	\$ 323.79	\$ 54.57	20.27%
20,000	\$ 279.30	\$ 335.91	\$ 56.61	20.27%
25,000	\$ 329.70	\$ 396.53	\$ 66.83	20.27%
30,000	\$ 380.10	\$ 457.14	\$ 77.04	20.27%
35,000	\$ 430.50	\$ 517.76	\$ 87.26	20.27%
40,000	\$ 480.90	\$ 578.37	\$ 97.47	20.27%
45,000	\$ 531.30	\$ 638.99	\$ 107.69	20.27%
50,000	\$ 581.70	\$ 699.60	\$ 117.90	20.27%
60,000	\$ 682.50	\$ 820.83	\$ 138.33	20.27%
70,000	\$ 783.30	\$ 942.06	\$ 158.76	20.27%
80,000	\$ 884.10	\$ 1,063.29	\$ 179.19	20.27%
90,000	\$ 984.90	\$ 1,184.52	\$ 199.62	20.27%
100,000	\$ 1,085.70	\$ 1,305.75	\$ 220.05	20.27%
110,000	\$ 1,186.50	\$ 1,426.98	\$ 240.48	20.27%
120,000	\$ 1,287.30	\$ 1,548.21	\$ 260.91	20.27%
130,000	\$ 1,388.10	\$ 1,669.44	\$ 281.34	20.27%
140,000	\$ 1,488.90	\$ 1,790.67	\$ 301.77	20.27%
150,000	\$ 1,589.70	\$ 1,911.90	\$ 322.20	20.27%
160,000	\$ 1,690.50	\$ 2,033.13	\$ 342.63	20.27%
170,000	\$ 1,791.30	\$ 2,154.36	\$ 363.06	20.27%
180,000	\$ 1,892.10	\$ 2,275.59	\$ 383.49	20.27%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - NEWLIN GREEN DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 115.50	\$ 93.45	\$ (22.05)	-19.09%
1,000	\$ 123.38	\$ 105.57	\$ (17.80)	-14.43%
2,000	\$ 131.25	\$ 117.70	\$ (13.55)	-10.33%
3,000	\$ 139.13	\$ 129.82	\$ (9.31)	-6.69%
3,700	\$ 144.64	\$ 138.31	\$ (6.33)	-4.38%
4,000	\$ 147.00	\$ 141.94	\$ (5.06)	-3.44%
5,000	\$ 154.88	\$ 154.07	\$ (0.81)	-0.52%
6,000	\$ 162.75	\$ 166.19	\$ 3.44	2.11%
7,000	\$ 170.63	\$ 178.31	\$ 7.69	4.50%
8,000	\$ 178.50	\$ 190.43	\$ 11.93	6.69%
9,000	\$ 186.38	\$ 202.56	\$ 16.18	8.68%
10,000	\$ 194.25	\$ 214.68	\$ 20.43	10.52%
11,000	\$ 202.13	\$ 226.80	\$ 24.68	12.21%
12,000	\$ 210.00	\$ 238.93	\$ 28.93	13.77%
13,000	\$ 217.88	\$ 251.05	\$ 33.17	15.23%
14,000	\$ 225.75	\$ 263.17	\$ 37.42	16.58%
15,000	\$ 233.63	\$ 275.30	\$ 41.67	17.84%
16,000	\$ 241.50	\$ 287.42	\$ 45.92	19.01%
17,000	\$ 249.38	\$ 299.54	\$ 50.17	20.12%
18,000	\$ 257.25	\$ 311.66	\$ 54.41	21.15%
19,000	\$ 265.13	\$ 323.79	\$ 58.66	22.13%
20,000	\$ 273.00	\$ 335.91	\$ 62.91	23.04%
25,000	\$ 312.38	\$ 396.53	\$ 84.15	26.94%
30,000	\$ 351.75	\$ 457.14	\$ 105.39	29.96%
35,000	\$ 391.13	\$ 517.76	\$ 126.63	32.38%
40,000	\$ 430.50	\$ 578.37	\$ 147.87	34.35%
45,000	\$ 469.88	\$ 638.99	\$ 169.11	35.99%
50,000	\$ 509.25	\$ 699.60	\$ 190.35	37.38%
60,000	\$ 588.00	\$ 820.83	\$ 232.83	39.60%
70,000	\$ 666.75	\$ 942.06	\$ 275.31	41.29%
80,000	\$ 745.50	\$ 1,063.29	\$ 317.79	42.63%
90,000	\$ 824.25	\$ 1,184.52	\$ 360.27	43.71%
100,000	\$ 903.00	\$ 1,305.75	\$ 402.75	44.60%
110,000	\$ 981.75	\$ 1,426.98	\$ 445.23	45.35%
120,000	\$ 1,060.50	\$ 1,548.21	\$ 487.71	45.99%
130,000	\$ 1,139.25	\$ 1,669.44	\$ 530.19	46.54%
140,000	\$ 1,218.00	\$ 1,790.67	\$ 572.67	47.02%
150,000	\$ 1,296.75	\$ 1,911.90	\$ 615.15	47.44%
160,000	\$ 1,375.50	\$ 2,033.13	\$ 657.63	47.81%
170,000	\$ 1,454.25	\$ 2,154.36	\$ 700.11	48.14%
180,000	\$ 1,533.00	\$ 2,275.59	\$ 742.59	48.44%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - AVON GROVE SCHOOL DISTRICT DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
COMMERCIAL - MONTHLY
6 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
1,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
2,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
3,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
3,700	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
4,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
5,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
6,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
7,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
8,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
9,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
10,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
11,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
12,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
13,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
14,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
15,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
16,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
17,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
18,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
19,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
20,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
25,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
30,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
35,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
40,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
45,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
50,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
60,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
70,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
80,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
90,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
100,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
110,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
120,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
130,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
140,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
150,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
160,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
170,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%
180,000	\$ 8,695.31	\$10,503.71	\$ 1,808.40	20.80%

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - SAGE HILL DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
ALL CUSTOMER CLASSES - MONTHLY
FLAT RATE

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
1,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
2,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
3,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
3,700	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
4,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
5,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
6,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
7,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
8,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
9,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
10,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
11,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
12,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
13,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
14,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
15,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
16,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
17,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
18,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
19,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
20,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
25,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
30,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
35,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
40,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
45,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
50,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
60,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
70,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
80,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
90,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
100,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
110,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
120,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
130,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
140,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
150,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
160,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
170,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%
180,000	\$ 189.00	\$ 141.94	\$ (47.06)	-24.90%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 6 - MASTHOPE DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 41.62	\$ 50.10	\$ 8.48	20.37%
1,000	\$ 42.67	\$ 51.36	\$ 8.69	20.37%
2,000	\$ 43.72	\$ 52.63	\$ 8.90	20.36%
3,000	\$ 44.77	\$ 53.89	\$ 9.12	20.36%
3,700	\$ 45.51	\$ 54.77	\$ 9.27	20.36%
4,000	\$ 45.82	\$ 55.15	\$ 9.33	20.36%
5,000	\$ 46.87	\$ 56.41	\$ 9.54	20.36%
6,000	\$ 47.92	\$ 57.68	\$ 9.76	20.36%
7,000	\$ 48.97	\$ 58.94	\$ 9.97	20.35%
8,000	\$ 50.02	\$ 60.20	\$ 10.18	20.35%
9,000	\$ 51.07	\$ 61.47	\$ 10.39	20.35%
10,000	\$ 52.12	\$ 62.73	\$ 10.61	20.35%
11,000	\$ 53.17	\$ 63.99	\$ 10.82	20.35%
12,000	\$ 54.22	\$ 65.25	\$ 11.03	20.35%
13,000	\$ 55.27	\$ 66.52	\$ 11.25	20.35%
14,000	\$ 56.32	\$ 67.78	\$ 11.46	20.34%
15,000	\$ 57.37	\$ 69.04	\$ 11.67	20.34%
16,000	\$ 58.42	\$ 70.31	\$ 11.88	20.34%
17,000	\$ 59.47	\$ 71.57	\$ 12.10	20.34%
18,000	\$ 60.52	\$ 72.83	\$ 12.31	20.34%
19,000	\$ 61.57	\$ 74.09	\$ 12.52	20.34%
20,000	\$ 62.62	\$ 75.36	\$ 12.74	20.34%
25,000	\$ 67.87	\$ 81.67	\$ 13.80	20.33%
30,000	\$ 73.12	\$ 87.99	\$ 14.86	20.33%
35,000	\$ 78.37	\$ 94.30	\$ 15.93	20.32%
40,000	\$ 83.62	\$ 100.61	\$ 16.99	20.32%
45,000	\$ 88.87	\$ 106.93	\$ 18.06	20.32%
50,000	\$ 94.12	\$ 113.24	\$ 19.12	20.32%
60,000	\$ 104.62	\$ 125.87	\$ 21.25	20.31%
70,000	\$ 115.12	\$ 138.50	\$ 23.38	20.31%
80,000	\$ 125.62	\$ 151.13	\$ 25.51	20.30%
90,000	\$ 136.12	\$ 163.76	\$ 27.64	20.30%
100,000	\$ 146.62	\$ 176.39	\$ 29.76	20.30%
110,000	\$ 157.12	\$ 189.01	\$ 31.89	20.30%
120,000	\$ 167.62	\$ 201.64	\$ 34.02	20.30%
130,000	\$ 178.12	\$ 214.27	\$ 36.15	20.29%
140,000	\$ 188.62	\$ 226.90	\$ 38.28	20.29%
150,000	\$ 199.12	\$ 239.53	\$ 40.41	20.29%
160,000	\$ 209.62	\$ 252.16	\$ 42.54	20.29%
170,000	\$ 220.12	\$ 264.79	\$ 44.66	20.29%
180,000	\$ 230.62	\$ 277.41	\$ 46.79	20.29%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 7 - LIMERICK DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 29.51	\$ 39.48	\$ 9.97	33.81%
1,000	\$ 29.51	\$ 47.85	\$ 18.34	62.16%
2,000	\$ 29.51	\$ 56.21	\$ 26.71	90.52%
3,000	\$ 32.94	\$ 64.58	\$ 31.63	96.02%
3,700	\$ 37.69	\$ 70.43	\$ 32.74	86.87%
4,000	\$ 39.73	\$ 72.94	\$ 33.22	83.61%
5,000	\$ 46.51	\$ 81.31	\$ 34.80	74.82%
6,000	\$ 53.29	\$ 89.68	\$ 36.38	68.27%
7,000	\$ 60.08	\$ 98.04	\$ 37.97	63.20%
8,000	\$ 66.86	\$ 106.41	\$ 39.55	59.15%
9,000	\$ 73.64	\$ 114.77	\$ 41.13	55.85%
10,000	\$ 80.42	\$ 123.14	\$ 42.72	53.11%
11,000	\$ 87.21	\$ 131.51	\$ 44.30	50.80%
12,000	\$ 93.99	\$ 139.87	\$ 45.88	48.81%
13,000	\$ 100.77	\$ 148.24	\$ 47.46	47.10%
14,000	\$ 107.56	\$ 156.60	\$ 49.05	45.60%
15,000	\$ 114.34	\$ 164.97	\$ 50.63	44.28%
16,000	\$ 121.12	\$ 173.34	\$ 52.21	43.11%
17,000	\$ 127.91	\$ 181.70	\$ 53.80	42.06%
18,000	\$ 134.69	\$ 190.07	\$ 55.38	41.12%
19,000	\$ 141.47	\$ 198.43	\$ 56.96	40.26%
20,000	\$ 148.25	\$ 206.80	\$ 58.55	39.49%
25,000	\$ 182.17	\$ 248.63	\$ 66.46	36.48%
30,000	\$ 216.08	\$ 290.46	\$ 74.38	34.42%
35,000	\$ 250.00	\$ 332.29	\$ 82.29	32.92%
40,000	\$ 283.91	\$ 374.12	\$ 90.21	31.77%
45,000	\$ 317.83	\$ 415.95	\$ 98.12	30.87%
50,000	\$ 351.74	\$ 457.78	\$ 106.04	30.15%
60,000	\$ 419.57	\$ 541.44	\$ 121.87	29.04%
70,000	\$ 487.40	\$ 625.10	\$ 137.70	28.25%
80,000	\$ 555.23	\$ 708.76	\$ 153.53	27.65%
90,000	\$ 623.06	\$ 792.42	\$ 169.36	27.18%
100,000	\$ 690.89	\$ 876.08	\$ 185.19	26.80%
110,000	\$ 758.72	\$ 959.74	\$ 201.02	26.49%
120,000	\$ 826.55	\$ 1,043.40	\$ 216.85	26.23%
130,000	\$ 894.38	\$ 1,127.06	\$ 232.68	26.02%
140,000	\$ 962.21	\$ 1,210.72	\$ 248.51	25.83%
150,000	\$ 1,030.04	\$ 1,294.38	\$ 264.34	25.66%
160,000	\$ 1,097.87	\$ 1,378.04	\$ 280.17	25.52%
170,000	\$ 1,165.70	\$ 1,461.70	\$ 296.00	25.39%
180,000	\$ 1,233.53	\$ 1,545.36	\$ 311.83	25.28%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 8 - EAST BRADFORD DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
SINGLE FAMILY DETACHED - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
1,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
2,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
3,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
3,700	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
4,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
5,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
6,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
7,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
8,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
9,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
10,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
11,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
12,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
13,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
14,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
15,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
16,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
17,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
18,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
19,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
20,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
25,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
30,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
35,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
40,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
45,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
50,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
60,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
70,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
80,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
90,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
100,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
110,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
120,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
130,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
140,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
150,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
160,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
170,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%
180,000	\$ 71.49	\$ 83.42	\$ 11.93	16.68%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 8 - EAST BRADFORD DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
TOWNHOME - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
1,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
2,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
3,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
3,700	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
4,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
5,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
6,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
7,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
8,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
9,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
10,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
11,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
12,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
13,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
14,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
15,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
16,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
17,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
18,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
19,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
20,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
25,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
30,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
35,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
40,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
45,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
50,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
60,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
70,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
80,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
90,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
100,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
110,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
120,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
130,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
140,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
150,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
160,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
170,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%
180,000	\$ 55.36	\$ 83.42	\$ 28.06	50.70%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 9 - CHELTENHAM TOWNSHIP DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 20.89	\$ 28.21	\$ 7.32	35.04%
1,000	\$ 24.80	\$ 33.49	\$ 8.69	35.05%
2,000	\$ 28.71	\$ 38.78	\$ 10.07	35.06%
3,000	\$ 32.62	\$ 44.06	\$ 11.44	35.07%
3,700	\$ 35.36	\$ 47.76	\$ 12.40	35.07%
4,000	\$ 36.53	\$ 49.34	\$ 12.81	35.07%
5,000	\$ 40.44	\$ 54.63	\$ 14.19	35.08%
6,000	\$ 44.35	\$ 59.91	\$ 15.56	35.08%
7,000	\$ 48.26	\$ 65.19	\$ 16.93	35.08%
8,000	\$ 52.17	\$ 70.47	\$ 18.30	35.09%
9,000	\$ 56.08	\$ 75.76	\$ 19.68	35.09%
10,000	\$ 59.99	\$ 81.04	\$ 21.05	35.09%
11,000	\$ 63.90	\$ 86.32	\$ 22.42	35.09%
12,000	\$ 67.81	\$ 91.61	\$ 23.80	35.09%
13,000	\$ 71.72	\$ 96.89	\$ 25.17	35.09%
14,000	\$ 75.63	\$ 102.17	\$ 26.54	35.09%
15,000	\$ 79.54	\$ 107.46	\$ 27.92	35.10%
16,000	\$ 83.45	\$ 112.74	\$ 29.29	35.10%
17,000	\$ 87.36	\$ 118.02	\$ 30.66	35.10%
18,000	\$ 91.27	\$ 123.30	\$ 32.03	35.10%
19,000	\$ 95.18	\$ 128.59	\$ 33.41	35.10%
20,000	\$ 99.09	\$ 133.87	\$ 34.78	35.10%
25,000	\$ 118.64	\$ 160.29	\$ 41.65	35.10%
30,000	\$ 138.19	\$ 186.70	\$ 48.51	35.10%
35,000	\$ 157.74	\$ 213.12	\$ 55.38	35.11%
40,000	\$ 177.29	\$ 239.53	\$ 62.24	35.11%
45,000	\$ 196.84	\$ 265.95	\$ 69.10	35.11%
50,000	\$ 216.39	\$ 292.36	\$ 75.97	35.11%
60,000	\$ 255.49	\$ 345.19	\$ 89.70	35.11%
70,000	\$ 294.59	\$ 398.02	\$ 103.43	35.11%
80,000	\$ 333.69	\$ 450.85	\$ 117.16	35.11%
90,000	\$ 372.79	\$ 503.68	\$ 130.89	35.11%
100,000	\$ 411.89	\$ 556.51	\$ 144.62	35.11%
110,000	\$ 450.99	\$ 609.34	\$ 158.35	35.11%
120,000	\$ 490.09	\$ 662.17	\$ 172.08	35.11%
130,000	\$ 529.19	\$ 715.00	\$ 185.81	35.11%
140,000	\$ 568.29	\$ 767.83	\$ 199.54	35.11%
150,000	\$ 607.39	\$ 820.66	\$ 213.27	35.11%
160,000	\$ 646.49	\$ 873.49	\$ 227.00	35.11%
170,000	\$ 685.59	\$ 926.32	\$ 240.73	35.11%
180,000	\$ 724.69	\$ 979.15	\$ 254.46	35.11%

AQUA PENNSYLVANIA INC.
RATE ZONE 10 - EAST NORRITON DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 21.08	\$ 32.37	\$ 11.29	53.56%
1,000	\$ 21.08	\$ 38.91	\$ 17.83	84.58%
2,000	\$ 25.44	\$ 45.45	\$ 20.01	78.64%
3,000	\$ 31.98	\$ 51.99	\$ 20.01	62.56%
3,700	\$ 36.56	\$ 56.57	\$ 20.01	54.73%
4,000	\$ 38.52	\$ 58.53	\$ 20.01	51.94%
5,000	\$ 45.06	\$ 65.07	\$ 20.01	44.40%
6,000	\$ 51.60	\$ 71.61	\$ 20.01	38.77%
7,000	\$ 58.14	\$ 78.15	\$ 20.01	34.41%
8,000	\$ 64.68	\$ 84.69	\$ 20.01	30.93%
9,000	\$ 71.22	\$ 91.23	\$ 20.01	28.09%
10,000	\$ 77.76	\$ 97.77	\$ 20.01	25.73%
11,000	\$ 84.30	\$ 104.31	\$ 20.01	23.73%
12,000	\$ 90.84	\$ 110.85	\$ 20.01	22.02%
13,000	\$ 97.38	\$ 117.39	\$ 20.01	20.55%
14,000	\$ 103.92	\$ 123.93	\$ 20.01	19.25%
15,000	\$ 110.46	\$ 130.47	\$ 20.01	18.11%
16,000	\$ 117.00	\$ 137.01	\$ 20.01	17.10%
17,000	\$ 123.54	\$ 143.55	\$ 20.01	16.20%
18,000	\$ 130.08	\$ 150.09	\$ 20.01	15.38%
19,000	\$ 136.62	\$ 156.63	\$ 20.01	14.64%
20,000	\$ 143.16	\$ 163.17	\$ 20.01	13.98%
25,000	\$ 175.86	\$ 195.87	\$ 20.01	11.38%
30,000	\$ 208.56	\$ 228.57	\$ 20.01	9.59%
35,000	\$ 241.26	\$ 261.27	\$ 20.01	8.29%
40,000	\$ 273.96	\$ 293.97	\$ 20.01	7.30%
45,000	\$ 306.66	\$ 326.67	\$ 20.01	6.52%
50,000	\$ 339.36	\$ 359.37	\$ 20.01	5.90%
60,000	\$ 404.76	\$ 424.77	\$ 20.01	4.94%
70,000	\$ 470.16	\$ 490.17	\$ 20.01	4.26%
80,000	\$ 535.56	\$ 555.57	\$ 20.01	3.74%
90,000	\$ 600.96	\$ 620.97	\$ 20.01	3.33%
100,000	\$ 666.36	\$ 686.37	\$ 20.01	3.00%
110,000	\$ 731.76	\$ 751.77	\$ 20.01	2.73%
120,000	\$ 797.16	\$ 817.17	\$ 20.01	2.51%
130,000	\$ 862.56	\$ 882.57	\$ 20.01	2.32%
140,000	\$ 927.96	\$ 947.97	\$ 20.01	2.16%
150,000	\$ 993.36	\$ 1,013.37	\$ 20.01	2.01%
160,000	\$ 1,058.76	\$ 1,078.77	\$ 20.01	1.89%
170,000	\$ 1,124.16	\$ 1,144.17	\$ 20.01	1.78%
180,000	\$ 1,189.56	\$ 1,209.57	\$ 20.01	1.68%

AQUA PENNSYLVANIA INC.
RATE ZONE 10 - WHITPAIN TOWNSHIP
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 31.66	\$ 32.37	\$ 0.71	2.24%
1,000	\$ 31.66	\$ 38.91	\$ 7.25	22.90%
2,000	\$ 31.66	\$ 45.45	\$ 13.79	43.56%
3,000	\$ 31.66	\$ 51.99	\$ 20.33	64.21%
3,700	\$ 31.66	\$ 56.57	\$ 24.91	78.67%
4,000	\$ 31.66	\$ 58.53	\$ 26.87	84.87%
5,000	\$ 31.66	\$ 65.07	\$ 33.41	105.53%
6,000	\$ 31.66	\$ 71.61	\$ 39.95	126.18%
7,000	\$ 39.57	\$ 78.15	\$ 38.58	97.50%
8,000	\$ 39.57	\$ 84.69	\$ 45.12	114.03%
9,000	\$ 39.57	\$ 91.23	\$ 51.66	130.55%
10,000	\$ 39.57	\$ 97.77	\$ 58.20	147.08%
11,000	\$ 39.57	\$ 104.31	\$ 64.74	163.61%
12,000	\$ 39.57	\$ 110.85	\$ 71.28	180.14%
13,000	\$ 39.57	\$ 117.39	\$ 77.82	196.66%
14,000	\$ 39.57	\$ 123.93	\$ 84.36	213.19%
15,000	\$ 39.57	\$ 130.47	\$ 90.90	229.72%
16,000	\$ 39.57	\$ 137.01	\$ 97.44	246.25%
17,000	\$ 39.57	\$ 143.55	\$ 103.98	262.77%
18,000	\$ 39.57	\$ 150.09	\$ 110.52	279.30%
19,000	\$ 39.57	\$ 156.63	\$ 117.06	295.83%
20,000	\$ 39.57	\$ 163.17	\$ 123.60	312.36%
25,000	\$ 39.57	\$ 195.87	\$ 156.30	395.00%
30,000	\$ 39.57	\$ 228.57	\$ 189.00	477.63%
35,000	\$ 39.57	\$ 261.27	\$ 221.70	560.27%
40,000	\$ 39.57	\$ 293.97	\$ 254.40	642.91%
45,000	\$ 39.57	\$ 326.67	\$ 287.10	725.55%
50,000	\$ 39.57	\$ 359.37	\$ 319.80	808.19%
60,000	\$ 39.57	\$ 424.77	\$ 385.20	973.46%
70,000	\$ 39.57	\$ 490.17	\$ 450.60	1138.74%
80,000	\$ 39.57	\$ 555.57	\$ 516.00	1304.02%
90,000	\$ 39.57	\$ 620.97	\$ 581.40	1469.29%
100,000	\$ 39.57	\$ 686.37	\$ 646.80	1634.57%
110,000	\$ 39.57	\$ 751.77	\$ 712.20	1799.85%
120,000	\$ 39.57	\$ 817.17	\$ 777.60	1965.13%
130,000	\$ 39.57	\$ 882.57	\$ 843.00	2130.40%
140,000	\$ 39.57	\$ 947.97	\$ 908.40	2295.68%
150,000	\$ 39.57	\$ 1,013.37	\$ 973.80	2460.96%
160,000	\$ 39.57	\$ 1,078.77	\$ 1,039.20	2626.23%
170,000	\$ 39.57	\$ 1,144.17	\$ 1,104.60	2791.51%
180,000	\$ 39.57	\$ 1,209.57	\$ 1,170.00	2956.79%

AQUA PENNSYLVANIA INC.
NORTH HEIDELBERG DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 21.08	\$ 32.37	\$ 11.29	53.56%
1,000	\$ 21.08	\$ 41.97	\$ 20.89	99.09%
2,000	\$ 34.14	\$ 51.57	\$ 17.43	51.04%
3,000	\$ 47.20	\$ 61.16	\$ 13.96	29.58%
3,700	\$ 56.34	\$ 67.88	\$ 11.54	20.48%
4,000	\$ 60.26	\$ 70.76	\$ 10.50	17.43%
5,000	\$ 73.32	\$ 80.36	\$ 7.04	9.60%
6,000	\$ 86.38	\$ 89.96	\$ 3.58	4.14%
7,000	\$ 99.44	\$ 99.56	\$ 0.12	0.12%
8,000	\$ 107.36	\$ 109.15	\$ 1.79	1.67%
9,000	\$ 115.28	\$ 118.75	\$ 3.47	3.01%
10,000	\$ 123.20	\$ 128.35	\$ 5.15	4.18%
11,000	\$ 131.12	\$ 137.95	\$ 6.83	5.21%
12,000	\$ 139.04	\$ 147.55	\$ 8.51	6.12%
13,000	\$ 146.96	\$ 157.14	\$ 10.18	6.93%
14,000	\$ 154.88	\$ 166.74	\$ 11.86	7.66%
15,000	\$ 162.80	\$ 176.34	\$ 13.54	8.32%
16,000	\$ 170.72	\$ 185.94	\$ 15.22	8.91%
17,000	\$ 178.64	\$ 195.54	\$ 16.90	9.46%
18,000	\$ 186.56	\$ 205.13	\$ 18.57	9.96%
19,000	\$ 194.48	\$ 214.73	\$ 20.25	10.41%
20,000	\$ 202.40	\$ 224.33	\$ 21.93	10.83%
25,000	\$ 242.00	\$ 272.32	\$ 30.32	12.53%
30,000	\$ 281.60	\$ 320.31	\$ 38.71	13.75%
35,000	\$ 321.20	\$ 368.30	\$ 47.10	14.66%
40,000	\$ 360.80	\$ 416.29	\$ 55.49	15.38%
45,000	\$ 400.40	\$ 464.28	\$ 63.88	15.95%
50,000	\$ 440.00	\$ 512.27	\$ 72.27	16.43%
60,000	\$ 519.20	\$ 608.25	\$ 89.05	17.15%
70,000	\$ 598.40	\$ 704.23	\$ 105.83	17.69%
80,000	\$ 677.60	\$ 800.21	\$ 122.61	18.09%
90,000	\$ 756.80	\$ 896.19	\$ 139.39	18.42%
100,000	\$ 836.00	\$ 992.17	\$ 156.17	18.68%
110,000	\$ 915.20	\$ 1,088.15	\$ 172.95	18.90%
120,000	\$ 994.40	\$ 1,184.13	\$ 189.73	19.08%
130,000	\$ 1,073.60	\$ 1,280.11	\$ 206.51	19.24%
140,000	\$ 1,152.80	\$ 1,376.09	\$ 223.29	19.37%
150,000	\$ 1,232.00	\$ 1,472.07	\$ 240.07	19.49%
160,000	\$ 1,311.20	\$ 1,568.05	\$ 256.85	19.59%
170,000	\$ 1,390.40	\$ 1,664.03	\$ 273.63	19.68%
180,000	\$ 1,469.60	\$ 1,760.01	\$ 290.41	19.76%

AQUA PENNSYLVANIA INC.
RATE ZONE 11 - NEW GARDEN
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 37.64	\$ 51.71	\$ 14.07	37.39%
1,000	\$ 37.64	\$ 51.71	\$ 14.07	37.39%
2,000	\$ 42.69	\$ 58.65	\$ 15.96	37.39%
3,000	\$ 57.86	\$ 79.50	\$ 21.64	37.40%
3,700	\$ 68.48	\$ 94.09	\$ 25.61	37.40%
4,000	\$ 73.03	\$ 100.34	\$ 27.31	37.40%
5,000	\$ 88.20	\$ 121.18	\$ 32.98	37.40%
6,000	\$ 103.37	\$ 142.03	\$ 38.66	37.40%
7,000	\$ 118.54	\$ 162.87	\$ 44.33	37.40%
8,000	\$ 133.71	\$ 183.72	\$ 50.01	37.40%
9,000	\$ 148.88	\$ 204.56	\$ 55.68	37.40%
10,000	\$ 164.05	\$ 225.40	\$ 61.35	37.40%
11,000	\$ 179.22	\$ 246.25	\$ 67.03	37.40%
12,000	\$ 194.39	\$ 267.09	\$ 72.70	37.40%
13,000	\$ 209.56	\$ 287.94	\$ 78.38	37.40%
14,000	\$ 224.73	\$ 308.78	\$ 84.05	37.40%
15,000	\$ 239.90	\$ 329.62	\$ 89.72	37.40%
16,000	\$ 259.55	\$ 356.62	\$ 97.07	37.40%
17,000	\$ 279.20	\$ 383.62	\$ 104.42	37.40%
18,000	\$ 298.85	\$ 410.62	\$ 111.77	37.40%
19,000	\$ 318.50	\$ 437.62	\$ 119.12	37.40%
20,000	\$ 338.15	\$ 464.62	\$ 126.47	37.40%
25,000	\$ 436.40	\$ 599.61	\$ 163.21	37.40%
30,000	\$ 534.65	\$ 734.61	\$ 199.96	37.40%
35,000	\$ 632.90	\$ 869.60	\$ 236.70	37.40%
40,000	\$ 731.15	\$ 1,004.60	\$ 273.45	37.40%
45,000	\$ 829.40	\$ 1,139.59	\$ 310.19	37.40%
50,000	\$ 927.65	\$ 1,274.59	\$ 346.94	37.40%
60,000	\$ 1,124.15	\$ 1,544.58	\$ 420.43	37.40%
70,000	\$ 1,320.65	\$ 1,814.57	\$ 493.92	37.40%
80,000	\$ 1,517.15	\$ 2,084.56	\$ 567.41	37.40%
90,000	\$ 1,713.65	\$ 2,354.55	\$ 640.90	37.40%
100,000	\$ 1,910.15	\$ 2,624.54	\$ 714.39	37.40%
110,000	\$ 2,106.65	\$ 2,894.53	\$ 787.88	37.40%
120,000	\$ 2,303.15	\$ 3,164.52	\$ 861.37	37.40%
130,000	\$ 2,499.65	\$ 3,434.51	\$ 934.86	37.40%
140,000	\$ 2,696.15	\$ 3,704.50	\$ 1,008.35	37.40%
150,000	\$ 2,892.65	\$ 3,974.49	\$ 1,081.84	37.40%
160,000	\$ 3,089.15	\$ 4,244.48	\$ 1,155.33	37.40%
170,000	\$ 3,285.65	\$ 4,514.47	\$ 1,228.82	37.40%
180,000	\$ 3,482.15	\$ 4,784.46	\$ 1,302.31	37.40%

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION

SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)		Bill Analysis Revenues, Proposed Rates (3)		Ref.	Adjustment Factor (Schedule 2 RZ 7) (4)	Revenues Under Proposed Rates (5)=(3)X(4)		Total Pro Forma Revenue Proposed Rates (6)	Proposed Increase (7)=(6)-(2)	Percent Increase (8)
METERED SALES											
Residential	\$	2,758,337	\$	4,969,432	Sch. 3 RZ 7	0.99987008	\$	4,968,786	\$	2,210,449	80.1%
Commercial		1,198,307		1,952,620	Sch. 3 RZ 7	1.00001211		1,952,644		754,336	63.0%
Public Authority		13,120		17,211	Sch. 3 RZ 7	1.00002001		17,211		4,091	31.2%
Total Sales Related to Wastewater	\$	3,969,765	\$	6,939,263			\$	6,938,641	\$	2,968,877	74.8%
Other Operating Revenues		8,808		8,808				8,808		-	0.0%
Total Wastewater Revenue	\$	3,978,573	\$	6,948,071			\$	6,947,449	\$	2,968,877	74.6%

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Adjustment to Per Books Revenue 3/31/2021 (3)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (4)	Bill Analysis Revenues, Present Rates (5)	Ref.	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(6)X(5)	Add Back Annualized DSIC Revenue (8)	Revenues Under Present Rates (9)=(8)+(7)
<u>METERED SALES</u>									
Residential	\$ 3,191,879	\$ (564,907)	\$ 2,626,972	\$ 2,627,313	Sch. 3 RZ 7	0.9998701	\$ 2,626,972	\$131,366	\$ 2,758,337
Commercial	577,517	563,729	1,141,246	1,141,232	Sch. 3 RZ 7	1.0000121	1,141,246	57,062	1,198,307
Public Authority	11,317	1,178	12,495	12,495	Sch. 3 RZ 7	1.0000200	12,495	625	13,120
Total Sales Related to Wastewater	\$ 3,780,713	\$ (0)	\$ 3,780,713	\$ 3,781,040			\$ 3,780,713	\$ 189,052	\$ 3,969,765
Other Operating Revenues	8,808		8,808	8,808			8,808		8,808
Total Wastewater Revenue	\$ 3,789,521	\$ (0)	\$ 3,789,521	\$ 3,789,848			\$ 3,789,521	\$ 189,052	\$ 3,978,573

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	50,815	-	\$ 28.10	\$ 1,427,893	\$ 39.48	\$ 2,006,164
1	4,153	-	28.10	116,688	39.48	163,945
1 1/2	11	-	28.10	309	39.48	434
2	6,116	-	28.10	171,860	39.48	241,460
Subtotal	61,094	-		1,716,750		2,412,003
Allowance (2,493 Gallons)	-	1,384,001	-	\$ -	0.8366	\$ 1,157,856
1st block	-	1,143,003	0.6460	738,380	0.8366	956,236
Subtotal	-	2,527,004		738,380		2,114,092
Total Metered	61,094	2,527,004		\$ 2,455,130		\$ 4,526,095
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered Per EDU	6,078	-	\$ 28.33	\$ 172,183	\$ 72.94	\$ 443,337
TOTAL RESIDENTIAL	67,172	2,527,004		\$ 2,627,313		\$ 4,969,432
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	7,072	-	\$ 28.10	\$ 198,737	\$ 39.48	\$ 279,222
3/4	1,272	-	28.10	35,742	39.48	50,217
1	1,955	-	28.10	54,942	39.48	77,192
1 1/2	8,404	-	28.10	236,153	39.48	331,791
2	1,583	-	28.10	44,473	39.48	62,483
6	1,188	-	28.10	33,386	39.48	46,907
8	297	-	28.10	8,348	39.48	11,728
10	10	-	28.10	276	39.48	388
Subtotal	21,781	-		612,057		859,928
Allowance (2,493 Gallons)	-	468,234	-	\$ -	0.8366	\$ 391,724
1st block	-	800,210	0.6460	516,936	0.8366	669,456
Subtotal	-	1,268,444		516,936		1,061,180
Total Metered	21,781	1,268,444		\$ 1,128,993		\$ 1,921,108
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered Per EDU	432	-	\$ 28.33	\$ 12,239	\$ 72.94	\$ 31,512
TOTAL COMMERCIAL	22,213	1,268,444		\$ 1,141,232		\$ 1,952,620
<u>Public - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 28.10	\$ 337	\$ 39.48	\$ 474
1	23	-	28.10	648	39.48	910
2	12	-	28.10	337	39.48	474
Subtotal	47	-		1,322		1,858
Allowance	-	1,057	-	\$ -	0.8366	\$ 884
1st block	-	17,295	0.6460	11,173	0.8366	14,469
Subtotal	-	18,352		11,173		15,353
TOTAL PUBLIC	47	18,352		\$ 12,495		\$ 17,211
TOTAL DIVISION	89,432	3,813,800		\$ 3,781,040		\$ 6,939,263

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 2) (3)	Ref.	Adjustment Factor (Schedule 2 RZ 8) (4)	Revenues Under Proposed Rates (5)=(3)X(4)	Pro Forma Adjustments Proposed Rates (Schedule 3) (6)	Total Pro Forma Revenue Proposed Rates (7)	Proposed Increase (7)=(6)+(2) (7)=(6)+(2)	Percent Increase (8)
METERED SALES									
Residential	\$ 864,242	\$ 1,160,442	Sch. 3 RZ 8	0.99997874	\$ 1,160,417	\$ (15,525)	\$ 1,144,892	\$ 280,650	32.5%
Commercial	132,205	208,813	Sch. 3 RZ 8	1.00003511	208,820		208,820	76,616	58.0%
Public Authority	1,744	2,857	Sch. 3 RZ 8	1.00004214	2,857		2,857	1,113	63.8%
Total Sales Related to Wastewater	998,190	1,372,112			1,372,094	(15,525)	1,356,569	358,379	35.9%
Other Operating Revenues	16,378	853		1.00000000	853	15,525	16,378	-	
Total Wastewater Revenue	\$ 1,014,569	\$ 1,372,965			\$ 1,372,948	\$ -	\$ 1,372,948	\$ 358,379	

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 4) (3)	Ref.	Adjustment Factor (4)=(2)/(3)	Revenues Under Present Rates (5)=(3)X(4)	Pro Forma Adjustments Present Rates (Schedule 3) (6)	Add Back Annualized DSIC Revenue (7)	Revenues Under Present Rates (8)=(5)+(6)+(7)
METERED SALES								
Residential	\$ 837,872	\$ 837,890	Sch. 3 RZ8	0.999978744	\$ 837,872	\$ (15,525)	\$ 41,895	\$ 864,242
Commercial	125,909	125,905	Sch. 3 RZ8	1.000035106	125,909		6,295	132,205
Public Authority	1,661	1,661	Sch. 3 RZ8	1.000042143	1,661		83	1,744
Total Sales Related to Wastewater	\$ 965,443	\$ 965,456			\$ 965,443	\$ (15,525)	\$ 48,273	\$ 998,190
Other Operating Revenues	853	853		1.000000000	853	15,525		16,378
Total Wastewater Revenue	\$ 966,296	\$ 966,309			\$ 966,296	\$ -	\$ 48,273	\$ 1,014,569

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Bills (6)	Proposed Consumption (7)	Proposed Rate (8)	Proposed Revenue (9)
Residential - Unmetered and Metered								
Flat Rate								
Single Family	4,596	-	\$ 68.09	\$ 312,921	276		\$ 83.42	\$ 23,024
Single Family - Birmingham Twp.	228		68.09	15,525	228		68.09	15,525
Townhome	9,663	-	52.72	509,444	-			-
Subtotal	14,487	-		\$ 837,890	504			\$ 38,549
EDU Charge					13,983		\$ 39.10	\$ 546,731
All Usage		-	\$ -	\$ -		519,099	\$ 1.1080	\$ 575,161
TOTAL RESIDENTIAL	14,487	-		\$ 837,890	14,487	519,099		\$ 1,160,442
Commercial - Monthly								
EDU Charge								
5/8	60	-	\$ 26.00	\$ 1,560	60	-	\$ 39.10	\$ 2,346
3/4	24	-	26.00	624	24	-	39.10	938
1	48	-	26.00	1,248	48	-	39.10	1,877
1 1/2	20	-	26.00	520	20	-	39.10	782
2	180	-	26.00	4,680	180	-	39.10	7,038
3	24	-	26.00	624	24	-	39.10	938
4	12	-	26.00	312	12	-	39.10	469
6	24	-	26.00	627	24	-	39.10	942
Subtotal	392	-		10,195	392	-		15,330
Allowance (2,000 Gallons)		6,927	-	\$ -		6,927	1.1080	\$ 7,675
1st block	-	167,696	0.6900	115,710		167,696	1.1080	185,808
Subtotal	-	174,623		115,710		174,623		193,483
TOTAL COMMERCIAL	392	174,623		\$ 125,905		174,623		\$ 208,813
Public - Monthly								
Customer Charge								
3/4	12	-	\$ 26.00	\$ 312	12		\$ 39.10	\$ 469
3	12	-	26.00	312	12		39.10	469
Subtotal	24	-		624	24			938
Allowance (2,000 Gallons)		229	-	\$ -		229	1.1080	\$ 254
1st block	-	1,503	0.6900	1,037		1,503	1.1080	1,665
Subtotal	-	1,732		1,037		1,732		1,919
TOTAL PUBLIC	24	1,732		\$ 1,661		1,732		\$ 2,857
TOTAL DIVISION	14,903	176,355		\$ 965,456		695,454		\$ 1,372,112

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION

APPLICATION OF PRESENT AND PROPOSED RATES TO PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Bills (6)	Proposed Consumption (7)	Proposed Rate (8)	Proposed Revenue (9)
<u>Residential - Unmetered</u>								
Flat Rate								
Single Family - Birmingham Twp.	(228)		\$ 68.09	\$ (15,525)	(228)	-	\$ 68.09	(15,525)
Subtotal	(228)	-		\$ (15,525)	(228)	-		\$ (15,525)
<u>Contract Sales for Resale - Unmetered</u>								
Single Family - Birmingham Twp.	228		\$ 68.09	\$ 15,525	228	-	\$ 68.09	15,525
Subtotal	228	-		\$ 15,525	228	-		\$ 15,525
TOTAL ADJUSTMENT	-	-		\$ -		-		\$ -

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Proposed Rates (3)		Ref.	Adjustment Factor (Schedule 2 RZ 9) (4)	Revenues Under Proposed Rates (5)=(3)X(4)		Total Pro Forma Revenue Proposed Rates (6)	Proposed Increase (7)=(6)-(2)	Percent Increase (8)
		Proposed Rates				Proposed Rates				
METERED SALES										
Residential	\$ 4,415,789	\$ 5,965,300		Sch. 3 RZ9	0.99989180	\$ 5,965,654	\$	5,965,654	\$ 1,549,865	35.1%
Commercial	2,771,955	3,744,893		Sch. 3 RZ9	1.00000160	3,744,899		3,744,899	972,944	35.1%
Industrial	2,787	3,764		Sch. 3 RZ9	1.00040560	3,766		3,766	978	35.1%
Public Authority	47,830	65,349		Sch. 3 RZ9	1.00000711	65,349		65,349	17,519	36.6%
Total Sales Related to Wastewater	\$ 7,238,362	\$ 9,780,306				\$ 9,779,668	\$	9,779,668	\$ 2,541,306	35.1%
Other Operating Revenues	20,377	20,377				20,377		20,377	-	0.0%
Total Wastewater Revenue	\$ 7,258,739	\$ 9,800,683				\$ 9,800,046	\$	9,800,046	\$ 2,541,306	35.0%

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 4) (3)	Ref.	Adjustment Factor (4)=(2)/(3)	Revenues Under Present Rates (5)=(3)X(4)
METERED SALES					
Residential	\$ 4,415,789	\$ 4,416,267	Sch. 3 RZ9	0.999891802	\$ 4,415,789
Commercial	2,771,955	2,771,951	Sch. 3 RZ9	1.000001598	2,771,955
Industrial	2,787	2,786	Sch. 3 RZ9	1.000405599	2,787
Public Authority	47,830	47,830	Sch. 3 RZ9	1.000007109	47,830
Total Sales Related to Wastewater	7,238,362	7,238,834			7,238,362
Other Operating Revenues	20,377	20,377			20,377
Total Wastewater Revenue	\$ 7,258,739	\$ 7,259,211			\$ 7,258,739

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	106,538	-	\$ 20.89	\$ 2,225,583	\$ 28.21	\$ 3,005,443
3/4	8,559	-	20.89	178,800	28.21	241,452
1	2,122	-	20.89	44,335	28.21	59,870
1 1/2	144	-	20.89	3,008	28.21	4,062
M	40	-	20.89	838	28.21	1,131
N	403	-	20.89	8,421	28.21	11,371
Subtotal	117,807	-		2,460,985		3,323,329
No Charge Customers		2,063	-	\$ -	0.5283	\$ 1,090
1st block	-	5,000,721	0.3910	1,955,282	0.5283	2,641,881
Subtotal	-	5,002,783		1,955,282		2,642,971
TOTAL RESIDENTIAL	117,807	5,002,783		\$ 4,416,267		\$ 5,966,300
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,690	-	\$ 20.89	\$ 56,188	\$ 28.21	\$ 75,876
3/4	478	-	20.89	9,990	28.21	13,490
1	5,545	-	20.89	115,831	28.21	156,419
1 1/2	14,582	-	20.89	304,620	28.21	411,361
2	20,824	-	20.89	435,015	28.21	587,448
3	6,063	-	20.89	126,664	28.21	171,049
4	27,076	-	20.89	565,607	28.21	763,800
6	4,092	-	20.89	85,482	28.21	115,435
8	1,560	-	20.89	32,588	28.21	44,008
Subtotal	82,910	-		1,731,985		2,338,886
No Charge Customers		1,621	-	\$ -	0.5283	\$ 856
1st block	-	2,659,760	0.3910	1,039,966	0.5283	1,405,151
Subtotal	-	2,661,380		1,039,966		1,406,007
TOTAL COMMERCIAL	82,910	2,661,380		\$ 2,771,951		\$ 3,744,893
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	60	-	\$ 20.89	\$ 1,253	\$ 28.21	\$ 1,693
3/4	24	-	20.89	501	28.21	677
1	24	-	20.89	501	28.21	677
Subtotal	108	-		2,255		3,047
1st block	-	1,358	0.3910	531	0.5283	717
Subtotal	-	1,358		531		717
TOTAL INDUSTRIAL	108	1,358		\$ 2,786		\$ 3,764

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	24	-	\$ 20.89	\$ 501	\$ 28.21	\$ 677
3/4	12	-	20.89	251	28.21	339
1	24	-	20.89	501	28.21	677
1 1/2	192	-	20.89	4,011	28.21	5,416
2	24	-	20.89	501	28.21	677
3	504	-	20.89	10,529	28.21	14,218
4	636	-	20.89	13,286	28.21	17,942
Subtotal	1,416	-		29,580		39,946
No Charge Customers		1,410	-	\$ -	0.5283	\$ 745
1st block	-	46,675	0.3910	18,250	0.5283	24,658
Subtotal	-	48,085		18,250		25,403
TOTAL PUBLIC	1,416	48,085		\$ 47,830		\$ 65,349
TOTAL DIVISION	<u>202,241</u>	<u>7,713,607</u>		<u>\$ 7,238,834</u>		<u>\$ 9,780,306</u>

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2023(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 2 RZ 10) (3)	Less Adjustment (4)	Adjusted Bill Analysis Revenues, Proposed Rates (5)	Adjustment Factor (Schedule 3 RZ 10) (6)	Revenues Under Proposed Rates (7)=(5)X(6) (7)	Pro Forma Adjustments Proposed Rates (Schedule 2) (8)	Total Pro Forma Revenue Proposed Rates (9)=(7)+(8) (9)	Proposed Increase (10)=(9)-(2) (10)	Percent Increase (11) (11)
METERED SALES										
Residential	\$ 2,099,876	\$ 2,360,874	\$ (140,785)	\$ 2,220,089	1.00157225	\$ 2,223,580	\$ 954,893	\$ 3,178,473	\$ 1,078,598	51.4%
Commercial	816,460	624,413	(28,213)	596,200	0.99153351	591,152	304,561	895,713	79,253	9.7%
Total Sales Related to Wastewater	\$ 2,916,336	\$ 2,985,287	\$ (168,998)	\$ 2,816,289		\$ 2,814,732	\$ 1,259,454	\$ 4,074,187	\$ 1,157,851	39.7%
Other Operating Revenues	7,435	7,435	7,435	7,435		7,435		7,435	-	0.0%
Total Wastewater Revenue	\$ 2,923,770	\$ 2,992,722	\$ (161,563)	\$ 2,823,724		\$ 2,822,167	\$ 1,259,454	\$ 4,081,621	\$ 1,157,851	
(a) Excludes Unbilled Revenue.										

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF APPLICATION OF PROPOSED RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Rate Zone PUC Pg.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)
RZ 10 - East Norriton Division	10	\$ 2,356,599	\$ 624,110				\$ 2,980,709
RZ 10 - East Norriton - Whitpain	10-WTP	4,275	303				4,578
		2,360,874	624,413	-	-	-	2,985,287
<u>Pro Forma Adjustments</u>							
Annualize Revenue - RZ 10 - East Norriton		953,663	304,561				1,258,224
Annualize Revenue - RZ 10 - East Norriton - Whitpain		1,230	-				1,230
June 2020 Advancement - RZ10 - East Norriton		(140,785)	(28,213)				(168,998)
Subtotal Adjustments		814,108	276,348	-	-	-	1,090,456
Total Pro Forma Revenues Under Proposed Rates		\$ 3,174,983	\$ 900,761	\$ -	\$ -	\$ -	\$ 4,075,744

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 4 RZ10) (3)	Less Adjustment (4)	Adjusted Bill Analysis Revenues, Present Rates (5)	Adjustment Factor (6)=(4)/(5) (6)=(4)/(5)	Revenues Under Present Rates (7)=(5)X(6) (7)=(5)X(6)	Pro Forma Adjustments Present Rates (Schedule 4 and 6 RZ10) (8)	Total Pro Forma Revenue Present Rates (9)=(7)+(8) (9)=(7)+(8)
METERED SALES								
Residential	\$ 1,463,700	\$ 1,557,407	\$ (96,005)	\$ 1,461,402	1.001572250	\$ 1,463,700	\$ 636,176	\$ 2,099,876
Commercial	536,265	565,659	(24,815)	540,844	0.991533511	536,265	280,195	816,460
Subtotal	1,999,965	2,123,066	(120,820)	2,002,246		1,999,965	916,371	2,916,336
Other Operating Revenues	7,435	7,435	7,435	7,435		7,435		7,435
Total Wastewater Revenue	\$ 2,007,399	\$ 2,130,501	\$ (113,385)	\$ 2,009,681		\$ 2,007,399	\$ 916,371	\$ 2,923,770

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
SUMMARY OF APPLICATION OF PRESENT RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division	Div. Ref.	Residential	Commercial	Total Sales
(1)		(2)	(3)	(7)
RZ 10 - East Norriton	10	1,555,269	565,157	2,120,426
RZ 10 - East Norriton - Whitpain	10-WTP	2,138	502	2,640
Total Present Wastewater Revenue		1,557,407	565,659	2,123,066
<u>Pro Forma Adjustments</u>				
Annualize Revenue - RZ 10 - East Norriton	10	635,552	280,195	915,747
Annualize Revenue - RZ 10 - East Norriton - Whitpain	10-WTP	624	-	624
June 2020 Advancement - RZ10 - East Norriton	10	(96,005)	(24,815)	(120,820)
		540,171	255,380	795,551
Total Pro Forma Revenues				
Under Present Rates		\$ 2,097,578	\$ 821,039	\$ 2,918,617

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	35,201	-	\$ 21.08	\$ 742,041	\$ 32.37	\$ 1,139,463
3/4	9	-	21.08	191	32.37	294
1	3,962	-	21.08	83,522	32.37	128,254
6	9	-	21.08	192	32.37	296
Subtotal	39,182	-		825,946		1,268,307
Allowance (1,333 Gallons)		491,429	-	\$ -	0.6540	\$ 321,395
1st block	-	1,004,491	0.6540	656,937	0.6540	656,937
Subtotal	-	1,495,921		656,937		978,332
Total Metered	39,182	1,495,921		\$ 1,482,883		\$ 2,246,639
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	1,879	-	\$ 38.53	\$ 72,386	\$ 58.53	\$ 109,960
TOTAL RESIDENTIAL	41,060	1,495,921		\$ 1,555,269		\$ 2,356,599
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	1,771	-	\$ 21.08	\$ 37,332	\$ 32.37	\$ 57,326
3/4	7	-	21.08	150	32.37	231
1	406	-	21.08	8,552	32.37	13,133
1-1/2	195	-	21.08	4,104	32.37	6,301
2	279	-	21.08	5,880	32.37	9,030
4	95	-	21.08	1,998	32.37	3,067
6	88	-	21.08	1,861	32.37	2,858
8	72	-	21.08	1,507	32.37	2,314
10	17	-	21.08	364	32.37	559
Subtotal	2,929	-		61,748		94,819
Allowance (1,333 Gallons)		31,511	-	\$ -	0.6540	\$ 20,608
1st block	-	754,203	0.6540	493,249	0.6540	493,249
Subtotal	-	785,714		493,249		513,857
Total Metered Commercial	2,929	785,714		\$ 554,997		\$ 608,676
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	264	-	\$ 38.53	\$ 10,160	\$ 58.53	\$ 15,434
TOTAL COMMERCIAL	3,193	785,714		\$ 565,157		\$ 624,110
TOTAL DIVISION	44,253	2,281,635		\$ 2,120,426		\$ 2,980,709

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
WHITPAIN TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Consumption (6)	Proposed Rate (7)	Proposed Revenue (8)
<u>Residential - Monthly</u>							
Customer Charge							
Up to 6,666 gals.	58	772	\$ 31.66	\$ 1,821		\$ 32.37	\$ 1,862
Over 6,666 gals.	<u>8</u>	<u>2,522</u>	39.57	<u>317</u>		32.37	<u>259</u>
	66	3,294		2,138			2,121
First Block					3,294	\$ 0.6540	2,154
TOTAL RESIDENTIAL	66	3,294		\$ 2,138	3,294		\$ 4,275
<u>Commercial - Monthly</u>							
Customer Charge							
4	<u>9</u>	<u>-</u>	\$ 56.00	<u>\$ 502</u>		\$ 32.37	<u>\$ 290</u>
Subtotal	9	-		502			290
Allowance (4,000 Gallons)		20	-	\$ -	\$ 20	0.6540	13
1st block	<u>-</u>	<u>20</u>	0.8000	<u>-</u>	<u>20</u>	0.6540	<u>-</u>
Subtotal	-	20		-	20		13
TOTAL COMMERCIAL	9	20		\$ 502	20		\$ 303
TOTAL WHITPAIN TOWNSHIP	75	3,314		\$ 2,640			\$ 4,578
	75	3314					

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	14,037	-	\$ 21.08	\$ 295,906	\$ 32.37	\$ 454,386
3/4	4	-	21.08	75	32.37	115
1	1,598	-	21.08	33,687	32.37	51,729
6	4	-	21.08	83	32.37	127
Subtotal	15,643	-		329,751		506,357
Allowance (1,333 Gallons)		193,872	-	\$ -	0.6540	\$ 126,793
1st block	-	424,246	0.6540	277,457	0.6540	277,457
Subtotal	-	618,118		277,457		404,250
Total Metered	15,643	618,118		\$ 607,208		\$ 910,607
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	736	-	\$ 38.53	\$ 28,344	\$ 58.53	\$ 43,056
TOTAL RESIDENTIAL	16,378	618,118		\$ 635,552		\$ 953,663
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	713	-	\$ 21.08	\$ 15,031	\$ 32.37	\$ 23,081
3/4	6	-	21.08	122	32.37	188
1	169	-	21.08	3,570	32.37	5,481
1-1/2	80	-	21.08	1,684	32.37	2,586
2	116	-	21.08	2,450	32.37	3,762
4	46	-	21.08	978	32.37	1,501
6	40	-	21.08	840	32.37	1,291
8	33	-	21.08	689	32.37	1,059
10	8	-	21.08	169	32.37	260
Subtotal	1,211	-		25,533		39,209
Allowance (1,333 Gallons)		13,214	-	\$ -	0.6540	\$ 8,642
1st block	-	383,361	0.6540	250,718	0.6540	250,718
Subtotal	-	396,575		\$ 250,718		\$ 259,360
Total Metered Commercial	1,211	396,575		\$ 276,251		\$ 298,569
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	102	-	\$ 38.53	\$ 3,944	\$ 58.53	\$ 5,992
TOTAL COMMERCIAL	1,314	396,575		\$ 280,195		\$ 304,561
TOTAL DIVISION	17,692	1,014,693		\$ 915,747		\$ 1,258,224

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
WHITPAIN TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Consumption (6)	Proposed Rate (7)	Proposed Revenue (8)
<u>Residential - Monthly</u>							
Customer Charge							
Up to 6,666 gals.	13	220	\$ 31.66	\$ 426		\$ 32.37	\$ 436
Over 6,666 gals.	<u>5</u>	<u>747</u>	39.57	<u>198</u>		32.37	<u>162</u>
	18	967		624			598
First Block					967	\$ 0.6540	632
TOTAL RESIDENTIAL	18	967		\$ 624	967		\$ 1,230
<u>Commercial - Monthly</u>							
Customer Charge							
4	-	-	\$ 56.00	\$ -		\$ 32.37	\$ -
Subtotal	-	-		-			-
Allowance (4,000 Gallons)		-	-	\$ -	\$ -	0.6540	-
1st block	-	-	0.8000	-		0.6540	-
Subtotal	-	-		-	-		-
Total Metered	-	-		\$ -	-		\$ -
TOTAL WHITPAIN TOWNSHIP	18	967		\$ 624			\$ 1,230

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO PRO FORMA ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	(1,962)	-	\$ 21.08	\$ (41,364)	\$ 32.37	\$ (63,518)
3/4	(1)	-	21.08	(11)	32.37	(18)
1	(222)	-	21.08	(4,677)	32.37	(7,181)
6	(1)	-	21.08	(20)	32.37	(30)
Subtotal	(2,186)	-		(46,072)		(70,747)
Allowance (1,333 Gallons)		(26,773)	-	\$ -	0.6540	\$ (17,510)
1st block	-	(68,709)	0.6540	(44,935)	0.6540	(44,935)
Subtotal	-	(95,482)		(44,935)		(62,445)
Total Metered	(2,186)	(95,482)		\$ (91,007)		\$ (133,192)
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	(130)	-	\$ 38.53	\$ (4,998)	\$ 58.53	\$ (7,593)
TOTAL RESIDENTIAL	(2,315)	(95,482)		\$ (96,005)		\$ (140,785)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	(97)	-	\$ 21.08	\$ (2,049)	\$ 32.37	\$ (3,147)
3/4		-	21.08	-	32.37	-
1	(22)	-	21.08	(458)	32.37	(704)
1-1/2	(10)	-	21.08	(211)	32.37	(325)
2	(16)	-	21.08	(337)	32.37	(518)
4	(9)	-	21.08	(200)	32.37	(307)
6	(7)	-	21.08	(138)	32.37	(213)
8	(6)	-	21.08	(124)	32.37	(190)
10		-	21.08	-	32.37	-
Subtotal	(167)	-		(3,517)		(5,404)
Allowance (1,333 Gallons)		(1,726)	-	\$ -	0.6540	\$ (1,128)
1st block	-	(31,436)	0.6540	(20,559)	0.6540	(20,559)
Subtotal	-	(33,162)		\$ (20,559)		\$ (21,687)
Total Metered Commercial	(167)	(33,162)		\$ (24,076)		\$ (27,091)
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	(19)	-	\$ 38.53	\$ (739)	\$ 58.53	\$ (1,122)
TOTAL COMMERCIAL	(186)	(33,162)		\$ (24,815)		\$ (28,213)
TOTAL DIVISION	(2,501)	(128,644)		\$ (120,820)		\$ (168,998)

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2023(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 3) (3)	Ref.	Adjustment Factor (Schedule 2) (4)	Revenues Under Proposed Rates (5)=(3)X(4) (5)	Pro Forma Adjustments Proposed Rates (Schedule 3) (6)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6) (7)	Proposed Increase (8)=(7)-(2) (8)	Percent Increase (9) (9)
METERED SALES									
Residential	\$ 2,291,038	\$ 685,629	Sch. 2	1.00133871	\$ 686,547	\$ 2,461,278	\$ 3,147,825	\$ 856,787	37.4%
Commercial	580,660	219,603	Sch. 2	1.00167313	219,970	567,642	787,612	206,952	35.6%
Public Authority	-	704	Sch. 2	1.00000000	704	(704)	-	-	
Total Sales Related to Wastewater	\$ 2,871,698	\$ 905,936			\$ 907,221	\$ 3,028,216	\$ 3,935,437	\$ 1,063,739	37.0%
Other Operating Revenues	-	-			-	-	-	-	
Total Wastewater Revenue	\$ 2,871,698	\$ 905,936			\$ 907,221	\$ 3,028,216	\$ 3,935,437	\$ 1,063,739	37.0%
(a) Excludes Unbilled Revenue.									

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 3) (3)	Ref.	Adjustment Factor (4)=(2)/(3)	Revenues Under Present Rates (5)=(3)X(4)	Pro Forma Adjustments Present Rates (Schedule 3) (6)	Add Back Annualized DSIC Revenue (7)	Total Pro Forma Revenue Present Rates (8)=(5)+(6)+(7)
METERED SALES								
Residential	\$ 499,679	\$ 499,011	Sch. 3 RZ11	1.001338708	\$ 499,679	\$ 1,791,359	\$ -	\$ 2,291,038
Commercial	161,141	160,872	Sch. 3 RZ11	1.001673131	161,141	419,519	-	580,660
Public Authority	513	513	Sch. 3 RZ11	1.000000000	513	(513)	-	-
Total	\$ 661,333	\$ 660,396			\$ 661,333	\$ 2,210,365	\$ -	\$ 2,871,698
Other Operating Revenues	-	-			-			-
Total Wastewater Revenue	\$ 661,333	\$ 660,396			\$ 661,333	\$ 2,210,365	\$ -	\$ 2,871,698

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,080	-	\$ 37.64	\$ 228,826	\$ 51.71	\$ 314,390
Subtotal	6,080	-		228,826		314,390
Allowance (1,667 Gallons)		95,055	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		121,041	1.5170	183,618	2.0844	252,297
2nd block (Over 5,000 gallons)	-	44,054	1.9650	86,567	2.6999	118,942
Subtotal	-	260,150		270,185		371,239
Total Metered	6,080	260,150		\$ 499,011		\$ 685,629
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	1,177	-	\$ 52.71	\$ 62,041	\$ 72.42	\$ 85,246
Subtotal	1,177	-		62,041		85,246
Allowance (1,667 Gallons)		18,230	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		16,023	2.3500	37,655	3.2289	51,738
2nd block (Over 5,000 gallons)	-	8,647	3.0150	26,070	4.1426	35,820
Subtotal	-	42,901		63,725		87,558
Total Metered	1,177	42,901		\$ 125,766		\$ 172,804
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	90	-	\$ 64.31	\$ 5,800	\$ 72.42	\$ 6,532
Subtotal	90	-		5,800		6,532
Allowance (1,667 Gallons)		1,450	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		2,420	3.3020	7,991	4.5369	10,979
2nd block (Over 5,000 gallons)	-	3,400	4.1670	14,168	5.7255	19,467
Subtotal	-	7,270		22,159		30,446
Total Metered	90	7,270		\$ 27,959		\$ 36,978
Total Commercial	1,267	50,171		\$ 153,725		\$ 209,782

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION

APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 218.32	\$ 655	\$ 299.97	\$ 900
Subtotal	3	-		655		900
Allowance (1,667 Gallons)		250	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		48	2.3500	113	3.2289	155
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	298		113		155
Total Metered	3	298		\$ 768		\$ 1,055
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	10	-	\$ 180.69	\$ 1,873	\$ 248.27	\$ 2,574
Subtotal	10	-		1,873		2,574
Allowance (1,667 Gallons)		35	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		-	2.3500	-	3.2289	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	35		-		-
Total Metered	10	35		\$ 1,873		\$ 2,574
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 165.62	\$ 497	\$ 227.56	\$ 683
Subtotal	3	-		497		683
Allowance (1,667 Gallons)		200	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		247	2.3500	580	3.2289	798
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	447		580		798
Total Metered	3	447		\$ 1,077		\$ 1,481
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 143.05	\$ 429	\$ 196.55	\$ 590
Subtotal	3	-		429		590
Allowance (1,667 Gallons)		150	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		10	2.3500	24	3.2289	32
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	160		24		32
Total Metered	3	160		\$ 453		\$ 622
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	6	-	\$ 127.98	\$ 768	\$ 175.84	\$ 1,055
Subtotal	6	-		768		1,055
Allowance (1,667 Gallons)		100	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		-	2.3500	-	3.2289	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	100		-		-
Total Metered	6	100		\$ 768		\$ 1,055

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION

APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 90.34	\$ 1,084	\$ 124.13	\$ 1,490
Subtotal	12	-		1,084		1,490
Allowance (1,667 Gallons)		350	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		260	2.3500	611	3.2289	840
2nd block (Over 5,000 gallons)	-	170	3.0150	513	4.1426	704
Subtotal	-	780		1,124		1,544
Total Metered	12	780		\$ 2,208		\$ 3,034
Total Combined Residential & Commercial	37	1,820		\$ 7,147		\$ 9,821
Total Commercial & Combined	1,305	51,991		\$ 160,872		\$ 219,603
<u>Public - Monthly</u>						
Customer Charge						
5/8	4	-	\$ 52.71	\$ 198	\$ 72.42	\$ 272
Subtotal	4	-		198		272
Allowance (1,667 Gallons)		61	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		82	1.5170	125	2.0844	171
2nd block (Over 5,000 gallons)	-	97	1.9650	190	2.6999	261
Subtotal	-	240		315		432
Total Metered	4	240		\$ 513		\$ 704
Total New Garden Division	7,388	312,381		\$ 660,396		\$ 905,936

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,912	-	\$ 37.64	\$ 636,516	\$ 51.71	\$ 874,526
Subtotal	16,912	-		636,516		874,526
Allowance (1,667 Gallons)		745	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		57,220	1.5170	86,803	2.0844	119,270
2nd block (Over 5,000 gallons)	-	543,532	1.9650	1,068,040	2.6999	1,467,482
Subtotal	-	601,498		1,154,843		1,586,752
Total Metered	16,912	601,498		\$ 1,791,359		\$ 2,461,278
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	875	-	\$ 52.71	\$ 46,113	\$ 72.42	\$ 63,360
Subtotal	875	-		46,113		63,360
Allowance (1,667 Gallons)		(9,680)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		115,471	2.3500	271,356	3.2289	372,844
2nd block (Over 5,000 gallons)	-	(8,647)	3.0150	(26,070)	4.1426	(35,820)
Subtotal	-	97,144		245,286		337,024
Total Metered	875	97,144		\$ 291,399		\$ 400,384
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	242	-	\$ 64.31	\$ 15,585	\$ 88.36	\$ 21,415
Subtotal	242	-		15,585		21,415
Allowance (1,667 Gallons)		(500)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		17,350	3.3020	57,290	4.5369	78,716
2nd block (Over 5,000 gallons)	-	14,124	4.1670	58,854	5.7255	80,866
Subtotal	-	30,974		116,144		159,582
Total Metered	242	30,974		\$ 131,729		\$ 180,997
Total Commercial	1,117	128,118		\$ 423,128		\$ 581,381

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 72.77	\$ (218)	\$ 299.97	\$ (900)
Subtotal	(3)	-		(218)		(900)
Allowance (1,667 Gallons)		(250)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		(48)	2.3500	(113)	3.2289	(155)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	(298)		(113)		(155)
Total Metered	(3)	(298)		\$ (331)		\$ (1,055)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(10)	-	\$ 60.23	\$ (624)	\$ 299.97	\$ (3,110)
Subtotal	(10)	-		(624)		(3,110)
Allowance (1,667 Gallons)		(35)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		-	2.3500	-	3.2289	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	(35)		-		-
Total Metered	(10)	(35)		\$ (624)		\$ (3,110)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 55.21	\$ (166)	\$ 299.97	\$ (900)
Subtotal	(3)	-		(166)		(900)
Allowance (1,667 Gallons)		(200)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		(247)	2.3500	(580)	3.2289	(798)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	(447)		(580)		(798)
Total Metered	(3)	(447)		\$ (746)		\$ (1,698)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 47.68	\$ (143)	\$ 299.97	\$ (900)
Subtotal	(3)	-		(143)		(900)
Allowance (1,667 Gallons)		(150)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		(10)	2.3500	(24)	3.2289	(32)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-
Subtotal	-	(160)		(24)		(32)
Total Metered	(3)	(160)		\$ (167)		\$ (932)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(6)	-	\$ 42.66	\$ (256)	\$ 299.97	\$ (1,800)
Subtotal	(6)	-		(256)		(1,800)
Allowance (1,667 Gallons)		(100)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		-	2.3500	-	3.2289	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.1426	-

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
Subtotal	-	(100)		-		-
Total Metered	(6)	(100)		\$ (256)		\$ (1,800)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(12)	-	\$ 30.11	\$ (361)	\$ 299.97	\$ (3,600)
Subtotal	(12)	-		(361)		(3,600)
Allowance (1,667 Gallons)		(350)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		(260)	2.3500	(611)	3.2289	(840)
2nd block (Over 5,000 gallons)	-	(170)	3.0150	(513)	4.1426	(704)
Subtotal	-	(780)		(1,124)		(1,544)
Total Metered	(12)	(780)		\$ (1,485)		\$ (5,144)
Total Combined Residential & Commercial	(37)	(1,820)		\$ (3,609)		\$ (13,739)
Total Commercial & Combined	1,080	126,297		\$ 419,519		\$ 567,642
<u>Public - Monthly</u>						
Customer Charge						
5/8	(4)	-	\$ 52.71	\$ (198)	\$ 72.42	\$ (272)
Subtotal	(4)	-		(198)		(272)
Allowance (1,667 Gallons)		(61)	-	\$ -	-	\$ -
1st block (up to 5,000 gallons)		(82)	1.5170	(125)	2.0844	(171)
2nd block (Over 5,000 gallons)	-	(97)	1.9650	(190)	2.6999	(261)
Subtotal	-	(240)		(315)		(432)
Total Metered	(4)	(240)		\$ (513)		\$ (704)
Total New Garden Division	17,988	727,555		\$ 2,210,365		\$ 3,028,216

APPENDIX

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- a. A description of the allocation methods used. A comparison of the allocated cost of service by class with the present and proposed revenues. A cost of service schedule showing the rate of return produced by present and proposed rates by class of service.

RESPONSE

A description of the methods used for the cost of service study is provided in Exhibit No. 5-B, Part I and in Statement No. 5. A comparison of the allocated cost of service by class with the present and proposed revenues is provided on Schedule A of Exhibit No. 5-B, part I.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- b. Indicate if the method used for establishing the allocation factors in the cost of service study deviates from the previous study submitted in the last rate case. If yes, indicate which allocation factors were changed and discuss the reason for the changes.

RESPONSE

The method used for establishing the allocation factors in the cost of service study does not deviate from the previous study submitted in the last rate case.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- c. Supply the average day, the maximum day and the maximum hour deliveries to the system adjusted for storage for the historic test year and 2 prior years. Also provide workpapers, analyses, comparative data or other documentation supporting the estimated maximum day and peak hour demands by customer class reflected in the company's cost of service study.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- d. Explain thoroughly the methodology employed if the company distinguishes between transmission and distribution or collection mains in its allocation of costs.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- e. Provide a detailed explanation of how storage is utilized to meet base, maximum day and maximum hour demands.

RESPONSE

There is no storage for the wastewater system.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- f. Provide workpapers, calculations and supporting documentation which develop the equivalent meters and equivalent service line weights reflected in the company's cost of service study.

RESPONSE

There are no meter or service equivalents calculated for this study.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- g. Provide all workpapers and supporting documentation for the fire flow requirement and duration utilized in the cost of service study.

RESPONSE

Because this is a wastewater operation, there is no fire flow requirement.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a breakdown of the number and size of private fire services according to the general water service class of customer.

RESPONSE

Not applicable.

AQUA PENNSYLVANIA INC.
WASTEWATER BASE OPERATIONS

CALCULATION OF CUSTOMER COST PER MONTH

		<u>Per Month</u>
(1) Cost Related to Customer Facilities	\$ 896,733	
(2) Service Equivalents X 12	210,985	
(3) Cost per Bill - Meter related		\$ 4.25
(4) Cost Related to Customer Accounting	\$ 1,911,529	
(5) Number of Bills	210,985	
(6) Cost per Bill		\$ 9.06
(7) Cost Related to I&I	\$ 14,882,763	
(8) Percentage of I&I Cost to to be recoverd in Customer Charge	66.67%	
(9) Net Cost Related to I&I to be recovered in Customer Charge	\$ 9,922,338	
(10) Service Equivalents X 12	210,985	
(11) Cost per Bill - I&I Related		\$ 47.03
(12) Total Customer Costs (3)+(6)+(11)		\$ 60.34

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a calculation of the company's base cost of water or wastewater per unit of consumption or usage.

RESPONSE

Please refer to the functional allocation schedule attached. The calculation of the average flow cost per hundred gallons for the Wastewater Base Operations is as follows:

Total Flow Costs	\$21,483,039
(includes collection and treatment expenses and 1/3 of I&I Expenses)	
Pro Forma Usage	8,632,773
Flow Cost per 100 gallons	\$2.49

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS1. Provide a complete (fully allocated) cost of service study if an interval of approximately three years has passed between a previous cost of service study and the historic test year date of the current filing. The cost of service study shall provide the necessary data to determine if the water rate structure is fair and equitable to all classifications of water uses (including public and private fire protection customers) and reflects, as nearly as possible, the cost of providing the service. The study shall correspond to the test year proposed revenue requirements (future test year only, if used). Summaries of conclusions and all back-up calculations shall be made part of the submission of the cost of service study and shall include the following.

- h. Provide a detailed cost analysis that supports the company's customer charges, by meter size, showing all direct and indirect costs included.

RESPONSE

Please refer to attached schedule.

AQUA PENNSYLVANIA, INC.

RESPONSES TO RATE STRUCTURE
AND COST OF SERVICE FILING REQUIREMENTS

RS2. Provide a listing of negotiated special rate contracts which includes a comparison of revenues under special rate contracts and under tariff rates. Provide the cost of service treatment of any deficiency in revenues resulting from the negotiated special rate contracts. Special rates are defined as rates not contained in the currently effective tariff.

RESPONSE

Please refer to attached schedule.

AQUA PENNSYLVANIA, INC.
WASTEWATER
CONTRACT SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
TARIFF RATES						
Customer Charge						
Zone Three Rates (220 EDU) (a)	12	-	\$ 46.00	\$ 121,440	\$ 58.09	\$ 153,358
1st block	-	69,000 (b)	0.8500	\$ 58,650	\$ 1.0734	\$ 74,065
Total Tariff Rate	12	69,000		\$ 180,090		\$ 227,423
CONTRACT RATE						
Flat Rate						
January 14, '20 to January 14, '20	9	-	\$ 25,551.80	\$ 229,966	\$ 27,921.14	\$ 251,290
January '20 to December '20	3	-	\$ 26,318.35	78,955	\$ 27,921.14	83,763
	12	-		308,921		335,053
TOTAL	12	-		\$ 308,921		\$ 335,053

(a) Tariff rates projected under Zone Three or Woodloch Springs Division Rates

(b) Consumption is provided by the Woodloch Pines, Aqua PA water contract.

AQUA PENNSYLVANIA
RESIDENTIAL CUSTOMER CLASS - WASTEWATER CONSUMPTION
COMPARISON OF HISTORIC TEST YEAR CAPPED CONSUMPTION TO HISTORIC TEST YEAR ANNUAL CONSUMPTION
IN 100 GALLONS

Rate Zone	Historic Test Year Capped Consumption*	Historic Test Year Total Consumption	Difference	Percentage Difference
RZ 1 - Bridlewood, Eagle Rock	271,274	443,649	(172,375)	-38.9%
RZ 1 - Media Division	471,512	714,968	(243,456)	-34.1%
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill	518,192	828,860	(310,668)	-37.5%
RZ 1B - Penn Township	150,467	322,232	(171,765)	-53.3%
RZ 2 - Emlenton, Rivercrest, White Haven	231,899	357,288	(125,389)	-35.1%
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stoney Creek, Thornhurst, Willsitown Woods, and Woodloch Springs	488,749	771,376	(282,627)	-36.6%
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills	192,723	289,520	(96,798)	-33.4%
RZ 5 - Newlin Green	28,025	42,191	(14,166)	-33.6%
RZ 5 - Avon Grove School, East Bradford, Little Washington, Greens at Penn Oaks, Sage Hill and Plumstock	171,899	260,893	(88,994)	-34.1%
RZ 6 - Masthope Division	157,167	301,022	(143,856)	-47.8%
	2,681,906	4,331,999	(1,650,093)	-38.1%
RZ 7 - Limerick Division	1,660,589	2,522,764	(862,175)	-34.2%
RZ 9 - Cheltenham Township Division	3,223,894	4,999,733	(1,775,839)	-35.5%
	10,248,295	16,186,495	(5,938,200)	-36.7%

*Total Residential Consumption for the Months of May-October capped at 4 months average winter consumption per Aqua IL tariff.

Aqua Pennsylvania, Inc.
Current and Proposed Rates

RZ-1 - Meter Size				RZ-1 - EDU				RZ-1A			
	Media Division			Bridlewood and Eagle Rock Divisions				Treasure Lake, Village at Valley Forge and Bunker Hill Divisions			
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change	
Residential											
EDU Charge											
	\$	31.00	\$ 43.30	\$	31.00	\$ 43.30		\$	31.00	\$ 43.30	
Non-Residential											
	Meter Size Charges			Per EDU				Meter Size Charges			
5/8	1	31.00	43.30	39.7%							
3/4	1.5	46.50	64.95	39.7%							
1	2.5	77.50	108.25	39.7%							
1-1/2	5	155.00	216.50	39.7%							
2	8	248.00	346.40	39.7%							
3	15	465.00	649.50	39.7%							
4	25	775.00	1,082.50	39.7%							
6	50	1,550.00	2,165.00	39.7%							
8	80	2,480.00	3,464.00	39.7%							
10	115	3,565.00	4,979.50	39.7%							
Flat Rate Customer Charges											
		61.40	85.73	39.6%							
					61.40	85.73			56.20	85.73	
											52.5%
Consumption Charges:											
1st block		0.7600	1.0608	39.6%							
2nd block					0.7600	1.0608			0.6300	1.0608	
3rd block											68.4%
Block Size (100 gallons)											
First											
Over											
SPECIAL CHARGES											
Customer Charges:											
	Media Division	31.00	43.30	39.7%	Bridlewood Apartment Complex						
					13,323.80	18,603.84					39.6%
					Children's World Daycare	217 EDUs					
					429.80	600.12					39.6%
					7 EDUs						
Consumption Charges:											
All Usage		0.7600	1.0608	39.6%							

[illegible]

Aqua Pennsylvania, Inc.
Current and Proposed Rates

	RZ-3			RZ-4			RZ-5		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
Residential									
EDU Charge	\$ 46.00	\$ 64.21	39.6%	\$ 62.00	\$ 77.50	25.0%	\$ 74.00	\$ 103.29	39.6%
Non-Residential									
	Meter Size Charges			Meter Size Charges			Meter Size Charges*		
5/8	46.00	64.21	39.6%	62.00	77.50	25.0%	74.00	103.29	39.6%
3/4	69.00	96.31	39.6%	93.00	116.30	25.1%	111.00	154.90	39.5%
1	115.00	160.52	39.6%	155.00	183.80	25.0%	185.00	258.20	39.6%
1-1/2	230.00	321.03	39.6%	310.00	387.50	25.0%	370.00	516.50	39.6%
2	368.00	513.65	39.6%	496.00	620.00	25.0%	592.00	826.30	39.6%
3	690.00	963.10	39.6%	930.00	1,162.50	25.0%	1,110.00	1,549.40	39.6%
4	1,150.00	1,605.17	39.6%	1,550.00	1,937.50	25.0%	1,850.00	2,562.30	39.6%
6	2,300.00	3,210.34	39.6%	3,100.00	3,875.00	25.0%	3,700.00	5,164.50	39.6%
8	3,680.00	5,136.54	39.6%	4,960.00	6,200.00	25.0%	5,920.00	8,263.20	39.6%
10	5,290.00	7,383.78	39.6%	7,130.00	8,912.50	25.0%	8,510.00	11,878.40	39.6%
Flat Rate Customer Charges									
	80.00	111.67	39.6%	100.00	125.00	25.0%	112.40	156.89	39.6%
Consumption Charges:									
1st block	0.8500	1.1864	39.6%	0.9500	1.1875	25.0%	0.9600	1.3400	39.6%
2nd block									
3rd block									
Block Size (100 gallons)									
First									
Over									
SPECIAL CHARGES									
Customer Charges:									
	Flat Rate - Various Divisions						Newlin Geen Division		
	71.50	111.67	56.2%				110.00	103.29	-6.1%
	Woodloch Springs						Sage Hill Division - Unmetered		
	262.21	393.90	39.6%				180.00	156.89	-12.8%
							Avon Grove School - Flat Rate		
							\$ 8,281.25	\$ 11,609.86	40.2%
Consumption Charges:									
All Usage							SPECIAL CHARGES		
							Newlin Geen Division		
							0.7500	1.3400	78.7%
							East Brandywine Twp		

Aqua Pennsylvania, Inc.
Current and Proposed Rates

SEASONAL

RZ-6

	Masthope Division		
	Current Rates	Proposed Rates	Change
Residential			
EDU Charge	\$ 39.64	\$ 55.30	39.5%
Non-Residential			
5/8	Per EDU 39.64	55.30	39.5%
3/4	39.64	55.30	39.5%
1	39.64	55.30	39.5%
1-1/2	39.64	55.30	39.5%
2	39.64	55.30	39.5%
3	39.64	55.30	39.5%
4	39.64	55.30	39.5%
6	39.64	55.30	39.5%
8	39.64	55.30	39.5%
10	39.64	55.30	39.5%
Flat Rate Customer Charges	43.64	60.88	39.5%

Consumption Charges:

1st block
2nd block
3rd block

0.1000

0.1396

39.6%

Block Size (100 gallons)

First
Over

SPECIAL CHARGES
Customer Charges:

Consumption Charges:

All Usage

water quality data is not readily available. Not only are rates in Peddlers View higher than those in surrounding communities, but they are higher than other rates within the Aqua rate zones.⁸ She closed by observing that the Peddler's Village system generates more in revenue than it costs to run, therefore she perceives it as a "cash cow" for Aqua.

Jacqueline Iverson expanded on Ms. Fleschar's testimony that the Peddler's View has had at least five rate increases in the last ten years. Rates were increased by 42.5% in 2007. From 2011 to 2021, the rate increases to date exceed 70%. In her view, Aqua has been permitted to leverage customers by way of rate hikes in order to finance acquisition and expansion.

F. November 12, 2021, at 1:00 p.m.

The final public input hearing was held by telephone and convened at 1:00 p.m. Ten individuals testified under oath. Most of the witnesses were wastewater customers.

Senator Katie Muth opened the hearing with a statement opposing the proposed rate increases. She noted that many of her constituents are on fixed incomes and that the proposed increases of 17% for residential water customers in her district and 33% for wastewater customers were too much to ask. She further noted that residents are still struggling from the effects of the COVID-19 pandemic as recovery from Tropical Storm Ida. While she appreciated Aqua's spending on infrastructure improvements, particularly as related to a new \$8 million laboratory opened in Bryn Mawr, she went on to note that Aqua had also spent \$295 million buying eight systems in the Philadelphia suburbs since 2016. In her view, Aqua should draw on other financial resources rather than increased rates charged to the consumers in her district.

Geoffrey Meyer, Peter Mrozinski and Bill Ferguson coordinated their testimony opposing the proposed rate increase specifically for New Garden Township wastewater rates. Mr. Meyer began by stating that the proposed 37% rate increase for New Garden Township is unjustified. In his view, there were many inconsistencies in the rate filing. He pointed out

⁸

See Fleschar Ex. 1-3.

various sections of the rate filing that lacked clarity or explanation, and questioned whether it was appropriate to assess certain expenses on ratepayers. These areas were detailed in Meyer Exhibit 1, which was admitted into the record.

Mr. Mrozinski provided background information regarding the acquisition of the New Garden Township system by Aqua. He noted that Aqua had initially agreed to a rate freeze when the system was acquired. Although the rate freeze was rejected by the Commission, if Aqua was willing to accept it as a condition of the sale, he does not believe Aqua should be requesting a rate increase now. He also noted that New Garden Township had already increased rates on customers by 27% just before the purchase by Aqua. Residents have already been subjected to successive rate increases. He agreed with Mr. Meyer that the application seemed to be intentionally written to prevent a clear analysis of the rate filing.

Mr. Ferguson closed the joint argument by agreeing with Mr. Meyer that the rate filing was deliberately opaque and inconsistent. For example, one part of the filing expressed rate data in a monthly fashion, but in others rate data was expressed quarterly. He also reviewed data which demonstrated Aqua's profitability to investors. As a regulated public utility, he argued that if the proposed rate increase is approved, Aqua is protected from the consequences of poor business decisions in the acquisition of other wastewater systems because it is guaranteed a return on its investment. He noted that given Aqua's financial success it should not require such a substantial rate increase.

John Day and Vivian George also opposed the rate increase for wastewater. They are both residents of Lake Harmony, in the Pocono Mountains. Their community includes many vacations homes that are not occupied all the time. Both complained that the fixed, unmetered rate charged by Aqua is unfair and does not differentiate between full-time residents and part-time residents. Ms. George also pointed out that many homes are rented to a large number of visitors on a weekly basis who likely utilize a lot of sewage capacity. Mr. Day also pointed out the flat rate is based on 4,000 gallons of consumption per month which is not representative of actual usage in Lake Harmony.

**PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17120**

Aqua Exhibit B

Public Meeting held May 12, 2022

Commissioners Present:

Gladys Brown Dutrieuille, Chairman, Statement
John F. Coleman, Jr., Vice Chairman
Ralph V. Yanora

Pennsylvania Public Utility Commission	R-2021-3027385
Bureau of Investigation and Enforcement	
Office of Consumer Advocate	C-2021-3028466
Office of Small Business Advocate	C-2021-3028509
Martha Bronson	C-2021-3028132
Neil Kugelman	C-2021-3028139
Geoffrey Rhine	C-2021-3028170
Theodore Voltolina	C-2021-3028194
Aaron Brown	C-2021-3028279
Darren Distasio	C-2021-3028285
Deena Denesowicz	C-2021-3028288
Vivian George	C-2021-3028310
Nick Panaccio	C-2021-3028331
Richard Regnier	C-2021-3028332
Gerald DiNunzio Jr.	C-2021-3028362
Nancy Reedman	C-2021-3028405
Michael McCall	C-2021-3028413
Raymond Cavalieri	C-2021-3028448
Byron Goldstein	C-2021-3028463
John Grassie	C-2021-3028663
Kyle Brophy	C-2021-3028712
Daniel Savino	C-2021-3028758
Michael Roberts	C-2021-3028869
Treasure Lake Property Owners Association Inc.	C-2021-3029004
Gerardo Giannattasio	C-2021-3029066
Aqua Large Users Group	C-2021-3029089

Erik McElwain	C-2021-3029135
Judy Burton	C-2021-3029152
Brian Edwards	C-2021-3029159
Richard Gage	C-2021-3029393
Joanne Smyth	C-2021-3029411
Jane O'Donovan	C-2021-3029532

v.

Aqua Pennsylvania, Inc.

Pennsylvania Public Utility Commission	R-2021-3027386
Bureau of Investigation and Enforcement	
Office of Consumer Advocate	C-2021-3028467
Office of Small Business Advocate	C-2021-3028511
Camp Stead Property Owners Association	C-2021-3028928
Dale Markowitz	C-2021-3028280
Keith Anthony	C-2021-3028444
Stephanie Boris	C-2021-3028443
Jennifer Buckley	C-2021-3028160
Carl Martinson	C-2021-3028312
Elizabeth O'Neill	C-2021-3028333
Erik and Ilisha Smith	C-2021-3028334
Curtis and Michele Tabor	C-2021-3028335
Gregory Valerio	C-2021-3028336
Jerome Perch	C-2021-3028356
Michael Brull	C-2021-3028361
James Blessing	C-2021-3028402
Elizabeth Yost	C-2021-3028407
Timothy Nicholl	C-2021-3028471
Alyssa Reinhart	C-2021-3028493
James Kolb	C-2021-3028497
Ronald Schneck	C-2021-3028547
Matthew Cicalese	C-2021-3028566
Ronald and Lora	C-2021-3028568
Kelly Frich	C-2021-3028665
Adam Anders	C-2021-3028670
Charleen Falsone	C-2021-3028760
Stephen Grugeon	C-2021-3028892

Lynne Germscheid	C-2021-3028860
Deborah and James Popson	C-2021-3028868
Masthope Mountain Community Association	C-2021-3028996
Treasure Lake Property Owners Association Inc.	C-2021-3029006
East Norriton Township	C-2021-3029019
Kevin Amerman	C-2021-3029063
James Wharton Jr.	C-2021-3029065
Peter and Kim Ginopolas	C-2021-3029096
Yefim Shnayder	C-2021-3029134
Andrea and Matthew Rivera	C-2021-3029154
Judy Burton	C-2021-3029139
Brian Edwards	C-2021-3029161
Edward Coccia	C-2021-3028870
John Day	C-2021-3028734
Robert Dolan	C-2021-3028798
Anthony Giovannone	C-2021-3028794
	C-2021-3028803
	C-2021-3028802
Sheila Gutzait	C-2021-3028634
Rudolph Hofbauer	C-2021-3028666
Ronald and Alexis Koenig	C-2021-3028483
Joan Lipski	C-2021-3028475
William and Ana Loftus	C-2021-3028617
Stephen and Teresa Mason	C-2021-3028576
David Monroe	C-2021-3028567
Lisa Rampone	C-2021-3028804
Lorraine Rocci	C-2021-3028499
David Ross	C-2021-3028479
Carolyn Sica	C-2021-3028446
Dean Swink	C-2021-3028604
Francine Weiner	C-2021-3028639
Tom Woodward	C-2021-3028927
Joseph Torello	C-2021-3029180
Donald Osinski	C-2021-3029413
Lake Associates LLC	C-2021-3029425
	C-2021-3029422
	C-2021-3029419
29 Estates LLC	C-2021-3029417

David Bowers
Joanne Smyth

C-2021-3029466
C-2021-3029411

v.

Aqua Pennsylvania Wastewater, Inc.

OPINION AND ORDER

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BY THE COMMISSION:

Before the Pennsylvania Public Utility Commission (Commission) for consideration and disposition are the Exceptions of Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. (collectively, Aqua, or the Company), the Commission's Bureau of Investigation and Enforcement (I&E), the Office of Consumer Advocate (OCA), the Office of Small Business Advocate (OSBA), the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), Aqua Large Users Group (Aqua LUG), and Masthope Mountain Community Association (Masthope), filed on February 28, 2022, and the Exceptions of Mr. Donald C. Osinski (Mr. Osinski), filed on February 21, 2022, to the Recommended Decision (R.D.) of Administrative Law Judge (ALJ) Mary D. Long, issued on February 18, 2022, in the above-captioned proceeding. Aqua, I&E, the OCA, the OSBA, and CAUSE-PA filed Replies to Exceptions on March 7, 2022.¹

For the reasons discussed below, we shall: (1) grant, in part, and deny, in part, the Exceptions filed by Aqua, I&E, and the OCA; and (2) deny the Exceptions filed by the OSBA, CAUSE-PA, Aqua LUG, Masthope, and Mr. Osinski.

Additionally, as discussed below, Aqua proposed rate changes that would have increased its total annual operating revenues for its water service by approximately \$86,118,612, or approximately 16.9%, and its total operating revenues for its wastewater service by approximately \$11,566,212, or approximately 31.2%, based on a fully projected future test year (FPFTY) ending March 31, 2023.² In this Opinion and Order, we shall approve an annual revenue increase of \$50,510,192 to the Company's *pro forma*

¹ Aqua LUG and Masthope each submitted a letter on March 7, 2022 indicating that they would not be filing Replies to Exceptions.

² As noted below, Appendix F of Aqua's Main Brief indicates an actual proposed revenue increase of \$85,489,328 for its water service and \$11,500,997 for its wastewater service.

revenue at present rates of \$510,006,687, or approximately 9.88%, for its water service and an annual revenue increase of \$18,740,978 to the Company's *pro forma* revenue at present rates of \$37,076,494, or approximately 50.55%, for its wastewater service.

I. Background

Aqua provides water and wastewater public utility service to approximately 450,000 water customers and 40,000 wastewater customers in a certificated service territory that spans thirty-two counties across the Commonwealth of Pennsylvania. Aqua is a subsidiary of Essential Utilities, Inc. (Essential Utilities). Aqua last filed for an increase in water and wastewater base rates in 2018, which the Commission addressed at *Pa. PUC, et. al v. Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc.*, Docket Nos. R-2018-3003558 and R-2018-3003561, *et al.* (Order entered May 9, 2019) (*Aqua 2018 Rate Case*).

The Company made its current combined water and wastewater rate increase filing in accordance with the provisions of Section 1311(c) of the Pennsylvania Public Utility Code (Code), 66 Pa. C.S. § 1311(c).³ Aqua's requested increase was based

³ Aqua submitted separate revenue requirement studies for its water and wastewater operations. Further, the Company provided separate wastewater revenue requirement studies for its individual wastewater systems. This included a revenue requirement study for the individual wastewater systems that were presented in the *2018 Aqua Rate Case*, which it referred to as "Wastewater Base," and separate studies for each of the wastewater systems acquired since the *2018 Aqua Rate Case* as part of the Section 1329 Fair Market Value (FMV) acquisition process authorized under 66 Pa. C.S. § 1329. Aqua M.B. at 2. Therefore, the rate tables set forth in the Commission Tables Calculating Allowed Revenue Increase that are attached to this Opinion and Order contain separate sets of rate tables for Aqua's Water Division, as well as separate rate tables for each of the following wastewater systems: Wastewater Base, Wastewater Limerick, Wastewater East Bradford, Wastewater Cheltenham, Wastewater East Norriton, and Wastewater New Garden. Additionally, we have included Table Act 11 – Water and Wastewater Revenue Requirement – Summary and Table RevSum – Water and Wastewater Revenue Requirement – Summary.

upon the FPFTY ending March 31, 2023.⁴ The Company sought an increase in water revenues of approximately \$85,489,328, or 16.76% of its total Pennsylvania jurisdictional water operating revenues, and an increase in wastewater revenues of approximately \$11,500,997, or 31.02% of its total Pennsylvania jurisdictional wastewater operating revenues. These proposed increases reflected the allocation of a portion of the Company's wastewater revenue requirement to its water operations.⁵ Aqua M.B. at 1, Appendix F, Water and Wastewater Revenue Requirement - Summary.

Aqua stated that its principal reason for filing its rate increase request is the Company's continuing need to invest in utility infrastructure replacement. Aqua represented that since March 31, 2020, which was the end of the FPFTY used in the *Aqua 2018 Rate Case*, the Company has invested nearly \$330 million in utility infrastructure for its water and wastewater operations through the HTY ended March 31, 2021, which is the HTY the Company utilized in this current rate case. Aqua stated that it projects to invest another \$800 million through March 31, 2023, including making a meaningful investment in a new financial reporting system, SAP, which will replace the Company's legacy financial reporting system that has been in use for nearly twenty-five years. Aqua noted that increases to its operating and maintenance (O&M) expenses are also a contributing factor in making its rate case filing. Aqua M.B. at 1-2.

⁴ The future test year (FTY) ended March 31, 2022, and the historical test year (HTY) ended March 31, 2021. Aqua M.B. at 15.

⁵ In its Main Brief, Aqua stated that it sought an increase in water revenues of approximately \$86.118 million and an increase in wastewater revenues of approximately \$11.566 million. Aqua M.B. at 1. However, Appendix F, Water and Wastewater Revenue Requirement – Summary shows a final proposed water revenue increase of \$85,489,328 and a final proposed wastewater increase of \$11,500,997.

II. History of the Proceeding

On August 20, 2021, Aqua filed proposed Tariff Water-Pa P.U.C. No. 3 (Tariff Water No. 3) to become effective October 19, 2021. Under Tariff Water No. 3, the Company proposed to increase Aqua's total annual operating revenues for its water service by approximately \$86,118,612, or 16.9%. Also on August 20, 2021, Aqua filed proposed Tariff Sewer-Pa P.U.C. No. 3 (Tariff Sewer No. 3) to become effective October 19, 2021. Under Tariff Sewer No. 3, the Company proposed to increase Aqua's total annual operating revenues for its wastewater service by approximately \$11,566,212, or 31.2%.

On September 3, 2021, I&E filed a notice of appearance in both the water and wastewater rate filings. On September 8, 2021, the OSBA filed formal complaints at Docket Nos. C-2021-3028509 (water) and C-2021-3028511 (wastewater). On September 13, 2021, the OCA filed formal complaints at Docket Nos. C-2021-3028466 (water) and C-2021-3028467 (wastewater). Additionally, numerous ratepayers filed complaints. The names of these ratepayers and the Docket Numbers of their Complaints appear on the cover page of this Opinion and Order. CAUSE-PA filed a petition to intervene on September 20, 2021. Masthope filed a petition to intervene, and formal complaints on October 5, 2021 at Docket Nos. at C-2021-3028992 (Water) and C-2021-3028996 (Wastewater).

On September 16, 2021, Commissioner Ralph V. Yanora posed ten Directed Questions to be examined by the Parties as part of these proceedings.

By order entered on October 7, 2021, the Commission suspended the rate filings, pursuant to 66 Pa. C.S. § 1308(d), until May 19, 2022, and directed an investigation to determine the lawfulness, justness, and reasonableness of the rates, rules, and regulations contained in the rate filings.

Forty-five customer complaints by individuals and property owner associations were filed opposing the proposed increase for water. Sixty-seven customer complaints were filed opposing the proposed wastewater rate increases. Three individual complainants requested to become a fully participating party of record: John Day (C-2021-3028734 (wastewater)); Francine Weiner (C-2021-3928639 (wastewater)); and Richard Gage (C-2021-3029393 (water)).

On October 15, 2021, ALJ Long conducted a prehearing conference. Counsel for Aqua, I&E, the OCA and the OSBA appeared. Additionally, counsel representing intervenor CAUSE-PA and complainants Aqua LUG (C-2021-3029089), East Norriton Township (C-2021-3029019), and Masthope, appeared and participated.⁶

At the prehearing conference, the petition to intervene of CAUSE-PA was granted without objection. Following a discussion, the Parties agreed to a schedule for the filing of written testimony, public input hearings, and evidentiary hearings which were scheduled to begin on December 20, 2021.

On October 14, 2021, Aqua filed a motion for a protective order. By interim order entered October 22, 2021, the motion was granted.

Six public input hearings were held November 8, 2021 through November 12, 2021. These public input hearings convened by telephone. A total of fifty-eight witnesses testified.

The active Parties engaged in discovery and served written direct, rebuttal, surrebuttal, and rejoinder testimony. The evidentiary hearing convened as scheduled on

⁶ The participants at the prehearing conference constitute the active Parties to this proceeding.

December 20, 2021. The Parties notified the ALJ that they had waived cross-examination of witnesses and requested to move their written testimony into the record. These testimony, exhibits, and hearing exhibits were admitted into the record without objection. All testimony was accompanied with written verification by the corresponding witness.

By interim order entered December 20, 2021, the Parties were provided with briefing instructions. As directed, each Party filed a main brief on January 11, 2022. Complainant John Day filed a letter in lieu of a brief on January 10, 2022. Reply briefs were filed on January 21, 2022. On January 20, 2022, Aqua filed a motion for the admission of a late filed exhibit. Aqua Post-Hearing Exhibit No. 1 was admitted by interim order entered January 24, 2022, and the record was closed.

In the Recommended Decision, issued on February 18, 2022, ALJ Long recommended that Aqua's Tariff Water No. 3 and Tariff Sewer No. 3, and the associated proposed revenue increases, be denied because the Company did not meet its burden of proving by a preponderance of the evidence the justness and reasonableness of every element of its requested increase. Instead, the ALJ recommended the approval of an increase in annual water operating revenue in the amount of approximately \$15.2 million, or approximately 2.97% over present rates, and an increase in annual wastewater operating revenue in the amount of approximately \$16.7 million, or approximately 45% over present rates. The ALJ also recommended that the Commission approve Aqua's universal service plan and universal service rider, proposed in its filings. Additionally, the ALJ made recommendations regarding pressure valve inspections and fire hydrants and recommended that the Commission approve Aqua's proposal for continued deferral of COVID-19 uncollectible expenses. R.D. at 1-2.

As previously noted, Mr. Osinski filed Exceptions to the Recommended Decision on February 21, 2022, and Aqua, I&E, the OCA, the OSBA, CAUSE-PA, Aqua LUG, and Masthope filed Exceptions on February 28, 2022.

On March 7, 2021, Aqua, I&E, the OCA, the OSBA, and CAUSE-PA filed Replies to Exceptions.

III. Public Input Hearings

As noted above, in the History of Proceeding, six public hearings were convened between November 8, 2021 and November 12, 2021 to hear from Aqua's customers regarding its proposed water and wastewater rate increases. Each of the public input hearings were conducted by telephone using a toll-free telephone number and a PIN. A total of 58 witnesses testified. For a summary of the public input hearings, see pages 4 to 15 of the Recommended Decision.

IV. Legal Standards

At issue here is the Company's request for a general base rate increase, which is governed by Section 1308(d) of the Code, 66 Pa. C.S. § 1308(d). Section 1308(d) of the Code provides the procedures for changing base rates, the time limitations for the suspension of the new rates, and the time limitations on the

Commission's actions. 66 Pa. C.S. § 1308(d).⁷ “Under traditional ratemaking, utilities may not change rates charged to customers outside of a base rate case.” *McCloskey v. Pa. PUC*, 127 A.3d 860, 863 n.2 (Pa. Cmwlth. 2015).

Section 1301(a) of the Code mandates that “[e]very rate made, demanded, or received by any public utility . . . shall be just and reasonable, and in conformity with [the] regulations or orders of the [C]ommission.” 66 Pa. C.S. § 1301(a). Pursuant to the just and reasonable standard, a utility may obtain “a rate that allows it to recover those expenses that are reasonably necessary to provide service to its customers[,] as well as a reasonable rate of return on its investment.” *City of Lancaster Sewer Fund v. Pa. PUC*, 793 A.2d 978, 982 (Pa. Cmwlth. 2002) (*City of Lancaster*). There is no single way to arrive at just and reasonable rates, and “[t]he [Commission] has broad discretion in determining whether rates are reasonable” and “is vested with discretion to decide what factors it will consider in setting or evaluating a utility’s rates.” *Popowsky v. Pa. PUC*, 683 A.2d 958, 961 (Pa. Cmwlth. 1996) (*Popowsky II*).

A public utility is entitled to an opportunity to earn a fair rate of return on the value of the property dedicated to public service. *Pennsylvania Gas and Water Co. v. Pa. PUC*, 341 A.2d 239, 251 (Pa. Cmwlth. 1975) (citations omitted). In determining a fair rate of return, the Commission must adhere to the constitutional standards established by the United States Supreme Court in the seminal cases *Bluefield Water Works and Improvement Co. v. Public Service Comm’n of West Virginia*, 262 U.S. 679,

⁷ Among other things, Section 1308(d) of the Code requires the Commission to render a final decision granting or denying, in whole or in part, the general rate increase requested by a public utility, within a general time frame not to exceed seven months from the proposed effective date of the utility’s proposed tariff supplement. See 66 Pa. C.S. § 1308(d); see also 52 Pa. Code § 53.31 (requiring a tariff proposing a rate increase to be effective upon sixty days’ advance notice). Unless the utility voluntarily extends the suspension period, the Commission’s non-action within this timeframe means, by operation of law, the utility’s proposed general rate increase will go into effect, as proposed, at the end of such period. See 66 Pa. C.S. § 1308(d).

692-93 (1923) (*Bluefield*) and *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (*Hope Natural Gas*). In *Bluefield*, the Supreme Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

Bluefield, 262 U.S. at 692-93. Twenty years later, in *Hope Natural Gas*, the Supreme Court reiterated:

From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

Hope Natural Gas, 320 U.S. at 603.

The Commission is required to investigate all general rate increase filings. *Popowsky II*, 683 A.2d at 961. The burden of proof to establish the justness and reasonableness of every element of a public utility's rate increase request rests solely

upon the public utility in all proceedings filed under Section 1308(d) of the Code.

66 Pa. C.S. § 315(a); *see also*, *Lower Frederick Twp. Water Co. v. Pa. PUC*, 409 A.2d 505, 507 (Pa. Cmwlth. 1980) (*Lower Frederick*); *see also*, *Brockway Glass Co. v. Pa. PUC*, 437 A.2d 1067 (Pa. Cmwlth. 1981). Section 315(a) of the Code provides as follows:

Reasonableness of rates. – In any proceeding upon the motion of the commission, involving any proposed or existing rate of any public utility, or in any proceedings upon complaint involving any proposed increase in rates, the burden of proof to show that the rate involved is just and reasonable shall be upon the public utility.

66 Pa. C.S. § 315(a). The evidence necessary to meet that burden must be substantial. *Lower Frederick* at 507.

In general rate increase proceedings, the burden of proof does not shift to parties challenging a requested rate increase. Rather, the utility's burden of establishing the justness and reasonableness of every component of its rate request is an affirmative one, and that burden remains with the public utility throughout the course of the rate proceeding. There is no similar burden placed on parties to justify a proposed adjustment to the Company's filing. The Pennsylvania Supreme Court has held:

[T]he appellants did not have the burden of proving that the plant additions were improper, unnecessary or too costly; on the contrary, that burden is, by statute, on the utility to demonstrate the reasonable necessity and cost of the installations, and that is the burden which the utility patently failed to carry.

Berner v. Pa. PUC, 116 A.2d 738, 744 (Pa. 1955).

However, in proving that its proposed rates are just and reasonable, a public utility need not affirmatively defend every claim it has made in its filing, even those which no other party has questioned. As the Pennsylvania Commonwealth Court has held:

While it is axiomatic that a utility has the burden of proving the justness and reasonableness of its proposed rates, it cannot be called upon to account for every action absent prior notice that such action is to be challenged.

Allegheny Center Assocs. v. Pa. PUC, 570 A.2d 149, 153 (Pa. Cmwlth. 1990) (citation omitted); *see also Pa. PUC v. Equitable Gas Co.*, 73 Pa. P.U.C. 301, 359-360 (1990).

Additionally, Section 315(a) of the Code cannot reasonably be read to place the burden of proof on the utility with respect to an issue the utility did not include in its general rate case filing and which, frequently, the utility would oppose. 66 Pa. C.S. § 315(a). The burden of proof must be on the party who proposes a rate increase beyond that sought by the utility. *Pa. PUC v. Metropolitan Edison Company*, Docket No. R-00061366, 2007 Pa. PUC LEXIS 5 (Order entered January 11, 2007). The mere rejection of evidence contrary to that presented by the public utility is not an impermissible shifting of the evidentiary burden. *United States Steel Corp. v. Pa. PUC*, 456 A.2d 686 (Pa. Cmwlth. 1983).

In her Recommended Decision, ALJ Long made 117 Findings of Fact and reached 13 Conclusions of Law. R.D. at 15-30, 137-39. The Findings of Fact and Conclusions of Law are incorporated herein by reference and are adopted without comment unless they are either expressly or by necessary implication rejected or modified by this Opinion and Order.

Finally, any issue or Exception that we do not specifically address shall be deemed to have been duly considered and denied without further discussion. The Commission is not required to consider expressly or at length each contention or argument raised by the parties. *Consolidated Rail Corp. v. Pa. PUC*, 625 A.2d 741 (Pa. Cmwlth. 1993); *also see, generally, University of Pennsylvania v. Pa. PUC*, 485 A.2d 1217 (Pa. Cmwlth. 1984).

V. Impact of the Pandemic

A. Positions of the Parties

The OCA urged the Commission to consider the economic repercussions of the COVID-19 pandemic and the hardships this ongoing reality continues to create for Aqua's ratepayers. In support, the OCA presented statistics on the effects of the pandemic in Pennsylvania and asserted that the Commission should consider these impacts when determining what constitutes a just and reasonable rate for the Company's customers. OCA M.B. at 5-15.

The OCA cited, in part, to job loss data and evidence specific to Pennsylvania residents showing that the lower the household's income the greater the impact the pandemic has on income loss. In addition, the OCA cited to data at the time of briefing showing a significant increase in active COVID-19 cases and deaths in Pennsylvania and rising unemployment rates in Aqua's service territory. The OCA also alleged that the Company charged significant levels of late fee payments during the pandemic, and during the moratorium on terminations. Thus, the OCA requested that the Commission take these factors into consideration when determining the appropriate return on equity (ROE) and the OCA's other recommendations related to the pandemic to keep the rate increase to the lowest possible cost for Aqua's customers. OCA R.B. at 3-4.

Aqua alleged that the OCA has taken an extreme position on a variety of issues, including rate of return, to propose that the Company be ordered to decrease its rates. According to the Company, rejecting any increase, in the face of overwhelming evidence that a rate increase is justified under traditional ratemaking principles, is not a balancing of customers' and investors' interests. Aqua argued that the OCA is attempting to establish a new ratemaking standard that rate increases can be granted or denied based upon subjective assessments of whether a sufficient number of customers will have trouble paying increased rates. The Company submitted that such a standard imperils the execution of needed safety investments in the short term and does long-term harm as investors assess whether to continue to invest in Pennsylvania utilities or shift investment to other states or other enterprises. Aqua R.B. at 2-3 (citing *Pa. PUC v. Columbia Gas of Pennsylvania, Inc.*, Docket Nos. R-2020-3018835, *et al.* (Order entered February 19, 2021) (*Columbia Gas*)).

The Company also cited to a drop in the unemployment rate since the *Columbia Gas* decision and a fall in the number of Aqua's customer accounts at risk for termination falling below pre-pandemic levels. Aqua asserted that it understands the difficulties faced by customers with an inability to pay. According to the Company, it implemented programs and practices during 2020 and 2021 to help customers who struggled to pay their bills and will provide further assistance with its new Customer Assistance Program (CAP) going forward. However, Aqua argued that it will not be able to meet its obligation to provide safe and reliable service, while also providing for the health and safety of its employees, without appropriate rate relief. Aqua R.B. at 3-4.

B. Recommended Decision

In the Recommended Decision, the ALJ indicated that neither she nor the Commissioners are unmindful of the important concerns raised by the OCA and CAUSE-PA regarding the affordability challenges faced by low-income customers. However, the

ALJ explained that the Commission has repeatedly taken the position that the existence of the pandemic does not suspend the consideration of utility rate increases. R.D. at 35 (citing *Columbia Gas* at 47-52).

The ALJ stated that utilities are expected to continue to provide reasonable service and safe and reliable facilities. Here, the ALJ noted that no Party has challenged Aqua's infrastructure improvement spending or the value of its proposal to continue that spending in this proceeding. Rather, the ALJ continued, some Parties have recommended Aqua put into place additional universal service programming and customer service improvements, which require financial investment to implement. Thus, the ALJ reasoned that her recommendations are an attempt to balance the many competing concerns of the ratepayers with the Company's ongoing challenge to consider the affordability of service while also meeting the increasing environmental and infrastructure obligations in pursuit of safe and reliable service. R.D. at 35

C. OCA Exception No. 28 and Replies

In its Exception No. 28, the OCA argues that the ALJ did not adequately account for the impact of the pandemic on Aqua's ratepayers when setting rates in this proceeding. In support, the OCA submits that it provided unrefuted testimony showing that the economic crisis is ongoing and continues to severely impact the lives of Aqua's ratepayers. The OCA also contends that portions of Aqua's service territory in Northumberland and Columbia counties have the highest hospitalization rates for COVID-19 in the United States. OCA Exc. at 39.

Although the OCA acknowledges that the existence of the pandemic should not suspend the consideration of utility rate increases, the OCA argues that the continued impact of the COVID-19 pandemic should be taken into account in the Commission's consideration of the appropriate return on equity and the OCA's other recommendations

related to the pandemic. Further, the OCA asserts that the ALJ's reliance on the Parties' lack of opposition to Aqua's infrastructure spending and the Parties' recommendations regarding improvements to universal service programming and customer service, which require financial investment, inappropriately shifts the burden of proof in this proceeding. The OCA argues that it is not required to challenge the Company's infrastructure spending in order to offer recommendations regarding universal service programming or customer service. OCA Exc. at 39-40.

The OCA notes that additional universal service programming and customer service improvements require financial investment to implement but contends that those financial investments are meant to mitigate the impact of unaffordable rates for Aqua's most vulnerable customers. According to the OCA, the costs of these programs would be fully recovered through surcharges or base rates and the OCA's witnesses took these additional costs into account in their analyses as appropriate means of addressing Aqua's proposed rate increase in this proceeding. *Id.* at 40.

In its reply, Aqua argues that the OCA's Exception No. 28 identifies no specific adjustments to be made. Aqua reiterates that the proper, and constitutional, approach to deal with lingering effects of the pandemic is to implement programs that support those with payment difficulties. According to the Company, this focuses the solution on the problem, rather than hampering Aqua's ability to continue to provide safe, exceptional service by denying adequate rate relief that is supported by the evidence and prior rulings. Aqua submits that its comprehensive, new CAP, including arrearage forgiveness, and its Hardship Fund, along with new federal assistance programs for water customers, will provide that support to payment-troubled customers. The Company contends that the OCA's Exception No. 28, to the extent it seeks to encourage the Commission to rule adversely on issues simply to produce a lower result, should be rejected. Aqua R. Exc. at 23.

D. Disposition

Upon review, we consider the OCA's Exception No. 28 to be a global, generalized objection to the overall recommendations set forth in the Recommended Decision. Here, the OCA does not identify any specific adjustments that should be made. Essentially, the OCA contends that the ALJ failed at a conceptual level to consider the impact of the pandemic when setting rates. However, in the context of this Exception, it is unclear what specific measures or calculations the ALJ should have applied to address the financial impact related to COVID-19.

The Parties' arguments pertaining to each particular issue in the rate proceeding are addressed in detail in this Opinion and Order. Our disposition related to each issue and the resulting calculations are more properly addressed within the context of those issues below. Thus, we decline here to apply an undefined and potentially subjective reductive factor to the following determinations and calculations based on the impact of COVID-19. Overall, we find no error in the ALJ's conclusion that she attempted to balance the competing interests of the ratepayers, the affordability of service, and the increasing environmental and infrastructure obligations to provide safe and reliable water and wastewater utility service.

The Commission has repeatedly determined that the existence of the pandemic does not suspend the consideration of rate cases. *See e.g., Pa. PUC v. Philadelphia Gas Works*, Docket No. R-2020-3017206 (Order entered November 19, 2020), *Pa. PUC v. UGI Utilities, Inc. - Gas Division*, Docket No. R-2019-3015162 (Order entered October 8, 2020) (*UGI Gas*), and *Pittsburgh Water and Sewer Authority*, Docket Nos. R-2020-3017951, R-2020-3017970 (Order entered December 3, 2020). Further, in *Columbia Gas*, we explained that under the traditional set of ratemaking norms there is a consideration and weighing of important factors or

principles in setting just and reasonable rates, such as quality of service, gradualism, and rate affordability.

This is true in normal circumstances as well as extraordinary circumstances, such as this pandemic. Indeed, in our opinion, the applicable legal standards that require the Commission to balance between the interests of the utility's customers, investors, and the public interest, require the Commission, by necessary implication, to weigh evidence or unique considerations related to changes in service, market forces, and the economy. Thus, it is our responsibility under the applicable legal and constitutional standards to weigh evidence and unique considerations related to the COVID-19 pandemic in setting just and reasonable rates, and our continued use of traditional ratemaking methodologies permit our consideration of important ratemaking principles, like gradualism and rate affordability, in relation to this pandemic. Moreover, the traditional ratemaking methodologies permit consideration of evidence presented regarding the risks, uncertainties, and impact of the COVID-19 global pandemic in determining various components of a utility's cost of service, or revenue requirement.

Columbia Gas at 48.

We have and will continue to apply traditional ratemaking methodologies which include the consideration of unique circumstances such as the risks, uncertainties, and impact of the COVID-19 pandemic. Thus, to the extent that the OCA is requesting such action by the Commission in this proceeding, we find the Exception to be unnecessary.

As a final matter, we find the OCA's contention that the ALJ improperly shifted the burden of proof by noting the lack of opposition to infrastructure spending and improvements to universal service programming and customer service as lacking merit. The ALJ's statement did not – nor could it – operate to shift the burden of proof

with respect to Aqua's burden to establish the justness and reasonableness of every component of its rate request. There is no indication in the Recommended Decision that this burden somehow shifted to the OCA with respect to its proposed adjustments to the universal service or customer assistance programs.

Accordingly, we shall deny OCA Exception No. 28.

VI. Rate Base

Rate base, also known as measure of value, is the depreciated original cost of a utility's investment in plant a utility has in place to serve customers plus other additions and deductions that the Commission determines to be necessary in order to keep the utility operating and providing safe and reliable service to its customers. Rate base is one part of the financial equation used by the Commission to determine the appropriate revenue that a utility is granted in a rate proceeding. I&E M.B. at 17.

Aqua's rate base claim calculation includes depreciated original cost plant in service plus additions of Materials and Supplies (M&S) and Cash Working Capital (CWC) as well as deductions of contributions in aid of construction (CIAC) and customer advances for construction (CAC), deferred income taxes, and Investment Tax Credit as shown on Schedule G-1 on Aqua Exh. 1-A through 1-G. *Id.*

Additionally, the depreciated original cost is determined by subtracting the book reserve, which is the accumulation of all prior annual depreciation expense, and other items such as salvage value, from the original cost of the plant in service that is projected to be used and useful in the public service. The depreciated original cost of the plant in service is determined by taking a "snapshot" look at the depreciated original cost value of used and useful utility plant in service at the end of the FPFTY. I&E M.B. at 17-18.

Further, for a utility plant to be included in rates, the plant must be used and useful in the provision of utility service to the customers. Therefore, by definition, only plant currently providing or capable of providing utility service to customers or plant projected to be completed and in service by the end of the FPFTY is eligible to be reflected in rates. I&E M.B. at 18.

A. Plant in Service

1. Positions of the Parties

No Party to this proceeding challenged the Company's claim for water or wastewater utility plant in service at the end of the FPFTY, except for the challenge regarding the Company's \$2,437,305 positive acquisition adjustment associated with the Borough of Phoenixville Water System, which we shall discuss in the next section, below. R.D. at 36; Aqua M.B. at 18.

The Company's claim for both water and wastewater utility plant in service begins with the actual HTY ending balance for each segment of its operations. Aqua St. 2 at 14. As shown in Table 1, below, the HTY ending balance for water was \$4,909,729,427 and the HTY ending balance for wastewater was \$500,221,311. Aqua M.B. at 16; Aqua St. 2 at 14; see also Aqua Exh. 1-A, Sch. G-2; Aqua Exhs. 1-B through 1-G, Sch. G-2.

The HTY figures for water and wastewater were then increased to reflect FTY and FPFTY plant additions, net of retirements, and utility plant acquisition

adjustments (UPAA)⁸ associated with certain acquired systems. Aqua M.B. at 16; Aqua St. 2 at 14-15; Aqua St. 2, Attachment 1.

For the FTY for its water operations, the Company projected additions totaling \$402,940,579 and retirements totaling (\$36,896,955). Aqua St. 2, Attachment 1 at 1. For the FPFTY for its water operations, the Company projected additions totaling \$314,771,304 and retirements totaling (\$28,466,740). Aqua M.B. at 16-17; Aqua St. 2, Attachment 1 at 2.

For the FTY for its wastewater operations, the Company projected additions totaling \$34,134,821 and retirements totaling (\$3,416,157). Aqua St. 2, Attachment 2 at 1. For the FPFTY, the Company projected additions totaling \$38,897,468 and retirements totaling (\$3,014,299). Aqua M.B. at 18; Aqua St. 2, Attachment 2 at 2.

Aqua Proposed Plant In Service						
Operations	HTY	FTY Additions/Retirements		FPFTY Additions/Retirements		FPFTY
	Plant In Service	Additions	Retirements	Additions	Retirements	Plant In Service
Water	\$4,909,729,427	\$402,940,579	(\$36,896,955)	\$314,771,304	(\$28,466,740)	\$5,562,077,614
Wastewater	\$500,221,311	\$34,134,821	(\$3,416,157)	\$38,897,468	(\$3,014,299)	\$566,823,145

Table 1: Aqua-Proposed Plant In Service for Water and Wastewater Operations.

Accordingly, the Company's FPFTY claim for its water utility plant in service is \$5,562,077,614 (Aqua Exhibit 1-A, Schedule G-2) and the FPFTY claim for its wastewater utility plant in service is \$566,823,145. Aqua M.B. at 18; Aqua Exhs. 1-B through 1-G, Sch. G-2.

⁸ The Company's HTY figures presented on Schedule G-2 do not reflect the Company's proposed UPAA. Adjustments related to proposed UPAA are reflected in Schedule G-3 of Aqua Exhibits 1-A and 1-G through 1-G. All UPAA shown have been previously approved by the Commission, with the exception of the Borough of Phoenixville acquisition. Aqua M.B. at 16, n. 4.

I&E recommended that the Company provide the Commission's Bureaus of Technical Utility Services (TUS) and I&E with an update to Schedule G-2 of Aqua Exhibits 1-A, 1-B, 1-C, 1-D, 1-E, 1-F, and 1-G, no later than July 1, 2022 which should include actual capital expenditures, plant additions, and retirements by month for the twelve months ending March 31, 2022 and an additional update for actuals for the year ending March 31, 2023, no later than July 1, 2023. I&E reasoned that, through the use of an FPFTY, a utility is allowed to require ratepayers, in essence, to pre-pay a return on a utility's projected investment in future facilities that are not in place and providing service at the time the new rates take effect and are not subject to any guarantee of being completed and placed into service. According to I&E, while the FPFTY provides for such projections, there should be some timely verification of the projections. I&E further submitted that the use of a FPFTY has become common practice by Pennsylvania utilities, including Aqua, and the Company agreed to provide such projections as part of its previous base rate case in which it made use of the FPFTY. I&E further noted that the Company did not challenge I&E's recommendation to continue to provide the requested updates. I&E M.B. at 21-22.

2. Recommended Decision

Except for the Company's proposed positive acquisition adjustment of \$2,437,305 to its water rate base associated with the Phoenixville System (addressed in Section VI.B, below), the ALJ recommended that the remainder of the Company's proposed adjustments to its water utility plant in service and all of the Company's adjustments to its wastewater utility plant in service at the end of the FPFTY be adopted. R.D. at 36.

The ALJ also recommend that I&E's reporting request be approved. In making this recommendation, the ALJ noted that this is a reporting requirement consistent with Section 315(e) of the Code, 66 Pa. C.S. § 315(e), which requires that

when a utility utilizes a FPFTY in any rate proceeding and such FPFTY forms a substantive basis for the Commission's final rate determination, the utility shall provide, as specified by the Commission in its Final Order, appropriate data evidencing the accuracy of the estimates contained in the FPFTY. R.D. at 39.

3. Disposition

Aside from the positive acquisition adjustment proposed by the Company with regard to its Phoenixville Water System (addressed immediately below), no other Party filed Exceptions on the Company's remaining proposed adjustments to its plant in service. Finding the ALJ's recommendation to be reasonable, we adopt it without further comment.

B. Water Rate Base – Borough of Phoenixville

In 2019, the Commission approved Aqua's acquisition of the water system assets of the Borough of Phoenixville, Chester County, PA (Borough) that included all of Phoenixville's water service territories located outside of its municipal borough boundaries (*i.e.*, extraterritorial water system) (hereinafter, Phoenixville Water System).⁹ In this proceeding, the primary adjustment to rate base is related to the Company's

⁹ *Joint Application of Aqua Pennsylvania, Inc. and the Borough of Phoenixville for approval of (1) the acquisition by Aqua of the water system assets of Phoenixville used in connection with the water service provided by Phoenixville in East Pikeland and Schuylkill Townships, Chester County, and Upper Providence Township, Montgomery County, PA; (2) the right of Aqua to begin to supply water service to the public in portions of East Pikeland Township, Chester County, and Upper Providence Township, Montgomery County, PA; and (3) the abandonment of Phoenixville of public water service in East Pikeland Township, Chester County, and Upper Providence Township, Montgomery County, and certain locations in Schuylkill Township, Chester County, PA, Docket Nos. A-2018-2642837, A-2018-2642839, et al. (Recommended Decision dated September 13, 2019), adopted as final (Order entered October 24, 2019) (Aqua-Phoenixville Order).*

proposal to include recovery of the acquisition premium that Aqua paid for the Phoenixville Water System. The depreciated cost of the Phoenixville Water System was \$1,026,724, and Aqua paid \$2,437,305 more for the assets than the depreciated original cost, creating a total purchase price of \$3,464,029. R.D. at 18, FOF No. 20.

The OCA and I&E opposed this recovery, as well as the Company's related amortization expense claim. They argued that because the Company failed to provide sufficient evidence that the Borough was failing to render reasonable and adequate service at the time the Phoenixville Water System was acquired by Aqua pursuant to Section 1327(a) of the Code, the Company should not be permitted to recover the acquisition premium in rate base. R.D. at 43. The ALJ agreed with the OCA and recommended that \$2,437,305 be removed from Aqua's rate base, and the concomitant adjustments be made to the accrued depreciation reserve and annual amortization expense. R.D. at 44. The details concerning this issue are more fully discussed immediately below.

1. Positions of the Parties

The Company requested that the Commission permit it to include an acquisition adjustment¹⁰ of \$2,437,305 in water rate base (see Aqua Exh. 1-A, Sch. C-5.1, line 3) for the price it paid beyond the depreciated original cost to acquire a portion of the Phoenixville Water System consistent with Section 1327 of the Code, 66 Pa. C.S.

¹⁰ Section 1327 (a) provides that "If a public utility acquires property from another public utility, a municipal corporation or a person at a cost which is in excess of the original cost of the property when first devoted to the public service less the applicable accrued depreciation, it shall be a rebuttable presumption that the excess is reasonable and that excess shall be included in the rate base of the acquiring public utility, provided that the acquiring public utility proves that [it has met the requirements of included in Section 1327(a)(1)-(9)]."

§ 1327(a).¹¹ The Company further proposed that the acquisition adjustment be amortized over a period of twenty years. Aqua M.B. at 15. Aqua reflected \$2,315,440 in the positive acquisition adjustment as of the end of the FPFTY as set forth in Aqua Exh. 1-A, Schedule G-3. *Id.* at 19.

Aqua based its acquisition adjustment claim on the fact that it paid more than the depreciated original cost for the assets, and it is therefore allegedly entitled to include the excess in rate base, because it meets the nine criteria set forth in Section 1327(a) of the Code to show that the Phoenixville Water System was a troubled water system on the date it was acquired. Aqua M.B. at 24-26; Aqua St. 2 at 16.

Aqua explained that the genesis of its purchase of the assets of the Phoenixville Water System that previously served the water customers located outside of the Borough's municipal boundaries was the result of the Borough's 2013 Petition and the Commission's 2015 Order on same. The Borough had requested that the Commission declare that the Phoenixville Water System is not subject to the Commission's jurisdiction so that it could better economize and manage its limited resources by reducing regulatory compliance costs and administrative costs.¹² R.D. at 42; *Phoenixville Petition Order* at 4. In its petition, the Borough explained that it was deterred from seeking rate relief for service to the extraterritorial customers because the cost and manpower required to prepare and defend a rate filing posed a strain on Borough resources. R.D. at 42. As a result, the Borough's territorial customers were subsidizing

¹¹ R.D. at 39-44; Aqua St. 2 at 16; Aqua Exh. 3-A; Aqua M.B. at 16-19; I&E M.B. at 6-7, 18, 21-22; OCA M.B. at 17; Aqua R.B. at 9-10; I&E M.B. at 6-7, 18, 21-22; Aqua R.B. at 9-10; I&E RB at 3, 16; OCA R.B. at 6.

¹² *Petition of the Borough of Phoenixville for a Declaratory Order that the Provision of Water and Wastewater Service to Isolated Customers in Adjoining Townships Does Not Constitute the Provision of Public Utility Service Under 66 Pa. C.S. § 102*, Docket No. P-2013-2389321 (Order entered May 19, 2015) (*Phoenixville Petition Order*).

service to the Borough's extraterritorial customers. *Id.* In denying the petition, the Commission acknowledged that seeking rate relief could be perceived as "burdensome," but observed that the Borough had the option to seek relief from regulatory burdens by approaching nearby systems owned by Aqua Pennsylvania and Pennsylvania-American Water Company. *Id.*; *Phoenixville Petition Order* at 7-8. Thereafter, the Borough reached an agreement with Aqua for the transfer of the system. As noted, the Joint Petition for Settlement of the acquisition was approved by the Commission in 2019. *Id.*

Aqua argued that the Phoenixville Water System was a troubled water system on the date it was acquired because it was not being maintained to provide adequate, efficient, safe, and reasonable service and facilities to customers outside the Borough limits. This was allegedly due to the following factors: (1) the Borough was manually reading residential and commercial meters; (2) non-revenue (unaccounted for) water was estimated to be 68%; and (3) 30%, or 32 out of the 105 system fire hydrants, needed to be repaired or replaced. Accordingly, Aqua argued, pursuant to Section 1327(a) of the Code, it is entitled to "a rebuttable presumption that the excess [it paid beyond the depreciated original cost] is reasonable, and that excess shall be included in the rate base of the acquiring utility." Aqua M.B. at 22 (citing Aqua St. at 16 and Aqua Exh. 3-A).

Aqua also argued that the high level of 68% for non-revenue or unaccounted-for water is extremely poor and indicates substantial leaks and metering issues. Aqua M.B. at 25. Aqua cited the Commission's Statement of Policy in Section 65.20(4) of the Commission's Regulations, 52 Pa. Code § 65.20(4), on water conservation which notes that unaccounted-for water levels above 20% have been considered by the Commission to be excessive. *Id.* Thus, Aqua opined that the high level of non-revenue or unaccounted-for water, estimated at 68%, is extremely poor and indicates substantial leaks and metering issues and that "[h]aving non-revenue water of

approximating 68%, and having to replace 30% of all hydrants in the system is a clear indication that this was a troubled system.” Aqua M. B. at 25; Aqua St. 2-R at 8.

The Company also submitted that after it purchased the Phoenixville Water System, it proactively performed leak surveys, verified hydrant pressures, and checked valve operations and then placed the system on its ongoing maintenance program. Aqua M.B. at 28 (citing Aqua St. 2-R at 8-9). According to Aqua, in view of the fact that it investigated significant unaccounted-for water issues and targeted the resolution of these issues via its maintenance program makes clear that the Borough had failed to maintain its fire hydrants and repair leaking water lines during its ownership. *Id.* Aqua contended that “fire protection is a significant safety and reliability issue which the Company addressed by inspecting 105 fire hydrants, replacing 13 hydrants, and repairing 19 hydrants.” Aqua M.B. at 28 (citing Aqua St. 2-R at 8). In addition, the Company contended that its meter replacement efforts addressed issues related to meter reading and billing of customers. Aqua M.B. at 29 (citing Aqua St. 2-R at 9). For all of the above reasons, Aqua believed it has adequately satisfied the requirement of Section 1327(a)(3)(v) that the Borough’s water system was troubled at the time it was acquired.

Both I&E and the OCA argued that the \$2,437,305 acquisition adjustment should not be permitted because the reasons provided by Aqua are not sufficient to satisfy the extensive Section 1327(a)(3) criteria. I&E St. 3-SR at 2-7; I&E M.B. at 18-21; OCA St. 2 at 11; OCA M.B. at 17-21. I&E and the OCA contended that there is no evidence that Aqua’s Phoenixville Water System acquisition was necessitated by the inability of the Borough to render reasonable and appropriate service to customers. *Id.* I&E and the OCA argued that Aqua’s rate base claim for its water operations should be denied, and the total annual amortization expense claimed by the Company should be reduced to \$409,015 (\$530,879 - \$121,865). R.D. at 39; I&E M.B. at 18-21; I&E St. 3-SR at 3-7; OCA M.B. at 17-21.

Regarding the Company's citation to the Commission's Statement of Policy on water conservation measures in 52 Pa. Code § 65.20 in support of its position that any water provider with unaccounted-for water above 20% is considered a troubled water system, I&E acknowledged that Section 65.20(4) does mention that unaccounted-for water levels should be kept within reasonable amounts, noting that levels above 20% have been considered by the Commission to be excessive. I&E M.B. at 14-15. However, I&E asserted that Section 65.20(4) does not stand for the presumption that a system experiencing above 20% unaccounted-for water is a *de-facto* troubled water system. I&E M.B. at 15. I&E noted there are various other end-of-service plant issues that were known or knowable that could be the cause, and Section 65.20 merely advises that water conservation measures may be necessary. *Id.*

Specifically, I&E argued: (1) hydrants are utility plant that require periodic replacement based on known and knowable service life; (2) Aqua provided no detail to indicate that there were substantial service issues or failed systems causing the 68% non-revenue water; and much of this non-revenue water could be due to other end-of-service plant issues that were known or knowable; (3) the motivation of an owner to sell is not listed in the Section 1327(a) criteria; and (4) small, private water and wastewater systems do not have the ability to increase taxes and issue bonds that a municipality such as the Borough has, so not every troubled system has the capability of funding necessary repairs. I&E M.B. at 19-20.

The OCA agreed with I&E and added that: (1) the Company did not provide any evidence that the Borough was in violation of statutory or regulatory requirements of the Pennsylvania Department of Environmental Protection or the Commission when the Company acquired the Phoenixville Water System assets; (2) in approving the acquisition, the Commission itself made no findings of inadequate financial, managerial, or technical ability of the Borough; (3) the Commission found no deficiencies concerning the availability of water, the palatability of water, or the

provision of water at adequate volume and pressure when the assets were owned by the Borough; and (4) the Commission found no issues with the acquired assets that would require necessary improvements to the plant or distribution system. OCA St. 2 at 11-12. In addition, the OCA argued that the acquisition was only for a portion of the Borough's system (*i.e.*, the portion located outside its municipal boundaries), and that the Borough continues to operate a system serving water and wastewater customers, as well as providing wholesale water supply to Aqua, which is evidence that the Borough was not providing inadequate service at the time of the acquisition. OCA St. 2 at 13-14.

With regard to Aqua's argument that the Commission's encouragement for the Company to sell the Phoenixville assets provides further support that the Company has satisfied the requirements of Section 1327, the OCA responded that while this may be true, it is not dispositive of the issue of whether the system was failing. OCA R.B. at 7. The OCA asserted that the Commission encouraged the sale of the Phoenixville assets to Aqua, in part, to resolve the Borough's inability to fund rate cases before the Commission, since as the Borough described, the costs of rate filings are significant and disproportionate to the "minimal revenues recovered from the Borough's small extraterritorial customer base." Aqua M.B. at 20 (citing *Phoenixville Petition Order* at 3-4). However, the OCA noted that the Commission has found that if a system does not have the financial resources to supply service outside of its service territory, or to remedy water quality problems near its territory, this does not indicate that the system was failing to maintain adequate, efficient, safe, and reasonable service and facilities at the time of the acquisition. OCA R.B. at 7 (citing *Pa. PUC v. Citizens Util. Water Co.*, 1996 Pa. P.U.C. LEXIS 167 at *20, *27-28).

2. Recommended Decision

The ALJ agreed with I&E and the OCA that they have successfully rebutted the presumption of the reasonableness of the excess paid for the Phoenixville

Water System. The ALJ found that there is no evidence that the Borough was failing to render reasonable and adequate service to its extraterritorial customers at the time it was acquired by Aqua. In addition, the ALJ explained that the Commission expects Class A public utilities, such as Aqua, to have completed a thorough analysis of the system's condition as part of any acquisition prior to making an offer, reaching an acquisition price, and closing on a transaction. R.D. at 43.

The ALJ further stated that all systems need ongoing maintenance and investment, and Aqua's meter replacement activity and routine maintenance only indicates that the Company is fulfilling its role as the new owner of the system. The ALJ noted that, while it is true that the estimated lost and unaccounted-for water is a concern and should be addressed, there may be a number of factors other than the failure of the facilities which contributed to the unaccounted-for water. However, the ALJ concluded that those factors alone do not support a conclusion that the service rendered by the Borough was inadequate within the meaning of Section 1327. R.D. at 43.

For the above reasons, the ALJ recommended that \$2,437,305 be removed from Aqua's rate base, and the concomitant adjustments be made to the accrued depreciation reserve¹³ and annual amortization expense which is expressed as a depreciation expense in this filing.¹⁴ R.D. at 44.

¹³ See Aqua M.B. at 18.

¹⁴ These adjustments are reflected in the Appendix to the Recommended Decision in Table II - Water, Rows "Acquis. Adj. – Phoenixville" and "Amort. Phoenixville Acquis. Adj."

3. Aqua Exception No. 2 and Replies

In its Exception No. 2, Aqua disagrees with the ALJ's decision to adopt I&E's and the OCA's positions to disallow the proposed acquisition adjustment in rate base and its amortization over a twenty-year period. Aqua Exc. at 15.

First, the Company argues that the Recommended Decision ignores the regulatory requirements imposed by the Commission in its *Phoenixville Petition Order* which prompted the acquisition. R.D. at 16. In this regard, Aqua contends:

[T]he RD fails to analyze, or even acknowledge, the Commission's prior findings that (a) recognized Phoenixville's inside-the-borough customers were subsidizing the service provided to outside-the-borough customers, and the defense of a base rate filing had deterred it from seeking rate relief to invest in its system, (b) the Commission had previously directed Phoenixville to avail itself of an acquisition to alleviate these burdens, and (c) Aqua PA's acquisition of the system is consistent with the regulatory requirement established in the *Phoenixville Petition Order*.

Aqua Exc. at 16 (footnotes omitted). In addition, the Company notes that the Commission also previously concluded, as a matter of law, that through the *Phoenixville Petition Order*, the Commission "encouraged the Borough to pursue a sale of its water system assets." Aqua Exc. at 16 (citing *Aqua-Phoenixville Order* at 19, Conclusion of Law ¶ 14).

Next, Aqua submits that the ALJ's recommendation is also incorrect that there is no evidence that the Borough was failing to render reasonable and adequate service at the time of the acquisition. Aqua maintains its argument that the Borough was failing to render reasonable and adequate service when it was acquired because the Borough was still manually reading meters, the system experienced 68% of

unaccounted-for water, and 30% of the system fire hydrants required repair or replacement. Aqua Exc. at 16.

Aqua asserts that the ALJ attempted to sidestep the above facts by arguing that those conditions are matters that reflect ongoing maintenance and investment requirements and that high levels of unaccounted-for water were not indicative of system failure. Aqua contends that the sidestepping of these issues divorces the existence of the conditions from the reasons the Borough was unable to address them during its ownership. Aqua cites to the following excerpt from the *Phoenixville Petition Order* in support of its argument that the Borough was not able to address the conditions prior to the acquisition:

In past years, the disproportionate cost of rate filings compared to the minimal revenues recovered from the Borough's small extraterritorial customer base has deterred the Borough from seeking rate relief and created cost subsidies flowing from inside-borough customers to outside-borough customers.

Aqua M.B. at 17 (citing *Phoenixville Petition Order* at 3 (quoting Borough Petition); Aqua M.B. at 29-30).

Aqua also submits that the ALJ's conclusion that the Company completed a thorough analysis of the system prior to making an offer and closing on the acquisition similarly misses the point. Aqua notes that it addressed this very argument, raised by I&E, in its Reply Brief:

First, the fact that poor conditions are known or knowable at the time of the acquisition is not the test; and if it was, it would completely undermine the purpose of Section 1327. Second, the assertion that the conditions were "known or knowable" actually supports the fact that the system was troubled at the time it was acquired, and that Aqua PA has

satisfied the requirements of Section 1327(a)(3), which is to encourage acquisition of troubled systems.

Aqua Exc. at 17 (citing Aqua R.B. at 13). Aqua argues that Section 1327 would be a “legal nullity” if the public utility’s showing under Section 1327 could be successfully rebutted by the claim that the poor conditions of the system were “known or knowable” at the time of the acquisition, or that the public utility conducted a thorough investigation of the system prior to acquiring it. Aqua contends that this would make it impossible to identify a troubled system for acquisition consistent with Section 1327 and Commission policy, because the identification of the poor conditions that would satisfy Section 1327 would also render it ineligible for the rebuttable presumption established by this section. Aqua Exc. at 17-18.

Lastly, the Company avers that the ALJ ignored the Commission’s policy statement in Section 69.711 of its Regulations, 52 Pa. Code § 69.711, which encourages regionalization and the acquisition of smaller troubled systems by larger capable public utilities. Aqua Exc. at 18. Aqua maintains that it presented credible testimony that the Phoenixville Water System was a prime candidate for using this policy and that the acquisition here is consistent with the Commission’s policy. *Id.* at 18 (citing Aqua St. 2-R at 8, Aqua M.B. at 30; and Aqua R.B. at 13).

In reply to Aqua’s Exceptions, I&E asserts that Aqua’s arguments do not accurately reflect the ALJ’s recommendation. First, I&E submits that Aqua erroneously argues that the ALJ failed to recognize that the Borough’s water customers within the Borough’s boundaries were subsidizing the water service provided to the extraterritorial borough customers. I&E R. Exc. at 6 (citing Aqua Exc. at 16). According to I&E, Aqua’s argument is irrelevant in that such subsidization is a rate structure concern internal to the Borough. I&E points to the testimony it provided that the Borough (unlike

a small private system) had many funding options to alleviate this problem. I&E R. Exc. at 7 (citing I&E St. 3-SR at 6; I&E St. 3 at 7-9).

I&E also asserts that Aqua's decision to pay in excess of the depreciated original cost for the subject assets does not guarantee recovery. I&E R. Exc. at 7. I&E cites the ALJ's observation that the excess Aqua chose to pay for the Phoenixville Water System created a rebuttable presumption and the ALJ determined that the presumption was successfully rebutted by I&E and the OCA. I&E R. Exc. at 7 (citing R.D. at 43). I&E further avers that the Commission's notation in the *Phoenixville Petition Order* that the Borough could explore a possible acquisition does not justify Aqua's decision to pay more than book value. *Id.*

I&E disagrees that the ALJ sidestepped Aqua's argument about the conditions of the Borough's water system prior to its acquisition (*i.e.*, manually reading meters, 68% of unaccounted-for water, and 30% of the system fire hydrants requiring repair or replacement) and, thus, the acquired Phoenixville Water System was non-viable at the time of acquisition. I&E asserts that the ALJ considered the factors raised by Aqua and rebutted by I&E and the OCA and clearly concluded that those factors alone do not support a conclusion that the service rendered by the Borough was inadequate within the meaning of Section 1327. I&E R. Exc. at 7.

I&E also contends that Aqua's regionalization argument is irrelevant to Aqua's choice to pay more than book value for the system and further notes that the regionalization concept also would have applied if Aqua had paid less than book value. I&E R. Exc. at 7. In closing, I&E explains that "the Commission expects Class A public utilities, such as Aqua, to have completed a thorough analysis as part of any acquisition to factor the condition of a system prior to making an offer and closing on a transaction." *Id.* at 7 (citing R.D. at 43).

The OCA's replies on this issue comport generally with those of I&E. OCA R. Exc. at 1. In addition, the OCA submits that the Company incorrectly claimed that the Commission, in its *Phoenixville Petition Order*, "directed" the Borough to consider selling its extraterritorial assets, thereby allegedly indicating that the Borough was not providing adequate service. OCA R. Exc. at 2 (citing Aqua Exc. at 16). The OCA clarifies that the Commission did not "direct" the Borough to consider selling. *Id.* The OCA notes the ALJ's finding that the Commission simply "observed" that the Borough had the "option to seek relief from regulatory burdens" by transferring its systems to an investor-owned utility like Aqua. OCA R. Exc. at 2 (citing R.D. at 42). Because there is no evidence in the record that the Borough was providing inadequate service at the time of the Company's acquisition, the OCA avers that the ALJ properly rejected the Company's proposal for a positive acquisition adjustment for the Phoenixville Water System, along with its associated \$121,865 amortization expense, which is expressed as a depreciation expense in this filing. OCA R. Exc. at 2 (citing OCA M.B. at 21; OCA Table II (Water)).

4. Disposition

Aqua based its acquisition adjustment claim on the fact that it paid more than the depreciated original cost for the assets, and it is therefore entitled to include the acquired facilities in rate base because it meets the nine criteria set forth in Section 1327(a) of the Code. Aqua M.B. at 24-26; Aqua St. 2 at 16. For convenience, Section 1327(a) is stated in its entirety below:

(a) Acquisition cost greater than depreciated original cost.--If a public utility acquires property from another public utility, a municipal corporation or a person at a cost which is in excess of the original cost of the property when first devoted to the public service less the applicable accrued depreciation, it shall be a rebuttable presumption that the excess is reasonable and that excess

shall be included in the rate base of the acquiring public utility, provided that the acquiring public utility proves that:

- (1) the property is used and useful in providing water or sewer service;
- (2) the public utility acquired the property from another public utility, a municipal corporation or a person which had 3,300 or fewer customer connections or which was nonviable in the absence of the acquisition;
- (3) the public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities, evidence of which shall include, but not be limited to, any one or more of the following:
 - (i) violation of statutory or regulatory requirements of the Department of Environmental Resources [¹⁵] or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;
 - (ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;
 - (iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;
 - (iv) a finding by the commission that the small water or sewer utility, because of necessary

¹⁵ The Department of Environmental Resources, referred to in Section 1327(a)(3)(i), was abolished by Act 18 of 1995. Its functions were transferred to the Department of Conservation and Natural Resources (DCNR) and the Pennsylvania Department of Environmental Protection (PADEP). R.D. at 42, n.24.

improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; or

(v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;

(4) reasonable and prudent investments will be made to assure that the customers served by the property will receive adequate, efficient, safe and reasonable service;

(5) the public utility, municipal corporation or person whose property is being acquired is in agreement with the acquisition and the negotiations which led to the acquisition were conducted at arm's length;

(6) the actual purchase price is reasonable;

(7) neither the acquiring nor the selling public utility, municipal corporation or person is an affiliated interest of the other;

(8) the rates charged by the acquiring public utility to its preacquisition customers will not increase unreasonably because of the acquisition; and

(9) the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base.

66 Pa. C.S. § 1327(a).

For the reasons detailed below, we agree with the ALJ's recommendation to deny the Company's request to include \$2,437,305 in rate base to reflect the amount beyond the depreciated original cost that it paid the Borough to acquire the Phoenixville Water System, that is, that portion of the Borough's extraterritorial water system. R.D. at 43-44.

Our review of the record leads us to conclude that Aqua failed to demonstrate that the proposed acquisition adjustment related to the Phoenixville Water System satisfies the requirements of Section 1327(a). As noted, none of the Parties have disputed that Aqua has satisfied Section 1327(a)(1)-(2) and (4)-(8).¹⁶ Thus, the contention among the Parties centers on Section 1327(a)(3) and (9), and particularly on Section 1327(a)(3)(v), which requires a finding by the Commission that "evidenc[es] the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities" at the time it was acquired by the acquiring utility. For the reasons discussed in more detail below, we find that the Company failed to meet its burden of proof of providing sufficient un rebutted evidence to demonstrate that the proposed positive acquisition adjustment should be included in rate base.

I&E and the OCA disputed the facts presented by the Company in response to Section 1327(a)(3), and particularly, Section 1327(a)(3)(iv). Section 1327(a)(3) specifically requires that Aqua must first provide sufficient evidence showing that "the

¹⁶ We disagree with the Company's statement that none of the Parties disputed that the Company has satisfied Section 1327(a)(9). The Company's statement implies that no one objected to the requirement that "the excess of the acquisition cost over the depreciated original cost will be added to the rate base to be amortized as an addition to expense over a reasonable period of time with corresponding reductions in the rate base." However, because I&E and the OCA are of the opinion that the Company has not met its burden of proving that the Borough's water system was a troubled system prior to its acquisition pursuant to Section 1327(a)(3) requirement, it stands to reason that I&E and the OCA also dispute that Aqua has satisfied the requirement of Section 1327(a)(9).

public utility, municipal corporation or person from which the property was acquired was not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities.” Section 1327(a)(3) further requires that the evidence presented to illustrate that the Borough was a troubled water system must “include, but not be limited to, any one or more” of the following:

- (i) violation of statutory or regulatory requirements of the Department of Environmental Resources or the commission concerning the safety, adequacy, efficiency or reasonableness of service and facilities;
- (ii) a finding by the commission of inadequate financial, managerial or technical ability of the small water or sewer utility;
- (iii) a finding by the commission that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure;
- (iv) a finding by the commission that the small water or sewer utility, because of necessary improvements to its plant or distribution system, cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility; or
- (v) any other facts, as the commission may determine, that evidence the inability of the small water or sewer utility to furnish or maintain adequate, efficient, safe and reasonable service and facilities;

66 Pa. C.S. § 1327(a)(3).

As noted, *supra*, Aqua provided responses to Items (i) – (v) in its checklist in Aqua Exhibit 3-A. With regard to Item (i), the Company indicated that the Borough did not have any statutory or regulatory violations of the Department of Environmental

Resources (now the DCNR and the PADEP) at the time of acquisition. With regard to Item (ii), the Company indicated that there were no Commission findings to show that the financial, managerial, or technical ability of the Borough was inadequate. With regard to Item (iii), the Company indicated that there are no Commission findings to show that there is a present deficiency concerning the availability of water, the palatability of water or the provision of water at adequate volume and pressure. With regard to Item (iv), the Company indicated that there were no findings by the Commission to show that, because of necessary improvements to its plant or distribution system, the Borough cannot reasonably be expected to furnish and maintain adequate service to its customers in the future at rates equal to or less than those of the acquiring public utility. And with respect to Item (v), which is the contested item here, the Company indicated, as discussed above, that at the time of acquisition, the Borough was unable to furnish or maintain adequate, efficient, safe and reasonable service and facilities because: (a) the Borough was manually reading residential and commercial meters; (b) non-revenue water was estimated to be at 68%; and (c) 30% (32/105) of the Borough of Phoenixville's system hydrants needed to be repaired or replaced.

In the Recommended Decision, the ALJ stated that the only evidence proffered by the Company to demonstrate the acquired water system was troubled at the time of acquisition involved: (1) manually reading meters; (2) 68% unaccounted-for water; and (3) a need to repair or replace 32 out of 105 fire hydrants. R.D. at 42. The ALJ agreed with I&E and the OCA in finding that the evidence submitted by the Company was vague and does not provide sufficient evidence that the Borough was failing to render reasonable and adequate service to its extraterritorial customers at the time it was acquired by Aqua. The ALJ determined that the manual meter readings and hydrant replacement primarily are routine maintenance matters not related to troubled water companies that indicate simply that Aqua is fulfilling its role as the new owner of the system. With regard to the estimated 68% unaccounted-for water, the ALJ stated that, while the amount of unaccounted-for water is a concern and should be addressed,

there may be a number of factors that contribute to the loss of water, but those factors alone, also do not support a conclusion that the service rendered by the Borough was inadequate within the meaning of Section 1327.

In its Exceptions, the Company maintains its argument that the manual meter readings, the need to replace 32 out of 105 hydrants, and the high level of unaccounted-for water are sufficient reasons to prove that the Borough was failing to render reasonable and adequate service at the time of the acquisition, and that the ALJ attempted to sidestep these facts in her Recommended Decision. We disagree with the Company. In our opinion, the ALJ appropriately ruled that the Company has not presented sufficient evidence to demonstrate that the Phoenixville Water System acquisition was necessary because the Borough was unable to render reasonable and appropriate service to customers at the time it was acquired by Aqua. We agree with the ALJ that the three items proffered by the Company in response to Section 1327(a)(3)(iv) are vague and not convincing. In our view, the Company failed to present substantial evidence pursuant to Section 1327(a) that the Borough was not maintaining reasonable service and thus, Aqua was not entitled to an acquisition adjustment presumption. In addition, the evidence presented by I&E and the OCA was sufficient to rebut the evidence presented by the Company.

The simple fact that the Borough's territorial customers were subsidizing service to the Borough's extraterritorial customers is not tantamount to the provision of unreasonable or inadequate service. Furthermore, the Company offered no convincing record evidence such as the number and type of customer complaints that were filed prior to or at the time of the acquisition or any proof to indicate whether the quality of the water or other services performed by the Borough were inferior and similar to those issues normally experienced by a troubled water company.

The Company also argues in its Exceptions that the ALJ did not “analyze or even acknowledge” that Phoenixville’s territorial customers were subsidizing the service provided to extraterritorial customers, and the defense of a base rate filing had deterred it from seeking rate relief to invest in its system. We disagree with the Company that the ALJ did not acknowledge this issue. Our review of the Recommended Decision indicates that the ALJ acknowledged the subsidization of water service to the Borough’s extraterritorial customers by the Borough’s territorial customers on page 41 of the Recommended Decision. The ALJ reasoned, however, that the issue was not pertinent to the relevant inquiry. In this regard, we agree with I&E’s position in its Reply Exceptions that, in this particular proceeding, the subsidization issue is irrelevant for the purpose of casting the Borough as a troubled water company. Rather, the subsidization issue is a rate structure concern internal to the Borough.

The Commission has handled numerous troubled water system acquisitions. Stated plainly, it generally is known at the time of the acquisition whether the water system to be purchased is a troubled system and it is often stated to be such and acquired pursuant to relevant statutory provisions. In this instance, nothing in the record demonstrates that the Borough was operating a troubled water system. The record reflects that the primary reason for the acquisition in this case was the Borough’s desire to be relieved of Commission jurisdiction so that it could avoid the high costs the Borough would incur in filing rate cases with the Commission for its extraterritorial water system. The important matter here is whether the customers in the acquired portion of the Borough’s system were receiving inferior service or whether the Company was not able to properly maintain the system facilities. The fact that the Borough chose to subsidize its extraterritorial customers with its territorial customer revenues rather than to file a rate case with the Commission to increase the rates for its extraterritorial customers, is not convincing evidence of the acquired water system being troubled.

We determine that the Company’s arguments regarding manual meter reading, relatively high unaccounted-for water levels, and hydrant repair/replacement issues do not rise to the level of rendering the Phoenixville Water System “troubled at the time of acquisition.” *See* Aqua R.B. at 13. The Company discusses at length its examination of the acquired assets post-acquisition and its findings of inadequacies. Aqua also vehemently argues against the I&E position that a “known or knowable” system flaw would render an acquisition adjustment claim under Section 1327 unavailable – making the statutory provision effectively a nullity. Aqua Exc. at 17.

We observe that recent orders of this Commission have directed acquiring utilities to present evidence supporting the inclusion of acquired assets in rate base and any claims of a Section 1327 acquisition adjustment be made in the first base rate case following application approval. *See e.g., Application of Columbia Water Company* Docket Nos. A-2021-3027134 and S-2021-3027145 (Order entered February 3, 2022). Thus, an acquiring utility is not prohibited from seeking an acquisition adjustment and enjoying the rebuttable presumption that such an adjustment should be made, should it: (1) discover system deficiencies; and (2) present sufficient evidence that establishes sufficiently that the acquired system was troubled at the time of acquisition. Section 1327 allows for this. In our view, an adequate measure of evidence simply was not presented by Aqua in the instant matter, when the underlying history of the sale is considered, and the discovered system inadequacies are evaluated.

The Company also filed Exceptions arguing that the Commission should approve its acquisition adjustment because “the Commission had previously *directed* Phoenixville to avail itself of an acquisition to alleviate these burdens.”¹⁷ Aqua Exc.

¹⁷ In its Main Brief, Aqua also incorrectly submitted that “the Commission imposed a regulatory requirement that Phoenixville sell the assets used to serve the extraterritorial customers, if it wanted to avoid the regulatory burdens associated with the Commission’s jurisdiction.” Aqua M.B. at 20 (emphasis provided).

at 16. It appears that Aqua filed this Exception in support of its position that the Borough was not providing adequate service. However, as the OCA noted in its Replies to Exceptions, it is important to note that this Commission never “*directed*” the Borough to sell its extraterritorial assets. OCA R. Exc. at 2. In the *Phoenixville Petition Order*, it is clear that we only suggested that the sale of the extraterritorial water system was a viable option for the Borough to consider:

Finally, the Commission would be remiss if we did not acknowledge Phoenixville’s concern regarding the regulatory “burden” related to Commission jurisdiction. However, the Commission believes these so-called “burdens” are justifiable and if reasonable, recoverable from ratepayers. Commission oversight provides voiceless extraterritorial customers with service protections and it ensures reasonable rates that will provide for safe and reliable service over the long term. Similarly, the Commission would also be remiss if we did not acknowledge that unlike in the prior municipal corporation cases, there are viable options for the Borough, namely, PAWC’s provision of public utility service in Upper Providence Township and Aqua Pennsylvania’s provision of public utility service in Schuylkill Township. In conclusion, Phoenixville clearly has options to these perceived regulatory “burdens” which may prove beneficial to explore.

Phoenixville Petition Order at 7-8. Notwithstanding Aqua’s mischaracterization of the Commission’s Order, we are of the opinion that even if the Commission had “directed” the Borough to sell its unwanted assets, the Company’s argument does not support its position that the Borough was not providing adequate water service and, thus, the acquisition cost beyond the depreciated original cost should be included in rate base. We agree with the ALJ that the Commission’s comment to the Borough regarding a possible acquisition does not justify Aqua’s decision to pay more than book value for the Phoenixville Water System. R.D. at 43.

In accordance with the above discussion, we shall deny the Company's Exception No. 2 and adopt the ALJ's recommendation that removes \$2,437,305 from Aqua's rate base and makes the concomitant adjustments to the accrued depreciation reserve and annual amortization expense, which is expressed as a depreciation expense in this filing. Thus, the Company's claimed depreciation expense will be reduced by \$121,865. These adjustments are reflected in Table II – Water, which is included in the rate tables that outline the Commission Tables Calculating Allowed Revenue Increase, which are attached to this Opinion and Order.

C. Additions to Rate Base – Cash Working Capital and Material & Supplies

1. Positions of the Parties

CWC is the capital requirement arising from the difference between: (1) the lag in the receipt of revenue for rendering service; and (2) the lag in the payment of cash expenses incurred to provide that service. R.D. at 44.

The Company's CWC claims for its water and wastewater operations include the working capital that is necessary for its O&M expense, taxes, and interest.¹⁸ *Id.* The Company claimed a CWC amount of \$1,736,000 for its water operations¹⁹ and a CWC amount of \$550,000 for its wastewater base operations.²⁰ *Id.*

¹⁸ See Aqua Exhibit 1-A(a), Schedule G-5; *see, e.g.*, Aqua Exhibit 1-B(b), Schedule G-5. Schedule G-5 in Exhibits 1-C through 1-G reflect the CWC amounts claimed for each of the individual wastewater operations claimed in this proceeding.

¹⁹ Aqua Exh. 1-A(a), Schedule G-5.

²⁰ Aqua Exh. 1-B(b), Schedule G-5.

No Party challenged the Company's lead/lag study²¹ or its calculation of: (a) the average lag days in payment of expenses, taxes, or interest; (b) the average lag day in receipt of revenues; or (c) the average lag days between payment of expenses and receipt of revenue.²² *Id.*

However, I&E recommended an adjustment to the CWC only for the water operations based on its recommended adjustments to revenue, O&M expenses, and taxes.²³ *Id.* I&E did not recommend any adjustments to wastewater base operations, or any individual wastewater operations because the proposed adjustments did not result in material changes to the respective CWC claims. R.D. at 44-45 (citing I&E St. 1 at 30).

The OCA's proposed adjustments to CWC were initially limited to the interest component of CWC. R.D. at 45 (citing OCA St. 1 at 24-25). However, the OCA subsequently revised its recommendations to reflect updates of operating expenses based on the OCA's proposed adjustments to operating expenses. *Id.* (citing OCA St. 1-SR at 12).

Aqua adjusted its claims for CWC based on the OCA's recommended adjustments to rate base, O&M expenses and taxes. The pertinent tables in the Appendix of the Recommended Decision reflect those adjustments. R.D. at 45.

Aqua also included an addition of \$7,672,303 for materials and supplies to its water operations rate base. R.D. at 45 (citing Aqua St. 1 at 27; Aqua Exh. 1-A, Sch. G-4). This amount was developed by averaging the monthly balances in the M&S

²¹ See Aqua St. 1 at 27 (describing the results of the lead/lag study).

²² See, *i.e.*, I&E St. 1 at 30 (agreeing with the Company's use of the lead/lag study method).

²³ I&E St. 1 at 30-31; *see also* Aqua St. 1-R at 10.

account for water operations for the thirteen months ended March 31, 2021.²⁴ Aqua’s wastewater filing includes a Schedule G-4, but “Aqua PA does not maintain a significant amount of standby materials and supplies for wastewater operations and, therefore, material and supplies [for wastewater operations] are expensed as they are purchased.” Aqua St. 1 at 27.

No Parties challenged the Company’s claim for an addition to rate base for materials and supplies.

2. Recommended Decision

The ALJ recommended that the Company’s claim for CWC be adopted, as adjusted by the Company, to reflect the recommended adjustments by I&E and the OCA to rate base, O&M expenses, and taxes. The ALJ also adopted the Company’s claim for an addition to rate base for M&S. R.D. at 45. The claims and pertinent adjustments recommended by the ALJ are reflected in the rate tables included in the Appendix to the Recommended Decision. A description of each of the tables is included on the first three pages of the Appendix.

3. Disposition

None of the Parties filed Exceptions regarding the ALJ’s recommendation on the Company’s remaining proposed adjustments to its plant in service. We find the ALJ’s recommendation to be reasonable and shall adopt it. As will be discussed in more detail in Section VIII.M of this Opinion and Order, *infra*, regarding the Company’s expense claims, a net increase of \$275,473 will be applied to the CWC component of

²⁴ Aqua St. 1 at 27.

Aqua's water rate base. This figure reflects, in part, our downward adjustment to O&M expenses of \$1,900,892.

Additionally, a net increase of \$362,667 will be applied to the CWC component of Aqua's wastewater rate base, which reflects, in part, our downward adjustment to wastewater O&M expenses of \$232,643. This is broken down as follows: (1) a net increase to the CWC component for Wastewater-Base of \$216,340, which reflects, in part, our downward adjustment to O&M expenses of \$150,101; (2) a net increase to the CWC component for Wastewater-Limerick of \$76,673, which reflects, in part, our downward adjustment to O&M expenses of \$27,778; (3) a net increase to the CWC component for Wastewater-East Bradford of \$9,669, which reflects, in part, our downward adjustment to O&M expenses of \$7,802; (4) a net increase to the CWC component for Wastewater-Cheltenham of \$54,249, which reflects, in part, our downward adjustment to O&M expenses of \$16,469; (5) a net increase to the CWC component for Wastewater-East Norriton of \$24,706, which reflects, in part, our downward adjustment to O&M expenses of \$14,318; and (6) a reduction to the CWC component for Wastewater-New Garden of \$18,970, which reflects, in part, our downward adjustment to O&M expenses of \$16,175.

In making the above adjustments, we have applied the same methodology utilized by Aqua and the ALJ and agreed upon by I&E and the OCA. Additionally, these adjustments are reflected in Table II-Adjustments in each of the sets of Commission Tables Calculating Allowed Revenue Increase that are attached in the Appendix to this Opinion and Order.

D. Deductions from Rate Base – Customer Advance for Construction, Contributions in Aid of Construction and Accumulated Deferred Income Tax (ADIT)

1. Positions of the Parties

“A customer advance for construction or ‘CAC’ is funds paid to a utility for an extension of service that is refunded over time to the applicant for service.” Aqua St. 2-R at 9. Similarly, “[c]ontributions in aid of construction or ‘CIAC’ are amounts furnished by applicants for facilities that may not be subject to a refund.” Aqua M.B. at 33; Aqua St. 2-R at 9. Both CAC and CIAC are treated as a reduction to a utility’s rate base.

With respect to its water operations, the Company’s claim for CAC and CIAC²⁵ reduced rate base by (\$178,784,735). R.D. at 45; Aqua Exh. 1-A, Sch. G-6. With respect to wastewater base operations, the Company’s claim reduced rate base by (\$20,965,154). Aqua Exh. 1-B, Sch. G-6.²⁶ Although the OCA initially proposed adjustments to CAC and CIAC, those proposals were subsequently withdrawn. OCA M.B. at 23; OCA R.B. at 9.

Additionally, Aqua claimed a total of \$392,515,121 for water and \$9,356,312 for wastewater in ADIT.²⁷ R.D. at 46. These amounts included normalized ADIT and the unamortized balance of excess ADIT resulting from various federal income tax rate reductions. Aqua St. 8 at 14. In rejoinder testimony, Aqua identified an

²⁵ Schedule G-6 of Aqua Exhibits 1-A and 1-B contain the Company’s proposed reductions to rate base for CAC and CIAC.

²⁶ No adjustments for CAC and CIAC were included in Exhibits 1-C through 1-G.

²⁷ See Aqua St. 8 at 14; *see also* Aqua Exh. Nos. 1-A(a) through 1-G(g), Sch. G-7.

additional \$6.1 million to be deducted from water rate base associated with the Company's claim regarding the treatment of uncertain tax positions in computing the flow-through deduction for tax repairs (FIN 48 adjustment). R.D. at 46; Aqua St. 8-R at 7; Aqua St. 8-RJ at 3. This adjustment was reflected by Aqua in its rate case tables attached to its Main Brief.²⁸

The OCA accepted the additional rate base deduction associated with uncertain tax positions, even though the OCA continued to oppose the Company's treatment of uncertain tax positions in computing the flow-through deduction for tax repairs. R.D. at 46; OCA St. 1-SR at 13-15.

2. Recommended Decision

The ALJ accepted Aqua's treatment of uncertain tax positions in computing the flow-through deduction for tax repairs. The ALJ noted that any other adjustments to ADIT as a result of other rulings are accounted for in the rate tables included in the Appendix to the Recommended Decision. R.D. at 46.

3. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we adopt it without further comment.

²⁸ See Aqua Table I Water, Column "Company Adjustments."

VII. Revenues and Revenue Requirement

A. Revenue Requirement

A utility's revenue requirement represents the total revenue that the utility needs to collect through the rates charged to the public to cover its cost of service. *See* https://www.puc.pa.gov/General/publications_reports/pdf/Ratemaking_Guide2018.pdf, accessed on March 18, 2022, (*PUC Rate Case Handbook*) at 102. The formula to calculate the utility's revenue requirement is set forth, as follows:

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

Where: RR=Revenue Requirement

T=Taxes

E=Operating Expense

D=Depreciation Expense

RB=Rate Base

ROR=Overall Rate of Return

I&E M.B. at 42, n.169. The central issue in a base rate case involves identifying the appropriate cost of service, or revenue requirement, for the company, in this case Aqua.²⁹ *PUC Rate Case Handbook* at 102.

1. Positions of the Parties

Aqua's final proposed revenue requirement on a total Company basis was approximately \$644,073,506, representing a proposed revenue increase of \$96,990,325 over *pro forma* revenues at present rates of \$547,083,180. After allocating a portion of

²⁹ We have discussed the Company's rate base, *supra*, and will discuss the remaining components of the Company's Revenue Requirement formula in the sections that follow.

the wastewater revenue requirement to water customers, this consisted of a proposed water revenue requirement of \$595,496,015, representing a proposed revenue increase of \$85,489,328 over water revenues at present rates of \$510,006,687; and a proposed wastewater revenue requirement of \$48,577,490, representing a proposed revenue increase of \$11,500,997 over wastewater revenues at present rates of \$37,076,493. Aqua M.B. at Appendix F, Water and Wastewater Revenue Requirement – Summary.³⁰

I&E recommended a revenue requirement of \$584,241,297 for Aqua, on a total company basis. I&E's proposal would result in a total revenue increase of approximately \$33.9 million over revenues at present rates of \$550,331,987. After allocating a portion of the wastewater revenue requirement to water customers, this consisted of a water revenue requirement of \$530,478,098, representing an increase of approximately \$17.223 million to the Company's water revenues of \$513,225,494 at present rates; and a wastewater revenue requirement of \$53,763,149, representing an increase of approximately \$16.687 million to the Company's wastewater revenues of \$37,076,443 at present rates. I&E M.B. at 5; M.B., Appendix A, Table VII-Water-Act 11 Allocation.

The OCA proposed a final revenue requirement of \$549,967,611 on a total Company basis, representing a revenue reduction of approximately \$12.142 million. OCA M.B. at 16; Appendix A, Summary Table.

³⁰ As previously noted, the Company stated in the body of its Main Briefs that its final revenue increase request was approximately \$97.6 million, which consisted of a claimed increase in water revenues of \$86.118 million and a claimed increase in wastewaters revenues of approximately \$11.566 million. Aqua M.B. at 2. However, Appendix F, Water and Wastewater Revenue Requirement – Summary, which is set forth in the Company's Main Briefs, shows a final proposed increase of \$85,489,328 in water revenues and \$11,500,997 in wastewater revenues, representing a total combined requested revenue increase of approximately \$96,990,325.

Although CAUSE-PA did not propose a specific revenue requirement in this proceeding, it stated that it supported and adopted the position of the OCA. CAUSE-PA M.B. at 12.

2. Recommended Decision

The ALJ recommended an overall revenue requirement of approximately \$582.2 million for Aqua on a total Company basis, based on the various adjustments she adopted in her Recommended Decision, resulting in an overall distribution revenue increase of approximately \$31.9 million. After allocating a portion of the wastewater revenue requirement to water customers, the ALJ's recommendation consisted of: (1) a revenue requirement of \$528.4 million for Aqua's water service, representing an increase of approximately \$15.2 million over *pro forma* present rate water revenues; and (2) a revenue requirement of \$53.8 million for Aqua's wastewater service, representing an increase of approximately \$16.7 million over *pro forma* present rate wastewater revenues. The ALJ's recommendation represented an increase of approximately 2.97% in water operating revenue and an increase of approximately 45% in wastewater operating revenue. R.D. at 1, 140, Appendix Table Act 11 – Water and Wastewater Revenue Requirement - Summary.

3. Disposition

Based upon our findings regarding certain inputs to Aqua's rate base, *supra*, and to Aqua's revenues, expenses, cost of common equity, and overall rate of return, discussed, *infra*, we shall approve an overall revenue requirement of \$617,476,255, on a total company basis, which will result in a maximum allowed overall distribution revenue increase of \$69,251,169, on an annual basis. After allocating a portion of the wastewater revenue requirement to Aqua's water customers, we shall approve: (1) a revenue requirement of \$561,658,784 for Aqua's water service,

representing a revenue increase of \$50,510,192, on an annual basis; and (2) a revenue requirement of \$55,817,471³¹ for Aqua’s wastewater service, representing a revenue increase of \$18,740,978,³² on an annual basis. These amounts are depicted on Table Act 11 Water and Wastewater Revenue Requirement – Summary, which is part of the Commission Tables Calculating Allowed Revenue Increase that are attached to this Opinion and Order.

B. Rider DRS Contracts

1. Positions of the Parties

Aqua proposed updated FPFTY *pro forma* revenues at present rates as set forth in Schedule B-1 of Aqua Exhibits 1-A(a) through 1-G(g). As a part of its direct case on revenue requirement, Aqua included an explanation of the basis for a number of water resale contracts charging discounted rates pursuant to Aqua’s tariff Rider DRS – Demand Based Resale Service (Rider DRS). *See* Tariff Water No. 3, Original Page 20. Aqua noted that “Rider DRS is available to existing or new customers that intend to purchase water from the Company for resale and have a viable competitive alternative to service from the Company.” Aqua St. 2-R at 11. Customers that can satisfy the requirements of Rider DRS may qualify for customer-specific contracts at

³¹ As set forth in Table Act 11 – Water and Wastewater Revenue Requirement – Summary, which is included in the Commission Tables Calculating Allowed Revenue Increase, attached to this Opinion and Order, this amount consists of the following individual wastewater revenue requirements: \$25,849,065 for Wastewater-Base Operations, \$7,249,205 for Wastewater-Limerick, \$1,663,639 for Wastewater-East Bradford; \$12,044,410 for Wastewater-Cheltenham, \$4,582,750 for Wastewater-East Norriton, and \$4,428,399 for Wastewater-New Garden.

³² This amount consists of the following individual allowed annual revenue increases: \$6,837,304 for Wastewater-Base Operations, \$3,270,632 for Wastewater-Limerick, \$649,070 for Wastewater-East Bradford; \$4,785,671 for Wastewater-Cheltenham, \$1,658,983 for Wastewater-East Norriton, and \$1,539,319 for Wastewater-New Garden. *See Id.*

discounted rates designed to maintain sales that would otherwise be lost to water service alternatives. *Id.*

Rider DRS further provides that, in order to qualify for discounted rates, a customer must have a competitive alternative:

The Company shall require documentation to establish, to the Company's satisfaction, the existence of a competitive alternative. Such documentation may include, but is not limited to, an affidavit of the customer or, if the customer is a corporation, an affidavit of one or more of its officers.

Tariff Water No. 3, Original Page 20.

In the Joint Petition for Settlement (2018 Settlement) approved by the Commission in the *Aqua 2018 Rate Case*, the Company agreed to provide “documentation of the existence of a viable competitive alternative to water service provided by the Company for the following Rider DRS customers and any new Rider DRS customers added after the date of this [2018 Settlement]”:

Rider DRS Customers

Chemung County Industrial Development Agency [(Chemung)]
New Wilmington Municipal Authority [(New Wilmington)]
Warwick Township Water and Sewer Authority [(Warwick)]
Borough of Sharpsville [(Sharpsville)]
City of Hubbard [(Hubbard)]
Horsham Water Authority [(Horsham)]
Schwenksville Borough Authority [(Schwenksville)]

2018 Settlement at ¶ 24.

Aqua also agreed in the 2018 Settlement “to date each competitive alternative analysis that is submitted regarding the above Rider DRS customers or new Rider DRS customers, and provide dates for when the competitive alternative analysis

was last considered, if applicable.” 2018 Settlement at ¶ 25. In addition, Aqua agreed to provide “a competitive alternative for the rates charged to [Aqua Ohio’s Masury Division (Masury)] area customers in its next water base rate filing.” 2018 Settlement at ¶ 26. Finally, it was noted in ¶ 27 of the Joint Petition that any party to same “reserves the right to review and challenge any contract and/or rate in future Aqua base rate filings, or in subsequent litigation related to this proceeding.”

I&E reviewed the updated information provided by Aqua regarding the Rider DRS customers and found that the documentation was inadequate to demonstrate a competitive alternative for certain customers. Thus, I&E proposed adjustments related to the “cancellation” of certain negotiated contracts that provide for sales for resale of water.³³ See I&E St. 4-SR at 17-18, I&E M.B. at 25-29.

I&E argued that several of the contracts do not qualify for the tariff discount and that these customers should pay full tariff rates when the rates resulting from this base rate case become effective. Specifically, I&E contended that resale customers are only eligible for discounted rates in a negotiated contract upon demonstration of the existence of a “viable competitive alternative” to service by the Company, and that the customer or prospective customer intends to select that alternative. In addition, I&E argued that unless and until the contract between Aqua and Masury – which was filed with the Commission as an affiliated interest agreement in November 2021 – is approved, Masury should be billed at full tariffed rates. I&E St. 4-SR at 20, I&E M.B. at 28.

³³ I&E originally sought to have additional discount contract customers moved to full tariff rates but withdrew its requests in surrebuttal testimony based upon the Company’s demonstrated evidence of available competitive alternatives.

2. Recommended Decision

The ALJ agreed with I&E that the documentation supplied by many of the discount rate customers was insufficient to demonstrate the existence of a competitive alternative. R.D. at 47. The ALJ reasoned that while an analysis of a competitive alternative need not be complex, more is required than simply a self-serving statement that competitive alternatives exist. The ALJ concluded that it is not burdensome to require the customer to include at least some description of the available alternatives and that it is not reasonable for Aqua to be satisfied by a dearth of information. The ALJ thus recommended that the Chemung and Horsham customers should be subject to Aqua's full tariffed rates. R.D. at 48.

The ALJ also agreed with I&E that the contract with New Wilmington does not comply with the terms of Rider DRS, and likewise should be subject to full tariff rates. *Id.* The ALJ determined that the only competitive alternative identified in the documentation supporting the discounted sale rate for the Borough of Sharpsville was the potential construction of an expensive new water treatment plant. The ALJ found that there was no evidence that this alternative is financially viable or that Sharpsville could purchase water from other sources and, accordingly, found that the contract with the Borough of Sharpsville does not qualify for Rider DRS. *Id.* at 48-49.

In contrast, the ALJ found that the documentation provided by the Executive Director of Schwenksville Borough is sufficient to demonstrate that the competitive contract satisfies the language of Rider DRS regarding the availability of competitive alternatives. Although not in the form of an affidavit, the ALJ determined that the letter is sufficiently reliable for the purpose of determining Schwenksville's qualification for Rider DRS. The ALJ concluded that it is reasonable for the Company to be satisfied by this description of a competitive alternative for the purpose of offering discounted service. *Id.* at 49.

In addition, the ALJ noted that Aqua provides water to Masury under a special tariff rate, that Aqua and Masury have negotiated a new contract under Rider DRS, but that the contract is an affiliated interest agreement that must be approved by the Commission pursuant to 66 Pa. C.S. § 2101, *et. seq.* R.D. at 49. Explaining that the agreement was filed with the Commission on November 30, 2021, and is pending a decision, the ALJ reasoned that, until the Commission makes a determination regarding the agreement, Masury should be charged full tariff rates, because doing otherwise would be premature. The ALJ recommended that Aqua's present rate revenues should be increased accordingly. R.D. at 49-50.

In summary, the ALJ recommended that the Commission direct Aqua to charge Sharpsville, Chemung, Horsham, and New Wilmington the full tariffed rates specified in Aqua's rate schedules upon the effective date of new base rates in this proceeding. She noted that this was without prejudice to the affected customers' ability to provide specific supporting documentation to Aqua that would satisfy the requirements of Rider DRS, including evidence that the affected customer has a viable competitive alternative and intends to select that alternative in the absence of a discounted rate. R.D. at 49. The ALJ also recommended that Masury be charged full tariff rates pending Commission consideration of the filed affiliated agreement. *Id.* at 46-50.

3. Aqua Exception No. 3, I&E Exception No. 1, and Replies

In its Exception No. 3, Aqua claims that the ALJ erroneously directed the Company to cancel certain Rider DRS contracts and charge those customers full tariff rates. The Company notes that the contracts were negotiated in good faith, in some cases, many years ago, and that cancellation of these arrangements could likely negatively impact current Aqua customers, create unnecessary litigation, and force local governments to build infrastructure, which they previously relied upon as being unnecessary. Aqua Exc. at 18-20.

Aqua claims that Rider DRS permits Aqua to enter into customer specific contracts at prices designed to maintain sales that would otherwise be lost to water service alternatives for customers that can satisfy the requirements of the rider. Aqua M.B. at 38-40. Aqua submits that the ALJ erred by agreeing with I&E's focus on the requirement that such customers must have a "competitive alternative" to qualify for the rate discount. Aqua notes that the contracts at issue include those between Aqua and Sharpsville, Schwenksville, Chemung, Horsham, and New Wilmington. Aqua Exc. at 18-21 (citing I&E St. 4-SR at 18). Aqua also disagrees with the ALJ's conclusion that charging Masury discounted rates is "premature." Aqua Exc. at 19 and 21-22.

Aqua claims that the ALJ's recommendations ignore the specific language of Rider DRS, which provides that:

The Company shall require documentation to establish, to the Company's satisfaction, the existence of a competitive alternative. Such documentation may include, but is not limited to, an affidavit of the customer or, if the customer is a corporation, an affidavit of one or more of its officers.

Tariff Water No. 3, Original Page 20 (emphasis added). Aqua Exc. at 19.

Emphasizing that the Company is required to adhere to its tariff pursuant to 66 Pa. C.S. § 1303, Aqua asserts that the ALJ's conclusions undermine the Company's ability to essentially exercise its judgment in evaluating the information supplied by potential contracting parties, and thus, adhere to its tariff as it is obligated to do under the Code. Aqua Exc. at 19. Additionally, Aqua argues that the ALJ disregarded the basis upon which the parties entered into these contracts and that her recommendation undermines the benefits these contracts provide to other customers. Aqua Exc. at 19-20 (citing Aqua M.B. at 41-42). Aqua claims that, by recommending that the Commission adopt the position of I&E, the ALJ supports I&E's "second guessing of documentation, contracts and decisions made by entities in the past." Aqua Exc. at 20. Aqua avers that

the ALJ's recommendation is erroneous because it "ignores the realities of these long-term contracts and seeks to analyze them in a vacuum, divorced from the specific facts and circumstances that existed at the time the contracts were entered into." *Id.* Aqua further claims that the Recommended Decision fundamentally alters the good faith, arms-length negotiations of the parties when they entered into the contracts over a decade ago. Aqua Exc. at 20 (citing Aqua M.B. at 42). Aqua submits that this ultimately eliminates approximately \$974,405 in benefits to other existing Aqua customers.³⁴ *Id.* (citing Aqua M.B. at 38-39).

Aqua next addresses the recommendations specific to each of its contracts with Chemung, Horsham, Sharpsville, New Wilmington, and Masury. Taking the Chemung, Horsham, and New Wilmington contracts together, Aqua claims that the ALJ erroneously concludes that the documentation provided by Chemung and Horsham is only "a self-serving statement that competitive alternatives exist" and that "[i]t is not reasonable for Aqua to be satisfied by so little information." Aqua Exc. at 20. Aqua submits that the statement in the Chemung contract is not "self-serving," but rather, it is a legally binding representation by this municipality, that forms the basis for the contract itself. *Id.* (citing Aqua M.B. at 47). Aqua argues that effectively, the ALJ appears to insinuate that the representations of a municipal entity that binds itself to a long-term contract based thereon is not to be trusted. Aqua asserts that there is no support for such a finding in the record. Aqua Exc. at 20.

Aqua insists that it demonstrated that Horsham has existing interconnections with the Company and another water provider, in addition to wells located throughout its own system. Aqua Exc. at 20-21 (citing Aqua M.B. at 48). Aqua argues that the Recommended Decision ignores these alternative supplies, and further

³⁴ Aqua claims that this is the sum of the benefits of the contracts associated with the applicable entities. Aqua Exc. at 20.

disregards the undisputed fact that Horsham could supply 100% of its water through sources other than the Company. Aqua Exc. at 20-21 (citing Aqua M.B. at 48).

With regard to New Wilmington, Aqua claims that the ALJ is in error by concluding that Aqua's contract with New Wilmington does not comply with Rider DRS. Aqua Exc. at 21. The Company claims that it demonstrated that the wheeling agreement³⁵ with New Wilmington provides important benefits, including enabling Aqua to provide service to a noncontiguous area of its service territory at low cost. According to Aqua, these factors make it reasonable for the Company to conclude that such a wheeling agreement does not require a competitive alternative. *Id.* (citing Aqua M.B. at 48-49).

Aqua next addresses the Sharpsville contract and asserts that the ALJ erred by retroactively concluding that the alternative identified by Sharpsville at the time it entered into the contract is not viable. Aqua Exc. at 21. Aqua asserts that the ALJ ignores other representations in the original contract by concluding that "the only competitive alternative identified in the documentation supporting the discounted sale rate was the potential construction of an expensive new water treatment plant. There is no evidence that this alternative is financially viable or that Sharpsville could purchase water from other sources." *Id.* at 21 (citing R.D. at 48-49). Aqua claims that Sharpsville also made representations at the time the contract was entered into regarding the then-existing source of supply. Aqua Exc. at 21 (citing Aqua M.B. at 44-45). Aqua asserts that this evidence conclusively demonstrates that Sharpsville was not only contemplating a new alternative to obtaining water service from Aqua, but also had an existing alternative at the time it entered into the contract. Aqua Exc. at 21 (citing Aqua

³⁵ Under a wheeling agreement, the Company "wheels" water to a proposed service area that is not contiguous with its distribution system. To transport the water to the proposed service area, Aqua provides water at a designated point of interconnection and then withdraws water elsewhere to serve the new service area. Aqua St. 2-R at 24.

M.B. at 44-45). Aqua adds that Sharpsville subsequently provided an affidavit that satisfies Rider DRS. Aqua Exc. at 21 (citing Aqua M.B. at 45-46). As a result, Aqua claims that the Commission should not cancel its long-term DRS contract with Sharpsville mid-term where the stated alternative at the time of contracting does not now exist precisely because of the Aqua DRS contract. *Id.* In sum, Aqua avers that Sharpsville has provided the documentation required by Aqua's tariff, and Aqua is obligated to adhere to its tariff. Aqua Exc. at 21.

Finally, Aqua asserts that the ALJ erred by concluding that the pendency of a Commission decision on the Masury contract dictates that the full tariff rate be applied to this customer unless and until the contract is approved. Aqua Exc. at 21-22. According to Aqua, the ALJ misunderstood the facts. Specifically, Aqua claims that the Recommended Decision disregards the fact that Aqua currently provides water to Masury under a special tariff rate.³⁶ In addition, Aqua points out that this specific agreement contains a competitive alternative analysis, as well as a sworn affidavit from Masury that it would select the alternative in the absence of the new contract. Aqua Exc. at 22 (citing Aqua M.B. at 49-50). Aqua contends that, if it is to be concluded that the Masury contract is not approved, then, rather than impute over \$1 million in additional revenues from Masury as proposed by the ALJ, the Commission should remove \$258,000 in revenues that will not be received from Masury. Aqua Exc. at 21 (citing Aqua M.B. at 50).

I&E replies to Aqua's assertions of error by stating that the ALJ correctly reasoned that customers who are able to satisfy the requirements of Rider DRS can enter into customer specific contracts at prices designed to maintain sales that would otherwise be lost to water service alternatives. I&E R. Exc. at 8 (citing R.D. at 47-50). I&E stresses that the key consideration under Aqua's tariff is the existence of a competitive

³⁶ See Tariff Water – Pa. P.U.C. No. 2, Third Revised Page 12.4.

alternative. According to I&E, the ALJ correctly analyzed the evidence presented regarding each of the Rider DRS contracts and reached well-reasoned conclusions. *Id.* I&E asserts that, while Aqua had the opportunity to provide substantial record evidence to support each of the Rider DRS contracts, it failed to meet its burden regarding those contracts identified by the ALJ. Therefore, I&E submits that the Commission should reject Aqua's Exception No. 3. I&E R. Exc. at 8.

In its Exception No. 1, I&E finds fault with the ALJ's conclusion that Aqua supplied sufficient evidence to support the DRS contract between Aqua and Schwenksville. I&E Exc. at 3-4 (citing R.D. at 49). I&E submits that the ALJ erroneously found that "the documentation provided by the Executive Director of Schwenksville Borough is sufficient to demonstrate that the competitive contract satisfies the language of Rider DRS regarding the availability of competitive alternatives." I&E Exc. at 3 (citing R.D. at 49). I&E specifically disagrees with the ALJ's conclusion that, "[a]lthough not in the form of an affidavit, the letter is sufficiently reliable for the purpose of determining Schwenksville's qualification for Rider DRS." I&E Exc. at 3-4 (citing R.D. at 49). I&E also disagrees that "it is reasonable for the Company to be satisfied by this description of a competitive alternative for the purpose of offering discounted service." I&E Exc. at 4 (citing R.D. at 49). I&E asserts that the letter provided by Schwenksville does not rise to the level of an affidavit and, therefore, is not sufficiently reliable for the purpose of determining Schwenksville's qualification for a Rider DRS. I&E Exc. at 4.

I&E argues that the document provided by Aqua is merely a cover letter with no oath or affirmation, and not an affidavit or the legal equivalent of one and thus, does not meet the standard required to be considered valid documentation supporting a competitive alternative under the plain language in Aqua's tariff. I&E Exc. at 4. Therefore, according to I&E, the Commission should overturn the ALJ's

recommendation, cancel the Schwenksville contract, and require Schwenksville to begin paying full tariff rates when they go into effect pursuant to this base rate proceeding. *Id.*

Aqua replies that I&E's argument disregards the plain language of Rider DRS, which permits Aqua to accept "documentation [that] may include, but is not limited to, an affidavit." Tariff Water No. 3, Original Page 20 (emphasis added). Aqua R. Exc. at 1-2. Aqua submits that it fully addressed I&E's claims and demonstrated that it satisfies the requirements of its tariff. Aqua R. Exc. at 1-2 (citing Aqua M.B. at 46-47, Aqua R.B. at 17-18). Aqua also argues that adopting I&E's assertion would violate the requirements of 66 Pa. C.S. § 1303, which requires Aqua's adherence to its effective tariff. For these reasons Aqua requests that I&E's exception be denied. Aqua R. Exc. at 2.

4. Disposition

At the outset, we note that adherence to tariff provisions is a statutory obligation of the utilities we regulate. 66 Pa. C.S. § 1303. We further note that when analyzing a tariff provision, like the law, we will not ignore its plain language under the pretext of pursuing its spirit. Finally, we study carefully the agreements reached by parties and commitments made in settlements brought to the Commission for its consideration and the evidence submitted in purported compliance with those settlement terms. With these governing principles in mind, we adopt, in part, and reject, in part, the recommendations of the ALJ on the DRS contract issues, as discussed more fully below.

It is useful first to repeat Aqua's obligations agreed to in the 2018 Settlement. The Company agreed to provide "documentation of the existence of a viable competitive alternative to water service provided by the Company for the following Rider DRS customers and any new Rider DRS customers added after the date

of this Joint Petition” for Chemung, New Wilmington, Warwick, Sharpsville, Hubbard, Horsham, and Schwenksville. 2018 Settlement at ¶ 24.

Aqua also agreed as follows:

25. Aqua agrees to date each competitive alternative analysis that is submitted regarding the above Rider DRS customers or new Rider DRS customers, and provide dates for when the competitive alternative analysis was last considered, if applicable.

26. Additionally, Aqua agrees to provide a competitive alternative for the rates charged to Masury area customers in its next water base rate filing.

27. Any party to this Joint Petition reserves the right to review and challenge any contract and/or rate in future Aqua base rate filings, or in subsequent litigation related to this proceeding.

2018 Settlement at ¶¶ 25-27.

These settlement commitments by Aqua were approved as a part of the Commission’s Opinion and Order in the *Aqua 2018 Rate Case*. We analyze each part of these settlement terms as context for the direct case that Aqua was to present in this, its next, base rate case.

Reviewing the 2018 Settlement language carefully, it is patently evident that under Paragraph 25, Aqua agreed to undertake a competitive alternative analysis for each existing and new Rider DRS contract, date those analyses, and indicate when the competitive alternative analysis “was last considered, if applicable.” This language seems to contemplate that consideration of the competitive alternative offered by a contracting party could be undertaken periodically during the course of the contract. This concept is contrary to Aqua’s claim now, in this present case, that the original validation of the availability of a competitive alternative is undertaken only at the time of contracting and it is not reviewed until the term of the contract expires.

With regard to the Masury contract, the 2018 Settlement contemplated that Aqua would “provide a competitive alternative for the rates charged to Masury area customers” in its next base rate case. This language is inartful, at best, and confusing when viewed in the context of our consideration of the Recommended Decision on the pending Masury contract and Aqua’s Exceptions regarding the same. Nevertheless, we examine the evidence of record and the ALJ’s recommendation on the Masury contract issue as we find it and rule on that basis.

Finally, we note that we do not have before us a recommendation or dispute regarding Aqua’s contracts with Hubbard, Warwick, Downingtown Municipal Water Authority, and Bucks County Water and Sewer Authority - Bristol. I&E withdrew its opposition to these contracts based upon information supplied by the Company. *See* I&E M.B. at 25-29. I&E indicated that it did not address Aqua’s contract with United Water because it was previously approved by the Commission. Our review of the record regarding these contracts indicates that even though they may provide some mutual benefit to the parties and are not detrimental to Aqua’s other customers, some of them potentially do not fit strictly within the applicability standards for Rider DRS. We strongly encourage Aqua to consider the development of an appropriate tariff provision governing the unique circumstances of these contracts.

With regard to the Chemung, Horsham and Sharpsville rate discounts, we agree with Aqua that it has presented sufficient record evidence to support the discounted rates based upon the availability of competitive alternatives. Aqua’s decisions to grant the discounted rates to these entities were validly based on official representations made by responsible municipal officials. For these reasons, we shall grant Aqua’s Exception No. 3 with respect to its arguments regarding the Chemung, Horsham, and Sharpsville discounts and reject the ALJ’s recommendations that these customers be charged full tariff rates. Based on our granting this portion of Aqua’s Exceptions, the ALJ’s upward adjustment of \$2,983,780 to the Company’s revenues, as set forth on Table II - Water in

the Attachment to the Recommended Decision, will be reduced by \$1,847,694.³⁷ Therefore, our total upward adjustment to the Company's Revenues as a result of water contract revenue is \$1,136,086 (*i.e.*, \$2,983,780 - \$1,847,694 = \$1,136,086).³⁸

As for New Wilmington, however, we agree with Aqua that it must adhere to its tariff language and the applicable DRS Rider does not contain any provision for the type of "wheeling" arrangement that Aqua entered into here. Aqua's claim of "important benefits" justifying its departure from the competitive alternative requirement in Rider DRS simply does not hold water.³⁹ For these reasons, we deny Aqua's Exception No. 3 with respect to its arguments regarding the New Wilmington contract and adopt the ALJ's recommendation that Aqua charge New Wilmington full tariff rates. Accordingly, we shall impute \$348,904 in revenues, representing the difference between \$677,550 in revenues at New Wilmington's full tariff rate and \$328,646 in revenues at contract rates. *See* I&E Exh. 4-SR, Sch. 1.

With regard to Masury, we acknowledge Aqua's observation that it provides service to Masury under a special tariff rate.⁴⁰ In addition, Aqua also has demonstrated that the agreement contains a competitive alternative analysis and a sworn

³⁷ As we are permitting the Company to grant discounted rates to Chemung, Horsham, and Sharpsville, the associated imputed revenues added back by the ALJ of \$30,944, \$123,779, and \$1,692,971, respectively, will be removed from the ALJ's total upward adjustment for water contract revenues. [$\$30,944 + \$123,779 + \$1,692,971$] = \$1,847,694. *See* I&E Exh. 4-SR, Sch 1.

³⁸ Accordingly, this \$1,136,086 is comprised of imputed general service revenues of \$348,904 for New Wilmington and \$787,182 for Masury, discussed, *infra*.

³⁹ We also note that consideration of the existence of competitive alternatives during the course of the contract is not explicitly prohibited by the language of Rider DRS. While it requires Aqua to consider evidence of competitive alternatives at the time of original contracting, it does not preclude Aqua from re-evaluating the contract in the event of changed circumstances.

⁴⁰ *See* Tariff Water – Pa. P.U.C. No. 2, Third Revised Page 12.4.

affidavit from Masury that it would select an alternative provider in the absence of the new contract. Aqua M.B. at 49-50. Nonetheless, we note that the new contract is pending approval by the Commission. Thus, because the new contract has not yet been ruled upon by the Commission, we deny this portion of Aqua's Exception No. 3 and include in Aqua's revenues those anticipated to be received from Masury under its special tariff rates that are currently in effect. Accordingly, we shall impute \$787,182 in revenues, representing the difference between \$1,045,216 in revenues at Masury's special tariff rate and \$258,034 in revenues at contract rates.⁴¹ See Aqua RS2 Attachment at 8; I&E Exh. 4-SR, Sch. 1.

We shall also deny I&E's Exception No. 1. The ALJ's conclusion that Aqua has met its burden to establish competitive alternatives available to Schwenksville is correct. Simply put, the language of Rider DRS does not command an affidavit from a contracting party. Aqua's acceptance of the documentation submitted by this duly formed municipal entity as sufficient and reliable is reasonable. We thus adopt the ALJ's recommendation to uphold the Schwenksville contract discount due to competitive alternatives being demonstrated as available to the customer.

C. Late Payment Charges

1. Positions of the Parties

I&E recommended an adjustment to the Company's forfeited discount revenues (*i.e.* revenues received from late payment charges). More specifically, I&E

⁴¹ We note that although the ALJ stated that the Company should bill Masury at full tariff rates, the ALJ properly used the revenues at Masury's special tariff rate in making her upward adjustment to Aqua's water contract revenues. Therefore, our only financial modification to the ALJ's recommended adjustment for water contract revenues is our adjustment to remove the imputed general service revenues associated with Rider DRS contracts for Chemung, Horsham and Sharpsville, discussed, *supra*.

recommended that the Company's water revenues under present rates be increased to reflect \$1,373,542 in late payment revenue. I&E St. 4 at 7. Additionally, I&E recommended that the Company's wastewater revenues for its New Garden system under present rates be increased to reflect \$17,832 in late payment revenues. I&E St. 5 at 60.

Aqua argued that I&E's proposed recommendation for water revenues at present rates should be rejected because, in its response to filing requirement "OR6 for Water," the Company recorded "other miscellaneous revenues" totaling \$1,301,938 on its books for the HTY ended March 31, 2021, which were, therefore, included in the FPFTY claim. Of this amount, the Company explained that \$735,710 was attributable to late payment revenues in the HTY. Thus, Aqua submitted that I&E's claim that the Company did not include late payment revenues for the FTY and the FPFTY was incorrect. However, in reviewing I&E's proposed recommendation, the Company agreed to make an upward adjustment to increase FPFTY miscellaneous revenues by \$150,172 to normalize the impact of COVID-19 on miscellaneous revenues. Aqua M.B. at 56; Aqua R.B. at 20.

I&E accepted the Company's adjustment and withdrew its recommended adjustment of \$1.3 million to water revenues at present rates. I&E St. 4-SR at 3-4. Additionally, the Company agreed with I&E's recommendation to increase wastewater revenues by \$17,382 for Aqua's New Garden system under present rates. Aqua M.B. at 56-57.

At the same time, I&E recommended that the Company's water revenues at proposed rates be increased by the same percent increase as the overall base rate increase granted by the Commission in this proceeding. I&E M.B. at 22-23.

Aqua countered that such an adjustment is not necessary because the Company has already reflected late payment revenues at proposed rates in its present rate

adjustment. Therefore, Aqua took the position that I&E's recommended adjustment would result in the improper double counting of late payment revenues. Aqua M.B. at 56; Aqua R.B. at 21.

I&E rejoined that the Company's late payment claim under revenues at present rates is designed to project the amount of revenue the Company would receive in the FPFTY if its rates were not increased. As such, I&E insisted that Aqua's claim that it already made an adjustment for the increase in late payment revenue that would be generated under proposed rates in its present rate claim is illogical and should be rejected.

Aqua and I&E also applied their above respective positions to the Company's wastewater revenues at proposed rates. Namely, the Company asserted that it will receive the same \$93,816 in late payment revenues under proposed rates for the FPFTY that it reflected under revenues at present rates, such that no adjustment to its revenues at proposed rates is necessary. Aqua St. 2-R at 30-31; I&E M.B. at 23-24.

However, I&E asserted that because late payment revenues are generally a percentage of a customer's bill, it is reasonable to expect that increasing revenue through a base rate increase will cause revenues from late payments to increase over time. Thus, I&E maintained that the Company's wastewater revenues at proposed rates should also be increased by the same percent increase as the overall base rate increase granted by the Commission in this proceeding. I&E M.B. at 24-25; I&E R.B. at 17-18.

2. Recommended Decision

The ALJ found I&E's position to be persuasive. Therefore, the ALJ recommended that the Company's late payment revenues at proposed rates, projected for the FPFTY, be adjusted for both water and wastewater accordingly. According to the ALJ, the total permitted operating revenue in this matter is inclusive of general service,

forfeited discount, and other miscellaneous revenues. Thus, the ALJ further concluded that Aqua should be directed to increase general service and forfeited discount revenues by the same percentage amounts such that these revenues, when combined with other miscellaneous revenues that are not increasing, equal the total permitted operating revenue. The ALJ also recommended that Aqua be instructed to demonstrate compliance with this directive through its proof of revenues, consistent with the Commission's Regulations at 52 Pa. Code §5.592(a) regarding compliance with orders prescribing rates. The ALJ attached, as Table RevSum, an illustration of the recommended increase in forfeited discount revenues that would result from the recommended increase in general service revenues. R.D. at 51; Appendix Table RevSum.

The ALJ also explained that the revenue adjustments included in Table II - Water, as discussed in the Recommended Decision and in the Appendix thereto, resulted in a concomitant adjustment to forfeited discount revenues. The ALJ stated that if it is reasonable to assume that additional revenues result in an incremental bad debt expense, as assumed by the increase in O&M Expense indicated in Table I, Column "ALJ Revenue Increase" of each rate case table, then it also must be reasonable to assume that the Company will receive corresponding forfeited discount revenues from those customers that are causing the incremental bad debt expense by not making timely payments on their bills. The ALJ continued that concomitant forfeited discount revenue is determined by applying Aqua's proposed uncollectible account rate to the sum of other revenue adjustments. The ALJ explained that this adjustment is reflected in each rate case table in the Attachment to the Recommended Decision under Table II, Row "Concomitant Forfeited Discounts."⁴² R.D. at 51-52, Appendix Table II.

⁴² However, as the ALJ did not recommend any additional adjustments to the Company's wastewater revenues, no adjustment for "Concomitant Forfeited Discounts" appears on Table II of any of the wastewater rate tables that were attached to the Appendix of the R.D.

3. Disposition

No Party filed Exceptions on this issue with regard to the ALJ's recommendation. Finding the ALJ's recommendation to be reasonable and based soundly on record evidence, we shall adopt it. Accordingly, we shall adopt the ALJ's recommendation that Aqua's claim for late payment revenues under proposed rates, for both water and wastewater, be increased by the same percentage as the overall base rate increase authorized under this Opinion and Order. In addition, we shall instruct Aqua to demonstrate compliance through its proof of revenues that will be included with the detailed calculations that accompany its tariff filing, described in Ordering Paragraph 16 of this Opinion and Order, *infra*. Similar to the ALJ in her Recommended Decision, Table RevSum, which is attached to the Appendix of this Opinion and Order, outlines the increase in forfeited discount revenues that would result from the final increase in general service revenues authorized under this Opinion and Order.

We further note that the final adjustments that we make to the Company's water revenues are included on Table II-Water-Summary of Adjustments in the Commission Tables Calculating Allowed Revenue Increase, attached to this Opinion and Order, along with the adjustments we have made to rate base, expenses, and taxes, as discussed elsewhere in those sections of this Opinion and Order. This table likewise includes an adjustment amount for "Concomitant Forfeited Discounts" based upon the uncollectible accounts factor outlined in Table IB-Water-Revenue Factor.

D. Escalation Provisions of Negotiated Water Contracts

1. Positions of the Parties

The OCA proposed that, to reflect revenue adjustments for the sale and resale contracts for the end-user negotiated rate contracts, the Company's water utility revenue for the FPFTY should be increased by \$236,777 for special contract revenue.⁴³ OCA M.B. at 26 (citing OCA St. 1SR at 16; OCA Exh. LA-6, Sch. C-2; OCA St. 4SR at 11). The OCA noted that the escalation provisions in Aqua's contracts are tied to changes in the Consumer Price Index (CPI). The OCA argued that Aqua forecasted considerably lower inflation rates without providing a basis for their use. The OCA submitted that its recommended escalation rates using the average of the United States Office of Management and Budget's (US OMB) and the Federal Reserve's forecasted inflation rates for 2021, 2022, and 2023 were the appropriate rates to be applied in this case. OCA M.B. at 26 (citing OCA St. 4SR at 9-10; Aqua St. 2-R at 28). Thus, the OCA submitted that its inflation calculation is a more accurate and realistic depiction of what inflation levels will be in the FPFTY. OCA M.B. at 26; OCA R.B. at 12-13.

Aqua disagreed with the OCA's proposed upward adjustment, arguing that the adjustment uses different inflation factors that are inconsistent with the inflation escalation clauses in the respective contracts. Aqua R.B. at 19 (citing Aqua St. 2-R at 28). Aqua further argued that, although this rate case is based upon a FPFTY ending March 31, 2023, the OCA included forecasted inflation rates for 2023 that will not affect most of the contract rates. Aqua M.B. at 52.

⁴³ Initially, the OCA submitted that Aqua's negotiated contract revenue adjustment be increased \$301,307. OCA St. 4SR at 11.

Aqua submitted that, contrary to the OCA's claim that the Company did not provide a basis for its adjustment factors, the escalation factors used are the same factors used to determine the General Price Level Adjustment for expense purposes. Aqua R.B. at 19 (citing Aqua M.B. at 53). Aqua explained that the Company's projection of inflation adjustments is based upon "the [Gross Domestic Product] GDP Chained Price Index" at the time the instant case was filed, which was used to calculate the General Price Level Adjustment for expense purposes. Aqua M.B. at 53. Thus, Aqua posited that for consistency, the inflation factor used to adjust certain revenues should be the same as the inflation factor used to adjust certain expenses. *Id.* Aqua added that using different escalation factors should not be permitted because it "would undermine the parties' good-faith bargain." Aqua R.B. at 19 (citing Aqua M.B. at 53).

2. Recommended Decision

The ALJ disagreed with the Company's argument that the escalation factor reasonably represents projected revenue resulting from negotiated contracts. Accordingly, the ALJ recommended that the Company's special contract revenue be increased in the FPFTY to reflect the escalation rate calculated by the OCA. R.D. at 53.

The ALJ found that the purpose of calculating the revenue requirement in a rate filing is to project revenues and expenses that can be expected in the FPFTY, which ultimately results in a reasonable and fair opportunity to earn a fair rate of return. The ALJ further found that, where such revenue is tied to a contractual escalation factor, revenue should be increased based upon a reasonable estimate of the amount of that escalation factor. The ALJ reasoned that the OCA's adjustment values are reliable and impartial because they are determined by government agencies (*i.e.*, the US OMB's and the Federal Reserve's forecasted inflation rates for 2021, 2022, and 2023). R.D. at 53 (citing OCA M.B. at 26). The ALJ observed that the OCA determined its projected CPI by averaging the forecasted CPIs for 2021, 2022, and 2023 for the Office of Management

& Budget (OMB) and the Federal Reserve. Additionally, the ALJ noted that the OCA supported higher inflation for 2021 through a November 2021 government publication containing information up to October 2021 from the Bureau of Labor Statistics. R.D. at 53.

Accordingly, the ALJ recommended that Aqua's special contract revenue be increased in the FPFTY based on the escalation rate calculated by the OCA, as reflected in Table II - Water in the Appendix of the Recommended Decision. Additionally, the ALJ noted that she did not include adjustments for the Rider DRS contracts because she recommended that Rider DRS contracts be charged the full tariff rates and "full tariff rates are not subject to an additional escalation rate." R.D. at 53. Thus, the actual upward adjustment to the Company's revenues as a result of the ALJ's recommendation was \$181,350. R.D. at Appendix, Table II - Water.

3. Aqua Exception No. 4 and Replies

In its Exception No. 4, Aqua disagrees with the ALJ's conclusion to increase the Company's special contract revenue associated with the OCA's calculated negotiated water rate contracts by \$236,777, to reflect the OCA's recommended escalation rates. Aqua Exc. at 22-23 (citing R.D. at 53-54; Aqua M.B. at 51-53; Aqua R.B. at 19).

Aqua argues that as a part of its contract terms, each of the contracts that would be subject to this adjustment contain an escalation provision that specifies how the rate of inflation is to be calculated for determining the annual escalation. Aqua Exc. at 23 (citing Aqua M.B. at 51). Therefore, Aqua argues that the OCA's recommendation is unreasonable and inappropriate because it effectively substitutes an escalation rate into each contract that is different from the agreed-upon escalation rate. Moreover, Aqua argues that it demonstrated that the OCA's calculated inflation rates are overstated. Aqua

Exc. at 23 (citing Aqua M.B. at 52-53). Aqua explains that the OCA includes inflation rates for 2023, which ignores that the instant rate case “is based upon a FPFTY ending March 31, 2023, and 2023 inflation rates will not affect most of the contract rates.” *Id.* (citing Aqua M.B. at 52). Thus, Aqua contends that the adjustment calculation recommended by the ALJ is based upon inflation rates that will not affect the Company’s revenues during the FPFTY. *Id.*

Aqua also submits that to the extent that the Commission determines that the OCA’s adjustment is appropriate due to the OCA’s use of more current inflation rates, the Commission should consider such inflation rates with respect to the Company’s proposed General Price Level Adjustment. Aqua cites to its Exception No. 7 in which it provides detailed arguments on why “existing macroeconomic conditions demonstrate that increases in inflation are subjecting the Company to increased expenses.” Aqua Exc. at 23 (citing Aqua Exc. at 26-29).⁴⁴ Moreover, Aqua argues that the ALJ’s approach to reflect inflation by increasing the revenues the Company obtains under its negotiated water rate contracts is inconsistent and arbitrary given the effects of inflation on other aspects of the Company’s revenue requirement that would entail a larger increase in revenue than what was recommended. *Id.*

In its Replies, the OCA disagrees with Aqua’s position. The OCA notes that in its calculation, the 2023 inflation factor was only applied to January 2023, February 2023, and March 2023, because those three months are within the FPFTY ending March 31, 2023. The OCA, therefore, asserts that it reflected the contract rates at the end of the FPFTY, just as the Company has calculated its estimated revenues, customers served, operating expenses, and rate base as of March 31, 2023. OCA R. Exc. at 11 (citing OCA R.B. at 67; OCA St. 4 SR at 9).

⁴⁴ We shall address Aqua Exception No. 7 separately, in Section VIII.J of this Opinion and Order, *infra*.

The OCA also disagrees with Aqua's argument that it would be inconsistent for the Commission to use higher inflation rates to calculate higher revenues if the impact of higher inflation rates on the Company's expenses is not recognized. OCA R. Exc. at 11 (citing Aqua Exc. at 23). According to the OCA, Aqua's general inflation adjustment was properly rejected because it was speculative and the Company did not provide specific evidence demonstrating that it would actually experience cost increases in those areas. Further, the OCA contends that the ALJ properly accepted the OCA's special contract revenue adjustment because the terms of the contract were specific about the adjustments that would occur in the FPFTY. *Id.* (citing R.D. at 52, 70-71).

Finally, the OCA acknowledged that the ALJ did not include adjustments for the Rider DRS contracts that she recommended should be charged full tariff rates. R.D. at 53. The OCA asserts that, to the extent the Commission does not adopt the ALJ's recommendation to move Chemung, Horsham, New Wilmington and Sharpsville from discounted contract rates to full tariff rates, special contract revenues for those contracts should be adjusted upward to reflect the escalation provisions (*i.e.*, the ALJ's recommended adjustment of \$181,350 should be increased accordingly). OCA R. Exc. at 11-12 (citing R.D. at 53).

4. Disposition

Upon our review, we disagree with the ALJ's reliance on the escalation rate calculation utilized by the OCA in its proposed adjustment to special contract revenue. In support of her recommendation, the ALJ asserted that the OCA's adjustment to special contract revenue, which is based on an escalation rate calculation that uses the average of the US OMB's and Federal Reserve's forecasted inflation rates for 2021, 2022, and 2023, has "an apparent reliability and degree of impartiality because they are determined by government agencies." R.D. at 53. Although we agree that the sources for the OCA's

adjustment values are reliable and fair, we are of the view that the Company provided a sufficient basis for justifying the reliability of the escalation provisions in the contracts.

As noted by Aqua, the escalation provisions in the relevant contracts specify how the inflation rate is to be calculated for annual escalation, and the OCA's recommendation would effectively substitute the agreed-upon escalation rate with a different rate. We find Aqua's argument here persuasive. Indeed, as noted by the Company, substituting the contractual escalation rate at this juncture would ultimately undermine the good-faith efforts of the related parties to negotiate an agreed-upon escalation rate. To the extent that the OCA argues that Aqua's inflation calculation does not sufficiently depict what inflation levels will be in the FPFTY, we are of the opinion that the inflation rates in the Company's negotiated rate contracts are substantiated, reliable, and do not require or necessitate an adjustment.

Therefore, we shall grant Aqua Exception No. 4 and modify the Recommended Decision by removing the ALJ's recommended upward adjustment of \$181,350 to the Company's revenues associated with negotiated water contracts.

E. Metered Residential Sale Adjustment

1. Positions of the Parties

The Company proposed an adjustment to water consumption related to the COVID-19 pandemic. In making this adjustment, Aqua asserted that it would not assume that consumption by class in the future will be similar to usage patterns during the pandemic (*i.e.*, the HTY). Rather, the Company contended that projected consumption by class will be similar to usage patterns in its prior base rate case, *i.e.*, the *Aqua 2018 Rate Case*. As such, it proposed an adjustment to residential, commercial, and public customer classes based on the average usage presented in the *pro forma* FPFTY used in

the *Aqua 2018 Rate Case*. The adjustment reduced residential water usage, and sales revenue by \$11.03 million, and increased Commercial and Public Authority water usage, and sales revenue by \$10.96 million. Aqua's proposed total overall change in revenue under present rates using this adjustment results in a decrease in total water revenues of \$64,639. Aqua M.B. at 53; Aqua St. 5 at 17.

The OCA accepted Aqua's adjustments for Commercial and Public Authority water sales revenues to reflect pre-pandemic water sales revenue. However, the OCA recommended an adjustment that reflected 75% of the Company's proposed reduction for residential customers. In support, the OCA emphasized that the Company's metered residential water sales in 2020 were 1,181,614,000 gallons higher than in 2019, a pre-pandemic period. With increased residential water usage in 2020, the OCA argued that it would be unreasonable for Aqua to reduce HTY metered residential water sales by such a significant quantity for the purpose of deriving sales levels for the FPFTY. The OCA submitted that many residential consumers will continue to work from home and spend more time in their houses. According to the OCA, its recommendation would increase residential water sales by \$2.757 million. OCA M.B. at 24-25.

In opposing the OCA's proposed adjustment to residential metered water sales, the Company cited substantial downward trends in residential usage for the months of September 2021 and October 2021 when compared with the pandemic months of September 2020 and October 2020. Aqua also argued that it was inconsistent for the OCA to accept the Company's revenue adjustments for commercial and public customers, but not residential customers. Aqua M.B. at 53-54; Aqua R.B. at 20.

In response, the OCA contended that Aqua's presumption that none of the 6.4% year-over-year increase in residential metered water sales is likely to continue beyond 2020 and into the FPFTY does not seem realistic. OCA St. 1 at 37. Rather, the OCA asserted that the record evidence supports a finding that the pandemic is ongoing

and residential water usage is not reasonably likely to return to pre-pandemic levels in the FPFTY. OCA R.B. at 10-11.

2. Recommended Decision

The ALJ accepted Aqua's reduction to revenues to reflect removing the impact of COVID-19 on metered customer water sales. Initially, the ALJ found that the OCA's proposed acceptance of this adjustment for commercial and public customers, but not for residential customers, was inconsistent. Citing the testimony of Aqua's witness, Ms. Constance E. Heppenstall, the ALJ reasoned that if individuals are staying home and using more water than pre-pandemic, it should follow that usage for commercial and public classes should also be lower than pre-pandemic levels. R.D. at 54 (citing Aqua St. 5-R at 18).

Next, the ALJ determined that Aqua's position that usage trends support its proposed adjustment to water consumption due to the COVID-19 pandemic is reasonable and that the projection of a return of consumption toward pre-pandemic levels is credible. Additionally, the ALJ stated that the Company's approach to treat trends on the residential class consistently with trends in the commercial and public classes for the purposes of projections for the FPFTY is reasonable and supported by the record. R.D. at 54-55 (citing Aqua St. 5-R at 19).

3. OCA Exception No. 1 and Replies

In its Exception No. 1, the OCA argues that the ALJ erred in adopting Aqua's residential metered water sales when the pandemic continues to keep people using more water at home. In support, the OCA reiterates that the Company's residential metered water sales in 2020 were over one billion gallons higher than the pre-pandemic level in 2019. Given this significant increase, the OCA contends that it is unlikely that

residential usage will decrease as quickly as Aqua predicts, such that usage would be back to “normal” for the purpose of deriving sales levels for the FPFTY. OCA Exc. at 1 (citing OCA St. 1 at 36).

Responding to the ALJ’s finding that the OCA’s adjustment to residential metered water sales is inconsistent with the acceptance of Aqua’s prediction for commercial and industrial sales, the OCA submits that its recommendation reflects the unpredictability surrounding how and when the pandemic will come to an end. According to the OCA, recent data about residential water usage indicates that it is still up from pre-pandemic levels by as much as 9.1%. OCA Exc. at 1 (citing OCA St. 1-SR at 27-28).

The OCA adds that although commercial and industrial institutions are slowly re-opening, many workers are still spending more time at home. The OCA proffers that its recommended increase to residential revenues of \$2.757 million addresses this slow return to pre-pandemic levels by reflecting 75% of Aqua’s proposed reduction to residential revenues, in order to account for the decrease to residential water usage, but recognizing that it is not likely to return to pre-pandemic levels in the FPFTY. OCA Exc. at 2 (citing OCA St. 1, Exh. LA-2, Sch. C-6).

The OCA argues that its projections are more consistent with the data which recognizes a gradual return to consumption more closely aligning to pre-pandemic levels, while Aqua’s assumptions assert, without basis, an immediate return. Based on its proposed revenue adjustment, the OCA recommends: (1) a related negative adjustment of \$66,787 to the Company’s claimed Chemicals Expense for water operations; (2) a negative adjustment to Purchased Power expense of \$96,312; and (3) an adjustment to CWC to reflect this recommended revenue adjustment and based on the OCA’s other expense adjustments. OCA Exc. at 2 (citing OCA M.B. at 22 and 30; OCA Table II (Water); and OCA Table II (Wastewater)).

In its reply, Aqua contends that the ALJ correctly accepted the Company's adjustments to water consumption for residential, commercial, and public customers associated with the pandemic and properly rejected the OCA's proposal that only 75% of the residential sales adjustment be applied. Aqua R. Exc. at 2.

In support, the Company emphasizes the ALJ's finding that the OCA's arguments are inconsistent because the OCA accepts the commercial and public customer adjustments but rejects the residential customer adjustments. Additionally, Aqua reiterates its contention that it presented credible evidence demonstrating the movement of usage for all classes toward pre-pandemic levels and requests denial of OCA Exception No. 1. Aqua R. Exc. at 2 (citing Aqua St. 5-R at 18-19).

4. Disposition

Upon review of the evidentiary record, pleadings, and arguments related thereto, we find that Aqua has demonstrated the reasonableness of its proposed adjustments to water consumption due to the COVID-19 pandemic.

The OCA emphasizes that Aqua reported metered residential water sales for 2020 of 19.552 billion gallons versus 18.370 billion gallons in 2019, a pre-pandemic period. The reported increase in residential water sales for this overall period between 2019 and 2020 was approximately 6.4%. OCA St. 1 at 37. Additionally, the OCA cites a specific percentage increase in residential water usage between October 2019 and October 2021 of 9.1%. OCA R.B. at 11; OCA St. 1-SR at 28.

In response, Aqua asserts that the specific increase in residential usage between October 2019 and October 2020 was accompanied by a decrease in residential usage between October 2020 and October 2021 – periods within the pandemic – of 5.6%. Additionally, the Company cites to a decrease in residential usage in the pandemic

periods of September 2020 and September 2021 of 4.1%. The Company also showed increases in both commercial and public usage during these periods. Aqua shows the trends of usage within the pandemic periods in the following, which is reproduced in Table 2, below:

	Oct-20	Oct-21	Change	Percentage Change
Residential	1,636,326	1,545,471	(90,855)	-5.6%
Commercial	805,189	877,755	72,566	9.0%
Public	43,714	58,915	15,201	34.8%
	2,485,230	2,482,141	(3,089)	-0.1%

	Sep-20	Sep-21	Change	Percentage Change
Residential	1,706,364	1,636,859	(69,505)	-4.1%
Commercial	870,301	935,491	65,190	7.5%
Public	54,027	59,981	5,954	11.0%
	2,630,691	2,632,331	1,639	0.1%

Table 2: Aqua trends of usage within the pandemic periods

Aqua M.B. at 54; Aqua St. 5-R at 19.

We note that it would have been helpful to have had additional data comparing pandemic periods incorporating a comparison of more recent time periods (*i.e.*, showing trends in usage following recent COVID-19 variant surges). However, the Parties were limited to the presentation of evidence as of the evidentiary hearing and prior to the close of the record and that data appears to represent the most recent available information at the time. Under the circumstances, we find that the Company has submitted sufficient evidence to show a trend of declining residential usage which, when extrapolated over the FPFTY period, supports its proposal that residential usage will likely decline to the pre-pandemic period. Additionally, Aqua provides sufficient support to show a concomitant increase in commercial and public water usage.

Although the OCA correctly indicates that there was a large increase in overall residential water usage when comparing a pre-pandemic and a pandemic period, we find that the more helpful barometer is the trend of usage data within the pandemic periods as asserted by the Company. Moreover, it is unclear what data supports the OCA's calculation of including only 75% of Aqua's proposed reduction to residential revenues thereby resulting in an increase to residential revenues of \$2.757 million. As to this proposed adjustment, the OCA states that it acknowledges a declining residential water usage but that it will not likely decline to the pre-pandemic level and that its proposal is more realistic than the Company's.

We recognize that the OCA does not bear the burden of proof in this proceeding.⁴⁵ However, there must be some evidence or analysis tending to show the reasonableness of the OCA's adjustment. In this regard, there is no apparent evidentiary support for a finding that residential usage will essentially remain high enough to result in a 25% increase in residential water sales when compared with a pre-pandemic period. Moreover, the OCA's proposed acceptance of the Company's adjustment for commercial and public customers, but not for residential customers, shows an inconsistency in the OCA's overall proposal. If individuals are staying home and using more water than prior to the pandemic, it would be reasonable to surmise that usage for commercial and public

⁴⁵ As the Commonwealth Court has explained: "While it is axiomatic that a utility has the burden of proving the justness and reasonableness of its proposed rates, it cannot be called upon to account for every action absent prior notice that such action is to be challenged." *See Allegheny Center Assocs. v. Pa. PUC*, 570 A.2d 149, 153 (Pa. Cmwlth. 1990) (citing *Central Maine Power Co. v. Public Utilities Commission*, 405 A.2d 153, 185 (Me. 1979)). Therefore, while the statutory burden of proof does not shift from the public utility in a general rate proceeding, a party proposing an adjustment to a ratemaking claim bears the burden of presenting some evidence or analysis, during the reception of evidence in the proceeding, tending to demonstrate the reasonableness of the adjustment. *See Id.*; *see, e.g., Pa. PUC v. PECO*, Docket No. R-891364 *et al.*, 1990 Pa. PUC Lexis 155 (Order entered May 16, 1990); *see also Pa. PUC v. Breezewood Telephone Company*, Docket No. 901666, 74 Pa. P.U.C. 431 (Order entered February 15, 1991).

classes should also be lower than pre-pandemic levels. However, the available overall data shows that the Company is experiencing between a 4 to 5% decrease in residential usage and increases in both commercial and public usage. *See* Aqua St. 5-R at 19.

Accordingly, we shall deny OCA Exception No. 1 and thereby decline to make the OCA's requested adjustments to both residential water revenue and the expense categories that would have been impacted by its proposal.

F. Third Party Sales

1. Positions of the Parties

Aqua has eight third-party sales customers, from which it derives revenue at present rates of \$1,095,381. The Company proposed to increase rates for all of its third-party customers except for its Southdown Homes and East Brandywine customers. Aqua R.B. at 18; I&E M.B. at 29. I&E recommended that the usage rate for Southdown Homes be increased from \$0.749 per hundred gallons to \$0.9535 per hundred gallons, which would result in an increase of \$0.2045 per hundred gallons, or approximately 27.3%. I&E M.B. at 29. In its rebuttal testimony, Aqua revised its proposed revenue for Southdown Homes and provided a proof of revenue that shows Southdown Homes paying a usage rate of \$1.35 per hundred gallons. I&E accepted this proposed usage rate. I&E M.B at 30; Aqua R.B. at 18; Aqua Exh. 5R-B, Sch. WW-5 at 17.

I&E also recommended an increase to the customer charge for the Company's East Brandywine customers from \$351.00 per month to \$446.75 per month. This equates to an increase of \$95.75 per month, or approximately 27.3%. I&E based this recommendation on the average percentage increase for the Company's third-party customers. According to I&E, this percentage increase is reasonable given the higher percentage increase being proposed by Aqua for other third-party customers and the

higher percentage increases proposed by Aqua for other wastewater customers. I&E further recommended that this flat rate should be increased and applied to the Company's revenues independent of any base rate increase granted by the Commission. I&E M.B. at 29, 30; I&E R.B. at 23.

Aqua found no reason to increase its East Brandywine rates. Therefore, Aqua opposed I&E's proposal to increase the customer charge for East Brandywine. Accordingly, Aqua submitted that its claimed revenues should not be modified to reflect I&E's recommendation. Aqua R.B. at 18-19.

2. Recommended Decision

The ALJ observed that Aqua did not offer any explanation as to why it was appropriate to retain the current rates for its East Brandywine customers when the Company: (1) originally proposed an increase to the rates for all of its third-party customers except for Southdown Homes and East Brandywine; and (2) subsequently accepted I&E's proposed increase for the Company's Southdown Homes customers. In contrast, the ALJ found that I&E's proposal would treat the Company's third-party customers consistently. As such, the ALJ found I&E's proposal to be more appropriate and recommended that it be adopted. The ALJ added that this is a rate design issue that does not require an adjustment to the Company's revenue requirement under present or proposed rates. R.D. at 56.

3. Disposition

No Party filed Exceptions on this issue with regard to the ALJ's recommendation. Finding the ALJ's recommendation to be based soundly on record evidence and reasonable, we shall adopt it. Accordingly, we shall adopt the ALJ's recommendation that approves I&E's proposal to increase the East Brandywine

customer charge by \$95.75 per month, or from \$351.00 per month to \$446.75 per month.

VIII. Expenses

A. Rate Case Expense

1. Positions of the Parties

Aqua provided that its rate case expense is \$2,200,000, of which 91.51% is allocated to water cost of service and 8.49% is allocated to the wastewater cost of service based on the ratio of customers served to total customers. Aqua M.B. at 77 (citing Aqua St. 3 at 3). Aqua proposed to normalize the cost of the rate case expense over a thirty-six month period, which is the anticipated interval between this rate case and the Company's next base rate case. Aqua St. 3 at 3.

I&E recommended the rate case expense be normalized over thirty-six months. I&E M.B. at 31, 32.

The OCA recommended a reduction of \$124,932 to the rate case expense by removing \$59,932 not incurred from the "Other Consultants" costs and removing the \$65,000 that Aqua has requested for "miscellaneous" costs. The OCA argued that the rate case expense should be normalized for thirty-nine months based on the actual historic frequency of Aqua's filings. OCA M.B. at 45.

2. Recommended Decision

The ALJ found Aqua's \$2.2 million rate case expense to be reasonable. The ALJ opined that Aqua provided sufficient justification for including forecasted

expenses for consultants. Additionally, the ALJ determined that Aqua's 36-month normalization period was reasonable. The ALJ stated that it was reasonable to exclude the "anomalous rate stay-out that was agreed to as part of a complex settlement negotiation" and rejected the OCA's longer normalization period of 3.3 years. R.D. at 57-58.

3. OCA Exception No. 6 and Replies

In its Exception No. 6, the OCA provides that the ALJ accepted Aqua's proposed thirty-six-month normalization period for rate case expense because the ALJ believed that to accept the OCA's proposed thirty-nine-month adjustment, which included the seven-year gap between Aqua's 2011 and 2018 rates, would discourage the negotiation of settlement stay-outs in the future. OCA Exc. at 7 (citing R.D. at 57-58). Additionally, the OCA notes the ALJ's statement that the reason Aqua did not file a rate case between 2011 and 2018 is that during that time Aqua was "constrained" by the stay-out it agreed to in the 2011 rate case. OCA Exc. at 7 (citing R.D. at 58). The OCA argues that Aqua was not "constrained" from filing a rate case between 2011 and 2018. Rather, the OCA continues, the stay-out negotiated in the 2011 settlement was for a term of only two years. OCA Exc. at 8 (citing *Pa. PUC v. Aqua Pa., Inc.*, Docket No. R-2011-2267958 (Order entered June 7, 2012) (*2011 Settlement*) at 18). According to the OCA, Aqua was free to file a rate case after the two-year time frame but chose not to do so for its own reasons. The OCA contends that including the time period between 2011 and 2018 in calculating the appropriate normalization period is reasonable. OCA Exc. at 8.

In its reply to the OCA Exception No. 6, Aqua avers that the OCA has misread the Recommended Decision. Aqua provides that it did not argue that it was "constrained" from making a base rate filing. Aqua explains that the "OCA's calculated average is distorted by the time period between Aqua's 2011 and 2018 rate case, based

upon a circumstance specific to the settlement of the 2011 rate case that will not occur in the future.” Aqua R. Exc. at 5 (citing Aqua M.B. at 79; Aqua St. 3-R at 9). Aqua provides that the circumstance was the initial adoption of the tax repairs election. Aqua R. Exc. at 5, n.2. Aqua avers that this distortion is why the Commission has noted that the normalization period for rate case filings may require consideration of future circumstances. Aqua R. Exc. at 5-6 (citing Aqua M.B. at 9). According to Aqua, this is consistent with prior precedent. Aqua R. Exc. at 6 (citing *Emporium Water Company*, Docket No. R-2014-2402324 (Order entered Jan. 18, 2015) at 48-49; *Pa. PUC v. PPL Electric Utilities Corp.*, Docket No. R-2012-2290597 (Order entered December 28, 2012) (*2012 PPL Order*); R.D. at 57; Aqua M.B. at 77-80; Aqua R.B. at 31-32).

I&E did not offer a reply to the OCA Exception No. 6 beyond stating that it agreed with the Company’s recommendation of a thirty-six month normalization period. I&E R. Exc. at 14 (citing R.D. at 57-58).

4. Disposition

Aqua agreed to a two-year stay-out period in the *2011 Settlement* as follows:

9.a. The Company’s agreement to a two-year stay-out from the filing date of this rate increase request, subject to the limited exceptions set forth in Paragraph No. 7.c., assures that, if [Aqua’s] next general base rate water case were filed at the earliest permitted date and were fully litigated, the Settlement Rates would remain in effect for at least 26 months.

2011 Settlement at 18.

The OCA calculated the thirty-nine month normalization period by including the 2011 to 2018 gap in rate case filings. The ALJ rejected the OCA's thirty-nine month normalization period based on the *2011 Settlement* and the associated stay-out period in that Settlement. Aqua provides that the stay-out period was not the cause of the time lapse between Aqua's 2011 and 2018 base rate case filings, rather it was caused by the initial adoption of the tax repairs election. Aqua R. Exc. at 5, n.2.

While the OCA is correct that a two-year stay-out would not have "constrained" Aqua from filing a base rate case two years after the *2011 Settlement* and before the 2018 rate case filing, we do not recommend a thirty-nine month normalization period.

Aqua provided that the lapse between base rate case filings such as that between the 2011 and 2018 filings is not related to a stay-out or likely to recur as follows:

The Company was able to avoid filing a rate case for an extended period after the 2011 rate case due to a provision in that settlement regarding the use of the tax repair deduction for income tax purposes. That situation will not recur in the future.

Aqua St. 3-R at 9.

We find Aqua's thirty-six month normalization period reasonable, and we accept the ALJ's recommendation of the thirty-six month normalization period. However, we will modify the Recommended Decision to remove the potentially confusing language in the paragraph on pages 57 – 58 of the Recommended Decision:

In this case it is reasonable to exclude an anomalous rate stay-out that was agreed to as part of a complex settlement negotiation. The settlement stay-out does not generally reflect the Company's rate filing interval. This settlement

term constrained Aqua's ability to file a rate case when it otherwise might have chosen to do so. To include the negotiated stay-out term in setting the normalization period for rate case expense might chill negotiations in future utility rate proceedings.

R.D. at 57-58.

Accordingly, the OCA's Exception No. 6 is granted, in part, and denied, in part.

B. General Liability Insurance Expense

1. Positions of the Parties

Aqua proposed a claim for general liability insurance based on a five-year average year-over-year increase of 5.97%. Aqua revised its claim based on opposition from I&E and the OCA. I&E proposed a "year-over-year three-year average" of 4.38%. I&E argued that the three-year average considers "more recent experience" and was consistent with the Company's method for calculating other categories of expenses (*i.e.*, uncollectibles expense and legal expense). Aqua M.B. at 75 (citing I&E St. 1 at 15-16). Aqua noted that the OCA's witness, Mr. Ralph C. Smith, accepted the Company's claimed FTY insurance expense but applied a 4.38% increase to the FTY to calculate his recommended FPFTY amount. Aqua M.B. at 75 (citing OCA St. 1 at 53-54). Aqua updated its claim for general liability insurance based on actual information that became available after the case had been filed. Aqua applied the three-year average increase of 4.38% to updated actual amounts accrued for Fiscal Year (FY) 2022. Aqua M.B. at 75 (citing Aqua St. 4-R at 6-7).

I&E and the OCA continued to disagree with Aqua’s proposed claim. I&E “questioned the reliability of the amounts stated.” Aqua M.B. at 77 (citing I&E St. 1-SR at 15). I&E’s witness, Ms. Christine Wilson, explained that Aqua’s revised claims for all the wastewater revenue requirements decreased from direct testimony to rebuttal testimony with no explanation for that directional change. I&E stated that Aqua did not provide documentation for the recent 2022 accruals to support the proposed changes in general liability expense. R.D. at 59. The OCA argued that Aqua’s calculation “inconsistently mixes calculation elements.” Aqua M.B. at 77 (citing OCA St. 1-SR at 40).

2. Recommended Decision

The ALJ recommended that the Commission adopt I&E’s adjustments to the Company’s general liability insurance expense. The ALJ reasoned that Aqua failed to provide adequate documentation in support of its treatment of insurance expense, nor is the mixing of calculation elements justified for the purposes of projecting expense increases. The ALJ recommended that Aqua’s claim for insurance expense should be decreased by \$340,945 for water and increased by \$29,967 for wastewater. The ALJ explained that the wastewater adjustments are comprised of increases for Wastewater Base, Limerick, East Bradford, and Cheltenham of \$18,640, \$3,533, \$789, and \$6,299, respectively, and a decrease for New Garden of \$676.⁴⁶ R.D. at 59.

3. Aqua Exception No. 5 and Replies

In its Exception No. 5, Aqua contends that it fully explained how it calculated its projection of general liability insurance expense for the FPFTY. Aqua Exc.

⁴⁶ We note that in her explanation, the ALJ inadvertently omitted an increase of \$1,382 for East Norriton Wastewater. See I&E St. 1-SR at 16.

at 24 (citing Aqua M.B. at 74-75). Aqua explains that it updated its insurance claim to reflect actual general liability expense information for the Year 2022 that became available after the case had been filed. Aqua Exc. at 24 (citing Aqua M.B. at 75). Aqua further submits that it then used I&E's proposed three-year average percentage increase to this expense to adjust the final quarter of the FPFTY. Aqua Exc. at 24 (citing Aqua M.B. at 75-76; Aqua St. 4-R at 6-7).

Aqua provides that although the ALJ concluded that the Company improperly mixed calculation elements, there is nothing unusual or improper in updating the claim to reflect known, actual information for FY 2022, or in developing the FPFTY claim using three quarters of that actual data and one quarter of projected data using the same adjustment factor (4.38%) proposed by both the OCA and I&E. According to Aqua, there is no evidence of record to support I&E's concerns regarding the reliability of this information. Aqua Exc. at 24 (citing Aqua R.B. at 30).

Aqua avers that the Recommended Decision inconsistently accepts I&E's calculation as credible but rejects Aqua's calculation which uses the same method updated with the most recent data available. Aqua Exc. at 25.

In its reply to Aqua Exception No. 5, I&E notes that after reviewing the record evidence presented by all parties, the ALJ correctly concluded that Aqua failed to provide adequate documentation in support of its treatment of insurance expense and the mixing of calculation elements is not justified for the purposes of projecting expense increases. I&E R. Exc. at 8-9 (citing R.D. at 59).

4. Disposition

I&E notes that the Company has recorded its calendar year 2022 insurance expense for accounting purposes, similarly updating the claim for ratemaking purposes,

and on a consolidated basis the accrual produces a year-over-year increase of 8.49% between calendar year 2021 and 2022 based on premiums the Company will pay in 2022. I&E St. 1-SR at 14 (citing Aqua St. 4-R at 6). I&E explains that the Company has updated its entire FTY claim for insurance and the first nine months of the FPFTY (April 1, 2022 through December 31, 2022) based on the recently determined accruals. I&E explains further that the final three months of the FPFTY (January 1, 2023 through March 31, 2023) were inflated using a 4.38% increase to the FTY result. *Id.*

I&E provided the updated expense portion of the insurance claims, noting that the revised claims for all the wastewater revenue requirements have decreased from direct testimony to rebuttal testimony with no explanation for the directional change. I&E St. 1-SR at 15. We agree with I&E, that Aqua has not provided an explanation for these updated insurance claims and provided no documentation for the recent 2022 accruals to support the changes in rebuttal testimony.

Therefore, we shall deny Aqua's Exception No. 5, and adopt the ALJ's recommendation that Aqua's claim for insurance expense should be decreased by \$340,945, or from \$4,915,277 to \$4,574,332 for water and increased by \$29,967, or from \$39,853 to \$69,820 for wastewater. The wastewater adjustments are comprised of: (1) an increase for Wastewater Base of \$18,640, or from \$16,327 to \$34,967; (2) an increase for Limerick of \$3,533, or from \$5,613 to \$9,146; (3) an increase for East Bradford of \$789, or from \$1,232 to \$2,021; (4) an increase for Cheltenham of \$6,299, or from \$9,814 to \$16,113; (5) an increase for East Norriton of \$1,382, or from \$4,915 to \$6,297; and (6) a decrease for New Garden of \$676, or from \$1,952 to \$1,276. R.D. at 59; I&E St. 1-SR at 16. These adjustments are outlined in Table II-Adjustments in each of the groups of rate tables in the Commission Tables Calculating Allowed Revenue Increase, attached to this Opinion and Order.

C. Payroll

1. Positions of the Parties

Both I&E and the OCA proposed adjustments to Aqua's claim for payroll expense. I&E proposed a vacancy rate of 6.83%. The OCA proposed a vacancy rate of 2.88%, rather than the Company's 2.50%. Aqua opposed I&E's vacancy rate but accepted the OCA's 2.88% full time vacancy rate. Aqua M.B. at 66. Aqua's witness, Ms. Erin M. Feeney, explained that I&E's adjustment double counts the adjustment already built into the Company's claim as a part of the gross payroll amounts. Aqua M.B. at 66 (citing Aqua St. 2-R at 37; Aqua St. 2 at 11). Subsequently, I&E withdrew its adjustment for payroll expense. Aqua M.B. at 66 (citing I&E St. 1-SR at 25).

The OCA calculated its vacancy rate of 2.88% based on information provided in response to I&E-RE-22-D. According to the OCA, the 2.88% vacancy rate is based on the difference between actual regular hours and authorized regular hours during the HTY, and more accurately reflects Aqua's expense. OCA M.B. at 33-34 (citing OCA St. 1 at 41-42). The OCA proposed an adjustment decreasing payroll expense by \$119,358 for the Company's water operations and \$6,855 for wastewater operations. The OCA provided that in aggregate, this calculation decreases payroll expense by \$126,213. OCA M.B. at 34 (citing OCA St. 1 at 44-45; OCA Exh. LA-2, Sch. C-11 at 2).

The OCA proposed an additional adjustment to payroll expense by reducing the number of seasonal positions included in the Company's claim to reflect the level of seasonal employees as of June 30, 2021. Aqua M.B. at 67 (citing OCA St. 1 at 43-44).

2. Recommended Decision

The ALJ recommended that the Company's payroll expense as updated with the OCA's 2.88% vacancy rate should be accepted. R.D. at 60 (citing Aqua Exh. 1-A(a) and 1-B(b) through 1-G(g)). The ALJ reasoned that Aqua had supported its projection for seasonal positions with the testimony of Ms. Feeney. Specifically, the ALJ stated that the 2020 and 2021 number of seasonal positions filled were impacted by the COVID-19 pandemic and should be considered outliers. The ALJ noted that Aqua anticipates filling all thirty-three seasonal positions during the FPFTY. R.D. at 60 (citing Aqua St. 2-R at 39).

3. OCA Exception No. 5 and Replies

In its Exception No. 5, the OCA disagrees with the ALJ's finding that Aqua has adequately supported its claim for thirty-three seasonal employees. The OCA submits that while Aqua may believe that it will fill all thirty-three of its budgeted-for seasonal positions in the FPFTY, the Company has failed to provide evidence that this is likely. According to the OCA, the record indicates that Aqua has not consistently filled all of its seasonal positions even before the COVID-19 pandemic began. OCA Exc. at 6-7 (citing OCA M.B. at 34-35). The OCA provides that in 2019, Aqua filled only thirty-one of the budgeted thirty-three positions. During the pandemic, the OCA continues, Aqua filled only eleven out of thirty-three budgeted positions. OCA Exc. at 7 (citing OCA St. 1SR at 32-33). The OCA avers that it is not reasonable to assume that Aqua's hiring will be more robust than before the pandemic. The OCA recommends an adjustment of \$286,373 to remove payroll expense for twenty-two of the authorized seasonal positions. OCA Exc. at 7.

In its reply to OCA Exception No. 5, Aqua argues that the ALJ correctly reasons that the payroll expense claim, including the seasonal positions, is "based upon

anticipated normal operating conditions” during the FPFTY. Aqua R. Exc. at 5 (citing R.D. at 61). Aqua contends that the seasonal employee counts for 2020 and 2019 were impacted by the COVID-19 pandemic and are not reflective of normal operating conditions. Aqua R. Exc. at 5.

4. Disposition

The seasonal employment period runs from mid-May to mid-September. I&E Exh. 1, Sch. 5 at 2. The OCA contends that the seasonal employee count should reflect the level as of June 30, 2021 when eleven positions were filled. We disagree with the OCA’s recommendation. The record does not clearly indicate that the number of seasonal employee positions as of June 30, 2021 reflects the total number employed through the seasonal employment period for 2021, or going forward. The Company filled thirty-one seasonal positions in 2019. The Company has noted that it expects to return to more normal operations. We agree with the ALJ that the Company’s assertion that it will be able to fill thirty-three seasonal positions going forward in the FPFTY is reasonable. The OCA Exception No. 5 is denied.

D. Stock-based Incentive Compensation

1. Positions of the Parties

Aqua has included expenses related to its stock-based incentive compensation program. Aqua maintained that this is an important part of its overall compensation program. R.D. at 61. Aqua averred that it is entitled to recover, in rates, all expenses reasonably necessary to provide service to customers. According to Aqua, the OCA has not claimed that the total stock reward expenses were unreasonable, imprudent, or excessive. Aqua noted that the OCA objected to the expenses on the basis that shareholders benefit from increases in stock prices, without consideration for the

customer benefits derived from achievement of the customer performance metrics applied to stock rewards. Aqua M.B. at 69.

Aqua stated that the Commission has established a bright line test for incentive compensation expense. According to Aqua, if the incentive compensation programs of the utility are reasonable and provide a benefit to ratepayers, then they may be recovered in their entirety. Aqua M.B. at 69 (citing *2012 PPL Order* at 26). Aqua noted that the Commission recently applied this standard in approving the recovery of stock-based incentive compensation in *Pa. PUC v. UGI Utilities, Inc. – Electric Division*, Docket No. R-2017-2640058 (Order entered October 25, 2018) (*UGI Electric*).

Aqua averred that it demonstrated that its stock reward plans include both financial and operating metrics and goals. Aqua provided that it further demonstrated that its incentive compensation package is reasonable, prudently incurred and not excessive in amount. Aqua's witness, Mr. William C. Packer, explained:

[A] key component of the incentive compensation plan is employee objectives that provide benefits to customers. Many of the employee objectives focus on cost containment, quality service, productivity enhancements and compliance initiatives to ensure reasonable cost and high-quality service to our customers.

Aqua M.B. at 70 (citing Aqua St. 1-R at 17-18).

I&E did not object to the Company's proposed incentive compensation plan expense.

The OCA acknowledged that where an incentive compensation plan is reasonable, prudently incurred, not excessive, and there is a benefit to ratepayers, a company may recover the expense of that program. The OCA noted that the Commission

has approved recovery for incentive compensation programs when they are focused on improving operational effectiveness. OCA M.B. at 36 (citing *2012 PPL Order*).

The OCA averred that Aqua’s stock-based compensation program provides Aqua and Essential Utilities executives with compensation based on the performance of the Company’s or parent company’s stock price. According to the OCA, absent a clear tie to ratepayer benefit or operational effectiveness, it is unreasonable to burden ratepayers with the costs of the stock compensation program. OCA M.B. at 37.

2. Recommended Decision

The ALJ accepted Aqua’s position that the stock-based compensation program benefits ratepayers. The ALJ explained that the Company described how the purpose of the plan is to tie compensation to employees accomplishing the Company’s main objectives, which benefits consumers. R.D. at 62 (citing Aqua St. 1-R at 15-16). The ALJ further explained that Aqua stated that compensation from the program is both “competitive” and “appropriate.” The ALJ noted that the Company has been using the program since 1999,⁴⁷ and thus claims that the program is a key element of its overall payment package in attracting and keeping a skilled workforce. R.D. at 62 (citing Aqua St. 1-R at 17). The ALJ reasoned that the OCA’s argument that the program also benefits stockholders is not sufficient to demonstrate that the program is unreasonable or excessive. R.D. at 63.

⁴⁷ We note that the Company states that the Incentive Compensation Plan was started in 1990. Aqua St. 1-R at 16.

3. OCA Exception No. 4 and Replies

In its Exception No. 4, the OCA disagrees with the ALJ's findings regarding Aqua's stock-based incentive compensation program. The OCA recommends an adjustment of \$846,493 to remove these costs. OCA Exc. at 4-5 (citing OCA M.B. at 36-39; OCA Table II (Water); Table II (Wastewater)). According to the OCA, the ALJ noted that since the purpose of the plan is to tie compensation to employees accomplishing the Company's objectives, the program must ultimately benefit consumers. OCA Exc. at 5 (citing R.D. at 62). The OCA contends that Aqua has failed to demonstrate that the key component of the program is to establish employee eligibility based on performance duties and metrics that are "*directly related to the provision of service.*" OCA Exc. at 5 (citing *Pa. PUC v. Pennsylvania American Water Co.*, 2021 Pa. PUC LEXIS 55 (*PAWC 2021*) at *59-60).

The OCA provides that although, in theory, a payment program which benefits stockholders might also benefit consumers, in this case, the payment program has no clear relationship to ratepayer benefits or operational effectiveness. OCA Exc. at 5 (citing OCA St. 1 at 48). The OCA avers that the stock-based incentive compensation program appears to have the primary purpose of benefitting executives and high-level managers. However, the OCA argues that no evidence has been provided to show the benefits of the payment program to ratepayers. OCA Exc. at 5 (citing OCA St. 1SR at 36).

The OCA highlights the ALJ's statement that Aqua has established that compensation from the program is both "competitive" and "appropriate." OCA Exc. at 5 (citing R.D. at 62). While this may be true, the OCA argues, it is irrelevant to whether the program is benefitting ratepayers and whether it should be funded by ratepayers. OCA Exc. at 5.

The OCA avers that Aqua's incentive compensation program is not reasonable or prudently incurred. In addition, the OCA insists that there is no evidence that it provides any benefit to ratepayers and, accordingly, Aqua should not be able to recover the plan expenses from ratepayers. The OCA remains of the opinion that its \$846,493 adjustment to remove these costs for ratemaking should be adopted. OCA Exc. at 6 (citing OCA M.B. at 36-39; OCA Table II (Water) and (Wastewater)).

In its reply to the OCA Exception No. 5, Aqua avers that the incentive compensation has been paid each year since 1990, demonstrating that the plan is successful in encouraging the accomplishment of Aqua's key objectives and the ongoing control over operating costs. Aqua R. Exc. at 4 (citing Aqua St. 1-R at 16-17).

I&E did not offer a reply to OCA Exception No. 5.

4. Disposition

We find that Aqua has provided evidence linking the stock-based incentive compensation program with benefits to customers and improved operational efficiency. Aqua's witness Mr. Packer explained that with the implementation of the Incentive Compensation Plan in 1990, a portion of an employee's total cash compensation was placed "at risk" pending the achievement of key performance objectives. The employee's progress toward these performance objectives was used to determine the employee's resulting percentage of a target bonus. Aqua St. 1-R at 15.

Mr. Packer explained further the rationale of the Company's incentive compensation plan as follows:

The purpose of the Plan is to tie employee compensation to the accomplishment of the Company's key operating objectives, thereby ensuring that the entire workforce is

working toward the same end. Customers benefit from the participant's individual objectives being met, as improvements in performance are accomplished by controlling costs, improving efficiencies and enhancing customer service. As a result, the need for rate relief is mitigated.

Aqua St. 1-R at 15-16.

Mr. Packer stated that “[m]any of the employee objectives focus on cost containment, quality service, productivity enhancements and compliance initiatives to ensure reasonable cost and high-quality service to our customers.” Aqua St. 1-R at 17-18. Mr. Packer provided that “[s]tock compensation is an equally important form of compensation at risk, promotes retention, and emphasizes an investment interest in the business at the employee level that promotes efforts to provide safe, adequate, and reliable utility service.” Aqua St. 1-R at 19.

We agree with the ALJ that the stock-based compensation benefits ratepayers. We find that the stock-based compensation is linked to performance objectives that benefit consumers, including controlling costs and compliance initiatives. Accordingly, the OCA Exception No. 5 is denied.

E. Supplemental Executive Retirement Plan (SERP)

1. Positions of the Parties

Aqua explained that the SERP is a legacy retirement program for highly compensated individuals who did not qualify under the Company's former pension plan due to Internal Revenue Service (IRS) limitations. Aqua M.B. at 72 (citing Aqua St. 1-SR at 11-12). In April 2003, the Company closed both the pension plan and its SERP to employees hired after that date. Aqua averred that the SERP provides replacement

retirement benefits for a limited number of past and present employees and their spouses who are not eligible for the Company's former pension plan. Aqua M.B. at 72 (footnote omitted).

The OCA provided that the Company's claim unreasonably imposes an expense for SERP for Essential Utilities and Aqua top executives on consumers when that expense is not affiliated with the provision of public utility service. The OCA noted that the SERP provides retirement benefits for select highly compensated executives that goes beyond what employees with qualified pension plans receive and beyond IRS limitations for qualified plans. The OCA explained that without the expense of SERP, the Company's executives would still receive retirement benefits available to any other Aqua employee. According to the OCA, an expense that exists for the purpose of providing additional compensation to executives that are already the highest paid in the Company is both excessive and unnecessary to the provision of water service.

OCA M.B. at 49 (citing *Pa. PUC v. Pennsylvania American Water Co.*, 1993 Pa. PUC LEXIS 79 (*PAWC 1993*) at *121-123, 136-139 (holding that unnecessary expenditures that do not relate to the provision of utility service should not be borne by ratepayers)). The OCA argued that while the Company is free to provide these additional retirement benefits to its executives, it should do so at the expense of shareholders rather than ratepayers. The OCA recommended removing the requested FPFTY expenses of \$695,612 for the water utility and \$57,050 for the wastewater utility. OCA M.B. at 49 (citing OCA St. 1 at 62; OCA Exh. LA-2, Sch. C-18; Table II (Water); Table II (Wastewater Base)).

2. Recommended Decision

The ALJ noted that the SERP is not associated with retaining or recruiting executive talent. R.D. at 63. The ALJ provided that Aqua did not demonstrate that the SERP is connected to employee performance metrics that relate to the provision of utility

service. The ALJ recommended the SERP expenses be excluded and that \$695,612 for the water utility and \$57,050 for the wastewater utility be removed from the requested FPFTY expenses. For wastewater, the ALJ recommended that the \$57,050 adjustment be allocated to each rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Sch. C-1. The ALJ recommendations are as follows:

The wastewater adjustments are comprised of decreases for Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, and New Garden of \$23,373; \$8,035; \$1,763; \$14,049; \$7,036; and \$2,794; respectively. These adjustments are reflected in each rate case under [Recommended Decision, Appendix] Table II, row “Supp. Exec. Retire Program.” As noted in [Recommended Decision, Appendix] Table VI for each rate zone, the cash working capital resulting from this SERP adjustment is recommended to be assigned to the management fee expense account for each rate zone.

R.D. at 63-64.

3. Aqua Exception No. 6 and Replies

In its Exception No. 6, Aqua avers that the Recommended Decision improperly applies incentive compensation recovery criteria to a post-employment retirement benefit to reach an incorrect recommendation. Aqua explains that the SERP is a legacy retirement program, similar to the Company’s pension plan but limited to certain senior level employees who did not qualify under the Company’s former pension plan due to Internal Revenue Code limitations. Aqua Exc. at 25 (citing R.D. at 63). Aqua notes that the SERP provides replacement retirement benefits for the limited number of present and retired employees and their spouses who are not eligible for the Company’s qualified pension plan. Aqua Exc. at 25.

Aqua maintains that eligibility for benefits each year under the SERP is not based upon performance criteria, but upon employment. When the program closed to new employees after April 2003, the pre-April 2003 employees continued to receive their promised benefits upon retirement. Aqua replaced the SERP and the pension plan with a defined contribution 401(k) program to control costs. Aqua Exc. at 26, n.15. Aqua notes that like the pension plan, the Company continues to incur costs under this legacy plan. Aqua expects the cost of the program to decline over time. Aqua Exc. at 25-26.

Aqua avers that as a post-employment benefit, recovery of the costs of the program in rates should not be measured by whether it serves as a current recruiting tool, or whether the recipient retirees have met an incentive target. Aqua Exc. at 26.

In its reply to Aqua Exc. No. 6, the OCA submits that the Company acknowledges that the SERP has no connection to the provision of utility service, to customer service, or to attracting and retaining new employees. OCA R. Exc. at 3 (citing OCA M.B. at 47-50; OCA R.B. at 23-24).

The OCA disagrees with Aqua's argument that the SERP should be included in rate recovery because excluding the program would "disincentivize utilities from changing or eliminating post-employment benefits, if the ongoing costs of a discontinued program may no longer be recoverable." OCA R. Exc. at 3 (citing Aqua Exc. at 26). The OCA contends that Aqua's argument has no basis in Commission precedent because it ignores that compensation programs wholly disconnected from utility service should never be funded, whether those programs are discontinued or current. OCA R. Exc. at 3 (citing OCA M.B. at 47-48; OCA R.B. at 23-24).

4. Disposition

We agree with the OCA, that not all costs incurred by Aqua are recoverable. While Aqua continues to incur costs from the SERP, Aqua's customers who receive no benefit from and have no ties to the SERP, should not be required to fund these costs. We agree with the ALJ's recommendation to remove the Company's FPFTY expenses of \$695,612 for water and \$57,050 for wastewater, in the manner outlined by the ALJ, *supra*. Accordingly, Aqua Exception No. 6 is denied.

F. Non-Rate Case Legal Expense

1. Positions of the Parties

Aqua proposed a three-year average of non-rate case legal expenses to reflect the costs incurred in a normal year, including the costs of union contract negotiations that occur on a two-year or more interval. Aqua M.B. at 80-81. Aqua's claim includes a request to recover \$644,4475 in non-rate case legal expense. Aqua M.B. at 80.

The OCA recommended a reduction of \$24,981 in Aqua's non-rate case legal expense to more accurately reflect the average amounts recorded by Aqua for the twelve month periods ending March 31, 2020 and March 31, 2021. OCA R.B. at 22 (citing OCA M.B. at 47). The OCA provided that its suggested two-year time frame excludes the 2019 year because the expense that year was unusual and is not representative of current or future levels of non-rate case legal expense. *Id.*

2. Recommended Decision

The ALJ reasoned that the use of a two-year average, as the OCA recommended, would fail to include expenses that occur on a two-year or more interval, such as union negotiations. The ALJ noted that according to Aqua, its proposal is consistent with its claim in prior rate cases and other expense categories that exhibit similar ebbs and flows as in this case. The ALJ found Aqua's claim based on a three-year average of non-rate case legal expenses to be reasonable. R.D. at 64-65 (citing Aqua St. 3-R at 10).

3. OCA Exception No. 3 and Replies

In its Exception No. 3, the OCA contends that the ALJ erred by accepting Aqua's claim for \$644,475 for non-rate case legal expense. OCA Exc. at 3 (citing R.D. at 65). The OCA avers that this amount of non-rate case legal expense was derived from a three-year average of non-rate case legal expense. The OCA notes that it proposed averaging two years of non-rate case legal expense instead of three, to exclude the year ending March 31, 2019, in which Aqua had unusually high legal expenses. OCA Exc. at 3 (citing OCA M.B. at 47). The OCA avers that Aqua's non-rate case legal expense in the year ending March 31, 2019 was unusually high and it does not provide an accurate representation of what that expense will be in the future. OCA Exc. at 4 (citing OCA M.B. at 47). According to the OCA, Aqua's non-rate case legal expense has decreased in each of the two years following 2019. OCA Exc. at 4 (citing OCA St. 1 at 58). Additionally, the OCA contends that Aqua has failed to establish that any expenses from the 2019 year are recurring. The OCA argues that Aqua's non-rate case legal expense should be reduced by \$24,981 to more closely reflect what the Company's expenses will be in the future. OCA Exc. at 4 (citing OCA M.B. at 47; OCA Exh. LA-2, Sch. C-17 at 2, Table II (Water)).

In its reply to the OCA Exception No. 3, Aqua provides that a three-year average for non-rate case legal expense accounts for the fluctuation of this expense that occurs in the normal course of business. In addition, the Company claims, that the two-year average proposed by the OCA may not capture regular cyclical legal expenses such as union contract negotiations. Aqua R. Exc. at 3 (citing Aqua M.B. at 81).

4. Disposition

We agree with the ALJ that a three-year average for non rate case legal expense is reasonable. In our view, a three-year average is more appropriate to include costs that a two-year average would not capture. Aqua's union contract negotiations are scheduled to occur during the FTY. Aqua St. 3-R at 10. As Aqua pointed out, the Company has used a three-year average for this expense in its prior rate case. Aqua M.B. at 81.⁴⁸ The OCA Exception No. 3 is denied.

G. Purchased Water Expense

1. Positions of the Parties

Aqua has included a claim for \$4,135,311 for Purchased Water Expense during the FPFTY. Aqua M.B. at 81 (citing Aqua Exh. 1-A, Sch. C-7.1). The amount includes \$297,839 of purchased water from Aqua Ohio. Aqua M.B. at 82 (citing Aqua Exh. 1-A, Sch. C-7.1.i, Line1).

⁴⁸ We note that Aqua used a three-year average to calculate its Legal Expense Claim in the *Aqua 2018 Rate Case*. *Aqua 2018 Rate Case*, Aqua Exh. 1-A(a), Sched. C-9.1. This claim was included within the Settlement approved by the Commission in the *Aqua 2018 Rate Case*.

I&E proposed a decrease of \$166,975, reflecting water purchases from Aqua Ohio at \$0.3449 per hundred gallons. I&E St. 1-SR at 19 (citing I&E St. 1 at 19). I&E argued that the cost of purchased water (Aqua Ohio Struthers Division) should be the same as the rate Aqua Pennsylvania receives when it sells water to that same affiliate (Aqua Ohio Masury Division) for ratemaking purposes so that Pennsylvania customers are not harmed. According to I&E, the Ohio rate is not guaranteed full recovery when that tariff rate is being claimed by a Pennsylvania affiliate in a Pennsylvania rate filing. I&E M.B. at 34-35 (citing St. 1-SR at 20).

Aqua's witness, Ms. Feeney, explained that I&E's recommendation ignores the fact that Aqua's sales to the Masury Division and Aqua's purchases from the Struthers Division of Aqua Ohio are not comparable. R.D. at 66 (citing Aqua St. 2-R at 33). Aqua explained further that these sales and purchases take place in different geographic locations. Additionally, Aqua highlighted that the Masury and Struthers Divisions of Aqua Ohio are separate – each division has a separately determined cost of service, separate tariffs, and different rates. *Id.*

2. Recommended Decision

The ALJ recommended that I&E's proposed adjustment be rejected. The ALJ reasoned that there is no evidence that the purchase of water from Aqua Ohio Struthers Division at tariffed rates is imprudent or excessive. The ALJ noted that in considering the Masury contract, the Commission will determine whether the sale of water to Masury at discounted rates is appropriate. The ALJ stated that as the purchase of water from Aqua Ohio Struthers division is made pursuant to tariff rates that have been approved by the applicable authorities with jurisdiction to regulate those utility rates, Aqua's claimed purchased water expense should not be adjusted. The ALJ further reasoned this rate is unaffected by the rate to be charged by Aqua to the Masury Division,

which Aqua based upon a contract rate established in relation to the cost of a competitive alternative available to the Masury Division. R.D. at 66.

3. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we adopt it without further comment.

H. Dredging Expense

1. Positions of the Parties

Aqua proposed to change its dredging process and to accrue a reserve exclusively for dredging costs at a rate of \$400,000 per year and charge actual costs against that reserve as they are incurred. Aqua M.B. at 85 (citing Aqua St. 3 at 5). Aqua proposed that the reserve be recorded as a regulatory liability. Aqua stated that this proposed adjustment would reduce dredging expense by approximately \$300,000 over three years. Aqua would change its past practice of mobilizing and demobilizing equipment (with fixed costs of approximately \$150,000 per occurrence) three times over a three-year span, to only one time over a three-year span. *Id.*

I&E recommended no adjustment to the claimed dollar amount, but recommended that Aqua's dredging expense be normalized and that the Company's proposed use of a reserve account and regulatory liability be rejected. I&E M.B. at 36 (citing I&E St. 1 at 21; I&E St. 1-SR at 21). I&E argued that dredging is a routine expense and should be normalized for ratemaking purposes. *Id.*

2. Recommended Decision

The ALJ recommended that the dredging expense be normalized and that the requested approval for deferred accounting treatment should be rejected. The ALJ reasoned that while the claimed expense may be substantial, it is not extraordinary, non-recurring, or within the scope of the type of items that the Commission has allowed as an exception to the general rule against retroactive recovery. R.D. at 67.

3. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we adopt it without further comment.

I. Advertising

1. Positions of the Parties

Included in Aqua's claim for advertising expense is \$75,000 for water operations and \$7,500 for wastewater operations related to the advertising for the Company's proposed Universal Service Program (USP). Aqua M.B. at 86 (citing Aqua St. 2-R at 34-35; OCA Exh. LA-3, 17-18).

The OCA recommended that the Company only be permitted to recover \$25,000 for water operations and \$2,500 for wastewater operations for this category of advertising. Aqua M.B. at 86 (citing OCA St. 1 at 40). The OCA considered this a new expense, since it was not incurred in the HTY and FTY. The OCA proposed to normalize the FPFTY amounts claimed by Aqua for this expense over three years. Aqua M.B. at 86 (citing OCA St. 1 at 41).

Aqua provided that the program was not in effect in the HTY and will not be in effect during the FTY. Aqua proposed the new program to be in effect in the FPFTY and averred that to normalize this expense with prior years when the program did not exist is unfair. Aqua M.B. at 87.

2. Recommended Decision

The ALJ recommended that Aqua's claimed expense to advertise the proposed new USP should be accepted. The ALJ reasoned that the program is proposed to be in effect during the FPFTY and, therefore, Aqua's advertising expense reasonably projects the new amounts associated with ensuring customers are informed about the new program. R.D. at 69 (citing 66 Pa. C.S. § 1316).⁴⁹

3. OCA Exception No. 2 and Replies

The OCA avers that normalizing this cost for customer outreach for the new USP over three years is consistent with an understanding that advertising priorities change over time. The OCA provides that normalization of a new expense being introduced for the first time in the FPFTY that may fluctuate in future rate cases is required under Commission precedent. OCA Exc. at 3 (citing *Pa. PUC v. Pennsylvania American Water Co.*, Docket Nos. R-00038304, *et al.*, 2003 Pa. PUC LEXIS 498 (Recommended Decision issued December 2, 2003) (*PAWC 2003*) at *101-102, *adopted as modified*, Order entered January 29, 2004).

⁴⁹ See 66 Pa. C.S. § 1316 (permitting utilities to recover advertising expenses that "(4) Provides important information to the public regarding safety, rate changes, means of reducing usage or bills, load management or energy conservation" or "(5) Provides a direct benefit to ratepayers.").

The OCA argues that normalization would reduce the impact for rate payers, and that Aqua has failed to explain why doing so prevents it from accomplishing its goal of customer outreach. OCA Exc. at 3 (citing OCA M.B. at 32).

In its reply to the OCA Exception No. 2, Aqua contends that the ALJ correctly concluded that Aqua is permitted to recover the expense under 66 Pa. C.S. § 1316 and that to require Aqua to normalize an expense to be incurred in the FPFTY for a program to be implemented in the FPFTY is unfair. Aqua R. Exc. at 2-3 (citing R.D. at 68-69; Aqua M.B. at 86-87). Aqua avers that, as the ALJ noted, the OCA proposed increased outreach efforts for the proposed USP. Aqua R. Exc. at 3 (citing R.D. at 69). Aqua argues that the OCA offered no evidence to indicate Aqua's existing level of advertising expense, exclusive of the new CAP spending, is excessive. Aqua contends that the OCA is relying on an inapposite case that dealt with the specific variability of uncollectibles expense and not a new expense associated with a new program. Aqua R. Exc. at 3 (citing Aqua R.B. at 35; *PAWC 2003* at *101-102).

4. Disposition

We find the advertising expense for the proposed USP to be reasonable. We agree with the ALJ that to normalize the expense over three years is not fair. We do not agree with the OCA's argument that Commission precedent requires the normalization. The *PAWC 2003* citation is related to an expense that varied over three years, not an expense for a new program occurring for the first time in the FPFTY. Accordingly, the OCA Exception No. 2 is denied.

J. General Price Level Adjustment

1. Positions of the Parties

Aqua provides that its “General Price Level Adjustment” reflects the anticipated effect of inflation on operating expenses that were not specifically adjusted. Aqua M.B. at 59 (citing Aqua St. 3 at 2, Aqua Exhs. 1-A; 1-B through 1-G; Sch. C-4.1). Aqua explains that it derived its inflation factors based on the quarterly Consumer Price Index (CPI) percentage change from the same quarter in the prior year set forth in the October 10, 2020, Blue Chip Economic Indicators. Aqua explains further that “[s]ince the forecast is not available for the quarters in the FPFTY, the Company uses the last available forecasted quarterly percentage change and uses that as the annual rate to multiply inflation eligible expenses.” Aqua M.B. at 59 (citing Aqua St. 3 at 3).

The OCA argued that the adjustment is a blanket inflation adjustment which does not utilize a targeted approach. Aqua M.B. at 60 (citing OCA St. 1 at 34-35). The OCA provided that Aqua’s adjustments for estimated blanket inflation are inconsistent with the law and should be removed, reducing FPFTY expenses by \$1.07 million. OCA M.B. at 28 (citing OCA St. 1 at 34-25; OCA Exh. LA-2, Sch. C-5; Table II (Water, Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, New Garden)). The OCA stated that Aqua did not adequately justify the purpose behind its inflation adjustments. The OCA argued that Aqua is speculating regarding what increase, if any, is appropriate for those expenses. OCA M.B. at 28-29.

2. Recommended Decision

The ALJ agreed with the OCA that Aqua has not justified the use of a general price level adjustment to expenses. The ALJ noted that according to Aqua’s witness, Mr. Christopher E. Manning, the general inflation factor would be applied to

22% of Aqua's total operating expenses. R.D. at 70 (citing Aqua St. 3-R at 3). The ALJ reasoned that while it may be simpler for Aqua to use a general inflation factor for a block of expenses, its simplicity belies the fact that Commission precedent requires specificity if an inflation factor is utilized. The ALJ explained that to permit a large, sophisticated utility like Aqua to use a general inflation factor on a group of expenses as proposed here would incentivize less accurate tracking of expenses and would disincentivize Aqua from controlling its costs. In the ALJ's view, Aqua has not demonstrated that tracking the changes in these expenses individually is unduly burdensome. R.D. at 70.

The ALJ recommended that the Company's full inflation adjustment should be removed as it is not supported by record evidence and contradicts precedent to approve inflation adjustments only when the proposed adjustments are specific and not too general. The ALJ recommended an adjustment of \$864,335 for water operations and \$205,560 for wastewater operations. The wastewater adjustments are comprised of decreases for Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, and New Garden of \$145,368, \$23,275, \$6,828, \$8,719, \$8,665, and \$12,705, respectively. These adjustments are reflected in each rate case table under Table II, Row "General Inflation" of the Recommended Decision Appendix. As noted in Table VI of the Recommended Decision Appendix for each rate zone, the cash working capital adjustment resulting from this general inflation adjustment is recommended to be assigned to a general expense account for each rate zone that uses a number of lag days that is equal to the weighted average O&M Expense lag days for each rate zone after all other adjustments are applied. R.D. at 70-71, R.D. Appendix, Table II, Table VI.

3. Aqua Exception No. 7 and Replies

In its Exception No. 7, Aqua provides that the Commission has repeatedly held that general price adjustment factors may be applied to expenses not separately

adjusted, where the utility has demonstrated the adjustments are adequately supported and relatively conservative. Aqua Exc. at 27 (citing Aqua M.B. at 61-62). Aqua states that the Commission “has consistently accepted inflation adjustments where supported by historic data demonstrating that the utility has experienced cost increases that exceed the claimed inflation increases.” Aqua Exc. at 27 (citing Aqua M.B. at 62 (quoting *Pa. PUC v. Philadelphia Suburban Water Company*, Docket Nos. R-00016750, 2002 Pa. PUC LEXIS 55 (Order entered July 8, 2002) (*Philadelphia Suburban Water 2002*) at *55)).

Aqua avers that the ALJ incorrectly stated that the adjustment lacked specificity. Aqua Exc. at 27 (citing R.D. at 70). Aqua notes that its Main Brief provided details on the proposed adjustment and demonstrated that it uses an inflation factor well below the historical cost increases the Company has faced. Aqua Exc. at 28 (citing Aqua M.B. at 63).

In its reply to Aqua Exc. No. 7, the OCA contends that the ALJ correctly disallowed the Company’s proposed general price level adjustment. The OCA avers that Aqua’s argument that the Commission has approved similar inflation adjustments by the Company ignores that the Commission has historically required utilities to provide greater specificity about these adjustments. OCA R. Exc. at 4 (citing OCA M.B. at 28-30; OCA R.B. at 14).

According to the OCA, Aqua’s claim that the ALJ “ignores” precedent by disallowing this general inflation adjustment is incorrect. OCA R. Exc. at 4 (citing Aqua Exc. at 27). The OCA provides that the Commission has historically disallowed speculative inflation factors. OCA R. Exc. at 4 (citing *Pa. PUC v. Philadelphia Elec. Co.*, 58 Pa. P.U.C. 7 (1983) (*PECO 1983*); *National Fuel Gas Dist. Corp. v. Pa. PUC*, 677 A.2d 861 (Pa. Cmwlth. 1986) (*NFG 1986*)). The OCA notes that Aqua provided only three examples of expenses that have grown at rates which exceed the Company’s proposed inflation factor. OCA R. Exc. at 4 (citing Aqua St. 3 R at 3-4). The OCA

argues that the proposed inflation adjustment should not be approved because Aqua has provided no evidence about the other operating expenses to which the inflation factor would be applied. OCA R. Exc. at 4 (citing R.D. at 70; OCA M.B. at 30; OCA R.B. at 15).

The OCA finds ALJ Long's concern about setting a precedent which would allow large utilities such as Aqua to apply a general inflation factor to unspecified expenses is well-founded. OCA R. Exc. at 4 (citing R.D. at 70). The OCA agrees with the ALJ that if the Commission were to approve Aqua's entire proposed inflation adjustment based solely on three expense examples provided by Aqua, it would open the door for other large utilities to propose unjustified blanket inflation expense adjustments in future rate cases. The OCA concludes that ALJ Long correctly disallowed Aqua's proposed inflation adjustment, reducing FPFTY expenses by \$1.07 million. OCA R. Exc. at 4 (citing R.D. at 70-71; OCA M.B. at 28-30; OCA R.B. at 15; OCA Table II (Water, Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, New Garden)).

4. Disposition

Aqua's proposed General Price Adjustment applies to approximately 22% of Aqua's O&M expenses. The OCA acknowledged that in our recent decision in *Pa. PUC v. PECO Energy Co. – Gas Division*, Docket No. R-2020-3018929, Order entered June 22, 2021 (*PECO Gas 2021*), we approved an inflation adjustment. However, as the OCA correctly notes, the company in that proceeding used a more targeted approach to an inflation adjustment than Aqua proposed. OCA St. 1 at 35. More specifically, the Commission approved an inflation adjustment for regulatory Commission expenses but denied an inflation adjustment in that same case that the Commission found less specific. *See PECO Gas 2021* at 88, 95-96.

The Commission recently denied a blanket increase by Wellsboro Electric Company⁵⁰ of 3% inflation applied to FTY expenses to estimate FPFTY expenses.

In *Wellsboro 2020* the Commission stated:

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

Wellsboro 2020 at 40.

In both its briefs and its Exceptions, Aqua also cited to *Philadelphia Suburban Water 2002*, to justify the use of an inflation factor for 22% of expenses. See Aqua M.B. at 62; Aqua Exc. at 27. However, we note in that case, the inflation adjustment was more closely targeted to the inflation adjustment and “was applied only to those miscellaneous employee expenses not otherwise specifically adjusted.” *Philadelphia Suburban 2002* at *51 (citing R.D. at 37-38). We agree with the ALJ that Aqua has not justified the use of a general price level adjustment to expenses “not specifically adjusted in this case or not subject to inflation.” R.D. at 70. We also agree that allowing Aqua to apply a general inflation adjustment to a block of expenses could incentivize less accurate tracking of expenses and a less rigorous approach to controlling costs for those expenses. The application of a General Price Adjustment to 22% of expenses is neither targeted nor specific. We find the ALJ’s recommendation to deny Aqua’s use of a General Price Adjustment to be reasonable. Therefore, we shall adopt the ALJ’s recommendation to remove the Company’s entire claimed amount of \$864,335 for water operations and \$205,560 for wastewater operations. As noted by the ALJ, the wastewater adjustments are comprised of decreases for Wastewater Base, Limerick, East

⁵⁰ *Pa. PUC, OCA, OSBA v. Wellsboro Electric Company*, Docket No. R-2019-3008208 (Order entered April 29, 2020) (*Wellsboro 2020*).

Bradford, Cheltenham, East Norriton, and New Garden of \$145,368, \$23,275, \$6,828, \$8,719, \$8,665, and \$12,705, respectively. These are outlined in Table II-Adjustments in each of the rate tables that are attached to Commission Tables Calculating Allowed Revenue Increase at the end of this Opinion and Order.

Based on the above discussion, Aqua Exception No. 7 is denied.

K. Chemicals and Purchased Power (Water) Expenses

1. Positions of the Parties

The OCA proposed to increase the Company's claimed Chemicals Expense for water operations by \$66,787. R.D. at 71 (citing OCA St. 1 at 38). This adjustment is based on the OCA's proposed adjustment to Metered Residential Water sales, which estimates the Company's progress towards the return to pre-pandemic residential usage levels as slower than the Company predicts.

The OCA recommended a related negative adjustment of \$96,312 to the Purchased Power expense. OCA M.B. at 30 (citing OCA St. 1 at 38; OCA Exh. LA-2, Sch. C-7; Table II (Water)).

I&E did not recommend adjustments to gas and electric O&M expenses. I&E M.B. at 39.

2. Recommended Decision

The ALJ did not recommend any adjustments to Aqua's claim for chemicals expense consistent with the ALJ's recommendations related to Metered Residential Water Sales revenue. R.D. at 71.

3. OCA Exception No. 1

In its Exception No. 1, the OCA recommends an increase to residential revenues of \$2.757 million based on a slower return of residential revenues than Aqua predicted. Associated with that more gradual revenue increase, the OCA recommends a negative adjustment of \$66,787 to the Chemicals Expense for water operations and a negative adjustment to Purchased Power expense of \$96,312. OCA Exc. at 1-2 (citing OCA M.B. at 30; OCA Table II (Water)). The OCA also recommends that the Company's CWC be adjusted to reflect this revenue adjustment and based on the expense adjustments it recommended. OCA Exc. at 2 (citing OCA M.B. at 22; OCA Table II (Water), OCA Table II (Wastewater)).

4. Disposition

As provided in our disposition of the OCA's Exception No. 1 in Section VII. D. of this Opinion and Order, *supra*, we denied the OCA Exception No. 1. Therefore, we shall also decline to make the OCA's requested adjustments to the Chemicals Expense and the Purchased Power Expense for water operations.

L. Depreciation - Amortization Expense Adjustment – Water – Phoenixville Acquisition

1. Positions of the Parties

Aqua has requested a positive acquisition adjustment of \$2,315,440 to its rate base for the Phoenixville water system as of the end of the FPFTY. Aqua M.B. at 19 (citing Aqua Exh. 1-A, Sch. G-3). Aqua has provided a claim of \$121,865 for amortization expense associated with the positive acquisition adjustment to rate base. Aqua M.B. at 58.

Both I&E and the OCA contended that the amortization expense associated with the Phoenixville acquisition should be disallowed. Aqua M.B. at 58 (citing I&E St. 3 at 11, OCA St. 1 at 30). I&E recommended that the Phoenixville acquisition adjustment be denied, which reduces rate base by \$2,315,440 and also reduces the annual amortization expense by \$121,865, which is expressed as a depreciation expense. I&E M.B. At 20 (citing I&E St. 3 at 10-11; I&E St. 3-SR at 7). I&E recommended that the Company's total annual amortization expense be reduced by \$121,865. I&E M.B. at 21 (citing I&S St. 3-SR at 3-7).

2. Recommended Decision

The ALJ recommended that \$2,437,305 be removed from Aqua's rate base, and the concomitant adjustments should be made to the accrued depreciation reserve and annual amortization expense which is expressed as a depreciation expense. R.D. at 44 (citing Aqua M.B. at 18). *See also* R.D. at 44, n. 27.

3. Aqua Exception No. 2

In its Exception No. 2, Aqua avers that the ALJ erred by disallowing Aqua's water rate base claim related to the acquisition of the Phoenixville Water system. Aqua Exc. at 15-18.

4. Disposition

As provided in our disposition of Aqua's Exception No. 2 in Section VI.B., *supra*, we denied the Company's Exception No. 2 and found the ALJ's recommended negative adjustment to rate base of \$2,437,305 to be reasonable. Accordingly, we find that the concomitant adjustments as recommended by the ALJ should be made to the accrued depreciation reserve and the annual amortization expense, which is expressed as

a depreciation expense in this filing. The adjustments are reflected in our Commission Tables Calculating Allowed Revenue Increase, attached to this Opinion and Order at Table II-Water, Rows “Acquis. Adj. – Phoenixville” and “Amort. Phoenixville Acquis. Adj.”

M. Cash Working Capital

1. Positions of the Parties

Aqua explained that CWC is the capital requirement arising from the difference between: (1) the lag in the receipt of revenue for rendering service; and (2) the lag in the payment of cash expenses incurred to provide that service. Aqua explained further that its CWC claims for water and wastewater operations include the necessary working capital associated with O&M expense, taxes, and interest. Aqua M.B. at 32 (citing Aqua Exh. 1-A(a), Sch. G-5; Aqua Exh. 1-B(b), Sch. G-5). For water operations, its CWC amount claimed is \$1,736,000. Aqua M.B. at 32 (citing Aqua Exh. 1-A(a), Sch. G-5). For wastewater base operations, its CWC amount claimed is \$550,000. Aqua M.B. at 31 (citing Aqua Exh. 1-B(b), Sch. G-5).

Aqua stated that no parties challenged the Company’s lead/lag study or its calculation of: (a) the average lag days in payment of expenses, taxes or interest, (b) the average lag day in receipt of revenues, or (c) the average lag days between payment of expenses and receipt of revenue. Aqua M.B. at 31 (citing Aqua St. 1 at 27 (describing the results of the lead/lag study)).

I&E provided that it agrees with the Company’s use of a lead/lag study to measure how many days exist on average between the midpoint of the service period and the date the payment is received. I&E M.B. at 38 (citing I&E St. 1 at 30). Based on I&E’s recommended expense adjustments, I&E recommended a cash working capital

allowance for Water of \$1,679,000 or a reduction of \$57,000 from the Company's claimed \$1,736,000. I&E did not recommend an adjustment for cash working capital for Wastewater Base or the other wastewater acquisitions. I&E M.B. at 38 (citing I&E St. 1-SR at 31).

The OCA averred that there should be a negative adjustment of \$9.433 million for Interest for Water Operations, and the proposed rate base amount for CWC should be reduced by \$0.718 million. OCA M.B. at 22 (citing OCA St. 1 at 24). The OCA explained that this adjustment is based on negative adjustments to Long Term Debt-Interest and Pennvest Interest. OCA M.B. at 22 (citing OCA St. 1 at 24; OCA Exh. LA-2, Sch. B-3). The OCA stated that, excluding the Section 1329 acquisitions by the Company, there should be an approximate negative \$440,000 adjustment for Interest for Aqua's wastewater rate base and recommended a CWC requirement that is \$28,000 lower than Aqua's proposed CWC allowance for Wastewater base operations. The OCA stated that this adjustment is made based on a negative adjustment to Long Term Debt-Interest, and both adjustments are made at the recommendation of the OCA's witness, Mr. Smith. OCA M.B. a 22 (citing OCA St. 1 at 25; OCA Exh. LA-2, Sch. B-3).

The OCA also recommended an adjustment to CWC based on its recommended adjustment to residential water sales revenue. OCA Exc. at 2.

2. Recommended Decision

The ALJ recommended adjustments to CWC related to the General Price Level Adjustment made as detailed in that discussion *supra*. R.D. at 71.

Overall, the ALJ noted that Aqua's claims for CWC have been adjusted based on the recommended adjustments to rate base, O&M expenses and taxes in the tables attached as appendices to the Recommended Decision. R.D. at 45.

3. OCA Exception No. 1 and Replies

In its Exception No. 1, the OCA insists that CWC should be adjusted to reflect the OCA's recommended residential revenue adjustment and its expense adjustments. OCA Exc. at 2 (citing OCA M.B. at 22; OCA Table II (Water); OCA Table II (Wastewater)).

In its reply to the OCA Exception No. 1, Aqua contends that OCA's recommended residential revenue adjustment was correctly rejected by the ALJ. Aqua R. Exc. at 1-2.

4. Disposition

As provided in our disposition for OCA Exception No. 1 in Section VII.E., *supra*, we denied OCA Exception No. 1. We decline to make the OCA's related requested adjustments to CWC. Accordingly, we shall also decline to make the OCA's requested changes to CWC related to Long Term Debt-Interest and Pennvest Interest.

Based on the above discussion of the adjustments to Aqua's individual expense claims, we have approved a total downward adjustment to the Company's water

O&M expenses of \$1,900,892.⁵¹ The cash working capital components related to interest and dividends, taxes, and O&M expense result in a net overall increase of \$199,948 to the Company's water CWC.⁵²

Additionally, we have approved a total downward adjustment to the Company's wastewater O&M expenses of \$232,643. The cash working capital components related to interest and dividends, taxes, and O&M expense result in a net overall increase of \$362,667 to the Company's wastewater CWC. As stated in Section VI.C, *supra*, this is broken down as follows: (1) a net increase to the CWC component for Wastewater-Base of \$216,340,⁵³ which reflects, in part our downward adjustment to O&M expenses of \$150,101; (2) a net increase to the CWC component for Wastewater-Limerick of \$76,673,⁵⁴ which reflects, in part our downward adjustment to

⁵¹ As set forth in Table II-Water in the Commission Tables Calculating Allowed Revenue Increase, attached to this Opinion and Order, our net total reduction to the Company's water expenses claim is \$1,894,043. This figure includes a total reduction of \$1,900,892 related to our downward adjustments to the Company's water expense claims for general liability insurance expense, general price level adjustment, and SERP expense, as discussed in this Expenses section. This is netted against a total increase to expenses of \$5,849 related to water contract revenues and concomitant forfeited discounts, as discussed in Section VII of this Opinion and Order, *supra*. $[(-\$1,900,892 + \$5,849) = -\$1,895,043]$. It is our \$1,900,892 reduction to the Company's expenses that flows to our downward adjustment to Cash Working Capital – O&M Expense that is described in the next footnote.

⁵² As set forth in Table II-Water, the \$275,473 addition is the net of: (1) an increase of \$4,950 to Cash Working Capital – Interest and Dividends; (2) an increase of \$431,945 to Cash Working Capital – Taxes; and (3) a decrease of \$161,422 to Cash Working Capital – O&M Expense. $[(\$4,950 + \$431,945 - \$161,422) = \$275,473]$.

⁵³ As set forth in Table II-Wastewater-Base, the \$216,340 addition is the net of: (1) a decrease of \$945 to Cash Working Capital – Interest and Dividends; (2) an increase of \$226,646 to Cash Working Capital – Taxes; and (3) a decrease of \$9,361 to Cash Working Capital – O&M Expense. $[(-\$945 + \$226,646 - \$9,361) = \$216,340]$.

⁵⁴ As set forth in Table II-Wastewater-Limerick, the \$76,673 addition is the net of: (1) a decrease of \$389 to Cash Working Capital – Interest and Dividends; (2) an increase of \$78,550 to Cash Working Capital – Taxes; and (3) a decrease of \$1,488 to Cash Working Capital – O&M Expense. $[(-\$389 + \$78,550 - \$1,488) = \$76,673]$.

O&M expenses of \$27,778; (3) a net increase to the CWC component for Wastewater-East Bradford of \$9,669,⁵⁵ which reflects, in part our downward adjustment to O&M expenses of \$7,802; (4) a net increase to the CWC component for Wastewater-Cheltenham of \$54,249,⁵⁶ which reflects, in part, our downward adjustment to O&M expenses of \$16,469; (5) a net increase to the CWC component for Wastewater-East Norriton of \$24,706,⁵⁷ which reflects, in part our downward adjustment to O&M expenses of \$14,318; and (6) a reduction to the CWC component for Wastewater-New Garden of \$18,970,⁵⁸ which reflects, in part our downward adjustment to O&M expenses of \$16,175.

⁵⁵ As set forth in Table II-Wastewater-East Bradford, the \$9,669 addition is the net of: (1) an increase of \$250 to Cash Working Capital – Interest and Dividends; (2) an increase of \$9,729 to Cash Working Capital – Taxes; and (3) a decrease of \$310 to Cash Working Capital – O&M Expense. $[(-\$250 + \$9,729 - \$310) = \$9,536]$.

⁵⁶ As set forth in Table II-Wastewater-Cheltenham, the \$54,249 addition is the net of: (1) a decrease of \$431 to Cash Working Capital – Interest and Dividends; (2) an increase of \$56,325 to Cash Working Capital – Taxes; and (3) a decrease of \$1,645 to Cash Working Capital – O&M Expense. $[(-\$431 + \$56,325 - \$1,645) = \$54,249]$.

⁵⁷ As set forth in Table II-Wastewater-East Norriton, the \$24,706 addition is the net of: (1) a decrease of \$369 to Cash Working Capital – Interest and Dividends; (2) an increase of \$25,827 to Cash Working Capital – Taxes; and (3) a decrease of \$752 to Cash Working Capital – O&M Expense. $[(-\$369 + \$25,827 - \$752) = \$24,706]$.

⁵⁸ As set forth in Table II-Wastewater-New Garden, the \$18,970 reduction consists of: (1) a decrease of \$378 to Cash Working Capital – Interest and Dividends; (2) a decrease of \$18,230 to Cash Working Capital – Taxes; and (3) a decrease of \$362 to Cash Working Capital – O&M Expense. $[(-\$378 - \$18,230 - \$362) = -\$18,535]$.

IX. Taxes

A. Payroll Tax Expense

1. Positions of the Parties

Aqua's initial payroll tax claim included a payroll tax expense of \$3,163,655, based on its vacancy rate of 2.50%. Aqua Exh. 1-A, Sch. D-2.5. The OCA submitted that a more accurate vacancy rate would be 2.88%. OCA M.B. at 33. Aqua and I&E accepted the OCA recommended 2.88% vacancy rate. Aqua M.B. at 88, I&E M.B. at 37. Accordingly, the Company updated its claim for payroll tax expense to \$3,151,838. Aqua Exh. 1-A(a), Sch. D-2.5.

2. Recommended Decision

The ALJ remarked that Aqua's payroll tax claim was updated in rebuttal testimony to reflect the Company's acceptance of a revised vacancy rate of 2.88%. As a result, it was not necessary for the ALJ to make further adjustments to the payroll taxes. R.D. at 71-72.

3. Disposition

No Exceptions were filed objecting to the ALJ's recommendation on this issue. We find that the ALJ's recommendation is supported by ample record evidence and is just and reasonable. Therefore, we shall adopt Aqua's payroll tax claim based on a 2.88% vacancy rate.

B. Income Taxes

1. Positions of the Parties

Aqua stated its interest expense deduction claimed for ratemaking purposes was calculated using the interest synchronization method, which multiplies the weighted cost of debt in the Company's capital structure by the Company's rate base. Aqua Exh. 1-A, Sch. E-1 at 1. The OCA calculated Aqua's interest synchronization using the OCA's recommended hypothetical capital structure, *infra*. OCA R.B. at 39. As Aqua disagrees with the OCA's proposed hypothetical capital structure, it also opposes the OCA's proposed adjustment to the interest expense deduction. Aqua R.B. at 36.

2. Recommended Decision

As will be discussed more fully in Section X.B, *infra*, the ALJ rejected the OCA's use of a hypothetical capital structure for Aqua. Thus, the ALJ denied the OCA's claim regarding interest synchronization as it relates to income taxes. R.D. at 71-72.

3. Disposition

No Exceptions were filed objecting to the ALJ's recommendation on this issue. We find that the ALJ's recommendation is supported by ample record evidence and is just and reasonable. Therefore, we shall adopt the ALJ's recommendation that Aqua's interest synchronization method be employed, using the Company's capital structure, to calculate its interest expense deduction.

C. Tax Repair Deduction

1. Positions of the Parties

Aqua has proposed to carve-out \$4 million per year for its repair deductions, in the calculation of income tax expense, on the basis that it has identified a portion of its annual repair deductions as being uncertain of passing an IRS audit. To account for the “uncertain” repair deductions, Aqua has established a reserve to reduce rate base. Aqua M.B. at 90-92. Any IRS disallowance would be offset against the reserve. Aqua explained that FIN 48 is related to the Company’s practice of claiming the greatest tax-repair deductions it believes are reasonable, it recognizes that the IRS may ultimately disallow certain claims. Aqua M.B. at 91; Aqua St. 8-R at 6. Aqua’s witness, Ms. Christine L. Saball, noted the IRS has yet to issue guidance regarding what capital additions will qualify as repairs, and thus there is uncertainty regarding the actual tax repair deductions that will be allowed. *Id.*

The OCA contended that Aqua’s “flow through” treatment for its tax repair deductions is “unusual” and can result in large amounts of excess earnings between rate cases. OCA M.B. at 77; OCA R.B. at 37. The OCA also proposed to eliminate the Company’s \$4 million adjustment for FIN 48 uncertain tax positions. According to the OCA, Aqua’s FIN 48 adjustment for uncertain tax positions should reflect the amount expected to be deducted for repairs without any offset for uncertain tax positions, relying on guidance provided by the Federal Energy Regulatory Commission (FERC) for energy utilities. OCA M.B. at 81; OCA St. 1 at 34-35.

2. Recommended Decision

The ALJ was not convinced that removal of the FIN 48 adjustment from the tax repair deduction is required. R.D. at 73. The ALJ noted that the OCA contended

that this treatment of the tax repair deduction “may” result in excess earnings. However, the ALJ was persuaded by Aqua’s explanation that “including the FIN 48 adjustment protects customers because they will not be required to return to the Company disallowed deductions, because those deductions will not have been reflected in rates.” R.D. at 74 (citing Aqua St. 8-R at 7). The ALJ was also persuaded by how the Company handles the FIN 48 exclusion with regard to its rate base. In this regard, the ALJ noted the Company’s statement that “[t]o compensate customers for the time value of money benefits of the FIN 48 exclusion, the Company deducts from rate base the reserve balance established for all years in which the challenged deductions are claimed.” *Id.*

The ALJ was further persuaded to recommend that the Company’s tax repair deduction be approved, based on the following Company arguments that: (1) shareholders will not receive income for the tax effect of the FIN 48 adjustment, and the rate base deduction ensures that customers receive the time value of money benefit related to the deferral of the uncertain tax position; (2) if, in the future, the IRS allows the full tax repair deduction, then the reserve balance will be returned to customers in rates; (3) if the full deduction is disallowed, as the Company assesses is likely, the reserve will be debited for the disallowed amount; and (4) customers will receive the benefit of the reserve balance amortized as a deduction to tax expense in future rate cases. R.D. at 74 (citing Aqua St. 8-R at 6-7).

Thus, the ALJ recommended that the Commission permit Aqua to continue utilizing the flow-through treatment of tax repair deductions which were approved in the settlement of Aqua’s 2018 base rate case. Similarly, the ALJ recommended the Commission reject the OCA’s objection to Aqua’s “collar mechanism.”⁵⁹ The ALJ

⁵⁹ The ALJ noted that the OCA did not address its witness’ argument in surrebuttal testimony opposing the collar mechanism in its Main Brief. R.D. at 74, n.120.

concluded that there is no convincing evidence that this tax treatment has resulted in excess earnings or has otherwise harmed ratepayers. R.D. at 74.

3. OCA Exception No. 10 and Replies

In its Exception No. 10, the OCA excepts to the ALJ's recommendation and states that the tax repair deduction should only include those repairs that Aqua expects to claim for tax purposes and that the proposed carve-out is inappropriate for ratemaking purposes. The OCA also states that it does not take issue with the "collar mechanism" recommended by the ALJ. However, the OCA opines that if any "collar" amount around the repairs deduction amount that is used to compute income tax expense were to be used going-forward, the "collar" should be no wider than \$4 million per year. OCA Exc. at 14-15.

In its Replies, the Company asserts that the ALJ correctly concluded the FIN 48 adjustment appropriately accounts for a portion of Aqua's claimed repairs expense deduction that will likely be disallowed by the IRS. Aqua notes the "collar" was established to address concerns that the claimed deduction could substantially vary from the actual deduction. Aqua R. Exc. at 8-9.

4. Disposition

We find that the ALJ's recommendation allowing Aqua to implement the FIN 48 adjustment as well as the "collar" up to \$4 million, is supported by ample record evidence and is just and reasonable. Accordingly, we shall adopt the ALJ's recommendation on this issue and deny the OCA's Exception No. 10.

X. Rate of Return

Rate of Return is one of the components of the utility's Revenue Requirement formula, outlined, *supra*. Specifically, a utility's rate of return is the amount of revenue an investment generates in the form of net income and is usually expressed as a percentage of the amount of capital invested over a given period of time. A fair and reasonable overall rate of return is one that will allow the utility an opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect. I&E M.B. at 42.

A. Proxy Groups

To estimate a utility's cost of equity,⁶⁰ or return on equity, a proxy group of similar companies is used. This group of companies acts as a benchmark to satisfy the long-established guideline of utility regulation that seeks to provide the subject utility the opportunity to earn a return similar to that of enterprises with corresponding risks and uncertainties. A proxy group is generally preferred over the use of data exclusively from any one company, because it has the effect of smoothing out potential anomalies associated with a similar company and, therefore, is a more reliable measure. I&E St. 2 at 7.

1. Description of the Parties' Proxy Groups

Aqua used a proxy group of eight companies, which it referred to as the "Water Group." In arriving at its Water Group, the Company applied the following criteria:

⁶⁰ The Parties' positions regarding the cost of common equity will be discussed in more detail in Section X.D of this Opinion and Order, *infra*.

1. Each company was listed in the “Water Utility Industry” section (basic and expanded) of The Value Line Investment Survey (*Value Line*); and
2. The company’s stock was publicly traded.

Aqua submitted that its size and financial risk are similar to the companies in its Water Group and, therefore, the Water Group provides a reasonable basis for measuring the Company’s cost of equity. Aqua St. 7 at 13, 18.

I&E’s proxy group consisted of seven companies. In selecting a proxy group of companies that are similar to Aqua, I&E applied the following criteria to *Value Line*’s “Water Utility” Company group:

1. Fifty percent or more of the company’s revenue were generated from the water utility industry;
2. The company’s stock was publicly traded;
3. Investment information for the company was available from more than one source, including *Value Line*;
4. The company must not be currently involved in an announced merger or the target of an announced acquisition; and
5. The company must have four consecutive years of historic earnings data.

I&E St. 2 at 8-9.

I&E explained that Aqua’s Water Group contains all seven companies in its own proxy group. However, I&E excluded Artesian Resources Corporation from its own proxy group because it violates I&E’s third proxy group criterion, *supra*. In this regard, I&E explained that Artesian Resources Corporation does not have a *Value Line* report,

and therefore, does not have projected dividends per share or projected earnings growth rate information. I&E St. 2 at 10-11; I&E St. 2-SR at 2-3.

The OCA chose to use the same proxy group as selected by the Company. According to the OCA, while different arguments could be raised for the inclusion or exclusion of a particular utility within the proxy group, by using the same proxy group as the Company, the OCA has removed the selection of the proxy group as a variable in analyzing the appropriate rate of return. In the OCA's view, utilizing the Company's proxy group is valuable in focusing on the primary factors driving the cost of equity estimate and in demonstrating why Aqua's conclusions regarding its proposed rate of return are unreasonable. OCA M.B. at 60-61.

Aqua claimed that I&E's decision to exclude Artesian Resources Corporation from its proxy group was erroneous. Aqua submitted that the composition of a proxy group should not be dependent upon whether relevant data is available from a specific source. Rather, Aqua argued, there is other source data available for Artesian Resources Corporation, as set forth in Aqua Exhibit 4-A, such that it should be included in the proxy group used in this proceeding. Aqua M.B. at 110.

Table 3, below, provides a summary of the companies each party proposed to be used in their respective water proxy groups:

Aqua	OCA	I&E
American States Water	American States Water	American States Water
American Water Works Company	American Water Works Company	American Water Works Company
Artesian Resources Corporation	Artesian Resources Corporation	California Water Serv. Group
California Water Serv. Group	California Water Serv. Group	Essential Utilities, Inc.
Essential Utilities, Inc.	Essential Utilities, Inc.	Middlesex Water Company
Middlesex Water Company	Middlesex Water Company	SJW Corporation
SJW Corporation	SJW Corporation	York Water Company
York Water Company	York Water Company	

Table 3: Summary of the Proposed Water Proxy Groups in this Proceeding

Aqua St. 1 at 13; I&E St. 2 at 9; OCA St. 3 at 17.

As discussed below, the ALJ recommended that the Commission adopt the proposals set forth by I&E in setting a cost of equity for Aqua in this proceeding, including the use of I&E's proxy group. R.D. at 77-81. No Party specifically challenged the use of I&E's proxy group in the Exceptions phase of this proceeding. Finding I&E's proxy group criteria to be reasonable, and finding the companies contained therein to be representative of Aqua, we shall adopt I&E's proposed proxy group.

B. Capital Structure Ratios

A utility's capital structure represents how the utility has financed its rate base with different sources of funds. Determining the appropriate capital structure is crucial in developing the weighted cost of capital, which, in turn, determines the overall rate of return in the revenue requirement equation, *supra*. The primary funding sources for the utility are long-term debt and common equity. Additionally, a capital structure may include preferred stock and/or short-term debt. However, the Company is financed only with long-term debt and common equity. I&E St. 2 at 11.

1. Positions of the Parties

Aqua proposed a capital structure of 53.95% common equity and 46.05% long-term debt, which represents its projected capital structure as of the end of the FPFTY ending March 31, 2023. Aqua explained that it based its FPFTY capital structure upon its actual capital structure at the HTY ended March 31, 2021 and made adjustments to reflect events that will occur during the FTY and FPFTY. Aqua continued that these changes are to finance the Company's net rate base additions of approximately \$557 million in the FTY and FPFTY. Specifically, Aqua included additional debt of \$190 million to be issued in the FPFTY. In addition, Aqua projected the retention of approximately \$269.7 million in earnings over the period, and the infusion of an additional \$100 million in equity. Aqua M.B. at 102.

Aqua argued that the Commission has determined in previous proceedings that a utility's actual capital structure should be utilized unless there is a finding that it is atypical or too heavily weighted to either the debt or equity side. Aqua M.B. at 103-04 (citing *2012 PPL Order*). According to Aqua, this policy was recently affirmed in *Columbia Gas*. Aqua insisted that its common equity ratio falls within the ranges of the common equity ratios in its Water Group and in the proxy groups employed by both the OCA and I&E, and cannot be deemed "atypical." Accordingly, Aqua submitted that it is appropriate to use the Company's actual capital structure for ratemaking purposes. Aqua M.B. at 102, 103-07; Aqua R.B. at 42-45.

I&E recommended that the Commission adopt Aqua's proposed capital structure. According to I&E, the Company's claimed capital structure falls within the range of the 2020 capital structures for the companies in I&E's proxy group. I&E explained that the 2020 capital structures represented the most recent information available at the time of I&E's analysis. I&E further noted that the most recent five-year average range contains individual company capital structure ratios ranging from 39.93%

to 56.33% debt and 43.67% to 59.54% common equity, with an overall five-year average of 46.88% debt and 53.05% common equity. According to I&E, this five-year average capital structure is almost identical to the Company's claimed capital structure. I&E M.B. at 44; I&E St. 2 at 12.

In contrast, the OCA submitted that the Commission has the discretion to employ a hypothetical capital structure if the utility's actual capital structure is unreasonable or uneconomical. OCA M.B. at 57 (citing *Big Run Tel. Co. v. Pa. PUC*, 449 A.2d 86, 89 (Pa. Cmwlth. 1982) (*Big Run*)). Applying this to the instant proceeding, the OCA explained that it opposed the Company's proposed capital structure because the common equity ratio of nearly 54% that Aqua seeks to employ is significantly higher than the average of the eight regulated water utilities in its Water Group. According to the OCA, because this results in an unreasonably high cost of capital estimate, the Commission must impose a capital structure upon the Company that will not unfairly penalize its ratepayers and that is more reflective of one that might exist in a competitive environment. In the OCA's view, the use of a hypothetical capital structure will reduce costs to ratepayers, as opposed to increasing costs. OCA M.B. at 56, 58-59.

Specifically, the OCA sought to use a hypothetical capital structure of 50% common equity and 50% long-term debt to set rates for Aqua. The OCA explained that such a capital structure is reflective of the average capital structures of the companies in the Water Group used by Aqua. In addition, the OCA pointed out that the average debt ratio of the Company's Water Group is 50%, based on 2020 data. OCA R.B. at 28-29; OCA St. 3-SR at 3-4.

2. Recommended Decision

The ALJ recommended that Aqua's proposed capital structure of 53.95% common equity and 46.05% long-term debt be adopted. The ALJ acknowledged the

OCA's observation that the Commission has the discretion to employ a hypothetical capital structure where a company's actual capital structure is unreasonable or uneconomical. However, the ALJ concurred with Aqua that the legal standard in Pennsylvania for deciding whether to use a hypothetical capital structure is not whether the utility's capital structure deviates from the "average" capital structure of the proxy group, but whether the capital structure is outside the range of the capital structures of the companies in the proxy group. The ALJ echoed I&E that Aqua's claimed capital structure is within the range of the capital structures in I&E's proxy group and is, therefore, reasonable. R.D. at 77.

3. OCA Exception No. 8 and Replies

In its Exception No. 8, the OCA remains of the opinion that a hypothetical capital structure consisting of 50% common equity and 50% long-term debt should be utilized in setting just and reasonable rates for Aqua. The OCA reasons that Aqua's proposed capital structure is inappropriate because the equity component is 400 basis points (*i.e.*, 4.00%) higher than the average of the companies in Aqua's Water Group. Thus, the OCA submits that if the Commission were to adopt the ALJ's recommendation, then this would result in a return on equity and a revenue requirement that are too favorable to Aqua's investors because they would impose an unfair cost burden to the Company's ratepayers. The OCA reiterates its argument that the Commission has exercised its discretion to direct a utility to use a hypothetical capital structure where the utility's management adopts an actual capital structure that imposes an unfair cost burden on ratepayers. As such, the OCA claims that the Commission should reverse the recommendation of the ALJ and exercise its discretion in this current proceeding. The OCA insists that its proposed hypothetical capital structure will adequately balance the interests of both the Company's ratepayers and investors and will reflect a capital structure that might exist in a competitive environment. OCA Exc. at 10-11.

In its Replies to Exceptions, Aqua rebuts that the ALJ correctly recommended that the OCA's proposed hypothetical capital structure should be rejected. Aqua submits that the OCA's position disregards long-established Commission precedent for deciding whether to use a hypothetical capital structure in setting rates. Namely, Aqua restates its position that the Commission has consistently held that if a utility's actual capital structure is within the range of a similarly situated proxy group of companies, then rates are set based on the utility's actual capital structure. Aqua maintains that its capital structure falls within the range of the companies in its Water Group and should be adopted. Aqua R. Exc. at 7.

In its Replies to Exceptions, I&E declines to offer a specific reply to the OCA's Exception No. 8. Rather, I&E simply reinforces its position that the Company's claimed capital structure should be adopted. I&E R. Exc. at 15.

4. Disposition

We shall deny the OCA's Exception No. 8 and adopt the ALJ's recommendation to use Aqua's actual capital structure, consistent with the following discussion.

Like the ALJ, we note the veracity of the OCA's statement that the Commission has the discretion to employ a hypothetical capital structure where a company's actual capital structure is unreasonable or uneconomical. However, because we find no merit in the OCA's arguments that the Company's actual capital structure is either unreasonable or uneconomical, we shall decline to exercise this discretion in the instant proceeding.

The use of an actual capital structure represents the Company's decision, in which it has full discretion, on how to capitalize its rate base. This actual capitalization

forms the basis upon which Aqua attracts capital. *See 2012 PPL Order* at 68; *Columbia Gas* at 116; *PECO Gas* at 144. For example, Aqua's long-term debt cost rate of 4.00%, discussed, *infra*, which all Parties have accepted for ratemaking purposes, fully reflects the capitalization determined by the Company to be appropriate.

In both *Columbia Gas* and *PECO Gas*, we reaffirmed the legal standard in Pennsylvania for deciding whether to use a party's proposed hypothetical capital structure in setting rates, *i.e.*, we stated that if a utility's actual capital structure is within the range of a similarly situated proxy group of companies, rates are set based on the utility's actual capital structure. *Columbia Gas* at 116; *PECO Gas* at 144. More specifically, we reaffirmed this standard, which we articulated in the *2012 PPL Order*, as follows:

Absent a finding by the Commission that a utility's actual capital structure is atypical or too heavily weighted on either the debt or equity side, we would not normally exercise our discretion with regard to implementing a hypothetical capital structure.

Columbia Gas at 116-17; *PECO Gas* at 144-45 (citing *2012 PPL Order* at 68).

We find that the record developed in this proceeding lends support to the same conclusion that we reached in the *2012 PPL Order*, *Columbia Gas*, and *PECO Gas*. First, we note the testimony of I&E that Aqua's claimed capital structure falls within the range of the 2020 capital structures for the companies in I&E's proxy group, which we have determined to be the companies that are most representative of Aqua. The 2020 range consists of long-term debt ratios ranging from 39.93% to 56.33% and equity ratios ranging from 43.67% to 59.54%, with a five-year average of 46.88% for long-term debt and 53.05% for common equity. As I&E observed, the five-year average capital structure of the proxy group is nearly identical to the Company's claimed capital structure. *See I&E St. 2* at 12.

Next, we note that using I&E’s proposed proxy group, Aqua’s witness, Mr. Paul R. Moul, provided the below chart in his rebuttal testimony, which we have set forth in Table 4. Namely, this chart details the forecasted common equity ratios for 2024 through 2026 for each of the companies in I&E’s proposed proxy group, as outlined in *Value Line* as of October 8, 2021.

Company	Projected Common Equity Ratio for 2024-2026
American States Water	46.50%
American Water Works	39.00%
California Water Serv. Group	59.00%
Essential Utilities, Inc.	45.00%
Middlesex Water Company	60.00%
SJW Corporation	62.00%
York Water Company	62.50%
Average	53.43%

Table 4: Forecasted Common Equity Ratios for 2024 through 2026 for I&E’s Water Proxy Group Companies

Aqua St. 7-R at 9-10. In comparing the Company’s proposed common equity ratio to the forecasted common equity ratios of I&E’s proxy group, we find that the above table lends support to Aqua’s argument that its proposed actual common equity ratio falls well within the range of the forecasted common equity ratios of similarly situated water companies. In this regard, the data in this table demonstrates that Aqua’s proposed common equity ratio of 53.95% is very close to the forecasted average common equity ratio for the entire proxy group of 53.43%. Furthermore, Aqua’s proposed common equity ratio is below four of the companies in the I&E proxy group (*i.e.*, California Water Serv. Group, Middlesex Water Company, SJW Corporation, and York Water Company), whose forecasted common equity ratios range from 59.00% to 62.50%.

Based on the forgoing, we find that the record underscores that Aqua’s proposed actual capital structure is not atypical and is within the range of reasonableness.

Therefore, we find no basis upon which to impose the OCA's hypothetical capital structure on the Company. Therefore, we shall deny the OCA's Exception No. 8 and adopt the ALJ's recommendation to use Aqua's proposed actual capital structure of 53.95% common equity and 46.05% long-term debt in this proceeding.

C. Cost of Debt

1. Positions of the Parties

Aqua proposed a cost of long-term debt of 4.00%. Aqua submitted that because no Party has challenged this debt cost rate, it should be adopted in the context of Aqua's actual capital structure ratios for debt, *infra*. Aqua M.B. at 107.

I&E noted that given Aqua's proposed capital structure ratios, *supra*, Aqua's proposal results in a weighted cost of debt of 1.84%. I&E submitted that Aqua's claimed cost rate of long-term debt is reasonable because it is representative of the industry, and it falls within I&E's proxy group's implied long-term debt cost range of 2.69% to 5.67% with an average implied long-term debt cost of 4.04%. I&E M.B. at 44-45.

2. Recommended Decision

The ALJ observed that no Party disagreed with Aqua's proposal to use its actual cost of long-term debt of 4.00%. Therefore, the ALJ recommended that the Company's proposal be adopted. R.D. at 77.

3. Disposition

No Party filed Exceptions on this issue with regard to the ALJ's recommendation. Finding the ALJ's recommendation to be reasonable, we shall adopt it without further comment. Accordingly, we shall approve a long-term debt cost rate of 4.00% for Aqua in this proceeding.

D. Cost of Common Equity

In the instant proceeding, Aqua, I&E, and the OCA presented a position on a reasonable ROE. The Parties' positions were generally developed through comparison groups' market data, costing models, reflection or rejection of risk and leverage adjustments, and a management performance adjustment, as will be further addressed, *infra*. Table 5, below, summarizes the cost of common equity claims made and the methodologies⁶¹ used by the Parties in this proceeding:

Party	DCF	CAPM	RP	CE	ROE
Aqua	11.78%	13.40%	10.50%	12.80%	10.75%
I&E	8.90%	9.89%			8.90%
OCA	8.00%	6.40%			8.00%

Table 5: Summary of Each Party's proposed ROE

⁶¹ As will be discussed below, in the following chart, DCF refers to the Discounted Cash Flow Method, CAPM refers to the Capital Asset Pricing Model, RP refers to the Risk Premium Method, and CE refers to the Comparable Earnings Method.

1. Methods for Determining the Cost of Common Equity

a. Discounted Cash Flow Method (DCF)

The DCF method applied to a proxy group of similar utilities, has historically been the primary determinant utilized by the Commission in determining the cost of common equity. *Pa. PUC v. City of Lancaster – Bureau of Water*, Docket No. R-2010-2179103 (Order entered July 14, 2011) at 56; *Pa. PUC v. PPL Electric Utilities Corp.*, Docket No. R-00049255 (Order entered December 22, 2004) (*2004 PPL Order*) at 59. The DCF model assumes that the market price of a stock is the present value of the future benefits of holding that stock. These benefits are the future cash flows of holding the stock, *i.e.*, the dividends paid and the proceeds from the ultimate sale of the stock. Because dollars received in the future are worth less than dollars received today, the cash flow must be “discounted” back to the present value at the investor’s rate of return.

(1) Positions of the Parties

Aqua’s DCF model consists of a dividend yield plus a growth rate plus a leverage adjustment. The Company’s DCF cost of common equity is 11.78%, which is calculated as follows:

	Dividend +	Growth +	Leverage =	DCF Cost Rate
Aqua DCF	1.94%	7.50%	2.34%	11.78%

Aqua’s dividend yield calculation used six-month average dividend yields for the Water Group resulting in a dividend yield of 1.87%. The Company then adjusted this dividend yield for expected growth in dividends to produce a final dividend yield of 1.94%. Aqua St. 7 at 24.

Aqua principally relied upon five-year forecasts of earnings per share growth, as earnings growth appropriately measures the growth in price over time. The Company used three separate sources of projected earnings growth: IBES/First Call, Zacks, and *Value Line*. From this data, and applying judgment, the Company recommended a growth rate of 7.50%. Aqua St. 7 at 30.

As will be discussed in more detail below, in Section X.D.2, Aqua also argued that a leverage adjustment should be added to its DCF cost rate. The Company explained that a leverage adjustment is designed to adjust the DCF cost rate for the different percentage of debt in the capital structure calculated at market values of equity and long-term debt (the values used by investors) as compared to the percentage of debt in the capital structure at book value (the values used in the ratemaking process) to account for the greater financial risk created by a higher debt ratio when that cost rate is applied to a book value capitalization in utility proceedings. The Company argued that an unadjusted DCF greatly understates the cost of common equity because the proportion of market value common equity in the Water Group's capitalization was significantly higher than its proportion measure at book value. Aqua calculated an 11.78% return on equity using market value weighting. The Company calculated its leverage adjustment by subtracting the DCF return of 9.44% from the market value cost of equity of 11.78%. Accordingly, Aqua proposed to add a leverage adjustment of 234 basis points (*i.e.*, 2.34%) to its DCF cost of common equity calculation. Aqua St. 7 at 30-34, Sch. 10.

At the outset, I&E claimed the DCF method is in accordance with the Commission's historical use of the DCF as the primary methodology to determine a utility's cost of equity. I&E noted its recommendation is consistent with the methodology historically used by the Commission in base rate proceedings, most recently acknowledged in *Columbia Gas*. In I&E's view, it is now well settled that the Commission prefers the use of the DCF as the primary methodology in setting a utility's ROE in a rate case. Through the methodologies outlined in its testimony, I&E calculated

that the DCF methodology produces a cost of common equity of 8.90%. I&E M.B. at 45-46.

I&E employed the standard DCF model, $k = D_1/P_0 + g$, where k is the cost of common equity, D_1 is the dividend expected during the year, P_0 is the current price of the stock, and g is the expected growth rate of dividends. I&E argued that a representative dividend yield must be calculated over a time frame that avoids problems of both short-term anomalies and stale data. I&E's dividend yield calculation placed equal emphasis on the most recent spot and the 52-week average dividend yields, resulting in an average dividend yield of 1.75%. I&E St. 2 at 21-22.

I&E used earnings growth forecasts to calculate its expected growth rate. I&E's earnings forecasts are developed from projected growth rates using five-year estimates from established forecasting entities for its proxy group of companies, yielding an average five-year growth forecast of 7.15%. I&E St. 2 at 23.

I&E submitted that Aqua's proposed leverage adjustment should be rejected because investors base their decisions on book value debt and equity ratios for regulated utilities, and not on market values, rendering any adjustment unnecessary. I&E also submitted that recent Commission precedent supports rejecting a utility's request for a leverage adjustment. I&E St. 2 at 42-44.

The OCA proposed an 8.00% DCF cost of equity. The OCA utilized a Quarterly Approximation DCF model that accounts for quarterly growth of dividends, instead of annual growth. OCA St. 3 at 25; OCA Exh. DJG-6. To obtain the stock price (P_0), the OCA selected a 30-day average for each company in the proxy group. OCA St. 3 at 27. The dividend term used by the OCA in the Quarterly Approximation DCF Model is the current quarterly dividend per share (d_0). The OCA states the model

assumes that each quarterly dividend is greater than the previous one by $(1 + g)^{0.25}$.
OCA St. 3 at 28.

Like I&E, the OCA submitted that Aqua's proposed leverage adjustment should be rejected. The OCA reasoned that Aqua based the leverage adjustment on its inaccurate and incorrect use of the Hamada formula. OCA St. 3 at 35-37.

b. Capital Asset Pricing Model (CAPM)

The CAPM uses the yield on a risk-free interest-bearing obligation (such as those issued by the U.S. Treasury) plus a rate of return premium that is proportional to the systematic risk of an investment. To compute the cost of equity with the CAPM, three components are necessary: a risk-free rate of return (R_f), the beta measure of systematic risk (β), and the market risk premium ($R_m - R_f$) derived from the total return on the market of equities reduced by the risk-free rate of return. The CAPM specifically accounts for differences in systematic risk (*i.e.*, market risk as measured by the beta) between an individual firm or group of firms and the entire market of equities.

Aqua, I&E, and the OCA each used the following standard CAPM formula:

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

Where: k = the cost of equity and the remaining terms are as defined above.

(1) Positions of the Parties

Aqua determined the CAPM cost of equity as follows:

	$R_f +$	$\beta \times$	$(R_m - R_f) +$	Size =	CAPM Cost Rate
Aqua CAPM	2.75%	1.07	9.00%	1.02%	13.40%

Aqua determined the risk-free rate to be 2.75% based on current and forecasted long-term Treasury Bond yields. Aqua also calculated a 9.00% premium for the risk/market premium component of the CAPM analysis, based upon the average historical data and forecasted returns. The Company used a leverage adjusted beta of 1.07, to reflect the financial risk associated with the rate setting capital structure that is measured at book value. Additionally, Aqua included a 1.02% size adjustment to its CAPM analysis. Therefore, Aqua calculated a CAPM cost of common equity of 13.40% for its Water Group. Aqua St. 7 at 41-43.

In calculating the CAPM cost of common equity, I&E chose the risk-free rate of return (R_f) of 1.98% from the projected yield on ten-year Treasury bonds as the most stable risk-free measure. I&E explained that its decision to use ten-year Treasury bonds balanced out issues related to the use of thirty-year long-term bonds and short-term T-Bills. I&E used the average of its proxy group betas from *Value Line* of 0.78. To arrive at a representative expected return on the overall stock market, I&E stated that it reviewed *Value Line*'s 1700 stocks and the S&P 500. I&E explained that the result of the overall stock market returns based on its CAPM analysis is 12.14%, which yields a cost of equity result of 9.89%. I&E St. 2 at 24-27. According to I&E, the 9.89% cost of equity from its CAPM should only be used as a point of comparison to its 8.90% DCF cost of capital. I&E St. 2 at 28.

In response to Aqua's CAPM analysis, I&E submitted that the Company used the same leverage adjustment for inflating its CAPM betas from 0.78 to 1.07 that was used for its DCF calculation. I&E asserted that such enhancements are unwarranted for beta in a CAPM analysis for the same reasons that enhancements are unwarranted for DCF results. In addition, I&E disagreed with Aqua's 102-basis point size adjustment applied to its CAPM analysis. I&E St. 2 at 47-49.

In its CAPM analyses, the OCA used a thirty-day average of thirty-year Treasury Bond yields to calculate a risk-free rate of 2.02%. OCA St. 3 at 40. The OCA found an average beta of 0.79 for its proxy group. OCA Exh. DJG-8. To find the equity risk premium, the OCA relied on expert surveys and an implied equity risk premium. The OCA calculated the implied equity risk premium by subtracting the risk-free rate from an implied expected market return. Using this data, the OCA concluded the proper CAPM return on equity is 6.4%. OCA St. 3 at 44-48.

c. Risk Premium (RP) Model and Comparable Earnings (CE) Model

Under the Risk Premium approach, the cost of equity capital is determined by corporate bond yields plus a premium to account for the fact that common equity is exposed to greater investment risk than debt capital. The RP method determines the cost of equity by summing the expected public utility bond yield and the return of equities over bond returns (*i.e.*, the "equity premium") over a historical period, as adjusted to reflect lower risk of utilities compared to the common equity of all corporations. Aqua M.B. at 117-118; Aqua St. 7 at 35-36.

The CE method estimates a fair return on equity by comparing returns realized by non-regulated companies to the returns that a public utility with similar risk characteristics would need to realize in order to compete for capital. According to Aqua,

because regulation is a substitute for competitively determined prices, the returns realized by non-regulated firms with comparable risks to a public utility provide useful insight into investor expectations for public utility returns. The firms selected for the CE method should be companies whose prices are not subject to cost-based price ceilings (*i.e.*, non-regulated firms) so that circularity is avoided. The CE method utilizes the concept of opportunity cost, wherein investors will likely dedicate their capital to the investment offering the highest return with similar risk to alternative investments. Aqua M.B. at 121; Aqua St. 7 at 43-44.

(1) Positions of the Parties

The Company determined the RP cost of common equity to be 10.50% as follows:

	Interest Rate +	Risk Premium =	RP Cost Rate
Aqua RP	3.75%	6.75%	10.50%

Aqua explained that the interest rate in its calculation is an estimated interest rate for A-rated public utility bonds, while the risk premium in its calculation is the average of historical risk premiums of long-term corporate bonds.

Aqua also performed a comparable earnings analysis based on the principle set forth by the United States Supreme Court that a utility should be afforded an opportunity to earn a return on its property equal to that being earned on investments in other businesses with corresponding risks and uncertainties. *See Bluefield, supra*. The Company's analysis identified non-regulated companies with comparable risk and produced a cost rate of 12.80%. Aqua M.B. at 121; Aqua St. 7 at 46.

I&E submitted that neither the RP method nor the CE method should be used in determining an appropriate cost of equity in a base rate proceeding. I&E pointed out that the RP method is a simplified version of the CAPM model. However, I&E noted that while the CAPM directly measures the systematic risk of the company through the use of beta, the RP method does not measure the specific risk of the company. As to the CE method, I&E charged that it is not market-based and relies upon historic accounting data. Further, I&E contended that under the CE method, the most problematic issue is determining what constitutes comparable companies. I&E St. 2 at 15, 19-20.

The OCA claimed that the Commission should disregard Aqua's RP and CE analyses. The OCA argued that Aqua's RP and CE analyses are flawed by the Company's choice of inputs and inclusion of adjustments. OCA M.B. at 73-75.

Therefore, I&E and the OCA recommended using the DCF method as the primary method to determine the cost of common equity and using the CAPM method as a comparison to the DCF results. Both I&E and the OCA pointed out that the DCF method has historically been the Commission's preferred method of setting common equity cost rates. I&E M.B. at 45; OCA M.B. at 59-60.

d. Recommended Decision

The ALJ agreed with I&E's proposal to calculate the recommended return on equity pursuant to the DCF methodology, using the CAPM as an alternate means to verify the reasonableness of the return on equity. The ALJ recommended the Commission approve the use of the DCF method as the primary method to determine the cost of common equity, consistent with the methodology commonly endorsed by the Commission in base rate proceedings. R.D. at 77-78.

e. Aqua Exception Nos. 1.1 and 1.4; OCA Exception No. 9 and Replies

In its Exception No. 1.1, Aqua contends that the ALJ erred by not analyzing the dividend yield and growth rate components of I&E's DCF methodology. Aqua claims I&E's use of spot prices, which were near the 52-week high of the proxy group, lowered its dividend yield. Aqua states that using only I&E's 52-week average dividend yield of 1.87% is very close to its own six-month average dividend yield of 1.94%. According to Aqua, I&E's growth rate is unreasonable because it improperly includes an extremely low growth rate of 3.6% for Middlesex Water. Citing *Columbia Gas*, Aqua notes that I&E excluded a high data point from its growth rate calculation on the basis that it was outside the norm and distorted the DCF results. If high growth rates can be excluded, as I&E has done in the past, then Aqua argues that low growth rates must also be excluded from I&E's DCF calculation. Aqua determines that removing the 3.6% growth rate for Middlesex Water from I&E's growth rate calculation results in a 7.74% growth rate. By adopting Aqua's dividend yield and calculating I&E's growth rate without Middlesex Water, the Company claims a DCF result of 9.68%. Aqua Exc. at 5-7.

In its Exception No. 1.4, Aqua maintains the ALJ inaccurately asserts that I&E used the DCF method and the CAPM method to arrive at its recommended ROE of 8.9%. Although I&E did prepare a CAPM analysis, Aqua states I&E ignored its 9.89% CAPM return on equity result. Aqua insists the Commission also recognizes the importance of informed judgment and information provided by other models. For example, Aqua submits that in the *2012 PPL Order*, the Commission considered the CAPM and RP methods instead of DCF-only results. Aqua claims one of the flaws of the DCF in a rising interest rate environment is that it lags in responding to interest rate changes. Therefore, Aqua proposes the CAPM and RP methods are necessary to consider in a time of rising interest rates because both methods directly reflect forecasts of interest rates and bond yields. In conclusion, Aqua argues that the ALJ's reliance

upon I&E's DCF result should be rejected and the Commission should consider and reflect in its ROE determination the results of other methods more attuned to rising interest rates. Aqua Exc. at 10-12.

In its Replies to Aqua's Exceptions, I&E asserts that the ALJ correctly recognized that Commission precedent favors the use of the DCF methodology, as applied by I&E, and that Aqua's DCF calculation included the use of an inflated growth rate and an unnecessary leverage adjustment. According to I&E, Aqua has erroneously argued that I&E ignored its CAPM result in deriving the I&E ROE recommendation. I&E expresses that it uses the DCF method as the primary methodology to calculate its recommended return on equity while also using the CAPM as a check on the reasonableness of its DCF results. I&E R. Exc. at 2-4.

In its Replies to Aqua's Exceptions, the OCA submits that contrary to Aqua's assertion, the DCF growth rate recommended by the ALJ is not understated. The OCA avers Aqua's argument for increasing the Growth Rate to 7.5% based on excluding the Middlesex Water IBES/First Call growth rate should be denied. OCA R. Exc. at 5-10.

In its Exception No. 9, the OCA claims the ALJ erred by adopting I&E's DCF model. The OCA maintains its Quarterly Approximation DCF model is more reasonable than Aqua's and I&E's DCF calculations because it accounts for quarterly growth of dividends rather than annual growth. Additionally, the OCA argues its Quarterly Approximation DCF model produces higher cost of equity estimates compared with the other DCF Model variations because dividends are compounded quarterly. In estimating the growth rate, the OCA insists it is prudent for U.S. GDP to be a limiting factor for the long-term growth rate input of the DCF model. OCA Exc. at 12-14.

In its reply to the OCA's Exception No. 9, Aqua maintains the ALJ correctly rejected the OCA's DCF method. Aqua insists the OCA uses an arbitrary growth rate and its DCF method should be rejected. Aqua R. Exc. at 8.

In its reply to the OCA's Exception No. 9, I&E supports the ALJ's adoption of its methodology, resulting in an 8.90% ROE. I&E R. Exc. at 15.

f. Disposition

Upon our consideration of the record evidence, we agree with the ALJ's determination that Commission precedent prefers the DCF methodology as applied by I&E. We also are persuaded by the arguments of Aqua that the Commission recognizes the importance of informed judgment and information provided by other ROE models. Therefore, we shall deny Aqua's Exception No. 1.1 and the OCA's Exception No. 9, and grant Aqua's Exception No. 1.4, consistent with the following discussion.

Aqua suggests I&E's use of spot stock prices skewed its dividend yield lower, thus reducing the DCF ROE. However, the record does not include any testimony specifying how I&E may have erred by including spot stock prices when calculating the proxy group dividend yield. The Commission affirmed I&E's DCF methodology in *Columbia Gas* and *PECO Gas*, thereby verifying I&E's use of spot stock prices. We find that I&E's DCF proxy group dividend yield calculation appropriately includes spot stock prices.

Next, Aqua claims I&E's growth rate is low because it includes an unreasonable growth rate for Middlesex Water. Aqua submits that I&E excluded an unreasonable growth rate from a proxy group it used in *Columbia Gas* and should do the same in the instant case. As the OCA points out, the growth rate excluded in *Columbia Gas* was 26.5%, 3.5 times greater than I&E's *Columbia Gas* proxy group average growth

rate. OCA R. Exc. 5-6. In the instant case, Middlesex Water's growth rate is 3.6% compared to I&E's proxy group average of 7.15%, less than half of the proxy group average. We do not find Middlesex Water's growth rate to be unreasonably low and, as such, it was appropriately included in I&E's DCF growth rate calculation.

The OCA claims the ALJ erred by not adopting its Quarterly Approximation DCF model. Like Aqua, we find the OCA's Quarterly Approximation DCF methodology to be unconventional and that it includes flaws with both its dividend yield and growth rate calculations. Aqua M.B. 126-128. Additionally, we find the OCA's Quarterly Approximation DCF methodology to be inconsistent with the DCF methodology affirmed in both *Columbia Gas* and *PECO Gas*. Therefore, we find the ALJ did not err by rejecting the OCA's Quarterly Approximation DCF methodology.

We are persuaded by the arguments of Aqua that the ALJ erred by concluding I&E used its DCF *and* CAPM results to determine Aqua's ROE. In this regard, we note that although I&E did use its CAPM as a comparison to its DCF result, it made no CAPM based adjustment to its final ROE recommendation. I&E M.B. at 47. As Aqua points out, *infra*, the U.S. economy is currently in a period of high inflation. To help control rising inflation, the Federal Open Market Committee has signaled that it is ending its policies designed to maintain low interest rates. Aqua Exc. at 9. Because the DCF model does not directly account for interest rates, consequently, it is slow to respond to interest rate changes. However, I&E's CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward looking changes in interest rates.

Therefore, our methodology for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies. As noted above, the Commission recognizes the importance of informed judgment and information provided by other ROE models. In the *2012 PPL Order*, the Commission considered PPL's CAPM and RP methods, tempered

by informed judgment, instead of DCF-only results. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived ROE calculation. Historically, we have relied primarily upon the DCF methodology in arriving at ROE determinations and have utilized the results of the CAPM as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination. In light of the above, we shall determine an appropriate ROE for Aqua using informed judgement based on I&E's DCF and CAPM methodologies.

Accordingly, we shall deny Aqua's Exception No. 1.1 and the OCA's Exception No. 9, and shall grant Aqua's Exception No. 1.4

2. Leverage Adjustment and Management Performance

a. Positions of the Parties

As previously noted, Aqua argued that a leverage adjustment should be added to its DCF cost rate. In addition, Aqua proposed to add a management effectiveness adjustment to its ROE claim. Both I&E and the OCA opposed the addition of a leverage adjustment or any allowance for management effectiveness.

As noted above, Aqua claimed that a utility that has a stock price above its book value and has an embedded cost of debt that is different from its marginal cost of debt has a market value or capitalization of its equity that is greater than the book value of its equity. Thus, Aqua explained, when an investor purchases equity at the market price (*i.e.*, the price used in the DCF model), the percentage of equity in the market capitalization is greater than the percentage of equity at book value. According to the

Company, under such circumstances, the DCF cost rate based on market prices must be adjusted upward to reflect the greater financial risk created by a higher debt ratio when that cost rate is applied to a book value capitalization in utility rate proceedings. Aqua M.B. at 113.

Aqua noted that the Commission has applied a leverage adjustment in cases in which it believes market conditions have resulted in an understated DCF cost rate. In support of this argument, Aqua cited to several previous rate cases before the Commission, including the *2004 PPL Order*, in which the Commission applied a leverage adjustment of forty-five basis points. Aqua M.B. at 112-13. Aqua further claimed that the Commonwealth Court has held that the decision of whether to adopt a leverage adjustment is within the Commission's discretion. *Id.* (citing *Popowsky v. Pa. PUC*, 868 A.2d 606, 612-13 (Pa. Cmwlth. 2004) (*2004 PA American*)).

According to Aqua, the market conditions that were present in the above rate cases also exist in this current proceeding. Aqua pointed to, *inter alia*, the high inflation rate that is currently present in the economy. Aqua reasoned that higher inflation expectations point to higher interest rates, which will contribute to higher capital costs prospectively, given that higher inflation results in greater risk of recovery of operating costs and greater volatility of earnings. In turn, Aqua insisted that the resulting increased capital costs warrant its requested leverage adjustment of 234 basis points. Aqua M.B. at 111, 117; Aqua St. 7 at 35.

As noted above, the Company also proffered that it demonstrated strong performance in the area of management effectiveness, such that it should be recognized by the Commission. Thus, Aqua sought an upward adjustment to its cost of equity for management effectiveness. Although the Company did not quantify what it believes to

be an appropriate level of additional basis points for management performance,⁶² it nonetheless claimed that in accordance with Section 523 of the Code, 66 Pa. C.S. § 523, the Commission is required to consider management effectiveness in setting a utility's rates. According to Aqua, nothing in Section 523 of the Code requires a finding that a utility must outperform all other utilities in the Commonwealth or that a utility's programs not be funded by customers before it is eligible for an increment to the rate of return for management performance. Aqua M.B. at 121, 128-29.

Aqua argued that it is committed to providing safe and reasonable service for the benefit of its communities and the environment. Aqua stated that it continues to assist the Commonwealth in dealing with the problems created by small, troubled, or non-viable water and wastewater systems. Aqua submitted that it provides high quality service and has implemented numerous programs designed to enhance the service it provides to customers. In support of these claims, Aqua highlighted that: (1) it maintains a strong, constant focus on water quality by providing filtration for all surface water sources and disinfection for all ground water sources, and by maintaining a central water quality laboratory in which it regularly takes water samples from its systems and responds promptly to water quality issues; (2) has acquired various water and wastewater systems that are in need of substantial improvement, has made larger scale plant upgrades that were beyond the capability of prior owners and/or operators, and has agreed to be a receiver for other troubled water systems under the provisions of Section 529 of the Code, 66 Pa. C.S. § 529; (3) has taken proactive measures to achieve its goal of providing twenty-four hour per day uninterrupted service to customers including undertaking extraordinary remediation and reconstruction efforts of the systems it has undertaken as a

⁶² While Aqua did not quantify what it believes to be an appropriate amount of additional basis points for management effectiveness, it did highlight that the Commission awarded the Company an upward adjustment of twenty-two basis points for management effectiveness in *Pa. PUC v. Aqua Pa., Inc.*, Docket No. R-00072711 (Order entered July 31, 2008) (*2008 Aqua Order*). Aqua M.B. at 115.

receiver; (4) seeks to contain operating costs by reviewing staffing needs and operating procedures to reduce operating expenses and by proactively taking advantage of refinancing opportunities and lowered interest rates on long-term debt; (5) has leveraged its size and operational abilities to develop rates that are just and reasonable, while also prudently investing in needed capital in the utility infrastructure serving its customers; (6) has successfully provided its water and wastewater services during the COVID-19 pandemic without any interruption, while furnishing a safe workplace for its essential employees; (7) has proactively implemented changes to its low-income program, and policies to help customers who have been impacted by the pandemic, including providing credits to its low-income customers; (8) has assisted other water and wastewater systems during the pandemic; (9) has provided its customers with a high level of customer service, including rolling out technology designed to improve customers' ability to be advised of, and track service disruptions; (10) has maintained its "A Helping Hand" low-income customer assistance program to help facilitate the payment of water bills by its low-income residential customers; (11) continues to embark on substantial capital programs intended to ensure long-term viability by rehabilitating its underground piping infrastructure; (12) has taken advantage of key tax programs to ensure the lowest possible cost of service for its customers; and (13) has taken environmental initiatives, including seeking to minimize its purchased power costs and to improve its carbon footprint to ensure that it is being a good steward of the environment. Aqua M.B. at 129-37.

In contrast, I&E recommended that the Commission reject both the Company's request for a leverage adjustment and its request for a management performance adjustment. With regard to the Company's proposed leverage adjustment, I&E took the position that the Company's proposal was inappropriate for several reasons. First, I&E claimed that the Company's proposal is not supported by academic journals, textbooks, or other literature, and that rating agencies assess financial risk based upon a company's financial statements, and not its market capital structure. Second, I&E cited to several recent rate cases to illustrate that Commission precedent favors rejecting a

utility's request for a leverage adjustment. Third, I&E posited that a leverage adjustment would unduly burden the Company's ratepayers. In this regard, I&E claimed that awarding the Company a leverage adjustment of 234 basis points would cause Aqua's ratepayers to fund an additional amount of \$68,578,855 annually to cover the increase of an inflated rate of return along with the associated impact resulting from increases to income taxes, gross receipts tax, uncollectibles, and assessments. I&E M.B. at 51-54.

As to the Company's request for an upward adjustment in recognition of management effectiveness, I&E likewise contended that no such adjustment is warranted. In this regard, I&E provided that the true measure of whether a utility has exhibited strong management performance is whether the utility earns a higher return through the efficient use of resources and cost cutting measures. I&E continued that the increased income resulting from cost savings and true efficiency in management and operations is to be passed on to shareholders. I&E opined that the initiatives the Company cited to in support of its request for a management effectiveness adjustment demonstrate nothing more than the Company meeting the requirements outlined in Section 1501 of the Code, 66 Pa. C.S. § 1501, that it must provide adequate, efficient, safe, and reasonable service. In I&E's view, neither Aqua, nor any other utility should be awarded additional basis points to their ROE for simply meeting the requirements set forth in Section 1501. I&E M.B. at 47-48.

I&E also submitted that if the Company is as effective at controlling operating and maintenance costs as it argues, those savings should flow through to its ratepayers and/or investors. At the same time, I&E contended that Aqua's claimed savings to its ratepayers would likely be offset by the addition of basis points for management performance, as ratepayers would have to fund the additional costs. I&E reasoned that this would defeat the purpose of cutting expenses to benefit ratepayers. I&E M.B. at 49-50. Further, I&E cited to *Columbia Gas* wherein the Commission upheld the finding of ALJ Katrina L. Dunderdale that Columbia's management performance

adjustment should be denied in light of the ongoing COVID-19 pandemic, noting that Columbia's proposal would defeat the purpose of cutting expenses to benefit ratepayers, particularly during a period in which many ratepayers have experienced reduced income from job loss or reduction in hours. *Id.* at 50 (citing *Columbia Gas* at 134). I&E posits that the Commission should reach a similar conclusion in this current proceeding. I&E M.B. at 50.

The OCA echoed the position of I&E that neither the Company's proposed leverage adjustment nor its proposed management effectiveness adjustment should be granted. The OCA acknowledged Aqua's statement that, as set forth in the Commonwealth Court's decision in *2004 PA American*, the decision of whether to adopt a leverage adjustment is within the Commission's discretion and is made on a case-by-case basis. OCA M.B. at 66. However, the OCA averred, *inter alia*, that the Commission typically only applies a leverage adjustment in cases in which market conditions have resulted in a DCF cost rate that is understated. *Id.* (citing *2012 PPL Order* at 120). The OCA opined that the opposite conditions exist in this current proceeding such that any leverage adjustment would be unnecessary and would be contrary to the public interest. OCA M.B. at 66-67.

According to the OCA, the primary reason for Aqua's inclusion of a leverage adjustment is that it seeks a higher return on equity than what the record supports. The OCA submits that although the Company cited the prospect of risks to investors, the Company failed to note that as a public utility operating in a monopoly environment, it faces less risk than the average company, which operates in a competitive marketplace. In addition, the OCA argued that in citing the potential risks to its investors, Aqua failed to acknowledge the additional risks that would be imposed on its ratepayers if it were awarded a leverage adjustment. Thus, the OCA claimed that the Company's request should be disregarded by the Commission. OCA M.B. at 67-68; OCA R.B. at 31-33.

Likewise, the OCA argued that the Company's request for an upward adjustment to its ROE for management performance is wholly unsupported. According to the OCA, Aqua has not conducted any comparative analyses to determine if the Company's management performance is superior to that of other regulated utilities, including those in its proxy group. To the contrary, the OCA claimed that the record thoroughly demonstrates that Aqua's management has not performed effectively in a variety of metrics, including but not limited to water quality, wastewater treatment compliance, system reliability, cost containment, rates, COVID-19 response, customer service, low-income customer assistance programs, infrastructure rehabilitation, tax programs, and environmental initiatives. As such, the OCA claimed that there is no basis for awarding a rate of return higher than Aqua's estimated cost of equity. OCA M.B. at 75-76; OCA R.B. at 34-35.

b. Recommended Decision

The ALJ concluded that Aqua has failed to justify that the addition of a leverage adjustment to its DCF cost calculation would be appropriate. Thus, the ALJ recommended that the Company's proposed leverage adjustment of 234 basis points be denied. R.D. at 78-79.

The ALJ also concurred with the positions of I&E and the OCA that Aqua should not be awarded any upward adjustment for strong management performance. First, the ALJ found that although it is true that the Company has been a strong partner with the Commission in acquiring troubled water systems, it has also acquired water and wastewater systems that were not troubled and has asked its existing customer base to help finance the costs to serve its newly acquired customers through base rates, reconcilable surcharge mechanisms, and/or its Distribution System Improvement Charge (DSIC). Thus, the ALJ concluded that the Company's claimed savings to ratepayers would likely be offset by the addition of basis points for management performance, as

ratepayers would need to fund the additional costs. In the ALJ's view, this would defeat the purpose of cutting expenses to benefit ratepayers. R.D. at 79-80.

Next, the ALJ concluded that although the Commission has rejected the notion that no rate increases are appropriate during the COVID-19 pandemic, it is also not appropriate to demand more from ratepayers than necessary to meet the utility's basic needs. The ALJ pointed out that at the public input hearings many of Aqua's customers described the additional economic burdens caused by job loss, elevated family care responsibilities and other hardships resulting from the ongoing effects of the pandemic. According to the ALJ, to permit the Company to seek an additional premium from ratepayers during a pandemic would be inequitable and "tone deaf" given the high level of unemployment experienced by residential customers and the detrimental effect the pandemic has had on small businesses. Thus, the ALJ concurred with I&E that the Commission should apply the same reasoning set forth in *Columbia Gas, supra*, and should deny the Company's request to add basis points to its ROE for strong management performance. R.D. at 80-81.

c. Aqua Exception Nos. 1.2 and 1.6 and Replies

In its Exception No. 1.2, Aqua finds fault with the ALJ's recommendation that the Company's proposed leverage adjustment should be rejected. The Company contends that the ALJ has failed to consider that the Commission has included an adjustment for leverage in instances where the DCF understates the cost of common equity. Aqua insists that such conditions are present in this instant proceeding. Aqua restates its arguments, *supra*, that a leverage adjustment is designed to adjust the DCF cost rate for the different percentage of debt in the capital structure calculated at market values of equity and long-term debt, as compared to the percentage of debt in the capital structure at book value, and to align those risks. Aqua Exc. at 7.

Next, Aqua acknowledges that the Commission has been selective in awarding a leverage adjustment to the DCF cost calculation in rate cases. However, Aqua submits that what is most apparent from the decisions in which the Commission has not adopted a leverage adjustment is that the Commission has concluded that the unadjusted DCF results in such cases do not underestimate the cost of common equity. According to the Company, there is substantial evidence in this instant proceeding to demonstrate that the unadjusted DCF results understate the cost of common equity in the current environment. Thus, Aqua submits that the Commission should reverse the ALJ's recommendation and should award the company a leverage adjustment of 234 basis points, or 2.34%. Aqua Exc. at 7-8.

In its Exception No. 1.6, Aqua claims that in recommending that the Commission reject the Company's request for an upward adjustment to its ROE for strong management performance, the ALJ has disregarded the requirements of Section 523 of the Code, 66 Pa. C.S § 523. Aqua notes that Section 523 directs the Commission to consider the efficiency, effectiveness, and adequacy of service of each utility when determining just and reasonable rates. Aqua argues that while the ALJ concluded that providing additional basis points for effective management may offset cost savings such that it would defeat the purpose of cutting expenses to benefit ratepayers, the Commission has rejected contentions that utilities should not be provided additional basis points for quality utility service in light of Section 523. Aqua insists that the Commission should similarly reject such contentions in this proceeding. Aqua Exc. at 13-14.

Aqua also objects to the ALJ's finding that while the Company has been a strong partner with the Commission in acquiring troubled water systems, it has also acquired systems that were not troubled and has asked existing customers to pay for those acquisitions. Aqua claims that such acquisitions are mutually exclusive. The Company avers that it includes in rate base only those amounts permitted by law. In addition, Aqua

insists that cost savings for its ratepayers have been realized through economies of scale associated with its acquisitions. Thus, Aqua submits that incentives to encourage acquisitions and regionalization to reduce the number of troubled water systems in the Commonwealth should not be denied simply because the Company also undertakes acquisitions of some entities that may not be classified as “troubled.” Aqua Exc. at 14.

In its Replies to the Exceptions, I&E counters that the ALJ correctly rejected Aqua’s proposed leverage adjustment. I&E maintains that Aqua has erroneously argued that there is substantial evidence to demonstrate that the unadjusted DCF results understate the cost of common equity in the current economic environment and that the ALJ appropriately rejected these arguments. I&E R. Exc. at 2.

In a similar fashion, I&E submits that the ALJ properly denied the Company’s request for an upward adjustment to its ROE for strong management performance. I&E refutes Aqua’s contention that the ALJ disregarded the requirements of Section 523 of the Code. To the contrary, I&E asserts that the ALJ properly considered the record evidence and the arguments presented by all of the Parties and then concluded that awarding the Company a management effectiveness adjustment is not warranted in this proceeding. I&E remains of the opinion that the Commission should reject the Company’s request, consistent with its reasoning for rejecting a management performance adjustment in *Columbia Gas*. I&E R. Exc. at 5-6.

The OCA’s arguments in its Replies to Exceptions mirror those of I&E with regard to both the leverage adjustment and the management performance adjustment. As to the leverage adjustment, the OCA also adds that the unadjusted DCF results of Aqua, I&E, and the OCA all fall between 8% and 9.07%, indicating a relatively small range resulting from the application of DCF models employed by the Parties’ respective expert witnesses. Thus, the OCA submits that the Company’s 234 basis point adjustment is unreasonable and creates substantial burdens for consumer ratepayers as

subsidizers of investors. In addition, the OCA claims that the Company incorrectly posited that the market-derived cost of equity needs to be adjusted to compensate for the difference in financial risk. The OCA restates its argument that because Aqua is a regulated public utility, it does not have greater financial risk when compared to the average company in the competitive marketplace. OCA R. Exc. at 6-8.

Furthermore, the OCA highlights that the Commission has routinely denied proposed leverage adjustments in rate case proceedings. In the OCA's view, the record evidence in this current proceeding does not support Aqua's request for a leverage adjustment and the ALJ appropriately rejected the Company's request. OCA R. Exc. at 7-8.

As to the Company's Exception No. 1.6, the OCA restates its position that Aqua has been *deficient* in many areas of management performance.⁶³ The OCA submits that even absent these deficiencies, the provision of safe, adequate, and reliable water and wastewater service is required under Section 1501 of the Code, 66 Pa. C.S. § 1501. As a result, the OCA asseverates that simply meeting these required standards does not constitute exemplary management performance. Otherwise, the OCA reasons, the Commission would be awarding unwarranted additional basis points for management effectiveness to nearly every utility under its jurisdiction. OCA R. Exc. at 8-9.

The OCA also refutes the Company's claim that its acquisition of small, troubled, or non-viable wastewater systems warrants consideration for additional basis points for strong management performance. The OCA points to the ALJ's finding that

⁶³ As discussed in Section XII.A, *infra*, the OCA, in its Exception No. 23, argues that Aqua's customer satisfaction survey, which indicates that only seventy-three percent of its customers rated their satisfaction as "excellent" or "very good" lends further support for rejecting the Company's request for a management effectiveness adjustment. *See* OCA Exc. at 34-35.

the costs of rehabilitating these systems is passed along to the Company's other ratepayers. According to the OCA, even if the Company's reference to economies of scale proves true, this is not an indicator of effective management performance. Instead, the OCA maintains that such economies are a function of the Company's system. Thus, the OCA asserts that the ALJ properly rejected the Company's request for an upward adjustment to its ROE for management performance. OCA R. Exc. at 9-10.

d. Disposition

As Aqua correctly notes in its Exception No 1.2, the Commission has been selective in adding a leverage adjustment to the DCF cost calculation in rate cases. We reinforced this in *UGI Electric*, stating that "the fact that we have granted leverage adjustments in a few select cases in the past does not mean that such adjustments are warranted in all cases. Rather, the award of such an adjustment is not precedential but discretionary with the Commission." *UGI Electric* at 93; *see also 2012 PPL Order* at 91.

In examining the record in this proceeding, we are not persuaded by Aqua's arguments that we should reach a different conclusion from that reached in *UGI Electric* and other recent base rate proceedings and award the Company an artificial leverage adjustment to its ROE. In its briefs, Aqua cited to the high inflation rate that is currently present in the economy in support of its argument for a leverage adjustment. Aqua M.B. at 117. However, the crux of the Company's request for a leverage adjustment to its ROE centers on its belief that the difference between its book value capital structure and its market value capital structure poses a financial risk. Thus, the Company seeks a leverage adjustment to account for applying the market value cost rate of equity to the book value of its equity.

We find I&E's arguments in opposition to the Company's position to be persuasive. For example, as I&E observed, credit rating agencies assess financial risk

based upon a company's booked debt obligations and the ability of its cash flow to cover the interest payments on those obligations. The agencies use a company's financial statements, and not the company's market capital structure, in conducting their analysis. It is a company's financial statements that affect the market value of the stock, and, therefore, the financial statements and the book value capital structure are relied upon in an analysis such as that done by rating agencies. I&E St. 2 at 40; I&E St. 2-SR at 10. Accordingly, we find that the record in this proceeding supports rejecting the Company's requested leverage adjustment.

Additionally, we note that PPL, in its 2012 rate case, sought a leverage adjustment in the range of 70 to 118 basis points based upon similar arguments regarding a perceived risk related to its market to book ratio. Likewise, UGI Electric, in its 2018 rate case, sought a leverage adjustment on this same basis. We found no merit in these arguments. *2012 PPL Order* at 91; *UGI Electric* at 93. We likewise find no merit in Aqua's arguments in which it seeks to support a leverage adjustment that is more than 100 basis points higher than that requested by either PPL or UGI Electric. Rather, we find, as we did in those base rate proceedings, that awarding the Company a leverage adjustment would run contrary to the public interest. Therefore, we shall deny the Company's Exception No. 1.2.

As to the Company's requested management performance adjustment, we note that pursuant to the Code, the Commission may reward utilities through rates for their performance. In pertinent part, Section 523 of the Code, 66 Pa. C.S. § 523, provides:

§ 523. Performance factor consideration.

(a) **Considerations.** – The Commission shall consider, in addition to all other relevant evidence of record, the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates under this

title. On the basis of the commission's consideration of such evidence, it shall give effect to this section by making such adjustments to specific components of the utility's claimed cost of service as it may determine to be proper and appropriate. Any adjustment made under this section shall be made on the basis of specific findings upon evidence of record, which findings shall be set forth explicitly, together with their underlying rationale, in the final order of the commission.

(b) **Fixed utilities.** – As part of its duties pursuant to subsection (a), the commission shall set forth criteria by which it will evaluate future fixed utility performance and in assessing the performance of a fixed utility pursuant to subsection (a), the commission shall consider specifically the following:

(1) Management effectiveness and operating efficiency as measured by an audit pursuant to Section 516 (relating to audits of certain utilities) to the extent that the audit or portions of the audit have been properly introduced by a party into the record of the proceeding in accordance with applicable rules of evidence and procedure.

* * *

(4) Action or failure to act to encourage development of cost-effective energy supply alternatives such as conservation or load management, cogeneration or small power production for electric and gas utilities.

* * *

(7) Any other relevant and material evidence of efficiency, effectiveness and adequacy of service.

On consideration of the record evidence in this proceeding, we shall award Aqua an upward adjustment of twenty-five basis points to its ROE for management effectiveness, consistent with the following discussion.

We specifically recognize Aqua's efforts and willingness to quickly provide emergency aid to various water and wastewater systems that needed substantial improvement. Aqua has often provided this emergency aid on short notice and at the request of the Commission or other parties to protect the public from egregious health and safety threats and to protect the Commonwealth's drinking water resources from catastrophic damage. The competence and reliability of Aqua's management effectiveness in this regard is unparalleled. Aqua's management has earned this reputation by consistently and successfully working to protect the public and the environment under emergency situations presenting highly difficult operational, financial, and legal issues over many years. For example, we note the aid rendered by Aqua in Emlenton, Pennsylvania where the Commission fielded approximately ninety-three simultaneously filed formal complaints against the Emlenton Water Company alleging unsafe and inadequate water service and water-born illness. *See Bradley Louise, et al. v. Emlenton Water Company*, Docket No. C-2008-2058411 (Complaint filed July 24, 2008); *Joint Application of Aqua Pennsylvania, Inc. and Emlenton Water Company*, Docket No. A-2008-2074746 (Order entered December 29, 2008).

Aqua's management performance in recent emergency situations reinforces that the Company has been, and continues to be, a trusted and reliable corporate citizen on which the public can rely. Specifically, Aqua is currently operating three troubled utility systems under emergency receiverships throughout the Commonwealth, including one wastewater and two water systems. These respectively include North Heidelberg Sewer Company (NHSC), Twin Lakes Utilities, Inc. (Twin Lakes), and James Black Water Service Company (James Black). *See Aqua St. 1 at 40; Aqua M.B. at 133-34.*

Regarding NHSC, on March 21, 2017, I&E requested that the Commission issue an *Ex Parte* Emergency Order to avoid "a tidal wave of adverse consequences, including the potential discharge of untreated wastewater into the Commonwealth's

waterways, which could result in irreparable harm to the environment, the health of NHSC's customers, and the safety of the public at large." *See Pa. PUC v. Metropolitan Edison Company and North Heidelberg Sewer Company*, Docket No. P-2017-2594688, (Petition for *Ex Parte* Emergency Order filed March 21, 2017) at 11.⁶⁴ At that time, NHSC served approximately 273 residential and one commercial wastewater customer. *May 2017 Order* at 5. I&E added that should NHSC fail to immediately take corrective action, the Commission should appoint a receiver pursuant to 66 Pa. C.S. § 529 because it appeared that NHSC was "consciously and intentionally placing in jeopardy its ability to provide safe, reliable and reasonable wastewater service to its customers." Petition for *Ex Parte* Emergency Order at 12. In the *Ex Parte* Order, Chairman Dutrieuille directed Aqua to assume this receiver role, which Aqua immediately and willingly did.

This past autumn, Hurricane Ida substantially destroyed NHSC's wastewater treatment plant and Aqua immediately responded to avert what could have been yet another disaster to the environment and to downstream drinking water supplies. Aqua M.B. at 131. Aqua's reconstruction efforts have gone beyond the normal expectations of a receiver. *Id.* On May 2, 2022, Aqua filed its 17th quarterly status report regarding its successful and ongoing five-year effort to rehabilitate the NHSC system, both operationally and financially, for the safety and benefit of the families served by that system and all Commonwealth residents downstream of its wastewater discharge. In our view, Aqua's reconstruction efforts have gone beyond the normal expectations of a receiver.

⁶⁴ On March 22, 2017, Chairman Gladys Brown Dutrieuille signed an *Ex Parte* Emergency Order (*Ex Parte* Order) granting the Petition for *Ex Parte* Emergency Order as modified to ensure continued wastewater service from NHSC to its customers, subject to ratification by the full Commission. On April 6, 2017, the Commission issued a Ratification Order of the *Ex Parte* Order. Subsequently, the Commission modified the *Ex Parte* Emergency Order. *Pa. PUC v. Metropolitan Edison Company and North Heidelberg Sewer Company*, Docket No. P-2017-2594688 (Order entered May 4, 2017) (*May 2017 Order*).

Regarding Twin Lakes, on October 23, 2018, Twin Lakes petitioned the Commission to approve an abandonment of water service to its approximately 114 residential customers no later than March 31, 2019. *Twin Lakes Utilities, Inc. Application to Abandon Service to its customers in Sagamore Estates in Shohola Township, Pike County Pennsylvania*, Docket No. A-2018-3005590 (filed October 23, 2018). Twin Lakes claimed it could no longer provide service to its customers because of significant quality of service and financial issues. *Id.*; *see also*, *Office of Consumer Advocate's Answer in Support of the Petition of Twin Lakes Utilities*, Docket No. P-2020-3020914 (filed August 5, 2020) (also containing a reiteration of the history and issues behind the Twin Lakes Section 529 forced acquisition petition supported by the OCA).

On June 10, 2020, Twin Lakes provided notice to the Commission that on September 1, 2020, it would cease providing water service to its customers. *Twin Lakes Utilities, Inc. – Notice of Termination of Service Agreement Between Middlesex Water Company and Twin Lakes Utilities, Inc.*, Docket No. M-2020-3020390 (served June 10, 2020). The practical effect of such abandonment would be the loss of potable water service and, for many customers, the loss of water for in-home sanitation as well. On July 13, 2020, the Commission directed that Twin Lakes “shall not abandon or surrender water service to its customers, in whole or in part, without Commission authorization.” *Twin Lakes Utilities, Inc. – Notice of Termination of Service Agreement Between Middlesex Water Company and Twin Lakes Utilities, Inc.*, Docket No. M-2020-3020390 (*Secretarial Letter* issued July 13, 2020.)

Nevertheless, on August 3, 2020, Twin Lakes provided public notice to its customers that “to protect the public health, Twin Lakes will cease water service at 12:01 am on September 1, 2020.” *Twin Lakes Utilities, Inc. Section 529 Petition*, Docket No. P-2020-3020914 (filed August 3, 2020.) Shortly thereafter, the OCA petitioned the

Commission stating that the “OCA respectfully requests the Commission direct Aqua Pennsylvania to act as a receiver to operate Twin Lakes until the resolution of the Section 529 proceeding.” *Office of Consumer Advocate Petition for Issuance of an Interim Emergency Order on an Expedited Basis*, Docket No. P-2020-3020914 (filed August 18, 2020) at ¶ 18. The OCA opined that “Aqua Pennsylvania appears to be financially, managerially, and technically capable to serve Twin Lakes’ customers. It is a capable PUC jurisdictional water utility and a proximate public utility as required under Section 529.” *Id.* at ¶ 17 (*citations omitted*). We note that Aqua willingly took on this request and the Company continues to make significant investments into the Twin Lakes system to ensure its customers receive safe water service.

Simultaneous with its work with NHSC and Twin Lakes, Aqua is also serving as a receiver to James Black, a typical small, troubled water system with approximately nineteen customers. *See In re James Black Water Service Company*, Docket No. M-2019-3012563 (*Ex Parte* Emergency Order issued September 3, 2019; Order ratified September 19, 2019). We include a description of this typical small troubled water system only to provide perspective on the difference in scale required to rehabilitate NHSC and Twin Lakes, and to comment on the depth of resources, expertise, and employee commitment required to simultaneously manage all these emergency efforts, as the Company has done.

In view of the above, it is clear that Aqua has answered the call to provide emergency assistance at the request of the public, public advocates, and government agencies. Given the nature and frequency of these emergencies, we are of the opinion that the Company should be recognized for its efforts to serve as a ready and willing ally in water and wastewater emergencies. In our view, affording Aqua a modest upward adjustment to its ROE to recognize its exemplary emergency service is a just, reasonable, and affordable approach to addressing its ongoing emergency aid efforts. It would be inequitable to proceed otherwise, as there is no provision of the Code that demands

utilities exhaust employees or financial resources because of emergencies occasioned by others.

Section 523 of Code, *supra*, permits the Commission to award a management performance adjustment based on “[a]ny other relevant and material evidence of efficiency, effectiveness and adequacy of service.” 66 Pa. C.S. § 523(b)(7). Aqua’s consistent willingness to answer calls for aid to other water and wastewater providers shows it is doing more than required under Section 1501 of the Code. The examples discussed above indicate that Aqua carries a roster of large and complex emergency aid matters unlike any other Pennsylvania utility. As stated in its direct testimony, operating troubled systems requires significant time, commitment, and involvement from many departments within Aqua. Aqua St. 1 at 20. As such, Aqua management is exceeding the expectations placed upon it not only by its existing customers, but also the Commonwealth. For this reason, we find that Aqua should receive a management efficiency award commensurate with the emergency service described herein. Therefore, to reflect the extraordinary effort exhibited by Aqua to aid and protect Pennsylvania water and wastewater customers and the environment, we shall award Aqua an additional twenty-five basis points to its ROE for management performance. As discussed in Section X.D.3, *infra*, this will result in a total ROE for the Company of 10.00%.⁶⁵ Accordingly, we shall grant Aqua’s Exception No. 1.6.

⁶⁵ As previously noted, in the *2008 Aqua Order*, the Commission awarded Aqua a management performance adjustment of twenty-two basis points for a total ROE of 11.00%.

3. Rate of Return on Common Equity

a. Positions of the Parties

As noted above, four methods of determining the cost of equity were presented for inclusion in the record in this proceeding: (1) DCF; (2) CAPM; (3) RP; and (4) CE. Aqua relied on each of these methodologies in presenting its recommended rate of return on common equity of 10.75%. Aqua St. 7 at 7.

As previously discussed, both I&E and the OCA took issue with the Company's analysis in arriving at the proposed cost of equity and argued that equal weight should not be given to the four different methodologies as Aqua did in its evaluation. Additionally, both I&E and the OCA submitted that the Commission has indicated a preference for using the DCF method to establish reasonable common equity costs.

As a result of its DCF analysis, I&E recommended a cost of common equity of 8.90%. St. 2 at 21.

The OCA recommended a cost of common equity of 8.00% based on its DCF model. OCA St. 3 at 3.

b. Recommended Decision

The ALJ rejected Aqua's proposed rate of return on common equity of 10.75%. Namely, the ALJ agreed with I&E's proposal to calculate the recommended cost of equity pursuant to the DCF methodology and using the CAPM to verify the reasonableness of the DCF ROE. According to the ALJ, I&E's analysis is consistent with the methodology commonly endorsed by the Commission and most recently

accepted in *Columbia Gas*. Therefore, the ALJ recommended that the Commission adopt the 8.90% cost of equity as determined by I&E. R.D. at 78.

c. Exceptions and Replies

(1) Aqua Exc. Nos. 1.3, 1.5, and 1.7 and Replies

In its Exception Nos. 1.3 and 1.7, Aqua disagrees with the ALJ's cost of equity recommendation of 8.90%, based on I&E's methodology recently approved in *Columbia Gas*. Aqua takes the position that

“[i]f adopted, this ROE will represent a watershed moment for the end of the Commission's longstanding commitment to supporting infrastructure investment, made doubly worse in a period of rising capital costs. The RD ROE would signal to the utilities and the credit rating agencies that Pennsylvania regulation has ceased to support investment in the state at a time of critical capital investment needs.”

Aqua claims the ALJ erred by using a formulaic application of I&E's DCF method. In selecting I&E's recommended ROE, Aqua asserts the ALJ is implicitly endorsing an approach that rejects the application of informed judgment. In further support of its position, Aqua argues that the ALJ completely failed to address the substantial increases to the rate of inflation that have been experienced subsequent to the preparation of rate of return recommendations by the Parties. Aqua highlights that the inflation rate reported in December of 2021 was a thirty-nine year high of 6.8%. Aqua adds this current period of significant inflation “shows no signs of abating.” Aqua Exc. at 2-4, 9-10, 13.

In its Exception No. 1.5, Aqua stresses that the ALJ's recommendation of an 8.90% ROE is below recent Commission determinations of a 9.86% ROE for

Columbia Gas, and a 10.24% ROE for *PECO*. In addition, Aqua argues that the allowed DSIC ROE of 9.80% is further evidence that the ALJ's recommended 8.90% ROE is deficient and will not provide Aqua with the opportunity to earn its investor-required cost of capital for the FPFTY. Aqua reinforces its position that the Commission should not be reducing a utility's ROE when there is a continuing, compelling need for capital investment to rehabilitate aging infrastructure. Aqua Exc. at 12-13.

In its reply to Aqua's Exceptions, I&E disputes Aqua's argument that the ALJ's rate of return recommendation in this proceeding should have been based on the allowable DSIC rate of return and the rate of return awarded to other dissimilar public utilities in other base rate proceedings. Rather, I&E avers that the ALJ correctly considered the substantial record evidence presented by all Parties in this base rate proceeding and properly recommended the Commission adopt the I&E recommended 8.90% ROE. Aqua R. Exc. at 11-12.

In its reply to Aqua's Exceptions, the OCA submits that the ALJ correctly rejected Aqua's cost of equity recommendation of 10.75%. The OCA avers Aqua's proposed 10.75% ROE relies on flawed empirical analyses and unsupported upward adjustments. OCA R. Exc. at 5.

(2) OCA Exception No. 9 and Replies

In its Exception No. 9., the OCA claims the ALJ erred by adopting I&E's proposed ROE of 8.90%. The OCA believes that adoption of I&E's cost of equity recommendation, albeit more reasonable than Aqua's ROE calculation, still overstates the cost of common equity. The OCA remains of the opinion that a ROE of 8.0% should be awarded to the Company, based on its Quarterly Approximation DCF model. OCA Exc. at 12.

In its reply to the OCA's Exception No. 9, Aqua submits the OCA's proposed ROE should be rejected because it would signal to Pennsylvania utilities and the investment community that Pennsylvania regulation no longer is supportive of capital investment, made doubly bad given the clear rise in inflation and capital costs that are occurring. Aqua R. Exc. at 7-8.

In its reply to the OCA's Exception No. 9, I&E supports the ALJ's recommendation to adopt the methodology employed by I&E, which resulted in an 8.90% ROE, as the most reasonable. I&E R. Exc. at 15.

d. Disposition

As determined in our disposition of Sections X.D.1 and X.D.2, *supra*, we will rely upon I&E's DCF and CAPM methodology and informed judgment, in addition to awarding an upward adjustment of twenty-five basis points for management effectiveness, in arriving at our determination of the proper ROE to award to Aqua in this proceeding. In particular, we note that the evidence presented in this case based on I&E's CAPM methodology produced a ROE higher than the results produced by its DCF. This suggests that, while properly computed in the abstract, I&E's DCF results understate the current cost of equity for Aqua and that consideration should be given to the CAPM in determining the appropriate range of reasonableness.

We agree with Aqua that the setting of the proper return on equity is necessary in this environment of increasing inflation, leading to an increase in interest rates and capital costs. Aqua Exc. at 2-4, 9-10, 13. However, we disagree with Aqua benchmarking recent Commission ROE determinations for *Columbia Gas* and *PECO Gas*, in addition to the most recent DSIC ROE, as further evidence that the ALJ's recommended 8.90% ROE is deficient. We agree with I&E that *Columbia Gas* and *PECO Gas* are dissimilar public utilities to Aqua, and each had a company specific ROE

determined by evidence presented at the time of its individual base rate case. Further, we note the DSIC ROE is unlike a ROE set in a base rate proceeding. The DSIC ROE is determined by the Commission on a quarterly basis and is set per industry. As such, it is not company specific. Therefore, we shall grant Aqua Exception Nos. 1.3 and 1.7 and deny Aqua Exception No. 1.5.

As also explained in our disposition of Section X.D.1, we found the ALJ did not err by rejecting the OCA's Quarterly Approximation DCF methodology. Consequently, we do not agree with the OCA's resultant 8.0% ROE for Aqua. Consistent with these determinations, we shall deny OCA Exception No. 9.

We have previously determined, above, that we shall utilize I&E's DCF and CAPM methodologies. I&E's DCF and CAPM produce a range of reasonableness for the ROE in this proceeding from 8.90% to 9.89%. Based upon our informed judgment, which includes consideration of a variety of factors, including increasing inflation leading to increases in interest rates and capital costs since the rate filing, we determine that a base ROE of 9.75% is reasonable and appropriate for Aqua. When combined with our upward adjustment of 25 basis points to the Company's ROE for management effectiveness, this will produce a final authorized ROE for Aqua of 10.00% (*i.e.*, $9.75\% + 0.25\% = 10.00\%$). Accordingly, we shall modify the ALJ's ruling as to the ROE to award Aqua in this proceeding.

E. Overall Rate of Return

1. Positions of the Parties

In this proceeding, Aqua claimed that it should be permitted to earn an overall rate of return of 7.64%. Aqua's proposed overall rate of return is comprised of a weighted average of a 4.00% rate of return on long-term debt, and a 10.75% rate of return

on common equity, inclusive of an upward adjustment for management effectiveness. This is, in turn, based on a capital structure of 53.95% common equity and 46.05% long-term debt. Aqua Exh. 4-A at 1, Sch. 1.

I&E recommended that Aqua should be afforded the opportunity to earn an overall rate of return of 6.64%. This recommended overall rate of return is comprised of a weighted average of a 4.00% rate of return on long-term debt and an 8.90% rate of return on common equity and is based off of the Company's proposed capital structure. I&E M.B. at 42.

The OCA proffered that the Commission should allow Aqua the opportunity to earn a 6.00% overall rate of return on its rate base. The OCA's recommendation is comprised of a weighted average of a 4.00% rate of return on long-term debt and an 8.00% rate of return on equity and is based on a hypothetical capital structure of 50% common equity and 50% long-term debt. OCA M.B. at 53.

Although CAUSE-PA did not propose a specific rate of return for the Company in this proceeding, it stated that it supported and adopted the position of the OCA. CAUSE-PA M.B. at 12.

2. Recommended Decision

The ALJ recommended that the Commission adopt I&E's proposed overall rate of return of 6.64%. This is based upon the ALJ's recommendations, *supra*,: (1) approving the Company's proposed capital structure of 53.95% common equity and 46.05% long-term debt; (2) approving the Company's claimed cost rate of 4.00% for long-term debt; (3) utilizing I&E's methodology for determining a rate of return on common equity; and (4) denying the Company's claimed 234-basis point leverage

adjustment and its upward adjustment for superior management performance. The ALJ's recommended rate of return is outlined in Table 6, as follows:

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	46.05%	4.00%	1.84%
Common Equity	53.95%	8.90%	4.80%
Total	100.00%		6.64%

Table 6: The ALJ's Recommended Capital Structure and Overall Rate of Return for Aqua

The ALJ applied this rate of return to Table IA of each of the rate tables set forth in the Appendix to the Recommended Decision. According to the ALJ, an overall rate of return of approximately 6.64% fairly balances the requirement that a utility be permitted an opportunity to recover those costs prudently incurred by all classes of capital used to finance the rate base during the prospective period in which its rates will be in effect, while also mitigating the revenue increases that will impact ratepayers who continue to struggle in the aftermath of the COVID-19 pandemic. R.D. at 81, Appendix Tables IA.

3. Exceptions and Replies

Only Aqua and the OCA filed exceptions to the ALJ's recommendations on a fair rate of return for the Company. Aqua and the OCA's Exceptions and Replies to Exceptions on the overall rate of return are based on their respective Exceptions and Replies to Exceptions regarding the ALJ's recommended capital structure, proxy group, and the cost of common equity, *supra*.

4. Disposition

For the reasons discussed above, we have adopted the ALJ's recommendation as to the appropriate capital structure and cost of debt for Aqua.

Additionally, based on the use of informed judgment and the addition of an upward adjustment for management effectiveness, we have modified the ALJ’s recommendation as to the appropriate cost of common equity for the Company. This will, in turn, modify the ALJ’s recommended overall rate of return. The table below summarizes our final determinations regarding Aqua’s capital structure, cost of debt, and cost of common equity, as well as the resulting weighted costs. As Table 7 indicates, we shall set an authorized overall rate of return for Aqua at 7.24%.⁶⁶ We shall apply this rate of return, as set forth in Table IA to each of the rate tables that are attached to the Commission Tables Calculating Allowed Revenue Increase at the end of this Opinion and Order.

Type of Capital	Ratio	Cost Rate	Weighted Cost
Long-Term Debt	46.05%	4.00%	1.84%
Common Equity	53.95%	10.00%	5.40%
Total	100.00%		7.24%

Table 7: Aqua Capital Structure – Authorized Overall Rate of Return

XI. Rate Structure

A. Cost of Service

1. Positions of the Parties

Cost allocation studies are used to allocate the total water and wastewater cost of service to the various customer classifications based on established principles of cost-causation with the fundamental purpose of aiding in the accurate and reasonable design of rates. *See* R.D. at 82.

⁶⁶ We note that there are additional rate issues pertaining to the elements in the proposed base rate increase addressed later in this Opinion and Order and not included here simply because the Order follows the structure of the Recommended Decision for ease of reference by the reader.

In this proceeding, none of the Parties disputed the method used by Aqua to calculate the cost of service for its water operations and its wastewater operations. In each of the studies prepared, the total costs of service are allocated to the various customer classifications in accordance with generally accepted cost of service principles and procedures. Aqua St. 5 at 3, 19.

Aqua's cost allocation study for its water operations is included in Aqua Exh. 5-A, Part I. The method used for the allocation water cost of service was based on the Base-Extra Capacity Method for allocating costs to customer classifications. This method is described in the 2017 and prior editions of the *Water Rates Manual*, published by the American Water Works Association (AWWA). Aqua Exh. 5-A, Part I at 3. The four basic categories of cost responsibility that are considered using this method are base, extra capacity, customer, and fire protection costs. *Id.*

Aqua's cost allocation study for its wastewater operations is included in Aqua Exh. 5-B, Part I. The method used for the allocation of wastewater cost of service incorporates the functional cost allocation methodology described in the text "Financing and Charges for Wastewater Systems," Manual of Practice No. 27, published by the Water Environment Federation. Aqua Exh. 5-B, Part I at 2-3. This method is recognized for allocating the cost of providing wastewater service to customer classifications in proportion to the classifications' use of the commodity, facilities, and services. *Id.* Aqua prepared separate cost allocation studies for its wastewater Base Operations and the separate operating divisions for Limerick, East Bradford, Cheltenham, East Norriton and New Garden. *See* Aqua St. 5 at 18-19. The separate operating cost allocation studies from the Base Operations are wastewater systems acquired since the *Aqua 2018 Rate Case*. Aqua St. 1 at 7.

2. Recommended Decision

The ALJ recommended that the cost of service study methods used by Aqua for its water and wastewater operation be approved because they are reasonable and consistent with past practice. R.D. at 83.

3. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we adopt it without further comment.

B. Cost of Service – Wastewater

1. Positions of the Parties

Both I&E and the OCA recommended that Aqua be required to prepare ongoing cost allocation studies for the wastewater systems acquired by the Company under Section 1329 of the Code, 66 Pa. C.S. § 1329, in future base rate cases. Additionally, I&E and the OCA argued that the Company should be required to file two separate revenue requirements going forward. These recommendations would require Aqua to prepare a cost of service study (COSS) and revenue requirement for (a) combined Wastewater Zones 1 through 6 (consisting of the Company's legacy systems), (b) combined Wastewater Zones 7-11 (representing the systems acquired under Section 1329 of the Code prior to this base rate proceeding),⁶⁷ and (c) each additional

⁶⁷ Specifically, these Wastewater Zones are as follows: Zone 7-Limerick, Zone 8-East Bradford, Zone 9-Cheltenham, Zone 10-East Norriton, and Zone 11-New Garden. *See* Aqua Volume 5, Exh. 5-B, Part II, Schs. LMK, EB, CH, EN and NG.

system acquired after this proceeding under Section 1329. I&E M.B. at 65-66; OCA M.B. at 84-86.

I&E argued that combining Wastewater Zones 7 through 11 into one COSS in Aqua's next base rate case is important because these zones include systems acquired under Section 1329 and represent a unique group of zones and cost recovery requirements. Therefore, I&E recommended that these zones should continue to be grouped into one COSS in future cases. I&E also reasoned that it is important to distinguish the difference between these systems and systems not acquired under Section 1329 because of the generally higher cost of providing service to customers in these systems acquired under Section 1329. I&E M.B. at 65-66 (citing I&E St. 5 at 66).

The Company opposed the recommendations of I&E and the OCA stating that the decision to require separate cost allocation studies for future wastewater acquisitions should not be pre-determined but should be evaluated in such future proceedings. Aqua further noted that it has never been required to carve out water and wastewater acquisitions in this manner, after the initial rate case post-acquisition. Additionally, the Company asserted that because the acquired systems are similarly operated as the legacy systems, no advantage could be gained on a cost of service basis by separating these systems. Aqua also contended that the Commission should not dictate how the Company will file its next base rate proceeding absent its agreement, citing the general principle that the Commission should refrain from acting as a super board of directors. Moreover, Aqua argued, the recommendations frustrate the goal of single tariff pricing and consolidation of rate zones. Aqua M.B. at 219-20; Aqua R.B. at 93.

2. Recommended Decision

The ALJ recommended that the Commission adopt the positions advanced by I&E and the OCA that Aqua be required to prepare separate COSS and revenue requirements in its next base rate proceeding. R.D. at 82-83.

The ALJ reasoned that this base rate filing emphasizes the importance of tracking the implications of the acquisition of water and wastewater systems and the effect of those acquisitions on rates and cost of service. In acknowledging that consolidating rate zones is important, the ALJ emphasized the importance of appropriately tracking the cost to serve the acquired systems – and the steps taken to move rates in these systems closer to the cost of service – while ensuring that other ratepayers are not subsidizing service to these customers indefinitely. The ALJ considered the proposals to be reasonable and sensible and well within the Commission’s mandate to ensure that a utility’s rates are just and reasonable and meet the public interest. *Id.* at 83.

3. Exceptions and Replies

In its Exception No. 8, Aqua argues that the ALJ erred by ordering the Company to prepare a separate COSS for each system acquired under Section 1329 of the Code that is included in the next base rate proceeding following such acquisition. Aqua Exc. at 29-31.

Initially, Aqua contends that the Recommended Decision ignores applicable appellate precedent, citing *City of Pittsburgh v. Pa. PUC*, 526 A.2d 1243 (Pa. Cmwlth. 1987), *appeal denied*, 517 Pa. 628, 538 A.2d 880 (1988) (*City of Pittsburgh*). The Company asserts that in *City of Pittsburgh* the Commonwealth Court specifically affirmed a prior Commission order that declined to condition a water utility’s

proposed consolidation of rate districts upon the maintenance of separate records for each district. Aqua argues that, consistent with this case, it should not be required to maintain and prepare separate studies and revenue requirements in its next base rate proceeding. Aqua Exc. at 30.

The Company further contends that the Recommended Decision disregards the impacts of imposing this requirement on Aqua relative to other water and wastewater utilities in Pennsylvania. According to Aqua, this requirement will result in significant accounting, tracking, operational and rate impacts that would also frustrate the Commission's policy supporting single tariff pricing and consolidation. Likewise, Aqua continues, the increased costs and complications associated with preparing separate cost allocation studies would likely put the Company at a competitive disadvantage from other bidders in future acquisition opportunities. *Id.* (citing Aqua M.B. at 219).

Furthermore, Aqua submits that, for new acquisitions, the recommended requirements should be analyzed in the context of future Section 1329 acquisition proceedings, and not in this base rate case. The Company submits that the Commission should not require Aqua to indefinitely prepare separate costs of service and revenue requirements for future acquired systems, where it is not known whether and when further systems will be acquired. Aqua Exc. at 30-31.

In its reply, I&E argues that the ALJ properly recommended that the Commission adopt its recommendations regarding recently acquired Section 1329 systems and those acquired subsequent to this base rate proceeding. I&E asserts that the ALJ correctly emphasized the importance of tracking the implications of the acquisitions under Section 1329 and the effect of those acquisitions on rates and cost of service. I&E adds that the ALJ noted the importance of consolidating rate zones. However, I&E asserts, the ALJ correctly determined the need to appropriately track the cost to serve Section 1329 acquired systems and the steps to move rates in these systems closer to the

cost of service while ensuring that other ratepayers are not subsidizing service indefinitely. I&E R. Exc. at 9-10.

In its reply, the OCA asserts that the ALJ's recommendation is reasonable given the significant impact that Section 1329 acquisitions had on rates for wastewater and water customers in this proceeding. OCA R. Exc. at 12-14.

The OCA argues that Aqua's objections to the recommendations on the basis that it would place an extra burden on Aqua relative to other water and wastewater utilities are misplaced. If other utilities are acquiring systems under Section 1329, the OCA submits, then they will be in the same situation that Aqua was in the current base rate case where it provided one COSS for legacy systems and individual COSSs for the systems acquired prior to the base rate case. According to the OCA, an individual COSS has been adopted by the Commission for every Section 1329 acquisition approved to date and it is reasonable to assume the Commission will continue to apply it uniformly to Aqua's competitors. OCA R. Exc. at 12.

The OCA contends that the main distinction in this proceeding is that Aqua would be preparing only one additional COSS for the combined Section 1329 systems included in this case. Regarding Aqua's concerns of increased costs and complications of preparing one additional COSS for those systems, the OCA asserts that the Company does not quantify such costs. Instead, the OCA cites to the rate case expense claim in the current proceeding – \$400,000 on “Engineering, Cost Allocation and Depreciation” – and compares it with the purchase price of the five systems Aqua already acquired under Section 1329, which ranged from \$5 million to \$75 million, or an average of \$34.4 million. OCA R. Exc. at 12-13 (citing Aqua Exh. 1-C, Sch. C-4.4). The OCA argues that even if COSSs and cost allocation represented the entire \$400,000 in this case, ignoring that 91.51% of rate case expense is allocated to water operations, the cost would represent only 1% of the average purchase price of the Section 1329 systems in

this case. The OCA submits that this cost to Aqua cannot reasonably be considered a meaningful competitive disadvantage. OCA R. Exc. at 13.

The OCA also criticizes Aqua's concerns about imposing future requirements indefinitely in this base rate case because it is not known whether and when further systems will be acquired. Citing to Aqua's three pending Section 1329 applications, the OCA submits that establishing a requirement for a separate COSS for Section 1329 acquisitions in this case would avoid the need for the Parties and the Commission to address it in every Section 1329 proceeding.⁶⁸ The OCA proffers that the continuing need for this requirement could be evaluated in the next base rate proceeding. *Id.*

The OCA further objects to Aqua's contention that preparing a separate COSS would frustrate the policy of single tariff pricing. Regarding the citation to *City of Pittsburgh*, which upheld the Commission's decision to not require a water utility to maintain separate records for rate districts after they were consolidated, the OCA contends the Commonwealth Court's decision is distinguishable. Here, the OCA asserts, Aqua has not reached the point of consolidating Section 1329 systems with its legacy systems. Rather, the OCA emphasizes that Aqua has proposed to reduce its legacy rate zones from six to five and for each Section 1329 system to stay in its own, separate rate zone. OCA R. Exc. at 13-14 (citing Aqua St. 5-R at 21; Tariff Sewer No. 3).

⁶⁸ The OCA notes there are three pending Section 1329 proceedings: *Application of Aqua Pa. Wastewater, Inc.*, Docket No. A-2019-3015173 (Delaware County Regional Water Quality Control Authority Wastewater System Assets); *Application of Aqua Pa. Wastewater, Inc.*, Docket No. A-2021-3026132 (East Whiteland Township Wastewater System Assets); and *Application of Aqua Pa. Wastewater, Inc.*, Docket No. A-2021-3027268 (Williston Township Wastewater System Assets). The OCA also references the recent acquisition approval in the *Application of Aqua Pa. Wastewater, Inc.*, Docket No. A-2021-3024267 (Order entered January 13, 2022) (Lower Makefield Township Wastewater System Assets). OCA R. Exc. at 13, n.8.

Additionally, the OCA argues that in this case Aqua proposes a one-third recovery of its wastewater revenue requirement from water customers, which moves all customers further from paying rates that reflect their indicated cost of service. OCA R. Exc. at 14 (citing OCA St. 4 at 4 (Table I); Aqua Exhs. 5-A, Part I, 5-B, Part I). The OCA submits that the ALJ correctly addressed the concerns about subsidies between water and wastewater and between the legacy and acquired wastewater systems in the Recommended Decision and appropriately adopted the proposal of I&E and the OCA. OCA R. Exc. at 14 (citing R.D. at 83).

4. Disposition

We begin by addressing the contention that an individual COSS has been adopted by the Commission for every Section 1329 acquisition approved to date. *See* OCA R. Exc. at 12. In the recent Section 1329 application by Pennsylvania-American Water Company (PAWC) to acquire the water and wastewater system assets of Valley Township, the parties to that proceeding filed a Joint Petition for Approval of Unanimous Settlement of All Issues (PAWC Settlement) which the Commission approved without modification. *Application of Pennsylvania-American Water Company*, Docket Nos. A-2020-3019859 and A-2020-3020178 (Order entered October 28, 2021) (*PAWC – Valley Township Order*). The PAWC Settlement did not require separate COSSs related to the Valley Township acquisitions in PAWC’s next base rate case nor did the Commission modify the Settlement to impose such a requirement. *Id.*

Our decision in the *PAWC – Valley Township Order* is illustrative of the importance of analyzing the necessity of COSSs within the context of individual Section 1329 acquisition proceedings. Although there is a benefit to having COSS data pertaining to Section 1329 acquisitions available in a base rate proceeding subsequent to an application approval, it is apparent from the PAWC Settlement – which included the statutory advocates as signatories – that it need not be mandated within all Section 1329

proceedings. We decline here to pre-judge the issue in all future Section 1329 proceedings when the facts and circumstances of that individual proceeding may not necessarily require a cost of service analysis. Moreover, we shall not impose such a blanket mandate requiring COSSs on all future Section 1329 proceedings involving Aqua when the Commission did not impose such a requirement in an individual application proceeding involving another regulated service provider. However, our decision herein shall not be deemed to limit the authority of the Commission to require the preparation of cost allocation studies for systems acquired in individual Section 1329 proceedings as the circumstances may warrant.

Regarding the proposal to maintain ongoing, separate COSSs for those systems acquired under Section 1329 of the Code prior to this base rate proceeding, we note that the Commission first directed the filing of a cost of service analysis as a condition of approval in Aqua's Section 1329 acquisition of the wastewater system assets of New Garden Township and the New Garden Township Sewer Authority. *Application of Aqua Pennsylvania Wastewater, Inc.*, Docket No. A-2016-2580061 (Order entered June 29, 2017) (*New Garden*).

The intention of the conditions in the *New Garden* proceeding and similar directives in other Section 1329 proceedings was, in part, to inform the Parties and the Commission of the overall rate impact that the acquisition will have on customers within the context of the *next* base rate proceeding. *See New Garden* at 69-70. It was not to impose ongoing conditions indefinitely in all subsequent rate cases.

Thus, we shall grant Aqua Exception No. 8 and modify the Recommended Decision accordingly.

C. Revenue Allocation

1. Positions of the Parties

Aqua noted that under *Lloyd v. Pa. PUC*, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006) (*Lloyd*), cost of service is the “polestar” of utility rates, and a proposed revenue allocation will only be found to be reasonable where it moves distribution rates for each class closer to the full cost of providing service. Aqua provided that its proposed revenue allocation for both water and wastewater involves a determination of: (1) the allocated cost responsibilities and the percentage of revenue under existing rates; and (2) the percentage of cost responsibilities and percentage of *pro forma* revenues under proposed rates for each customer classification. Aqua M.B. at 211-12 (citing *Lloyd* at 1020). Aqua submitted that, upon making such determinations, the Company: (1) proposed allocating revenues to each customer class that would be required to move that class toward the cost of service; and (2) determined an amount of wastewater revenues to be recovered in water rates, pursuant to Section 1311(c) of the Code (commonly referred to as Act 11).⁶⁹ Aqua M.B. at 212 (citing Aqua St. 5 at 10, 21;

⁶⁹ Section 1311(c) of the Code:

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

Aqua Exh. 5-A, Part I, Sch. A; Aqua Exh. 5-B, Part I, Sch. WW-A; 66 Pa. C.S. § 1311(c)).

Aqua explained that Act 11 allows a utility that provides both water and wastewater services to allocate a portion of the wastewater revenue requirement to the combined water and wastewater customer base if doing so is in the public interest. Aqua M.B. at 213 (citing *Aqua 2018 Rate Case*, additional citations omitted). Aqua further explained that the public interest is served if properly incurred costs to upgrade a nonviable system can be allocated to the combined wastewater and water customer base. Aqua provided that the Commission noted that one of the benefits of Act 11 is that the costs of necessary upgrades which can be substantial can be spread among the common customer base of water and wastewater utilities. Aqua M.B. at 214-215 (citing Docket No. M-2012-2293611 (Tentative Implementation Order entered May 12, 2012, and Final Implementation Order entered August 2, 2012)).

In order to provide a direction for gradualism and avoid substantial rate shock to wastewater customers who will be subject to their first rate increases resulting from a Commission rate case, the Company allocated a portion of the wastewater revenue requirement to its water customers. Aqua M.B. at 215-216 (citing Aqua St. 1-R at 23-25). Aqua determined its Act 11 allocation from wastewater to water rates “by subtracting the proposed level of wastewater revenue after various increases from the *pro forma* cost of wastewater service for the twelve months ended March 31, 2023 from the revenue requirement for each area.” Aqua M.B. at 216 (citing Aqua St. 5 at 10; 66 Pa. C.S. § 1311). After increasing and consolidating various wastewater rates to a level that moved each division towards the cost of service while mitigating significant rate impacts, the Company proposed to allocate \$20,818,925 of the remaining shortfall

66 Pa. C.S. § 1311(c).

from wastewater revenues to water customers.⁷⁰ Aqua St. 1-R at 2-3; Aqua Exh. 1-A(a). Aqua noted that this allocation represents approximately 30% of the Company's proposed revenue requirement from wastewater to water. Aqua M.B. at 216 (citing Aqua St. 1-R at 24).

Aqua proposed that if the Commission approves a rate increase that is less than that proposed by the Company, that the scale back (or reduction) be applied proportionately based on the Company's proposed revenue allocation. Aqua further proposed that no wastewater scale back occur until the total wastewater Act 11 allocation is eliminated, and any scale back after the Act 11 allocation is eliminated be based on the Company's proposed rates. Aqua M.B. at 265 (citing Aqua St. 5-R at 19-20, 24-25).

I&E's witness, Mr. Joseph Kubas, disagreed with the Company's proposal that its water customers subsidize wastewater customers by approximately \$20.8 million because it is large and unreasonable. Mr. Kubas contended that water customers are not wastewater customers, and each utility service should recover as much of the cost to provide that service as possible. I&E M.B. at 70; I&E St. 5 at 7-8. Further, Mr. Kubas contended that the Company did not demonstrate how allocating 30% of the cost of operating wastewater systems to water customers is reasonable. I&E St. 5-SR at 6.

I&E submitted that Mr. Kubas created a rate design that applies an Act 11 subsidy from wastewater to water consistent with cost of service principles and is in the public interest. Accordingly, I&E recommended that the Company's proposed water subsidy be reduced by \$5,072,876. I&E St. 5-SR at 4-5; I&E Exh. No. 5, Sch. 1 at 1. Subsequently, in surrebuttal testimony, Mr. Kubas revised his recommended reduction to

⁷⁰ Initially, Aqua submitted that wastewater revenues of \$20,839,425 be allocated to water customers. Aqua M.B. at 216.

the subsidy necessary for wastewater systems operation by \$5,044,324. I&E St. 5-SR at 8; I&E Exh. 5-SR, Sch 1 at 1.

With regard to any scale back that may result if the Commission approves a rate increase that is less than that proposed by the Company, I&E submitted that the Company's proposed rates should be scaled back to produce the revenue requirement allowed by the Commission. I&E further proposed that, to determine the amount of the Act 11 subsidy revenue requirement to be allocated to water operations, the wastewater operations revenue requirements should be determined first, and that the water rates should then be scaled back to recover the resulting water operations' full revenue requirement. Regarding wastewater, I&E recommended that no scale back of wastewater rates should occur until the total Act 11 wastewater subsidy is eliminated. I&E R.B. at 55-56 (citing I&E M.B. at 71).

Similar to I&E, the OCA disagreed with the Company's proposal for its water customers to pay approximately \$20.8 million to subsidize its wastewater operations because the wastewater rates would not support a reasonable relationship to the utility's cost of serving the wastewater customers. According to the OCA, it is not in the public interest to use Section 1311(c) and Section 1329 in combination to require that water customers subsidize approximately 75% of the revenue requirement generated by the FMV premiums for the five wastewater systems acquired under Section 1329.⁷¹ OCA R.B. at 46-47 (citing OCA M.B. at 89-91; OCA St. 4 at 7-8).

The OCA submitted that its proposed Act 11 wastewater to water subsidy of \$11.774 million is more moderate and in the public interest than that proposed by the other Parties because it recognizes that the Company's water customers do not receive a

⁷¹ Acquired systems or customers represent Rate Zones 7 through 11, or systems/customers that were acquired by the Company since its last rate proceeding.

direct or indirect benefit from FMV premiums paid to residents of the seller municipalities and the impact of rate increases will be mitigated on the Company's legacy wastewater customers by shifting a substantial amount of their share of the wastewater increase to water customers.⁷² OCA R.B. at 47. The OCA asserted that its proposed Act 11 subsidy recognizes the benefit that customers of the acquired Section 1329 systems receive from the FMV premiums and mitigates the impact of the rate increases by shifting their share of the wastewater increase to water customers. OCA R.B. at 47 (citing OCA St. 4 at 3-4, 7-9; I&E St. 5 at 66). The OCA also proposed that, if the Commission adopts the OCA's recommendation that assigns more revenue requirement to the five wastewater systems acquired under Section 1329, then the revenue requirement calculation should be based on the Company's authorized ROE. In this manner, the OCA explained that if the Commission adopts a different capital structure and/or lower ROE than proposed by the Company, then the scale back should first reduce the revenue requirement associated with the FMV premiums, to the benefit of the acquired customers. The OCA further recommended that if the Commission reduces the revenue requirement for non-ROR reasons, then the benefit should be applied to reduce the subsidy by water operations. OCA R.B. at 53-54 (citing OCA M.B. at 96-98; OCA St. 4 at 11-12).

The OSBA criticized the Company's proposed revenue allocation for water service as being unjust, unreasonable, and in violation of *Lloyd* because it fails to move the Residential, Public, Other Water Utilities and Private Fire Protection customer classes closer to their respective cost of service. OSBA R.B. at 7-8 (citing OSBA M.B. at 9-10; *Pa. PUC v. City of Bethlehem-Water Department*, Docket No. R-2020-3020256 (Order entered April 15, 2021) (*City of Bethlehem*) at 36; *Lloyd*). The OSBA also asserted that the Company's proposal to move each customer classification toward its appropriate

⁷² Legacy systems or customers represent Rate Zones 1 through 6, or systems/customers that were under the Company at the time of its last rate case proceeding.

percentage cost of service without isolating the Act 11 allocation has no legal foundation. OSBA R.B. at 9-11 (citing OSBA St. 1-S at 4-8).

The OSBA's witness, Mr. Brian Kalcic, proposed an alternative revenue allocation for water service, exclusive of Act 11 considerations, to move customer classes toward their respective costs of service. OSBA R.B. at 8-9 (citing OSBA Exh. BK-1 W, Schs. BK-4W, BK-5W). The OSBA averred that isolating Aqua's claimed water cost of service from Act 11 subsidies is necessary because Act 11 addresses the recovery of proposed wastewater subsidies and is not related to the water cost of service. The OSBA explained that its proposed revenue allocation approach assigns a greater revenue responsibility to the Residential class than under the Company's proposal because the Company's proposed revenue allocation actually moves the Residential class away from its cost of service. The OSBA notes that in this proceeding, any revenue allocation that moves all classes toward cost of service must assign greater revenue responsibility to the Residential class. OSBA R.B. at 11-12. Regarding wastewater service, the OSBA submitted that the Company's proposed Act 11 revenue requirement be reduced by assigning an additional total increase to Aqua's Base and New Garden wastewater divisions. OSBA R.B. at 15 (citing OSBA St. 1-S at 1-3; OSBA St. 1 at 15-16).

Regarding the Company's proposed scale back of its proposed revenue allocation, the OSBA asserted that: (1) because the Company's proposed revenue allocation is cost based, using it as a starting point for any scale back is not valid; and (2) a separate scale back for reductions in the Company's allowed water service revenue requirement is necessary. OSBA R.B. at 16-17 (citing OSBA St. 1-R at 8-11). The OSBA proposed that if the Commission awards the Company a water service revenue increase that is less than Aqua's requested amount and exclusive of Act 11 considerations, then the OSBA's recommended class increases for water service should be proportionately scaled back. OSBA R.B. at 17 (citing OSBA M.B. at 19; OSBA Exh. BK-1 W, Sch. BK-4W). The OSBA also proposed that, at the conclusion of this

proceeding, the Act 11 revenues assigned to water classes should be subject to a separate scale back of Aqua's proposed allocation of Act 11 revenues to water customers. OSBA R.B. at 18 (citing OSBA M.B. at 20).

Aqua LUG submitted that the Company's proposed revenue allocation fails to sufficiently move the customer classes towards cost of service. Therefore, Aqua LUG's witness, Mr. Richard A. Baudino, proposed adjustments to the Company's proposed revenue allocation that would result in most customer classes moving closer to their costs of service, consistent with *Lloyd*. Specifically, Mr. Baudino recommended as follows: (1) move the Residential class Relative Rate of Return (RROR) from 0.96 to 0.98; (2) move the Commercial class RROR from 1.04 to 1.02; (3) move the Industrial class RROR from 0.93 to 0.99; and (4) move the Public class RROR from 1.18 to 1.15. Mr. Baudino also recommended that, in the spirit of gradualism, any excess revenue requirement above the Industrial customer cost of service should be allocated to the Residential customer class. Aqua LUG M.B. at 7, 9-10 (citing Aqua LUG St. 1 at 5-6; Aqua LUG Exh.__(RAB-2)).

Aqua LUG provided that Mr. Baudino supported the adjusted revenue allocation recommended by the OSBA witness, Mr. Kalcic, to achieve additional movement towards cost of service. Aqua LUG M.B. at 10 (citing Aqua LUG St. 1S at 3; OSBA St. 1-R at 11-12). Accordingly, Aqua LUG recommended that the Commission should modify the Company's proposed revenue allocation to reflect the OSBA's proposed adjustments or, alternatively, Aqua LUG's proposed adjustments. Aqua LUG M.B. at 7, 11 (citing OSBA St. 1, Exh. BK-1 W, Sch. BK-4W; Aqua LUG St. 1, Exh.__(RAB-2)). Aqua LUG also recommended that, if the Commission approves a revenue increase lower than the proposed revenue allocation, then the approved revenue allocation should be scaled back proportionately. Aqua LUG M.B. at 11-12 (citing Aqua LUG St. 1 at 6).

Masthope submitted that any revenue allocation pursuant to Act 11 and any rate design or rate structure will result in significant increases in wastewater rates for Masthope ratepayers. Masthope R.B. at 6 (citing Masthope M.B. at 19-24; 66 Pa. C.S. § 1311). Further, Masthope asserted that the Act 11 subsidy adjustments proposed by I&E and the OCA will result in unjust and unreasonable rates that would have an adverse effect on Masthope's wastewater customers. Moreover, Masthope recommended that, if the Commission approves revenues in amounts less than what the Company proposed, any increased revenue requirement for water and wastewater customers and the amount of revenue support to be provided by water customers should be distributed in a manner consistent with the Company's proposal. Masthope M.B. at 20-22 (citing Masthope St. 2-R at 3-5). Additionally, Masthope proposed that, in anticipation that increases in costs and the potential need for cross-subsidies will continue for several years, the Commission should hold Aqua's wastewater revenue increase at the Company's proposed level while reducing the water increase to achieve a reduction in any computed cross subsidies. Masthope M.B. at 22.

2. Recommended Decision

In her Recommended Decision, the ALJ determined that Aqua's allocation of revenues between all water and wastewater customer classifications is reasonable and should be approved. Regarding the Act 11 subsidy allocated to water customers, the ALJ recommended that the Commission adopt I&E's proposed methodology for allocating revenue and designing wastewater rates. R.D. at 91, 93.

The ALJ recommended an additional adjustment for shifting the wastewater revenue requirement to water customers. Specifically, the ALJ provided that the wastewater revenue is based upon the expenses associated with wastewater service, such as bad debt expense, which is determined using an uncollectible accounts factor. The ALJ concluded that because the Company would incur bad debt expenses from water

customers at the water uncollectible accounts factor rather than at the wastewater uncollectible accounts factor, it is not reasonable to charge water customers for bad debt expenses at the wastewater uncollectible accounts factor because water customers will ultimately pay the revenue requirement that was shifted to them. Therefore, the ALJ reasoned that, when wastewater revenue requirement is shifted to water customers, the gross wastewater revenue requirement must be reduced to a net basis using the revenue factor for each service, as reflected in Table I(B) for each of the wastewater tables in the Appendix of the Recommended Decision, to determine the water net income that the Company will receive and the wastewater net income that the Company would have received. The ALJ found that the difference between these net values is grossed up using the water revenue factor before being deducted from the gross allocated wastewater revenue requirement, thereby resulting in an adjusted gross water revenue requirement that provides the Company the same net income from water customers that it would have received from wastewater customers. R.D. at 86-87. Table Act 11 in the Appendix of the Recommended Decision provides the detail of the ALJ's adjusted gross water revenue requirement.

The ALJ addressed Mr. Kubas' recommendation to shift some of the revenue increase from the acquired systems (Rate Zones 7 through 11) to the legacy systems (Rate Zones 1 through 6).⁷³ R.D. at 87-88. Specifically, the ALJ discussed Mr. Kubas' view that, although each type of utility service should recover the cost of providing service as much as possible to the subsidy allocated to water customers, eliminating the subsidy would result in large increases to the monthly charges and rates for residential and commercial wastewater customers. The ALJ continued that

⁷³ We note that in her Recommended Decision, the ALJ presented a table prepared by Mr. Kubas "which summarized each party's proposed allocation of revenue." R.D. at 87-88 (citing I&E Exh. 5, Sch. 1). As discussed, *infra*, we shall strike the table presented at the top of page 88 in the Recommended Decision, consistent with this Opinion and Order.

Mr. Kubas reduced the subsidy allocated to water customers by recommending that the usage rate increases to the average residential customers be limited. The ALJ also addressed the proposed alternative Act 11 subsidy analyses offered by the OCA and the OSBA. R.D. at 88-89 (citing I&E St. 5 at 7-8, 10, 35-36, 38; OCA St. 4 at 1; OSBA St. 1 at 16-17).

The ALJ explained that in public utility regulation, and particularly in infrastructure improvements, it is not uncommon to approve the socialization of costs which benefit a subset of consumers over a larger group of consumers. The ALJ noted Act 11 permits the costs associated with wastewater system improvements to be shifted to water customers to avoid steep rate hikes to wastewater customers. The ALJ addressed Aqua's statement that the proposed revenue increase for both water and wastewater is primarily driven by investment in infrastructure, noting that it is important to understand that for the Acquired Systems, both the buyer, Aqua, and the selling municipalities should know that at the time of acquisition customers were likely paying rates that were well below the cost of service, either because rates had not been increased or facility improvements had been deferred. R.D. at 90.

Therefore, the ALJ reasoned that to meet the increased costs associated with system improvements, rates will need to be increased, and the increases might be substantial. The ALJ also addressed the responsibility of the community representatives of the acquired systems who sold their systems to avoid increasing taxes or utility rates or both. Specifically, the ALJ reasoned that such communities achieved a benefit from the revenue generated by the sale of their wastewater systems, and, because these communities have already enjoyed some benefit from the sale of the system, it is not equitable to the Company's water customers to mitigate the resulting increases in expenses to care for the acquired systems. R.D. at 90. Moreover, the ALJ reasoned that it is not fair for water customers to take on the burden of filling the gap between the cost of service to serve these wastewater systems because the proceeds Aqua paid

municipalities to acquire the wastewater systems are used by those municipal governments to reduce, stabilize, or eliminate municipal costs recovered through taxes to the benefit of the wastewater customers residing within those municipalities. *Id.* (citing Aqua St. 1-R at 25). The ALJ highlighted that the Commission relied on these benefits when it determined that the acquisitions were in the public interest. R.D. at 90.

According to the ALJ, although increasing rates gradually to avoid rate shock is important to consider in setting reasonable rates, such gradualism is only one consideration among many, and some level of rate shock is inevitable. The ALJ reasoned that Aqua's approach of allocating 30% of the proposed wastewater revenue requirement to water customers is arbitrary and will not result in just and reasonable rates. Therefore, the ALJ found that, given the consideration of rate shock in the setting of rates in certain circumstances, Aqua's proposal to shift 30% of the wastewater revenue requirement to water customers is not equitable. *Id.*

Additionally, the ALJ addressed the agreement of both I&E and Aqua that no scale back of the Company's proposed wastewater rates should occur until the total wastewater allocation is eliminated. The ALJ found that any scale back of water rates will first reduce the Act 11 allocation. R.D. at 90-91 (citing Aqua St. 5-R at 25; *Lloyd*).

Ultimately, the ALJ recommended adoption of I&E's proposed methodology for allocating revenue and designing wastewater rates, reasoning that I&E's approach considers the number of water and wastewater customers in each system and balances the goal of moving rates toward alignment with the cost of service while mitigating some of the large rate increases that would result if no allocation of wastewater revenue was approved. The ALJ found that I&E's approach addresses the benefits received by the communities serviced by the acquired systems from the sale of their systems to the Company, adding that I&E's method is less complicated than the method advocated by the OCA. R.D. at 91.

Regarding water allocation, the ALJ reasoned that Aqua and the OCA's approach to revenue increases for water is more reasonable than the proposed modifications of the OSBA and Aqua LUG. *Id.* at 91. The ALJ found that, but for the Act 11 subsidy allocated to water customers, Aqua's allocation of revenues between all water customer classifications and all wastewater customer classifications is reasonable and should otherwise be approved. R.D. at 91, 93 (citing OSBA M.B. at 9-20; Aqua LUG M.B. at 8-11).

The ALJ highlighted the OCA's argument that the results of the OSBA's witness, Mr. Kalcic's, class revenue allocations (before the Act 11 subsidy) are not reasonable. R.D. at 91 (citing OCA St. 4R at 5-7). Specifically, the ALJ observed that, although the Residential and Industrial classes are currently earning close to parity, Mr. Kalcic's proposal would increase their percentage of system average revenue responsibility. *Id.* Similarly, the ALJ observed that concurrently, the Commercial class is also earning close to parity, but Mr. Kalcic recommended that this class receive 74% of the system average percentage increase. R.D. at 92. The ALJ also reasoned that Aqua's proposed allocation of revenues views cost of service as a whole and does not attempt to exclude the Act 11 allocation from its analysis. *Id.* Further, the ALJ reasoned that Aqua moves each customer classification toward its appropriate percentage cost of service, including Act 11 allocation. R.D. at 92.

In reviewing the Company's proposed revenue allocation compared to the OSBA's recommended revenue allocation, the ALJ noted that it appears that the OSBA's recommendations to isolate and remove the Act 11 allocation from its analysis is motivated by its preference to decrease the revenue allocated to non-residential customer classes while increasing the revenue allocated to residential classes. R.D. at 92 (citing Aqua St. 5-R at 5). However, the ALJ emphasized that, from the perspective of customers, the effect of the increase includes both the water increase and the wastewater

allocation. Therefore, the ALJ found that Aqua's methodology better reflects the cost of service. R.D. at 92.

The ALJ also addressed Aqua LUG's witness, Mr. Baudino's, proposed reductions to the projected increases to the Commercial and Public classes. R.D. at 93 (citing Aqua LUG St. 1 at 5; Aqua LUG Exh. __ (RAB-2)). Specifically, the ALJ agreed with Aqua witness, Ms. Constance E. Heppenstall, that Mr. Baudino's recommendation, which is based on moving a portion of the Industrial class increase to the Residential class due to a larger increase to blocks 5 and 6 of the consumption rates for the Industrial class, would result in RROR between 0.98 and 0.96 and, therefore, should be rejected. R.D. at 93 (citing Aqua St. 5-R at 25). Similarly, the ALJ agreed with the OCA that Aqua LUG does not consider other inherent complexities in this case, including: (1) gradual movement of various divisions to a state-wide rate; (2) the Public Fire revenue subsidy required by statute; and (3) subsidization of wastewater operations by water operations. R.D. at 93 (citing Aqua St. 4R at 12).

3. Exceptions and Replies

a. Aqua Exception No. 9 and Replies

In its Exception No. 9, Aqua submits that the ALJ's recommendation that the Commission accept I&E's methodology for allocating wastewater revenues and wastewater rates under Act 11 should be rejected, and the Company's proposed Act 11 revenue allocation should be adopted. Aqua Exc. at 31, 34 (citing R.D. at 91, 96). Aqua challenges the ALJ's reasoning that the Company's proposed allocation of wastewater revenues is not fair to water customers because the Company and the selling municipalities should know that rates would increase at the time of a wastewater system acquisition as wastewater customers were likely paying rates that were below the cost of service. Aqua Exc. at 31-32 (citing R.D. at 89-90). Aqua counters that the Company

demonstrated that justifications advanced by I&E and restated by the ALJ are unreasonable and unsupported by record evidence. Aqua Exc. at 32. Specifically, the Company contends that I&E's testimony: (1) implies that municipal governments believed that the cost of acquiring the subject systems would be carried by existing Aqua customers; and (2) ignores the Company's explanation that, as part of the Section 1329 process, future customer rates will be impacted by the purchase price. Moreover, Aqua notes that, contrary to I&E's arguments, the Company demonstrated that it educates and engages with municipal leaders on the ratemaking process. Aqua Exc. at 32 (citing Aqua M.B. at 218-19).

Aqua also challenges the ALJ's reasoning that: (1) community representatives who decided to sell a system due to increasing taxes and/or utility rates are unable to avoid the consequences of that decision; and (2) the revenue generated by the sale of a community's wastewater system is a benefit to the communities of the acquired systems. Aqua Exc. at 32 (citing R.D. at 90). Specifically, Aqua posits that the ALJ took the testimony of Aqua's witness, Mr. Packer, out of context because Mr. Packer was responding to the proposed Act 11 revenue allocation advanced by the OCA, and although Mr. Packer did not disagree with the benefits to the communities whose systems were acquired by Aqua, he states that, "the principles of gradualism should prevail and be utilized to mitigate these first in rate increases." Aqua Exc. at 32 (citing Aqua M.B. at 217-18; Aqua St. 1-R at 25). Further, Aqua claims that the ALJ ignored Mr. Packer's testimony that over the long-term, the Commission will have sufficient opportunities in subsequent rate cases to adjust the rate design for each of the acquired systems. Aqua Exc. at 32-33 (citing Aqua St. 1-R at 25-26). Aqua asserts that the ALJ, instead, reasoned that each system should be subjected to a large and immediate rate increase in this proceeding because an immediate benefit was obtained by the communities which sold wastewater systems to the Company. Accordingly, Aqua contends that such reasoning highlights that I&E's proposal will result in rate shock. Aqua Exc. at 33.

Aqua also challenges the ALJ's determination that the Company's approach of allocating 30% of the proposed wastewater revenue requirement to water customers is "arbitrary." Aqua Exc. at 33 (citing R.D. at 90). Aqua counters that, although the ALJ cited to *Lloyd*, which rejected the definition of gradualism as limiting a rate increase to 10% of the total bill as "the magic number that will prevent rate shock," the Company explained why its proposal is just and reasonable and does not aver that its proposed 30% allocation is the "magic number." Aqua Exc. at 33 (citing Aqua R.B. at 95-99; Aqua M.B. at 216-225). Further, Aqua notes that given the size and number of the systems acquired since the Company's last base rate case and to mitigate the impacts of the initial rate increase for these systems while still moving each towards the cost of service, it is appropriate for the initial allocation of revenues to be higher. Aqua Exc. at 33 (citing Aqua M.B. at 216; Aqua St. 1-R at 24). Moreover, Aqua notes that the other Parties' alternatives are disruptive to the Company's balanced approach and would subject the customers of the acquired systems to significant and immediate rate increases. Aqua Exc. at 33.

Finally, Aqua argues that I&E's proposed rate zone-specific rate design, and Act 11 revenue allocation proposal, are inappropriate. Aqua posits that the ALJ did not analyze the Company's detailed wastewater rate design proposal beyond determining that I&E's proposed rate design should be adopted as a part of the Act 11 revenue allocation. Aqua Exc. at 34 (citing R.D. at 91; Aqua M.B. at 237-38).

In its Replies, I&E argues that the ALJ considered all of the wastewater revenue allocations presented by the Parties and properly recommended the methodology presented by I&E for allocating revenue and designing the wastewater rates. Further, I&E notes the ALJ's finding that I&E's approach: (1) takes into consideration the number of water and wastewater customers in each system; (2) balances the goal of moving rates toward alignment with the cost of service; and (3) mitigates some of the resulting large rate increases if a wastewater revenue allocation is not approved.

Moreover, I&E avers the ALJ acknowledged that I&E's approach is: (1) more beneficial to the communities served by the systems acquired by the Company pursuant to Section 1329; and (2) less complicated and more logical than the methods advocated by the other Parties. I&E R. Exc. at 10 (citing R.D. at 91).

In its Replies, the OSBA disagrees with the Company's Exception to reverse the ALJ's recommendation that reduces the Company's proposed amount by approximately \$10 million. The OSBA avers that it does not oppose the magnitude of the Act 11 subsidy reduction recommended by the ALJ because it argued in this proceeding that the Company's request to recover \$20.839 million of the wastewater revenue requirement from water service customers was not supported by the record evidence. The OSBA further notes that, as a result of its proposal to assign additional increases to Aqua's Base and New Garden Divisions, the OSBA's overall proposed wastewater increase and its recommended Act 11 revenue requirement was less than the Company's proposal. Therefore, the OSBA concludes that it supports the ALJ's recommendation to reduce the Act 11 subsidy paid by the Company's water customers. OSBA R. Exc. at 2-3 (citing OSBA St. 1 at 15-17).

In its Replies, the OCA, likewise, submits that the ALJ properly rejected the Company's Act 11 subsidy and rate design, arguing that the subsidy is unreasonable and inconsistent with generally accepted ratemaking principles. The OCA notes that, with regard to the Act 11 subsidy amount, the recommendations of I&E and the OCA are based on the same reasoning that it is not reasonable or in the public interest for water customers, who receive no benefit from wastewater operations or Section 1329 acquisitions, to support a disproportionate share of the revenue requirement driven by those acquisitions. OCA R. Exc. at 16 (citing R.D. at 89-91; 96; OCA St. 4 at 4-5; I&E St. 5 at 66). Further, the OCA contends that establishing a subsidy close to one-third of the wastewater revenue requirement would mean that wastewater rates do not support a

reasonable relationship to the utility's cost of serving the customer. OCA R. Exc. at 16 (citing OCA M.B. at 89-91).

The OCA also disagrees with the Company's claims that the subsidy is necessary to mitigate significant rate impacts for the acquired wastewater customers and that the more moderate subsidy recommended by I&E produces wastewater rate increases that are not sufficiently gradual. OCA R. Exc. at 16 (citing Aqua Exc. at 31-33). The OCA posits that the Company neglects the role that FMV ratemaking rate base and the Company's high proposed return on common equity play in worsening the rate impact on the customers of the acquired systems. Therefore, the OCA asserts that it is reasonable to assign more of the revenue requirement generated by the acquired systems. Moreover, the OCA notes that under the ALJ's recommended reduction to the Act 11 subsidy, the acquired wastewater customers and legacy wastewater customers will not pay the full cost of service, and there would still be a \$10 million subsidy by water customers. OCA R. Exc. at 16-17 (citing OCA St. 4-SR at 2-3).

b. I&E Exception No. 2 and Replies

In its Exception No. 2, I&E submits that the ALJ erred in using I&E's wastewater increase by class recommendation table that was prepared to support the rebuttal testimony of I&E's witness, Mr. Kubas, instead of I&E's updated wastewater increase by class recommendation table that Mr. Kubas submitted in support of his surrebuttal testimony. I&E explains that Mr. Kubas prepared a table in support of his rebuttal testimony that summarized the proposed revenue allocations set forth in the Parties' direct testimony. However, I&E restates that in the surrebuttal phase of the case, Mr. Kubas revised I&E's proposed wastewater revenue increase by system to reflect revisions to Aqua's original claim, late payment revenues, and proposed revenues, as well as to address the positions of the other Parties. Accordingly, I&E argues that the Commission should rely on the wastewater increases by class which were updated in

Mr. Kubas' surrebuttal testimony. I&E Exc. at 4-5 (citing R.D at 88; I&E St. 5-SR at 4; I&E Exh. 5-SR, Sch. 1 at 1; I&E St. 5-R at 1-23; I&E Exh. 5-R, Sch 1).

In its Replies, Aqua submits that I&E's surrebuttal wastewater revenue allocation should be rejected for the same reasons it argued against adopting I&E's rebuttal proposal. Aqua R. Exc. at 9 (citing I&E Exc. at 4-5).

c. OCA Exception No. 11 and Replies

In its Exception No. 11, the OCA submits that, although it supports the reduction to the subsidy, the OCA's method for allocating the revenue requirement between water and wastewater customers is more reasonable and should be adopted. OCA Exc. at 16 (citing R.D. at 89-91). The OCA asserts that, by allocating a portion of the wastewater revenue requirement to water customers, the OCA's method moves the acquired and legacy system rates closer to their cost of service while mitigating rate increases to all wastewater customers. OCA Exc. at 18 (citing OCA St. 4SR at 1-2; OCA St. 4 at 4-9).

The OCA notes that although I&E's method focuses on the gap generated by each system's revenue requirement, the OCA's method also considers how much of the gap is generated by the FMV premium paid for each acquired system. The OCA argues that, in determining relative burdens, it is not reasonable for the subset of wastewater customers benefiting from the FMV premium to further benefit by having water customers pay the portion of the acquired system's revenue requirement generated by the FMV premium. OCA Exc. at 16-17 (citing OCA R.B. at 46-49; OCA M.B. at 88-89, 91-96; OCA St. 4 at 6-8; OCA St. 4-SR at 2-3).

The OCA also claims that contrary to the ALJ's concerns regarding the complexity of the OCA's recommendation, the additional steps for implementation of the

OCA's method are warranted and not unreasonably complicated. OCA Exc. at 17 (citing R.D. at 91). The OCA explains that the calculated amount of the revenue requirement associated with the FMV premiums is allocated to the five acquired systems such that no system exceeds its cost of service, and the remainder is allocated to the legacy systems. The OCA notes that the Company's proposed class increases for each division are prorated when applied. OCA Exc. at 17 (citing OCA St. 4 at 8-10; OCA Exh. Sch. GAW-4).

Further, the OCA argues that, when compared to the OCA's method, I&E's method recommends that the Cheltenham wastewater system be assigned a larger revenue requirement and, if I&E's method is adopted, then Cheltenham's resulting rates at the Company's revenue requirement would be higher than its cost of service. OCA Exc. at 17 (citing OCA St. 4-SR at 5-6; I&E St. 4-SR at 5, 14). Moreover, the OCA notes that, although it agrees that the wastewater subsidy should be reduced, the revenue allocations should also be guided by cost-causation. Accordingly, the OCA submits that, if the OCA's allocation method is not adopted and if the revenue allocated to the Cheltenham system would otherwise exceed its cost of service, then an adjustment should be made as part of the scale back. OCA Exc. at 17 (citing OCA R.B. at 54).

The OCA also explains that it does not except to the ALJ's recommendation regarding water allocation because, but for the Act 11 subsidy, the ALJ adopted the Company's and the OCA's recommendation. The OCA provides that it is the OCA's understanding that the ALJ accepts the OCA's recommended proportional scale back across the divisions and classes and, other than the Act 11 subsidy, this is consistent with the water revenue increase allocation adopted by the ALJ and supported for the same reasons. OCA Exc. at 18 (citing R.D. at 91-93; OCA R.B. at 55-58; OCA St. 4 at 12-13).

The OCA disagrees with the ALJ's recommendation that adopts I&E's and the Company's scale-back proposal which would not reduce wastewater rates until the Act 11 subsidy is eliminated. OCA Exc. at 18 (citing R.D. at 91; Aqua St. 5-R at 25; I&E St. 5 at 63-64). The OCA recommends a different scale-back approach that would allocate additional wastewater revenue to the acquired systems and legacy systems based on the Company's authorized ROE. Therefore, the OCA maintains that if the Commission adopts a different capital structure and/or a lower ROE than proposed by the Company, then the scale back should first be applied to reduce the revenue requirement associated with the FMV premiums, to the benefit of wastewater customers. Further, the OCA maintains that if the Commission reduces revenue requirement for non-ROR reasons, or the Commission does not adopt the OCA's method for allocating wastewater revenue requirement based on FMV premiums, then the OCA agrees that the benefit should be applied to reduce the subsidy by water operations. OCA Exc. at 18 (citing OCA M.B. at 96-97; OCA St. 4 at 11-12).

In its Replies, Aqua argues that the OCA's proposed allocation of Act 11 revenues was properly rejected because it is neither fair nor reasonable. Aqua counters that the arguments advanced by the OCA in support of its proposed Act 11 revenue allocation are without merit and should be rejected for the same reasons as its revenue allocation proposal. Aqua argues that the OCA's calculation of the revenue requirement associated with FMV premiums: (1) is improper; (2) seeks to mask a large increase to wastewater base customers; and (3) ignores that the Company's proposal already accounts for the premiums which the OCA seeks to undo. Aqua adds that the OCA's scale-back method should be rejected for the same reasons as its proposed revenue allocation. Aqua R. Exc. at 9-10 (citing OCA Exc. 17; Aqua R.B. at 95-98; Aqua M.B. at 220-21, 266).

In its Replies, I&E submits that, upon consideration of all of the proposals set forth by the Parties regarding this issue, it supports the ALJ's recommendation. I&E R. Exc. at 16.

d. OSBA Exception No. 1 and Replies

In its Exception No. 1, the OSBA argues that the ALJ erred in adopting the Company's proposed revenue allocation for its water service customers. OSBA Exc. at 2 (citing R.D. at 93). First, the OSBA disagrees with the ALJ's conclusion that Aqua's methodology better reflects the cost of service compared to those advocated by the other Parties because it is based on "a combined water and wastewater revenue, or 'total bill,' evaluation." OSBA Exc. at 2-3 (citing R.D. at 81, 92). The OSBA argues that the ALJ's conclusion violates the decision in *Lloyd* that ratemaking must be conducted using each specific service's cost of service. OSBA Exc. at 3. The OSBA notes that, when developing a revenue allocation based upon an accepted cost of service study, the ALJ and the Commission must follow the requirements set forth in *Lloyd* because if ratemaking is performed on a combined or total-bill basis, such as Aqua, proposes the true impact of the revenue increases required by the Company's separate water and wastewater cost of service study will be hidden. *Id.* (citing *Lloyd* at 1015, 1020-21).

The OSBA also argues that the Company's proposed water revenue allocation violates the principles of *Lloyd* because it moves each class "toward its appropriate percentage cost of service including the Act 11 allocation." OSBA Exc. at 4 (citing R.D. at 92-93). The OSBA asserts that the plain language of Section 1311(c) of the Code sets the legal standard that must be met in all combined water/wastewater rate cases under Act 11. The OSBA specifically notes that Section 1311(c) provides that "[t]he commission when setting base rates, after notice and an opportunity to be heard, *may allocate a portion of the wastewater revenue requirement* to the combined water and wastewater customer base if in the public interest." OSBA Exc. at 4 (citing 66 Pa. C.S.

§ 1311(c) (emphasis added by the OSBA)). However, the OSBA contends that Section 1311(c) does not provide the legal authority to violate the requirement of *Lloyd* that rates for individual utility services be based on separate cost of service determinations. OSBA Exc. at 4 (citing *Lloyd*). Accordingly, the OSBA contends that the ALJ's approval of Aqua's water revenue allocation on the basis that it moves each class "toward its appropriate percentage costs of service including the Act 11 allocation" must be rejected because the ALJ made her decision without any legal basis set forth in Act 11. OSBA Exc. at 4 (citing R.D. at 92-93).

The OSBA also argues that the Company's revenue allocation violates *City of Bethlehem* where the Commission agreed with the OSBA when it determined that "the proper yardstick for measuring the degree of movement toward cost of service is the change in the absolute level of class subsidies at present and proposed rates." The OSBA asserts that in this case, the ALJ ignored the Commission's standard in *City of Bethlehem* for measuring progress towards cost of service when designing a revenue allocation. OSBA Exc. at 4-5 (citing *City of Bethlehem* at 36). In fact, the OSBA contends that its subsidy analysis demonstrates that the Company's proposed revenue allocation for water service, at the Company's requested revenue requirement level, would result in the Commercial, Industrial, and Public Fire customer classes moving toward cost of service and the Residential, Public, Other Water Utilities and Private Fire customer classes moving away from cost of service. OSBA Exc. at 5-8 (citing OSBA St. 1 at 4, 6-9; OSBA Exh. BK-1 W, Schs. BK-1W, BK-3W). Thus, the OSBA maintains that the Company's proposed revenue allocation for water service, exclusive of Act 11 subsidies, is unjust and unreasonable because it violates *Lloyd* by failing to move all of the customer classes closer to their respective cost-based revenue levels. OSBA Exc. at 8.

Finally, the OSBA further disagrees with the ALJ's finding that Aqua's revenue allocation better reflects cost of service since it moves each customer classification toward its appropriate percentage of cost of service when the Act 11

allocation is included. OSBA Exc. at 8-9. The OSBA argues, however, that the preferred cost metric used by Aqua in support of its revenue allocation is conceptually invalid. In this regard, the OSBA cites the testimony and detailed analysis (see OSBA Exc. at 8-11) of its witness, Mr. Kalcic, in reiterating its position that the Company's proposed class revenue allocation for water service, including Aqua's alternative percentage of cost of service metric, and Aqua's claim that Act 11 revenues should be included in class revenue allocation evaluations, is without legal foundation. OSBA Exc. at 9-11 (citing OSBA St. 1-S at 4-8). Therefore, the OSBA avers that the Company's proposed class revenue allocation for water service must be rejected by the Commission. OSBA Exc. at 11.

In its Replies, Aqua counters that the Company's proposals are consistent with Act 11 and *Lloyd*. Further, Aqua notes that the OSBA essentially is repeating the same arguments it made in its Briefs against the Company's proposed water revenue allocation in favor of its own water revenue allocation. The Company cites to its arguments included in its Briefs against the OSBA's position. Aqua R. Exc. at 10 (citing OSBA Exc. at 11-17; Aqua R.B. at 98-100; Aqua M.B. at 224, 228-29). Additionally, Aqua avers that the OSBA's reliance upon *Lloyd* is misplaced in that the OSBA "treats the allocation of wastewater costs as though they were a separate rate charged to water customers." Aqua R. Exc. at 10.

e. OSBA Exception No. 2 and Replies

In its Exception No. 2, the OSBA submits that the ALJ erred in rejecting the OSBA's proposed water revenue allocation. The OSBA begins its Exception No. 2 by citing to the ALJ's conclusion that "it appears that OSBA's recommendation to isolate and remove the Act 11 allocation from its analysis is motivated by a desire to decrease the revenue allocated to non-residential customer classifications, while increasing the revenue allocated to residential customer classes." OSBA Exc. at 11 (citing R.D. at 92;

Aqua M.B. at 229). In response, the OSBA argues that the ALJ's conclusion with respect to its motivations is baseless. The OSBA submits that its proposed water revenue allocation should be adopted by the Commission because it correctly isolates Act 11 revenues in its proposed revenue allocation. The OSBA explains that its approach of isolating the Company's claimed water cost of service from Act 11 subsidies: (1) is the only revenue allocation sponsored by any Party that follows both the requirements of *Lloyd* and the Commission's decision in *City of Bethlehem*; and (2) is necessary to develop a cost-based water revenue allocation, given that the Company's claimed wastewater cost of service and associated Act 11 subsidies are separate from, and unrelated to, its claimed water revenue requirement. Furthermore, the OSBA maintains that, given that Aqua's proposed revenue allocation moves the Residential class in the wrong direction (*i.e.*, away from the cost of service), the OSBA's revenue allocation assigns greater revenue responsibility to the Residential class because any revenue allocation which corrects the Company's failure to move all classes toward cost of service will assign a greater revenue responsibility to the Residential class. OSBA Exc. at 11-12 (citing OSBA M.B. at 9-14).

The OSBA repeats its argument that the Commission should adopt its alternative water revenue allocation proposal sponsored by its witness, Mr. Kalcic, in this proceeding because it: (1) implements the Company's requested revenue increase; (2) is exclusive of any allocation of Act 11 subsidies; and (3) would move all classes toward their respective cost-based revenue levels without imposing an excessive increase on any class of water customers. OSBA Exc. at 12-15, 17 (citing OSBA St. 1 at 9-11; OSBA Exh. BK-1 W, Schs. BK-4W, BK-5W). Moreover, the OSBA notes that, although it agrees with the Company's method of allocating its Act 11 revenue requirement to its water service classes, the OSBA does not agree with the overall magnitude of the Company's proposed Act 11 revenue requirement. OSBA Exc. at 15-16 (citing OSBA St. 1 at 11, 15, 17; OSBA Exh. BK-1 W, Schs. BK-1W, BK-6W).

In its replies, Aqua counters that the Company's proposals are consistent with Act 11 and *Lloyd*. Further, Aqua notes that the OSBA essentially is repeating the same arguments it made in its Briefs against the Company's proposed water revenue allocation in favor of its own water revenue allocation. The Company cites to its arguments included in its Briefs against the OSBA's position. Aqua R. Exc. at 10 (citing OSBA Exc. at 11-17; Aqua R.B. at 98-100; Aqua M.B. at 224, 228-29).

In its replies, the OCA disagrees with the OSBA's arguments in its Exception No. 2 and opines that the ALJ properly found that the OSBA's recommended total class water increases are unreasonable. The OCA agrees with the ALJ that, from the perspective of the customers, both the water increase and the wastewater allocation are included in the effect of the increases. Further, the OCA states that with the Act 11 subsidy excluded, the results of the OSBA's class revenue allocations are not reasonable. OCA R. Exc. at 18-19 (citing R.D. at 92; OSBA Exc. at 11-17). Moreover, the OCA asserts that, although the Residential, Industrial and Commercial classes are currently earning close to parity, the OSBA's proposal would result in skewed, unreasonable, and inequitable increases because the Residential and Industrial classes would experience a higher percentage of revenue responsibility than that of the Commercial class. OCA R. Exc. at 19 (citing OCA R.B. at 55-58; Aqua M.B. at 228-29; OCA St. 4R at 7, 9-10).

f. OSBA Exception No. 3 and Replies

In its Exception No. 3, the OSBA disagrees with the ALJ's adoption of I&E's recommended wastewater rate design and rate increases because it does not include an analysis of how the Company's Act 11 wastewater subsidies should be allocated to Aqua's customers. OSBA Exc. at 17 (citing R.D. at 91). Thus, the OSBA supports the Company's proposed method of allocating the Act 11 subsidy because, as discussed in more detail below, it is consistent with the OSBA's position that the recovery of Act 11 wastewater subsidies from water customers on a revenue neutral basis

by customer class is the only just and reasonable resolution of this issue that is consistent with the requirements of *Lloyd*. OSBA Exc. at 17, 20.

In support of this Exception, the OSBA references its witness, Mr. Kalcic's, review and analysis of the Company's proposed method of allocating its Act 11 revenue requirement to water customers to argue that the Company's proposed wastewater increase would not recover all of the Company's claimed wastewater revenue requirement. OSBA Exc. at 18-19 (citing OSBA St. 1 at 13-14, OSBA Exh. BK-1 WW, Sch. BK-1 WW). Further, the OSBA contends that, although Act 11 provides the statutory authority to temporarily recover the costs associated with Aqua's wastewater system from its water customers, Act 11 does not allow for any "cross-subsidization" of customer classes between water and wastewater customers. OSBA Exc. at 19. Moreover, the OSBA argues that Act 11 does not supersede the requirements of *Lloyd*, meaning that the Company's water rates, exclusive of Act 11, must be based primarily on the results of Aqua's water cost of service study. Accordingly, the OSBA requests that the Commission adopt the Company's proposal to recover Act 11 wastewater subsidies from water customers on a revenue neutral basis by customer class because it is just, reasonable, and consistent with the requirements of *Lloyd* and the language of Act 11. OSBA Exc. at 19-20 (citing OSBA St. 1 at 17-18).

In its Replies, the OCA argues that the OSBA's recommended total class water increases are unreasonable and should not be adopted by the Commission. With regard to the OSBA's argument that the ALJ erred in not accepting the OSBA's proposal with regard to the Act 11 allocation subsidy between Residential and non-Residential classes, the OCA retorts that, because the Company has much fewer wastewater customers (63,869) to non-fire water customers (415,059), most water customers do not rely upon the Company's wastewater operations and there is no reasonable basis for a particular class of water customers to have to subsidize the same class of wastewater customers. OCA R. Exc. at 19-20 (citing OSBA Exc. at 17-20; OCA St. 4-R at 10-11).

Further, the OCA counters that the OSBA's proposal results in the Residential class being assigned a larger relative percentage of Act 11 subsidy revenues than the system average, while the Commercial class is assigned significantly less than the system average and the Industrial class is not assigned Act 11 subsidy responsibility. The OCA elaborates that, because the Residential, Commercial, and Industrial class indexed RORs are all reasonably close to unity, when the OSBA's initial class revenue allocations (prior to the Act 11 revenue shift) are combined with the Act 11 revenue increases, the OSBA's recommendation unreasonably favors the Commercial class. OCA R. Exc. at 20 (citing OCA St. 4R at 9-10).

g. OSBA Exception No. 4 and Replies

In its Exception No. 4, the OSBA submits that Aqua's proposal to scale back the Company's proposed revenue allocation must be rejected. The OSBA contends that, although the ALJ acknowledged that the exclusion of wastewater rates from any scale back in this proceeding will reduce Aqua's Act 11 revenue requirement, the ALJ did not discuss how the Company's allocation of its proposed Act 11 revenue requirement of approximately \$20.8 million for water classes should be scaled back to the ALJ's recommended level of approximately \$10.2 million. OSBA Exc. at 20-21 (citing R.D. at 91, Table Act 11; Aqua M.B. at 265; OSBA Exh. BK-1 W, Sch. BK-6W). In order to ensure that the Company's Commission-approved revenue requirement is recovered from water customers on a revenue neutral basis, the OSBA recommends that the Commission: (1) scale back the wastewater class revenue requirements proportionately to reflect the Company's total approved wastewater revenue requirement level; and (2) subtract the Company's approved level of wastewater revenues, by class, from the adjusted wastewater class revenue requirement levels. OSBA Exc. at 25 (citing OSBA St. 1 at 18-19). The OSBA submits that its recommended water service and Act 11 scale-back proposals are consistent with *Lloyd* and Act 11 and would ensure that

the Aqua's approved Act 11 revenue requirement would be recovered from water customers on a revenue neutral basis, by customer class. OSBA Exc. at 25.

The OSBA repeats its argument that the Company's proposed scale back of its proposed revenue allocation must be rejected because: (1) the Company's proposed revenue allocation is not cost based and, therefore, using it as a starting point for any scale back is not valid; and (2) a separate scale back is necessary for reductions in the Company's allowed water service revenue requirement and changes in the Company's Act 11 revenue requirement. OSBA Exc. at 21-22 (citing OSBA St. 1-R at 8-11). The OSBA maintains that if the Commission awards the Company a water service revenue increase that is less than Aqua's requested amount and exclusive of Act 11 considerations, then the OSBA's recommended class increases for water service should be proportionately scaled back. OSBA Exc. at 22-23 (citing OSBA M.B. at 19-20; OSBA Exh. BK-1 W, Sch. BK-4W). Thus, the OSBA maintains its position that whatever the Act 11 revenues that the Commission decides to assign to water classes should be subject to a separate scale back, as determined by the level of Aqua's awarded wastewater revenue requirement and the overall level of final wastewater rates. OSBA Exc. at 23-24 (citing OSBA St. 1 at 12, 19; OSBA Exh. 5-B, part 1; OSBA Sch. BK-6WW).

In reply to the OSBA's position that the Commission reject the Company's proposed scale back for water rates for the same reasons that it opposed the Company's water revenue allocation, Aqua contends that the Company has demonstrated that its proposed scale back was reasonable, and therefore, the OSBA's exception regarding this matter should be rejected. Aqua R. Exc. at 10 (citing OSBA Exc. at 20; Aqua R.B. at 107-108; Aqua M.B. at 265-66).

In its Replies, I&E submits that it agrees with the ALJ's recommendation to adopt the I&E methodology for allocating revenue and designing wastewater rates,

including I&E's recommended Act 11 subsidy. I&E also agrees that no scale back of Aqua's proposed wastewater rates should be permitted until the entire wastewater Act 11 subsidy allocation is eliminated. I&E R. Exc. at 22 (citing OSBA Exc. at 20-21; R.D. at 88, 91).

h. Aqua LUG Exception No. 1 and Replies

In its Exception No. 1, Aqua LUG disagrees with the ALJ's reliance on the testimony provided by Aqua and the OCA that alleged that Aqua LUG's proposed revenue allocation would result in an unacceptable RROR. According to Aqua LUG, the ALJ never addressed the unfavorable RROR effects that her recommended revenue allocation would have on Commercial customers and the very limited progress that would be made towards cost of service rates for the other classes. Aqua LUG Exc. at 2 (citing R.D. at 93). In this regard, Aqua LUG requests that the Commission adopt its revenue allocation proposal that it developed consistent with *Lloyd*, to determine the reasonableness of the movement towards cost of service. Aqua LUG Exc. at 2-3 (citing *Lloyd*; *Pa. PUC v. Philadelphia Gas Works*, Docket No. R-2008-2073938 (Order entered March 26, 2009)).

More specifically, Aqua LUG asserts that the Company's proposed movement of the Commercial rate class closer to the Company's cost to serve, from a current RROR of 1.07 to 1.05 RROR, would not achieve sufficient movement for the Residential customer class because the resulting RROR under current residential rates would be 0.96 and would not move towards the system average increase in the Company's proposed revenue allocation. Aqua LUG Exc. at 2-3 (citing Aqua M.B. at 9; Aqua LUG St. 1 at 4). Aqua LUG maintains that its recommendation would require the Company to modify its revenue allocation so that: (1) the Residential class RROR would move from 0.96 to 0.98; (2) the Commercial class RROR would move from 1.04 to 1.02; (3) the Industrial class RROR would move from 0.93 to 0.99; and (4) the Public class

RROR would move from 1.18 to 1.15.⁷⁴ Aqua LUG Exc. at 3-4 (citing Aqua LUG M.B. at 9-10). Aqua LUG further contends that the basis for its recommendation is the unreasonableness of setting rates that preserve substantial interclass subsidies for the Commercial class (*i.e.*, the Commercial class RROR decreasing from present to proposed rates by 0.02) while not progressing towards cost of service for the Residential class (*i.e.*, the Residential RROR at present and proposed rates remaining at 0.96). Aqua LUG Exc. at 4-5. Moreover, Aqua LUG argues that, given that the Residential class has a RROR of 0.96 under present rates, it is not clear how a reasonable movement towards cost of service justifies a rejection of Aqua LUG's proposed revenue allocation. Aqua LUG adds that, by not immediately moving the Residential customer class to cost of service, Aqua LUG's recommended movement for the Residential class incorporates principles of gradualism. Aqua LUG Exc. at 5 (citing Aqua LUG M.B. at 9-10).

Accordingly, Aqua LUG requests that the Commission reject the ALJ's recommendation and direct the Company to implement the revenue allocation modifications submitted by Aqua LUG because its proposed allocations would move all customer classes closer to their cost to serve. In the alternative, Aqua LUG requests that the Commission adopt the OSBA's recommendation. Aqua LUG Exc. at 2, 6.

Next, Aqua LUG excepts to the ALJ's decision to adopt Aqua's class allocation methodology based on her determination that the Company's proposal does not attempt to exclude the Act 11 allocation from its analysis. More specifically, Aqua LUG takes issue with the discussion in the Recommended Decision where the ALJ accepted the OCA's observation that Aqua LUG's recommendation does not incorporate the subsidization of wastewater operations by water operations. Aqua LUG Exc. at 5 (citing

⁷⁴ Aqua LUG notes that it remains unopposed to the OSBA's proposed alternative revenue allocation that is also intended to adjust the Company's proposed revenue allocation by advancing various customer classes towards their cost of service. Aqua LUG Exc. at 4 (citing Aqua LUG St. 1-S at 2).

R.D. at 92). Aqua LUG submits that the ALJ's discussion lacks the appropriate context, explaining that the ALJ adopted I&E's scale-back recommendation to eliminate the subsidy to wastewater customers prior to proportionately scaling back the additional rates. Aqua LUG Exc. at 5-6 (citing R.D. at 91). Aqua LUG contends that, to the extent I&E's recommendation is adopted by the Commission, any further accounting consideration of the Act 11 subsidy would be a double count. Aqua LUG Exc. at 6. Therefore, Aqua LUG submits that, if the Commission accepts I&E's scale-back proposal to eliminate the subsidy to water customers first, then the Commission should scale back the additional water rates, consistent with Aqua LUG's proposed revenue allocation. *Id.* at 6.

Finally, Aqua LUG argues that without the I&E scale-back recommendation, the legislative authority to allocate a portion of the wastewater cost of service to water customers should not supersede the Commission's evaluation of the water revenue allocation. Aqua LUG notes the OSBA's observation that Act 11 revenue requirements are assigned on a revenue-neutral basis and do not reflect class cost of service. Aqua LUG Exc. at 6 (citing OSBA St. 1-S at 6-7). Therefore, Aqua LUG contends that pursuant to *Lloyd*, the appropriate Act 11 subsidy should be determined after establishing the appropriate water system revenue allocation on a cost of service basis. Aqua LUG Exc. at 6.

In its Replies, Aqua argues that Aqua LUG's exception should be denied because the ALJ correctly rejected Aqua LUG's proposal to move a portion of the industrial class increase to the Residential class, due to a larger increase to blocks 5 and 6 of the consumption rates for the industrial class. Aqua R. Exc. at 10-11 (citing Aqua LUG Exc. at 2-6; Aqua M.B. at 229-30).

In its Replies, the OCA argues that the Commission should reject Aqua LUG's adjustments because Aqua LUG's proposals would move classes by small

percentage increments and do not reflect the lack of accuracy of the underlying cost allocations, among other complexities in this case. Therefore, the OCA contends that the ALJ properly concluded that the Company's proposed allocation of class revenues is more appropriate. OCA R. Exc. at 19 (citing Aqua LUG Exc. at 2-6; R.D. at 93; OCA St. 4-R at 12).

i. Masthope Exception No. 2 and Replies

In its Exception No. 2, Masthope argues that the ALJ's adoption of the Act 11 subsidy adjustments results in unjust and unreasonable rates that disproportionately and negatively affect Masthope wastewater customers, particularly commercial customers. Masthope Exc. at 10-11 (citing R.D. at 84-91). Masthope explains that it expressed its concern throughout this proceeding about allocating water revenues to the Company's wastewater revenue requirement which may result in large rate increases to wastewater rates for Masthope customers and, therefore, urged the ALJ to adopt Aqua's original distribution of the proposed rate increases between and within water and wastewater rate schedules. Masthope Exc. at 10 (citing Masthope M.B. at 19-24). Notwithstanding its concerns, Masthope avers that the ALJ ultimately adopted I&E's proposed Act 11 revenue allocation methodology that would result in large increases in Masthope's wastewater usage rates (147% increase) and monthly service charge (35% increase). Masthope Exc. at 10 (citing R.D. at 84-91; Masthope R.B. at 6-7; Masthope M.B. at 19-24). Thus, Masthope requests that the Commission reverse the ALJ's recommendation to the extent it results in dramatic rate increases for Masthope water customers. Masthope Exc. at 10-11.

Masthope also argues that although Act 11 provides the Commission has broad discretion to allocate wastewater revenue requirements across a utility's combined customer base, the Commission should: (1) assure just and reasonable rates for all classes of customers, pursuant to Section 1301 of the Code, 66 Pa. C.S § 1301; (2) avoid

rate shock; and (3) embrace the principles of gradualism. Masthope Exc. at 11 (citing 66 Pa. C.S. § 1311(c); *Implementation of Act 11 of 2012*, Docket No. M-2012-2293611 (Order entered August 2, 2012)). Further, Masthope maintains that the impact on its community would be especially detrimental to the unique mix of part-time/seasonal residents and residential and commercial customers. Moreover, Masthope asserts that, if the Commission approves revenues in amounts less than the Company originally proposed, then the Commission should distribute any increased revenue requirement for water and wastewater customers and the amount of revenue support to be provided by water customers in a manner consistent with the Company's proposal. Furthermore, Masthope avers that the Commission should distribute any increase in rates, both between and within rate schedules, in a manner consistent with the Company's original proposal. Masthope explains that Aqua selectively proposed increases between and within rate schedules to encourage its long-term plan of rate schedule consolidation into a uniform tariff. Masthope details that by contrast, the adjustments adopted by the ALJ are excessive for certain customers in specific schedules, including commercial customers in wastewater Zone 6 who would experience as much as a 147% rate increase. Masthope Exc. at 11-12 (citing Masthope M.B. at 19-23).

In its Replies, Aqua notes that it does not oppose Masthope's Exception, explaining that Masthope supports Aqua's proposed Act 11 revenue allocation and Masthope's Exceptions lend further support to Aqua's proposed allocation of revenues. Aqua R. Exc. at 11 (citing Masthope Exc. at 10-11; Aqua R.B. at 99).

In its Replies, I&E argues that although it understands Masthope's argument, any Act 11 subsidy imposed on Aqua's water customers is for the benefit of Aqua's wastewater customers, including Masthope. I&E explains that absent the Act 11 subsidy from wastewater to water customers, the Masthope wastewater rates would have to be further increased. Further, I&E notes that in similar Commission cases, the ALJ and the Commission must balance the justness and reasonableness of all revenue

allocation and rate design components, within the complexities of a cost of service methodology, among all customer classes. Moreover, I&E asserts that as a result of making the required choices, ultimately all customer classes will be adversely affected. Therefore, I&E submits that it supports the ALJ's recommendation that the Commission adopt I&E's methodology for allocating revenue and designing wastewater rates, including I&E's recommended Act 11 subsidy. I&E R. Exc. at 24-25 (citing Masthope Exc. at 10-11; R.D. at 82-91).

In its Replies, the OCA refers to its argument that Aqua's Exception No. 9 regarding the Act 11 subsidy should be rejected, to contend that Masthope's objection to decreasing the subsidy for Masthope (one of the legacy systems) should be rejected for the same reasons. OCA R. Exc. at 17 (citing Masthope Exc. at 10-12; R.D. at 88; OCA R.B. at 51-53).

4. Disposition

At the outset, we will address I&E's Exception No. 2. Based on our review, we agree with I&E that the Commission should rely on the wastewater increases by class which were updated in Mr. Kubas' surrebuttal testimony. *See* I&E Exh. 5-SR, Sch 1 at 1. Therefore, we shall grant I&E's Exception No. 2 and strike the table presented in the Recommended Decision at the top of page 88 and replace it with the table set forth in I&E Exhibit 5-SR, Schedule 1, Page 1 of 3, as reproduced below:

Aqua Pennsylvania, Inc
R-2021-3027386 Schedule "W.W.A" PSW Cost of Service Study
Zones 1 through 6 and Zones 7 through 11 and Grand Total for Aqua Wastewater

Zone	Cost of Service	Percent	Act 11 *	(D)	(E)	Adjusted Cost of Service	Revenue Present Rates	Revenue Proposed Rates	I&E Increase	Percent Increase	I&E Adjustment	Company Increase **	I&E Subsidy
	(B)	(C)		(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)*	(M)
Zones 1-6													
1 Residential	\$27,146,216	79.3%	(\$11,076,966)	82.4%		\$16,069,250	\$13,419,396	\$17,942,695	\$4,523,299	33.7%	\$1,887,342	\$2,635,957	-\$9,189,624
2 Non Residential	\$7,066,927	20.7%	(\$2,361,992)	17.6%		\$4,704,935	\$3,976,095	\$5,365,264	\$1,389,169	34.9%	\$656,907	\$732,562	-\$1,705,085
3 Third Party	\$1,388,690		\$0			\$1,388,690	\$1,280,031	\$1,437,920	\$157,889	12.3%	\$381	\$157,508	\$381
4 Total Sales	\$35,601,833	100.0%	(\$13,438,958)	100.0%		\$22,162,875	\$18,675,522	\$24,745,879	\$6,070,357	32.5%	\$2,544,630	\$3,525,727	-\$10,894,328
5 Contract	\$312,754		\$0			\$312,754	\$312,754	\$331,801	\$19,047	6.1%	\$0	\$19,046	\$0
6 Late Payment	\$23,436		\$0			\$23,436	\$23,436	\$31,054	\$7,618	32.5%	\$7,618	\$0	\$7,618
7 TOTALS - Zones 1-6	\$35,938,023		(\$13,438,958)			\$22,499,065	\$19,011,712	\$25,108,734	\$6,097,022	32.1%	\$2,552,248	\$3,544,773	-\$10,886,710
8 Zone 7	\$9,025,668		(\$2,974,708)	-30.0%		\$6,050,960	\$3,969,765	\$6,945,307	\$2,975,542	75.0%	\$6,665	\$2,968,877	-\$2,968,043
9 Late Payment							\$8,808	\$15,410	\$6,602	75.0%	\$6,602	\$0	\$6,602
10 Zone 8	\$1,831,445		(\$457,466)	-25.0%		\$1,373,979	\$998,190	\$1,599,095	\$600,905	60.2%	\$242,526	\$358,379	-\$214,940
11 Late Payment							\$16,378	\$26,237	\$9,859	60.2%	\$9,859	\$0	\$9,859
12 Zone 9	\$10,316,073		(\$314,835)	-5.0%		\$9,801,238	\$7,238,362	\$11,311,729	\$4,073,466	56.3%	\$1,532,060	\$2,541,506	\$1,017,425
13 Late Payment							\$20,377	\$31,844	\$11,467	56.3%	\$11,467	\$0	\$11,467
14 Zone 10	\$5,830,936		(\$1,746,595)	-30.0%		\$4,084,341	\$2,916,336	\$4,440,845	\$1,524,509	52.3%	\$366,658	\$1,157,851	-\$1,379,937
15 Late Payment							\$7,435	\$11,322	\$3,887	52.3%	\$3,887	\$0	\$3,887
16 Zone 11	\$5,622,603		(\$1,686,363)	-30.0%		\$3,936,240	\$2,871,704	\$4,246,926	\$1,375,222	47.9%	\$304,027	\$1,071,195	-\$1,382,336
17 Late Payment							\$17,382	\$25,706	\$8,324	47.9%	\$8,324	\$0	\$8,324
18 TOTALS - Zones 7-11	\$33,526,725		(\$7,379,967)			\$26,146,758	\$18,084,737	\$28,654,421	\$10,569,684	58.6%	\$2,492,076	\$8,097,608	-\$4,887,891
19 WW TOTALS	\$69,464,748		(\$20,818,925)			\$48,645,823	\$37,076,449	\$53,763,155	\$16,688,705	45.0%	\$5,044,324	\$11,642,381	-\$15,774,601
20 I&E Proposed Change in Subsidy			(\$5,044,324)					\$10,519	\$40,139	51.0%	Late Payment Revenue Zones 7-11		

* Column D Adjusted to Match Aqua Exhibit L-A(a) Schedule Act 11

** Column L Adjusted to Match Aqua Exhibit 5B-B

As will be discussed, at length, below, after our review of the Exceptions and Replies, we agree with the ALJ that Aqua's allocations of revenue between all water customer classifications and all wastewater customer classifications are reasonable and should be approved. We also agree that I&E's methodology for allocating the Act 11 wastewater revenue subsidy should be approved. Table Act 11, which is included in the Commission Tables Calculating Allowed Revenue Increase attached to this Opinion and Order, sets forth the water and wastewater revenue requirement summary for Aqua, based on I&E's allocation methodology.

Additionally, we support the ALJ's recommended adjustment to reduce the gross wastewater revenue requirement to a net basis when shifting the wastewater revenue requirement to water customers.⁷⁵ Finally, we agree with the ALJ that any scale back of water rates will first reduce the Act 11 allocation.

To recap, the allocation of revenue among a utility's rate classes involves, *inter alia*, consideration of ratemaking policy and the principles of gradualism. Here, Aqua proposed revenues to be allocated to each customer classification that would be required to move that classification toward the cost of providing service (or revenue requirement). R.D. at 84-85 (citing Aqua St. 5 at 10, 21; Aqua Exh. 5-A, Part I, Sch. A; Aqua Exh. 5-B, Part I, Sch. WW-A). Additionally, Aqua proposed to recover a shortfall of approximately 30% of the Company's proposed revenue requirement from wastewater revenues in water rates. R.D. at 85; Aqua M.B. at 216. I&E, the OCA, the OSBA, and Aqua LUG all opposed Aqua's Act 11 subsidy proposal and proposed alternative Act 11 subsidy reduction methodologies. R.D. at 87-89; Aqua LUG M.B. at 7, 9-10. The ALJ recommended I&E's methodology and agreed with I&E and the Company that any scale back of water rates should reduce the Act 11 allocation first. The ALJ reasoned that

⁷⁵ We note that, as outlined in Table Act 11, this will result in the Company's overall allowed revenue requirement being reduced by approximately \$77,706 after the Act 11 Allocation.

I&E's approach, *inter alia*: (1) considers the number of water and wastewater customers in each system; (2) balances the goal of aligning rates with the cost of service while mitigating some of the large rate increases that would result absent an allocation of wastewater revenue; and (3) acknowledges the benefits received by the communities serviced by the acquired systems. R.D. at 91.

In its Exceptions, Aqua argues that it demonstrated that justifications and arguments advanced by I&E and discussed by the ALJ were unreasonable and unsupported by record evidence, and that the ALJ misrepresented and/or ignored the testimony and exhibits presented by the Company in support of its proposed wastewater rate design. Similarly, in its Exceptions, the OSBA argues that the ALJ adopted the I&E's recommended wastewater rate design and rate increases without providing details regarding the allocation of Act 11 wastewater subsidies to water customers. We disagree with the arguments expressed by Aqua and the OSBA on these matters. In our view, the ALJ appropriately reasoned that the Company did not present sufficient evidence to demonstrate that allocating 30% of the proposed wastewater requirement to water customers is reasonable and in the public interest. Further, the ALJ appropriately found that shifting 30% of the wastewater revenue requirement to water customers is not equitable and will not result in just and reasonable rates. Indeed, we agree with the OCA's position in its Replies to Exceptions that it is not reasonable or in the public interest for those water customers who do not receive a benefit from wastewater operations or Section 1329 acquisitions to support a disproportionate share of the revenue requirement driven by such acquisitions. With regard to Aqua's and the OSBA's arguments that the ALJ did not provide sufficient analysis in her discussion, we disagree. The ALJ was aware of the positions and arguments put forth by the Company and the OSBA, including the testimonies and exhibits submitted in support of their positions. However, the ALJ has the discretion to determine whether, and to what extent, further discussion and analysis is warranted. Here, it appears that the ALJ did not believe that further consideration of these matters was necessary to recommend that I&E's proposed

wastewater allocation methodology be approved. Accordingly, we will deny Aqua Exception No. 9 and OSBA Exception No. 3.

The OCA also filed Exceptions arguing that its method for allocating a portion of the wastewater revenue requirement to water customers is more reasonable because it considers the FMV premium paid for each acquired system. We agree that a portion of wastewater customers benefitted from the revenue generated by the 1329 acquisition; however, we also agree with the ALJ's reasoning that I&E's approach for allocating the wastewater revenue requirement and designing wastewater rates is less complex than the method offered by the OCA. Indeed, I&E's approach is more streamlined than the methods advanced by the other Parties, while also addressing the benefits received by the communities serviced by the acquired systems and moving rates toward their respective cost of service. Similarly, with regard to the scale-back approach, both the OCA and the OSBA contest the ALJ's adoption of the scale-back approach; however, we are of the opinion that the scale back agreed upon by Aqua and I&E offers a less complicated method than other alternatives. Therefore, we agree with the ALJ's conclusion that any scale back of water rates will first reduce the Act 11 allocation. Accordingly, we will deny the OCA's Exception No. 11 and the OSBA's Exception No. 4.

The OSBA also filed Exceptions challenging the ALJ's reasoning and submitting that the OSBA's proposed water revenue allocation should be adopted. The OSBA is of the opinion that the ALJ violated *Lloyd*, misapplied Section 1311, and ignored Commission precedent by reasoning that Aqua's methodology better reflects cost of service and concluding that the Company's allocation of revenues is reasonable. We disagree with the OSBA. We are of the opinion that reasons considered by the ALJ upon which she based her recommendation to approve the Company's allocations of revenues between all water and wastewater customer classifications are just, reasonable, and in the public interest, and should be approved. The OSBA's contention is that Aqua's proposed

revenue allocation, which views cost of service as a whole and does not exclude the Act 11 allocation, conflicts with the requirement in *Lloyd* that the basis for individual utility service rates is specific to each service's cost of service. We find this argument unpersuasive. As noted by Aqua in its Replies, the OSBA's reliance upon *Lloyd* appears to be misplaced as wastewater costs are not stand-alone, separate rates charged to water customers. Therefore, we do not believe that the principles of *Lloyd* have been violated. The OSBA also argues that its proposed water revenue allocation correctly isolates the Act 11 allocation. We disagree. Rather, we find the ALJ's conclusion, that the Company's methodology better reflects the cost of service because Aqua's proposed allocation views cost of service "as a whole" and moves each customer classification toward its appropriate cost of service, is more persuasive and in the best interest of the public. R.D. at 92. Accordingly, we shall deny the OSBA's Exception Nos. 1 and 2.

In its Exceptions, Aqua LUG argues that the ALJ erred in adopting the Company's revenue allocations rather than the revenue allocations proffered by the OSBA and itself. Aqua LUG opines that the ALJ's recommendation is baseless and will delay progress of the movement of all customer classes towards their cost of service and result in an unfavorable RROR for Commercial customers. As discussed above, we agree with the ALJ's reasoning and basis for recommending that the Company's allocation of revenues between all water and wastewater customer classifications be approved. Accordingly, we will deny Aqua LUG's Exception No. 1.

Finally, in its Exceptions, Masthope disagrees with the ALJ's adoption of the Act 11 subsidy adjustments because they will disproportionately affect Masthope's wastewater customers. As discussed by the ALJ, it is not fair to the Company's water customers to mitigate increases in expenses to repair acquired systems and to take on the shortfall between the cost of service to serve the wastewater systems. I&E's approach for allocating wastewater revenue and designing wastewater rates allows for each service to recover as much of the cost of providing that service as possible without removing the

subsidy, which would result in large increases for every customer. R.D. at 88, 90. Indeed, we agree with I&E's position in its Replies to Exceptions that Masthope's rates would have further increased without the Act 11 subsidy from wastewater to water customers and, as a result of balancing the justness and reasonableness of all revenue allocation and rate design components with the inherent complexities of a cost of service methodology, all customers will ultimately be affected. Therefore, although we understand Masthope's point of contention, we will deny Masthope's Exception No. 2.

D. Tariff Structure and Rate Design

A utility's rate structure implements the Commission's approved revenue increase to determine how the overall increase will be allocated among the utility's various customer classes. Once a class revenue allocation is determined, development of a rate design will address how the tariffed rates and rate elements will generate the allocated revenues. I&E noted the following unique rate structure and rate design challenges present in this proceeding: (1) water base rates; (2) an Act 11 subsidy applied to water base rates to subsidize wastewater customers; (3) wastewater base rates; (4) new rate zones for numerous Section 1329 acquisitions; and (5) third-party sales rates. I&E R.B. at 49. Under the Company's proposal, a residential water customer in the Main Division of Rate Zone 1, using 4,000 gallons of water per month,⁷⁶ would experience a monthly bill increase from \$69.35 to \$81.32, or 17.3% per month, and residential customers in other water divisions would experience increases ranging from 17.3% to 51.3%. *See* Aqua Exh. 5-A, Part II, Sch. 8.⁷⁷ Wastewater customers would see increases

⁷⁶ The Company claimed that the average usage of 4,000 gallons per month is substantiated in the Company's prior rate case as the pre-COVID pandemic average residential usage was 4,068 per month for the residential class. Aqua St. 5-R at 14.

⁷⁷ Present Rates include 7.5% DSIC.

ranging from 7.9% to 84.87%, with one division seeing a proposed decrease (Rate Zone 5 – Newlin Green). *See* Aqua Exh. 5-B, Part II, Sch. WW-7.⁷⁸

1. Positions of the Parties

a. Water Rate Design

(1) Aqua's Water Rate Design Proposal

As shown in Table 8, below, the majority of Aqua's water rate divisions are grouped into three rate zones (Rate Zones 1-3) based on the similarity of their rate structure and rate design, while the Bunker Hill, Sun Valley, Phoenixville, and Belle Aire Acres Divisions are displayed separately because they are dissimilar from those divisions grouped into Rate Zones 1-3.

The majority of Aqua's water customers are charged the rates applicable to its Main Division, designated as Rate Zone 1. The Company proposed to continue to move rate divisions closer to each other and to the Rate Zone 1 in order to facilitate further consolidation with the Main Division. Aqua St. 1 at 29. Specifically, Aqua's proposal indicated that it is working to consolidate water rates for Rate Zones 1 and 2 (with the exception of Chalfont, Concord Park and Treasure Lake in Rate Zone 2). Aqua's witness, Ms. Heppenstall, explained that the Company developed the following five guidelines for the design of water rates: (1) maintain separate rate divisions for those areas with year-round usage and those areas with seasonal usage; (2) maintain a low-use block for the residential class at 2,000 gallons per month in each division, and a sixth block for the industrial classification for usage over 10 million gallons per month; (3) continue movement of those areas with year-round usage toward the Main Division

⁷⁸ Present Rates include 5.0% DSIC.

rates; (4) increase existing Main Division private fire service line rates 17.5% and private hydrant charges by 20.6%; and (5) increase the existing Public Fire Hydrant rate up to the 25% of cost of service level. *See Aqua St. 5 at 11.*

Water Operations - Rate Zones / Divisions

<u>Rate Zone 1</u> Main Division Country Club Gardens and Sand Springs Division Beech Mountain Division Bristol Township Division Mifflin Township Division Mount Jewett Division Robin Hood Lakes Division
<u>Rate Zone 2</u> Superior Division Chalfont Division Concord Park Division Treasure Lake Division
<u>Rate Zone 3</u> Oakland Beach Division CS Water (Masthope) Division Eagle Rock Division
Bunker Hill Division Sun Valley Division Phoenixville Division Belle Aire Acres Division (Receivership)*
* The James Black Water Service Company – Belle Aire Acres Development is being operated by Aqua under a Receivership established via Commission Order on September 3, 2019 at Docket No. M-2019-3012563. Aqua began its Receivership on September 11, 2019 and will continue to act as Receiver for the system until a final determination is made by the Commission. Belle Aire Acres customers are flat rate unmetered customers.

Table 8: Aqua’s water operations showing its Division by Rate Zone

As explained by the OCA’s witness, Mr. Glenn A. Watkins, Aqua’s rate design proposal pertaining to its water operations generally consisted of: (1) the continued movement of those areas with year-round usage toward the Main Division rates; (2) the continuation of its inverted-block usage rate structure; and (3) an increase to its monthly fixed customer charges. The Company’s present and proposed water rates by class, set forth in Schedule I of Aqua Exhibit 5-A, Part I, reflect its rate structure, rate design and the distribution of the increase in revenue proposals in this proceeding.⁷⁹

Table 9, below, provides a summary of the Company’s current and proposed 5/8” meter residential customer charges:

Aqua Water Current & Proposed Residential 5/8” Customer Charges				
Rate Zone	Division	Current	Proposed	Percent Change
1	Main	\$18.00	\$22.40	24.44%
2	Main	\$18.00	\$22.40	24.44%
3	Main	\$28.00	\$32.40	15.71%
BH	Bunker Hill	\$8.00	\$11.80	47.50%
PH	Phoenixville	\$3.33	\$4.90	47.15%

Table 9: Summary of Aqua’s current and proposed customer charges by Rate Zone for residential 5/8” meter water customers. OCA St. 4 at 13.

⁷⁹ Ms. Heppenstall provided updates to her revenue allocation and rate design for water service in Aqua Exhibit 5R-A, Part I, as part of her rebuttal testimony. The Company’s revised revenue exhibits reflect corrections to: (1) the 6-inch and 8-inch private fire rates in the Superior Division, and (2) Aqua’s public fire revenue under proposed rates. *See* Aqua Exh. 5R-A, Part I, Schs. 1 and 7A.

Aqua indicated that its proposal includes increases in consumption charges so that revenues by class move toward cost of service indicators and to recover the total revenue requirement. Aqua St. 5 at 12.

The Company explained its proposed rates for the remaining non-seasonal water divisions as follows:

Zone 1 – CC Garden, Sand Springs, Mifflin Township, Mount Jewett, and Robin Hood rates will move fully to Rate Zone 1 rates. Beech Mountain and Bristol Township division rates will continue to move toward Zone 1 rates.

Zone 2 – will move fully to rates in Rate Zone 1 by raising the meter charges for $\frac{3}{4}$ -inch to 4-inch to the level of Rate Zone 1 rates. All other rates were previously equal to Zone 1 rates.

Two other areas, Bunker Hill and Phoenixville, rates were increased to move toward Zone 1 rates. The Company capped the rate increases for these two areas to 48%.

Aqua St. 5 at 12.

The Company explained its proposed rate structure for seasonal areas as follows:

The Zone 3 Division has a significant number of seasonal customers and will continue to be served under the merged seasonal rate design. The customer charge is increased to \$32.40 per month, but is offset with a lower first block consumption rate than Main Division for the first 4,000 gallons. The bills for the seasonal rate structure are equalized with Main Division at the 4,000 gallon average per month and greater consumption levels.

Aqua St. 5 at 13.

The Company further explained its use of competitive service riders⁸⁰ and summarized the development of its rate proposals regarding public and private fire and those for Industrial Standby Rates, Resale, and Electric Generation Standby Rates. *See* Aqua St. 5 at 13-15; Aqua M.B. at 232-33.

(2) I&E

As previously discussed, Aqua proposed to subsidize its wastewater revenue requirement by approximately \$20.8 million with increased water revenues by the same amount under Act 11. Aqua Exh. 1-A(a), Sch. Act 11. Although the actual recommendations differ, I&E, the OCA, and the OSBA⁸¹ each recommended a reduction to the requested subsidy from Aqua water customers, indicating a reflection of that reduced subsidy through a corresponding increase to the wastewater rates proposed by the Company.

Therefore, I&E's recommended water rate design changes are based upon its proposal to reduce the Act 11 subsidy from water customers. Specifically, I&E proposed a 20% increase for water customers as compared to the Company's proposal for water customers. Thus, I&E asserted that the Company's proposed percentage increases to the water customer classes should all be scaled back to 20% of the Company's original proposed percentage increases. I&E M.B. at 73. I&E explained that this scale back of water rates, including customer charges, should be proportional to the percentage increase originally proposed by the Company. I&E St. 4 at 18-20.

⁸⁰ The Company noted that it has not proposed any changes to its competitive service riders in this proceeding. Aqua M.B. at 232.

⁸¹ "As a result of the OSBA's proposal to assign additional increases, in aggregate, of \$2.259 million to the Company's Base and New Garden Divisions, Mr. Kalcic testified that the OSBA's overall proposed wastewater increase is \$13.8 million or 37.3%, and its recommended Act 11 revenue requirement is \$18.580 million, or \$2.259 million less than Aqua's proposal." OSBA St. 1 at 16-17.

(3) OCA

Although the OCA did not agree with I&E's methodology, the OCA did agree that the wastewater subsidy should be reduced. Therefore, the OCA's recommended water rate design changes are also based upon its proposal to reduce the Act 11 subsidy from water customers. Specifically, the OCA recommended to reduce the Company's proposed Act 11 water subsidization of approximately \$20.8 million by \$9.065 million. Accepting the Company's proposed water increases by division and class, the OCA allocated the \$9.065 million to each division and class on a prorated basis. OCA St. 4 at 11.

Additionally, the OCA contended that Aqua's proposed increase to water customer charges was unsupported and that certain overhead costs were improperly included in the Company's customer cost analysis. Specifically, according to the OCA, Aqua included indirect O&M expenses, indirect depreciation expenses and indirect rate base within its customer cost analysis. OCA M.B. at 99-101.

Based on the customer cost analyses performed by its witness, Mr. Watkins, the OCA argued that there is no reasonable basis for Aqua's proposal to increase the existing monthly residential water customer charges in the Main Division of Zone 1 (\$18.00), Zone 2 (\$18.00) and Zone 3 (\$28.00) above current rates.⁸² OCA St. 4 at 16. The details of Mr. Watkins' customer cost analyses are presented in OCA Schedule GAW-7. Table 10, below, provides a summary of the OCA's residential customer cost analyses for residential 5/8" meter water customers under the OCA's and Aqua's proposed cost of capital.

⁸² The OCA accepted Aqua's proposed increases to the customer charges for Bunker Hill and Phoenixville because the current rates and proposed rates are significantly lower than the current Main Division rates. OCA St. 4 at 16.

Aqua Water Residential Customer Costs (5/8" Meter Equivalent)		
	OCA Proposed Cost of Capital	Aqua Proposed Cost of Capital
Direct Costs	\$17.07	\$19.26
Direct + Indirect Costs	\$17.36	\$19.55

Table 10: Summary of results of the OCA’s residential customer cost analyses (OCA Schedule GAW-7) for residential 5/8” meter water customers under the OCA’s and Aqua’s proposed cost of capital. *See* OCA St. 4 at 16.

Aqua contended that the OCA’s attempt to exclude certain costs from the calculation of the residential water customer charge lacks merit and undermines the support provided by Aqua for its proposed residential water customer charges. Aqua M.B. at 234-35. Aqua specifically noted its reliance on Commission precedent in the *Aqua 2004 Order* in the development of its residential customer charge⁸³ and further averred that the Commission’s determination in the *Aqua 2004 Order* was subsequently affirmed in the *2012 PPL Order*. Aqua M.B. at 234-235.

(4) Aqua LUG

Only Aqua LUG addressed the issue of non-residential water charges. Aqua LUG’s Main Brief reiterated the arguments it raised in testimony regarding changes to the design of the customer charges and the rates for consumption blocks for commercial and industrial customers. *See* Aqua LUG M.B. at 10-12. Specifically, Aqua LUG’s witness, Mr. Baudino, testified that “Commercial and Industrial customer charges

⁸³ *Pa. PUC v. Aqua Pennsylvania, Inc.*, Docket No. R-00038805 (Order entered August 5, 2004) (*Aqua 2004 Order*).

and the rates for consumption blocks 1 through 4 are the same for both classes,” but noted “Industrial class rates also have 5th and 6th blocks that Commercial customers do not have.” Therefore, he recommended that the Company keep charges for blocks 1 through 4 of the Commercial and Industrial classes similar, while avoiding “excessive increases for blocks 5 and 6 of the Industrial class.” Aqua LUG St. 1 at 5-6. He further recommended that Aqua could shift some of the revenue allocated to the Industrial class to the Residential class to moderate any increases, if necessary. Aqua LUG St. 1 at 6.

Aqua responded to the arguments posed by Aqua LUG, contending that Aqua LUG’s proposals are unreasonable and unnecessary. Aqua M.B. at 229-230, 236-237.

b. Wastewater Rate Design

(1) Aqua’s Wastewater Rate Design Proposal

Aqua currently has eleven different wastewater rate zones, with different subsystems and eight different third-party customers. *See* Aqua Exh. 5-B, Part II, Schs. WW-2, LMK-3, EB-3, CH-3, EN-2, and NG-2. Since the Company’s last base rate proceeding, it has acquired the Limerick, East Bradford, Cheltenham, East Norriton, and New Garden systems through separate Section 1329 proceedings.⁸⁴ These five systems became Rate Zones seven through eleven, as shown in Table 11, below:

⁸⁴ *See* Aqua Pennsylvania, Inc. Tariff Sewer – PA P.U.C. No. 2, Original Page 5 through Supplement No. 6 to Tariff Sewer – PA P.U.C. No. 2, Third Revised Page 6.

Wastewater Operations - Rate Zones / Divisions

Rate Zone 1 (Main)	Rate Zone 1A	Rate Zone 1B
Media Division	Treasure Lake Division	Penn Township Division
Bidlewood Division	Village at Valley Forge Division	
Eagle Rock Division	Bunker Hill Division	
Rate Zone 2	Rate Zone 3	
Emlenton Borough Division	Beech Mountain Lakes Division	Stony Creek Division
Rivercrest Division	Deerfield Knoll Division	Thornhurst Division
White Haven Division	Laurel Lakes Division	Willistown Woods Division
Pinecrest Division	Links at Gettysburg Division	Woodloch Springs Division
Rate Zone 4	Rate Zone 5	Rate Zone 6
Honeycroft Village Division	Avon Grove School Division	CS Sewer Division (Masthope)
Lake Harmony Division	East Bradford Division	
New Daleville Division	Little Washington Division	
Peddlers View Division	Plumsock Division	
Tobyhanna Township Division	The Greens at Penn Oaks Division	
Twin Hills Division	Newlin Green Division	
	Sage Hill Division	
<u>Zones Recently Acquired Under Act 129, at 66 Pa. C.S. § 1329</u>		
Rate Zone 7 - Limerick Division		
Rate Zone 8 - East Bradford Township Division		
Rate Zone 9 - Cheltenham Township Division		
Rate Zone 10 - East Norriton Township Division		
Rate Zone 11 - New Garden Township Division		

Table 11: Aqua’s wastewater operations showing its Divisions by Rate Zone.

As a result of recent and prior acquisitions of wastewater systems, Aqua’s wastewater rates are comprised of several varying rate structures, including fixed

customer or EDU⁸⁵ charges, plus usage charges, unmetered flat rates, and structures with minimum usage allowances. Aqua proposed a similar model to its water operations for its wastewater operations with the intent of gradually grouping and consolidating divisions towards Rate Zones, specifically proposing to begin (or continue) movement to unified customer charges for metered customers.

Aqua's witness, Ms. Heppenstall, explained that the Company developed the following four guidelines for the design of wastewater rates: (1) move toward additional consolidation of rates across rate zones; (2) for metered areas, develop a rate structure that includes a customer charge or EDU charge and a single block usage charge; (3) for unmetered areas, develop a monthly flat rate equal to 4,000 gallons priced-out at the respective zone rates; and (4) where possible, eliminate an allowance. *See* Aqua St. 5 at 21-22. The Company presented a comparison of its present and proposed wastewater rates in Schedule F-WW of Aqua Exhibit 5-B, Part I.⁸⁶

⁸⁵ The Company's proposed wastewater tariff defines an EDU as follows:

Equivalent Dwelling Unit or "EDU": The EDU is a measure based upon the estimated average daily wastewater flow for the type of business, as calculated by the Pennsylvania Department of Environmental Protection regulation at 25 Pa. Code § 73.17 divided by the typical estimated average daily wastewater flow from a current single-family unit. In the Company's sole discretion, the Company may assign more than one (1) EDU for a residential Property.

See Tariff Sewer No. 3, Original Page 25.

⁸⁶ Ms. Heppenstall provided updates to her revenue allocation and rate design for wastewater service in Aqua Exhibit 5R-B, Part I, as part of her rebuttal testimony. The Company's revised revenue exhibits reflect corrections to: (1) Aqua's proposed unmetered charges for Woodloch Springs, and (2) Aqua's proposed rate for Southdown Homes. *See* Aqua Exh. 5R-B, Part II, Sch. WW-5 at 9 and 17.

In this proceeding, Aqua has proposed the same rates for Zones 1 and 2, and therefore, has merged Zone 2 into Zone 1. The proposed merger of Zone 2 into 1 (with which I&E disagrees) would mean that each subsequent zone could be reclassified up one (*i.e.*, Zone 3 customers would become Zone 2; Zone 4 customers would become Zone 3; Zone 5 customers would become Zone 4; and Zone 6 customers would become Zone 5). *See* Tariff Sewer, Original Page 5 and 6.

Additionally, as part of its consideration of the design of wastewater rates, Aqua performed an analysis of the feasibility of implementing a summer wastewater cap, as required by the settlement of its 2018 base rate proceeding. *See* Aqua Exh. 5-C. Based on this analysis, Aqua witness, Ms. Heppenstall, explained Aqua's contention that it was not appropriate to implement a summer wastewater cap for its wastewater customers:

[Aqua] performed an analysis based on capping usage at winter water usage levels for the Wastewater Base Operations. This cap would have the affect[sic] of raising the rates for all wastewater customers significantly and benefiting high water users. Our analysis, attached as Exhibit 5-C, shows that, under the cap, billed usage would decline by 38% and the average monthly bill for a residential customer using 4,000 gallons per month would rise to \$85.73, a 10.6% increase over the projected bill under proposed filed rates of \$77.49. In addition, as the wastewater operations benefit from the shift under Act 11 from wastewater to the water operations, it is conceivable that as wastewater rates rise due to the implementation of the cap, more Act 11 shifting would be needed to mitigate this increase.

Aqua St. 5 at 21-22.

(2) I&E

Consistent with the modifications I&E recommended for the Company's water rate design changes, I&E recommended similar adjustments to Aqua's proposed wastewater rates that are intended to reduce the size of Aqua's proposed Act 11 subsidy of wastewater customers. As such, I&E generally recommended higher rates for wastewater customers than those proposed by the Company, producing a larger increase for each division.⁸⁷ I&E provided a comprehensive summary of its proposed wastewater rate structure in its Main Brief that was presented in greater detail by its witness, Mr. Kubas, in his direct and surrebuttal testimony and accompanying exhibits. *See* I&E M.B. at 74-92; I&E St. 5; I&E St. 5-SR. In revising rates in Zones 1 through 6 to reduce the Act 11 contribution related to the wastewater customers in these rate zones, Mr. Kubas proposed the following recommendations shown in Table 12, below.

⁸⁷ As previously explained, I&E recommended an increase of \$6,097,022 for Rate Zones 1 through 6, as opposed to the Company's \$3,544,773 requested increase for those Zones, and an increase of \$10,589,684 for Rate Zones 7 through 11, as opposed to the Company's \$8,097,608 requested increase for those Zones. *See* I&E Exh. 5-SR, Sch. 1 at 1, Cols. I and L, lns. 7 and 18.

Summary of I&E Recommendation for Rate Zones 1-6

RZ 1:

- Increase the customer charges, unmetered rates and the volumetric charge by 46.8%.
- Increase the Media and Bunker Hill unmetered charge to \$90.00/month.
- **39.8% bill increase for an average residential customer.***

RZ 1A and 1B:

- Set these rates equal to Zone 1 rates.
- Eliminate the allowance in Zone 1B.
- **52.2% bill increase for an average residential customer in Zone 1A.***
- **42.5% bill increase for an average residential customer in Zone 1B.***

RZ 2 - Main:

- An across-the-board increase of 46.7% to tariff rates.
- No consolidation of Rate Zone 2 with Rate Zone 1 as proposed by Aqua.
- **39.7% bill increase for an average residential customer.***

RZ 2 - Pinecrest:

- Maintain Aqua's proposed rate design of no increase.

RZ 3 - Main:

- Increase the customer and volumetric charges by 36.6% per month.
- Consolidate the unmetered charges to one charge.
- **29.8% bill increase for an average residential customer.***

RZ 3 - Woodloch Springs (Flat Rate):

- Accepts Aqua's proposed rate structure based upon EDU billing, with no usage charge.
- Increase the monthly unmetered charge to \$109.00/month, as opposed to Aqua's proposal of \$101.03/month (\$109.00 per EDU is the same unmetered charge I&E proposed for Zone 3 - Main customers).
- **52.5% bill increase for an unmetered commercial customer.**

RZ 4:

- An across-the-board increase of 31.1% to tariff rates.
- **24.9% bill increase for an average residential customer.***

RZ 5:

- Accepts Aqua's proposed rates.
- **20.3% bill increase for an average residential customer in RZ 5 - Main.***
- **4.4% bill decrease for an average residential customer in RZ 5 - Newlin Green.***

RZ 6:

- Increase the customer charge by 41.8%, the usage rate by 160%, and the unmetered rate by 53.5%.
- **44.6% bill increase for an average residential customer.***

* I&E assumed an average 5/8" residential customer using 3,700 gallons per month.

Table 12: Summary of I&E's recommended rate changes for Aqua's wastewater Rate Zones 1 through 6 (*See* I&E Exh. 5, Sch. 2 at 1, Cols. F and L; I&E Exh. 5, Schs. 3-8 at 1, Col. F; *see also*, I&E Exh. 5, Sch. 2 at 2-4, Sch. 3 at 2; Sch. 4 at 2-4; Sch. 5 at 2; I&E Exh. 5-SR, Sch. 2; Aqua Exh. 5-B, Part II, Sch. WW-7 at 11-12; Aqua Exh. 5R-B, Part II, Sch. WW-5 at 9).

As previously indicated, Zones 7 through 11 include the Limerick, East Bradford, Cheltenham, East Norriton,⁸⁸ and New Garden systems, which were acquired after the *Aqua 2018 Rate Case*. Some of these systems have rates lower than present rates in Zones 1 through 6, and therefore, I&E argued that it is unfair to keep these rates artificially lower than the rates of existing customers. As delineated in Table 13, below, I&E recommended adjustments to rates in Zones 7 through 11 to reduce the subsidy, simplify the rate structure, and limit the increase to Zone 7 flat-rate customers and certain Zone 11 usage blocks. I&E reasoned that acquiring these systems should not harm existing Aqua customers; therefore, the larger than average increase to rates in Zones 7 through 11, shown on page 3 of I&E Exhibit 5-SR, Schedule 1, balanced out by the benefits to the municipality and/or customers of the acquired systems, will, according to I&E, limit the harm to other Aqua customers by reducing the subsidy paid by other non-Zone 7-11 Aqua customers. I&E noted that it is tempering the proposed increases in order to mitigate the large increases to the monthly customer charges, usage rates, unmetered rates, and average bills for both residential and commercial customers in Zones 7-11. I&E added that it is recommending rates so that the average residential bill increase is limited to generally less than 100%. I&E St. 5 at 35-38.

⁸⁸ Aqua acquired the Whitpain system with the East Norriton system on June 19, 2020 at Docket No. A-2019-3009052.

Summary of I&E Recommendation for Rate Zones 7-11

RZ 7 - Limerick:

- Increase the customer charge by 40.6% and the volumetric rate by 33.1%.
- Eliminate the allowance (also proposed by Aqua).
- Increase the unmetered rate to \$60.00/month.
- **89.2% bill increase for an average residential customer.***

RZ 8 - East Bradford:

- Monthly customer (EDU) charge of \$55.00, as opposed to Aqua's proposal of \$39.10.
- Volumetric charge of \$1.12/100 gallons.
- Accepts Aqua's proposed monthly commercial customer charge of \$39.10.
- **74.2% bill increase for an average Multi-Family Residential customer.***
- **84.3% bill increase for an average commercial customer.**

RZ 9 - Cheltenham:

- Increase the customer charge to \$30.00/month (43.6% increase).
- Increase the volumetric charge to \$0.68/100 gallons (73.9% increase).
- **56% bill increase for an average residential customer.***

RZ 10 - East Norriton & Whitpain:

- Increase the customer charge to \$35.00/month (66.0% increase).
- Increase the volumetric charge to \$0.76/100 gallons (16.2% increase).
- Eliminate the allowance (also proposed by Aqua).
- **72.6% bill increase for an average residential customer in RZ 10 - East Norriton.***
- **99.4% bill increase for an average residential customer in RZ 10 - Whitpain.***

RZ 11 - New Garden:

- Increase the customer charge to \$43.00/month (14.2% increase).
- Increase the residential volumetric charge to \$2.20/100 gallons for usage up to 5,000 gallons/month and \$3.1626/100 gallons for usage over 5,000 gallons per month.
- Eliminate the allowance (not proposed by Aqua).
- **81.7% bill increase for an average residential customer.***

* I&E assumed an average 5/8" residential customer using 3,700 gallons per month.

Table 13: Summary of I&E's recommended rate changes for Aqua's wastewater Rate Zones 7 through 11 (*See* I&E Exh. 5, Schs. 6-7 at 1, Cols. F and G; I&E Exh. 5-R, Sch. 2 at 1, Cols. F and G; *see also*, I&E Exh. 5. Sch. 6 at 2, 4, 5, Sch. 7 at 2, 3, 4; I&E Exh. 5-R, Sch. 2 at 2).

With respect to non-residential wastewater charges, only I&E addressed this issue. Specifically, as previously explained, I&E's proposed rate design changes

regarding Rate Zone 8 – East Bradford operations were based upon its proposals to reduce the Act 11 wastewater revenue allocation from this Rate Zone to water customers.

Aqua responded to I&E’s rate design proposals for wastewater rates, generally opposing the rate design modifications proposed by I&E. In this regard, the Company contended that I&E’s proposals would be contrary to the principles of gradualism, resulting in significant percentage increases to an average customer bill, as well as significant dollar-for-dollar increases. *See* Aqua M.B. at 222-23. Aqua particularly noted that I&E’s proposed changes to the commercial wastewater customer rates for Rate Zone 8 – East Bradford would increase the average bill by over 84%. Aqua M.B. at 245 (citing I&E Exh. 5, Sch. 6 at 5).

(3) OCA

As he contended with respect to the Company’s proposed increase to water customer charges, the OCA’s witness, Mr. Watkins, argued that the Company provided no support for its proposed increase to wastewater residential customer charges. OCA St. 4 at 17. Therefore, Mr. Watkins opposed Aqua’s proposal to increase the wastewater Rate Zone 1 5/8” monthly residential customer charge by \$8.10 per month, from \$31.00 to \$39.10. OCA St. 4-S at 17. Mr. Watkins argued that similar to Ms. Heppenstall’s customer cost analysis for water, her analysis for wastewater also includes numerous overhead costs that cannot be reasonably considered “direct costs” required to connect and maintain a customer’s account. OCA St. 4-SR at 7.

Aqua contended that the OCA’s arguments it proffered against the approval of the Company’s proposed residential wastewater customer charges lack merit and ignore the record evidence provided by Aqua. Aqua M.B. at 238-239. Aqua averred that the OCA’s proposal regarding Rate Zone 1 rates should be rejected because, as the Company’s witness, Ms. Heppenstall, demonstrated, the weighted average of all

wastewater customer charges under proposed rates is lower than the customer charge that the Company can support based upon a customer cost analysis which is summarized in Table 14, below:

Rate Zone	Metered Bills	Customer Charge Revenue*	Average Customer Charge
RZ 1	\$ 16,897	\$ 660,669	\$ 39.10
RZ1A	26,337	1,146,776	43.54
RZ1B	9,833	384,486	39.10
RZ2	11,663	492,629	42.24
RZ3	27,676	1,607,722	58.09
RZ4	8,085	626,580	77.50
RZ5	6,457	607,967	94.15
RZ5 - NG	588	54,957	93.45
RZ6	16,548	829,074	50.10
RZ7	82,876	3,271,931	39.48
RZ8	14,399	562,999	39.10
RZ9	202,241	5,705,208	28.21
RZ10	56,687	1,834,952	32.37
RZ11	25,392	1,361,551	53.62
Total	\$ 505,680	\$ 19,147,501	\$ 37.86

* Under proposed rates.

Table 14: Aqua’s summary of its average wastewater customer charge by Rate Zones (Aqua M.B. at 239 (citing Aqua St. 5-R at 11)).

Aqua further asserted that the OCA’s rate analysis was “incomplete,” and noted that although Mr. Watkins proposed to maintain the existing customer charge of Rate Zone 1, he did not discuss the customer charges for Rate Zones 2 through 6. Aqua St. 5-R at 11, 14.

With regard to Rate Zones 7, 8 and 10, the only area of disagreement between Aqua and the OCA is whether the residential wastewater customer charges should be \$31.00, which is the rate recommended by the OCA for residential Rate

Zone 1, rather than the Company's proposed charges of \$39.48, \$39.10 and \$32.37, respectively.⁸⁹ Aqua M.B. at 240-41; OCA M.B. at 102-03; OCA St. 4 at 18-19.

With regard to Rate Zone 11, the OCA objected to Aqua's proposal to increase the fixed monthly charge from \$37.64 to \$51.71 per month and recommended holding it at the current \$37.64 level, to avoid moving the charge further from the \$31.00 residential customer charge recommended by the OCA for most of the wastewater rate zones. OCA M.B. at 103. Also, similar to I&E, the OCA recommended eliminating the usage allowance. OCA M.B. at 103; OCA St. 4 at 18.

Aqua contended that the OCA's proposals regarding Rate Zones 7 through 11 are similarly meritless. Aqua M.B. at 240-43.

In addition to its recommended modifications to the Company's proposed wastewater rates, the OCA offered further proposals regarding Aqua's unmetered rates. OCA M.B. at 104-108. The OCA's discussion surrounding the rate design of Aqua's metered and unmetered customers centered on its concern that under present rates, the Company's average monthly metered revenue per customer, for all customers, is different than the Company's current unmetered rate. The OCA's witness, Mr. Watkins, identified nine wastewater rate zones that have both metered and unmetered residential rates. He explained that for some zones, the metered and unmetered rates are relatively close; but in others, there is a significant difference between rates for an average metered rate customer and flat rate customer. OCA St. 4 at 20; OCA Sch. GAW-8. For example, compared to metered rates, flat rates are 57% higher in Zone 5 and 30% lower in the

⁸⁹ The OCA accepted Aqua's proposed customer charge increase for Zone 9 residential customers. *See* OCA M.B. at 241.

Limerick Zone.⁹⁰ In this regard, the OCA requested that the Company study the reasonableness of its unmetered rates and provide the results in its next base rate proceeding. OCA St. 4 at 21.

According to Aqua, there are valid reasons for the differences between metered and unmetered rates. Aqua further explained that its unmetered rates assume an average usage of 4,000 gallons per month, which is standard industry practice. Aqua St. 5-R at 14-15. As to customers who pay a flat rate in Lake Harmony and Tobyhanna, Aqua took the position that customers pay to have wastewater service available, whether they are present at the service address for a few days or for longer periods of time; residency status is not a determinative factor. Aqua St. 9-R at 29.

Based on the concerns and testimony of several Lake Harmony wastewater customers regarding flat wastewater rates, as voiced at the public input hearings, the OCA's witness, Mr. Watkins, submitted supplemental direct testimony addressing the issue in Lake Harmony and several other developments where Aqua provides wastewater service, in which the water service is unmetered. OCA St. 4 SUPP. At those locations, wastewater customers either have their own wells or receive unmetered water from a community system. In these situations, the Company will bill wastewater service at a flat rate, where it uses average metered wastewater usage from customers with metered rates to develop a proxy of usage, which is then used to develop the rates. The OCA recommended that Aqua develop a pilot program to install meters for those customers who want them.⁹¹ Under this proposal, Aqua would install water meters on customer-owned wells on an opt-in basis. These opt-in customers would be billed at the applicable

⁹⁰ The current average monthly metered rate for the Avon Grove Division in Rate Zone 5 is \$113 (before DSIC) compared to \$177 for flat-rate customers. The current average monthly metered rate for Rate Zone 7 – Limerick is \$40 (before DSIC) compared to \$28 for flat rate. OCA St. 4 at 20, Table 8.

⁹¹ Complainant John Day wrote in support of the OCA's proposal. Letter in Lieu of Brief filed January 10, 2022.

metered rate. Mr. Watkins further proposed that the Company install water meters on other customer-owned wells based upon a random sample of 10% to 20% of the unmetered customers. These customers would be billed on a flat-rate basis, but the Company would prepare “shadow” bills based upon consumption. OCA St. 4 SUPP. at 2.

Aqua opposed this recommendation for a variety of reasons including cost and feasibility. Aqua St. 5-R at 17-18; Aqua St. 9-R at 29-30.

The OCA’s witness, Mr. Watkins, further testified in response to the result of the Company’s analysis of capping non-seasonal wastewater rates. *See* OCA St. 4 at 21-22. As previously indicated, Aqua performed an analysis of the feasibility of implementing a summer wastewater cap, as required by the settlement of its 2018 base rate proceeding. *See* Aqua Exh. 5-C. The basis for the cap is to address potential inaccuracies in the calculation of wastewater volumetric charges during the summer months when irrigation, swimming pool filling, and other outside watering activities are traditionally in use.⁹² Mr. Watkins recommended that the Company continue to study the feasibility of: (1) a capping mechanism with a winter multiplier greater than 100%;⁹³ and (2) the implementation of irrigation water meters on a customer-by-customer request basis. OCA St. 4 at 22.

⁹² Mr. Watkins testified that “In my experience, I am familiar with two mechanisms to fairly treat those customers whose Summer irrigation use is significant. The first and most prevalent are capping mechanisms similar to the one considered in the study conducted by Aqua. However, more often than not, I have seen capping mechanisms with an admittedly arbitrary multiplier such as 125% of Winter usage or 150% of Winter usage as a cap. This is different from the Company’s study wherein they used a multiplier of 100%; *i.e.*, simply capped at average Winter usage.” OCA St. 4 at 22.

⁹³ The OCA acknowledged that Aqua has already conducted an analysis of a capping mechanism with a multiplier of 100% but recommended that Aqua could study a multiplier greater than 100%. OCA St. 4 at 21-22.

Aqua opposed further study of a cap on non-seasonal wastewater rates, noting that it complied with its prior commitment from the 2018 base rate proceeding to provide a study as a part of this proceeding, and the results of the study revealed that a cap only benefits high water users. In addition, the imposition of a cap on non-seasonal wastewater rates could also result in a need to shift more wastewater revenue requirement to water rates. Aqua explained that the further studies proposed by the OCA will produce results similar to the analysis presented by Aqua in this case, and thus further studies are not necessary. Aqua St. 5-R at 15. Aqua also disagreed with the OCA's proposal to install irrigation meters on a customer opt-in basis, noting that such an implementation would increase revenue requirement for the installation and reading of meters and would not reduce revenue requirement recovery. Aqua R.B. at 104.

2. Recommended Decision

In her Recommended Decision, the ALJ recommended that the Commission adopt the overall wastewater rate design advocated by I&E, which was proposed to obtain I&E's Act 11 revenue allocation proposal:

I recommend that the Commission accept the methodology of I&E for allocating revenue and designing wastewater rates. I&E's approach takes into consideration the number of water and wastewater customers in each system and balances the goal of moving rates toward alignment with the cost of service, while also mitigating some of the large rate increases that would result if no allocation of wastewater revenue was approved. I&E's approach acknowledges the benefits received by the communities serviced by the Acquired Systems from the sale of their systems to Aqua, but is less complicated than the method advocated by OCA.

R.D. at 91.

Although the ALJ recommended adoption of I&E's proposed wastewater rate design, including its recommended customer charges, the ALJ found Aqua's water and wastewater residential customer cost analyses upon which it based its proposed increases to customer charges to be reasonable, stating:

While the Commission generally disfavors the inclusion of indirect costs into the calculation of customer charges, the Commission has nevertheless permitted the allocated portions of certain indirect costs such as employee benefits, local taxes and other general and administrative costs. I find that Aqua's witness adequately demonstrated that the indirect costs included in her study fall within the ambit of permissible general and administrative costs.

R.D. at 95.

In this regard, the ALJ implicitly rejected the OCA's residential customer charge proposals for water customers, while nonetheless, adopting I&E's recommended water rate design changes, based upon its proposal to reduce the Act 11 subsidy from water customers.⁹⁴ R.D. at 91, 95.

Regarding the reasonableness of unmetered rates, the ALJ agreed with the OCA and recommended that Aqua study whether a different method of calculating a flat rate would be more reasonable for some systems than applying a system-wide average and report the results in its next base rate case. R.D. at 98.

⁹⁴ I&E asserted that the Company's proposed percentage increases to the water customer classes should all be scaled back to 20% of the Company's original proposed percentage increases. I&E M.B. at 73. I&E explained that this scale back of water rates, including customer charges, should be proportional to the percentage increase originally proposed by the Company. I&E St. 4 at 18-20.

Although the ALJ saw the benefits of Aqua studying the reasonableness of its unmetered rates, finding that there may be areas in Aqua's service territory where unique circumstances may suggest that a different method of calculating a flat rate is more reasonable, ALJ Long however, rejected the OCA's proposal for the implementation of a metering pilot for flat-rate customers in the Lake Harmony service area, providing the following reasoning:

OCA does not include any cost estimates for its recommended pilot program but proposes that the meters be installed at Aqua's cost. No doubt, that cost would be socialized to all of Aqua's wastewater ratepayers. Some customers would "opt-in" for the installation of a meter. Other customers would not opt-in. This adds a layer of administrative complexity and costs, including costs to test and maintain meters and administer this program. While the Commission certainly favors consumption-based utility rates, it is not clear that the cost of OCA's proposed pilot will achieve overall benefits to Aqua's customers that will outweigh the costs. Therefore, I recommend the Commission reject OCA's proposal.

R.D. at 97.

Finally, the ALJ recommended that the Commission reject the OCA's recommendation regarding additional studies of a non-seasonal wastewater capping mechanism. The ALJ agreed with Aqua that further study of a non-seasonal wastewater capping mechanism is unnecessary, reasoning that the OCA did not demonstrate that further study would yield better results. R.D. at 99.

3. Exceptions and Replies

a. Aqua Exception No. 10 and Replies

In its Exception No. 10, Aqua submits that the ALJ erred in recommending that Aqua be required to provide a study in its next base rate case that would determine the reasonableness of unmetered rates. Aqua maintains its position, as argued by its witness, Ms. Heppenstall, that such a study is not needed. Aqua Exc. at 35. Aqua contends that Ms. Heppenstall fully explained the basis for the differences between metered and unmetered rates, as follows:

The large difference in Limerick and East Norriton is based on the fact that these are new acquisitions with legacy rates. The Company will rectify this disparity when it sets the rates in this case. For the other rate zones, the unmetered rate is based on an assumed average usage of 4,000 gallons per month plus a customer charge. The average usage of 4,000 gallons is substantiated in the Company's prior rate case as the pre-COVID pandemic average residential usage was 4,068 per month for the residential class. For example, in Bridlewood, the calculation of the unmetered rate under present rates equals \$31.00 plus the usage rate of .7600 per 100 gallons at 4000 gallons ($\$31.00 + .7600 \times 40$) or \$61.40. This calculation of the unmetered rate based on average usage is standard in the industry and used by other regulated water and wastewater utilities in Pennsylvania. For example, Pennsylvania American Water Company's unmetered wastewater rate for Zone 1 for 2022 is \$78.41 per month which was designed to equal the metered customer charge plus the usage rate multiplied by an average usage of 3,458 gallons.

Aqua M.B. at 244 (citing Aqua St. 5-R at 14-15) (emphasis added by Aqua).

Aqua further argues that the ALJ did not find the Company's use of unmetered rates or use of an average monthly usage of 4,000 gallons to be unreasonable,

but rather only found “that the use of a 4,000-gallon average monthly usage rate may not result in fair rates, and that there may be areas where a different method of calculating a flat rate is more reasonable.” Aqua Exc. at 35 (citing R.D. at 98 (emphasis added by Aqua)). Aqua notes that its witness, Mr. Todd M. Duerr, credibly testified that the average usage of 4,000 gallons was substantiated by the pre-COVID pandemic average residential usage shown in Aqua’s last base rate proceeding, and that its average usage amount was consistent with the average usage of other water utilities such as Pennsylvania-American Water Company. Aqua Exc. at 35 (citing Aqua St. 9-R at 14-15).

Additionally, Aqua posits that any results of such a study would be “speculative,” since many of the areas without metered water service have individual customer wells, which prevents access to the usage data needed to assess average usage for an area. Aqua Exc. at 35.

In its Replies, the OCA asserts that Aqua misunderstood the ALJ’s reasoning based on her concern that the usage amount assumption (derived from the system-wide average) for flat rates may not be reasonable for all areas of Aqua’s service territory, particularly in areas where there is a significant mix of types of housing or other unique circumstances. OCA R. Exc. at 15 (citing R.D. at 98; Aqua Exc. at 35). Therefore, the OCA maintains that, where the Company’s use of a system-wide average in the derivation of its unmetered rates is causing an unreasonable disparity in the rates charged to metered and unmetered customers, it is reasonable for Aqua to study and propose adjustments to its unmetered rates, which may include an adjustment to the usage assumption applied in a particular territory. OCA R. Exc. at 15.

Moreover, in reply to Aqua’s argument that due to customers being served by unmetered individual wells in some areas of its service territory, it lacks access to the usage data needed to perform such an analysis, the OCA notes that Aqua is ignoring the

nine individual territories where it charges some customers metered rates. OCA R. Exc. at 15. The OCA continues that Aqua has usage data at the individual system level, which informs its operations and compliance with regulatory requirements for wastewater collection, conveyance, treatment, and discharge. OCA R. Exc. at 15 (citing 25 Pa. Code. Chapters 91, 92a). Other information regarding housing size, occupancy and seasonal usage may be available from property owners' associations, local municipalities, and observation. OCA R. Exc. at 15.

b. OCA Exception No. 12 and Replies

In its Exception No. 12, the OCA disagrees with the ALJ's adoption of what it believes are overly inclusive residential customer cost analyses performed by Aqua, upon which the Company has based its residential customer charges for water and wastewater customers. OCA Exc. at 19-22.

The OCA maintains that a review of the specific indirect costs included in Aqua's studies show they do not fall within the ambit of costs that the Commission has historically permitted but are merely costs related to Aqua's general operation as a utility. The OCA noted its reliance on Commission precedent, which has generally permitted only expenses directly related to meter reading, customer service, accounting and customer records and collection, but has allowed costs associated with direct labor costs, including employee benefits, workers compensation insurance and payroll taxes, where portions of indirect costs have been permitted on a case-by-case basis. OCA Exc. at 20 (citing *Pa. PUC v. Metropolitan Edison Company*, 60 Pa. P.U.C. 349 (1985); *Pa. PUC v. West Penn Power Company*, 59 Pa. P.U.C. 552 (1985); *Pa. PUC v. West Penn Power Company*, 1994 Pa. PUC LEXIS 144, *154; *Pa. PUC v. National Fuel Gas Distribution Corporation*, 83 Pa. P.U.C. 262, 371 (1994); *see also*, 2004 PPL Order and Aqua 2004 Order). The OCA notes that more recently, the Commission has rejected a utility's proposed customer charge increase based on a cost analysis that included indirect costs.

OCA Exc. at 20 (citing *Pa. PUC v. PPL Gas Utilities Corporation*, Docket No. R-00061398 (Order entered February 8, 2007) at 137) (*2007 PPL Gas Order*).

The OCA submits that even when the additional types of costs that the Commission allowed in the *PSWC 2004 Order*⁹⁵ are included, the indicated customer costs are below the current Main Division 5/8” residential water customer charge of \$18.00 and, thus, there is no reasonable basis to increase the customer charges. OCA Exc. at 21. The OCA also maintains that Aqua’s proposal to increase the wastewater Zone 1 5/8” residential customer charge to \$39.10 should be rejected because the study that Aqua relies on improperly includes indirect overhead costs that are not reasonably related to connecting and maintaining a customer’s account, such as uncollectibles expense and rate case amortization. OCA Exc. at 21.

In addition to not supporting that level of customer charge increases with a direct cost study, the OCA contends that the magnitude of the increases is not supported by the public policy of gradualism and incentivizing conservation. OCA Exc. at 21 (citing *2007 PPL Gas Order*; *Pa. PUC v. Community Utilities of Pennsylvania, Inc.*, R-2021-3025206, *et al.* (Order entered January 13, 2022) at 62-63). The more revenue recovered through customer charges, the lower the volumetric rate, which impacts customers’ incentive to conserve. OCA Exc. at 21.

Contrary to the OCA’s claims in its Exceptions, Aqua maintains that the items the OCA asserts are “overhead costs” or “indirect expenses” are actually necessary for the support of customer facilities and customer accounting and should be considered direct costs. Aqua R. Exc. at 11 (citing Aqua M.B. at 234-35).

⁹⁵ *Pa. PUC v. Philadelphia Suburban Water Company*, Docket No. R-00038805 (Order entered August 3, 2004) at 72 (*PSWC 2004 Order*).

Moreover, Aqua counters that its customer cost analysis is consistent with Commission precedent; the ALJ evaluated these costs “on a case-by-case basis” consistent with this precedent. Aqua R. Exc. at 11 (citing Aqua M.B. at 235; R.D. at 95). Aqua further asserts that the OCA’s argument that Aqua’s proposed customer charges violate gradualism and do not incentivize conservation should be rejected. Aqua R. Exc. at 11 (citing OCA Exc. at 21). Aqua argues that its rates were designed to balance these considerations with the cost of serving its customers and demonstrated that its rate design guidelines were reasonable and appropriate. Aqua R. Exc. at 11-12 (citing Aqua M.B. at 230-33, 237-38).

c. OCA Exception No. 13 and Replies

In its Exception No. 13, the OCA disagrees with the ALJ’s adoption of I&E’s wastewater rate design methodology. OCA Exc. at 22 (citing R.D. at 88-89, 91, 96; OCA M.B. at 101-04; OCA R.B. at 60-61). Rather, the OCA maintains that its proposed wastewater rate design for the legacy systems and acquired systems is more reasonable and should be adopted. OCA Exc. at 22.

The OCA noted that I&E witness, Mr. Kubas, acknowledged that he normally would not support increasing the customer charges above cost, but he did so in this case because it provided more revenue. OCA Exc. at 22 (citing I&E St. 5 at 10, 38; I&E St. 5-R at 5). The OCA argues the additional revenue is derived from I&E’s proposed 46.8% increase to Zone 1 customer charges, from \$31.00 to \$45.50 per month, which is nearly two times the increase proposed by the Company as well as I&E’s proposed increases to all of the 5/8 customer charges that range between 26% and 66% and exceed their costs. OCA Exc. at 22 (citing I&E Exh. 5, Schs. 2-8).

On the other hand, the OCA submits that under its proposal, customer charges are supported by cost analyses and move customer charges toward consolidation

with the main wastewater zone customer charges. The OCA posits that under its proposal, customers will: (1) be charged cost-based fixed rates; (2) receive proper price signals; and (3) have more control of their bills. OCA Exc. at 22-23 (citing OCA R.B. at 58-61; OCA M.B. at 102-04; OCA St. 4 at 17-20). Further, the OCA contends that unlike I&E's proposal, the OCA's recommendations flow from its proposed customer charges for Zone 1 and reasonably move other divisions toward consolidation with those charges. OCA Exc. at 22 (citing OCA St. 4 at 17-20).

In its Replies, Aqua submits that the OCA's argument regarding the adoption of I&E's proposed wastewater rate design should be denied for the same reasons that the Company opposes the ALJ's adoption of I&E's proposed wastewater rate design and revenue allocation. Aqua R. Exc. at 12 (citing OCA Exc. at 22-23; Aqua Exc. at 31-34; Aqua R.B. at 102-04; Aqua M.B. at 237-43).

In its Replies, I&E notes that it made revisions in its final schedule that addressed the positions proffered by other Parties, including the OCA. Therefore, I&E asserts that the Commission adopt I&E's final wastewater revenue allocation and rate design, as discussed in I&E Exception No. 2. I&E R. Exc. at 17 (citing I&E Exc. at 4-5; I&E St. 5-SR at 4; I&E Exh. 5-SR, Sch. 1 at 1).

d. OCA Exception No. 14, Mr. Osinski's Exceptions, and Replies

In its Exception No. 14, the OCA submits that the ALJ erred by rejecting its proposal for the implementation of a metering pilot for flat-rate customers in the Lake Harmony service area. OCA Exc. at 23-25.

Referencing Aqua's continuation of deduct metering⁹⁶ programs for some of its acquired systems, specifically its Cheltenham service territory, the OCA contends that the cost and operational data from that existing deduct metering program can help to inform how the pilot is structured. Moreover, the OCA argues that the benefits of a pilot program, which assists in moving flat-rate customers to metered rates in an area where a significant number of customers may use less than (or more than) the average usage of 4,000 gallons, outweigh the costs, which, according to the OCA, should be reasonable since the pilot would involve only a few hundred customers. OCA Exc. at 23-24.

As such, the OCA excepts to the ALJ's suggestion to delay a remedy until the next base rate case because it will delay relief to customers who, under the OCA's proposal, could begin participating in a pilot program within a few months of a final order in the current case. The OCA maintains that Aqua should be directed to adopt a program, on a pilot basis, as a reasonable and measured response to the concerns raised by its customers regarding flat rates. OCA Exc. at 24-25.

In its Replies, Aqua maintains its opposition to any requirement to install Company water meters on customer owned (wells) or community owned water supplies, in order to implement metered wastewater rates, reemphasizing the arguments presented in its briefs. Aqua R. Exc. at 12-13 (citing Aqua M.B. at 243-44; Aqua R.B. at 103). Aqua adds that it has no right to enter customers' premises to demand the installation of water meters where Aqua does not provide the water supply and posits that an "opt-in" pilot will only lead to meter installations where customers have decided that their usage is below average, thereby negating the validity of the "pilot." Aqua R. Exc. at 12.

⁹⁶ Deduct metering is a mechanism which allows individual customers, using a significant amount of outside water, such as for an irrigation system, to have a separate irrigation water meter installed. This second meter, known as a deduct meter, measures the flow of water that does not enter the wastewater system and is used to calculate a reduction in wastewater charges. *See generally*, OCA St. 4 at 21-22, and 25; OCA Exc. at 25; Aqua R. Exc. at 13; and OCA M.B. at 109.

Mr. Osinski also filed exceptions to the Recommended Decision, specifically taking issue with the flat-rate service provided to the Camp Stead Property Owners Association, which is part of Aqua's Tobyhanna Township Division. Mr. Osinski argues that the private development (Camp Stead Property Owners Association) in which he resides is served by a metered community well; however, Aqua does not meter his wastewater. Mr. Osinski contends that Aqua's practice of basing his flat rate on 4,000 gallons of consumption per month is unjustified, and as a result, he is being charged far more than he uses. Osinski Exc. at 1-4.

In its Replies to the Exceptions of Mr. Osinski, Aqua points to its response to OCA Exception No. 14, in which it addresses concerns related to the flat-rate service provided to certain customers. Additionally, Aqua notes that it responded to concerns raised by customers at residences on Camp Stead Circle in its Main Brief. Aqua R. Exc. at 13 (citing Aqua M.B. at 179-180).

Furthermore, Aqua notes that Exhibits A-G, L and Q, attached to Mr. Osinski's Exceptions, appear to be extra record evidence, not permitted to be introduced in his Exceptions, and thus, should be disregarded. Aqua R. Exc. at 13 (citing *Application of Apollo Gas Company*, 1994 Pa. PUC LEXIS 45 (Order entered February 10, 1994) at *8-9 (denying party's attempt to introduce extra-record evidence in its exceptions)).

e. OCA Exception No. 15 and Replies

In its Exception No. 15, the OCA submits that the ALJ erred by not requiring the Company to study the feasibility of affording additional customers the option of deduct metering. OCA Exc. at 25-26 (citing R.D. at 99).

The OCA explains that the ALJ did not distinguish between the studies recommended by its witness, Mr. Watkins, and, as such, did not address the OCA's recommendation for an alternative study, which Mr. Watkins opined may be the fairest for Aqua – installing irrigation water meters on a customer-by-customer request basis. OCA Exc. at 25 (citing OCA M.B. at 109-10; OCA R.B. at 65-66; OCA St. 4 at 22). The OCA notes that, to its knowledge, Aqua has not already conducted any studies on irrigation metering, also referred to as deduct metering. *Id.*

Further, the OCA argues that Aqua's objection to studying the feasibility of opening its deduct metering program to Aqua's non-Cheltenham customers is not reasonable, since the Company already has a deduct metering program in its Cheltenham service territory and two years of cost and operational data from that program. Therefore, the OCA submits that the results of that study, including either a proposal to make deduct metering available to more or all customers or a detailed explanation for why Aqua believes expansion is infeasible in other service territories, should be filed no later than Aqua's next base rate case. OCA Exc. at 25-26.

Contrary to the OCA's arguments, Aqua replies that no such study should be ordered. Aqua maintains its argument that the installation of a second meter to measure usage deductions will only increase the revenue requirement for installing and reading meters and will not reduce the revenue requirement that needs to be recovered. Aqua R. Exc. at 13 (citing Aqua R.B. at 104; Aqua M.B. at 244-45).

4. Disposition

a. Water and Wastewater Rate Design

As previously explained, the allocation of the rate increase among the customer classes of both Aqua's water and wastewater divisions, and ultimately the rate

design under each division, was a significant issue in this proceeding.⁹⁷ In cases such as the instant one before us, the ALJ and the Commission are faced with the difficult task of balancing the justness and reasonableness of all components of revenue allocation and rate design. The reality is, as a result of the difficult choices that must be made, all customer classes will inevitably experience some degree of an undesired impact. Consistent with our discussion, *supra*, regarding the issue of revenue allocation, and based on our review of the supporting information contained in the record, we find that the ALJ's determinations regarding rate design are sufficiently supported by the evidentiary record. Accordingly, based on our discussion below, we find that the OCA's arguments against the ALJ's recommendation concerning this matter are without merit.

In reaching this determination, we have reviewed the rate designs adopted by the ALJ and found them to be reasonable, affording appropriate primary consideration to cost causation principles per *Lloyd* in tandem with secondary consideration for the value of service, gradualism, and affordability.

There is not a prescribed "ratemaking formula" that the Commission must adhere to when determining just and reasonable rates. Rather, the Commission "has broad discretion in determining whether rates are reasonable" and "is vested with discretion to decide what factors it will consider in setting or evaluating a utility's rates." *Popowsky II*. Included in the Commission's broad ratemaking authority is the authority to approve alternative rates and rate mechanisms, including formula rates as well as decoupling mechanisms, performance-based rates, and multiyear rate plans. 66 Pa. C.S. § 1330(b)(1)(i)-(v).

⁹⁷ In this proceeding, the Company invoked the Commission's authority under Section 1311(c) of the Code to mitigate the impact of revenue increases on wastewater customers by recovering a portion of the Company's wastewater revenue requirement from its total water and wastewater customer base. *See* 66 C.S. § 1311(c).

With that said, we acknowledge that a set of ratemaking norms have been developed over time and have been consistently utilized by parties in rate cases before the Commission to determine the appropriate level of a utility's requested revenue increase in accordance with all applicable legal and constitutional standards. These norms, or traditional ratemaking methodologies,⁹⁸ are used to determine a utility's cost of providing service, or its revenue requirement, and to determine appropriate rate structure, which includes, among other things, the appropriate allocation of the revenue requirement to various customer classes. However, while these ratemaking norms provide a rational and methodical way to analyze and determine the utility's cost of service, they also permit the consideration and weighing of important factors or principles in setting just and reasonable rates, such as quality of service,⁹⁹ gradualism,¹⁰⁰ and rate affordability.¹⁰¹

We acknowledge that there are several factors that must be considered when designing a rate recovery proposal, including the concepts of gradualism and affordability. We emphasize, however, that while affordability is permitted to be considered, it is but one of many factors to be considered and weighed by the Commission in determining the utility's rates. The rate increase reflects the business challenges the Company currently faces, including required investments in the repair/replacement or improvement of its distribution systems, including newly acquired

⁹⁸ See, e.g., *Pa. PUC, et al. v. PPL Electric Utilities Corporation*, Docket Nos. R-2015-2469275 *et al.* (Recommended Decision issued October 5, 2015) at 32-33.

⁹⁹ See 66 Pa. C.S. §§ 523, 526(a).

¹⁰⁰ See *Lloyd*, 904 A.2d at 1020 (explaining that gradualism is the principle under which utility rates are gradually increased in order to avoid rate shock, as part of what is overall considered a reasonable rate under the circumstances and is permitted in implementing large rate increases).

¹⁰¹ See *Pa. PUC et. al v. Twin Lakes Utilities, Inc.*, Docket No. R-2019-3010958 (Order entered March 26, 2020) at 48, 80 (the ALJ did not err in considering evidence relating to the various quality of service and rate affordability issues in the proceeding and factoring in such evidence as part of her overall determination on which expert witnesses' cost of equity to adopt for setting just and reasonable rates).

water and wastewater distribution systems; and the high costs associated with maintaining a distribution system necessary to provide safe and reliable water and wastewater service within the Commonwealth.

As discussed, *supra*, Aqua's proposal, establishing an Act 11 subsidy close to one-third of the wastewater revenue requirement would result in wastewater rates that do not bear a reasonable relationship to the Company's cost of serving those customers. In consideration of Aqua's recent Section 1329 acquisitions and the consequences of the Company's request to have water customers subsidize rate increases for customers in wastewater Rate Zones 1 through 6, as well as to absorb a significant portion of the revenue shortfalls of the newly acquired wastewater systems, Rate Zones 7 through 11, we find I&E's approach in limiting the Act 11 subsidies¹⁰² and its subsequent rate design proposals, adopted by the ALJ, to be a reasonable compromise between the conflicting objectives of moving towards consolidated rates and maintaining gradualism in customer bill impacts.

Table 15, below, provides a comparison of residential wastewater bills for a typical residential customer under the Company's proposed rates and under I&E's proposal. Under Aqua's proposed rates, residential wastewater customers would see increases ranging from 7.9% to 84.9%, with Rate Zone 5 – Newlin Green experiencing a proposed decrease. Under I&E's proposed rates, residential wastewater customers would see increases ranging from 20.3% to 86.0%, excluding the increase to Rate Zone 10 – Whitpain, where the average residential customer will experience an increase of approximately 106.6%. As I&E noted, this larger than average increase is

¹⁰² I&E's approach for allocating wastewater revenue and designing wastewater rates allows for each type of utility service to recover as much of the cost of providing services as possible without removing the Act 11 subsidy, which would result in unreasonably large increases to the monthly customer charges, usage rates, unmetered rates, and average bills for both residential and commercial wastewater customers.

justified for three reasons: (1) the average bill under current rates of \$31.66 per month is the lowest average bill for all zones; therefore, to move the average bill closer to other average bills, a larger percentage increase is necessary; (2) the Company's desire to consolidate all Zone 10 rates justifies the higher rates for Zone 10 – Whitpain to match Zone 10 – East Norriton rates; and (3) even with higher rates causing a higher than average increase for Zone 10 – Whitpain, total Rate Zone 10 operations will continue to need \$1,378,735 of subsidy from water customers. *See* I&E St. 5 at 52-53.

Wastewater Division
Bill Comparison of 5/8" Metered Residential Customers with Average Usage*

	Average Current Monthly Bill	Aqua Proposal		I&E Proposal	
		Monthly Bill	% Increase	Monthly Bill	% Increase
RZ 1 - Main	\$64.47	\$77.49	20.2%	\$90.12	39.8%
RZ 1A	\$59.01	\$77.49	31.3%	\$90.12	52.7%
RZ 1B	\$64.05	\$77.49	21.0%	\$90.12	40.7%
RZ 2 - Main	\$71.82	\$77.49	7.9%	\$100.32	39.7%
RZ 3 - Main	\$84.00	\$101.03	20.3%	\$109.04	29.8%
RZ 4 - Main	\$105.00	\$125.00	19.0%	\$131.13	24.9%
RZ 5 - Main	\$118.02	\$141.94	20.3%	\$141.94	20.3%
RZ 5 - Newlin Green	\$147.00	\$141.94	-3.4%	\$141.94	-3.4%
RZ 6 - Masthope	\$45.82	\$55.15	20.4%	\$66.60	45.4%
<u>Zones Recently Acquired</u>					
RZ 7 - Limerick	\$39.73	\$72.94	83.6%	\$73.90	86.0%
RZ 8 - East Bradford (Multifamily Residential)	\$55.36	\$83.42	50.7%	\$99.80	80.3%
RZ 9 - Cheltenham	\$36.53	\$49.34	35.1%	\$57.20	56.6%
RZ 10 - East Norriton	\$38.52	\$58.53	51.9%	\$65.40	69.8%
RZ 10 - Whitpain	\$31.66	\$58.53	84.9%	\$65.40	106.6%
RZ 11 - New Garden	\$73.03	\$100.34	37.4%	\$130.99	79.4%

* Average 5/8" residential customer using 4,000 gallons per month.

Table 15: Comparison of residential wastewater bills for a typical residential customer under the Company's proposed rates and under I&E's proposal. *See Aqua Exh. 5-B, Part II, Sch. WW-7; see also, I&E Exh. 5, Sch. 2 at 2-4, Sch. 3 at 2, Sch. 4 at 2 and 4, Sch. 5 at 2, Sch. 6 at 2 and 4, Sch. 7 at 2-3; I&E Exh. 5-R, Sch. 2 at 2.*

Furthermore, since the average bill under current rates is lower in Rate Zones 1 and 6 than it is for Rate Zones 2 through 5, it is reasonable that Rate Zones 1 and 6 would experience larger percentage increases compared to Rate Zones 2 through 5. Since the Company presented one cost of service study for Rate Zones 1 through 6, there is no justification for such a wide variety in rates and corresponding average bills.

The overall bill impact to a typical residential water customer bill would be overall less than the Company's proposal,¹⁰³ since I&E's recommended water rate design changes are based upon its proposal to reduce the Act 11 subsidy from water customers. In this regard, a bill for a typical residential water customer would reflect I&E's recommendation that the Company's water rates be scaled back to 20% of the Company's original proposed percentage increases, and that the recommended scale back, including customer charges, be proportional to the percentage increase originally proposed by the Company. *See* I&E M.B. at 73; I&E St. 4 at 18-20.

Moreover, the higher percentage increases to a typical residential customer bill recommended by I&E's rate design for Rate Zones 7 through 11 are indicative of the substantial revenue shortfall attributable to these newly acquired systems, even under the Company's proposed rates. Without the, albeit, more moderate Act 11 subsidy proposed by I&E, compared to Aqua's proposal, these wastewater rates would necessarily have to be increased even further. As such, we find I&E's rate design reasonably mitigates the impact of revenue increases onto these wastewater customers by recovering a portion of the Company's wastewater revenue requirement from its total water and wastewater customer base.

The OCA also excepts to the ALJ's recommendation, arguing that Aqua's proposed customer charges are based on its flawed cost of service study results, violate the principle of gradualism, and would result in a disincentive for customers to engage in conservation activities. Therefore, the OCA's wastewater rate design recommendations include its contention that there is no cost justification for increasing the present \$31.00

¹⁰³ Under the Company's proposal, a residential customer in the Main Division of Rate Zone 1, using 4,000 gallons of water per month, would experience a monthly bill increase from \$69.35 to \$81.32, or 17.3% per month, and residential customers in other water divisions would experience increases ranging from 17.3% to 51.3%. *See* Aqua Exh. 5-A, Part II, Sch. 8.

per month 5/8” residential customer charge in Rate Zone 1. Upon our consideration of the evidence and record herein, we conclude that the ALJ correctly recommended that, consistent with the *Aqua 2004 Order*, and subsequently affirmed in the *2012 PPL Order*, other customer-related costs are properly includable in a customer cost analysis. We find that the OCA proposed limitation of costs excludes customer costs that should be included in a customer charge and is unreasonably narrow.

As previously indicated, although the ALJ accepted Aqua’s water and wastewater residential customer cost analyses upon which it based its proposed increases to customer charges, the ALJ adopted I&E’s proposed rate design which includes the wastewater customer charges summarized in Table 16, below.

Further, we are persuaded by I&E’s reasoning for its increase to the 5/8” residential customer charge for Rate Zone 1:

While I normally would support not increasing the monthly 5/8th inch residential customer charge based upon cost, there are other factors to consider in this case. First, the present \$31.00 per month customer charge is below the monthly customer charges in Zones 3 through 5. Therefore, in order to move towards consolidation of the customer charges in these zones, the present Zone 1 customer charge of \$31.00 per month should be increased. Customer charges should be consolidated in Zones 1 through 6 for fairness and simplicity. Second, the remaining revenue increase will have to come from increasing the usage charge. Therefore, given this low customer charge, I recommend that the OCA proposal be rejected.

I&E St. 5-R at 5-6. Additionally, as I&E indicated, the OCA did not address the remaining meter sizes in Rate Zone 1, the other classes in Rate Zone 1, or the other customer charges in Rate Zones 2 through 6.

Wastewater Division
Comparison of 5/8" Metered Residential Customer Charges

	Current	Aqua Proposal		I&E Proposal	
	Customer Charge	Customer Charge	% Increase	Customer Charge	% Increase
RZ 1 - Main	\$31.00	\$39.10	26.1%	\$45.50	46.8%
RZ 1A	\$31.00	\$39.10	26.1%	\$45.50	46.8%
RZ 1B	\$31.00	\$39.10	26.1%	\$45.50	46.8%
RZ 2 - Main	\$36.00	\$39.10	8.6%	\$52.80	46.7%
RZ 3 - Main	\$46.00	\$58.09	26.3%	\$62.70	36.3%
RZ 4 - Main	\$62.00	\$77.50	25.0%	\$81.30	31.1%
RZ 5 - Main	\$74.00	\$93.45	26.3%	\$93.45	26.3%
RZ 5 - Newlin Green	\$110.00	\$93.45	-15.0%	\$93.45	-15.0%
RZ 6 - Masthope	\$39.64	\$50.10	20.4%	\$56.20	41.8%
<u>Zones Recently Acquired</u>					
RZ 7 - Limerick	\$28.10	\$39.48	40.5%	\$39.50	40.6%
RZ 8 - East Bradford (Mult-Family Residential)	Current Flat Rate	\$39.10		\$55.00	
RZ 9 - Cheltenham	\$20.89	\$28.21	35.0%	\$30.00	43.6%
RZ 10 - East Norriton	\$21.08	\$32.37	53.6%	\$35.00	66.0%
RZ 10 - Whitpain	\$31.66	\$32.37	2.2%	\$35.00	10.5%
RZ 11 - New Garden	\$37.64	\$51.71	37.4%	\$43.00	14.2%

Table 16: Comparison of 5/8" metered residential wastewater customer charges. *See* I&E Exh. 5, Schs. 2-7 at 1; I&E Exh. 5-R, Sch. 2 at 1.

With regard to the concerns expressed by the OCA that the Company's proposed customer charges will discourage conservation, we note that the customer charges, shown above, in the context of the total monthly bill for a typical 5/8" meter residential wastewater customer, would comprise approximately 47% to 91% of the charges on the bill under the Company's proposal and only approximately 33% $[(\$43.00 \div \$130.99) \times 100 = 33\%]$ to 84% $[(\$56.20 \div \$66.60) \times 100 = 84\%]$ under I&E's wastewater rate design proposal. This is less than the portion of a typical bill for a 5/8" meter wastewater residential customer under current rates, of which approximately 48% to 87% is attributable to the customer charge, as shown in Table 17 below:

Wastewater Division
Comparison of the Portion of a Customer's Bill Attributable to the Customer Charge

	<u>Current Rates</u>	<u>Aqua Proposed Rates</u>	<u>I&E Proposed Rates</u>
RZ 1 - Main	48%	50%	50%
RZ 1A	53%	50%	50%
RZ 1B	48%	50%	50%
RZ 2 - Main	50%	50%	53%
RZ 3 - Main	55%	57%	58%
RZ 4 - Main	59%	62%	62%
RZ 5 - Main	63%	66%	66%
RZ 5 - Newlin Green	75%	66%	66%
RZ 6 - Masthope	87%	91%	84%
<u>Zones Recently Acquired</u>			
RZ 7 - Limerick	71%	54%	53%
RZ 8 - East Bradford (Multifamily Residential)	100%*	47%	55%
RZ 9 - Cheltenham	57%	57%	52%
RZ 10 - East Norriton	55%	55%	54%
RZ 10 - Whitpain	100%*	55%	54%
RZ 11 - New Garden	52%	52%	33%

*Average use customers, using 4,000 gallons per month, are currently billed a flat rate.

Table 17: Comparison of the portion of a customer's wastewater bill attributable to the customer charge.

Regarding the Company's water rate design proposal, the portion of charges attributable to the customer charge on a typical 5/8" meter water residential customer would range from approximately 21.6% [$(\$4.90 \div \$22.66) \times 100 = 21.6\%$] for customers in the Phoenixville Division to 39.8% [$(\$32.40 \div \$81.32) \times 100 = 39.8\%$] for customers in Rate Zone 3 – Main. Reflective of I&E's effort to reduce the Act 11 subsidy, with which we agree, I&E's proposal simply scales back the Company's proposed percentage increases for water customers to 20% of the Company's original

proposal. Therefore, we find that I&E's proposal reasonably balances the principles of gradualism with the challenges of rate consolidation, especially those that come with newly acquired systems, while preserving adequate opportunity for customer savings due to conservation efforts. As such, we find no basis to reverse the ALJ's recommendation. Accordingly, OCA Exception Nos. 12 and 13 are denied.

b. Unmetered Residential Wastewater Rates

Aqua explained that similar to many wastewater systems throughout the Commonwealth, Aqua does serve a limited number of areas where wastewater customers are billed on a flat rate, meaning that unmetered customers receiving wastewater service from Aqua pay the same amount each month, *i.e.*, their water consumption does not have an effect on their monthly wastewater bills. Unmetered, flat-rate wastewater customers make up the communities of Tobyhanna, Pennsylvania (730 customers) and Lake Harmony, Pennsylvania (995 customers).¹⁰⁴ These communities were billed on a flat rate prior to Aqua's acquisition of these wastewater systems, and the Company has continued to bill the customers on a flat-rate basis. Aqua St. 9-R at 28.

There is no question that volumetric billing is preferable to flat-rate billing, as it provides better price signals and promotes conservation, as well as resulting in a more equitable distribution of the variable costs of wastewater service among ratepayers. However, in situations, such as this, where metered water information is unavailable, we acknowledge the standard industry practice of basing the flat rate on a system-wide average usage per month plus a customer charge. As indicated previously, Aqua assumes an average 5/8" meter residential customer uses 4,000 gallons per month.

¹⁰⁴ Customers in Tobyhanna and Lake Harmony obtain their water supplies from individual wells not owned or operated by a utility or a municipality/municipal authority. Aqua St. 9-R at 28.

The flat charge should be reasonable and appropriate, and sufficient to cover the intended costs. The challenge is the development of a reasonable flat-rate charge. In this regard, we cannot ignore the disparity in the rates charged to metered and unmetered customers in certain divisions where Aqua serves both types of customers, as illustrated by the OCA. For these reasons, we agree with the ALJ's recommendation that directs Aqua to study and report the results in the next base rate proceeding, in order to determine whether different methods of calculating a flat rate would be more reasonable for some systems rather than applying a system-wide average to each system. Accordingly, Aqua Exception No. 10 is denied.

The primary concern at the public input hearings voiced by customers receiving wastewater service in the Tobyhanna and Lake Harmony service areas, including Mr. Osinski, was that flat-rate billing is unfair to customers with below average usage, including customers who may be part-time residents that may use less than full-time residents. *See* Tr. at 70-71, 166-68, 175-81, and 323-25. Recognizing that customers in Lake Harmony have private water wells on their property that are not individually metered, the OCA proposed a pilot program in Lake Harmony to install meters: (1) on an opt-in basis for those customers that request metered wastewater service, (2) on other customer-owned wells based upon a random sample of 10% to 20% of the unmetered customers. *See* OCA St. 4 SUPP. at 2.

Although we find merit in the OCA's proposal that Aqua study whether a different method of calculating a flat rate would be more reasonable for some systems than applying a system-wide average, we cannot say the same for its Lake Harmony pilot program proposal. Instead, we find persuasive the testimony of Aqua's witness, Ms. Heppenstall, explaining the impracticability of the OCA's proposal:

I disagree for two reasons. One, the Company does not have the authority to meter a representative sampling of customer owned private wells. Allowing customers to opt in would

only incentivize those customers with low water consumption, not the perceived larger users. Second, there are concerns about the ability to access customers' property to properly install a meter on a well. I understand that Company Witness Todd Duerr will explain the operational issues with this pilot program in his rebuttal testimony ([Aqua St. 9-R]). There may be substantial cost involved, and Mr. Watkins' proposal is that the Company bear the cost of such installations. Finally, the lack of authority to meter all privately owned wells means that the "pilot" can never be adopted as a permanent solution. Customers would continually opt for the lesser cost alternative. Mr. Watkins' proposal is unworkable.

Aqua St. 5-R at 17-18. We also find it difficult to ignore the operational issues with the OCA's proposal, highlighted by Aqua's witness, Mr. Duerr:

First, we reinforce that industrywide flat sewer rates have been utilized to bill for public or private wastewater service in instances where customers have private wells throughout the Commonwealth. While we understand the customer's desire to limit any rate increase, resorting to changing the current methodology on which these customers are billed will not impact that reality, and in fact, some customers could be billed more. For wastewater only customers that receive water from private wells, the Company would be required to enter, traverse, and locate a customer's water well, to a property the Company does not have a right to enter, install a Company owned meter somewhere on a customer's property where a water well is located, and maintain that property going forward. That in and of itself is problematic.

Aqua St. 9-R at 29-30.

Regarding Mr. Osinski's assertion that the well servicing his community is metered, Mr. Duerr explained that "the well, the water meter, and the water distribution system are owned by the community. There are not individual meters measuring usage to

each customer's residence. As such, the Company cannot bill these individual customers based on usage from one community water meter." Aqua St. 9-R at 30-31.

Based upon our review of the record evidence, we agree with the recommendation of the ALJ that the OCA's proposal be rejected, as it is not clear that the cost of the OCA's proposed pilot will achieve overall benefits to Aqua's customers that will outweigh the costs. The OCA does not explain: (1) Aqua's authority to place a meter on a person's water line; (2) how higher-usage customers could be "incentivized" to opt-in in the future; nor (3) why wastewater cost of service should be increased to cover the cost of installing, maintaining, and reading water meters for wastewater service. As such, we find no basis to reverse the ALJ's recommendation. Accordingly, OCA Exception No. 14 and Mr. Osinski's Exceptions are denied.

With regard to the OCA's argument that the Company be required to study the feasibility of opening an irrigation or deduct metering program to Aqua's non-Cheltenham customers and file the results of the study no later than the Company's next base rate case, we agree with the ALJ that the OCA has not demonstrated that further study would yield better results. Aqua noted that further studies are not necessary because the results will be similar to the analysis presented by the Company in the instant base rate case. Further, Aqua noted that the installation of a meter to measure usage deductions will increase the revenue requirement and not reduce the revenue requirement subject to recovery. Aqua M.B. at 244-45. Moreover, beyond arguing that it is unaware if the Company has conducted any studies on irrigation metering, the OCA has not sufficiently demonstrated why the Company should be required to conduct an irrigation metering study at this time. Accordingly, we find the OCA's argument that the Commission require the Company to conduct an irrigation metering program study to be unpersuasive.

To the extent that the OCA contends that the ALJ did not sufficiently acknowledge the OCA's irrigation water meter study, we note that the ALJ was aware of the positions and arguments put forth by the OCA, including the studies recommended by the OCA; however, it is up to the ALJ to determine whether, and to what extent, further discussion and analysis is warranted. See 52 Pa. Code §§ 5.403, 5.404. Here, it appears that the ALJ did not believe that further consideration of these matters was necessary to agree with Aqua that no further study is necessary. Accordingly, we will deny OCA Exception No. 15.

E. Tariff Structure - Proposed Reconcilable Rider Mechanisms

1. Energy Cost Adjustment Mechanism (ECAM) and Purchased Water Adjustment Clause (PWAC)

In this proceeding, Aqua proposed two new reconcilable rider mechanisms in its Tariff Water No. 3 to recover the costs associated with its energy and purchased water costs. These riders are the Energy Cost Adjustment Mechanism (ECAM) and the Purchased Water Adjustment Clause (PWAC) which are described in more detail, below. Inasmuch as the Exceptions address the ECAM and PWAC in combination, we shall address the merits of the Exceptions on these two items in a single consolidated disposition at the end of this section.

a. ECAM

(1) Positions of the Parties

Aqua proposed to implement the ECAM in its Tariff Water No. 3 (Tariff Water No. 3, Original Pages 35-36) to ensure that it will recover all of the energy costs it purchases from natural gas and electric providers. Aqua St. 4 at 5; R.D. at 99. According

to the Company, the ECAM addresses both increases and decreases in the energy rates charged by energy suppliers from whom the Company purchases natural gas and electricity. *Id.* The Company provided the following explanation on how it proposes to implement the ECAM:

The mechanism would collect or refund any difference between the energy costs included in base rates from the Company's last rate filing and the actual energy costs incurred in the period of calculation. Within 60 days after the end of each calendar year, the Company would file a reconciliation of its actual costs to the amount recovered in base rates per actual thousand gallons sold as established in the last rate case. Any increase or decrease in these costs would be divided by the projected normalized volumes increased for growth to develop a volumetric surcharge/surcredit applied to metered customers in the following 12-month period. In this way, the Company is protected from uncontrollable increases in costs and customers will receive the benefit of decreases if those costs are less than those included in rates. The ECAM is included as a rider in the proposed tariff submitted with this filing and describes the mechanics of the clause. At the end of a 12-month period, the amount refunded/collected via the mechanism would be compared to the actual costs to be refunded/collected and the difference would be added or subtracted to the difference to be recovered/refunded in the following period.

Aqua St. 4 at 6; Aqua M.B. at 255-256.

The Company is of the opinion that the ECAM and PWAC are authorized under Section 1307 of the Code and, thus, qualify as an exception to the general prohibition of single-issue ratemaking.¹⁰⁵ The Company argued that the ECAM is similar

¹⁰⁵ In this case, as discussed below, the statutory advocates argued that the ECAM would constitute "single-issue ratemaking" because, if the ECAM were approved, the Company would be permitted "to automatically change customers' prices (rates) due to changes in single cost components." OCA St. 4 at 24.

to where other utilities are permitted to pass certain costs through a rider or surcharge as authorized by Section 1307 of the Code. Aqua St. 4-R at 2. The Company proposed that the same safeguards it proposed for its PWAC also apply to its ECAM, with the exception of the 3% billing cap. Aqua M.B. at 256, n.93. According to the Company, the Commission has approved similar clauses (*i.e.*, such as the State Tax Adjustment Surcharge (STAS) and the implementation of the reduced tax associated with the federal Tax Cuts and Jobs Act of 2017 (TCJA)) in circumstances where the costs are volatile, unpredictable, or significant. Aqua submitted that, if the PWAC is approved, its incentive to reduce operating costs will remain an important tenant of its regulatory compact with customers and regulators in the delivery of safe, adequate, and reliable utility service. Aqua St. 4 at 6; Aqua St. 4-R at 3. Similarly, the Company submitted that if the PWAC is approved, it would have ample incentive to take advantage of every reasonable opportunity to prevent increases and pursue decreases in its purchased water cost to the benefit of its customers. Aqua St. 4 at 5; Aqua St. 4-R at 3. In response to opponents who believe the ECAM and PWAC would discriminate in favor of competitive rate rider (CRR) customers and against all other customers because the proposed riders would not apply to CRR customers even though these customers are served, at least in part, with purchased water, the Company averred that the exclusion of contract customers from the operation of surcharges is not unduly discriminatory because the Commission has approved various surcharge provisions that exempt negotiated contract rate customers. Aqua St. 4-R at 4. The Company explained that CRR customers' contract prices would not change based on increases/decreases in the cost of purchased water or energy regardless of whether those changes are implemented through the PWAC or the ECAM or through changes in base rates. *Id.*

I&E, the OCA, and the OSBA each opposed the use of the proposed mechanisms for the recovery of energy expenses. R.D. at 100. According to I&E: (1) it is not appropriate to use a reconcilable rider such as the ECAM to recover O&M expenses because the energy expenses to be recovered via the ECAM are a minimal

portion of routine O&M expenses for which the Commission must undertake a substantive audit and implementation task if it is approved;¹⁰⁶ (2) contrary to the Company's opinion, the ECAM would reduce the incentive for the Company to minimize its energy usage and minimize costs via shopping/negotiating for lower rates;¹⁰⁷ (3) Aqua failed to clearly explain how its claim for recovery of a routine operating expense through the ECAM mechanism would be appropriate;¹⁰⁸ (4) Aqua ignores the fact that the other utilities, to which it referred in direct testimony, are energy companies and those energy costs are pass-through gas and electric commodity costs, not expenses for energy consumed by those utilities during routine operations;¹⁰⁹ (5) the proposed ECAM is discriminatory because it would only apply to tariff rate customers and not rider rate customers;¹¹⁰ (6) the Company has not shown that implementing the ECAM will result in the filing of fewer rate cases as it claimed, because the energy cost expense is not significantly volatile; nor is it a large enough expense to represent an extraordinary impact to the Company's operational output;¹¹¹ (7) the ECAM will only apply to the Water Tariff, which is problematic because the Company either will inappropriately use the Water Tariff to reconcile wastewater expenses, or the Company will simply treat water and wastewater customers unequally (I&E St. 1 at 53); and (8) the Company's arguments that it reports earnings on a quarterly basis does not negate the single-issue ratemaking nature of the ECAM because the proposed surcharge would benefit Aqua by increasing revenue in lockstep with expense increases for specific individual expenses while circumventing the normal rate case process in which the full examination of all expenses and revenues would be evaluated simultaneously. I&E St. 3-SR at 10-11.

¹⁰⁶ I&E St. 1 at 52-53; I&E St. 1-SR at 3; I&E St. 1-SR at 67.

¹⁰⁷ I&E St. 1 at 51; I&E St. 1-SR at 61.

¹⁰⁸ See I&E St. 3-SR at 9-13.

¹⁰⁹ I&E St. 1 at 51-52; I&E St. 1-SR at 65.

¹¹⁰ I&E St. 3 at 23-24; I&E St. 3-SR at 11-13.

¹¹¹ I&E St. 3 at 22-23; I&E St. 3-SR at 9-13.

The OCA echoed I&E's arguments and emphasized that Aqua's ECAM proposal amounts to single-issue ratemaking. OCA St. 4 at 24-25. The OCA submitted that the costs to be recovered through the ECAM do not warrant special recovery separate and apart from other costs recovered through base rates. OCA St. 4 at 25. The OCA notes that Aqua has exercised some control of purchased energy costs through its selection of suppliers (*See* Aqua Exh. 1-A, Schs. C-6.1.i., C-6.1.ii.) and has already captured the potential for future changes in purchased water and energy costs as part of its adjustments to its FPFTY claims. OCA St. 4 at 25; *see* Aqua Exh. 1-A, Schs. 6.1, 7.1.

The OSBA also agreed with I&E and the OCA that since the ECAM would make the Company whole for all energy cost increases between base rate proceedings, the ECAM would constitute single-issue ratemaking. OSBA M.B. at 6. The OSBA submitted that recovery of energy costs through the ECAM is unreasonable because the Company would have no incentive to control its energy usage or costs because they would automatically be passed onto customers. OSBA St. 1 at 22. The OSBA further noted that the ECAM would insulate the Company from fluctuating energy costs, thereby lowering Aqua's business risk, which should result in a lower ROE for Aqua. *Id.* However, the OSBA indicated that the Company made no such proposal, and that by lowering Aqua's business risk, while not lowering the Company's ROE, the Company's shareholders are the entities that would most benefit from the ECAM proposal. OSBA St. 1 at 22. According to the OSBA, the only way ratepayers would benefit from ECAM is if energy costs decrease between base rate proceedings; but given the economic challenges due to rising energy costs as well as the ongoing impact of the COVID-19 pandemic, the OSBA urged the Commission to incentivize Aqua to aggressively control its energy costs by rejecting the ECAM proposal. OSBA M.B. at 6.

Aqua LUG agreed with the statutory advocates' arguments that the ECAM is nothing more than an unjust and unreasonable attempt at single-issue ratemaking that should be rejected by the Commission. In addition, the Aqua LUG argued that Aqua's

circumstances with relation to its purchased water and energy expenses simply do not warrant the implementation of an automatic recovery mechanism, as the costs to Aqua for its purchases of water supplies do not constitute significant expenses that require adjustments between base rate cases. Aqua LUG M.B. at 5-6.

(2) Recommended Decision

The ALJ agreed with the statutory advocates and recommended that the ECAM for the recovery of energy costs be rejected. The ALJ found that Aqua is a large company with considerable buying power and there is no reason to believe that it cannot adequately control its energy costs through normal cost control mechanisms. R.D. at 101-02. The ALJ further found that incentivizing cost containment by including energy costs in base rates is more effective than relying on the notion of a “regulatory compact with customers and ratepayers in the delivery of safe, adequate, and reliable utility service.” *Id.* (citing Aqua St. 4 at 6). The ALJ noted that in the current economic climate, energy costs are not likely to decline, and this would be the only scenario where ratepayers would benefit from permitting the recovery of costs through a rider rather than through base rates. R.D. at 102.

The ALJ also agreed with the advocates that the ECAM equates to single-issue ratemaking. R.D. at 102. In support of this determination, the ALJ cited to a prior case involving a Collection System Improvement Charge (CSIC) rider in which the Pennsylvania Commonwealth Court declared that “single-issue rate making is prohibited if it impacts on a matter considered in a base rate case.”¹¹² R.D. at 102 (citing *CSIC Order*). In *CSIC Order*, the Court ruled that “[t]he ‘cursory’ review undertaken for a

¹¹² *Popowsky v. Pa. PUC*, 869 A.2d 1144, 1152 (Pa. Cmwlth. 2005) (*CSIC Order*), appeal denied, 895 A.2d 552 (Pa. 2006) (citing *Phila. Elec. Co. v. Pa. PUC*, 502 A.2d 722, 727-28 (Pa. Cmwlth. 1985) (*PECO 1985*) and overturning Commission’s grant of a wastewater utility’s request to implement a CSIC).

surcharge is not a substitute for the review undertaken in a base rate case to determine whether a rate is just and reasonable.” R.D. at 102 (quoting *CSIC Order*, 869 A.2d at 1157). Thus, the ALJ ruled that “[i]t is inappropriate to single out this cost for rate recovery without recognizing other possibly offsetting changes in costs and revenues that could ordinarily be thoroughly examined in a base rate proceeding, as Aqua’s claims of expenses and offsetting savings and revenues are being examined in the instant case.” R.D. at 102. The ALJ explained that to do so would violate the ratemaking principle of matching revenues, expenses, return and rate base. R.D. at 102 (citing OCA St. 3 at 15-16).

The ALJ concluded her recommendation with regard to the ECAM by noting that the financial risk of greater energy bills serves as an incentive to Aqua to seek methods to reduce its energy costs, whether through shopping for competitive suppliers or implementing other cost-saving conservation measures. R.D. at 102.

b. PWAC

(1) Positions of the Parties

Aqua proposed to implement the PWAC in its Tariff Water No. 3 (Tariff Water No. 3, Original Pages 37-38) that would enable the Company to recover the costs of water it purchases for resale from non-affiliated suppliers. Aqua St. 4 at 2. According to the Company, the rider addresses both increases and decreases in the price it pays for purchased water. *Id.* at 2-3. If rates are increased, the Company cannot recover those costs until the next rate case is filed; if rates are decreased, the customer must wait until the next rate case to benefit from that reduced cost. *Id.* at 3. Additionally, the Company proposed to include a 3% cap to its proposed PWAC as well as an audit and reconciliation process to protect its customers from unjust and unreasonable rates. *Id.*

The Company provided the following explanation on how it proposes to implement the PWAC:

The PWA[C] would adjust customers' bills by adding a charge or credit to reflect increases or decreases, respectively, in the Company's "Baseline Cost." The Baseline Cost is the annual purchased water costs approved as an operating expense in the Company's last base rate case. When one or more of the Company's suppliers change the rates for water purchased by the Company, the Company will re-compute its annual purchased water costs based on the level of consumption and other billing determinants that formed the basis for the Company's calculation of its Baseline Cost. If there is a change in purchased water costs above or below the Baseline Cost, a charge or credit, as applicable, would be added to customers' bills. More precisely, the PWA[C] provides the Company the ability to implement a charge to recover an increase in purchased water costs above the Baseline Cost or a credit to pass back savings from a decrease in purchased water costs below the Baseline Cost.

Aqua St. 4 at 3-4; Aqua M.B. at 248-49.

As noted, Aqua proposed the PWAC to address both increases and decreases in the rates charged by non-affiliated suppliers from whom the Company purchases water. R.D. at 102 (citing Aqua St. 4 at 2); Aqua Tariff Water-PA P.U.C. No. 3 at 37-38. Aqua's PWAC proposal relies, in part, on the Commission's prior approval of a similar recovery mechanism for Newtown Artesian Water Company in 2010.¹¹³ The Company noted that the PWAC for Newtown Artesian Water Company contained safeguards, and that it has proposed those same safeguards for the PWAC in this proceeding. *See* Aqua M.B. at 249, n. 88, which delineates the four safeguards.

¹¹³ *Pa. PUC v. Newtown Artesian Water Co.*, Docket No. R-2009-2117550 (Order entered April 15, 2010) (*Newtown Artesian Water*) at 6-17 affirmed by *Popowsky v. Pa. PUC*, 13 A.3d 583 (Pa. Cmwlth. 2011) (*Popowsky 2011*).

The statutory advocates have raised most of the same arguments against the PWAC that they made against the ECAM. R.D. at 103. As with the ECAM, I&E argued that the PWAC is discriminatory and that Aqua has not provided a convincing reason for treating purchased water expenses as anything other than an O&M expense which should be recovered in base rates. *Id.* (citing I&E St. 3 at 14). I&E asserted that the Company's request to use the PWAC to recover future increases in purchased water through a reconcilable surcharge is an unreasonable exception to the normal rate making treatment for purchased water expense and would violate the principle of "single issue ratemaking." *Id.* Aqua M.B. at 250. I&E submitted that in the past, the Commission only granted surcharge treatment when a utility has demonstrated that the expense in question was volatile or unpredictable and the level of the expense is significant when compared to total O&M expenses including depreciation expense. *Id.* However, in this case, I&E asserted that Aqua failed to present sufficient evidence that its purchased water expense is volatile, unpredictable, or significant.¹¹⁴

The OCA added that purchased water costs are known and are subject to agreements with the provider. OCA St. 4 at 25. Since Aqua has voluntarily entered into its contracts to purchase water with various entities, the OCA contended that those costs are not entirely beyond its control.¹¹⁵

The OSBA observed that like the ECAM, allowing Aqua to use the adjustment clause would not incentivize the Company to control its purchased water costs and the only way that ratepayers would benefit would be if purchased water costs declined between rate cases. OSBA St. 1 at 25. In addition, the OSBA's witness, Mr. Kalcic, argued that the PWAC was biased in favor of shareholders and would

¹¹⁴ See I&E St. 3 at 11-19 and I&E St. 3-SR at 7-8 for a full discussion of the PWAC issue.

¹¹⁵ See, e.g., Aqua Exh. 1-A, Sch. C-7.1.i. Also, see OCA St. 4 at 24-25 for a full discussion of the OCA's position on the ECAM and PWAC.

insulate Aqua's earnings. OSBA St. 1 at 22-25. Finally, the OSBA asserted that PWAC is unnecessary because the Company's purchased water costs are \$4.5 million, whereas Aqua's claimed water cost of service is \$575.03 million. Purchased water costs are only 0.7% of the Company's total costs. Any changes in water costs will have a minimal impact on Aqua's earnings. OSBA St. 1 at 24.

(2) Recommended Decision

The ALJ recommended that Aqua's proposed PWAC be rejected because Aqua failed to demonstrate that the PWAC is necessary, just, or reasonable. R.D. at 102-04. In reaching her decision, the ALJ relied on the arguments proffered by the statutory advocates which included many of the same arguments made in opposition to the ECAM.

The ALJ initially found that Aqua did not provide any convincing reasons why purchased water expenses should be treated as anything other than an O&M expense that are recoverable in base rates. R.D. at 103. The ALJ agreed with I&E that the Company's request for an exception to the normal ratemaking treatment for purchased water expense through a reconcilable surcharge is unreasonable based on past policy where the Commission only granted surcharge treatment when it had been demonstrated that the expense in question was volatile or unpredictable, and the level of the expense was significant when compared to total O&M expenses, including depreciation expense. R.D. at 103 (citing I&E St. 3 at 14). The ALJ found that Aqua did not present any such evidence related to its purchased water expense. R.D. at 103 (citing I&E St. 3 at 11-19; I&E St. 3-SR at 7-8).

Next, the ALJ concluded that Aqua's purchased water costs are not entirely beyond its control in that Aqua's purchased water costs are known costs because they are subject to agreements with the provider. R.D. at 103 (citing Aqua Exh. 1-A,

Sch. C-7.1.i). The ALJ also concluded that permitting Aqua to use the PWAC would not incentivize the Company to control its purchased water costs and the only way that ratepayers would benefit would be if purchased water costs declined between rate cases. R.D. at 103. The ALJ further found that the PWAC is not necessary because any changes in water costs will have minimal impact on Aqua's earnings since the Company's purchased water cost of \$4.5 million is only 0.7% of its total claimed water cost of service of \$570.03 million. R.D. at 104 (citing OSBA St. 1 at 24).

Finally, the ALJ ruled that Aqua's reliance on *Newtown Artesian Water* is misplaced. R.D. at 104. In support of her judgment, the ALJ explained:

At the time of its request, Newtown purchased nearly 60% of its water from other sources. [*Newtown Artesian Water* at 3] Its purchased water expense represented about 25% of its annual revenues and 34% of its O&M expenses for the same period. [*Newtown Artesian Water* at 3; *see also* I&E St. 3 at 18-19; I&E Exh. 3, Sch. 3 at 1-2] In stark contrast, Aqua's projected purchased water costs will amount to only about 0.7% of its total water cost of service. [OCA St. 4 at 25] Aqua is not a small utility where purchased water or energy costs constitute a significant portion of its cost of service. Aqua's costs are not so significant such that they would cause its overall cost of service to vary widely from authorized revenues as a result of suppliers' price changes. Similar to ECAM, the financial risk of greater purchased water bills serves as an incentive to Aqua to seek methods to reduce its purchased water costs, whether through shopping for competitive suppliers, supplying more of its own water, reducing water losses, or implementing other cost-saving conservation measures. Aqua has failed to demonstrate that the PWAC is necessary, just or reasonable.

R.D. at 104 (footnote numbers omitted).

c. Aqua Exception No. 11 and Replies

In its Exception No. 11, Aqua disagrees with the conclusions the ALJ reached in support of her recommendations that the proposed ECAM and PWAC be rejected. Aqua Exc. at 35-36; R.D. at 99-104. Those conclusions include: (1) the ECAM and PWAC constitute impermissible single-issue ratemaking (R.D. at 102); (2) the Company failed to demonstrate that it cannot adequately control its energy and purchased water costs through normal mechanisms (R.D. at 101-102; 104); (3) the Company's energy and purchased water costs each do not constitute a significant amount of Aqua's cost of service (*Id.*); and (4) customers are not likely to benefit from the ECAM because energy costs are not, likely to decline in this climate (R.D. at 102). For the reasons discussed below, the Company requests that the above findings be rejected and each of the reconcilable riders be approved.

First, Aqua maintains its position that the two new reconcilable riders should be approved because it has demonstrated that they satisfy the requirements for approval of reconcilable riders under Pennsylvania law and Section 1307(a) of the Code. Aqua Exc. at 36 (citing Aqua M.B. at 245-249; Aqua R.B. at 105-106). Additionally, Aqua submits that because each rider seeks to recover an expense that is easily identifiable and beyond the Company's control, it has adequately demonstrated that the ECAM satisfies the exception to the prohibition against single-issue ratemaking. Aqua Exc. at 36.

The Company also disagrees with the ALJ's finding that energy costs are not likely to decline. The Company contends that the ALJ's statement is an unsupported assertion used to undermine Aqua's otherwise unrebutted testimony that any energy cost savings would be passed through to customers in a timely manner. *Id.*

In view of the above arguments, the Company requests that, for the reasons more fully explained in its Briefs, the Commission reject the ALJ's findings and approve the proposed ECAM. Aqua Exc. at 36 (citing Aqua M.B. at 235-58; Aqua R.B. at 105-07). We refer to the "Positions of the Parties" sections, above, which address the Company's positions with regard to the issues it raised in its Exceptions here concerning these ECAM and PWAC riders.

In its reply, I&E disagrees with the Company that its ECAM and PWAC riders satisfy the requirements under Pennsylvania law and Section 1307(a) of the Code. I&E also submits that Aqua continues to aver, incorrectly, that the proposed reconcilable riders satisfy the well-recognized exception to the prohibition against single-issue ratemaking, and that each rider seeks to recover an expense that is easily identifiable and beyond the Company's control. I&E R. Exc. at 11.

In regard to the ECAM, I&E avers that the ALJ appropriately considered the counter arguments made by the statutory advocates and correctly recommended that the ECAM for the recovery of energy costs should be rejected. I&E R. Exc. at 11 (citing R.D. at 101). I&E agrees with the ALJ's reasoning that because Aqua is a large company with considerable buying power, there is no reason to believe that it cannot adequately control its energy costs through normal cost control mechanisms. In consideration of the above, and the fact that the ALJ concluded that the ECAM would equate to single-issue ratemaking, I&E believes Aqua's Exception should be denied. I&E R. Exc. at 11.

With regard to the PWAC, I&E opines that the ALJ correctly agreed with the statutory advocates by rejecting the PWAC and recommending that Aqua continue to recover its purchased water costs in base rates rather than through the PWAC. I&E R. Exc. at 11 (citing R.D. at 103). I&E agreed with the ALJ that Aqua's purchased water cost, which amounts to only 0.7% of its total water cost of service, is not a significant portion of its total water cost of service. I&E R. Exc. at 11 (citing R.D. at 104). As such,

I&E maintains that Aqua's costs are not so significant that they would cause its overall cost of service to vary widely from authorized revenues due to its suppliers' price changes. *Id.* I&E, therefore, asserts that since Aqua has failed to demonstrate that the PWAC is necessary, just or reasonable, the Commission should reject Aqua's Exception on this matter. I&E R. Exc. at 11-12.

In its reply to Aqua's Exception No. 11, the OCA renders similar arguments to those raised by I&E. OCA R. Exc. at 20-21. The OCA agrees with the ALJ to reject the ECAM because it constitutes single-issue ratemaking, and it is not appropriate to adopt this type of reconcilable rider mechanism because Aqua is adequately able to control its energy costs. OCA R. Exc. at 20 (citing R.D. at 101-02).

The OCA also submits that it supports the ALJ's recommendation to reject the PWAC because the ALJ correctly found that Aqua's reliance on *Newtown Artesian Water* was misplaced. OCA R. Exc. at 20 (citing R.D. at 103 and *Newtown Artesian Water* at 6-17). The OCA references the ALJ's Recommended Decision comparing Newtown with Aqua in which the ALJ stated that Newtown purchased nearly 60% of its water and that Newtown's expense was about 25% of its annual revenues and 34% of its operation and maintenance expenses. In contrast, Aqua's projected purchased water costs are only about 0.7% of its total water cost of service.¹¹⁶ OCA R. Exc. at 20 (citing R.D. at 104; OCA M.B. at 114).

The OCA also requests that the Commission reject Aqua's continued stance in its Exceptions that Section 1307(a) justifies implementing the ECAM and PWAC because Aqua's energy costs and purchased water costs are outside of its control. In this regard, the OCA submits that Aqua's position is unsupported because, as the ALJ found,

¹¹⁶ It is noted that the OCA appears to inadvertently state in its reply that Aqua's projected purchased water costs are about "1.4% of its total water cost of service."

due to the large size of Aqua, which has considerable buying power, there is “no reason to believe that it cannot adequately control its energy costs through normal cost control mechanisms.” OCA R. Exc. at 21 (citing R.D. at 101). Since Aqua has voluntarily entered into contracts to purchase water with various entities, the OCA contends that those are known costs for which Aqua can exercise some control. *Id.* The OCA also notes that Aqua has exercised some control through its selection of electricity suppliers. OCA R. Exc. at 21 (citing OCA R.B. at 69).

The OCA concludes its reply by asserting that the costs at issue in the ECAM and PWAC do not meet the criteria that the Commission and Courts have applied in approving a Section 1307(a) surcharge. OCA R. Exc. at 21 (citing OCA R.B. at 70-71). In this regard, the OCA argues that the associated costs are not extraordinary, substantial, unexpected, or non-recurring. Instead, the OCA opines that such costs represent the normal, ongoing costs of providing water service that are such a small percentage of Aqua’s overall cost of service that any fluctuations will have minimal impact. OCA R. Exc. at 21.

In its reply to Aqua’s Exception No. 11, the OSBA makes similar arguments as I&E and the OCA that Aqua’s ECAM and PWAC do not satisfy the requirements of Section 1307(a) of the Code. OSBA R. Exc. at 4, 5. The OSBA also disagrees with the Company’s argument that the proposed riders qualify as a “well recognized exception to the prohibition against single-issue ratemaking” because each of them would move consideration of a *single* ratemaking expense outside the context of a traditional base rate proceeding. OSBA R. Exc. at 3, 4, 6 (citing Aqua Exc. at 36). The OSBA submits that the ECAM and PWAC are classic examples of single-issue ratemaking and would provide no incentive to control its energy and purchased water costs because the ECAM, in particular, would insulate the Company from fluctuating energy costs, and any energy and purchased water cost increases under the ECAM and PWAC, respectively, would be passed along to customers. OSBA R. Exc. at 4, 5.

The OSBA also reinforces its previous argument that the ECAM would lower Aqua's business risk, which should lower its ROE. The OSBA notes that the Company did not make such a proposal in this rate proceeding. Accordingly, the OSBA remains of the opinion that if the Company's ROE is not lowered in conjunction with the resulting lower business risk, the approval of the ECAM rider would only serve to benefit the Company's shareholders. OSBA R. Exc. at 4 (citing OSBA St. No. 1 at 21-22).

d. Disposition

After thoroughly reviewing the record with respect to the ECAM and the PWAC, we shall deny Aqua's Exception No. 11 and adopt the ALJ's recommendations that reject the two reconcilable rider mechanisms in accordance with the arguments set forth by I&E, the OCA, the OSBA and Aqua LUG in this proceeding.

The primary disagreement between the Company and the opposing Parties centers on whether the tariffed ECAM and PWAC riders satisfy the requirements for approval of reconcilable riders under Pennsylvania law and Section 1307(a) of the Code. I&E, the OCA, the OSBA and Aqua LUG (opposing Parties) were opposed to these riders and argued that approving them would constitute impermissible single-issue ratemaking. I&E M.B. at 91-95; OCA M.B. at 112-15; OSBA M.B. at 5-7; Aqua LUG M.B. at 4-6. Aqua, however, took the position that Section 1307(a) specifically provides an exception to the prohibition against single-issue ratemaking, and that Aqua's proposal to add the riders is almost identical to the rider proposed and approved in *Newtown Artesian Water*. Aqua R.B. at 105. Aqua also submitted that I&E's, the OCA's, and the OSBA's attempts to distinguish this case on the basis that Aqua's cost are not as significant as in *Newtown Artesian Water* also fail.¹¹⁷ The Company argued that while

¹¹⁷ See Aqua R.B. at 105, n.41 OCA M.B. at 114; I&E M.B. at 92, 94; OSBA M.B. at 6-7.

the court in *Popowsky 2011* recognized that *Newtown Artesian Water* purchased a significant portion of its water from other sources, precedent clearly demonstrates that where an automatic adjustment clause is not specifically authorized by statute, a utility must show that the expense is easily identifiable and beyond the utility's control.¹¹⁸ Thus, Aqua contends that it has made this showing. Aqua R.B. at 105-06, n.41.

Upon our review of the record, we are not persuaded by the Company's arguments that there is a need to implement the ECAM and PWAC in this proceeding. First and foremost, we agree with the ALJ and the opposing Parties that granting Aqua's request to adopt the riders constitutes single-issue ratemaking because the costs that Aqua proposes to recover through the reconcilable surcharges apply to costs that are normal, ongoing costs of providing water service. Therefore, because we find that the costs are not unique, unexpected, or non-recurring, we conclude that it would not be prudent to permit the Company to use the Section 1307(a) statute to justify its requests for the proposed riders because the Company has not persuaded us that it has experienced any extraordinary circumstances with regard to its purchased water and energy costs when compared to the other routine O&M costs it recovers through base rates.

We also disagree with the Company's contention that since the Commission approved a similar rider in *Newton Artesian Water*, the Commission should approve its proposed riders in this proceeding. Our review of the record indicates that there is a major difference between the rider approved for *Newtown Artesian Water* and those proposed here. According to testimony presented by I&E's witness, Mr. Esyan Sakaya, "unlike Aqua's situation, Newtown purchased approximately 52% of the water sold in the first half of 2009 from the Bucks County Water Authority (I&E Exh. No. 3, Sch. 3, p.1)" and "[t]he purchased water expense was over 29% of total O&M and depreciation expense for the same period (I&E Exh. No. 3 Sch. 3, p.2)." I&E St. 3 at 18.

¹¹⁸ See Aqua M.B. at 245 (citing, in part, *Popowsky 2011*).

Here, the record indicates that Aqua only purchases 2.46% of the total water it sells. Mr. Sakaya further testified:

The total proposed purchased water expense claim is \$4,135,311 (Aqua Ex. No. 3, Sch. C-7 1.i). Subtracting the affiliated purchases of \$297,839 leaves \$3,837,472 ($\$4,135,311 - \$297,839$) of non-affiliated purchase water expense. The total Operating, Maintenance and Depreciation expense for the Company is approximately \$272,527,954 (Aqua Ex. 5-A, Sch. C, column 2, line 4, p. 9). Therefore, non-affiliated purchased water expense is only 1.4% ($\$3,837,472 / \$272,527,954$) of total operating, maintenance and depreciation expenses. This 1.4% is minimal compared to the 24% - 70% of purchased gas costs that is typical for a natural gas utility with a PGC adjustment.

I&E St. 3 at 16. We note that the OSBA's witness, Mr. Kalcic, testified that based on the \$4.15 million in total purchased water expense claim in this proceeding, "[t]he Company's total claimed cost of service for its water operations (excluding Act 11) is \$575.03 million. As such, Aqua's claimed purchased water expense amounts to only 0.7% of its total costs." OSBA St. 1 at 24.

With regard to the Company's purchased power expense the Company proposes to recover through the ECAM, Mr. Sakaya testified:

[T]he total proposed purchased power expense, projected for the FPFTY ending March 31, 2023 is \$8,182,196 (AP Ex. No. 1-A, Sch. C-6.1, line 3). The total Operating, Maintenance and Depreciation expense for the Company is approximately \$272,527,954 (AP Ex. 5-A, Sch. C, column 2, line 4, p. 9). Therefore, purchased power expense is only 3.0% ($\$8,182,196 / \$272,527,954$) of total Operating, Maintenance and Depreciation expenses. This 3.0% is nowhere near the 24% - 70% that is typical for gas utilities with a PGC adjustment. Even large variations in an expense of this size

would not represent an extraordinary impact to the Company's operational outlook.

I&E St. 3 at 23. Using Mr. Kalcic's comparison that he calculated for the Company's total percentage of purchased water to the Company's total cost, we calculate that the Company's claimed purchased energy costs amounts to only 1.4% of its total costs $[(\$8,182,196 \div \$575,030,000) \times 100 = 1.4\%]$.

In view of the above comparisons, our approval of the reconcilable rider for *Newton Artesian Water* does not justify approving the ECAM and PWAC riders in this proceeding as argued by Aqua. The *Newtown Artesian Water* case is a rare exception where we determined such a rider was absolutely necessary because of the extraordinary circumstances in that case. Such circumstances are not relevant with regard to the Company's purchased water and energy costs in this proceeding. As the ALJ and the opposing Parties appropriately observed, these expenses are routine O&M expenses that are not unique, unexpected, or non-recurring. R.D. at 100-02. Thus, we are of the opinion that granting the Company's request to adopt its ECAM and PWAC reconcilable riders would be akin to single-issue ratemaking. As emphasized by the Commonwealth Court, single-issue ratemaking is similar to retroactive ratemaking and is generally prohibited if it impacts on a matter normally considered in a base rate case such as this proceeding. *See Popowsky 2011*, 13 A.3d at 593. Additionally, we agree with the ALJ that to approve the proposed riders "would violate the ratemaking principle of matching revenues, expenses, return and rate base." R.D. at 102. Accordingly, the Company's *Newtown Artesian Water* argument in its Exceptions is denied.

Regarding the Company's Exception to the ALJ's ruling that Aqua failed to demonstrate that it cannot adequately control its energy and purchased water costs through normal mechanisms, we again are not persuaded by the Company's arguments. The Company has not submitted any convincing historical data demonstrating erratic

fluctuations in its water or energy costs between rate cases that would persuade us that such costs are beyond the Company's control. In fact, the record demonstrates otherwise. I&E witness, Mr. Sakaya, testified that historical data submitted by the Company "shows no significant price volatility from municipal water suppliers from 2019 to 2023." I&E St. 3-SR at 13 (citing Aqua Exh. 1-A(a), Sch. C-7.1.1.). Mr. Sakaya also noted that "the cost of purchased water on a cost per unit basis generally increases from rate case to rate case like many other expenses, such as payroll and benefits, but it is not volatile and subject to large unanticipated increases or decreases." I&E St. 3 at 15. The fact that the Company's purchased water and energy expenses are not volatile or unpredictable makes it easier for the Company to control its costs. In this regard, we agree with the OCA's position that because the Company's purchased water costs are known and subject to contractual agreements with various entities, Aqua's costs are not entirely beyond its control.

We also agree with the ALJ's evaluation of this matter when she stated the following with regard to the ECAM:

As the advocates observe, Aqua is a large company with considerable buying power. There is no reason to believe that it cannot adequately control its energy costs through normal cost control mechanisms. Incentivizing cost containment by including energy costs in base rates is more effective than relying on the notion of a "regulatory compact with customers and ratepayers in the delivery of safe, adequate, and reliable utility service."

R.D. at 102.

In light of the above, we conclude that Aqua has unreasonably requested an exception to the normal rate making treatment for purchased water and energy expenses by requesting that future increases be automatically recovered through a reconcilable surcharge. Accordingly, Aqua's Exception No. 11 is denied and the ALJ's

recommendation is adopted in its entirety with regard to the proposed ECAM and PWAC.

2. Federal Tax Adjustment Surcharge

a. Positions of the Parties

Aqua proposed to add a new reconcilable surcharge, entitled the Federal Tax Adjustment Surcharge (FTAS), to its water and wastewater tariffs (Tariff Water No. 3, Original Pages 32-34, and Tariff Sewer No. 3, Original Pages 16-19) which will adjust its water and wastewater base rates when there are changes in federal corporate income tax rates by adding the revenue requirement for the incremental impact of the change in the federal corporate income tax rate. Aqua St. 8 at 14-15.

Aqua explained that the FTAS is analogous to the State Tax Adjustment Surcharge (STAS) that the Company, and other major Pennsylvania utility companies, have had in place for many years, and just as the STAS provides for adjustments to base rates for changes in state taxes (and more specifically for changes under the Pennsylvania Corporate Net Income Tax), so too does the FTAS provide for adjustments to base rates for changes in federal corporate income tax. Aqua St. 8 at 18.

According to the Company, the FTAS was proposed because significant changes in the federal corporate income tax rate can substantially impact the Company's revenue requirement and it is more appropriate to adjust rates quickly to reflect significant federal tax rate changes. Aqua St. 8 at 15, 17. The Company cited the TCJA as an example to describe the difficulty and delays of implementing federal corporate tax rate changes in the current environment. Aqua St. No. 8 at 17. The Company explained that for companies like Aqua that had planned base rate cases in 2018, the lower tax rate was reflected in those decisions prospectively in early 2019, along with refunds for 2018.

Id. The Commission set temporary rates for other companies and implemented surcredits¹¹⁹ on July 1, 2018, to begin the flow through of the tax rate decrease and required those companies to record regulatory liabilities for the first half of 2018. *Id.* This process delayed receipt of the effects of the tax rate change and required changes to rates previously charged for service. *Id.* The Company expressed its concerns that the White House recently has proposed an increase in the corporate tax rate from 21% to 28% and, if enacted, this will roll back some tax reductions enacted only a few years ago. *Id.* at 15. The Company presented an analysis showing the effect the potential corporate tax increase would have on its revenue requirement. *Id.* at 16-17. The Company opined that any delay in adjusting rates can result in either significant refunds or retroactive collections after the effective date of the tax rate change and may compel Aqua to file another rate case sooner than originally planned at significant cost and time to all parties. *Id.* at 15, 16. The Company averred that the FTAS will avoid these concerns because it is designed to adjust rates as fast as possible to reflect tax rate changes. *Id.* at 18.

I&E opposed the FTAS. According to I&E, the Company's stated need for the surcharge is speculative as the Company cannot say with certainty if or when an increase to the federal corporate income tax rate might be enacted or ever take effect. I&E St. 1-SR at 32-46. Furthermore, the Commission and its advisory staff have appropriately responded to changes in tax law as they have recently dealt with this issue in response to the reduction in the federal corporate income tax rate that took effect starting January 1, 2018, because of the TCJA. *Id.* at 32. I&E is confident that the Commission would provide adequate and timely guidance on a statewide basis to affected regulated utilities if such a tax rate change occurs. Accordingly, I&E opined that there is no need for the proposed FTAS at this time.

¹¹⁹ Generally, a "surcredit" is a surcharge returned to a customer.

I&E also had concerns about allowing rate adjustments in a surcharge mechanism for excess ADIT because deferred taxes require more scrutiny of regulators and statutory parties due to subjectivity in certain circumstances in determining the proper normalization periods, particularly for tax differences associated with non-protected assets that are not subject to the strict requirements of IRS normalization rules. *Id.* at 33-39. In addition, I&E testified in favor of a one-sided interest component for a reconcilable rider where the Company must pay interest to ratepayers for excess tax amounts due to be refunded to ratepayers so that companies would be encouraged to promptly refund its customers. I&E St. 1-SR at 39-40.

The OCA also opposed the implementation of the FTAS. OCA St. 2 at 14-15. The OCA submitted that the Company's proposal to implement the FTAS is premised on Aqua's belief that the federal corporate income tax rate may be increased from 21% to 28%, but it is uncertain when the next change in the corporate federal income tax rate will occur, and whether the legislation enacting the change will include other provisions which affect corporate federal income tax liabilities. *Id.* at 15. Based on the provisions attached to the TCJA (*i.e.*, the tax treatment of net operating loss carryback and caps, and limits on net interest deductions), the OCA asserted that such provisions need to be given consideration before they are allowed. *Id.* According to the OCA, the FTAS is neither necessary nor reasonable because it is unknown when or even if the federal government will make legislative changes to the federal tax rate. *Id.* The OCA concluded that any changes to the federal corporate income tax rate should be addressed by the Commission on a generic basis. *Id.* at 16.

b. Recommended Decision

The ALJ agreed with I&E and the OCA that Aqua's proposed FTAS should be rejected because it is uncertain when the next change in the federal corporate income tax rate will occur, and it is unknown whether any future legislation enacting a change in

the federal corporate tax rate would include other provisions which would affect tax liabilities. The ALJ stated that, at this time, there is no pending legislation proposing an increase to the federal corporate income tax rate, and even if legislation was being considered in Congress, there is no way of knowing if or when and in what form the tax change would be implemented. The ALJ concluded that, while it may be true that changes in tax rates may affect utilities differently, the FTAS proposal is premature and should be rejected because there is no current legislation to actually consider, and Aqua is requesting a surcharge mechanism with no trend or context in which to evaluate it. R.D. at 106.

c. Aqua Exception No. 12 and Replies

In its Exception No. 12, the Company believes the ALJ erred in rejecting the proposed FTAS. Aqua Exc. at 36. First, Aqua opines neither the ALJ nor any of the other Parties found or concluded that the proposed method of calculation, mechanics, or safeguards contained in the FTAS were unreasonable. Aqua Exc. at 37 (citing Aqua M.B. at 261, noting that no parties contested these aspects of the FTAS).

The Company believes that the ALJ's concern – that a change in the federal corporate income tax rate is uncertain – is irrelevant to the determination of whether the FTAS is just and reasonable, because “if no change occurs, the FTAS has no impact upon customers,” and “if/when a change does occur, the FTAS will act as a temporary mechanism if/when a change occurs between a utility's base rates and will more-timely ensure that the impacts of the change are reflected in the utility's rates.” Aqua Exc. at 37 (citing Aqua M.B. at 262; Aqua St. 8-R at 9).

Aqua also argues that it has demonstrated that any change in the federal corporate income tax rate would have a significant impact upon tax expense, and the Company's rates. The Company estimates that an increase in the federal corporate

income tax rate from 21% to 28% would result in a \$14 million increase in its revenue requirement. Aqua Exc. at 37 (citing Aqua St. No. 8 at 1). The Company avers that this calculation is un rebutted; therefore, it is reasonable to infer that any changes in the federal corporate income tax rate, whether an increase or a decrease, will significantly impact the Company's base rates. Aqua Exc. at 37.

Aqua also reiterates its analogy of its proposed FTAS with the existing STAS mechanism in that “[j]ust as the STAS provides for adjustments to base rates for changes in state rates (and more specifically for changes under the Pennsylvania Corporate Net Income Tax), so too does the FTAS provide for adjustments to base rates for changes in federal corporate income tax.” Aqua Exc. at 37-38 (citing Aqua St. 8 at 18).

In reply to Aqua Exception No. 12, I&E first disagrees with the Company's representation that the ALJ “did not find or conclude that the proposed method of calculation, mechanics, or safeguards contained in the FTAS were unreasonable.” I&E R. Exc. at 12 (citing Aqua Exc. at 37). I&E submits that the ALJ did not have to consider whether the FTAS is reasonable because she concluded that the proposed FTAS is premature when she stated in her Recommended Decision that “at this time there is no pending legislation proposing an increase to the federal corporate income tax rate.” I&E R. Exc. at 12 (citing R.D. at 106). I&E notes that the ALJ further concluded that “while it may be true that future changes in tax rates may affect utilities differently, there is no current legislation to actually consider and Aqua is requesting a surcharge mechanism with no trend or context in which to evaluate it.” *Id.* In view of the fact that the ALJ made no determinations to find that the terms of the FTAS were reasonable, I&E submits that Aqua's Exception here should be rejected. *Id.*

In its reply, the OCA disagrees with Aqua's arguments in its Exceptions that the lack of evidence of any change in the federal tax liabilities is irrelevant, and that

there would be a large impact on Aqua if there is a change in the federal income tax rate. OCA R. Exc. at 22 (citing Aqua Exc. at 36-38). The OCA contends that Aqua's arguments are without merit because, if the issue of tax liabilities is "irrelevant," then there is no reason to implement Aqua's proposed FTAS. *Id.* Thus, the OCA opines that Aqua's position is consistent with the evidence that establishes that the FTAS is not necessary. *Id.* Because Aqua has not presented any evidence that a tax change is imminent and its witness admitted that "no one can say with any certainty if/when an increase to the federal corporate income tax will take effect," the OCA argues that Aqua's proposed FTAS must be rejected. *Id.*; R.D. at 106 (citing Aqua St. 8-R at 10).

The OCA also takes issue with Aqua's argument that the impact of any tax changes would be large. OCA R. Exc. at 22. The OCA asserts that Aqua's statement is pure speculation because the Company has no knowledge or certainty of any upcoming tax changes. The OCA avers that the Company has presented its FTAS as the only way to address a hypothetical tax change. Nevertheless, the OCA stresses that future, unknown changes to the federal corporate income tax rate should be addressed by the Commission on a generic basis for all the public utilities similar to what the Commission did in February 2018, when it initiated a generic proceeding to determine the effects of the TCJA on public utilities' tax liabilities. *Id.* (citing OCA M.B. at 83; OCA St. 2 at 15).

d. Disposition

We agree with the ALJ's recommendation that the Company's proposed FTAS reconcilable rider should be rejected because it is premature, and no trend or context has been established under which it can be evaluated. In reaching our decision on this matter, we share the concerns of the ALJ and the opposing Parties that it is uncertain when the next change in the federal corporate income tax rate will occur, and it is unknown whether any future legislation enacting a change in the federal corporate tax rate would include other provisions which would affect tax liabilities. Thus, we agree

with the ALJ that the FTAS proposal is premature because there is no current legislation to actually consider and Aqua is requesting a surcharge mechanism with no trend or context within which to evaluate it. *See* R.D. at 106. We further find that the FTAS is not necessary at this time because this Commission, in conjunction with our advisory staff, recently provided timely guidance on a statewide basis to the affected regulated utilities with regard to the method of calculation, mechanics, or safeguards on the methodology to use in implementing the federal corporate income tax rate that took effect starting January 1, 2018. *See Tax Cuts and Jobs Act of 2017*, Docket No.

M-2018-2641242. In our opinion, the Commission may utilize this same process again should changes in the federal tax rate occur in the future. Furthermore, we support the OCA's position that any changes to the federal corporate income tax rate should be addressed by the Commission on a generic basis for all the public utilities under its jurisdiction because "future legislation changing the federal corporate income tax rates may impact other provisions which affect corporate federal tax liabilities." *See* OCA M.B. at 83.

For the reasons above, we shall deny Aqua's Exception No. 12 and adopt the ALJ's recommendation that rejects the Company's FTAS reconcilable rider it proposed in its water and sewer tariffs.

3. Universal Service Rider

a. Positions of the Parties

Aqua proposed to include a Universal Service Rider (USR) in its water and wastewater tariffs¹²⁰ that would adjust its residential base rates to recover the costs of its

¹²⁰ *See* proposed Tariff Water No. 3, Original Pages 32-34, and proposed Tariff Sewer No. 3, Original Pages 19-21.

proposed customer assistance programs (CAP) from all residential customers, except those enrolled in the Company's CAPs. Aqua explained that its proposed USR is similar to the riders in the tariffs of its affiliated Peoples Companies¹²¹ and other energy utilities throughout the state and that it has filed the USR consistent with the terms of the *Aqua-Peoples Settlement*¹²² that was approved by the *Aqua-Peoples Acquisition Order*.¹²³ R.D. at 107; Aqua M.B. at 264; Aqua St. 10 at 9; Aqua St. 2 at 17-18.

According to the Company, the USR will be used to recover those costs associated with the following low-income offerings: (1) CAP discounts; (2) CAP arrearage forgiveness benefits; (3) CAP administration by a third party (*i.e.*, Dollar Energy Fund); and, (4) the proposed Conservation and Emergency Repair Program (\$100,000 per year). Aqua St. 10 at 9. Aqua's calculation of the costs to be recovered through the USR is based on its anticipated enrollment in the CAP, subject to an annual reconciliation and audit by the Commission. Aqua St. 10 at 10. Aqua submitted that approval of the USR will ensure that residential ratepayers are only responsible for actual costs of the program, rather than projected costs that may not come to fruition. *Id.*

¹²¹ The Peoples Companies include Peoples Gas Company, Peoples – Equitable Division, and Peoples Natural Gas Company LLC.

¹²² See *Joint Petition for Approval of Non-Unanimous, Complete Settlement Among Most Parties*, Docket Nos. A-2018-3006061, A-2018-3006062 and A-2018-3006063; June 26, 2019 (*Aqua-Peoples Settlement*).

¹²³ See *Joint Application of Aqua America, Inc., Aqua Pennsylvania, Inc., Aqua Pennsylvania Wastewater, Inc., Peoples Natural Gas Company LLC and Peoples Gas Company LLC for All of the Authority and the Necessary Certificates of Public Convenience to Approve a Change in Control of Peoples Natural Gas Company LLC and Peoples Gas Company LLC by Way of the Purchase of All of LDC Funding, LLC's Membership Interests by Aqua America, Inc.*, Docket Nos. A-2018-3006061, A-2018-3006062 and A-2018-3006063 (Order entered Jan. 24, 2020) at 147-150 (*Aqua-Peoples Acquisition Order*).

The Company provided the following explanation on how its proposed USR will operate:

The USR would adjust customers' bills by adding a charge or credit to reflect increases or decreases, respectively, in the Company's "Baseline Cost." The Baseline Cost is the estimate to administer and provide benefits under the various program components in the proposed CAP. Costs and revenues under the USR will be reconciled each year, and an over or under collection, as applicable, will be included in the "E" factor of the charge.

Aqua M.B. at 264; Aqua St. 2 at 18.

The OCA argued that the USR should not be approved for the following reasons: (1) any recovery of low-income program costs should be recovered in base rates rather than through a reconcilable rider, and the associated costs should be based on net costs, rather than gross costs (R.D. at 107; OCA St. 5 at 42); (2) it is not appropriate for Aqua to use the Peoples Companies' reconcilable riders as models to recover costs for its low-income programs because when the Commission approved the reconcilable riders for Pennsylvania gas and electric utilities, the Commission relied upon specific statutory language from Pennsylvania Energy Competition Acts,¹²⁴ which are not applicable to water/wastewater companies (*Id.* at 43-44); (3) the recovery of the low-income program costs should not be subject to a reconcilable recovery rider because CAP costs: (a) are normal operating costs that represent a small portion of Aqua's total operating revenues; (b) will not vary widely based on changes in total consumption as would occur with energy CAPs; and (c) are not variable costs that fluctuate outside of Aqua's control (*Id.* at 45); and (4) the Company proposed to recover the low-income program costs only from the residential customer class (*Id.* at 46).

¹²⁴ Electricity Generation Customer Choice and Competition Act, 66 Pa. C.S. § 2804(9); Natural Gas Choice and Competition Act, 66 Pa. C.S. § 2203(8) (collectively, the Energy Competition Acts).

I&E agreed with the Company in opposing the OCA's position that the Company's universal service program (USP) costs be recovered through base rates. I&E argued it is preferable that the Company's costs for a full-scale universal service plan be recovered via a reconcilable surcharge mechanism that tracks dollar-for-dollar net costs similar to what is used by the Peoples Companies. I&E St. 1-R at 3.

I&E also opposed the OCA's suggestion that only net costs¹²⁵ of the program be recovered via base rates because the OCA failed to address how the Company would not potentially over or under-recover associated net costs if projections are incorporated as a component of base rates which would not be updated until the Company's next base rate case filing. I&E St. 1-R at 3-4.

I&E made the following three recommendations with regard to the Company's proposed USP: (1) in view of the fact that, for the first time, the Helping Hand program will be funded by involuntary ratepayer funding, the Company should be required to perform income verifications to admit participants into the programs to ensure legitimacy of applicants and reduce misuse of the program. (I&E St. 1 at 45; I&E St. 1-R at 5; I&E St. 1-SR at 53); (2) the Company should be required to perform the appropriate tracking, to be reported in the Company's next base rate case filing, that demonstrates its efforts to encourage participants to take advantage of the Federal Low-Income Household Water Assistance Program funds made available via the American Rescue Plan. (I&E St. 1 at 45; I&E St. 1-R at 5; I&E St. 1-SR at 53); and (3) that Aqua should be required to

¹²⁵ The OCA noted that the Company indicated that it does not conduct any collectability studies for its water or wastewater operations assessing the rate at which the Company converts billings into collected revenue. However, the Company did state that it has collection contracts which provide contingency fees ranging between 18% to 40% of the amount collected. Thus, the OCA recommended that a 28% offset (the middle of the contingency fee range) to the gross costs of the program be applied to obtain the net program costs that the Company should be permitted to recover. OCA St. 5 at 42.

monitor available federal and state assistance programs and notify customers of all available sources of aid. (I&E St. 1 at 49; I&E St. 1-SR at 54).

b. Recommended Decision

The ALJ recommended that the Commission approve the Company's proposed USR because she found "it is clear from a review of the *Aqua-Peoples Acquisition Order* that the Commission agreed that a 'comparable' funding mechanism as those used by the natural gas and electric distribution companies in Pennsylvania is preferable." R.D. at 108. She further determined that the use of the USR, which will be subject to audit and an annual reconciliation process, will allow actual costs to be maintained and tracked separately, because the costs proposed for inclusion in the Company's USR are easily identifiable, and any adjustments to the costs would be a simple mathematical exercise. R.D. at 108.

In further support of her recommendation to use the USR reconcilable surcharge to recover Aqua's low-income program costs, the ALJ determined: (1) certain costs that the Company will incur under its CAP program are outside of its control; (2) the Company's enrollment projections, which include a substantial ramp-up in projected participation between Years 1 and 3 of the CAP,¹²⁶ could be less than or exceed the projections; (3) since there is no limit on the number of customers who could participate in the CAP, costs may vary based on enrollment levels;¹²⁷ and (4) the ability to adjust and reconcile the costs associated with such programs via the USR "is particularly important when launching a new program that may not meet or could exceed

¹²⁶ Aqua St. 10 at 11.

¹²⁷ Aqua St. 10-R at 12; see also Aqua Exhibit RFB-1-R (The OCA's witness, Mr. Colton, admitting no limitation on the number of customers who could participate was proposed).

enrollment expectations.”¹²⁸ R.D. at 106-109. In view of the above, the ALJ agreed with Aqua that the reconcilable nature of the proposed USR will “ensure ratepayers are only responsible for actual program costs which may be more or less than original projections.” R.D. at 109 (citing Aqua St. 10-R at 13).

The ALJ explained that if the projected low-income program costs were included in base rates, as argued by the OCA, the costs would “be subsumed regardless of the potential difference between projected and actual costs.” R.D. at 109. The ALJ cited the *Final CAP Investigatory Order*¹²⁹ for the proposition that the Commission has recognized that the recovery of universal service costs through a surcharge, rather than in base rates, is a more effective way to ensure robust customer assistance programs. *Id.*

Finally, the ALJ found that the proposed rider is consistent with the general theme of the *Aqua-Peoples Settlement* to share best practices throughout Aqua and the Peoples Companies. The ALJ explained that this is reaffirmed by the plain language of the *Aqua-Peoples Settlement* which required that Aqua will include “a comparable funding mechanism that exists for electric and gas utilities in Pennsylvania.” R.D. at 109 (citing *Aqua-Peoples Settlement* at ¶ 108; OCA St. 5 at 42-43). Therefore, the ALJ concluded that Aqua’s proposed USR should be approved because it complies with the terms of the *Aqua-Peoples Settlement* that was approved as part of the *Aqua-Peoples Acquisition Order*. R.D. at 109.

¹²⁸ Aqua St. 10-R at 13.

¹²⁹ *Customer Assistance Programs: Funding Levels and Cost Recovery Mechanisms*, Docket No. M-00051923 (Final Investigatory Order entered December 18, 2006) (*Final CAP Investigatory Order*) at 15. *See also* testimony of Aqua’s witness, Ms. Rita F. Black, Aqua St. 10 at 10.

c. OCA Exception No. 16 and Replies

In its Exception No. 16, the OCA excepts to the ALJ's recommendation to adopt Aqua's proposed USR to recover the costs associated with its CAPs. OCA Exc. at 26 (citing R.D. at 107-09). The OCA maintains its position that it is proper that Aqua recover the costs of the low-income programs through base rates as normal operating expenses, rather than through the reconcilable USR, and that Aqua should only be permitted to recover the *net* costs of the program. OCA Exc. at 26, 28 (citing OCA M.B. at 152-61; 175-78; OCA R.B. at 82-89).

In support of its Exception, the OCA first asserts that, contrary to the ALJ's and the Company's view, the language in the *Aqua-Peoples Settlement* that directed the Company to file "a comparable cost recovery mechanism" to the natural gas and electric utilities' cost recovery mechanism, did not require that a specific cost recovery mechanism be used. OCA Exc. at 26 (citing R.D. at 147-50). The OCA asserts that the ALJ relied on only a portion of the language in the *Aqua-Peoples Settlement*, and thus, erred by interpreting the above language to mean that Aqua *must* propose, in its next base rate proceeding, a cost-recovery mechanism *just* like that used by the natural gas and electric utilities. OCA Exc. at 26. The OCA cites to its Briefs in which it provided detailed arguments on why a reconcilable rider is not required by the *Aqua-Peoples Settlement*. OCA Exc. at 27 (citing OCA M.B. at 152-161; 175-78; OCA R.B. at 82-89).

In reply, Aqua disagrees with the OCA's position that the ALJ erred by relying on only a portion of the *Aqua-Peoples Settlement* and that the OCA is attempting to "walk back" its admission in its Briefs that Aqua was contractually obligated under this settlement to "implement a universal service program with a suite of low-income assistance programs." Aqua R. Exc. (citing Aqua R.B. at 67; OCA M.B. at 120). The Company submits that the OCA's argument is inconsistent because it wants Aqua to implement a universal service plan similar to those in place at other energy utilities, but

then proposes that Aqua be required to recover its costs differently than the energy utilities' methodology. Aqua R. Exc. at 14 (citing Aqua R.B. at 68).

I&E also disagrees with the OCA's position and replies that it agrees with the ALJ's recommendation that the *Aqua-Peoples Acquisition Order* that approved the *Aqua-Peoples Settlement* permitted Aqua to use a reconcilable rider. I&E avers that Aqua's proposed USR is consistent with the directives of the Commission in the *Aqua-Peoples Acquisition Order* and Aqua's obligation to comply with the terms of the Settlement. I&E R. Exc. at 17-18.

Next, the OCA excepts to the ALJ's conclusion that the program costs are outside of the Company's control, and that a reconcilable surcharge is necessary to allow for full cost recovery and to ensure robust customer assistance programs. OCA Exc. at 27 (citing R.D. at 107-08). The OCA avers that the ALJ disregarded the fact that there is no statutory basis for the full cost recovery of water low-income program costs as there is for energy low-income program costs. Thus, the OCA asserts that a comparison between energy utilities' mature universal services programs with a statute-defined cost recovery mechanism and Aqua's proposed discount/arrearage forgiveness programs is not appropriate. OCA Exc. at 27.

Aqua replies that it disagrees with the OCA's claims that the costs of the program are within Aqua's control, and there is no statutory basis for the cost recovery of water program costs. The Company retorts that the OCA is ignoring its own admission that no enrollment limitations have been proposed, and that variance in enrollment will drive variances in costs. Aqua R. Exc. at 14 (citing Aqua M.B. at 159; OCA St. 5SR at 29).¹³⁰ In addition, the Company argues that the OCA's assertion that there is no

¹³⁰ The Company projects that the cost of discounts for the water program alone range from \$3 million to \$8 million. The OCA projects costs of \$4 million to \$10 million under its proposal. See Aqua R.B. at 69.

statutory basis for this reconcilable rider ignores Section 1307(a) of the Code, 66 Pa. C.S. § 1307(a). Aqua claims that it has demonstrated that the rider satisfies Section 1307(a). Aqua R. Exc. at 14 (citing Aqua M.B. at 264-265; Aqua R.B. at 68-70).

Next, the OCA argues that the ALJ ignored that every other Pennsylvania water utility with low-income discount programs, including Pennsylvania-American Water Company and Pittsburgh Water and Sewer Authority (PWSA), treat their low-income program costs as normal operating costs that are recovered through base rates.¹³¹ OCA Exc. at 27 (citing OCA R.B. at 87; OCA St. 5SR at 28-29). The OCA asserts that the Commission should also require that Aqua continue doing the same in this case. The OCA adds that contrary to the ALJ's conclusion, there is no need for Aqua to use a reconcilable surcharge because Aqua does not anticipate that there will be substantial fluctuations in the costs of the program. OCA Exc. at 27 (OCA R.B. at 88; OCA St. 5 at 45-46).

The Company rejoins that the OCA disregards the fact that other water utilities' programs are not as robust as the programs proposed by Aqua. Aqua R. Exc. at 14 (citing Aqua M.B. at 158).

Finally, the OCA excepts to the ALJ's Recommended Decision because she did not address the OCA recommendations that only net costs, rather than gross costs, of low-income programs should be recovered, and those costs should be included in base rates, including a cost offset to reflect the benefits of the program to Aqua's uncollectible expenses. OCA Exc. at 28 (citing OCA St. 5 at 42). The OCA submits that the ALJ appeared to ignore the need for an offset which the OCA recommended be established to address the impact of the program on Aqua's uncollectible expenses. *Id.* According to the OCA, an offset is needed for the discount and arrearage forgiveness program costs in

¹³¹ See OCA R.B. at 87; OCA St. 5SR at 28-29.

order to prevent the double-recovery of costs. *Id.* The OCA cites to its Briefs in which it explained that the Commission previously has concluded that double recovery is possible through a reconcilable surcharge and that an offset is appropriate here. OCA Exc. at 28 (citing OCA M.B. at 153-54; OCA R.B. at 83-85).

The Company replies that it disagrees with the OCA's claims that an offsetting reduction to Aqua's uncollectibles expense associated with the proposed USP is required. The Company asserts that the OCA's Exception should be denied because this recommendation is premature and unnecessary where a reconcilable rider is used. Aqua R. Exc. at 14-15 (citing Aqua M.B. at 155-61, 264-65; Aqua R.B. at 67-71, 107).

I&E also replies that it disagrees with the OCA's arguments in its Exceptions that Aqua's net costs of the program should be recovered in base rates. I&E R. Exc. at 12. I&E further states that it supports the ALJ's determination that the *Aqua-Peoples Settlement* requires that Aqua's proposal include "a comparable funding mechanism that exists for electric and gas utilities in Pennsylvania," which do not net their costs. I&E R. Exc. at 12 (citing R.D. at 109).

d. Disposition

The primary argument in this matter focuses on whether the *Aqua-Peoples Acquisition Order*, through the approved, modified, *Aqua-Peoples Settlement*, requires or permits Aqua to implement a reconcilable rider (*i.e.*, the proposed USR) to recover its low-income program costs in its CAP program. The ALJ, Aqua, and I&E share the opinion that it does. However, the OCA asserts in its Exceptions that the ALJ erred in her reliance on the *Aqua-Peoples Settlement* by incorrectly interpreting that it meant that Aqua was given the clearance to file the reconcilable USR exactly like those used by its Peoples' affiliates to recover the costs associated with its low-income CAP.

Upon our review of the *Aqua-Peoples Merger Order* and the *Aqua-Peoples Settlement*, we disagree with the ALJ's reliance on language in the *Aqua-Peoples Settlement* that the ALJ used as the basis to recommend that the Company's proposed USR be approved. As the OCA noted, the ALJ relied on the testimony of Aqua's witness, Ms. Rita Black, who testified with regard to the Company's implementation of the terms of Paragraph 108 of the *Aqua-Peoples Settlement* as follows:

[Paragraph 108] notes that, through the Helping Hand Collaborative process, Aqua PA was to consider development of a comprehensive and universal service and conservation program. The items for evaluation included a customer assistance program, hardship fund, water conservation program, low-income service repair program and a comparable funding mechanism as utilized by energy utilities in the Commonwealth. Following this evaluation, Aqua PA would propose a recoverable universal service plan in its next base rate proceeding using input from the Helping Hand Collaborative and best practices from the Peoples Companies.

Aqua St. 10 at 3; *see also Merger Settlement* at 135; OCA M.B. at 117; OCA R.B. at 85-86; OCA St. 5 at 7. In support of her recommendation, the ALJ averred, "[i]t is clear from a review of the *Aqua Peoples Acquisition Order* that the Commission agreed that a 'comparable' funding mechanism as those used by the natural gas and electric distribution companies in Pennsylvania is preferable." R.D. at 107-08 (citing *Aqua-Peoples Acquisition Order* at 147-150).

We disagree. We find that the *Aqua-Peoples Settlement* did not dictate that a specific cost recovery be used. When we adopted the *Aqua-Peoples Settlement*, we never *directed* that Aqua use the same mechanism used by the Peoples' Companies and other energy Companies to recover the costs of its low-income programs. Paragraph 108 of the *Aqua-Peoples Settlement*, which we approved without modification, is stated in its entirety as follows:

Aqua PA will include in the Helping Hand collaborative agreed to in its recent rate case settlement at Docket No. R-2018-3003558, discussion of the development of a comprehensive universal service and conservation program that will be proposed by Aqua PA. The items to be evaluated for inclusion in Aqua PA's proposal include: (1) a bill payment/customer assistance program; (2) a hardship fund; (3) a water conservation program; (4) a low-income service repair line and replacement program; and (5) a comparable funding mechanism that exists for electric and gas utilities in Pennsylvania. Aqua PA will submit a rate recoverable universal service proposal in Aqua PA's next base rate case that considers the best practices learned from the Peoples Companies and through conversations from the Helping Hand collaborative.

Aqua-Peoples Settlement ¶ 108 at 23 (emphasis added). We note that Item No. 5 in Paragraph 108 merely states that the Company will include “a *comparable* funding mechanism” for evaluation, and the sentence following Item No. 5 states that Aqua will submit a “*rate recoverable universal service proposal*” in its next base rate case. However, the testimony of Aqua's witness, Ms. Black, quoted above, left out the word “rate” before “recoverable” when she stated, “Aqua PA would propose a *recoverable* universal service plan in its next base rate proceeding.” Nothing in Paragraph 108 specifically directed the type of a comparable funding mechanism that must be evaluated. The Settlement stated only that Aqua was allowed to “consider” such a funding mechanism. Furthermore, the text “rate recoverable” implies that the costs of the universal service proposal should be recovered through base rates. In this regard we, agree with the OCA's assertion that “[i]f the parties had intended to mandate use of a funding mechanism akin to the mechanisms used by Pennsylvania's energy utilities, the Settlement would have said so.”¹³² Similarly, if it were the intent of the Commission to permit the use of a reconcilable rider, we specifically would have modified Paragraph 108 to state that was our intention. Accordingly, we conclude in view of the fact that the

¹³² OCA St. 5SR at 36

settlement stated only that Aqua was allowed to “consider” such a funding mechanism, we reject the ALJ’s reliance on Paragraph 108 in support of her recommendation that the Company’s USR should be approved because it is consistent with the Commission’s directive to file a reconcilable rider to recover its low-income CAP expenses.

It is also important to note that the use of a Section 1307(a) reconcilable rider, such as is proposed here, is the exception, rather than the rule, as can be observed during the history of the Commission, how few times the use of this mechanism has been either legislatively mandated (*i.e.*, when the Energy Competition Acts specifically permitted its use for energy companies) or directed by the Commission (*i.e.*, the implementation of the STAS).¹³³ In this regard we agree with the OCA that Section 1307(a) of the Code does not authorize the Commission to approve surcharges other than in limited circumstances.¹³⁴ OCA M.B. at 157. We further note that when we established the reconcilable surcharge recovery mechanism for energy companies pursuant to the Energy Competition Acts, we concluded that, consistent with the direction given in the Energy Competition Acts, we must allow recovery through a surcharge that is either reconciled or adjusted frequently to track changes in the level of CAP costs. *See* OCA St. 5 at 44 (citing *Final CAP Investigatory Order* at 14-15). However, those energy riders that were approved under legislative mandate for the Peoples Companies and other energy companies are not appropriate models upon which to base the cost recovery for

¹³³ *See* 52 Pa. Code § 69.52, Exh. A (State Tax Adjustment Surcharge Order, entered March 10, 1970). Furthermore, as I&E’s witness, Mr. Sakaya, testified, “the PGC [Purchased Gas Cost], STAS and DSIC mechanisms are authorized by statute while the PWA [Purchased Water Adjustment] and ECA [Energy Cost Adjustment] are not, and, furthermore, the establishment of the PGC and STAS were specifically related to historic volatility.” I&E St. 3-SR at 12-13.

¹³⁴ *See* 66 Pa. C.S. § 1307(a); *CSIC Order*, 869 A.2d at 1160; *see also* *Pennsylvania Indus. Energy Coal. v. Pa. PUC*, 653 A.2d 1336, 1349 (Pa. Cmwlth. 1995), *aff’d per curiam*, 543 Pa. 307, 670 A.2d 1152 (1996) (*PIEC*). The general rule for expense items is that if the item in question is normally considered in a base rate case, then singling that item out for recovery outside of a base rate case is not appropriate. *CSIC Order*, 869 A.2d at 1157; *PIEC* at 1350.

Aqua's low-income water programs because there has been no legislative carve-out for water companies such as that which exists for energy companies.

We also agree with the OCA's Exceptions in which it argues that a reconcilable rider is not needed here because the Company admitted there will not be substantial fluctuation in its low-income program costs due to changes in bills. OCA St. 5 at 45 (citing OCA-V-29). Aqua disagrees with the OCA's Exception and maintains that the OCA ignores its own witness's admission that no enrollment limitations have been proposed, and that variance in enrollment will drive variances in costs. Aqua R. Exc. at 14 (citing Aqua M.B. at 159). The Company asserts that it has projected that the cost of discounts for the water program alone will range from \$3 million to \$8 million, while the OCA has projected costs of \$4 million to \$10 million under its proposal. Aqua R. Exc. at 14 (citing Aqua R.B. at 69). Nevertheless, the OCA avers that unlike natural gas bills, which may vary widely, Aqua's water bills will not experience substantial cost fluctuations due to changes in bills. OCA St. 5 at 45. The OCA explained that the variability in costs, such as those found in energy CAPs, would not be present in Aqua's program because, except for a small portion attributable to discounts on Tier 2 consumption for the lowest income, the vast bulk of discounts provided – whether using Aqua's or the OCA's proposed discounts - are applicable only to the base facility charge and to the first tier of consumption (*i.e.*, the first 2,000 gallons of use). *Id.*

We find the OCA's arguments to be more persuasive. The variability arguments presented by the Company assumes that its and the OCA's projections will vary between \$3 million to \$8 million or between \$4 million and \$10 million from month to month. We are of the opinion that such an occurrence is unlikely because the costs associated with Aqua's low-income water assistance offerings will likely start at some point between those ranges and gradually increase over time as participation in the program increases until it eventually levels off at the top of the projected ranges, taking into account the amount of public outreach conducted by the utility and the number of

customers who will actually qualify for each offering pursuant to the design of the programs. Notwithstanding the Company's and the OCA's arguments, we note that this is just one consideration to take into account in considering the reasonableness of a reconcilable surcharge; another issue is the appropriateness of implementing a reconcilable rider in this rate case proceeding rather than addressing it pursuant to Section 1307(a) in the context of a generic investigation proceeding where all water utilities would have the opportunity to participate. This is especially relevant here because, as the OCA noted, all Pennsylvania water utilities that offer discount programs, including Pennsylvania-American Water Company and PWSA, currently recover their low-income assistance program costs through base rates. OCA Exc. at 27 (citing OCA R.B. at 87; OCA St. 5SR at 28-29).

The OCA also excepted to the ALJ's adoption of the Company's position that the reconcilable USR should be approved because the program costs are outside of the Company's control and that a reconcilable surcharge is necessary to allow for full cost recovery and to ensure robust customer assistance programs. OCA Exc. at 27 (citing R.D. at 107-08). As noted, the OCA asserts in its Exceptions that the ALJ disregarded that the statutory mandate, which was enacted to permit energy companies to recover their full low-income program costs, does not apply to water utilities. The OCA further contends in its Exceptions that it is not appropriate to compare the energy utilities' mature universal services programs with a statute-defined cost recovery mechanism and Aqua's proposed discount/arrearage forgiveness programs. Aqua Exc. at 27. Aqua disagrees with the OCA's claims that the costs of the program are within Aqua's control because the OCA ignores its own admission that no enrollment limitations have been proposed, and that variance in enrollment will drive variances in costs. Aqua R. Exc. at 14 (citing Aqua M.B. at 159; OCA St. 5SR at 29). The Company also submits that, contrary to the OCA's assertion, Section 1307(a) provides a statutory basis for its proposed reconcilable rider.

Although the Company is correct that Section 1307(a) provides the statutory basis for the use of reconcilable riders, the fact remains that unlike energy companies, the water companies are not statutorily-mandated to implement universal service plans or to use a Section 1307(a) rider to recover the associated costs as are the energy companies.¹³⁵ In addition, as we stated, *supra*, use of such riders are the exception rather than the rule, and it is our preference that it is best to consider the development of a policy regarding the use of a Section 1307(a) reconcilable rider to recover water utilities' low-income programs in a generic investigation proceeding. Furthermore, we disagree with the Company that its program costs are beyond its controls; the Company is responsible for establishing the budget and parameters associated with each of its programs. In this regard, the Company has some control over the number of customers who may or may not qualify.

Next, the OCA excepted to the ALJ's Recommended Decision because the ALJ did not address its witness, Mr. Roger D. Colton's, recommendation that only net costs, rather than gross costs, of low-income programs should be recovered in base rates including via a cost offset that reflects the benefits of the program to Aqua's uncollectible expenses. OCA Exc. at 28 (citing OCA St. 5 at 42); OCA M.B. at 151-52. In this regard, the OCA averred in its Main Brief that its witness, Mr. Colton, provided the following testimony why he believed a lost revenue offset to gross low-income program costs for the discount and arrearage forgiveness programs is necessary and should be adopted:

The "basis" for my recommended lost revenue adjustment is not that Aqua PA has performed no collectability analysis. The basis for my adjustment is that, in the absence of such an adjustment, Aqua PA will recover some parts of low-income rates twice. Aqua PA's proposal to include 100% of its low-income discount through rates assumes that, in the absence of the discount, 100% of the billed revenue to discount

¹³⁵ See 66 Pa. C.S. § 2804(9) for electric utilities and § 2203(8) for gas utilities.

participants would have been collected. Only given this assumption is it reasonable to say that the dollar amount of the discount needs to be replaced by separately including that discounted revenue in rates. We know, however, that Aqua PA does not collect 100% of its low-income billings in the absence of the discount.

OCA M.B. at 153 (citing OCA St. 5SR at 30-31). The OCA further submitted in its Main Brief that Mr. Colton argued that the unpaid dollars of its low-income customers are currently reflected in base rates and that Aqua is proposing “to continue to reflect those unpaid dollars in rates and, in addition, to collect 100% of its discounted revenues again as though all of the discounted revenue would have been collected in the absence of the discount program.” OCA M.B. at 154 (citing OCA St. 5SR at 31 (emphasis in original)). Thus, the OCA recommended, that since Aqua has collection contracts which provide contingency fees between 18% to 40% of the amount collected (OCA-II-47), that an “offset in the middle of that range (28%)” should be used to reduce the cost of Aqua’s bill discount program. OCA R.B. at 83 (citing OCA St. 5 at 42).

Aqua replied that the OCA’s recommendation is premature and unnecessary where a reconcilable rider is used. Aqua R. Exc. at 14-15. Aqua’s witness, Ms. Black, submitted that the OCA’s assertions lack merit because:

[o]ver time, as participation in the program grows and matures to a stable level, bad debt levels will adjust accordingly, reflecting appropriate levels of collectability for the Company. I would further note that because we do not have a historical study of low income billing collections and its relation to bad debt, any adjustment proposed at this stage would be premature. Use of the reconcilable rider, which limits arrearage forgiveness recovery to those cost which are

actually incurred due to customers receiving benefits from timely payments, will align recovery with actual collections experience.

Aqua M.B. at 161 (citing Aqua St. 10-R at 14). Aqua averred in its Reply Brief that even if this offset were necessary and appropriate, the OCA's 28% offset is unreasonable and any offset established should be based on actual collections experience gained after implementation of the CAP to ensure the offset reflects the actual collection savings. Aqua R.B. at 70-71.

We agree with the Company. In our opinion, the OCA's proposed 28% offset is arbitrary; and it would not be prudent to adopt it as a realistic offset to reflect actual collections savings. Nevertheless, we agree with the OCA that there is a potential that the Company's CAP may result in a double recovery of low-income rates. Inasmuch as the Company acknowledged that any offset should be based on actual collections experienced gained after the implementation of the CAP to ensure it is an accurate representation of actual collections savings, we shall deny the OCA's Exception concerning its recommended offset and, instead, direct Aqua to take the necessary actions within its Company to monitor and maintain the necessary information that could be used in its next base rate proceeding to determine whether a double-recovery is occurring, and if so, to determine an appropriate offset that should be applied to prevent any double recovery. The Company is further directed to consult with the OCA and I&E to determine the necessary data needed to accomplish this directive.

Accordingly, consistent with the discussion above, we shall reverse the ALJ's recommendation and adopt the OCA's Exception No. 16, in part, by rejecting the Company's proposed reconcilable USR and requiring that the Company continue to recover its low-income program costs through base rates. However, the OCA's Exception No. 16, with regard to its requests that the Company be directed to collect only

the net costs of its low-income program in this proceeding is denied because an appropriate offset has not been determined in this proceeding and needs further review.

Therefore, consistent with the above discussion, the Company is directed to begin monitoring and reviewing the appropriate billing data for purposes of determining, in its next base rate proceeding, if, and to what extent, any offset to its low-income program cost recovery is necessary to avoid any double recovery the Company may receive through actual collections after the implementation of its CAP. The Company is further directed to consult with the OCA and I&E to determine the necessary data needed to accomplish this directive.

XII. Miscellaneous Issues

A. Universal Service Issues

1. Consideration of Affordability and CAP Design

a. Positions of the Parties

Aqua explained that before this proceeding, it made certain commitments regarding its existing Helping Hand Program¹³⁶ and the evaluation and development of a more comprehensive USP as a part of the Commission's approval of the acquisition of the Peoples Companies by Essential Utilities, Inc., f/k/a Aqua America, Inc. Aqua M.B.

¹³⁶ Several years ago, Aqua implemented a program called "A Helping Hand" to facilitate the payment of water and wastewater bills by its low-income residential customers. Helping Hand is "a program designed to help limited-income customers with arrearages to reduce the amount they owe through regular monthly payments." Under the program, "[f]or each timely payment made, participants receive a \$25 credit towards their prior arrearage." Helping Hand does not provide a discount or Percentage of Income Payment Plan (PIP). Aqua St. 10 at 4.

at 141 (citing *Aqua-Peoples Acquisition Order*). In the settlement agreement the Commission approved in the *Aqua-Peoples Settlement*, the parties agreed as follows:

108. Aqua PA will include in the Helping Hand collaborative agreed to in its recent rate case settlement at Docket No. R-2018-3003558, discussion of the development of a comprehensive universal service and conservation program that will be proposed by Aqua PA. The items to be evaluated for inclusion in Aqua PA's proposal include: (1) a bill payment/customer assistance program; (2) a hardship fund; (3) a water conservation program; (4) a low income service repair line and replacement program; and (5) a comparable funding mechanism that exists for electric and gas utilities in Pennsylvania. Aqua PA will submit a rate recoverable universal service proposal in Aqua PA's next base rate case that considers the best practices learned from the Peoples Companies and through conversations from the Helping Hand collaborative.

Aqua M.B. at 141-142 (citing *Aqua-Peoples Settlement* at ¶ 108).

Consistent with its commitments in the *Aqua-Peoples Settlement*, Aqua has proposed to implement a CAP that builds upon the successful aspects of Helping Hand in order to further assist low-income customers throughout its service territory. Aqua M.B. at 143 (citing Aqua St. 10 at 5-8). The proposed CAP adds tiered bill discount benefits, similar to the structure in place at the Peoples Companies, and an Emergency Repair Program to the benefits already afforded under Helping Hand. The proposed three tiers are set at 100% of the Federal Poverty Level (FPL), 150% FPL, and 200% FPL, with the highest level of discounts provided to those in the first tier and gradually reducing the discounts in the other tiers. Aqua M.B. at 145 (citing Aqua St. 10 at 7; Aqua Exh. RFB-2 (setting forth the discounts to the Base Facility Customer Charge and Consumption Charge that an enrollee can obtain based on their income tier)).

The OCA analyzed the affordability of water and wastewater bills and cited to the extensive testimony of its witness, Mr. Colton. OCA M.B. at 120-131. CAUSE-PA similarly argued that existing rates are unaffordable. CAUSE-PA M.B. at 17-18. Therefore, both Parties recommended modifications to Aqua’s proposed CAP.

Among other things, the OCA argued that the benefits of the affordability program contemplated by the proposed USP should be modified to increase the level of discounts provided to customers and to adjust the structure of the income tiers. OCA M.B. at 136-39; 141-42. The OCA also recommended that the design of the discount program should evolve toward a PIP¹³⁷ similar to the program operated by Aqua’s sister utility, Peoples Gas. The OCA stated that Aqua should not immediately move to a PIP design but, rather, that a series of policy decisions by the Commission would first be needed, including what water and wastewater burden should be deemed affordable, and such decisions are best addressed in a statewide proceeding involving all water and wastewater utilities and related stakeholders and would involve additional analysis and data than is available in this rate proceeding. OCA M.B. at 135-136; OCA St. 5 at 31. The OCA proposed that Aqua be required to present a PIP in its next base rate proceeding. OCA M.B. at 144-52.

CAUSE-PA supported the OCA’s recommendations regarding discount structure and adjusted income tiers. CAUSE-PA M.B. at 21 (citing OCA St. 5 at 35,

¹³⁷ The Commission’s CAP Policy Statement provides the following:

Total payment for total electric and natural gas home energy under a percentage of income plan is determined based upon a scheduled percentage of the participant’s annual gross income. The participating household’s gross income and size place the household at a particular poverty level based on the [Federal Poverty Income Guidelines].

52 Pa. Code § 69.265(2)(i).

Table 9; OCA St. 5 at 39, Table 13; CAUSE-PA St. 1-R at 7). Additionally, CAUSE-PA stated that as its witness, Harry Geller, Esq., recommended in his direct testimony, Aqua should be required to closely monitor and analyze the water and wastewater burdens of CAP participants and should transition its proposed bill discount structure to a PIP structure if participants are not reaching acceptable levels of affordability. CAUSE-PA M.B. at 22 (citing CAUSE-PA St. 1 at 44-45; OCA St. 5 at 31).

Aqua explained in its direct and rebuttal testimony that it performed an affordability analysis and considered bill affordability as a part of the development of the proposed USP. Aqua M.B. at 144-48; Aqua R.B. at 58. The Company averred that the program, as designed, takes affordability into account and also balances the interests of ratepayers who are not low-income, but who bear the costs of universal service programs. Specifically, the Company contended that the OCA and CAUSE-PA fail to consider the effect of their proposed changes upon the rates of non-low-income customers. Aqua R.B. at 59. Aqua also argued that its proposed bill discount program should not be modified. Aqua M.B. at 153-54; Aqua R.B. at 60. Aqua stated that it should not be required to propose a PIP in its next base rate proceeding, particularly when the Company questions the cost/benefit of a PIP for water and wastewater customers at this time. Aqua submitted that once its proposed USP is in place, it can and should be evaluated in the context of a USP proceeding specifically focused on the effectiveness, costs, and benefits of the programs. Aqua R.B. at 63. Aqua further submitted that the OCA and CAUSE-PA's other suggestions regarding discount structure and adjusted income tiers, which would require programmatic changes to the existing system, were unreasonable and not feasible at this time, because Aqua will be converting its billing system to SAP in 2023 and development of the system is in the early stages. *Id.* at 61-62.

b. Recommended Decision

The ALJ agreed with the Company that substantial modification of Aqua's proposed CAP was not appropriate at this time. While the ALJ recognized that the Code permits consideration of a broad range of issues in base rate proceedings, the ALJ concluded that this rate case was not the best forum for considering "the complex social and economic issues related to affordability as it impacts CAP design." R.D. at 113. The ALJ noted the OCA's acknowledgment that the Commission has not established the water and wastewater burden that should be deemed affordable and the OCA's concession that the "policy decision of the appropriate water and wastewater burdens is best addressed in a statewide proceeding involving all water/wastewater utilities and related stakeholders or would involve additional analysis that would require more time and data than is available in this proceeding." *Id.* (citing OCA M.B. at 135-36; OCA St. 5 at 31).

For example, the ALJ pointed out that the OCA and CAUSE-PA proposed that Aqua should be required to implement a PIP in its next base rate case. The ALJ determined that this base rate proceeding was not an adequate venue for consideration of whether implementing a PIP is reasonable, and this complex issue would be better reviewed in the universal service stakeholder process which would allow the parties to review data from the current program and its associated costs through a more flexible discourse. The ALJ similarly found that many of the structural refinements to the CAP design regarding bill discount and arrearage forgiveness benefits should be more fully considered at a later time, reasoning that Aqua explained that many of these recommendations cannot be efficiently implemented until the Company converts its current customer information system (CIS) to SAP in 2023. R.D. at 113. The ALJ agreed with Aqua that consideration of the structural changes proposed by the OCA and CAUSE-PA should be deferred until Aqua's transition to SAP, noting that the Company has committed to providing arrearage forgiveness benefits for each full CAP payment

made, regardless of timeliness, when the conversion to SAP is completed. *Id.* at 113-14 (citing Aqua St. 10-R at 10).

The ALJ further reasoned that the OCA and CAUSE-PA have not demonstrated that the costs to make these proposed changes while Aqua is using its current CIS is reasonable. The ALJ stated that such proposed enhancements can be considered during the process of evaluating the effectiveness of the design of Aqua's universal service program in the future. The ALJ noted the OCA's concession that Aqua's proposed bill discount program will improve affordability for low-income customers. R.D. at 114. The ALJ also noted that Aqua's proposed USP was presented to and vetted by stakeholders participating in its Helping Hand Collaborative, including CAUSE-PA and the OCA, before this proceeding. *Id.* (citing Aqua St. 10 at 3). The ALJ further noted that Aqua was able to draw upon the knowledge and expertise of its affiliates, the Peoples Companies, and the Peoples Companies' Director of Community Assistance Program, Ms. Black, to develop the USP. The ALJ concluded that while a robust low-income program is required to offset the rate increases proposed in this case, increasing costs to non-low-income customers should also be mitigated. R.D. at 114.

c. OCA Exception No. 17, CAUSE-PA Exception No. 1, and Replies

In its Exception No. 17, the OCA avers that the ALJ erred in her determination to adopt Aqua's proposed program design without modification. OCA Exc. at 28. The OCA argues that the ALJ disregarded the evidence it presented, including OCA witness Mr. Colton's, extensive analysis of the affordability of Aqua's proposed program design for its water and wastewater discount and arrearage forgiveness proposals. *Id.* (citing OCA M.B. at 117-75; OCA R.B. at 73-82, 91-96). The OCA states that, instead, the ALJ improperly deferred the determination of the OCA's recommended program modifications to a generic proceeding sometime in the future. OCA Exc. at 28.

In so doing, the OCA believes that the ALJ misunderstood the purpose of Mr. Colton's testimony. The OCA explains that the purpose of Mr. Colton's affordability analysis was not to create a final, definitive assistance program for Aqua but, rather, Mr. Colton understood that the program would need to evolve and recommended that the affordability targets be established in a future generic proceeding and that Aqua propose a PIP in its next base rate proceeding. *Id.* at 29. The OCA emphasizes that Mr. Colton's testimony was intended to demonstrate the problems with Aqua's proposed discount and arrearage forgiveness levels, particularly for customers from 0-50% of the FPL and to show that the proposed program design will not achieve the objectives of the *Aqua-Peoples Settlement* to consider a "comprehensive universal services program." *Id.* (citing *Aqua-Peoples Settlement* at 135; OCA M.B. at 133-36; OCA R.B. at 76-77).

The OCA explains that a comprehensive universal services program should be designed to achieve affordability for customers, and the evidence Mr. Colton presented demonstrated that the discount program Aqua proposed for water and wastewater customers will significantly under-serve those customers from 0-50% of the FPL and will not help customers achieve affordability after implementation. *Id.* The OCA additionally states that the ALJ ignored the evidence of the shortcomings of the continuation of the current \$25/month arrearage forgiveness program described in Mr. Colton's testimony. OCA Exc. at 29 (citing OCA St. 5 at 59-60, Schs. RDC-1, RDC-2; OCA St. 5-SR at 7-8). As such, the OCA argues that the Commission should approve the OCA's proposed design modifications to Aqua's water and wastewater discount and arrearage forgiveness programs. OCA Exc. at 29 (citing OCA M.B. at 117-75; OCA R.B. at 73-82, 91-96).

In its Exception No. 1, CAUSE-PA avers that the ALJ erred as a matter of law and sound public policy by concluding that issues involving the design of Aqua's rate discount and arrearage forgiveness programs are not properly considered in the context of this rate proceeding. First, CAUSE-PA argues that an evaluation of the justness and

reasonableness of any proposed rate increase must necessarily analyze the effect of the rate increase on the ability of residential consumers to afford service and, consequently, the adequacy and design of rate assistance programming. CAUSE-PA Exc. at 4. CAUSE-PA states that the rules, regulations, and practices for Aqua's universal service programs affect the charges to both program participants and non-participants, and, therefore, they fit squarely within the definition of rates that must be just and reasonable and must be evaluated in this rate proceeding. *Id.* at 5 (citing *Pa. PUC v. PGW*, Docket No. R-2020-3017206 (Order on PGW's Motion *in Limine* dated July 8, 2020) at 3). CAUSE-PA notes the testimony of Mr. Geller, who explained that it is not appropriate "to raise rates for water and wastewater service without first ensuring that low and moderate income customers are able to receive affordable service under just and reasonable terms." CAUSE-PA Exc. at 5 (citing CAUSE-PA St. 1 at 10). CAUSE-PA asserts that universal accessibility is a polestar principle of ratemaking for essential, life-sustaining services like water and wastewater. CAUSE-PA Exc. at 5-6.

CAUSE-PA submits that low-income customers represent a significant portion of Aqua's residential customers, as Aqua estimates that nearly one in four households in its service territory have income below 200% of the FPL and has identified approximately 5% of its total residential customers as low-income. CAUSE-PA argues that in order to meaningfully conduct an investigation of proposed and existing rates, it is necessary to examine the lawfulness, justness, and reasonableness of rates for all consumers, including low-income consumers, and such an investigation necessarily includes an examination of the design and delivery of Aqua's universal service programs. CAUSE-PA Exc. at 6.

CAUSE-PA notes the concerns it has raised throughout the proceeding related to rate affordability for low-income customers and the inadequacy of Aqua's proposed CAP to ensure reasonable rate affordability for low-income CAP participants.

CAUSE-PA also notes that based on these concerns, it recommended that Aqua be required to: (1) implement the improved discount levels and adjusted income tiers recommended by the OCA expert witness, Mr. Colton, and supported by Mr. Geller; (2) closely monitor and analyze water/wastewater burdens of CAP participants; and (3) transition to a PIP structure if participants are not reaching acceptable levels of affordability. *Id.* at 7. CAUSE-PA further notes the testimony and evidence its witness presented that Aqua's Helping Hand arrearage forgiveness program is inadequate to address high levels of arrears accrued by low-income customers and further exacerbates rate unaffordability faced by these customers. *Id.* at 7-8. CAUSE-PA states that it has recommended that Aqua should be required to revise the structure of Helping Hand so that: (1) when entering the program, pre-program arrears are frozen and no longer accrue late fees or charges; and (2) for each in-full payment that a customer makes while enrolled in Helping Hand, 1/36th of the customer's frozen arrears, or \$25, whichever is greater, should be forgiven. *Id.* at 8.

CAUSE-PA avers that by precluding meaningful consideration of universal service issues in the context of this rate proceeding, the ALJ has disregarded the statutory mandate to ensure that all rates are just and reasonable and contradicted past precedent considering universal service issues. CAUSE-PA requests that the Commission clarify that examination of the structure and affordability of universal service programs is properly addressed in the context of this rate case. CAUSE-PA Exc. at 9-10.

Second, CAUSE-PA argues that the informal universal service stakeholder process is not a substitute for consideration of the impact a rate increase will have on low-income customers in this rate proceeding and the need to make corresponding adjustments to the rates charged through universal service programming. CAUSE-PA supports using universal service stakeholder meetings to provide a forum for parties and stakeholders to discuss issues surrounding the design and delivery of universal service programming and to reach consensus where possible. CAUSE-PA Exc. at 11.

Nevertheless, CAUSE-PA avers that informal stakeholder meetings are not an adequate substitute for a formal examination of rates produced by universal service programming in the context of a rate proceeding, because CAUSE-PA believes that informal stakeholder processes lack the tools necessary to meaningfully investigate universal services, including the use of discovery and evidentiary hearings. *Id.* at 11-12. CAUSE-PA submits that informal processes do not provide for a mechanism to require Aqua to implement, or even consider, parties' proposals and if Aqua fails to implement recommended improvements, parties would not have a clear path to take exception to or appeal Aqua's decisions. *Id.* at 12.

Third, CAUSE-PA argues that the continued need to address water and wastewater affordability on a statewide level does not preclude review of the adequacy of Aqua's low-income programs in the context of this rate proceeding. CAUSE-PA states that all rates must be just and reasonable and that the absence of a statewide affordability standard does not eliminate this requirement. CAUSE-PA Exc. at 12. CAUSE-PA supports the initiation of a statewide proceeding to establish formal Commission policy on water and wastewater affordability and applicable standards and guidelines to help ensure that all Pennsylvanians can afford water and wastewater services. *Id.* at 12-13. However, CAUSE-PA asserts that the absence of formal, statewide policy does not bar consideration of program improvements critical to ensuring low-income customers can reasonably afford to connect to and maintain water and wastewater services in the context of this or other rate proceedings. CAUSE-PA takes issue with the ALJ reaching a conclusion on several aspects of Aqua's universal service programming, such as the verification process and other program rules, while declining to reach conclusions about the overall design and benefits provided through the program. *Id.* at 13.

In its Replies to Exceptions, Aqua avers that both the OCA and CAUSE-PA's Exceptions regarding its proposed USP lack merit. Aqua R. Exc. at 15. Aqua states that the ALJ properly recognized that the Company's proposed USP will

improve affordability and benefit customers, while also balancing the implementation of this new program as a part of this base rate case with the fact that Aqua will convert its existing customer information system (CIS) to SAP in 2023. *Id.* (citing R.D. at 113-14). Aqua submits that it demonstrated that the additional income tiers, changes to benefits, and other proposed modifications that the OCA and CAUSE-PA propose are incompatible with the Company's existing CIS and would increase the costs of implementing the USP. Aqua R. Exc. at 15-16 (citing Aqua M.B. at 148-155; Aqua R.B. at 56-67).

Aqua continues that CAUSE-PA's claims regarding the use of the informal stakeholder process misread the Recommended Decision, as the ALJ did not "relegate" the evaluation of the impacts of base rate increases to the informal stakeholder process. Aqua states that, rather, the ALJ recognized that in the context of this base rate case, the informal stakeholder process could be used to further present and discuss possible modifications to the program before Aqua's next base rate case, or another case involving modifications to the USP, is initiated. Aqua R. Exc. at 16. Aqua also states that CAUSE-PA's claim that addressing affordability concerns in a statewide proceeding should not preclude an evaluation of low-income impacts and that the USP in this base rate case misses the point, because the ALJ properly found that an "affordability" determination should be made at the statewide level since it will involve all water and wastewater utilities. *Id.* (citing R.D. at 113).

d. Disposition

Upon review, we agree with the ALJ that certain modifications and determinations regarding Aqua's proposed CAP are not appropriately considered in the context of this base rate proceeding. For instance, we do not have sufficient information in this proceeding to require Aqua to propose a PIP in its next base rate proceeding, as the OCA proposes. It is unclear at this time what the cost, benefits, and overall effectiveness

of such a program would be for a water/wastewater public utility. As the ALJ stated, this complex issue would be better reviewed in a universal service stakeholder process that would allow the parties to review data from the current program and its associated costs through a more flexible discussion. The OCA itself acknowledged that before Aqua could move to a PIP design, a series of policy decisions by the Commission would first be needed, including what water and wastewater burden should be deemed affordable, and such decisions are best addressed in a statewide proceeding involving all water and wastewater utilities and related stakeholders and would involve additional analysis and data than is available in this rate proceeding. OCA M.B. at 135-36; OCA St. 5 at 31.¹³⁸

Similarly, we agree with the ALJ that the structural changes the OCA and CAUSE-PA proposed to the CAP design regarding bill discount and arrearage forgiveness benefits should be more fully considered at a later time, particularly because Aqua explained that many of these recommendations cannot be efficiently implemented until the Company converts its current CIS to SAP in 2023. *See* R.D. at 113. Aqua has presented evidence in this proceeding to demonstrate that its proposed CAP, which includes its Helping Hand arrearage forgiveness program and tiered bill discount benefits similar to the structure in place at the Peoples Companies, is reasonable. Aqua explained in its testimony that it performed an affordability analysis and considered bill affordability as part of the development of its proposed USP. Aqua St. 10 at 6-7.

¹³⁸ The Commission engaged in a holistic review of universal service and energy conservation programs of electric distribution companies (EDCs) and natural gas distribution companies (NGDCs), including a thorough examination of the effects of the Commission's current energy burden thresholds, focusing on whether existing CAP pricing was affordable for low-income customers. The Commission's review and examination resulted in the adoption of CAP policy changes and amendments to the Commission's existing CAP Policy Statement at 52 Pa. Code § 69.261–69.267. *See Amendments to Policy Statement on Customer Assistance Program, Final Policy Statement Order*, Docket No. M-2019-3012599 (Order entered November 5, 2019). The Commission has not engaged in a similar review and examination concerning water and wastewater public utilities operating in Pennsylvania.

Ms. Black testified that consistent with the Aqua-Peoples Settlement, Aqua's proposed USP was presented to and vetted by stakeholders participating in its Helping Hand Collaborative, including CAUSE-PA and the OCA, before this proceeding. The Collaborative discussed aspects of the Company's proposal, including needs analysis, projected enrollment levels, proposed discounts, program designs, and estimated costs, and the participants noted the tiered benefits were an important part of the design by providing the highest amount of benefits to the most vulnerable. Ms. Black noted that the group did not recommend any changes to the proposal at that time. Aqua St. 10 at 13.

Ms. Black further testified that the OCA and CAUSE-PA's suggestions regarding discount structure and adjusted income tiers would require programmatic changes to the existing system, which currently maintains the Company's customer data. Ms. Black explained that changes to the existing system are not recommended, as Aqua will be converting its billing system to SAP in 2023, and development of the system is in the early stages. Aqua St. 10-R at 8. Ms. Black stated that Aqua's proposed CAP is intended to improve affordability while maintaining reasonable program costs for other ratepayers from whom discounts are recovered. Ms. Black testified that the Company's proposal decreases low-income customers' monthly bill responsibilities by offering discounts that are tiered to provide larger discounts to those with lower income. *Id.* at 10.

As proposed, we conclude that Aqua's program is reasonable under the circumstances as it takes affordability into account and balances the interests of low-income customers as well as the interests of ratepayers who are not low-income but bear the costs of universal service programs. Based on the record, we agree with the ALJ that the OCA and CAUSE-PA have not demonstrated that the costs to make their proposed changes while Aqua is using its current CIS are reasonable and that any such proposed enhancements can be considered during the process of evaluating the effectiveness of the design of Aqua's universal service program in the future.

Our decision on this issue is consistent with prior decisions in which we have determined that it was not appropriate to consider proposals relating to a public utility's energy burdens, CAP, and other universal service program issues within the context of a base rate proceeding, finding that such proposals are more properly considered in a public utility's Universal Service and Energy Conservation Plan (USECP) proceeding. *See PECO Gas* at 195; *Columbia Gas* at 160. While water and wastewater public utilities are not required to file USECPs with the Commission, any possible modifications to Aqua's universal service programs, including a move toward a PIP, can be discussed as part of Aqua's Helping Hand Collaborative or a larger, statewide stakeholder proceeding and presented to the Commission in a future proceeding appropriate for addressing Aqua's universal service programs, whether it be Aqua's next base rate case or another proceeding involving modifications to the Company's USP. For these reasons, we deny OCA Exception No. 17 and CAUSE-PA Exception No. 1.

2. Income Verification

a. Positions of the Parties

I&E generally agreed with the Company's proposed USP. However, I&E's witness, Ms. Wilson, recommended that the Company be required to verify enrollees' income for CAP eligibility to ensure the legitimacy of applicants and prevent misuse or abuse of the program. I&E M.B. at 60-62 (citing I&E St. 1 at 45-47).

Aqua currently allows participants to self-attest to their income. Aqua explained that discount water programs "do not typically require income documentation for participation" and that "[p]roviding income documentation can be a barrier to enrollment for eligible households." Aqua stated that the Commission has previously encouraged self-attestation of income. Aqua noted that its witness, Ms. Black testified that during the periods where self-attestation was used, Peoples Companies "did not see a

spike in enrollment levels as a result of this flexibility and participation levels, year over year, are relatively flat.” Aqua also noted Ms. Black’s testimony that as with any income-based programs, there may be individuals that attempt to perpetrate fraud, but customers who are genuinely low-income customers are generally those that seek assistance. Aqua M.B. at 150 (citing Aqua St. 10-R at 3-4).

The OCA agreed that the Company should be permitted to use self-attestation of income and that income verification should not be required for participation in the program. The OCA recommended, however, that the Company review the income qualifications for randomly selected CAP participants and report error rates to the Commission’s Bureau of Consumer Services (BCS). The OCA stated that to the extent error rates are not reasonable, BCS and Aqua should develop appropriate remedial action. OCA M.B. at 144.

Similarly, CAUSE-PA opposed the imposition of stringent income documentation requirements for Aqua’s universal service programs, including its proposed CAP. CAUSE-PA argued that I&E did not present any evidence to support its contention that such income documentation would prevent fraud or that fraud was occurring in the first instance. CAUSE-PA also argued that restrictive income documentation requirements would be a barrier to low-income customers successfully enrolling in CAP and hinder the success of the proposed CAP at its outset. CAUSE-PA R.B. at 18. CAUSE-PA further argued that I&E’s proposal lacked critical details for how income documents will be collected and evaluated, what income documents will be accepted, and how applicants will be informed if the documentation submitted is not received or is deemed unacceptable. *Id.* at 19.

b. Recommended Decision

The ALJ agreed with Aqua that I&E's recommendation regarding income verification should be rejected. The ALJ reasoned that based on Ms. Black's experience, the benefit of removing a barrier to low-income customers outweighs the risk of abuse or harm to paying customers. R.D. at 115.

c. I&E Exception No. 3 and Replies

In its Exception No. 3, I&E argues that the ALJ erred in rejecting I&E's recommended income verification proposal for CAP eligibility. I&E avers that the ALJ erroneously accepted Aqua's position that the benefit of removing a barrier to low-income customers outweighs the risk of harm to paying customers. I&E Exc. at 6. I&E points out that when asked about Peoples' CAP during discovery, Aqua stated that "Peoples' CAP requires income documentation from an interested customer to certify income eligibility for participation" and upon recertification. *Id.* (citing I&E St. 1 at 46). I&E also points out that the ALJ acknowledged its concern that as with other income-based programs, there may be individuals who attempt to perpetrate fraud. I&E Exc. at 6 (citing R.D. at 115).

I&E contends that the Commission should accept its recommendation regarding income verification for CAP eligibility. I&E Exc. at 7. I&E states that it explained that the program Aqua proposed will be a full-scale USP funded by ratepayers. I&E also notes that it argued that the program as proposed is based on a specific level of benefits matched to a specific percentage of the FPL and, as such, logic dictates that incomes must be verified to properly administer and award the graduated program benefits. *Id.* (citing I&E M.B. at 62). I&E believes that if the Company does not perform income verifications, this would subject the USP to potential abuse that would harm responsible customers that pay their bills. I&E Exc. at 7. I&E further argues that support

for income verification is set forth in the Code and the Commission's Regulations and that in enacting Chapter 14 of the Code, 66 Pa. C.S. §§ 1401-1419, the Pennsylvania General Assembly intended to protect responsible bill paying customers from rate increases attributable to other customers' delinquencies. I&E Exc. at 7 (citing I&E M.B. at 62). I&E avers that any abuse of the CAP programs through income self-attestation by ineligible customers would have the same negative affect on the responsible, paying customers and may also harm eligible customers. I&E Exc. at 7. Moreover, I&E points out that as stated in Aqua's rejoinder testimony, Aqua's provider of administrative services, Dollar Energy Fund, already has the cost of income verification built into its proposal. *Id.* (citing I&E M.B. at 62).

In its Replies to Exceptions, Aqua avers that the ALJ correctly rejected I&E's recommendation that CAP enrollees be required to verify their income. Aqua states that its proposal is based on experience showing that income documentation can be a barrier to enrollment. Aqua R. Exc. at 17. Aqua notes that this concern must be balanced against the risk of fraud; however, Aqua stresses that when Peoples used self-attestation, it did not experience a rise in enrollment levels that was indicative of a serious effort to defraud the program. *Id.* (citing Aqua M.B. at 150). Aqua submits that the CAP is a new program for its low-income customers, and barriers to participation should be avoided when possible. Aqua R. Exc. at 18 (citing Aqua M.B. at 150; Aqua R.B. at 62).

In its Replies to Exceptions, the OCA avers that the ALJ correctly denied I&E's income verification proposal. OCA R. Exc. at 23. The OCA's position is that Aqua should be permitted to use self-attestation of income for its program. *Id.* (citing OCA M.B. at 143-144). In response to I&E's reliance on Chapter 14 in support of its proposal, the OCA states that Chapter 14 does not specifically address income verification for any CAP. The OCA also argues that the evidence does not support the idea that abuse or fraud will occur without income verification but, instead, supports the

opposite conclusion. OCA R. Exc. at 23. The OCA explains that water companies do not typically require income documentation for participation and requiring income documentation can be a barrier to enrollment. *Id.* (citing R.D. at 115; Aqua St. 10-R at 4). The OCA notes that the Commission has also previously supported the use of self-attestation of income. OCA R. Exc. at 23. The OCA further notes that during the pandemic, Peoples allowed customers to enroll using self-attestation of income and did not see a spike in enrollment levels. *Id.* (citing Aqua St. 10-R at 4; OCA R.B. at 80).

In its Replies to Exceptions, CAUSE-PA states that the ALJ properly found that I&E's recommendation to impose additional income verification requirements should be rejected. CAUSE-PA R. Exc. at 3. CAUSE-PA avers that Aqua is, in fact, proposing a verification process for its CAP, which the ALJ approved, as Aqua proposes to use self-declared income to verify CAP eligibility and for recertification purposes. CAUSE-PA points out that Aqua is not, however, proposing to require applicants to submit physical documentation of income because such a requirement would pose burdensome obstacles for low-income customers most in need of assistance. *Id.* at 4 (citing CAUSE-PA R.B. at 17-18).

CAUSE-PA additionally contends that I&E has not presented any evidence to support its contention that failure to impose income documentation requirements will cause universal service application processes to be abused and will ultimately harm other ratepayers and residential customers. CAUSE-PA R. Exc. at 5 (citing CAUSE-PA R.B. at 18). CAUSE-PA states that its witness, Mr. Geller, testified that imposing more restrictive income documentation requirements, as I&E recommends, will act as a barrier to low-income customers successfully enrolling in universal service programs and hinder the success of the proposed CAP. CAUSE-PA R. Exc. at 5 (citing CAUSE-PA R.B. at 18-19). CAUSE-PA submits that Aqua's low-income programs have historically had low enrollment levels, particularly when measured against the number of low-income customers Aqua estimates are eligible for assistance. *Id.*

CAUSE-PA also opposes I&E's proposal to require Aqua to implement income documentation requirements for households to recertify enrollment in Aqua's universal service programs. As discussed in CAUSE-PA's Reply Brief, Mr. Geller extensively described how periodic recertification requirements pose difficulties for vulnerable low-income customers, including seniors or individuals with disabilities, because these households more often lack access to transportation and struggle to gather and submit formal income documentation. CAUSE-PA continues that these vulnerable households are also more likely to rely on fixed income sources that tend not to change from year to year, making recertification requirements unnecessary and administratively burdensome. As Mr. Geller noted, available independent evaluations of USECPs of other regulated Pennsylvania utilities have shown that requiring submission of income documentation through program recertification is a significant cause of high program attrition. CAUSE-PA R. Exc. at 7 (citing CAUSE-PA R.B. at 19).

Further, CAUSE-PA argues that I&E's reliance on Chapter 14 to support its income documentation proposal is misplaced because I&E fails to recognize that Chapter 14's declaration of policy expressly recognizes that Chapter 14 was enacted to improve payments for those "*capable of paying*," rather than to unfairly penalize those who cannot afford services. CAUSE-PA R. Exc. at 8 (citing 66 Pa. C.S. § 1402(2)). CAUSE-PA asserts that ensuring robust access to Aqua's universal service programs is consistent with the intent of Chapter 14 to provide greater equity among all customers. CAUSE-PA R. Exc. at 8.

Moreover, CAUSE-PA is concerned that I&E's proposal continues to lack critical details for how income documents will be collected, what income documents will be accepted, how income documents will be evaluated, and how applicants will be informed if their submitted documentation is not received or is considered unacceptable. CAUSE-PA believes that failing to provide these details has the potential to lead to widespread ambiguities in program requirements that will further impede low-income

customers from successfully enrolling in Aqua's universal service programs. Accordingly, CAUSE-PA supports the income verification process Aqua proposes and opposes I&E's recommendations to impose additional income documentation requirements. *Id.* Nevertheless, CAUSE-PA states that if the Commission decides to require additional income verification for Aqua's universal service programs, including the proposed CAP, such process should be implemented on a pilot basis to allow Aqua, the Parties and stakeholders, and the Commission to monitor how CAP enrollment, retention, and costs are impacted and to determine if there is any evidence of abuse of the universal service process. *Id.* at 8-9.

d. Disposition

Upon review, we conclude that Aqua should require income documentation from an interested customer to certify income eligibility for participation in its CAP and upon recertification in a manner similar to that of the Peoples Companies.¹³⁹ I&E's witness, Ms. Wilson, testified that while the Helping Hand program has historically been funded through voluntary donations and shareholder contributions, Aqua's proposed program would be funded through the proposed Universal Service Rider and would be fully ratepayer funded. I&E St. 1 at 44; I&E Exh. 1, Sch. 8.¹⁴⁰ While as some of the Parties note, this Commission took some steps in response to the COVID-19 pandemic to reduce barriers to participation, such as encouraging self-attestation of income for enrollment and encouraging utilities to halt the process of removing customers for failure to recertify income (*see, e.g.*, Aqua St. 10-R at 4), we are not otherwise aware that this Commission has approved a ratepayer-funded low-income program that does not include

¹³⁹ See Peoples Natural Gas Company LLC Universal Service and Energy Conservation Plan 2015-2018, Docket No. M-2014-2432515, at 8-10.

¹⁴⁰ As set forth in XI.E.3, *supra*, we are rejecting the Company's proposed reconcilable USR and requiring that the Company continue to recover its low-income program costs through base rates.

some form of documented income-verification. EDC and NGDC's CAPs require participating households to document their income eligibility periodically. Given the size and nature of Aqua's proposed program, which is larger and more robust than most of the other water utilities' programs, it makes sense to implement income eligibility processes similar to those of the EDCs and NGDCs.

We addressed a similar issue in reviewing National Fuel Gas Distribution Corporation's (NFG) 2017-2020 USECP.¹⁴¹ During that proceeding, NFG disclosed that it did not require its CAP participants to reverify income eligibility after enrollment, and that during recertification, NFG was accepting the household's verbal declaration of income. *NFG* at 34-35. We directed NFG to ensure that CAP households reverify income eligibility at least once every two years, stating:

Although we recognize accepting a verbal declaration of income is less burdensome for both the customer and the CAP administrator, utilities have the responsibility to ensure that their CAPs – which are primarily funded by non-CAP residential customers – help only those customers that qualify for these programs.

Id. at 36.

Applying similar reasoning in this case, we agree with I&E that program benefits contingent on a poverty level should be based on a verified percentage of income, as the costs of these programs can have a significant impact on ratepayer bills. *See* 2020 Report on Universal Service Programs and Collections Performance of the Pennsylvania Electric Distribution Companies and Natural Gas Distribution Companies, Appendix 7, at 89. We have provided some flexibility to EDCs and NGDCs

¹⁴¹ *See National Fuel Gas Distribution Corporation's Universal Service and Energy Conservation Plan for 2017-2020 Submitted in Compliance with 52 Pa. Code § 62.4*, Docket No. M-2016-2573847 (Order entered March 1, 2018) (NFG).

concerning the manner in which these utilities document income and what forms of documentation are acceptable, and these matters are not necessarily addressed in each utility's USECP. We believe that these issues and other related issues are best addressed in a utility's low-income program committee, and, in this case, may be addressed as part of Aqua's Helping Hand Collaborative. In the meantime, Aqua can use the income documentation standards that the Peoples Companies currently use. For these reasons, we shall grant I&E's Exception No. 3, modify the ALJ's recommendation on this issue, and direct Aqua to require income documentation from an interested customer to certify income eligibility for participation in its CAP and upon recertification in a manner similar to that of the Peoples Companies. Within sixty days of the entry date of this Opinion and Order, Aqua shall submit a written plan describing the process it will use for certification and recertification of income eligibility for participation in its CAP. Such plan shall be filed with the Commission at this base rate proceeding Docket, with a copy served on BCS.

3. Application Process: Transitioning Helping Hand Customers to the New Customer Assistance Program

a. Positions of the Parties

The OCA recommended that current participants in the existing Helping Hand program be automatically enrolled in the new bill discount program. OCA M.B. at 168-73, 173-75. Similarly, CAUSE-PA recommended that Aqua develop a streamlined process for enrolling existing Helping Hand customers in CAP so the existing Helping Hand customers are not required to provide duplicative information to enroll in CAP. CAUSE-PA M.B. at 26 (citing CAUSE-PA St. 1 at 47).

Aqua explained that the lack of an automatic enrollment in CAP for existing Helping Hand customers is necessary to ensure customers are eligible. Aqua

also explained that the application process for these customers is simple and does not require additional income documentation and, therefore, does not impose an incremental burden on CAP enrollees. Aqua states that it will notify Helping Hand customers by mail of the replacement and expansion of the existing program, which will detail the benefits of the CAP and encourage the customers to participate. Aqua notes that these customers can confirm their income through self-attestation and enroll over the telephone, online, or through a participating agency. Aqua M.B. at 149 (citing Aqua St. 10-R at 3). The Company believes that while it will encourage participation in the new program, existing Helping Hand customers should have the right to make an affirmative choice about whether to enter the new CAP. Aqua M.B. at 149.

b. Recommended Decision

The ALJ agreed with Aqua that the proposed application process to transition Helping Hand customers who qualify for the new CAP is reasonable and rejected the modification proposed by the OCA and CAUSE-PA. R.D. at 116.

c. OCA Exception No. 18 and Replies

In its Exception No. 18, the OCA argues that the ALJ erred in her decision to adopt Aqua's proposed application process for the new CAP. OCA Exc. at 29. The OCA avers that Aqua's existing Helping Hand customers should be automatically migrated to the new discount program, as the OCA's witness, Mr. Colton, and CAUSE-PA's witness, Mr. Geller, recommended. *Id.* at 30 (citing OCA St. 5 at 62-63; CAUSE-PA St. 1 at 46-48). The OCA states that the ALJ may not have appreciated the fact that the existing Helping Hand customers will lose their existing program benefits if the customers do not apply for the new combined discount/arrearage forgiveness program, because the existing Helping Hand program will no longer exist. OCA Exc. at 30 (citing Aqua St. 10-R at 2). As such, a group of customers that have not had their

arrears completely forgiven and who do not apply to the new CAP, will no longer have the program forgiveness to complete reducing their arrearage balance. OCA Exc. at 30 (citing OCA St. 5-SR at 3). The OCA explains that arrearage forgiveness and the discount are designed to work together to address affordability, and separate enrollments and applications mean that not all low-income customers currently enrolled in the arrearage forgiveness program will continue to receive assistance either through the to-be-discontinued arrearage forgiveness program or the new bill discount program. The OCA asserts that this problem can be avoided by automatic migration to the new programs. OCA Exc. at 30.

In its Replies to Exceptions, Aqua avers that contrary to the OCA's claims, the enrollment process involves a single application, is simple, does not require additional income documentation and, therefore, presents no incremental burden. Aqua R. Exc. at 16-17. Aqua explains that existing Helping Hand customers will be asked to submit the application to ensure they are eligible for the new USP. Additionally, Aqua avers that it will actively encourage existing Helping Hand customers to enroll in the new program. *Id.* at 17.

d. Disposition

Given our determination, above, directing Aqua to require income documentation in order to certify income eligibility for participation in its CAP, it would not be feasible for Aqua to automatically migrate its existing Helping Hand customers into its new program. Aqua should implement its proposed application process to transition Helping Hand customers who qualify for the new CAP, subject to the modification that Aqua will now require income documentation for certification purposes rather than permitting potential program participants to confirm their income through self-attestation. Accordingly, we shall deny OCA Exception No. 18 and modify the ALJ's Recommended Decision consistent with this discussion.

4. Community Education and Outreach Plan

a. Positions of the Parties

The OCA witness, Mr. Colton, recommended that Aqua be directed to develop a Community Education and Outreach Plan (CEOP) that is directed toward areas within the Company's service territory with identified concentrations of low-income need. OCA M.B. at 162 (citing OCA St. 5 at 49-50). Mr. Colton specifically proposed that the CEOP incorporate the following elements:

(1) the outreach should focus on community-based outreach; (2) the outreach is best implemented through "trusted messengers" that are part of the community toward which outreach is directed; (3) the outreach should be focused through boots-on-the-ground grassroots strategies. This boots-on-the-ground grassroots outreach out-performs outreach such as that provided through mass media, social media, utility-sponsored efforts, and top-down sponsored events; and (4) the outreach should be focused on efforts to go to where the community is rather than making the community come to the utility.

OCA M.B. at 162 (citing OCA St. 5 at 49). Mr. Colton stated that Aqua's CEOP should be designed to "identify the community partners with which it proposes to work," "identify the grassroots community organizations that will provide boots-on-the-ground efforts," and identify those times and places Aqua proposes to meet the community members where they "live, work, pray and play." OCA M.B. at 162-163 (citing OCA St. 5 at 49-50).

CAUSE-PA's witness, Mr. Geller, noted the low enrollment rates in Aqua's Helping Hand and Hardship Fund and concluded that as a result, there was a critical need for "enhanced, more concerted efforts to reach and enroll low-income consumers in Aqua's service territories in assistance programs." CAUSE-PA M.B. at 37 (citing

CAUSE-PA St. 1 at 64). Accordingly, CAUSE-PA recommended that Aqua should be required to develop and implement a comprehensive and coordinated consumer outreach and education plan that should:

(1) be developed with input from the parties and interested stakeholders through Aqua's Helping Hand Collaborative; (2) set forth how Aqua will specifically promote each of its low income assistance programs; (3) be tailored to the demographics of Aqua's service territory; (4) include how Aqua will target outreach to specific communities, including those communities that have faced pervasive utility insecurity such as Black and Latinx communities; (5) specifically identify efforts to educate and enroll eligible customers at or below 50% FPL who represent those customers with the lowest incomes who struggle most profoundly to make ends meet; (6) translate all promotional and education materials into, at minimum, Spanish; and (7) identify resources and translation services for [limited English proficient/proficiency] LEP customers.

CAUSE-PA M.B. at 38 (citing CAUSE-PA St. 1 at 64).

Aqua agreed that a CEOP is an important component of universal service programs. Aqua M.B. at 150 (citing Aqua St. 10-R at 5). Aqua noted that its witness, Ms. Black, explained that Aqua's anticipated outreach and education will be similar to the CEOP that she developed for the Peoples Companies and will use the multiple touchpoints that utilities have with low-income customers and other entities, and that Aqua "plans to seek collaboration with other utilities to cross-promote its low-income programs with the goal of reducing barriers to participation and encouraging customers to avail themselves of all beneficial programs." Aqua M.B. at 151 (citing Aqua St. 10-R at 5-6). Aqua stated that its proposed CAP will include broad outreach and collaboration to ensure customers are made aware of the benefits available to them and are given significant opportunities to take advantage of the available benefits. Aqua M.B. at 151.

b. Recommended Decision

The ALJ recommended that Aqua continue to work to develop a CEOP in the manner that Ms. Black described in her testimony. The ALJ also stated that because Aqua does not appear to oppose CAUSE-PA and the OCA's recommendations for the development of the CEOP, Aqua should consider their input and incorporate their reasonable recommendations into the Company's outreach program. The ALJ reasoned that if Aqua does not adopt the OCA and CAUSE-PA's recommendations, the OCA and CAUSE-PA may seek appropriate relief from the Commission. R.D. at 118.

c. OCA Exception No. 19 and Replies

In its Exception No. 19, the OCA avers that the ALJ erred by not requiring Aqua to adopt the OCA and CAUSE-PA's recommendations for a CEOP. OCA Exc. at 30 (citing R.D. at 118; OCA M.B. at 161-64; OCA R.B. at 90-91). The OCA submits that the ALJ's recommended approach is not sufficient to address the problems that the OCA and CAUSE-PA identified regarding the development of a CEOP, and it is also not clear in what forum either the OCA or CAUSE-PA could seek appropriate relief. OCA Exc. at 30-31.

The OCA posits that while Aqua agrees that a CEOP is an important component of a universal service plan, the Company does not appear to adopt the OCA's recommendations regarding what that outreach should look like. OCA Exc. at 31. The OCA explains that it recommends that the Company incorporate a strategy of reaching low-income customers "where the community lives, works, plays and prays to be present at those locations rather than to sponsor 'events' that community members must attend." *Id.* (citing OCA St. 5 at 47-50). The OCA states that while the ALJ indicated that the OCA and CAUSE-PA may seek appropriate relief from the Commission if their recommendations are not adopted, there is not an appropriate alternative forum in which

to seek relief. The OCA submits that unlike with energy utilities, Aqua would not need to submit a plan for approval of its CEOP, and there are not any Commission policy statements, applicable regulations, or statutory requirements specifically regarding what effective outreach and education for Aqua's discount and arrearage forgiveness programs should look like. The OCA avers that the instant proceeding is the forum in which the Company's proposed approach to education and outreach should be addressed. OCA Exc. at 31.

In its Replies, Aqua maintains its position in this proceeding that it has worked, and will continue to work, with the OCA and CAUSE-PA in the development of a CEOP, consistent with the Recommended Decision. As such, Aqua states that the OCA's concern is unfounded and its Exception should be denied. Aqua R. Exc. at 17.

d. Disposition

Upon review, we conclude that Aqua should continue to develop a comprehensive and coordinated CEOP with input from the Parties, including the OCA and CAUSE-PA, and from interested stakeholders through Aqua's Helping Hand Collaborative. Within six months of the entry date of this Opinion and Order, Aqua is required to file its CEOP with the Commission at this base rate proceeding Docket, with a copy served on the Commission's BCS and Office of Communications. As the CEOP is an evolving process, the Company must continue to work collaboratively with its Helping Hand Collaborative and the Commission's Office of Communications on any potential improvements and/or changes to its outreach and education initiatives after filing its first CEOP. We will also require Aqua to file annually, after its first CEOP filing, an updated CEOP at this base rate proceeding Docket until either its next base rate proceeding or another proceeding addressing its universal service programs. This will enable us to ensure that the Company is working with the collaborative to address stakeholder concerns or whether a separate proceeding is necessary to address

outstanding matters. As such, we shall grant, in part, OCA Exception No. 19 and modify the ALJ's Recommended Decision consistent with our discussion on this issue.

B. Quality of Service

1. Unaccounted for Water

Unaccounted for water (UFW) is "Total Water Delivered for Distribution & Sale" minus "Total Sales" minus "Non-Revenue Usage and Allowance." R.D. at 119; OCA M.B. at 204; OCA St. 7 at 3-4. "Non-Revenue Usage and Allowance" includes "Main Flushing," "Blow-off Use," "Unavoidable Leakage," "Located & Repaired Breaks in Mains & Services" and "Other." Calculating UFW determines the amount of non-revenue water in a distribution system, helping to identify leaks and inaccurate meter readings. When UFW is measured, non-revenue water can be reduced which reduces chemical and power costs, provides for water conservation, and helps improve operational efficiency. *Id.* Levels of UFW above 20% are considered excessive by the Commission. 52 Pa. Code § 65.20(4).

a. Positions of the Parties

Aqua stated that its UFW is 20%, despite operational challenges of recently acquired water systems, and that no Party challenged its UFW. R.D. at 119; Aqua M.B. at 162. However, the OCA argued that Aqua should modify its reporting of UFW by being required to submit a Section 500 UFW calculation for each of its water systems and that the information submitted should be based on the same data that is required for American Water Works Association (AWWA) Audits and the annual Chapter 110

Reports submitted to the PADEP.¹⁴² OCA M.B. at 206; OCA St. 7 at 6. Aqua opposed the modified reporting of UFW because Aqua's Section 500 Report is prepared on a consolidated basis and contains financial and operating data regarding operating the entire company. Aqua contended that it should not be treated differently by requiring it to prepare separate reports for operating divisions, that Section 500 Reports require different information than Chapter 110 Reports submitted to PADEP, and that AWWA Water Audits are a different measurement from UFW measurements prepared for the Section 500 Reports. In addition, Aqua noted that on November 18, 2021, the Commission issued a Notice of Proposed Rulemaking (NOPR) concerning proposed language for a regulation at 52 Pa. Code § 65.20(a), relating to water conservation measures. Aqua argued that committing to file separate Schedule 500 reports for each operating division while that NOPR is pending is redundant, time consuming and inefficient. R.D. at 120; Aqua M.B. at 162-63.

b. Recommended Decision

The ALJ found that the OCA did not demonstrate that its modification will result in a significant benefit to Aqua's customers. Therefore, the ALJ concluded that the OCA's proposed modification to the reporting of UFW should be rejected. R.D. at 120.

c. OCA Exception No. 24 and Replies

In its Exception No. 24, the OCA argues that the ALJ erred in concluding that Aqua should not be required to submit Section 500 reports for each of its distribution systems. The OCA disagrees that it has not demonstrated that its modification will result in a significant benefit to Aqua's customers and avers that requiring Aqua to submit a

¹⁴² The Section 500 Forms are filed as part of the Company's PUC Annual Reports, and the Chapter 110 Reports are filed pursuant to the Company's requirements in its Annual Department of Environmental Protection (DEP) reports.

Section 500 Report for each of its distribution systems would identify levels of UFW which is a localized issue. The OCA contends that the identification and reduction of UFW benefits all water customers by reducing non-revenue water, which reduces chemical and power costs. OCA Exc. at 35.

In reply, Aqua asserts that Section 500 Reports are filed by utilities on a consolidated basis, and the OCA has offered no reason why Aqua should be singled out to prepare separate reports for operating divisions. Furthermore, Aqua avers that reporting on water loss in the annual Section 500 Report should not be revised while the Commission's NOPR, discussed above, which provides for AWWA water audit reports on an annual basis, remains pending. Aqua R. Exc. at 21.

d. Disposition

Upon review, we agree with the ALJ that the OCA's proposed modification to the reporting of UFW should be rejected. No significant benefits to Aqua's customers have been identified to treat Aqua differently by requiring it to prepare separate reports for operating divisions with different information than the financial and operating data that is currently provided in the Section 500 Report on a consolidated basis for the entire Company. In addition, we agree with Aqua that revising reporting requirements on water loss in the annual Section 500 Report should not be done at this time while the Commission's NOPR on this issue is pending. Therefore, we shall deny the OCA's Exception No. 24.

2. Pressure Measurements

The Commission's Regulations at 52 Pa. Code § 65.6(d) require a water utility to conduct pressure surveys by measuring pressures at "representative" points on its system:

(d) *Pressure surveys.* At regular intervals, but not less than once each year, each utility shall make a survey of pressures in its distribution system of sufficient magnitude to indicate the pressures maintained at representative points on its system. The surveys should be made at or near periods of maximum and minimum usage. Records of these surveys shall show the date and time of beginning and end of the test and the location at which the test was made. Records of these pressure surveys shall be maintained by the utility for a period of at least three years and shall be made available to representatives, agents, or employees of the Commission upon request.

52 Pa. Code § 65.6(d).

With respect to variations in pressure levels, the Commission's Regulations require that a water utility shall maintain normal operating pressures between 25 pounds per square inch (psi) and 125 psi at the main, except that during periods of peak seasonal loads, the pressures at the time of hourly maximum demand may be between 20 psi and 150 psi, and that during periods of hourly minimum demand the pressure may not be more than 150 psi. 52 Pa. Code § 65.6.

a. Positions of the Parties

With respect to pressure surveys, the OCA argued that Aqua is not in compliance with 52 Pa. Code § 65.6(d) regarding the placement of the measurement point to track water pressure within Aqua's system because appropriately "representative points" means readings taken "at only a low and high pressure point." OCA M.B. at 210.

Aqua disagreed with the OCA's interpretation of 52 Pa. Code § 65.6(d) and maintained that its method of conducting pressure surveys on its system is compliant with the regulation. Aqua noted that it records pressures annually at more than 24,000 hydrants in its systems, and it described its operational procedures to monitor pressures

by using local recordings as proxy checks for system performance. If an abnormality from the standard is observed, or if a customer reports a pressure problem, Aqua will conduct a follow-up investigation and address the issue. Aqua M.B. at 166-67; Aqua St. 9-R at 6.

In addition, the OCA recommended that Aqua should reduce pressures to all customers below 125 psi or be responsible for any damages resulting from higher pressures. Further, the OCA argued that Aqua should install pressure reducing valves for customers experiencing high pressures or be responsible for damages if it fails to reduce pressures to all customers below 125 psi. OCA M.B. at 210; OCA St. 7 at 13. The OCA cited an example of a water customer from Chesterbrook who testified at the public input hearing and described that he had experienced extremely high pressures, some as high as 200 psi, which caused damage to his home and neighborhood. Tr. at 230-43.

Aqua argued that the Commission recently considered and rejected a similar argument presented by the OCA in *Pa. PUC v. Pennsylvania-American Water Co.*, Docket No. R-2020-3019371 (Order entered February 25, 2021) (*PAWC*).¹⁴³ Aqua M.B. at 169-70. Aqua averred that, like *PAWC*, Aqua provides pressure in excess of 125 psi in situations where it is needed to serve customers in challenging terrain and to flow water between operating districts with different pressures. Aqua contended that the OCA's recommendation should be rejected. *Id.*

¹⁴³ In *PAWC*, the OCA recommended that PAWC should either provide a pressure reducer protecting a customer's service line or provide an insurance policy covering repair or replacement of the service as protection to service lines and inside plumbing in situations where PAWC elected to provide service at higher than 125 psi. The Commission concluded that it was not reasonable to "impose the requirement of insuring the customer service line upon the distribution utility." *PAWC* at 127.

b. Recommended Decision

Regarding the pressure surveys, the ALJ concluded that 52 Pa. Code § 65.6 does not define what is meant by “representative points” on a water system, and that if the Commission intended to limit pressure surveys to those taken at “one high and one low pressure point” on a system to be sufficiently “representative,” the regulation would include that language. The ALJ found that there is no evidence that Aqua’s current system is not reasonable for maintaining generally normal operating pressures between the range of 25 psi and 125 psi or that the points where measurements are taken are not sufficiently “representative.” R.D. at 121-22.

The ALJ concluded that Aqua should not be directed to reduce upstream water pressures or install additional pressure valves in this proceeding. Noting that the Commission has repeatedly held that public utilities are not required to render perfect service, the ALJ found that a handful of customer experiences are not sufficient for the Commission to mandate operational changes on Aqua’s distribution system at this point in time. However, the ALJ stated that as Aqua tracks pressure complaints more closely, it may be able to target areas that may require system improvements. R.D. at 123-24.

c. OCA Exception No. 25 and Replies

In its Exception No. 25, the OCA argues that the ALJ erred in concluding that Aqua should not be required to conduct pressure surveys at one high and one low pressure point on its system and that Aqua should not be required to reduce upstream water pressures or install additional pressure valves. The OCA contends that the intent of 52 Pa. Code § 65.6 is to ensure that water utilities are providing water service with pressures in reasonable ranges, and it is only logical and consistent with expert opinion that pressures be surveyed at a minimum at one high and one low point to get a fully comprehensive and useful understanding of the pressure reading of a system.

Furthermore, the OCA avers that allowing Aqua to continue providing service to customers at levels above 125 psi is not consistent with Aqua's obligation to provide safe, adequate and reliable service under 66 Pa. C.S. § 1501. OCA Exc. at 35-37.

In reply, Aqua argues that its system of pressure measurements satisfies the requirements of 52 Pa. Code § 65.6(d) and that the ALJ correctly rejected the OCA's arguments that Aqua's processes violate the regulation. In addition, Aqua states that the Recommended Decision recognizes that there are places in its system where higher pressures are necessary to ensure adequate water service to downstream customers. Aqua asserts that in the customer example from Chesterbrook offered by the OCA, this customer's property is located close to one of Aqua's largest treatment plants and pressures in excess of 200 psi are necessary to serve customers at higher elevations. Aqua references the Commission's decision in *PAWC* in arguing that it is not reasonable in certain situations to require Aqua to reduce pressures or to insure the customer against damages if the customer's required reducing valve fails. Aqua R. Exc. at 21-22.

d. Disposition

With respect to the pressure surveys, we agree with the ALJ's conclusion that, in promulgating the regulation at 52 Pa. Code § 65.6(d), if the Commission intended to limit pressure surveys in any way to define the meaning of "representative points," *e.g.*, to those taken at one high and one low pressure point, the regulation would include such language. Without such a requirement, the ALJ found that there is no evidence that Aqua's current system is not reasonable for maintaining generally normal operating pressures or that the points of measurement are not sufficiently representative. Therefore, we agree that Aqua's system of pressure measurement satisfies the requirements of 52 Pa. Code § 65.6(d).

Additionally, we agree with the ALJ that Aqua should not be directed to reduce upstream water pressures or install additional pressure valves based upon this proceeding. While we are sympathetic to the experience of the customer from Chesterbrook of failing pressure valves and property damage, the Commission has repeatedly held that public utilities are not required to render perfect service. *Rounce v. PECO Energy Co.*, Docket No. C-2015-2506941 (Order entered December 9, 2016); *Bertsch v. PPL Elec. Util. Corp.*, Docket No. C-2011-2251784 (Order entered April 2, 2012). Although a few customer experiences are not sufficient for the Commission to mandate operational changes on Aqua's distribution system at this point in time, we encourage Aqua to identify and explore ways to target areas that may benefit from system improvements as it investigates and tracks individual pressure complaints. We shall deny the OCA's Exception No. 25.

3. Isolation Valves

Isolation valves are installed on water mains so that the flow of water can be shut off in sections of the distribution system in case of a water main break or for other main repairs and replacements. Aqua M.B. at 170. Exercising an isolation valve means operating the valve through complete full open and close cycles until it operates with little resistance. Exercising isolation valves prevents them from seizing up and getting stuck due to corrosion or other deposits. An isolation valve that cannot be fully closed will increase water loss during a water main break. Inoperable valves will need to be replaced or repaired. OCA M.B. at 211-12; OCA St. 7 at 14.

a. Positions of the Parties

With respect to critical isolation valves, Aqua stated that all of its 270 such valves have been identified and currently have an exercising schedule within Aqua's work order management system, and that it exercises these valves at least once every four

years. Aqua M.B. at 171. The OCA determined that Aqua's exercising schedule for its critical isolation valves is reasonable and recommended that any critical isolation valves that could not be exercised should be repaired or replaced as soon as practicable after they are found to be inoperable. OCA M.B. at 212.

For non-critical isolation valves, Aqua operates according to a twelve-year inspection and exercising program. Aqua averred that it has committed to various non-critical valve inspection measures as part of its 2020 management audit with the Commission. Aqua M.B. at 171-172. The OCA argued that Aqua's schedule to inspect non-critical isolation valves is too long and that they should be inspected on a five-year cycle. OCA M.B. at 213. Aqua contended that the cost of the OCA's recommendation, for which the OCA did not provide any estimates, may exceed any operational benefit due to the amount of time and additional workforce needed to implement it, and that the proposed timeline is inefficient and redundant. Aqua M.B. at 172; Aqua St. 9-R at 13-14.

b. Recommended Decision

The ALJ found that the OCA did not meet its burden of proving that requiring a five-year inspection cycle for non-critical valves is necessary or will derive a benefit to Aqua's system commensurate with the cost of the program. However, the ALJ recommended that the Commission direct Aqua to develop an isolation valve inspection and exercise program, to be implemented no later than 180 days from the effective date of rates resulting from this proceeding, which establishes a defined schedule to exercise each of its non-critical isolation valves within a set inspection cycle and, subsequently, maintain records of its attempts to inspect and exercise its isolation valves noting whether it was successful. R.D. at 125.

c. Aqua Exception No. 13, OCA Exception No. 26, and Replies

In its Exception No. 13, Aqua argues that the ALJ erred by requiring the Company to develop an isolation valve inspection and exercise program, because it has already developed an appropriate inspection and exercise program. Further, Aqua contends that it has made commitments through its 2020 management audit relating to the inspection of non-critical valves, and it committed to ensure the exercising of these valves is completed over a twelve-year period. Aqua asserts that the ALJ's recommendation is duplicative of Aqua's existing program and commitments and should be rejected. Aqua Exc. at 38-39.

In reply, the OCA agrees with the ALJ's recommendation that Aqua must develop an isolation valve inspection and exercise program. The OCA disagrees with Aqua that it has already developed such a program and that the ALJ's recommendation is duplicative of such program. Rather, the OCA contends that certain findings in Aqua's 2020 management audit state that "several aspects of a comprehensive critical valve testing program are missing or in progress, and the company should expand the program to track testing and operation of non-critical valves..." and Aqua's operating procedure "does not include information on valve inspection, scheduling, or valve criticality – all of which would be critical components of a valve inspection manual or program." OCA R. Exc. at 24 (citing *Aqua Pennsylvania, Inc., Peoples Natural Gas Company LLC, Peoples Gas Company LLC, Management and Operations Audit*, Docket Nos. D-2020-3018771, D-2020-3018773, and D-2020-3018774 (issued April 2021) (*Aqua 2020 Management Audit Report*)). Furthermore, the OCA argues that a specific replacement time for non-critical valves has not been approved by the Commission and Aqua has not provided support for the longer twelve-year exercising schedule. The OCA asserts that the Commission should adopt the ALJ's recommendation to direct Aqua to develop an isolation and inspection exercise program to be implemented no later than

180 days from the effective date of rates resulting from this proceeding. OCA R. Exc. at 24-25.

In its Exception No. 26, the OCA argues that the ALJ erred in concluding that Aqua should be required to inspect non-critical isolation valves every twelve years instead of five years. The OCA avers that it demonstrated that a five-year inspection cycle would provide a benefit to Aqua and its customers. OCA Exc. at 37-38.

In reply, Aqua contends that the ALJ correctly denied the OCA's recommendation that Aqua implement the OCA's proposed five-year inspection cycle for non-critical valves. Aqua reiterates that it has made commitments through its 2020 management audit to exercise its non-critical valves over a twelve-year period, and that it has identified all valves in its system and is developing a schedule for exercising the non-critical isolation valves. Also, Aqua avers that the OCA's proposal is not supported by cost estimates for the amount of time and additional workforce that would be needed. Aqua R. Exc. at 22.

d. Disposition

Upon review of the record, we conclude that the OCA did not meet its burden of proving that requiring a five-year inspection cycle for non-critical isolation valves is necessary or will be cost-beneficial to Aqua's system. The OCA did not provide any cost estimates for the implementation of its recommended five-year program. Without any cost estimates, it is not possible to determine whether any benefits from the accelerated program will be commensurate with its costs. The costs associated with any additional time and workforce needed for the program could exceed its operational benefit and render it inefficient and redundant. For these reasons, we will not require Aqua to implement a five-year inspection cycle for non-critical isolation valves. Accordingly, the OCA's Exception No. 26 shall be denied.

We will, however, adopt the ALJ's recommendation and direct Aqua to develop an isolation valve inspection and exercise program, to be implemented no later than 180 days from the effective date of rates resulting from this proceeding, which establishes a defined schedule to exercise each of its non-critical isolation valves within a set inspection cycle and requires Aqua to maintain records of its attempts to inspect and exercise its isolation valves noting whether it was successful. Although Aqua contends that such a directive is duplicative because it has already developed an appropriate inspection and exercise program and made commitments through its 2020 management audit relating to the inspection of non-critical valves, we agree with the ALJ that the development of a non-critical isolation valve inspection and exercise program at this time is reasonable. The findings referenced by the OCA from the Commission's 2020 Aqua management audit that Aqua should expand its valve inspection program to track testing and operation of non-critical valves and that its operating procedure should include information on valve inspection, scheduling, or criticality, along with the fact that a specific replacement time for non-critical valves has not been approved by the Commission, support the ALJ's recommendation to develop a more formal valve inspection program. *See* OCA R. Exc. at 24 (citing *Aqua 2020 Management Audit Report*). Therefore, Aqua's Exception No. 13 will be denied.

4. Fire Hydrants

Aqua has over 21,000 public fire hydrants throughout its systems. In response to discovery, Aqua identified sixteen public fire hydrants on its systems that cannot provide the minimum fire flow of 500 gallons per minute (gpm) at 20 psi. Aqua M.B. at 172.

a. Positions of the Parties

The OCA recommended that each of the sixteen fire hydrants that cannot provide the minimum fire flow should be marked as such so that they will only be used for flushing and blow-offs and Aqua should provide confirmation to the OCA and other parties when this is completed. OCA M.B. at 213; OCA St. 7 at 17. Aqua stated that it has planned main replacement projects to address these hydrants within the next three years and, during this time, Aqua will attempt to either find alternative locations for the hydrants or remove them. Aqua M.B. at 172; Aqua St. 9-R at 15. The OCA agreed with this approach, so long as the hydrants will be marked and only used for flushing and/or blow-offs until they are moved or replaced. OCA M.B. at 213-14; OCA St. 7SR at 8.

b. Recommended Decision

The ALJ stated that the OCA and Aqua largely resolved their disputes regarding Aqua's plan to address the sixteen fire hydrants in its system that cannot provide the minimum fire flow of 500 gpm at 20 psi. Given the limited number of fire hydrants at issue and the importance to fire companies to know that these hydrants are not reliable for fire protection, the ALJ found that the OCA's recommendation that Aqua should mark the hydrants for only flushing and/or blow-offs until they are moved or replaced, and report to the OCA and other Parties when this is completed, is reasonable and should be adopted. R.D. at 125.

c. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we shall adopt it without further comment.

5. Flushing

Flushing addresses sediments that build up in pipes that may affect the taste, clarity, and color of water. There are no Commission or PADEP requirements for main flushing. In a discovery response, Aqua indicated that all systems were flushed in 2020 under its main flushing program, but six systems were not flushed in 2019 due to staffing issues. OCA M.B. at 214; OCA St. 7 at 17.

a. Positions of the Parties

The OCA recommended that Aqua improve its flushing program in its Southeast Pennsylvania (SEPA) division by flushing the system once every three years because there are a substantial number of complaints regarding flushing-related issues which would likely be eliminated under a regular flushing program. OCA M.B. at 214.

Aqua disagreed with the OCA's recommendation. Aqua argued that the OCA offered no evidence, and that there is no industry standard, supporting a three-year flushing schedule. Also, Aqua averred that flushing is labor-intensive, somewhat disruptive and can result in significant non-revenue water volume. Aqua stated that certain factors, including water quality samples, customer issues, system geometry, daily water volume in an area, and proximity to wells and tanks, dictate how and when flushing occurs. Aqua contended that it should retain flexibility regarding flushing its distribution system and a three-year schedule is not warranted. Aqua M.B. at 174-175; Aqua St. 9-R at 17-18.

b. Recommended Decision

The ALJ noted that a three-year flushing program may eliminate customer complaints and the need for Aqua to assess certain factors in determining whether and

when to flush the system. However, the ALJ found that, based on Aqua's witness testimony that flushing can be labor intensive and result in UFW, it is not possible to conclude that it is reasonable to impose the costs on ratepayers for a three-year flushing program which may or may not result in the benefits identified by the OCA. R.D. at 126.

c. OCA Exception No. 27 and Replies

In its Exception No. 27, the OCA argues that the ALJ erred in concluding that Aqua should not be required to flush its SEPA system every three years. The OCA asserts that Aqua did not offer support for its position that flushing a system can be labor intensive and result in UFW, and it contends that a three-year flushing program is reasonable and consistent with industry standards. OCA Exc. at 38.

In reply, Aqua contends that the OCA's proposal "is an expensive and a wasteful solution in search of a problem." Aqua avers that the number of customer complaints does not suggest a serious water quality issue requiring a change to its flushing procedures. Furthermore, Aqua argues that the OCA's proposal would result in additional lost water from increased flushing and add to labor and water treatment costs. Aqua R. Exc. at 22-23.

d. Disposition

Upon review of the record, we agree with the ALJ that it is not possible based on the record to determine whether any benefits of a three-year flushing program will outweigh the costs associated with it. While such a program may reduce customer complaints and provide for a pre-determined flushing frequency, as the OCA argues, flushing the system can be labor intensive, disruptive and result in UFW, according to Aqua. Without any additional evidence or a clear industry standard supporting a

three-year flushing program, we find that requiring Aqua to flush its SEPA system every three years is not warranted. Therefore, we shall deny the OCA's Exception No. 27.

6. Per- and Polyfluoroalkyl Substances (PFAS)

Aqua maintains a website, www.waterfacts.com, with information about its testing and treatment for PFAS contamination in its water supplies. The most recent test results for some water sources were from 2016, 2017 and 2018, without explanation why more recent test results were not provided. Aqua M.B. at 175; OCA M.B. at 215; OCA St. 7 at 19.

a. Positions of the Parties

The OCA indicated that its understanding that testing was stopped at certain sites was because the test results indicated less than 13 parts per trillion for PFAS, which is Aqua's standard, and that Aqua ceases testing for sources that test below 13 parts per trillion. The OCA recommended that Aqua should add a statement to its website explaining why testing was stopped for water sources that it no longer tests for PFAS. Aqua agreed to implement the OCA's recommendation and stated it will include clarifying comments on its website regarding the reasons testing ceased at certain sites. Aqua M.B. at 175-76; Aqua St. 9-R at 19; OCA M.B. at 215; OCA St. 7 at 19.

b. Recommended Decision

The ALJ found that as no other party presented testimony on this issue, and Aqua agreed to the OCA's recommendation regarding PFAS reporting, Aqua's PFAS procedures should be accepted by the Commission.

c. Disposition

No Party filed Exceptions on this issue. Finding the ALJ's recommendation to be reasonable, we shall adopt it without further comment.

C. Customer Service

Under the *Aqua-Peoples Settlement*, the settling parties agreed that Aqua would commit to the following "Customer Service" improvement metrics:

83. Aqua commits to improve Aqua's call center performance to meet or exceed the same performance standards that the Peoples Companies agreed to meet in the 2013 Settlement concerning the acquisition of Equitable Gas Company (Docket No. A-2013-2353647 et al.) for the following three metrics in each of the five calendar years (2020-2024) following closing:

- i. percent of calls answered within 30 seconds of at least 82%,
- ii. busy-out rate of no more than 0.25%,
- iii. average call abandonment rate that is no higher than 4% for 2020-2021, no higher than 3% for 2022-2023, and no higher than 2.5% for 2024.

Aqua-Peoples Settlement at 146-147.

In this proceeding, the OCA and CAUSE-PA asserted that Aqua failed to comply with certain of the customer service related commitments made by Aqua in the *Aqua-Peoples Settlement*. R.D. at 127-131. As will be discussed more fully below, the OCA challenged Aqua's compliance with Paragraph No. 83, above, of the settlement commitments. In this regard, the OCA challenged Aqua's compliance with: (1) percent of calls answered within 30 seconds of at least 82%; and (2) average call abandonment rate that is no higher than 4% for 2020-2021, no higher than 3% for 2022-2023, and no

higher than 2.5% for 2024. *See* OCA M.B. at 188-193. The OCA stated that Aqua met the busy-out rate standard, but for reasons argued in its OCA St. 6, Aqua had not met the standards for calls answered and average call abandonment rate.

The OCA also challenged Aqua's compliance with Paragraph 85 of the *Aqua-Peoples Settlement*, *infra*, regarding the Company's commitment to complete a root cause analysis (RCA) of customer complaints. *See* OCA M.B. at 193-94. In addition, the OCA argued that Aqua's failure to comply with customer service related issues, in addition to other considerations, were an additional reason to reject the Company's request for a management performance adjustment to its ROE, discussed, *supra*. *See* OCA MB at 75-77; 181-82; 204.

1. Calls Answered Commitment Under the *Aqua-Peoples Settlement*

a. Positions of the Parties

The OCA asserted that Aqua was not in compliance with the calls answered commitment under the *Aqua-Peoples Settlement*. The OCA proffered its calculation of the utility's percentage of calls in which a customer affirmatively seeks to talk to a live representative. OCA M.B. at 190 (citing OCA St. 6 at 10); *also*, OCA Exh. BA-2 for calculation of annual average results for each of the performance standards using monthly information provided by Aqua. According to the calculations of the OCA witness Ms. Barbara A. Alexander, as measured by the calls in which the customer selects the option to speak with a representative, the annual calls answered average for 2019 was 70.56%, for 2020 was 72.86%, and for 2021 through July was 50.64%. *Id.*

Based on the foregoing, the OCA witness, Ms. Alexander, pointed out that Aqua has never met the 82% call answering standard as measured by the typical

measurement of the percentage of calls in which the customer affirmatively seeks to talk to a live representative.

Additionally, the OCA took issue with Aqua's calculation of the percentage of calls answered within 30 seconds based on the Company's use of "aggregated" data. Aqua used data from a combination of the results for customers seeking to speak to a representative with all calls handled without that request through its automated menu, Interactive Voice Response (IVR), system. Use of data from the IVR system was described as an "aggregate" of data. The OCA found use of aggregate data to be objectionable as it would, in its view, skew the data results.¹⁴⁴ OCA St. 6 at 10.

In response to the position of the OCA concerning Aqua's compliance with the percentage of calls answered, Aqua noted that OCA witness Ms. Alexander acknowledged that the Company's percentage exceeded the 82% threshold for both 2019 and 2020. Aqua M.B. at 184. Consequently, the disagreement between Aqua and the OCA regarding this metric centered upon the inclusion of calls handled by Aqua's IVR system in calculating the calls answered percentage. *Id.*

Aqua explained that the IVR is an automated way to service customers that call in with questions or concerns. *See* Aqua St. 10-R at 15-16. Aqua cites to the applicable terms of the *Aqua-Peoples Settlement*, Paragraph No. 83, and argues that the Peoples Companies include IVR contacts in calculating service level performance. Aqua continues that the use of IVR contacts data is a standard calculation in measuring contact

¹⁴⁴ In response to discovery, Aqua stated that it utilizes two call centers located in Illinois and North Carolina which handle calls from Pennsylvania customers. OCA St. 6 at 9. The Merger Settlement requires annual average performance standards in the three areas mentioned above [Aqua-Peoples Settlement Paragraph No. 83] that can be measured to reflect the performance provided to Pennsylvania customers. Since both call centers handle calls from all of Aqua's customers in several states, the performance standards reflect the average of all calls at both call centers. *See* OCA St. 6 at 9.

center performance. Based on the foregoing, Aqua submits that the position of the OCA, that the IVR system should not be “aggregated” with the Company’s person-to-person telephonic contacts, should be rejected.

b. Recommended Decision

The ALJ agreed with Aqua that the Company met its commitment under the *Aqua-Peoples Settlement* to answer 82% of customer calls within 30 seconds. The ALJ rejected the position of the OCA that use of the IVR data to calculate the Company’s performance related to the call center standards metric, made Aqua’s data unreliable and, therefore, not in compliance with the terms of the settlement. The ALJ agreed that use of aggregate data was consistent with the settlement and reasonable because it is the standard used by the Peoples Companies. R.D. at 128.

c. OCA Exception No. 20 and Replies

In its Exception No. 20, the OCA disagrees with the ALJ that use of aggregate data is reasonable. The OCA argues that the calls answered standard should be measured only by the number of customers who choose to speak with a representative because use of aggregate data, which also includes customers who use the IVR system (and do not attempt to reach a representative), skews the results. OCA Exc. at 31-32. The OCA notes that these calls are clearly “answered” within less than thirty seconds, but the calls are irrelevant to the issues discussed and agreed to in the *Aqua-Peoples Settlement*. OCA Exc. at 32.

Therefore, based on its position that use of the IVR data (or aggregated data) is not reasonable under the *Aqua-Peoples Settlement*, the OCA argues that the Commission should adopt its recommendation. *See, i.e.*, OCA M.B. at 204, pertaining to the directive for Aqua to issue a compliance document. The OCA submits that due,

inter alia, to Aqua's failure to meet the obligations of the *Aqua-Peoples Settlement*, the Commission should reject Aqua's claim for exemplary management performance.

OCA Exc. at 32

In its Replies to Exceptions, Aqua distinguishes the contentions asserted by the OCA about what may be "reasonable." According to Aqua, the OCA's position disregards the clear language of the commitment of the *Aqua-Peoples Settlement*. In this regard, Aqua argues the express language of the settlement commits the Company to improve its call center performance to meet or exceed the same performance standards that the Peoples Companies are under. Aqua continues that this is the result of the metric - – percentage of calls answered within 30 seconds of at least 82%. Because the Peoples Companies include IVR contacts in calculating service level performance, which is a standard calculation in measuring contact center performance, Aqua argues that it should be permitted to do so and that it is reasonable to do so in its calculation. Aqua R. Exc. at 18-20.

d. Disposition

On consideration of the record evidence, we shall deny the OCA's Exception No. 20, consistent with the discussion herein and adopt the recommendation of the ALJ. There is no dispute that the analogue for this metric is the performance metric adopted by the Peoples Companies. Based on the use of aggregated data for the calculation as used to measure the performance of the Peoples Companies, we agree with the recommendation of ALJ Long that use of this data is acceptable for Aqua. When viewed in this light, it appears that Aqua has complied with its commitments.

Based on the foregoing, we will deny the OCA's Exception No. 20 in full recognition that, in any future proceeding, where the metric is shown to inaccurately reflect Pennsylvania-specific conditions, its calculation may be revisited.

2. Calls Abandonment Commitment Under the *Aqua-Peoples Settlement*

a. Positions of the Parties

Under the *Aqua-Peoples Settlement*, Aqua committed to: “[an] average call abandonment rate that is no higher than 4% for 2020-2021, no higher than 3% for 2022-2023, and no higher than 2.5% for 2024.” The OCA noted that Aqua’s annual call abandonment rate metric had not been met. *See* OCA St. 6 at 10. The OCA, through its witness Ms. Alexander, observed that the call abandonment rates were: 4.56% in 2019, 4.32% in 2020, and 13.15% in 2021, through July. *Id.*

The OCA also, as noted, objected to Aqua’s measure of the call abandonment rate by combining the performance when customers affirmatively seek to speak with a customer service representative with all calls handled via the IVR system. The OCA argued that use of the IVR system data results in an inaccurate measurement of customer experience for those attempting to reach a customer service representative. OCA St. 6 at 10.

Aqua conceded that it had not, for the applicable period, met the percentage of average call abandonment metric commitment of the *Aqua-Peoples Settlement*. Aqua explained, however, that unanticipated circumstances outside of its control were substantial factors in preventing the Company from express compliance. *See* Aqua M.B. at 185-86.

Aqua, through its witness, Ms. Black, explained that the failure to meet the metric was primarily attributed to unanticipated United States Postal Service (USPS) delays. Aqua explained that the unanticipated USPS delivery delays caused many customer bills to be delivered late and resulted in higher-than-normal call volumes.

The impact of the postal service delay and severe weather events in meeting this metric was identified in an annual report filed on February 1, 2021.

Aqua noted that the *Aqua-Peoples Settlement* contemplated a situation where the Company may miss a benchmark and such failure would be addressed in collaboratives as contemplated by the terms of the *Aqua-Peoples Settlement*. Under the terms of the settlement, Aqua is required to compile an annual report to apprise stakeholders of its compliance with the settlement terms.

b. Recommended Decision

On consideration of the position of the Parties, the ALJ agreed with Aqua. The ALJ noted that the *Aqua-Peoples Settlement* contemplated a situation where events outside of the Company's control that prevent compliance with the literal terms of the settlement commitments could occur. She found that Aqua transparently explained in the February 1st report the reason for its failure to meet the call abandonment benchmark for 2020-21. The events resulting in Aqua's failure to meet the settlement commitment were viewed as an isolated situation and did not, in her opinion, equate to a failure to comply with the settlement. R.D. at 128.

c. OCA Exception No. 21 and Replies

In its Exception No. 21, the OCA disagrees with and, therefore, excepts to, the ALJ's conclusion that Aqua "[s]hould be excused from its obligation to reduce its average call abandonment rate to 4% or less." OCA Exc. at 32.

The OCA argues that the evidence shows that as of July 2021, the call abandonment rate was 13.15%, compared to a rate of 4.56% in 2019. The OCA argues that, in the year before and in the partial year following the unusual circumstances in

late 2020, Aqua never met the “no higher than 4%” metric for its call abandonment rate, even when calculated using the aggregate calls that included IVR data. OCA Exc. at 32-33 (citing OCA St. 6SR at 5; OCA M.B. at 192-93).

The OCA, contrary to the conclusion of the ALJ, takes the position that Aqua’s failure to achieve its commitment level was not an isolated event that happened because of unforeseen circumstances. The OCA points out that the Company has not met the 4% abandonment rate in any of the last two and one half years. OCA Exc. at 33.

In its Replies to Exceptions, Aqua stresses two points: (1) the settlement commitment did not become effective until after the merger was approved by the Commission in 2020, and thus prior performance data under this metric is not relevant to assess its compliance with the commitment; and (2) the ALJ concluded that the *Aqua-Peoples Settlement* contemplated that unexpected circumstances could prevent compliance. Based on the foregoing, the Company maintains that the failure to meet this metric is, in fact, an isolated situation which does not equate to a failure to comply with the settlement commitment. Aqua R. Exc. at 19.

d. Disposition

On consideration of the positions of the Parties, we shall deny the Exceptions of the OCA in this matter. We note that there is a substantial disparity in the percentage of calls abandoned for year 2021 (as of July 2021, 13.15 %; *see* OCA Exc. at 32). While we find the substantial difference in the target percentage under the metric and the actual performance of Aqua to be a concern, we accept the reasoning of the presiding ALJ that the Company provided a reasonable basis to account for the disparity. On balance, we agree that the substantial difference in the abandoned call percentage for the calendar year 2021 resulted from unanticipated conditions and is an isolated event. While the OCA notes that the Company has never met its target prior to the periods of

time of the 2021 report, the Company notes that the approval of the merger conditions in 2020 renders this data not material to our consideration of the year at issue, 2021.

Based on the foregoing, the OCA's Exception No. 21 is denied consistent with the discussion in this Opinion and Order. We advise the Parties that the annual report will provide a basis for cooperation between interested stakeholders should further concerns arise regarding compliance.

3. Commitment to Complete a Root Cause Analysis (RCA) of Customer Complaints

a. Positions of the Parties

The OCA explained that this area of concern arises pursuant to Paragraph No. 85 of the *Aqua-Peoples Settlement*. Paragraph No. 85 is reprinted below:

85. Aqua PA will develop a system to track Aqua PA customer complaints in a live Excel spreadsheet, consistent with Paragraph 47 in the Joint Petition for Settlement submitted in Aqua PA's recent base rate case (Docket Nos. R-2018-3003558 and R-2018-3003561). Aqua PA will review this information and conduct a root cause analysis [(RCA)] of adverse trends at least annually.

Aqua-Peoples Settlement at 147.

The OCA took the position that Aqua failed to comply with the development of a RCA.¹⁴⁵ *See* OCA M.B. at 193-94. The OCA asserted that Aqua has not provided requested information on the methodology and timetable for the completion of the RCA contemplated by the *Aqua-Peoples Settlement*. The OCA further stated that Aqua has not indicated a methodology for tracking whether its responses to customer disputes or complaints were incorrect or improper, which, we are advised, is a key component of any RCA of customer complaints.¹⁴⁶ *Id.*

Aqua, through its witness, Ms. Black, acknowledged that the RCA has not been completed. Aqua referenced a “live spreadsheet” that has not yet been finalized. Aqua M.B. at 187. Aqua attributed the lack of finalization to the fact that it has been working with the OCA to develop the spreadsheet based upon the OCA’s requested parameters. *Id.* (citing Aqua St. 10-R at 17).

b. Recommended Decision

The ALJ concluded that Aqua sufficiently demonstrated its good faith efforts to come into compliance with the benchmarks set forth in the *Aqua-Peoples*

¹⁴⁵ A RCA requires a fundamental review of the policies and practices that resulted in an informal customer complaint and the internal evaluation of how to prevent the complaint or fix the underlying cause. *See* OCA St. 6 at 12. The OCA acknowledged that Aqua provided a confidential spreadsheet of complaints and their “root cause,” but did not provide an actual analysis of the root cause. OCA M.B. at 193-194.

¹⁴⁶ As the OCA witness, Ms. Alexander, noted, “[t]his lack of analysis of customer complaint trends and identification of the root cause for any complaint trends is also troubling in light of the volume of ‘justified’ complaints and ‘notices of infractions’ from the Commission’s [BCS] after that office’s handling of informal complaints submitted by Aqua customers.” OCA St. 6 at 13.

Settlement concerning the development of a RCA. R.D. at 129. The ALJ acknowledged that the development of a RCA is an ongoing process.¹⁴⁷

c. OCA Exception No. 22 and Replies

In its Exception No. 22, the OCA argues that Aqua has not complied with the commitment to conduct a RCA of customer complaint data consistent with the *Aqua-Peoples Settlement*. The OCA stresses that the terms of the settlement required Aqua to develop a system to track Aqua customer complaints in a live Excel spreadsheet and to review this information and conduct a RCA of adverse trends at least annually. The OCA takes the position that Aqua has failed to do this, and it disagrees with the ALJ's conclusion that Aqua's compliance with this settlement obligation should not be determined based upon "good faith efforts." OCA Exc. at 33.

The OCA further argues that, based on a comparison of Aqua's performance compared to other utilities, such comparison shows why it is "critical" for Aqua to comply with this term of the *Aqua-Peoples Settlement* in this regard.¹⁴⁸ The OCA points out that Aqua had a high number of customer complaints and, in order to address Aqua's high percentage of justified complaints, it asserts that the Company should be required to conduct a RCA of customer complaint data to spot issues and concerns that require attention and potential changes in policies or processes as soon as practicable. OCA Exc. at 33.

¹⁴⁷ The ALJ further noted that, upon the conversion to SAP, Aqua's witness, Ms. Black, stated that the Company's RCA efforts can be enhanced by increasing the visibility of case trends through enhanced reporting of case types. R.D. at 129.

¹⁴⁸ In 2020, Aqua had the highest number of "justified" complaints compared to other Pennsylvania water utilities; 16% of the closed and evaluated customer complaints were justified compared to 5% for other major water utilities. *See* OCA Exc. at 33 (citing 2020 Utility Consumer Activities Report and Evaluation at 12; OCA M.B. at 180; OCA R.B. at 110). In October 2021, Aqua's justified average complaint percentage was 13%. OCA Exh. BA-5; OCA R.B. at 111. *Id.*

For these reasons, the OCA submits that Aqua is not in compliance with this term of the settlement. Therefore, the Commission should modify the Recommended Decision and adopt the OCA's recommendation. OCA Exc. at 33-34.

In its Replies to Exceptions, Aqua explains that it has been attempting to work collaboratively with the OCA to develop the spreadsheet's parameters. Aqua R. Exc. at 20. With respect to the RCA, Aqua further explains that the RCA occurs on an on-going basis. The Company states that, if an isolated employee error is identified, coaching on compliance is provided. If multiple similar complaints are received, the issue is escalated to the customer contact team for review. *Id.*

Aqua concludes its Replies by noting that it is working to "enhance" and "formalize" the RCA process, which will be facilitated by Aqua's upcoming conversion to the SAP operating system. Based on this representation, Aqua asserts that the OCA's contentions regarding its RCA efforts are without merit and that the OCA's Exception should be denied. Aqua R. Exc. at 20.

d. Disposition

On consideration of the record, we shall grant the OCA's Exception No. 22, in part, and deny it, in part. The Parties appear to have little to no disagreement concerning the "live" spreadsheet data. The controversy appears to surround the use of the spreadsheet data in development of the RCA. We do not, therefore, dismiss, out of hand, the concerns expressed by the OCA in the development of the RCA.

The Company's commitment, as memorialized in Paragraph No. 85 of the *Aqua-Peoples Settlement*, cross-references Paragraph No. 47 of the 2018 Settlement, which was approved by the Commission in the *Aqua 2018 Rate Case*. Paragraph No. 47 of that 2018 Settlement reads as follows:

47. The Company shall continue to provide water and wastewater customer complaints in a live Excel spreadsheet that shall be made available in future general rate proceedings. The water and wastewater customer complaint logs shall contain separate searchable columns for date of complaint, street number, street name, city (zip code is preferable), and code for the type of complaint. The Company and OCA agree to continue to discuss how to incorporate into a live Excel spreadsheet the following additional information regarding whether a Company employee made a site visit, if the problem was the responsibility of the Company or the customer, and the date the complaint was resolved. The Company and the OCA agree to have that discussion within 90 days after the entry of a final order in this proceeding. Additionally, the Company agrees to provide a legend explaining the abbreviations used in the complaint logs.

Our review of the cross-referenced language connotes a more collaborative process between the OCA and Aqua was intended for the development of the RCA that goes beyond the submission of live spreadsheet data. Based on our review, we direct Aqua, the OCA and I&E to engage in collective exchanges regarding the spreadsheet data and cooperatively apprise each of how this data will be developed into a RCA that can reflect meaningful trends so as to, potentially, reduce contested issues in future proceedings. Accordingly, we shall grant the OCA's Exception No. 22, in part, and deny it, in part.

4. Management Performance Adjustment to Aqua's ROE Based Upon Asserted Levels of Customer Satisfaction

a. Positions of the Parties

The OCA's overall position was in vigorous opposition to the base rate increase request of Aqua. *See, e.g.*, OCA M.B. at 1-16. In addition to its objection to any increase in rates due to the adverse economic impact of the COVID-19 pandemic on the

service territory of Aqua, the OCA also took the position that Aqua's customer service performance was below that of comparable utilities. The OCA, through its witnesses, Ms. Alexander and Mr. Colton, addressed areas where Aqua was alleged to have failed to meet basic standards of utility performance pursuant to Sections 526 and 1501 of the Code, 66 Pa. C.S. §§ 526, 1501.

Based on the foregoing, as well as other factors discussed in Section X.D.2 of this Opinion and Order, *supra*, the OCA opposed Aqua's request for a management performance adjustment to its ROE. The OCA noted that the request was not supported but was refuted by the testimony of its witness Mr. David J. Garrett, who provided specific analyses of customer service and customer assistance measures. Namely, as noted in Section X.D.2, *supra*, the OCA, through its witness Mr. Garrett, testified that the Company has not conducted any comparative analyses to determine if Aqua's management performance is any different than other regulated utilities, in or out of its proxy group. OCA M.B. at 75-76.

The OCA, as a remedy for Aqua's alleged failure to implement the commitments agreed to in the *Aqua-Peoples Settlement*, and for other areas in which the OCA contended were inadequate, requested:

. . . that Aqua be held accountable for these previously agreed-to performance standards. OCA St. 6 at 23. [OCA witness Alexander] recommends that Aqua develop and submit a compliance plan to the stakeholders that, after review, should be submitted to the Commission for approval and implementation. *Id.* The plan should include specific action steps and deadlines for achieving compliance. *Id.*

OCA M.B. at 204.

Accordingly, the OCA reinforced its argument that there was no basis for awarding a rate of return higher than Aqua's estimated cost of equity. *See* OCA St. 3SR at 10.

As discussed, in detail, under Section X.D.2 of this Opinion and Order, Aqua requested an upward adjustment to its ROE for superior management performance. Aqua argued that in accordance with Section 523 of the Code, 66 Pa. C.S. § 523, the Commission is required to consider management effectiveness when setting rates. Aqua insisted that it has provided extensive evidence to demonstrate that it provides high quality service and has implemented numerous programs designed to enhance the service it provides to customers and that this evidence supports an addition to the allowed ROE. Aqua M.B. at 128-37.

b. Recommended Decision

As previously noted, the ALJ recommended that the Commission reject the Company's request for an upward adjustment to its ROE for superior management performance. R.D. at 79-81.

For different reasons, however, the ALJ was not persuaded that in rejecting the Company's request, the Commission should rely on the evidence proffered by the OCA and CAUSE-PA regarding the provision of poor customer service. In particular, the OCA argued for its persuasive evidentiary value, that a customer satisfaction survey indicated that 73% of Aqua customers with recent telephone call center transactions rated satisfaction as "excellent" or "very good." R.D. at 129 (referencing OCA St. 6 at 11; OCA M.B. at 191). The OCA argued that this level of customer satisfaction is low compared to Pennsylvania electric and gas companies where over 80% of customers typically express that they are "very satisfied" with their interaction with the utility's representative. R.D. at 120-30. In considering this testimony, the ALJ agreed with Aqua

that its customer satisfaction survey indicating only 73% of customers rated their satisfaction as “excellent” or “very good” is not, in and of itself, indicative of poor customer service, particularly during the COVID-19 pandemic in which certain customer interactions have had to be limited. *Id.*

Accordingly, the ALJ recommended that in rejecting the Company’s request for a management performance adjustment the Commission should instead rely on the findings the ALJ made on pages 79-81 of her Recommended Decision, discussed, *supra*.

c. OCA Exception No. 23 and Replies

In its Exception No. 23, the OCA argues that the ALJ properly recommended that the Commission reject Aqua’s claim for an upward adjustment to its ROE for superior management performance. Nonetheless, the OCA submits that in recommending that the Commission reach this conclusion, the ALJ erred in finding that the Commission should not rely on the evidence proffered by the OCA and CAUSE-PA that demonstrates that the Company provides less than adequate customer service. The OCA points to the testimony of its witnesses Ms. Alexander and Mr. Colton that Aqua’s call center performance level in comparison to other utilities was not a good indicator regarding Aqua’s customer satisfaction. OCA Exc. at 34 (citing OCA St. 6 at 9-11; OCA St. 6SR at 5).

For purposes of ensuring that all of the evidence rebutting Aqua’s claim for a management performance adder is reviewed, in addition to the evidence adopted by the ALJ, the OCA submits that Aqua’s lower customer satisfaction level should be considered as one of many instances of Aqua’s lack of evidence to support a management performance adjustment. Therefore, the OCA argues that the Commission should consider Aqua’s poor satisfaction ratings, including the fact that Aqua’s customer survey

indicated that only 73% of customers rated their satisfaction as “excellent” or “very good” as further support for the OCA’s recommended ROE and as additional support for rejecting the management performance adder. OCA Exc. at 34-35 (citing OCA St. 6 at 8-22).

In its Replies to Exceptions, the Company refers the Commission to its prior evidence and argument in support of a management performance adder, and discussed in Section X.D.2 of this Opinion and Order, *supra*. Aqua R. Exc. at 20.

In its Replies to Exceptions, I&E explains that although it did not file any testimony regarding the Company’s customer service satisfaction levels, it does not oppose the OCA’s assertions, as set forth in OCA Exception No. 23. I&E R. Exc. at 19.

d. Disposition

As set forth in our disposition of Section X.D.2, *supra*, we have determined that Aqua has exhibited extraordinary effort in aiding and protecting Pennsylvania water and wastewater customers and the environment. Thus, we have awarded the Company a management performance adjustment of twenty-five basis points to its ROE. For this reason, we shall decline to address the additional arguments of the OCA, as set forth in its Exception No. 23, for rejecting the Company’s requested management performance adjustment. Accordingly, the OCA’s Exception No. 23 is denied.

D. Masthope Allegations of Inadequate Wastewater Service

1. Positions of the Parties

Masthope contended that the Commission should deny Aqua's requested rate increase for Masthope's water and wastewater customers because the Company has provided unreasonable service. In this regard, Masthope alleged that there have been unreasonable systematic and unresolved instances of hydraulic overload conditions affecting the Masthope Wastewater Treatment Plant (WWTP) dating back to 2018, which resulted in restrictions upon Aqua's ability to make new wastewater connections. Masthope submitted that Aqua's insufficient planning, investment, maintenance, and operation solely caused the hydraulic overload conditions and ensuing building restrictions within Masthope. Masthope contended that any additional rate increase for Masthope's customers would be unjust and unreasonable given Aqua's failure to provide reasonable service over a period of years. Masthope M.B. at 9-24.

Aqua rebutted that it has adequately planned for the capacity needs of Masthope and has taken reasonable and appropriate measures to improve the wastewater system and service facilitates in its provision of service to the Masthope community. . The Company completed an evaluation of the capacity needs at the Masthope community as part of its 2018 Chapter 94 Report. Based on the evaluation, Aqua implemented the project known as the "Treatment Train Project" to address the system's increasing capacity needs and to avoid future hydraulic exceedance. Aqua St. 9-R at 36-37. Aqua asserted that based upon its evaluation of both the capacity and connection needs of the Masthope community, the Company's "Treatment Train Project," as expanded, would address both the system's need for increased capacity to prevent future hydraulic overload, as well as connection needs of the system. The Company noted that the Treatment Train Project was subsequently expanded to a long-term capital upgrade project based on an evaluation of the remaining connection needs of the system. The

Company also asserted it has demonstrated it is taking proactive steps to reduce inflow and infiltration (I&I) in the collection system as described in its 2020 Chapter 94 Report. Aqua M.B. at 195-200; Aqua R.B. at 84-89; Aqua St. 9-R at 36-37; Aqua St. 9-R at 37.

While maintaining it has taken affirmative steps, Aqua asserted that two events beyond its control led to hydraulic overloads on the system. The Company alleged that elevated precipitation levels and shifts to more full-time use of the residences at Masthope, because of the COVID-19 pandemic, caused hydraulic overloads on the system. As a result of the overloads, Aqua explained, PADEP issued a moratorium on new connections to the system. In response to the moratorium, Aqua submitted a Corrective Action Plan to PADEP, which was designed to restore or otherwise make available connection capacity at Masthope. At that time, the Company noted that the Corrective Action Plan was approved by PADEP, and consequently, PADEP also granted a sewer connection allocation of 60 Equivalent Dwelling Units (EDUs) to Aqua, which modified the prior total moratorium on sewer connections. *See* Aqua St. 9-R at 33-36; Aqua St. 9-R at 37; Aqua Post-Hearing Exh. 1.

2. Recommended Decision

As a procedural matter, the ALJ noted that the issues presented by Masthope were in the context of a complaint *against a utility's rate increase based on the unreasonable provision of service*, rather than a complaint based on the unreasonable provision of service. As such, the ALJ noted that the question was not:

...whether Aqua's wastewater service to Masthope is adequate and reasonable given the persisting hydraulic overload conditions and resulting moratorium on new connections to the Masthope WWTP. Instead, the Commission must determine *whether Aqua's alleged failure to provide reasonable service is so pervasive that the Company should be punished for this failure by refusing to*

grant its request for increased revenue, and whether it is necessary and appropriate to direct service changes or the installation of additional facilities.

R.D. at 133 (citing Masthope R.B. at 4 (quotations omitted, emphasis added)).

The ALJ noted the steps taken by Aqua to rectify the issues related to the Masthope system, including the Company's Treatment Train project, and the Company's Corrective Action Plan submitted to PADEP. Under the Corrective Action Plan, which was recently approved by the PADEP, the ALJ noted that the Company would restore and otherwise make connection capacity available for the Masthope community.

Id. at 132.

The ALJ acknowledged "[t]he Masthope community is clearly experiencing challenges due to hydraulic overload at the WWTP." *See* R.D. at 133. However, the ALJ concluded that Aqua has taken affirmative steps to address the problem, and "[a]ppears to be working with PADEP to address the sewage planning and regulatory issues within that agency's purview."¹⁴⁹ Accordingly, the ALJ did not recommend that the Commission deny Aqua's request for a rate increase, decline to increase rates attributable to the cost of providing service to Masthope, or direct additional service changes or the installation of additional facilities. *Id.*

3. Masthope Exception No. 1 and Replies

In its Exception No. 1, Masthope challenges the grant of Aqua's requested rate increase based upon, *inter alia*, inadequate provision of service by Aqua where hydraulic overload conditions have persisted at the Masthope WWTP since at least 2018,

¹⁴⁹ R.D. at 133. The ALJ also noted that Masthope may file an appeal to the Environmental Hearing Board if it believes that PADEP's response to the sewage planning issues are inadequate. *Id.* (citing, Aqua Post-Hearing Exh. 1).

and the resulting moratorium on new connections imposed by the PADEP in 2020, notwithstanding PADEP's recent modification to allow additional connections. Masthope remains of the opinion that a rate increase under these circumstances is unwarranted. Namely, Masthope emphasizes that the Masthope community experienced a substantial rate increase in 2019. Masthope Exc. at 4 (citing Masthope M.B. at 9-19; Masthope Exc. at 4-10).

Masthope asserts that the ALJ erred by: (1) failing to conclude that Aqua has rendered inadequate and unreasonable wastewater service; (2) concluding that the Commission lacks jurisdiction over the hydraulic overload issues facing the Masthope system; (3) making an unsubstantiated finding that increased precipitation levels and shifts from part-time to full-time residencies during the COVID-19 pandemic caused hydraulic overloads; and (4) failing to consider whether to impose conditions upon any rate increase granted in this proceeding. Masthope Exc. at 5-10.

Masthope reemphasizes its position that Aqua's requested rate increase is unjust and unreasonable for Masthope ratepayers, particularly since Masthope residents experience ongoing and unresolved service issues. Masthope notes that Aqua acknowledges that it may take five years to implement the plans to fully resolve the hydraulic overload conditions at the Masthope WWTP. Masthope Exc. at 4.

Masthope asserts the Commission has jurisdiction, pursuant to its authority under Section 523 of the Code, *supra*, to consider the adequacy of Aqua's service to Masthope customers in determining just and reasonable rates. Masthope argues that the Commission should find that Aqua failed to provide its Masthope customers with adequate, efficient, safe, and reasonable service and facilities, and therefore deny all or part of Aqua's requested rate increase. Masthope Exc. at 5-7 (citing, *e.g.*, *Sutter v. Clean Treatment Sewage Company*, Docket No. C-20078197, (Order entered May 15, 2009) (*Sutter*) at 14).

Masthope notes that while the ALJ acknowledged the Company's failure to provide adequate service, she should have recommended an adjustment to Aqua's requested rate increase to reduce the impact on Masthope wastewater customers. Masthope Exc. at 6-7 (citing R.D. at 29-30, Findings of Fact Nos. 11[2]-1[4]¹⁵⁰). Masthope also argues that it was error for the ALJ to conclude that because PADEP has granted limited approval of Aqua's proposed Corrective Action Plan, the Commission lacks jurisdiction to address those matters as part of the rate proceeding. Masthope Exc. at 6 (citing R.D. at 133). Masthope asserts that the Commission has previously drawn a distinction of PADEP jurisdiction over hydraulic overloads which involve strictly environmental protection issues and the Commission's jurisdiction over adequate service in the context of rate proceedings. Masthope Exc. at 6-7 (citing *Sutter*).

Next, Masthope argues that it was error for the ALJ to acknowledge any factors "beyond Aqua's control" as mitigating Aqua's responsibility for hydraulic overload conditions. Specifically, Masthope asserts that there is no evidence of record to support the impact of the COVID-19 pandemic, including shifts from part-time to full-time residency, and elevated precipitation levels as impacting hydraulic overloads. Masthope Exc. at 8-9 (citing R.D. at 132).

¹⁵⁰ These Findings of Fact state, as follows:

112. Aqua submitted a Corrective Action Plan to Pennsylvania Department of Environmental Protection (PADEP), which is targeted at restoring or otherwise making available capacity to current and future connections at Masthope Mountain community.

113. This Corrective Action Plan was recently approved by PADEP.

114. As part of the approved Corrective Action Plan, PADEP also granted a sewer connection allocation of 60 Equivalent Dwelling Units (EDUs) to Aqua, modifying the sewer connection moratorium.

R.D. at 29-30 (citations omitted).

Finally, Masthope asserts that it was error for the ALJ to fail to impose any conditions on Aqua's proposed rate increase to assure the future provision of adequate and reasonable wastewater service for Aqua's Masthope customers, consistent with the Commission's authority to deny a rate increase *in part* where the Commission finds a public utility fails to render adequate service. Masthope Exc. at 9 (citing Masthope M.B. at 9-19; Masthope R.B. at 2-5).

Masthope requests that, if the Commission approves an increase in Masthope rates, the Commission should impose conditions and deadlines on Aqua to assure that the Company timely resolves the hydraulic overload conditions and permanently eliminates building restrictions that detrimentally affect the community. Further, Masthope argues the existence of Aqua's Corrective Action Plan in response to the PADEP does not preclude the Commission's authority to impose further such conditions. Masthope Exc. at 2, 6.

Specifically, Masthope requests that the Commission impose conditions to resolve the hydraulic overload conditions and eliminate building restrictions by directing Aqua to:

- coordinate with Masthope and local officials regarding the Corrective Action Plan;
- report to Masthope and the Commission on the status of corrective actions;
- seek additional requests or an amendment to the Corrective Action Plan to increase the number of connections to the Masthope WWTP pending completion of the Corrective Action Plan;
- assure that Aqua's "Project 15088006258 – Masthope WWTP Add Treatment Train" results in eliminating the building restrictions currently affecting the Masthope WWTP;

- timely complete Act 537 planning and related improvements to eliminate building restrictions in Masthope; and
- at a minimum, in light of PADEP's recent modifications to Aqua's Corrective Action Plan, require that Aqua meet and confer with Masthope and Lackawaxen Township officials to discuss the 60 permitted connections to determine areas of priority and maximize the benefit to the Masthope community.

Masthope Exc. at 9 (citing Masthope M.B. at 9-19; Masthope R.B. at 2-5).

Accordingly, Masthope asserts that the Commission should reject the ALJ's recommendation, grant Masthope's Exception No. 1, impose a reasonable reduction in Aqua's requested rate increase as it pertains to the Masthope community, and otherwise impose reasonable conditions upon Aqua to ensure timely resolution of the hydraulic overload conditions and elimination of building restrictions. Masthope Exc. at 10.

In its replies, Aqua asserts that the ALJ properly recommended that the Commission deny Masthope's claims of poor quality of service as a basis for challenging the Company's requested rate increase. Aqua notes that the ALJ correctly concluded that Aqua has taken affirmative steps to resolve problems facing this system, and proactively identify improvements to address "sewage planning and regulatory issues within...[PADEP's] purview." Aqua asserts that its affirmative steps taken to improve the system, which led to PADEP's lifting of the ban on new housing in Masthope, based upon Aqua's detailed Treatment Train Project, as expanded to a long-term capital upgrade project, and other steps taken by the Company to reduce I&I in the collection system, demonstrate Aqua's reasonable provision of service in the circumstances. Aqua R. Exc. at 23-25 (citing R.D. at 133; Aqua M.B. at 195-96). Aqua concludes that,

as found by the ALJ, Aqua has provided reasonable service and taken reasonable steps to address the problems facing this system. Aqua R. Exc. at 25.

Aqua further asserts that Masthope misconstrues the Commission's decision in *Sutter*, which Aqua asserts is distinguishable from the present circumstances. Specifically, Aqua claims that, unlike the utility in *Sutter*, Aqua has taken prompt and significant steps to resolve the hydraulic overloads facing the Masthope system, including the recently approved Corrective Action Plan submitted to PADEP. Aqua Exc. at 24 (citing Aqua R.B. at 85-86).

Aqua asserts that, contrary to Masthope's position, the record fully supports the ALJ's conclusion regarding the impact of circumstances beyond Aqua's control upon the occurrence of hydraulic overloads, including increased precipitation levels and shifts from part-time to full-time residencies during the COVID-19 pandemic. More specifically, Aqua notes that its witness, Mr. Duerr, testified to the steps taken by Aqua beginning in 2018 to address the system's issues, and the intervening events in 2020 that resulted in these overloads. Aqua Exc. at 24-25 (citing Aqua M.B. at 196-97).

Finally, Aqua contends that the Commission should reject Masthope's request that the Commission condition Aqua's requested rate increase. Aqua asserts that Masthope's proposed conditions relate to items identified in Aqua's Chapter 94 Reports and the Corrective Action Plan which was approved under the purview of the PADEP. Aqua Exc. at 25 (citing Aqua R.B. at 87-88).

Accordingly, Aqua asserts that the Commission should deny Masthope's Exception No. 1 and adopt the ALJ's recommendation dismissing Masthope's Complaints at Docket Nos. C-2021-3028992 and C-2021-3028996. Aqua Exc. at 25.

In its replies, I&E asserts its support for what it describes as the ALJ's well-reasoned recommendation as it pertains to Masthope. I&E R. Exc. at 24.

Finally, in its Replies, the OCA asserts that if the Commission grants Masthope's request to reduce the rate increase for Masthope customers, the remedy should not shift or impose corresponding costs on other Aqua water or wastewater customers. The OCA asserts that the revenue requirement associated with the rates set for Masthope should not be reallocated to other Aqua customers, based on Masthope's claim of inadequate service. Rather, if inadequate service is found, the OCA maintains that Aqua should bear the cost by reduction in the return on equity because the revenue requirement for Masthope would not be fully reflected in rates. OCA R. Exc. at 18 (citing OCA R.B. at 50; Masthope Exc. at 4-10).

4. Disposition

Upon review, as discussed more fully, *infra.*, we agree with the ALJ's recommendation to grant Aqua's proposed rate increase as applicable to Masthope, and we decline to impose any additional conditions upon Aqua related to the reduction of hydraulic overload conditions and elimination of building restrictions.

As a preliminary matter, we agree with the ALJ that our disposition of this issue turns on whether Aqua's alleged failure to provide reasonable service is so pervasive that the Company should be punished for this failure by refusing to grant its request for increased revenue, and whether it is necessary and appropriate to direct service changes or the installation of additional facilities.

Further, we agree with the general principles argued by Masthope that it is within the Commission's discretion pursuant to our authority under Section 523 of the Code, to consider the adequacy of Aqua's service to Masthope customers in determining

just and reasonable rates. Should we determine that Aqua's provision of service was inadequate *in the circumstances*, it is within our discretion to deny or reduce Aqua's requested rate increase, and/or impose further conditions as deemed reasonable and necessary in the circumstances. However, under the circumstances, we do not conclude that Aqua's provision of service to Masthope may be found to be unreasonable, or so inadequate as to justify a reduction in the proposed rate increase or warrant imposition of additional conditions upon Aqua's provision of service.

In the present circumstances, it is acknowledged that the Masthope community has experienced serious customer service issues regarding hydraulic overloads and the inability to meet the needs for new connections. However, in the context of a requested rate increase, our recognition of the serious allegation of issues regarding the provision of service must also include consideration of the Company's response to those issues. Where the Company's response is untimely and/or inadequate, we may be persuaded that the Company's proposed rate increase should be denied in total or reduced by some measure, and/or that certain conditions should be attached to the rate increase approval. *See Sutter, supra.*

Here, however, we conclude that the facts of the present case reflect that Aqua has taken prompt, reasonable and affirmative steps to rectify the problems associated with hydraulic overloads and the connection needs of the Masthope community. As noted by the Company, Aqua's detailed Treatment Train Project, as expanded to a long-term capital upgrade project, and other steps taken by Aqua to reduce I&I in the collection system, demonstrate Aqua's reasonable provision of service in the circumstances. Aqua R. Exc. at 23-25 (citing, R.D. at 133; Aqua M.B. at 195-96).

Further, we disagree with Masthope's argument that the Commission's prior decision in *Sutter* is applicable in the present circumstances. We note that *Sutter* is an example of the exercise of the Commission's discretion on a case-by-case basis, in the

circumstances involving a rate increase which did not establish a mandatory standard or ruling. Although *Sutter* did involve the Commission’s exercise of jurisdiction where a utility had matters pending before the PADEP, the facts in *Sutter* are distinguishable in material respect to the facts presently before us. Foremost, the utility in *Sutter* did not demonstrate the prompt and affirmative steps to rectify the service deficiencies at issue in the proceeding. See, generally, *Sutter*, at 14. . In contrast here, the record reflects Aqua’s prompt, reasonable and affirmative steps to rectify the problems and needs of the Masthope community.

Accordingly, we shall deny Masthope’s Exceptions No. 1, and adopt the ALJ’s recommendation, dismissing the Complaints at Docket Nos. C-2021-3028992 and C-2021-3028996.

E. COVID-19 Uncollectible Deferral

1. Positions of the Parties

Rather than requesting recovery of its existing COVID-19 deferral amounts in this current rate case, Aqua proposed to continue recording amounts in its COVID-19 deferral account and to seek recovery in a future rate case. In support, Aqua explained that the Commission previously authorized utilities to create regulatory assets for incremental uncollectible expenses related to COVID-19 above those already embedded in base rates. Aqua M.B. at 200 (citing Aqua St. 1 at 22-24).

Aqua noted increased levels of unpaid billings or “bad debt,” due to the service termination moratorium, citing *Public Utility Service Termination Moratorium Proclamation of Disaster Emergency – COVID-19*, Docket No. M-2020-3019244 (Emergency Order ratified March 26, 2020) (*Emergency Order*). According to Aqua, this increased the Company’s uncollectible accounts expense above the amount currently

embedded in its base rates, which were \$2,425,823 for water and \$217,335 for wastewater base systems during the HTY. Aqua explained that it calculated these expenses by normalizing them to pre-pandemic levels, specifically the rate of bad debt expense implicitly authorized in the *Aqua 2018 Rate Case*. The Company recorded a regulatory asset of \$5,695,030 as a result of aging accounts receivable from its customers due to the termination moratorium. Aqua M.B. at 201.

Aqua argued that, although the service termination moratorium has ended, Pennsylvania continued to be impacted by the COVID-19 pandemic at the time of the Company's filing, and that it continues to incur incremental levels of uncollectible expenses beyond the end of the HTY. In response, Aqua sought continued authorization to defer (not recover) these incremental expenses realized over and above its recovery levels for review and recovery in its next base rate case. Aqua M.B. at 201-02 (citing Aqua St. 1 at 23-24).

Aqua asserted that it was not asking for "any time value of the money related to these deferrals" and that the Company and its shareholders were currently funding, and will continue to fund, the delayed cash inflow from aging accounts receivable. Thus, the Company submitted that its customers will not fund this aspect of the incremental costs Aqua has incurred to provide continuous and reliable service in the face of a global pandemic. Aqua M.B. at 203 (citing Aqua St. 1-R at 7).

Moreover, the Company asserted that it has not sought authorization to defer any incremental expenses for safety supplies, masks, hand sanitizers, social distancing signage, which were required in many facilities. According to the Company, Aqua has been and will continue to be conservative in seeking to recover incremental COVID-19 related expense. Aqua M.B. at 203-04.

I&E recommended the Company be required to track further COVID-19 related reductions to uncollectible expenses in its water and individual wastewater revenue requirements; and, that the balances be claimed in the next rate filing, which is anticipated to be filed in 2024. Further, I&E requested that Aqua: (1) be required to propose amortization of the balance at that time, amortized over a period of years, to be claimed in the next rate proceeding; and (2) be allowed to claim no interest or any time value of money component associated with the delay. Also, I&E recommended that the Company be allowed to claim no increases to COVID-19 related uncollectible expenses beyond the effective date of new rates in this proceeding, because Aqua has expressed that its motivation in delaying the amortization of the balance is to mitigate the impact on ratepayers. I&E M.B. at 58-59.

I&E added that any new increases to the COVID-19 related uncollectible expenses should not be recoverable in a future proceeding. According to I&E, the recommended delay is based on Aqua's assertion that the COVID-19 related uncollectible expenses are declining since the Company has been permitted to resume collection activities, and that the Company expects this declining trend to continue which would reduce the impact on ratepayers. I&E submitted that any new increases to the COVID-19 related uncollectible expenses should not be recoverable in a future proceeding. I&E M.B. at 57, 59.

The OCA recommended that Aqua offset any claimed costs with savings that it has recognized during the pandemic. Aqua agreed with this recommendation. However, the OCA contended that indefinite continued deferrals beyond the FPFTY would be unreasonable and should not be permitted. According to the OCA, the end of the FPFTY would be a reasonable point to cut off the Company's ability to continue recording incremental deferred uncollectible expenses related to the pandemic. OCA M.B. at 50.

2. Recommended Decision

The ALJ recommended that the Commission should continue to authorize Aqua to defer its COVID-19 related uncollectible expenses. However, the ALJ agreed with I&E that Aqua should be required to track further COVID-19 related reductions to uncollectible expenses pursuant to its water and the individual wastewater revenue requirements. The ALJ reasoned that the burden is on Aqua to demonstrate that these expenses are “prudently incurred incremental extraordinary, nonrecurring expenses related to COVID-19.” R.D. at 136 (citing Secretarial Letter issued by the Commission on May 13, 2020, at Docket No. M-2020-3019775 titled “COVID-19 Cost Tracking and Creation of Regulatory Asset” (*May 2020 Secretarial Letter*)).¹⁵¹ Agreeing with the OCA, the ALJ also stated that these expenses should be offset by any savings, upon which Aqua indicated agreement. R.D. at 136.

Additionally, the ALJ emphasized that, to date, the Commission has declined to impose a hard cutoff for the accumulation of deferred expenses related to COVID-19. The ALJ noted the provisions of the *May 2020 Secretarial Letter* have not been modified and cited to a recent decision of the Commission indicating that the effects

¹⁵¹ Subsequent to the *May 2020 Secretarial Letter*, the Commission issued the following Orders: *Public Utility Service Termination Moratorium – Modification of March 13th Emergency Order*, Docket No. M-2020-3019244 (Order entered October 13, 2020) (*October 2020 Order*); *Public Utility Service Termination Moratorium*, Docket No. M-2020-3019244 (Order entered March 18, 2021) (*March 2021 Order*); and *Public Utility Service Termination Moratorium; COVID-19 Cost Tracking and Creation of Regulatory Asset*; Docket Nos. M-2020-3019244 and M-2020-3019775 (Order entered July 15, 2021) (*July 2021 Order*).

of the COVID-19 pandemic are still being felt by utilities.¹⁵² Therefore, the ALJ deemed it premature to establish a hard cut-off date for the accumulation of deferred expenses and savings in this base rate proceeding. Rather, the ALJ was persuaded by Aqua's argument that permitting additional time for economic conditions to stabilize will not harm ratepayers and may perhaps be to their benefit as the Company is able to offset uncollectible expenses with increased collection activities. R.D. at 136 (citing Aqua St. 1-R at 7).

The ALJ acknowledged the Company's contention that it is not seeking any time value of the money related to these deferrals, nor is it seeking authorization to defer any incremental expenses for safety supplies, masks, hand sanitizers, and social distancing signage, that were required in many facilities. The ALJ further reasoned that uncollectible expenses may be mitigated by the enhancements to Aqua's universal service program and from recent federal funding dedicated to reducing unpaid utility bills. R.D. at 136-37.

3. OCA Exception No. 7 and Replies

In its Exception No. 7, the OCA argues that the ALJ erred in accepting Aqua's proposal to continue deferring its COVID-19 uncollectible expenses indefinitely. OCA Exc. at 9-10.

The OCA begins with its agreement that the pandemic is ongoing and its continuing impacts have informed the OCA's other adjustments including those

¹⁵² See *Petition of Pennsylvania-American Water Company for Authorization to Defer, and Record as Regulatory Assets for Future Recovery: (1) Incremental Expenses Incurred Because of the Effects of the COVID-19 Emergency; (2) Revenue Reductions Attributable to the Effects of the COVID-19 Emergency; and (3) Carrying Charges on the Amounts Deferred*, Docket No. P-2020-3022426 (Order entered September 15, 2021) (*PAWC COVID-19 Deferral Order*).

regarding seasonal positions and rate case expense, citing the OCA Exception Nos. 4 and 5. Despite this, the OCA asserts it is unreasonable to continue to allow deferrals indefinitely beyond the FPFTY. OCA Exc. at 9 (citing OCA St. 1 at 63). According to the OCA, the Commission should establish a clear point in time during which Aqua must cease recording costs related to COVID-19 into the existing deferral account, in order to ensure that those costs do not accumulate to unreasonably burden consumers in later rate cases. OCA Exc. 9-10.

The OCA submits that the end of the FPFTY would be a reasonable point to end the current deferral and the Commission should impose such a cut-off for the Company. The OCA adds that if the Company finds it necessary to continue to defer COVID-19 related costs at the end of its FPFTY (*i.e.*, by March 31, 2023), it can ask the Commission to approve a new deferral mechanism at that time. *Id.* at 10.

In its reply, Aqua argues that the ALJ correctly rejected the OCA's arguments. The Company asserts that the OCA still believes it necessary to set an end-date for the calculation of COVID-19 deferrals that increase expenses but wants to capture any future decreases to the balance. Aqua submits that the OCA's approach is unbalanced and should be rejected. The Company contends that its proposal, as modified and adopted by the ALJ, is balanced because it continues to defer the determination of changes to the COVID-19 uncollectible accounts balance, whether higher or lower, until Aqua's next rate case. Aqua R. Exc. at 6.

Emphasizing the ALJ's reference to the *May 2020 Secretarial Letter* and that the Commission has declined to impose a hard cut-off for the accumulation of deferred expenses related to COVID-19, the Company argues that establishing a cut-off date only for Aqua in the context of this rate proceeding would be unfair and premature. Accordingly, Aqua contends that the OCA's Exception No. 7 should be denied. Aqua R. Exc. at 7 (citing Aqua M.B. at 200-06; Aqua R.B. at 89).

In its reply to the OCA's Exception No. 7, I&E asserts that it does not oppose the OCA's argument that the ALJ erred in accepting Aqua's proposal to continue deferring its COVID-19 uncollectible expenses indefinitely. I&E also references the ALJ's conclusion that the Commission has declined to impose a hard cut-off date for the accumulation of such deferred expenses. However, I&E recommends that, until such time as a hard cut-off date is established, the Commission in this proceeding should set the cut-off date for Aqua at the effective date of new rates. I&E R. Exc. at 14-15.

4. Disposition

Aqua seeks Commission approval of its request to continue recording amounts in its COVID-19 deferral account and to seek recovery in a future rate case. As discussed in *PAWC COVID-19 Deferral Order*, the Company must demonstrate that the expense items it requests to defer appear to be within the scope of the type of items that the Commission has allowed as an exception to the general rule against retroactive recovery of past expenses. Commission authorization for deferral accounting is not intended to create a factual record. As such, the burden of proof will remain with Aqua in a future proceeding to demonstrate that each expense item is: (1) extraordinary and substantial, (2) nonrecurring, (3) incremental and, (4) COVID-19 related consistent with the *May 2020 Secretarial Letter*. See *PAWC COVID-19 Deferral Order* at 6-7.

Regarding COVID-19 cost tracking and the creation of regulatory assets, the Commission directed regulated utilities in Pennsylvania:

[T]o track extraordinary, nonrecurring incremental COVID-19-related expenses and to maintain detailed accounting records of such expenses. Utilities must maintain detailed records of the incremental expenses incurred for the provisioning of utility services used to maintain the health, safety and welfare of Pennsylvania customers during the COVID-19 pandemic. With the exception of the separate

regulatory authorization afforded uncollectible expenses below, this Secretarial Letter does not grant authorization for utilities to defer any other potential COVID-19-related expenses.

May 2020 Secretarial Letter at 2.

The directives in the *May 2020 Secretarial Letter* were reaffirmed in our *July 2021 Order*, as follows:

The Commission acknowledged in its [*March 2021 Order*] that its COVID-19 related Orders may benefit customers and increase expenses for utilities. Consistent with our May 13, 2020, Secretarial letter at Docket No. M-2020-3019775, the Commission hereby confirms that utilities shall continue tracking extraordinary, nonrecurring incremental COVID-19 related expenses and shall maintain detailed accounting records of such expenses. Additionally, the Commission hereby confirms that electric, natural gas, water, wastewater, steam, and all rate base/rate of return telecommunications utilities are authorized to create a regulatory asset for any incremental expenses incurred above those embedded in rates resulting from the directives contained in this Order. To be eligible for inclusion in a utility's COVID-19 designated regulatory asset, the utility must maintain detailed records of the incremental extraordinary, nonrecurring expenses incurred as a result of compliance with the Commission's [*Emergency Order, March 2021 Order, October 2020 Order*] and this Order.

July 2021 Order at 4.

Here, there is no dispute that the incremental uncollectible expenses related to COVID-19 above those already embedded in base rates are within the scope of the type of items which are allowable as an exception to the general rule against retroactive recovery of past expenses. Aqua has elected to defer seeking recovery of these expenses

until its next base rate proceeding at which time it will have the burden of proof to demonstrate that each expense satisfies the Commission standards for recovery.

The only question in this proceeding is whether the Commission should impose a cut-off date for the accumulation of deferred expenses related to COVID-19. Aqua seeks to extend the accumulation period until its next base rate proceeding. I&E requests that the Commission stop the accumulation time period beginning with the effective date of new rates established in this proceeding. The OCA proposes a continuation of the deferral of COVID-19 related costs until the end of the Company's FPFTY in this proceeding and thus by March 31, 2023.

Consistent with our determination in *PAWC COVID-19 Deferral Order*, we shall decline to set a hard cut-off date for the accumulation of deferred expenses. It is evident that the effects of COVID-19 are still being felt by utilities and we deem it premature to conclude that the pandemic is over and that no additional related expenses will be incurred beyond the end-dates proposed by I&E and the OCA.

We also agree with the well-reasoned conclusions of the ALJ that permitting additional time for economic conditions to stabilize will not harm ratepayers but may operate to their benefit if the Company is able to offset uncollectible expenses with increased collection activities. *See* Aqua St. 1-R at 7. Further, Aqua provided testimony that it is not seeking the time value of the money related to these deferrals, nor is it seeking authorization to defer any incremental expenses for safety supplies, masks, hand sanitizers, or social distancing signage, that were required in many facilities. *Id.* Moreover, as noted by the ALJ, uncollectible expenses may be further mitigated by the enhancements to the Company's universal service program and from recent federal funding dedicated to reducing unpaid utility bills. *See* R.D. at 137.

In declining to establish a cut-off date for the accumulation of deferred expenses in this proceeding, we emphasize that consideration of the period of recovery for any regulatory asset treatment is being deferred to the subsequent base rate proceeding filed by the Company. Again, such deferred amounts that Aqua may seek to recover in a future proceeding will be subject to detailed review and investigation and the burden of proof will remain with the Company to establish the prudence and reasonableness of its incremental COVID-19 related financial impacts.

Thus, we shall deny the OCA's Exception No. 7 and adopt the recommendation of the ALJ.

F. Directed Questions of Commissioner Yanora

On September 16, 2021, Commissioner Yanora requested that the Parties address certain issues, including questions pertaining to lead service lines, cross-connections, backflow prevention devices, and lost and unaccounted for water. The Company provided responses to these questions in Aqua Exhibit TMD-4-R which were sponsored by Aqua's witness, Mr. Duerr, with his rebuttal testimony. *See* Aqua M.B. at App. D.

The specific inquiries are as follows:

- 1) The estimated number of company-owned lead service lines and the number of customer-owned lead service lines in the Aqua water distribution system;
- 2) Compliance of the Aqua tariff cross-connection control requirements with 25 Pa. Code §§ 109.709, 109.609 and any applicable provisions of the International Plumbing Code;
- 3) Compliance materials of Aqua's operation and maintenance plans required by 25 Pa. Code § 109.702 as they relate to

adequate, safe, and reasonable service for utility customers and employees;

- 4) The number of Aqua's commercial meters in the system, the number tested, and the number passed or failed for calendar year 2020;
- 5) The number of Aqua's valves exercised in calendar year 2020 and the frequency of valve maintenance;
- 6) The number of Aqua's commercial and industrial customers that have testable backflow prevention devices and the number of devices that were tested for calendar year 2020;
- 7) Aqua's tariff backflow prevention requirements regarding residential fire protection and irrigation and whether Aqua has a plan for inspection and testing of fire hydrants;
- 8) Whether Aqua has surveyed the number of fire hydrants that do not provide a minimum flow of 500 gallons per minute at 20 pounds per square inch; and
- 9) Whether Aqua's residential customers have American Society of Sanitary Engineers 1024 backflow assemblies installed at meter locations.
- 10) Whether Aqua has evaluated its lost and unaccounted water performances since 2018 and any relevant results.

Directed Questions at 1-2.

The following discussion provides a summary of the responses provided by Aqua's witness, Mr. Duerr, in addressing the Directed Questions. Aqua Exh. TMD-4-R.¹⁵³ We note that some of the areas of inquiry have already been addressed in the Quality of Service sections, *supra*.

¹⁵³ There are no page numbers within this exhibit; thus, we shall follow the Company's general citation method to the questions and responses (*i.e.*, Yanora-1, Yanora-2, *etc.*).

Regarding the first inquiry about the estimated number of lead service lines in Aqua's system, the Company responded that on September 3, 2020, Aqua filed a petition for approval of tariff changes authorizing the replacement of customer-owned lead service lines. Aqua asserted that the Commission approved the petition on July 15, 2021, pursuant to a modified settlement.¹⁵⁴ The Company submitted that since receiving approval it has reached out to customers with known lead service lines and is in the process of getting agreements in place with customers to allow replacement of their lead service line under Aqua PA's program. Yanora-1.

The Company added that, as of September 2021, Aqua had seven known Company-side lead service lines and identified 325 customer-owned lead service lines in its system based on the review of tap cards, water sampling data, meter exchange, and service call information. Aqua estimated that in total there are over 100 Company-side lead service lines and over 2,000 customer-owned lead service lines. *Id.*

¹⁵⁴ On May 28, 2021, ALJ Marta Guhl granted Aqua's modified Joint Petition for Settlement and approved the Company's Joint Settlement Replacement Plan set forth in the Settlement. *See Petition of Aqua Pennsylvania, Inc. for Tariff Changes Authorizing Replacement of Customer-Owned Lead Service Lines*, Docket No. P-2020-3021766 (Recommended Decision issued May 28, 2021). No Exceptions to the Recommended Decision were filed and the Commission entered a Final Order adopting the Recommended Decision on July 15, 2021 (*Aqua LSL Order*).

As to the second inquiry concerning compliance with tariff cross-connection¹⁵⁵ control requirements, Aqua asserted that it has an established cross-connection control program operated under its Cross-Connection Control Manual (Manual). The Company attached a copy of the Manual (as Yanora-2, Attachment 1) and indicated that as of July 2021, 77% of known backflow devices in Aqua's service areas were tested in accordance with 25 Pa. Code §§ 109.709, 109.608 and applicable provisions of the International Plumbing Code. According to Aqua, all new customers of its systems are required to install backflow devices as identified in the standards and specification outlined in its Manual which meet the requirements of the codes noted above. Yanora-2.

Regarding the third inquiry, Aqua submitted that it has an operation and maintenance plan required by 25 Pa. Code §109.702 as it relates to adequate, safe, and reasonable service for utility customers and employees. The Company stated that this plan was last updated in November 2019 and will be updated again in 2022 after the Company completes its requirements to update emergency response plans required by the American Water Infrastructure Act, which the Company indicated were due on December 31, 2021, for certification of Group 3 systems. In addition to general updates,

¹⁵⁵ Cross connections are defined in the PA DEP's regulations as follows:

Cross-connection—An arrangement allowing either a direct or indirect connection through which backflow, including backsiphonage, can occur between the drinking water in a public water system and a system containing a source or potential source of contamination, or allowing treated water to be removed from any public water system, used for any purpose or routed through any device or pipes outside the public water system, and returned to the public water system. The term does not include connections to devices totally within the control of one or more public water systems and connections between water mains.

Aqua stated that the updated operation and maintenance plan will reflect acquired systems and updates related to other operating plans. Yanora-3.

Regarding the fourth inquiry concerning the number of commercial meters in the system, the number tested, and the number passed or failed for 2020, Aqua responded that at the end of 2020, the Company had 23,139 meters installed at commercial premises within the service area. Aqua added that in 2020, 801 meters installed at commercial premises were removed and tested; 458 (57%) of those meters failed their testing based on flowrates and accuracy defined by the standards of the American National Standards Institute (ANSI) and the AWWA for new meters. Yanora-4 (citing ANSI/AWWA C-700).

The fifth inquiry concerned the number of valves exercised in calendar year 2020 and the frequency of valve maintenance.¹⁵⁶ Aqua responded that it has a critical valve testing program that was reviewed during the Commission's recent Management Audit report. In this report, Aqua noted that it has been credited with developing a strong base for its valve inspection program by focusing on critical valves. Yanora-5.

Additionally, Aqua referenced the Management Audit recommendation that Aqua implement a full-scale valve inspection and exercise program designed to identify what valves have not been operated or inspected in the last ten years. Although Aqua

¹⁵⁶ Generally, the exercising of a water main valve means that each valve connected to the water main of the distribution system is tested to ensure it is working properly by operating the valve through a full cycle and returning it to its normal position (*i.e.*, turning the valve completely off, then gradually opening it and closing it, before returning it to its normal open position). *See e.g.*, Zane Satterfield, P. E., *Tech Brief – Valve Exercising*, Summer 2007, Vol. 7, Issue 2, National Environmental Services Center; <https://www.nesc.wvu.edu/files/d/1f62b334-8497-403e-bceb-f5116ac2c142/valve-exercising.pdf>.

agreed that non-critical valve inspection and exercising program is warranted, it had concerns with the suggested exercising frequency outlined in the report. As part of the implementation plan, Aqua agreed to engage a consultant to evaluate the Company's water systems and develop a non-critical valve inspection and exercising program. According to Aqua, this effort will consider such factors as standard operating procedures for inspection and exercising valves, valve operating frequency, the identification of routinely operated valves, and the resources necessary to complete these procedures. Aqua asserted that this program will ensure that non-critical valves will be inspected and exercised on a level representing good industry practice. The Company added that the exercising frequency will be included in the review by the consultant and Aqua will provide the recommended frequency in its next update report. *Id.*

In further response to the fifth inquiry, Aqua explained that all critical valves have been identified in the Aqua Geographic Information System (GIS) asset registry and will continue to be updated as as-builts are received. These valves currently have exercising schedules created and maintained in Aqua's work order management system or Maintenance Connection. The Company indicated that these schedules will be transferred to SAP Plant Maintenance in January 2022 and maintained at the asset level to ensure compliance with critical valve requirements. Aqua also asserted that all non-critical valves have been identified in the Aqua GIS asset registry. The Company conducted an analysis to ensure the exercising of these valves is completed over a 12-year period. According to Aqua, internal staff used GIS analysis techniques to identify valve proximity to major roadways to determine staffing requirements needed for traffic control measures. The Company stated that operation staff are meeting to determine which non-critical valves are scheduled per year. *Id.*

Additionally, Aqua stated that 129 isolation valves were repaired during calendar year 2020. Although the Company does not at present have a program for operating valves based on frequency, Aqua noted its operation of approximately 6,000 to

8,000 valves during its normal course of business which it estimated as ten percent of the valves in service each year. Aqua stated that the program operates critical valves at least once every four years and there are 270 valves in the program which began in 2017. The Company emphasized the ongoing nature of the program and the potential for occasional changes depending on modifications made in the distribution system. For reference, Aqua asserted that as of October 2021 there were a total of 83,547 valves in its system and provided a breakdown by region. *Id.*¹⁵⁷

In response to the sixth inquiry, Aqua provided information related to the number of commercial and industrial customers that have testable backflow prevention devices and the number of devices that were tested for calendar year 2020. The Company stated that there are 21,830 testable backflow devices installed on commercial premises, and 920 testable backflow devices installed on industrial premises. In 2020, Aqua recorded passable tests for 15,573 devices installed on commercial premises and 643 devices installed on industrial premises. Yanora-6.

The seventh inquiry pertained to tariff backflow prevention requirements regarding residential fire protection and irrigation and whether Aqua has a plan for inspection and testing of fire hydrants. In response, Aqua cited to the Manual provided in response to the second inquiry, which defines the requirements for residential fire protection and irrigation accounts. According to the Company, all new residential fire protection and irrigation services are required to install testable backflow devices and those devices are required to be tested annually. Yanora-7.

In response to the eighth inquiry – whether Aqua has surveyed the number of fire hydrants that do not provide a minimum flow of 500 gpm at 20 psi – Aqua replied

¹⁵⁷ PA-Southeastern comprised the largest number of valves at 66,033. The remainder of the regions were as follows: PA-Central – 5,374; PA-Northeastern – 6,322; and PA-Western – 5,818. Yanora-5.

that it has approximately 24,500 hydrants in service in Pennsylvania. During its normal course of business, Aqua continued, it receives requests to perform flow testing from various groups outside the Company such as fire companies, sprinkler contractors, township engineers and insurance companies. Aqua also noted it performs flow tests for its own internal purposes to review fire flow in areas of its systems, with 300-500 flow tests performed annually. According to Aqua, all tests assist in decisions in operating the system and for capital planning and tests coming back with less than 500 gpm at 20 psi residual are reviewed more thoroughly. If the hydrant is in good working order and does not need repairs, Aqua explained, the hydrant location area is passed along to the Engineering Department in order for the area to be included as a candidate within Aqua's Main Replacement program. Yanora-8.

Additionally, the Company stated that as a follow up from the last rate case, it provided information regarding all fire hydrants connected to 4-inch mains or smaller that are not capable of providing 500 gpm of water at 20 psi. *Id.*¹⁵⁸

The ninth inquiry concerns whether Aqua has determined if its residential customers have American Society of Sanitary Engineers (ASSE) 1024 backflow assemblies installed at meter locations. Aqua replied that its Rules and Regulations require all new customer connections to the Company's distribution system be equipped with backflow prevention, cross-connection-control or other special devices approved by the Company and in accordance with the Company's specifications. Further, at the Company's request, existing customers must install backflow prevention, cross-connection-control or other special devices approved by the Company to existing customer connections which must comply with the Company's specifications. Yanora-9.

¹⁵⁸ Aqua designated this information as Confidential and submitted it pursuant to the Protective Order issued in this proceeding. Yanora-8.

In support, Aqua submitted its Meter Installation Specifications, revised June 2015, indicating that it defines the requirements for all residential accounts. *See Yanora-9, Attachment 1.* The Company contended that all residential services are required to install an ASSE 1024 backflow device. Aqua asserted that these installations are monitored throughout its new business activities and the device is confirmed as installed before the meter is set. According to the Company, existing residential services are required to meet this standard when improvements are made to those properties requiring plumbing permits due to renovations and retrofits. *Yanora-9.*

In response to the tenth and final inquiry, Aqua affirmed that it has evaluated lost and unaccounted for water performance since 2018. The Company also emphasized that the Commission's Bureau of Audits recently reviewed this information in Aqua's 2020 Management Audit. *Yanora-10.*

Aqua explained that a yearly audit is conducted using the AWWA water audit tool which it described as "Version 6.0." *Id.* Aqua submitted that its performance exceeds industry medians for most key performance indexes, noting how Aqua's non-revenue water has held steady since 2018 at 20.2%, plus or minus 0.01%. The Company contended this results in a Real-Loss-Cost-Rate of only \$6.39/connection/year which is below the median 30th percentile. *Id.*

As background, Aqua described the leak survey activity conducted in Southeast Pennsylvania by its three full-time leak survey technicians with one in each operating division office. The Company stated that its leak survey technicians normally perform leak surveys fifty-two weeks a year by pipe plate, which systematically performs a survey on the entire system. According to Aqua, the survey focuses on high-risk materials such as cast iron and stove pipe cement pipe and the objective is to survey 100% of the high-risk pipe in the system over a 15-month period. Aqua further described how leak survey technicians are available at any time to assist crews having trouble

locating leak sources in the system. Additionally, Aqua noted that leak surveys are performed daily as the Company inspects hydrants, performs meter change outs, or responds to service calls. Specifically, the Company explained that the technician listens on the lines for leaks and any suspected leaks are relayed to maintenance personnel, who then respond. *Id.*

Next, the Company described its contract with Utilis, a remote-sensing data company, to conduct a pilot study survey of select distribution systems in 2019 in Southeast Pennsylvania. Aqua asserted that Utilis uses synthetic aperture radar satellite data along with their proprietary algorithm to specifically identify areas with soil moisture at a depth underground that often signifies drinking water leaks from pipes. The pilot is expected to conclude in 2022. *Id.*

For Greater Pennsylvania, Aqua proffered that it performs a water loss analysis using a form of the AWWA water audit methodology and employs a full-time leak locator who focuses primarily in the Northeastern areas. The Company also asserted that leak detection is outsourced to several contracted professionals throughout Greater Pennsylvania, as needed. Regarding other leak detection efforts, Aqua explained that its distribution field employees are equipped with acoustic leak detection equipment which is utilized each time the employee operates a fire hydrant, flushing device, distribution system valve or customer service valve. *Id.*

Referencing its direct testimony, Aqua noted its capital expenditures program for the years 2018 through 2021 has been weighted toward water main replacement. Yanora-10 (citing Aqua St. 1 at 4). The Company explained that it has approximately 5,800 miles of water main in Pennsylvania, and has been replacing, on average, over 100 miles per year for the last ten years accounting for an average investment of approximately \$100 million to \$150 million annually. As a result of this investment, the Company contended that it has experienced a reduction in the number of

main breaks in cold weather months and an overall tightening up of the system such that recent unaccounted for water levels have been trending downward. In addition, Aqua emphasized that it has acquired many small or troubled systems and made significant improvements in their unaccounted-for-water through main replacement. Specifically, Aqua asserted that it greatly improved the Phoenixville water systems. The Company added that it has also invested in GIS software, which is used to track and monitor main break history and water aesthetic issues due to aging infrastructure. Yanora-10.

In the Recommended Decision, the ALJ referenced the Directed Questions and the Company's responses to them. R.D. at 137. The ALJ also made one specific Finding of Fact pertaining to the Company's responses to the Directed Questions as follows:

111. As a matter of the normal course of operations, Aqua operates between 6,000 to 8,000 valves per year, or about 10% of its valves. [Aqua Exh. TMD-4-R]

R.D. at 29. No Party filed Exceptions regarding the Company's Responses to the Directed Questions or to the recommended Finding of Fact.

However, the Parties have developed an evidentiary record pertaining to various quality of service issues that overlap with some of the Directed Question issues, including Unaccounted-for-Water, Pressure Measurements, Isolation Valves, and Fire Hydrants. We have addressed these litigated issues in this Opinion and Order, *supra*. Moreover, we note that the Company's tariff proposal to help remediate customer-owned lead service lines was recently considered and approved in the Commission's *Aqua LSL Order* entered on July 15, 2021.

To the extent that the Directed Questions pertain to additional issues not addressed in the prior litigated issues, we find that Aqua has provided sufficient

responses and information which have assisted the Parties and the Commission in evaluating tangential matters which may impact the rate proposals at issue in this proceeding. Upon review, we determine that the Company's responses to the Directed Questions do not alter our ultimate determination herein that the proposed increases in rates, as modified by this Opinion and Order, are just and reasonable.

XIII. Conclusion

Based on our review of the record in this proceeding, we shall: (1) grant, in part, and deny, in part, the Exceptions filed by Aqua, I&E, and the OCA; (2) deny the Exceptions filed by the OSBA, CAUSE-PA, Aqua LUG, Masthope, and Mr. Osinski; and (3) approve an annual revenue increase of \$50,510,192 to the Company's *pro forma* revenue at present rates of \$510,006,687, or approximately 9.88%, for its water service and an annual revenue increase of \$18,740,978 to the Company's *pro forma* revenue at present rates of \$37,076,494, or approximately 50.55%, for its wastewater service.

THEREFORE;

IT IS ORDERED:

1. That the Exceptions filed by Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., on February 28, 2022, are granted, in part, and denied, in part, consistent with this Opinion and Order.

2. That the Exceptions filed by the Commission's Bureau of Investigation and Enforcement on February 28, 2022, are granted, in part, and denied, in part, consistent with this Opinion and Order.

3. That the Exceptions filed by the Office of Consumer Advocate on February 28, 2022, are granted, in part, and denied, in part, consistent with this Opinion and Order.

4. That the Exceptions filed by the Office of Small Business Advocate on February 28, 2022, are denied, consistent with this Opinion and Order.

5. That the Exceptions filed by the Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania on February 28, 2022, are denied, consistent with this Opinion and Order.

6. That the Exceptions filed by Masthope Mountain Community Association on February 28, 2022, are denied, consistent with this Opinion and Order.

7. That the Exceptions filed by the Aqua Large Users Group on February 28, 2022, are denied, consistent with this Opinion and Order.

8. That the Exceptions filed by Donald C. Osinski on February 21, 2022, are denied, consistent with this Opinion and Order.

9. That the Recommended Decision of Administrative Law Judge Mary D. Long, issued on February 18, 2022, is adopted, as modified, by this Opinion and Order.

10. That Aqua Pennsylvania, Inc., is authorized to grant discounted rates to Chemung County Industrial Development Agency, Horsham Water Authority, and the Borough of Sharpsville consistent with the water resale contracts charging discounted rates pursuant to Aqua Pennsylvania, Inc.'s tariff Rider DRS – Demand Based Resale

Service. The total upward adjustment to Aqua Pennsylvania, Inc.'s revenues as a result of water contract revenue as set forth in Table II – Water shall be \$1,136,086.

11. That the corrections and modifications directed by this Opinion and Order reflected in Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., Docket Nos. R-2021-3027385 and R-2021-3027386 (Commission Tables Calculating Allowed Revenue Increase), attached hereto, are adopted as being in the public interest.

12. That Aqua Pennsylvania, Inc., shall not place into effect the rates, rules, and regulations contained in proposed Tariff Water - Pa. P.U.C. No. 3, as filed.

13. That Aqua Pennsylvania Wastewater, Inc., shall not place into effect the rates, rules, and regulations contained in proposed Aqua Original Tariff Sewer - Pa. P.U.C. No. 3, as filed.

14. That Aqua Pennsylvania, Inc., is authorized to file tariffs, tariff supplements and/or tariff revisions, on at least one day's notice, and pursuant to the provisions of 52 Pa. Code §§ 53.1, *et seq.*, and 53.101, designed to produce an annual operating revenue of approximately \$561,658,784, representing an annual revenue increase of approximately \$50,510,192, to become effective for service rendered on and after May 19, 2022.

15. That Aqua Pennsylvania Wastewater, Inc., is authorized to file tariffs, tariff supplements and/or tariff revisions, on at least one day's notice, and pursuant to the provisions of 52 Pa. Code §§ 53.1, *et seq.*, and 53.101, designed to produce an annual operating revenue of approximately \$55,817,471, representing an annual revenue increase of approximately \$18,740,978, to become effective for service rendered on and after May 19, 2022.

16. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall file detailed calculations with its tariff filings, which shall demonstrate to the Commission's satisfaction that the filed tariff adjustments comply with the provisions of this final Opinion and Order.

17. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall allocate the authorized increase in operating revenue to each service, rate schedule, and customer class, and rate schedule within each rate customer class, in the manner prescribed in this Opinion and Order.

18. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall file with the Commission's Secretary's Bureau at these dockets and provide the Commission's Bureaus of Technical Utility Services and Investigation and Enforcement with updates to schedule G-2 of Aqua Exhibits 1-A, 1-B, 1- C, 1-D, 1-E, 1-F, and 1-G, no later than July 1, 2022, which should include actual capital expenditures, plant additions, and retirements for the 12 months ending March 31, 2022, and, an additional update for actuals for the 12 months ending March 31, 2023, no later than July 1, 2023.

19. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall comply with all directives and conclusions contained in this Opinion and Order that are not the subject of individual ordering paragraphs as if they were the subject of specific ordering paragraphs.

20. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall begin monitoring and reviewing the appropriate customer billing data for purposes of determining, in its next base rate proceeding, if, and to what extent, any offset to its low-income program cost recovery is necessary to avoid any double recovery Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., may receive through actual collections after the implementation of its customer assistance programs. Aqua

Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall consult with the Office of Consumer Advocate and the Commission's Bureau of Investigation and Enforcement to determine the necessary data that is needed to accomplish this directive.

21. That Aqua Pennsylvania, Inc., shall develop an isolation valve inspection and exercise program, to be implemented no later than one-hundred and eighty (180) days from the effective date of rates resulting from this base rate proceeding, which establishes a defined schedule for Aqua Pennsylvania, Inc., to inspect and exercise each of its non-critical valves within a set inspection cycle and to maintain records of its attempts to exercise its isolation valves and note whether the operation was successful.

22. That Aqua Pennsylvania, Inc., shall appropriately mark any public fire hydrants in Aqua Pennsylvania, Inc.'s system that cannot provide the minimum fire flow of 500 gallons per minute at 20 pounds per square inch within thirty (30) days of entry of this Opinion and Order.

23. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall require income documentation from an interested customer to certify income eligibility for participation in its customer assistance program and upon recertification in a manner similar to that of the Peoples Companies. Within sixty (60) days of the entry date of this Opinion and Order, Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall file a written plan with the Commission's Secretary's Bureau at the Dockets in this proceeding, with a copy to be served on the Bureau of Consumer Services, describing the process it will use for certification and recertification of income eligibility for participation in its customer assistance program.

24. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall implement its application process proposed in this proceeding to transition Helping Hand customers who qualify for the new customer assistance program, subject to

the modification that Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall require income documentation for certification purposes rather than permitting potential program participants to confirm their income through self-attestation.

25. That within six (6) months of the entry date of this Opinion and Order, Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall file its Community Education and Outreach Plan with the Commission's Secretary's Bureau at these Dockets with copies to be served on the Commission's Bureaus of Consumer Services and Office of Communications. Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall also file an annual update of its Community Education and Outreach Plan, after the filing of its first Community Education and Outreach Plan at these Dockets until either the filing of its next base rate proceeding or another proceeding addressing its universal service programs.

26. That Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., shall consult with the Office of Consumer Advocate and the Commission's Bureau of Investigation and Enforcement regarding the root cause analysis of customer complaint data and cooperatively discuss how this data will be developed to reflect meaningful trends in customer complaint data and potentially reduce contested issues in future proceedings.

27. That the request of Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., to continue to record COVID-19 uncollectible expenses in their COVID-19 deferral accounts and to seek recovery in the next rate case proceeding filed by Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., is granted. Any deferred amounts that Aqua Pennsylvania, Inc., and Aqua Pennsylvania Wastewater, Inc., seek to recover in their next rate case proceeding shall be subject to detailed review and investigation and the burden of proof will remain with Aqua Pennsylvania, Inc., and

Aqua Pennsylvania Wastewater, Inc., to establish the prudence and reasonableness of their incremental COVID-19 related financial impacts.

28. That the Formal Complaints filed by the Office of the Consumer Advocate at Docket Nos. C-2021-3028466 and C-2021-3028467 are sustained, in part, and dismissed, in part, and shall be marked closed.

29. That the Formal Complaints filed by the Office of Small Business Advocate at Docket Nos. C-2021-3028509 and C-2021-3028511 are dismissed and shall be marked closed.

30. That the Formal Complaints of the Masthope Mount Community Association at Docket Nos. C-2021-3028992 and C-2021-3028996 are dismissed and shall be marked closed.

31. That the Formal Complaint of the Aqua Large Users Group, at Docket No. C-2021-3029089 is dismissed and shall be marked closed.

32. That the following Formal Complaints against Aqua Pennsylvania, Inc., are dismissed and shall be marked closed:

Martha Bronson at Docket No. C-2021-3028132

Neil Kugelman at Docket No. C-2021-3028139

Geoffrey Rhine at Docket No. C-2021-3028170

Theodore Voltolina at Docket No. C-2021-3028194

Aaron Brown at Docket No. C-2021-3028279

Darren Distasio at Docket No. C-2021-3028285

Deena Denesowicz at Docket No. C-2021-3028288

Vivian George at Docket No. C-2021-3028310

Nick Panaccio at Docket No. C-2021-3028331
Richard Regnier at Docket No. C-2021-3028332
Gerald DiNunzio Jr. at Docket No. C-2021-3028362
Nancy Reedman at Docket No. C-2021-3028405
Michael McCall at Docket No. C-2021-3028413
Raymond Cavalieri at Docket No. C-2021-3028448
Byron Goldstein at Docket No. C-2021-3028463
John Grassie at Docket No. C-2021-3028663
Kyle Brophy at Docket No. C-2021-3028712
Daniel Savino at Docket No. C-2021-3028758
Michael Roberts at Docket No. C-2021-3028869
Treasure Lake Property Owners Association Inc. at
Docket No. C-2021-3029004
Gerardo Giannattasio at Docket No. C-2021-3029066
Erik McElwain at Docket No. C-2021-3029135
Judy Burton at Docket No. C-2021-3029152
Brian Edwards at Docket No. C-2021-3029159
Richard Gage at Docket No. C-2021-3029393
Joanne Smyth at Docket No. C-2021-3029411 and
Jane O'Donovan at Docket No. C-2021-3029532.

33. That the following Formal Complaints against Aqua Pennsylvania Wastewater, Inc., are dismissed and shall be marked closed:

Camp Stead Property Owners Association at
Docket No. C-2021-3028928
Dale Markowitz at Docket No. C-2021-3028280
Keith Anthony at Docket No. C-2021-3028444
Stephanie Boris at Docket No. C-2021-3028443

Jennifer Buckley at Docket No. C-2021-3028160
Carl Martinson at Docket No. C-2021-3028312
Elizabeth O'Neill at Docket No. C-2021-3028333
Erik and Ilisha Smith at Docket No. C-2021-3028334
Curtis and Michele Tabor at Docket No. C-2021-3028335
Gregory Valerio at Docket No. C-2021-3028336
Jerome Perch at Docket No. C-2021-3028356
Michael Brull at Docket No. C-2021-3028361
James Blessing at Docket No. C-2021-3028402
Elizabeth Yost at Docket No. C-2021-3028407
Timothy Nicholl at Docket No. C-2021-3028471
Alyssa Reinhart at Docket No. C-2021-3028493
James Kolb at Docket No. C-2021-3028497
Ronald Schneck at Docket No. C-2021-3028547
Matthew Cicalese at Docket No. C-2021-3028566
Ronald and Lora Roebuck at Docket No. C-2021-3028568
Kelly Frich at Docket No. C-2021-3028665
Adam Anders at Docket No. C-2021-3028670
Charleen Falsone at Docket No. C-2021-3028760
Stephen Grugeon at Docket No. C-2021-3028892
Lynne Germscheid at Docket No. C-2021-3028860
Deborah and James Popson at Docket No. C-2021-3028868
Masthope Mountain Community Association at
Docket No. C-2021-3028996
Treasure Lake Property Owners Association Inc.at
Docket No. C-2021-3029006
East Norriton Township at Docket No. C-2021-3029019
Kevin Amerman at Docket No. C-2021-3029063
James Wharton Jr. at Docket No. C-2021-3029065

Peter and Kim Ginopolas at Docket No. C-2021-3029096
Yefim Shnayder at Docket No. C-2021-3029134
Andrea and Matthew Rivera at Docket No. C-2021-3029154
Judy Burton at Docket No. C-2021-3029139
Brian Edwards at Docket No. C-2021-3029161
Edward Coccia at Docket No. C-2021-3028870
John Day at Docket No. C-2021-3028734
Robert Dolan at Docket No. C-2021-3028798
Anthony Giovannone at Docket Nos. C-2021-3028794,
C-2021-3028803, C-2021-3028802
Sheila Gutzait at Docket No. C-2021-3028634
Rudolph Hofbauer at Docket No. C-2021-3028666
Ronald and Alexis Koenig at Docket No. C-2021-3028483
Joan Lipski at Docket No. C-2021-3028475
William and Ana Loftus at Docket No. C-2021-3028617
Stephen and Teresa Mason at Docket No. C-2021-3028576
David Monroe at Docket No. C-2021-3028567
Lisa Rampone at Docket No. C-2021-3028804
Lorraine Rocci at Docket No. C-2021-3028499
David Ross at Docket No. C-2021-3028479
Carolyn Sica at Docket No. C-2021-3028446
Dean Swink at Docket No. C-2021-3028604
Francine Weiner at Docket No. C-2021-3028639
Tom Woodward at Docket No. C-2021-3028927
Joseph Torello at Docket No. C-2021-3029180
Donald Osinski at Docket No. C-2021-3029413
Lake Associates LLC at Docket Nos. C-2021-3029425
C-2021-3029422, C-2021-3029419
29 Estates LLC at Docket No. C-2021-3029417

David Bowers at Docket No. C-2021-3029466 and
Joanne Smyth at Docket No. C-2021-3029411.

34. That a copy of this Opinion and Order be served on the Bureau of Consumer Services, Division of Policy; the Bureau of Investigation and Enforcement; and the Bureau of Technical Utility Services, Finance/Tariff Division for monitoring and compliance.

BY THE COMMISSION,

A handwritten signature in black ink, appearing to read "Rosemary Chiavetta". The signature is fluid and cursive, with the first name "Rosemary" written in a larger, more prominent script than the last name "Chiavetta".

Rosemary Chiavetta
Secretary

(SEAL)

ORDER ADOPTED: May 12, 2022

ORDER ENTERED: May 16, 2022

LIST OF ABBREVIATIONS

ADIT	Accumulated Deferred Income Tax
ALJ	Administrative Law Judge
ANSI	American National Standards Institute
Aqua	Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc.
Aqua LUG	Aqua Large Users Group
ASSE	American Society of Sanitary Engineers
AWWA	American Water Works Association
BCS	Bureau of Consumer Services
CAC	customer advances for construction
CAP	Customer Assistance Program
CAPM	capital asset pricing model
CAUSE-PA	Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania
CE	comparable earnings
CEOP	Community Education and Outreach Plan
CIAC	contributions in aid of construction
CIS	customer information system
COSS	cost of service study
CPI	Consumer Price Index
CRR	Competitive Rate Rider
CSIC	Collection System Improvement Charge
CWC	Cash Working Capital
DCF	discounted cash flow
DCNR	Department of Conservation and Natural Resources
DRS	Demand Based Resale Service
DSIC	Distribution System Improvement Charge
ECA	Energy Cost Adjustment
ECAM	Energy Cost Adjustment Mechanism
EDC	Electric Distribution Company
EDU	Equivalent Dwelling Unit
FERC	Federal Energy Regulatory Commission
FMV	Fair Market Value
FPFTY	fully projected future test year
FPL	Federal Poverty Level
FTAS	Federal Tax Adjustment Surcharge
FTY	future test year
FY	Fiscal Year
GDP	gross domestic product

GIS	Geographic Information System
gpm	gallons per minute
HTY	historical test year
I&E	Bureau of Investigation and Enforcement
I&I	inflow and infiltration
IRS	Internal Revenue Service
IVR	Interactive Voice Response
LEP	Limited English proficient/proficiency
M&S	Materials and Supplies
Masthope	Masthope Mountain Community Association
NFG	National Fuel Gas Distribution Corporation
NGDC	Natural Gas Distribution Company
NOPR	Notice of Proposed Rulemaking
O&M	Operating and Maintenance
OCA	Office of Consumer Advocate
OSBA	Office of Small Business Advocate
PADEP	Pennsylvania Department of Environmental Protection
PAWC	Pennsylvania-American Water Company
PFAS	per and poly-fluoro alkyl substances
PGC	Purchased Gas Cost
PIP	Percentage of Income Payment Plan
psi	per square inch
PWA	Purchased Water Adjustment
PWAC	Purchased Water Adjustment Clause
PWSA	Pittsburgh Water and Sewer Authority
RCA	Root Cause Analysis
Rf	risk-free rate of return
ROE	return on equity
RP	risk premium
RROR	Relative Rate of Return
SEPA	Southeast Pennsylvania
SERP	Supplemental Executive Retirement Plan
STAS	State Tax Adjustment Surcharge
TCJA	Tax Cuts and Jobs Act of 2017
TUS	Bureau of Technical Utility Services
UFW	Unaccounted For Water
UPAA	utility plant acquisition adjustments
US OMB	United States Office of Management and Budget
USECP	Universal Service Energy and Conservation Plan

USP	Universal Service Program
USPS	United States Postal Service
USR	Universal Service Rider
WWTP	Wastewater Treatment Plant

Pennsylvania Public Utility Commission

v.

**Aqua Pennsylvania, Inc.
Aqua Pennsylvania Wastewater, Inc
Docket Nos. R-2021-3027385
R-2021-2027386**

Commission Tables Calculating Allowed Revenue Increase

**Table Act 11 Act 11 Water and Wastewater Revenue
Requirement Summary**

Table RevSum Water and Wastewater Revenue Summary

Water Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-Base Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-Limerick Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-East Bradford Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-Cheltenham Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-East Norriton Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Wastewater-New Garden Tables

Table I	Income Summary
Table IA	Rate of Return
Table IB	Revenue Factor
Table II	Adjustments
Table III	Interest Synchronization
Table IV	Cash Working Capital: Interest and Dividends
Table V	Cash Working Capital: Taxes
Table VI	Cash Working Capital: O&M Expense

Commission Final Allowance
AQUA PENNSYLVANIA, INC.

TABLE ACT 11 - WATER AND WASTEWATER REVENUE REQUIREMENT - SUMMARY

Line No.	Description	Total Company (a)	Water Operations (b)	Wastewater Base Operations (c)	Wastewater Limerick (d)	Wastewater East Bradford (e)	Wastewater Cheltenham (f)	Wastewater East Norriton (g)	Wastewater New Garden (h)
1	Present Rate Revenue	\$ 548,225,086	\$ 511,148,592	\$ 19,011,761	\$ 3,978,573	\$ 1,014,569	\$ 7,258,740	\$ 2,923,770	\$ 2,889,080
2	Additional Revenue Requirement	<u>69,328,876</u>	<u>39,323,400</u>	<u>15,616,886</u>	<u>5,581,376</u>	<u>777,094</u>	<u>2,752,399</u>	<u>2,733,266</u>	<u>2,538,455</u>
3	Act 11 Allocation, Gross, Unadjusted ⁽¹⁾	(0)	11,264,498	(8,779,582)	(2,310,744)	(128,024)	2,033,271	(1,080,283)	(999,136)
4	Revenue Factor ⁽²⁾	-	70.27%	69.78%	69.78%	69.78%	69.78%	69.78%	69.78%
5	Net Income Available for Return ⁽³⁾	54,601	7,915,126	(6,126,516)	(1,612,470)	(89,337)	1,418,845	(753,837)	(697,211)
6	Act 11 Allocation Adjustment, Gross ⁽⁴⁾	(77,706)	(77,706)	-	-	-	-	-	-
7	Act 11 Allocation, Gross, Adjusted ⁽⁵⁾	(77,706)	11,186,792	(8,779,582)	(2,310,744)	(128,024)	2,033,271	(1,080,283)	(999,136)
8	Proposed Revenues ⁽⁶⁾	<u>\$ 617,476,255</u>	<u>\$ 561,658,784</u>	<u>\$ 25,849,065</u>	<u>\$ 7,249,205</u>	<u>\$ 1,663,639</u>	<u>\$ 12,044,410</u>	<u>\$ 4,582,752</u>	<u>\$ 4,428,399</u>
9	Rate Increase/(Decrease) - \$	\$ 69,251,169	\$ 50,510,192	\$ 6,837,304	\$ 3,270,632	\$ 649,070	\$ 4,785,671	\$ 1,658,983	\$ 1,539,319
10	Rate Increase/(Decrease) - %	12.63%	9.88%	35.96%	82.21%	63.97%	65.93%	56.74%	53.28%
11	Total Rate Increase/(Decrease) - \$ For Wastewater Operations			\$ 18,740,978					
12	Total Rate Increase/(Decrease) - % For Wastewater Operations			50.55%					

Notes to accompany Table Act 11 – Water and Wastewater Revenue Requirement – Summary

- ⁽¹⁾ The allocation between wastewater and water operations is achieved by the proposed consolidation of water and wastewater revenue requirements to derive the water and wastewater rates in this case.
- ⁽²⁾ See the revenue factors in Table IB for each rate group to determine the gross, unadjusted Act 11 Allocation.
- ⁽³⁾ Line No. 3 x Line No. 4.
- ⁽⁴⁾ Reduce the gross water revenue requirement resulting from the Act 11 Allocation by dividing Line No. 5, Column (a) by Line No. 4, Column (b) and assigning this adjustment to water. This provides the Company the same net income from water customers as if the revenue requirement were charged to wastewater customers, since water customers have a lower uncollectible account rate.
- ⁽⁵⁾ Line No. 3 + Line No. 6.
- ⁽⁶⁾ Line No. 1 + Line No. 2 + Line No. 7.

Commission Final Allowance
AQUA PENNSYLVANIA, INC.

TABLE REVSUM - WATER AND WASTEWATER REVENUE SUMMARY

Line No.	Description	Total Company	Water Operations	Wastewater Base Operations	Wastewater Limerick	Wastewater East Bradford	Wastewater Cheltenham	Wastewater East Norriton	Wastewater New Garden
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Current General Service Revenues ^{(1)(II)}	\$ 546,693,727	\$ 509,695,526	\$ 18,988,325	\$ 3,969,765	\$ 1,013,716	\$ 7,238,362	\$ 2,916,335	\$ 2,871,698
2	Proposed General Service Revenues	\$ 615,829,068	\$ 560,132,914	\$ 25,817,242	\$ 7,233,172	\$ 1,662,240	\$ 12,010,599	\$ 4,571,144	\$ 4,401,756
3	Rate Increase/(Decrease) - \$	\$ 69,135,342	\$ 50,437,388	\$ 6,828,917	\$ 3,263,407	\$ 648,524	\$ 4,772,237	\$ 1,654,809	\$ 1,530,058
4	Rate Increase/(Decrease) - %	12.65%	9.90%	35.96%	82.21%	63.97%	65.93%	56.74%	53.28%
5	Current Forfeited Discount Revenues ⁽²⁾	\$ 813,782	\$ 735,710	\$ 23,317	\$ 8,788	\$ 853	\$ 20,377	\$ 7,355	\$ 17,382
6	Proposed Forfeited Discount Revenues	\$ 929,610	\$ 808,513	\$ 31,703	\$ 16,012	\$ 1,399	\$ 33,812	\$ 11,528	\$ 26,643
7	Rate Increase/(Decrease) - \$	\$ 115,828	\$ 72,803	\$ 8,386	\$ 7,224	\$ 546	\$ 13,435	\$ 4,173	\$ 9,261
8	Rate Increase/(Decrease) - %	12.65%	9.90%	35.96%	82.21%	63.97%	65.93%	56.74%	53.28%
9	Current Miscellaneous Revenues ^{(3)(II)}	\$ 717,577	\$ 717,357	\$ 120	\$ 20	\$ -	\$ -	\$ 80	\$ -
10	Proposed Miscellaneous Revenues	\$ 717,577	\$ 717,357	\$ 120	\$ 20	\$ -	\$ -	\$ 80	\$ -
11	Rate Increase/(Decrease) - \$	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Rate Increase/(Decrease) - %	0.00%	0.00%	0.00%	0.00%			0.00%	
13	Total Operating Revenues ^(II)	\$ 617,476,255	\$ 561,658,784	\$ 25,849,065	\$ 7,249,205	\$ 1,663,639	\$ 12,044,410	\$ 4,582,752	\$ 4,428,399
14	Proposed Revenues ^(II)	\$ 617,476,255	\$ 561,658,784	\$ 25,849,065	\$ 7,249,205	\$ 1,663,639	\$ 12,044,410	\$ 4,582,752	\$ 4,428,399
15	Difference, Lines 14 and 13	-	-	-	-	-	-	-	-

Notes and Sources to Accompany Table RevSum

The Company will need to increase General Service and Forfeited Discount revenues by the same percentage to achieve the total indicated operating revenues, as evidenced by a proof of revenue.

- ⁽¹⁾ See Aqua Exhibits 1-A to 1-F(f) at Schedule B-1, Line "Total Sales to General Customers". Water general service revenues are adjusted for imputed revenues. *See* Table II - Water, Notes 2 and 6.
- ⁽²⁾ See Aqua Exhibits 1-A to 1-F(f) at Schedule B-1, Line "Forfeited Discounts". For water, Aqua indicated that \$735,710 was attributable to forfeited discount revenue in the historic test year. *See* Aqua St. 2-R at 29.
- ⁽³⁾ For Wastewater - East Bradford, General Service revenues are increased by \$15,525 and Miscellaneous revenues are decreased by the same amount. This amount represents charges for General Service described as "Contract Sales for Resale - Unmetered - Single Family - Birmingham Twp.". *See* Aqua's rate filing at Schedule EB-4, Page 1 and Exhibit 1-D(d), Schedule B-1, Line No. 9.
- ⁽⁴⁾ See Aqua Exhibits 1-A to 1-F(f) at Schedule B-1, Lines "Other WW Revenues" and "Miscellaneous WW Service Revenues". Unlike Forfeited Discount revenues, Miscellaneous revenues aren't expected to increase proportionately with General Service revenues. For water, miscellaneous revenues are reduced by forfeited discount revenues. *See* Note 2.
- ⁽⁵⁾ Sum of Line Nos. 2, 6, and 10.
- ⁽⁶⁾ *See* Table Act 11, Line No. 8.

Commission Final Allowance

TABLE I - Water
Aqua Pennsylvania, Inc.
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽¹⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 510,006,687	\$ -	\$ 510,006,687	\$ 1,141,906	\$ 511,148,592	\$ 39,323,400	\$ 550,471,992
Expenses:							
O & M Expense	116,459,234	-	116,459,234	(1,895,043)	114,564,192	201,431	114,765,623
Depreciation	122,166,578	-	122,166,578	(121,865)	122,044,713	-	122,044,713
Taxes, Other	12,450,066	-	12,450,066	7,669	12,457,734	264,080	12,721,814
Income Taxes:							
State	5,345,514	11,184	5,356,698	318,777	5,675,475	3,881,903	9,557,378
Federal	7,677,005	21,161	7,698,166	603,160	8,301,326	7,344,957	15,646,283
Total Expenses	264,098,397	32,345	264,130,742	(1,087,302)	263,043,440	11,692,371	274,735,811
Net Inc. Available for Return	245,908,290	\$ (32,345)	\$ 245,875,945	\$ 2,229,207	\$ 248,105,152	\$ 27,631,028	\$ 275,736,181
Rate Base	3,818,456,012	(6,077,218)	3,812,378,794	(2,161,832)	3,810,216,962		3,810,216,962
Rate of Return	6.44%		6.45%		6.51%		7.23675800%

⁽¹⁾ Company Main Brief

⁽¹⁾ Company Main Brief Section III.E.2 & AP Stmt. 8-R

⁽¹⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%):

7.69%

Commission Final Allowance
TABLE I(A) - Water
Aqua Pennsylvania, Inc.
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		<u>1.84%</u>
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	10.00%	<u>5.39459700%</u>	0.711079	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania, Inc.
TABLE I(B) - Water
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.00512242
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98816198
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09871738</u>
Factor After Local and State Taxes	0.88944460
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18678337</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.70266123</u></u>

^(*) Company Main Brief

Commission Final Adjustments

TABLE II - Water
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
C/W/C:							
Int. & Div. (Table IV)	4,950						
Taxes (Table V)	431,945						
O & M (Table VI)	(161,422)						
Acquis. Adj. - Phoenixville ⁽¹⁾	(2,437,305)						
REVENUES:							
Water Contract Revenue ⁽²⁾⁽⁷⁾⁽⁸⁾		1,136,086	5,820		7,630	112,151	212,202
Negotiated Water Contracts ⁽⁸⁾		0	0		0	0	0
Concomitant Forfeited Discounts ⁽⁷⁾⁽⁸⁾		5,820	30		39	574	1,087
EXPENSES:							
Supp. Exec. Retire. Program ⁽⁹⁾			(635,612)			0	0
General Inflation ⁽⁴⁾			(864,335)			63,432	131,485
Gen. Liab. Insurance ⁽⁵⁾			(340,345)			86,347	163,377
			0			34,060	64,446
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
Amort. Phoenixville Acquis. Adj. ⁽¹⁾⁽⁸⁾				(121,865)		0	0
						12,174	23,035
TAXES:						0	0
Interest Synchronization (Table III)				0		0	0
						3,979	7,528
TOTALS	<u>(2,161,832)</u>	<u>1,141,906</u>	<u>(1,835,043)</u>	<u>(121,865)</u>	<u>7,669</u>	<u>318,777</u>	<u>603,160</u>

Notes to Accompany Table II - Water

- (1) Remove Phoenixville acquisition adjustment and associated amortization expense.
- (2) Add imputed general service revenue for Rider DRS contracts for New Wilmington [\$348,904] and Masury [\$787,182]. [$\$348,904 + \$787,182 = \$1,136,086$]. See I&E Exh. 4-SR, Sch. 1. However, as we are granting Aqua's Exception No. 3, in part, imputed general service revenue for Rider DRS contracts associated with Chemung, Horsham, and Sharpsville are not added back.
- (3) Remove Supplemental Executive Retirement Program expenses.
- (4) Remove general inflation adjustment.
- (5) Adopt I&E's position regarding general liability insurance expense.
- (6) Grant Aqua's Exception No. 4, which removes the ALJ's recommended upward adjustment
- (7) Revenues increased by the sum of one plus the uncollectible accounts factor in Table IB Water to include additional imputed forfeited discount revenue. Expenses includes additional bad debt expense as the product of additional revenues times the uncollectible accounts factor in Table IB Water. Taxes-Other includes additional assessment expenses as the product of additional revenues times the assessment factor in Table IB Water. Expenses and Taxes-Other are deducted from revenue when determining State and Federal Income Taxes.
- (8) Cash working capital is not adjusted for non-cash expenses (*i.e.*, incremental bad debt expense and amortization expense).

Commission Final Allowance
TABLE III - Water
Aqua Pennsylvania, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	3,812,378,794
Commission Rate Base Adjustments (From Table II)	<u>(2,161,832)</u>
Commission Rate Base (Line 1 - Line 2)	3,810,216,962
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	70,190,331
Company Claim ⁽¹⁾	<u>70,342,109</u>
Total Commission Adjustment (Line 6 - Line 5)	151,778
Company Adjustment ⁽¹⁾⁽²⁾	<u>111,952</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	39,826
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>3,979</u>
Net Commission Interest Adjustment (Line 9)	39,826
State Income Tax Adjustment (Line 11)	<u>3,979</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	35,847
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>7,528</u></u>

⁽¹⁾ Company Main Brief

⁽²⁾ Rate Base Company Adjustment times weighted cost of debt

Commission Final Allowance
TABLE IV - Water
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	\$3,812,378,794	\$3,812,378,794	Company Rate Base Claim	\$3,812,378,794
Commission Rate Base Adjustments	<u>(\$2,161,832)</u>	<u>(\$2,161,832)</u>	Commission Rate Base Adjustments	<u>(\$2,161,832)</u>
Commission Rate Base	\$3,810,216,962	\$3,810,216,962	Commission Rate Base	\$3,810,216,962
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>	Weighted Cost Pref. Stock	<u>0.00000000%</u>
Commission Annual Interest Exp.	<u><u>\$70,190,331</u></u>	<u><u>\$0</u></u>	Commission Preferred Dividends	<u><u>\$0</u></u>
Average Revenue Lag Days	45.1	45.1	Average Revenue Lag Days	45.1
Average Expense Lag Days	<u>30.3</u>	<u>30.3</u>	Average Expense Lag Days	<u>30.3</u>
Net Lag Days	<u><u>-45.2</u></u>	<u><u>-45.2</u></u>	Net Lag Days	<u><u>-45.2</u></u>
Working Capital Adjustment				
Commission Daily Interest Exp.	\$192,302	\$0	Commission Daily Dividends	\$0
Net Lag Days	<u>-45.2</u>	<u>-45.2</u>	Net Lag Days	<u>-45.2</u>
Commission Working Capital	(\$8,692,050)	\$0		\$0
Company Claim ⁽¹⁾⁽²⁾	<u>(\$8,697,000)</u>	<u>\$0</u>	Company Claim ⁽¹⁾⁽²⁾	<u>\$0</u>
Commission Adjustment	<u><u>\$4,350</u></u>	<u><u>\$0</u></u>		<u><u>\$0</u></u>
Total Interest & Dividend Adj.	<u><u>\$4,350</u></u>			

⁽¹⁾ Company Main Brief.

⁽²⁾ Company claim rounded to nearest thousandth

Commission Final Allowance
TABLE V - Water
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL - TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days ⁽²⁾	Accrued Tax Adjustment
Assessments ⁽²⁾	\$3,425,001	\$7,669	\$3,432,670	\$264,080	\$3,696,750	\$10,128.08	-197.50	(\$2,000,296)
Public Utility Realty	\$4,800,000	\$0	\$4,800,000		\$4,800,000	\$13,150.68	-11.30	(\$148,603)
Capital Stock Tax	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
Local property taxes & misc.	\$1,073,227		\$1,073,227		\$1,073,227	\$2,940.35	-167.00	(\$491,038)
FICA Taxes - Hourly	\$2,470,719		\$2,470,719		\$2,470,719	\$6,769.09	8.50	\$57,537
FICA Taxes - Executive & Exempt	\$1,729,006		\$1,729,006		\$1,729,006	\$4,737.00	12.00	\$56,844
Federal Unemployment Tax	\$26,883		\$26,883		\$26,883	\$73.65	75.00	\$5,524
PA Unemployment Tax	\$276,017		\$276,017		\$276,017	\$756.21	75.00	\$56,716
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	\$5,783,096	\$318,777	\$6,101,873	\$3,881,903	\$9,983,776	\$27,352.81	45.20	\$1,236,347
Federal Income Tax	\$13,101,742	\$603,160	\$13,704,902	\$7,344,957	\$21,049,859	\$57,670.85	33.40	\$1,926,206
	<u>\$32,685,691</u>	<u>\$929,606</u>	<u>\$33,615,296</u>	<u>\$11,490,940</u>	<u>\$45,106,236</u>	<u>\$123,578.72</u>	<u>5.66</u>	<u>\$699,237</u>

⁽¹⁾ Company Main Brief

⁽²⁾ See Table II - Water, Note 2.

Average Lag Days in Receipt of Revenues	45.1
Average Lag in Payment of Taxes	<u>5.7</u>
Net Lag	<u>39</u>
Average Daily Tax Expense	123,579
Commission Cash Working Capital for Taxes	4,873,945
Less Company Claim ⁽¹⁾	<u>4,442,000</u>
Commission Adjustment	<u>431,945</u>

Commission Final Allowance
TABLE VI - Water
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	Commission	Commission Pro forma Expenses	Lag Days	Lag Dollars
Hourly Labor	\$21,691,942	\$0	\$21,691,942	7.50	\$162,689,568
Non-Union Labor	\$14,922,316	\$0	\$14,922,316	11.00	\$164,145,477
Management Fee ⁽¹⁾	\$18,159,655	(\$695,612)	\$17,464,043	16.00	\$279,424,681
Electric Power	\$8,264,721	\$0	\$8,264,721	20.73	\$171,297,822
Water Purchased	\$4,148,773	\$0	\$4,148,773	32.55	\$135,036,763
Employee Group Insurance	\$5,966,463	\$0	\$5,966,463	16.00	\$95,463,405
Liability Insurance ⁽²⁾	\$7,021,825	(\$340,945)	\$6,680,880	-1.37	(\$9,151,630)
SFI Postage	\$1,344,879	\$0	\$1,344,879	-7.96	(\$10,706,644)
Pension	\$3,990,000	\$0	\$3,990,000	300.60	\$1,199,377,034
SFAS106	\$27,361	\$0	\$27,361	365.67	\$10,005,097
All Other Expenses	\$27,451,796	\$0	\$27,451,796	25.50	\$700,020,787
General Inflation ⁽⁴⁾	\$0	(\$864,335)	(\$864,335)	25.90	(\$22,386,273)
	\$0		\$0	0.00	\$0
	\$0		\$0	0.00	\$0
	\$0		\$0	0.00	\$0
	\$0		\$0	0.00	\$0
	\$0		\$0	0.00	\$0
	<u>\$112,989,731</u>	<u>(\$1,900,892)</u>	<u>\$111,088,839</u>	<u>25.90</u>	<u>\$2,875,216,087</u>
Commission Average Revenue Lag	45.1				
Less: Commission Avg. Expense Lag	<u>25.9</u>				
Net Difference	19.2	Days			
Commission Pro forma O & M Expense per Day	<u>\$304,353</u>				
Commission CWC for O & M	\$5,843,578				
Less: Company Claim ⁽¹⁾⁽²⁾	<u>\$6,005,000</u>				
Commission Adjustment	<u>(\$161,422)</u>				

Notes and Sources to Accompany Table VI – Water

⁽¹⁾ Company Main Brief

⁽²⁾ Company claim rounded to nearest thousandth

⁽³⁾ See Table II- Water, Note 3. Most SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.

⁽⁴⁾ See Table II - Water, Note 4. We reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.

⁽⁵⁾ See Table II - Water, Note 5.

Commission Final Allowance

TABLE I - Wastewater - Base
Aqua Pennsylvania Wastewater, Inc. - Base
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 19,011,761	\$ -	\$ 19,011,761	\$ -	\$ 19,011,761	\$ 15,616,886	\$ 34,628,647
Expenses:							
O & M Expense	9,830,816	-	9,830,816	(150,101)	9,680,715	186,452	9,867,167
Depreciation	7,780,016	-	7,780,016	-	7,780,016	-	7,780,016
Taxes, Other	303,529	-	303,529	-	303,529	104,877	408,406
Income Taxes:							
State	(1,181,921)	-	(1,181,921)	14,597	(1,167,324)	1,531,023	363,699
Federal	(1,086,251)	-	(1,086,251)	27,620	(1,058,631)	2,896,852	1,838,221
Total Expenses	15,646,188	-	15,646,188	(107,884)	15,538,304	4,719,204	20,257,508
Net Inc. Available for Return	3,365,573	\$ -	\$ 3,365,573	\$ 107,884	\$ 3,473,458	\$ 10,897,682	\$ 14,371,140
Rate Base	198,368,990	-	198,368,990	216,340	198,585,330		198,585,330
Rate of Return	1.70%		1.70%		1.75%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 82.14%

Commission Final Allowance
TABLE I(A) - Wastewater - Base
Aqua Pennsylvania Wastewater, Inc. - Base
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	<u>10.00%</u>	<u>5.39459700%</u>	<u>0.711079</u>	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - Base
TABLE I(B) - Wastewater - Base
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments

TABLE II - Wastewater - Base
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(945)						
Taxes (Table V)	226,646						
O & M (Table VI)	(9,361)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ^{1H}			(23,373)			2,335	4,418
General Inflation ^{1H}			(145,368)			14,522	27,478
Gen. Liab. Insurance ^{1H}			18,640			(1,862)	(3,523)
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						(398)	(753)
TOTALS	<u>216,340</u>	<u>0</u>	<u>(150,101)</u>	<u>0</u>	<u>0</u>	<u>14,597</u>	<u>27,620</u>

Notes to Accompany Table II – Wastewater - Base

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-1. Since Wastewater - Base is assigned \$714,262 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
[$-\$57,050 \times (\$714,262 / \$1,743,416) = -\$23,373$].
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater - Base
Aqua Pennsylvania Wastewater, Inc. - Base
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	198,368,990
Commission Rate Base Adjustments (From Table II)	<u>216,340</u>
Commission Rate Base (Line 1 - Line 2)	198,585,330
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	3,658,261
Company Claim ⁽¹⁾	<u>3,654,276</u>
Total Commission Adjustment (Line 6 - Line 5)	(3,985)
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	(3,985)
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>(398)</u>
Net Commission Interest Adjustment (Line 9)	(3,985)
State Income Tax Adjustment (Line 11)	<u>(398)</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	(3,587)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>(753)</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance
TABLE IV - Wastewater - Base
Aqua Pennsylvania Wastewater, Inc. - Base
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	\$198,368,990	\$198,368,990	Company Rate Base Claim	\$198,368,990
Commission Rate Base Adjustments	<u>\$216,340</u>	<u>\$216,340</u>	Commission Rate Base Adjustmer	<u>\$216,340</u>
Commission Rate Base	\$198,585,330	\$198,585,330	Commission Rate Base	\$198,585,330
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>	Weighted Cost Pref. Stock	<u>0.00000000%</u>
Commission Annual Interest Exp.	<u>\$3,658,261</u>	<u>\$0</u>	Commission Preferred Dividends	<u>\$0</u>
Average Revenue Lag Days	50.2	50.2	Average Revenue Lag Days	50.2
Average Expense Lag Days	<u>91.3</u>	<u>91.3</u>	Average Expense Lag Days	<u>91.3</u>
Net Lag Days	<u>-41.1</u>	<u>-41.1</u>	Net Lag Days	<u>-41.1</u>
Working Capital Adjustment				
Commission Daily Interest Exp.	\$10,023	\$0	Commission Daily Dividends	\$0
Net Lag Days	<u>-41.1</u>	<u>-41.1</u>	Net Lag Days	<u>-41.1</u>
Commission Working Capital	(\$411,945)	\$0		\$0
Company Claim ⁽¹⁾	<u>(\$411,000)</u>	<u>\$0</u>	Company Claim ⁽¹⁾	<u>\$0</u>
Commission Adjustment	<u>(\$945)</u>	<u>\$0</u>		<u>\$0</u>
Total Interest & Dividend Adj.	<u>(\$945)</u>			

⁽¹⁾ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater -Base
Aqua Pennsylvania Wastewater, Inc. - Base
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments	\$127,675	\$0	\$127,675	\$104,877	\$232,552	\$637.13	-197.50	(\$125,833)
Local, County, School, & Municipal Tax	\$175,853	\$0	\$175,853		\$175,853	\$481.79	-167.00	(\$80,459)
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	(\$1,178,637)	\$14,597	(\$1,164,040)	\$1,531,023	\$366,983	\$1,005.43	45.20	\$45,445
Federal Income Tax	(\$2,225,857)	\$27,620	(\$2,198,237)	\$2,896,852	\$698,615	\$1,914.01	33.40	\$63,928
	<u>(\$3,100,965)</u>	<u>\$42,217</u>	<u>(\$3,058,748)</u>	<u>\$4,532,752</u>	<u>\$1,474,004</u>	<u>\$4,038.36</u>	<u>(24.00)</u>	<u>(\$96,919)</u>

⁽¹⁾ Company Main Brief

Average Lag Days in Receipt of Revenues	50.2
Average Lag in Payment of Taxes	<u>(24.0)</u>
Net Lag	<u>74</u>
Average Daily Tax Expense	4,038
Commission Cash Working Capital for Taxes	299,646
Less Company Claim ⁽¹⁾	<u>73,000</u>
Commission Adjustment	<u>226,646</u>

Aqua Pennsylvania Wastewater, Inc. - Base
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

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Notes and Sources to Accompany Table VI – Wastewater - Base

- ⁽¹⁾ Company Main Brief
- ⁽²⁾ See Table II - Wastewater - Base, Note 2. We reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- ⁽³⁾ See Table II - Wastewater - Base, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- ⁽⁴⁾ See Table II Wastewater - Base, Note 3.

Commission Final Allowance
TABLE I - Wastewater - Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 3,978,573	\$ -	\$ 3,978,573	\$ -	\$ 3,978,573	\$ 5,581,376	\$ 9,559,949
Expenses:							
O & M Expense	2,041,053	-	2,041,053	(27,778)	2,013,275	66,637	2,079,912
Depreciation	1,998,881	-	1,998,881	-	1,998,881	-	1,998,881
Taxes, Other	26,719	-	26,719	-	26,719	37,482	64,201
Income Taxes:							
State	(146,426)	-	(146,426)	2,634	(143,792)	547,178	403,386
Federal	(211,135)	-	(211,135)	4,984	(206,151)	1,035,317	829,166
Total Expenses	3,709,091	-	3,709,091	(20,160)	3,688,931	1,686,614	5,375,545
Net Inc. Available for Return	269,482	\$ -	\$ 269,482	\$ 20,160	\$ 289,642	\$ 3,894,762	\$ 4,184,405
Rate Base	57,744,861	-	57,744,861	76,673	57,821,534		57,821,534
Rate of Return	0.47%		0.47%		0.50%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 140.29%

Commission Final Allowance
TABLE I(A) - Wastewater - Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	10.00%	<u>5.39459700%</u>	0.711079	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u> ⁽¹⁾		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement					
(1-(21%+(9.99% X (1-21%)))	71.10790%				

⁽¹⁾ The Company rounded the Total After-Tax Weighted Cost to 4 decimals places. The formula in the original presentation did not round the Total After-Tax Weighted Cost.

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - Limerick
TABLE I(B) - Wastewater - Limerick
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments

TABLE II - Wastewater - Limerick
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(389)						
Taxes (Table V)	78,550						
O & M (Table VI)	(1,488)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ¹⁹			(8,035)			803	1,519
General Inflation ¹⁹			(23,275)			2,325	4,400
Gen. Liab. Insurance ¹⁹			3,533			(353)	(668)
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						(141)	(267)
TOTALS	<u>76,673</u>	<u>0</u>	<u>(27,778)</u>	<u>0</u>	<u>0</u>	<u>2,634</u>	<u>4,984</u>

Notes to Accompany Table II -Wastewater - Limerick

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-1. Since Limerick is assigned \$245,560 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
 $[-\$57,050 \times (\$245,560 / \$1,743,416) = -\$8,035]$.
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater - Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	57,744,861
Commission Rate Base Adjustments (From Table II)	<u>76,673</u>
Commission Rate Base (Line 1 - Line 2)	57,821,534
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	1,065,166
Company Claim ⁽¹⁾	<u>1,063,753</u>
Total Commission Adjustment (Line 6 - Line 5)	(1,412)
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	(1,412)
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>(141)</u>
Net Commission Interest Adjustment (Line 9)	(1,412)
State Income Tax Adjustment (Line 11)	<u>(141)</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	(1,271)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>(267)</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance
TABLE IV - Wastewater - Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	\$57,744,861	\$57,744,861
Commission Rate Base Adjustments	<u>\$76,673</u>	<u>\$76,673</u>
Commission Rate Base	\$57,821,534	\$57,821,534
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>
Commission Annual Interest Exp.	<u>\$1,065,166</u>	<u>\$0</u>
Average Revenue Lag Days	49.7	49.7
Average Expense Lag Days	<u>31.3</u>	<u>31.3</u>
Net Lag Days	<u>-41.6</u>	<u>-41.6</u>
Working Capital Adjustment		
Commission Daily Interest Exp.	\$2,318	\$0
Net Lag Days	<u>-41.6</u>	<u>-41.6</u>
Commission Working Capital	(\$121,389)	\$0
Company Claim ¹⁴¹	<u>(\$121,000)</u>	<u>\$0</u>
Commission Adjustment	<u>(\$389)</u>	<u>\$0</u>
Total Interest & Dividend Adj.	<u>(\$389)</u>	

¹⁴¹ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater -Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL - TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments	\$26,719	\$0	\$26,719	\$37,482	\$64,201	\$175.89	-197.5	(\$34,738)
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.0	\$0
State Income Tax	(\$146,426)	\$2,634	(\$143,792)	\$547,178	\$403,386	\$1,105.17	45.2	\$49,954
Federal Income Tax	(\$277,054)	\$4,984	(\$272,070)	\$1,035,317	\$763,247	\$2,091.09	33.4	\$69,842
	<u>(\$396,762)</u>	<u>\$7,618</u>	<u>(\$389,144)</u>	<u>\$1,619,977</u>	<u>\$1,230,833</u>	<u>\$3,372.15</u>	<u>25.22</u>	<u>\$85,058</u>

⁽¹⁾ Company Main Brief

Average Lag Days in Receipt of Revenues	49.7
Average Lag in Payment of Taxes	<u>25.2</u>
Net Lag	<u>24.5</u>
Average Daily Tax Expense	3,372
Commission Cash Working Capital for Taxes	82,550
Less Company Claim ⁽¹⁾	<u>4,000</u>
Commission Adjustment	<u>78,550</u>

Commission Final Allowance
TABLE VI - Wastewater - Limerick
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

[illegible]

Notes and Sources to Accompany Table VI – Wastewater - Limerick

- ⁽¹⁾ Company Main Brief
- ⁽²⁾ See Table II - Wastewater - Limerick, Note 2. We reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- ⁽³⁾ See Table II - Wastewater - Limerick, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- ⁽⁴⁾ See Table II - Wastewater - Limerick, Note 3.

Commission Final Allowance
TABLE I - Wastewater - East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 1,014,569	\$ -	\$ 1,014,569	\$ -	\$ 1,014,569	\$ 777,094	\$ 1,791,663
Expenses:							
O & M Expense	1,113,197	-	1,113,197	(7,802)	1,105,395	9,278	1,114,673
Depreciation	158,552	-	158,552	-	158,552	-	158,552
Taxes, Other	11,413	-	11,413	-	11,413	5,219	16,632
Income Taxes:							
State	(42,221)	-	(42,221)	761	(41,460)	76,183	34,723
Federal	(68,340)	-	(68,340)	1,441	(66,899)	144,147	77,248
Total Expenses	1,172,601	-	1,172,601	(5,600)	1,167,001	234,827	1,401,828
Net Inc. Available for Return	(158,032)	\$ -	\$ (158,032)	\$ 5,600	\$ (152,432)	\$ 542,267	\$ 389,835
Rate Base	5,377,205	-	5,377,205	9,669	5,386,874		5,386,874
Rate of Return	-2.94%		-2.94%		-2.83%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 76.59%

Commission Final Allowance
TABLE I(A) - Wastewater - East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		<u>1.84%</u>
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	<u>10.00%</u>	<u>5.39459700%</u>	<u>0.711079</u>	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - East Bradford
TABLE I(B) - Wastewater - East Bradford
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments
TABLE II - Wastewater - East Bradford
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	250						
Taxes (Table V)	3,729						
O & M (Table VI)	(310)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ¹⁴			(1,763)			176	333
General Inflation ¹²			(6,828)			682	1,291
Gen. Liab. Insurance ¹³			789			(79)	(149)
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						(18)	(34)
TOTALS	<u>3,669</u>	<u>0</u>	<u>(7,802)</u>	<u>0</u>	<u>0</u>	<u>761</u>	<u>1,441</u>

Notes and Sources to Accompany Table II – Wastewater – East Bradford

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-2. Since East Bradford is assigned \$53,881 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
 $[-\$57,050 \times (\$53,881 / \$1,743,416) = -\$1,763]$.
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater -East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	5,377,205
Commission Rate Base Adjustments (From Table II)	<u>9,669</u>
Commission Rate Base (Line 1 - Line 2)	5,386,874
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	99,235
Company Claim ⁽¹⁾	<u>99,057</u>
Total Commission Adjustment (Line 6 - Line 5)	(178)
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	(178)
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>(18)</u>
Net Commission Interest Adjustment (Line 9)	(178)
State Income Tax Adjustment (Line 11)	<u>(18)</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	(160)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>(34)</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance
TABLE IV - Wastewater - East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	\$5,377,205	\$5,377,205	Company Rate Base Claim	\$5,377,205
Commission Rate Base Adjustments	<u>\$9,669</u>	<u>\$9,669</u>	Commission Rate Base Adjustments	<u>\$9,669</u>
Commission Rate Base	\$5,386,874	\$5,386,874	Commission Rate Base	\$5,386,874
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>	Weighted Cost Pref. Stock	<u>0.000000000%</u>
Commission Annual Interest Exp.	<u><u>\$99,235</u></u>	<u><u>\$0</u></u>	Commission Preferred Dividends	<u><u>\$0</u></u>
Average Revenue Lag Days	48.1	48.1	Average Revenue Lag Days	48.1
Average Expense Lag Days	<u>91.3</u>	<u>91.3</u>	Average Expense Lag Days	<u>91.3</u>
Net Lag Days	<u><u>-43.2</u></u>	<u><u>-43.2</u></u>	Net Lag Days	<u><u>-43.2</u></u>
Working Capital Adjustment				
Commission Daily Interest Exp.	\$272	\$0	Commission Daily Dividends	\$0
Net Lag Days	<u>-43.2</u>	<u>-43.2</u>	Net Lag Days	<u>-43.2</u>
Commission Working Capital	(\$11,750)	\$0		\$0
Company Claim ¹⁴¹	<u>(\$12,000)</u>	<u>\$0</u>	Company Claim ¹⁴¹	<u>\$0</u>
Commission Adjustment	<u><u>\$250</u></u>	<u><u>\$0</u></u>		<u><u>\$0</u></u>
Total Interest & Dividend Adj.	<u><u>\$250</u></u>			

¹⁴¹ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater -East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PA PUC - General Assessments	\$6,813	\$0	\$6,813	\$5,219	\$12,032	\$32.97	-197.50	(\$6,512)
Local, County, School, & Municipal Tax	\$4,600	\$0	\$4,600		\$4,600	\$12.60	-167.00	(\$2,104)
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	(\$42,221)	\$761	(\$41,460)	\$76,183	\$34,723	\$95.13	45.20	\$4,300
Federal Income Tax	(\$79,886)	\$1,441	(\$78,445)	\$144,147	\$65,702	\$180.00	33.40	\$6,012
	<u>(\$110,694)</u>	<u>\$2,202</u>	<u>(\$108,492)</u>	<u>\$225,549</u>	<u>\$117,057</u>	<u>\$320.70</u>	<u>5.29</u>	<u>\$1,696</u>

⁽¹⁾ Company Main Brief

Average Lag Days in Receipt of Revenues	48
Average Lag in Payment of Taxes	<u>5.3</u>
Net Lag	<u>42.8</u>
Average Daily Tax Expense	321
Commission Cash Working Capital for Taxes	13,729
Less Company Claim ⁽¹⁾	<u>4,000</u>
Commission Adjustment	<u>9,729</u>

Commission Final Allowance
TABLE VI - Wastewater - East Bradford
Aqua Pennsylvania Wastewater, Inc. - East Bradford
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	Commission	Commission Pro forma Expenses	Lag Days	Lag Dollars
Non-Union Labor	\$161	\$0	\$161	11.00	\$1,775
Management Fee ⁽³⁾	\$53,881	(\$1,763)	\$52,118	16.00	\$833,889
Electric Power	\$12,168	\$0	\$12,168	20.73	\$252,196
Employee Group Insurance	\$97	\$0	\$97	16.00	\$1,549
Liability Insurance ⁽⁴⁾	\$1,760	\$789	\$2,549	-1.37	(\$3,491)
SFI Postage	\$3,856	\$0	\$3,856	-7.96	(\$30,698)
All Other Expenses	\$1,027,433	\$0	\$1,027,433	25.50	\$26,199,540
General Inflation ⁽²⁾	\$0	(\$6,828)	(\$6,828)	24.80	(\$169,337)
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	\$0	\$0	\$0	0.00	\$0
	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>0.00</u>	<u>\$0</u>
	<u>\$1,099,356</u>	<u>(\$7,802)</u>	<u>\$1,091,553</u>	<u>24.80</u>	<u>\$27,085,423</u>
Commission Average Revenue Lag	48.1				
Less: Commission Avg. Expense Lag	<u>24.8</u>				
Net Difference	23.3	Days			
Commission Pro forma O & M Expense per Day	<u>\$2,991</u>				
Commission C/W/C for O & M	\$69,690				
Less: Company Claim ⁽¹⁾⁽²⁾	<u>\$70,000</u>				
Commission Adjustment	<u>(\$310)</u>				

Notes and Sources to Accompany Table VI – Wastewater – East Bradford

- ⁽¹⁾ Company Main Brief
- ⁽²⁾ See Table II - Wastewater - East Bradford, Note 2. We reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- ⁽³⁾ See Table II - Wastewater East Bradford, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- ⁽⁴⁾ See Table II - Wastewater E Bradford, Note 3.

Commission Final Allowance
TABLE I - Wastewater - Cheltenham
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 7,258,740	\$ -	\$ 7,258,740	\$ -	\$ 7,258,740	\$ 2,752,399	\$ 10,011,139
Expenses:							
O & M Expense	4,552,450	-	4,552,450	(16,469)	4,535,981	32,861	4,568,842
Depreciation	1,011,770	-	1,011,770	-	1,011,770	-	1,011,770
Taxes, Other	48,747	-	48,747	-	48,747	18,484	67,231
Income Taxes:							
State	(10,260)	-	(10,260)	1,545	(8,715)	269,835	261,120
Federal	164,955	-	164,955	2,924	167,879	510,556	678,435
Total Expenses	5,767,661	-	5,767,661	(12,000)	5,755,662	831,736	6,587,398
Net Inc. Available for Return	1,491,079	\$ -	\$ 1,491,079	\$ 12,000	\$ 1,503,078	\$ 1,920,663	\$ 3,423,741
Rate Base	47,256,177	-	47,256,177	54,249	47,310,426		47,310,426
Rate of Return	3.16%		3.16%		3.18%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 37.92%

Commission Final Allowance
TABLE I(A) - Wastewater - Cheltenham
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		<u>1.84%</u>
Short-term Debt	0.00%	0.00%	0.00000000%		<u>0.00%</u>
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	<u>0.00%</u>
Common Equity	<u>53.95%</u>	10.00%	<u>5.39459700%</u>	0.711079	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
TABLE I(B) - Wastewater - Cheltenham
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments
TABLE II - Wastewater - Cheltenham
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(431)						
Taxes (Table V)	56,325						
O & M (Table VI)	(1,645)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ⁽¹⁾			(14,043)			1,403	2,656
General Inflation ⁽²⁾			(8,713)			871	1,648
Gen. Liab. Insurance ⁽³⁾			6,233			(623)	(1,131)
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						(100)	(183)
TOTALS	<u>54,249</u>	<u>0</u>	<u>(16,463)</u>	<u>0</u>	<u>0</u>	<u>1,545</u>	<u>2,324</u>

Notes and Sources to Accompany Table II – Wastewater - Cheltenham

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-1. Since Cheltenham is assigned \$429,319 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
$$[-\$57,050 \times (\$429,319 / \$1,743,416) = -\$14,049].$$
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater -Cheltenham
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	47,256,177
Commission Rate Base Adjustments (From Table II)	<u>54,249</u>
Commission Rate Base (Line 1 - Line 2)	47,310,426
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	871,534
Company Claim ⁽¹⁾	<u>870,535</u>
Total Commission Adjustment (Line 6 - Line 5)	(999)
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	(999)
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>(100)</u>
Net Commission Interest Adjustment (Line 9)	(999)
State Income Tax Adjustment (Line 11)	<u>(100)</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	(899)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>(189)</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance
TABLE IV - Wastewater - Cheltenham
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	\$47,256,177	\$47,256,177
Commission Rate Base Adjustments	<u>\$54,249</u>	<u>\$54,249</u>
Commission Rate Base	\$47,310,426	\$47,310,426
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>
Commission Annual Interest Exp.	<u><u>\$871,534</u></u>	<u><u>\$0</u></u>
Average Revenue Lag Days	57.2	57.2
Average Expense Lag Days	<u>91.3</u>	<u>91.3</u>
Net Lag Days	<u><u>-34.1</u></u>	<u><u>-34.1</u></u>
Working Capital Adjustment		
Commission Daily Interest Exp.	\$2,388	\$0
Net Lag Days	<u>-34.1</u>	<u>-34.1</u>
Commission Working Capital	(\$81,431)	\$0
Company Claim ¹⁴¹	<u>(\$81,000)</u>	<u>\$0</u>
Commission Adjustment	<u><u>(\$431)</u></u>	<u><u>\$0</u></u>
Total Interest & Dividend Adj.	<u><u>(\$431)</u></u>	

¹⁴¹ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater -Cheltenham
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
CASH WORKING CAPITAL - TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PA PUC - General Assessments	\$48,747	\$0	\$48,747	\$18,484	\$67,231	\$184.19	-197.50	(\$36,378)
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
	\$0	\$0	\$0		\$0	\$0.00	0.00	\$0
State Income Tax	(\$10,260)	\$1,545	(\$8,715)	\$269,835	\$261,120	\$715.40	45.20	\$32,336
Federal Income Tax	(\$19,413)	\$2,324	(\$16,489)	\$510,556	\$494,067	\$1,353.61	33.40	\$45,211
	<u>\$19,073</u>	<u>\$4,469</u>	<u>\$23,542</u>	<u>\$798,875</u>	<u>\$822,417</u>	<u>\$2,253.20</u>	<u>18.00</u>	<u>\$41,169</u>

⁽¹⁾ Company Main Brief

Average Lag Days in Receipt of Revenues	57.2
Average Lag in Payment of Taxes	<u>18.0</u>
Net Lag	<u>39.2</u>
Average Daily Tax Expense	2,253
Commission Cash Working Capital for Taxes	88,325
Less Company Claim ⁽¹⁾	<u>32,000</u>
Commission Adjustment	<u>56,325</u>

R-2021-3027385, R-2021-3027386

Commission Average Revenue Lag	57.2	
Less: Commission Avg. Expense Lag	<u>22.6</u>	
Net Difference	34.6	Days
Commission Pro forma O & M Expense per Day	<u>\$12,149</u>	
Commission C/W/C for O & M	\$420,355	
Less: Company Claim ⁽¹⁾⁽²⁾	<u>\$422,000</u>	
Commission Adjustment	<u>(\$1,645)</u>	

Notes and Sources to Accompany Table VI – Wastewater – Cheltenham

- ⁽¹⁾ Company Main Brief
- ⁽²⁾ See Table II - Wastewater Cheltenham, Note 2. We reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- ⁽³⁾ See Table II - Wastewater Cheltenham, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- ⁽⁴⁾ See Table II - Wastewater Cheltenham, Note 3.

Commission Final Allowance
TABLE I - Wastewater - East Norriton
Aqua Pennsylvania Wastewater, Inc. - East Norriton
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments ⁽¹⁾	Pro Forma Present Rates (Revised) ⁽¹⁾	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 2,923,770	\$ -	\$ 2,923,770	\$ -	\$ 2,923,770	\$ 2,739,266	\$ 5,663,036
Expenses:							
O & M Expense	2,271,778	-	2,271,778	(14,318)	2,257,460	32,704	2,290,164
Depreciation	952,641	-	952,641	-	952,641	-	952,641
Taxes, Other	19,635	-	19,635	-	19,635	18,396	38,031
Income Taxes:							
State	(84,197)	-	(84,197)	1,386	(82,811)	268,548	185,737
Federal	(147,480)	-	(147,480)	2,621	(144,859)	508,120	363,261
Total Expenses	3,012,378	-	3,012,378	(10,311)	3,002,066	827,768	3,829,834
Net Inc. Available for Return	\$ (88,608)	\$ -	\$ (88,608)	\$ 10,311	\$ (78,297)	\$ 1,911,498	\$ 1,833,202
Rate Base	25,307,104	-	25,307,104	24,706	25,331,810		25,331,810
Rate of Return	-0.35%		-0.35%		-0.31%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 93.69%

Commission Final Allowance
TABLE I(A) - Wastewater - East Norriton
Aqua Pennsylvania Wastewater, Inc. - East Norriton
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	10.00%	<u>5.39459700%</u>	0.711079	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - East Norriton
TABLE I(B) - Wastewater - East Norriton
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments

TABLE II - Wastewater - East Norriton

SUMMARY OF ADJUSTMENTS

R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(369)						
Taxes (Table V)	25,827						
O & M (Table VI)	(752)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ⁽¹⁾			(7,036)			703	1,330
General Inflation ⁽²⁾			(8,665)			866	1,638
Gen. Liab. Insurance ⁽³⁾			1,382			(138)	(261)
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						(45)	(86)
TOTALS	<u>24,706</u>	<u>0</u>	<u>(14,318)</u>	<u>0</u>	<u>0</u>	<u>1,386</u>	<u>2,621</u>

Notes and Sources to Accompany Table II – Wastewater – East Norriton

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-1. Since East Norriton is assigned \$215,006 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
$$[-\$57,050 \times (\$215,006 / \$1,743,416) = -\$7,036].$$
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater -East Norriton
Aqua Pennsylvania Wastewater, Inc. - East Norriton
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	25,307,104
Commission Rate Base Adjustments (From Table II)	<u>24,706</u>
Commission Rate Base (Line 1 - Line 2)	25,331,810
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	466,653
Company Claim ⁽¹⁾	<u>466,198</u>
Total Commission Adjustment (Line 6 - Line 5)	(455)
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	(455)
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>(45)</u>
Net Commission Interest Adjustment (Line 9)	(455)
State Income Tax Adjustment (Line 11)	<u>(45)</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	(410)
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>(86)</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance
TABLE IV - Wastewater - East Norriton
Aqua Pennsylvania Wastewater, Inc. - East Norriton
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	\$25,307,104	\$25,307,104	Company Rate Base Claim	\$25,307,104
Commission Rate Base Adjustments	<u>\$24,706</u>	<u>\$24,706</u>	Commission Rate Base Adjustments	<u>\$24,706</u>
Commission Rate Base	\$25,331,810	\$25,331,810	Commission Rate Base	\$25,331,810
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>	Weighted Cost Pref. Stock	<u>0.00000000%</u>
Commission Annual Interest Exp.	<u><u>\$466,653</u></u>	<u><u>\$0</u></u>	Commission Preferred Dividends	<u><u>\$0</u></u>
Average Revenue Lag Days	44.1	44.1	Average Revenue Lag Days	44.1
Average Expense Lag Days	<u>31.3</u>	<u>31.3</u>	Average Expense Lag Days	<u>31.3</u>
Net Lag Days	<u><u>-47.2</u></u>	<u><u>-47.2</u></u>	Net Lag Days	<u><u>-47.2</u></u>
Working Capital Adjustment				
Commission Daily Interest Exp.	\$1,279	\$0	Commission Daily Dividends	\$0
Net Lag Days	<u>-47.2</u>	<u>-47.2</u>	Net Lag Days	<u>-47.2</u>
Commission Working Capital	(\$60,369)	\$0		\$0
Company Claim ⁽¹⁾	<u>(\$60,000)</u>	<u>\$0</u>	Company Claim ⁽¹⁾	<u>\$0</u>
Commission Adjustment	<u><u>(\$369)</u></u>	<u><u>\$0</u></u>		<u><u>\$0</u></u>
Total Interest & Dividend Adj.	<u><u>(\$369)</u></u>			

⁽¹⁾ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater - East Norriton
Aqua Pennsylvania Wastewater, Inc. - East Norriton
CASH WORKING CAPITAL - TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PA PUC - General Assessments	\$19,635	\$0	\$19,635	\$18,396	\$38,031	\$104	-197.50	(\$20,578)
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
State Income Tax	(\$84,197)	\$1,386	(\$82,811)	\$268,548	\$185,737	\$509	45.20	\$23,001
Federal Income Tax	(\$159,309)	\$2,621	(\$156,688)	\$508,120	\$351,432	\$963	33.40	\$32,159
	<u>(\$223,871)</u>	<u>\$4,007</u>	<u>(\$219,864)</u>	<u>\$795,064</u>	<u>\$575,200</u>	<u>\$1,576</u>	<u>21.94</u>	<u>\$34,582</u>

⁽¹⁾ Company Main Brief

Average Lag Days in Receipt of Revenues	44.1
Average Lag in Payment of Taxes	<u>22.0</u>
Net Lag	22.1
Average Daily Tax Expense	1,576
Commission Cash Working Capital for Taxes	34,827
Less Company Claim ⁽¹⁾	<u>9,000</u>
Commission Adjustment	<u>25,827</u>

TABLE VI - Wastewater - East Norriton

CASH WORKING CAPITAL -- O & M EXPENSE

R-2021-3027385, R-2021-3027386

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Notes and Sources to Accompany Table VI – Wastewater – East Norriton

- (1) Company Main Brief
- (2) See Table II Wastewater - East Norriton, Note 2. Reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- (3) See Table II Wastewater - East Norriton, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- (4) See Table II Wastewater East Norriton, Note 3.

Commission Final Allowance
TABLE I - Wastewater - New Garden
Aqua Pennsylvania Wastewater, Inc. - New Garden
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates ⁽¹⁾	Company Adjustments (1)	Pro Forma Present Rates (Revised) (1)	Commission Adjustments	Commission Pro Forma Present Rates	Commission Revenue Increase ⁽²⁾	Total Allowable Revenues
	\$	\$	\$	\$	\$	\$	\$
Operating Revenue	\$ 2,889,080	\$ -	\$ 2,889,080	\$ -	\$ 2,889,080	\$ 2,538,455	\$ 5,427,536
Expenses:							
O & M Expense	1,845,024	-	1,845,024	(16,175)	1,828,849	30,307	1,859,156
Depreciation	735,834	-	735,834	-	735,834	-	735,834
Taxes, Other	19,402	-	19,402	-	19,402	17,047	36,449
Income Taxes:							
State	(75,351)	-	(75,351)	1,651	(73,700)	248,861	175,161
Federal	(40,533)	-	(40,533)	3,124	(37,409)	470,870	433,461
Total Expenses	2,484,377	-	2,484,377	(11,400)	2,472,977	767,085	3,240,062
Net Inc. Available for Return	\$ 404,704	\$ -	\$ 404,704	\$ 11,400	\$ 416,104	\$ 1,771,370	\$ 2,187,473
Rate Base	30,246,226	-	30,246,226	(18,970)	30,227,256		30,227,256
Rate of Return	1.34%		1.34%		1.38%		7.23675800%

⁽¹⁾ Company Main Brief

⁽²⁾ Revenue increases before Section 1311(c) allocation from water to wastewater

Pre-Act 11 Allocation Revenue Change (%): 87.86%

Commission Final Allowance
TABLE I(A) - Wastewater - New Garden
Aqua Pennsylvania Wastewater, Inc. - New Garden
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	<u>Structure</u>	<u>Cost</u>	<u>After-Tax Weighted Cost</u>	<u>Effective Tax Rate Complement</u>	<u>Pre-Tax Weighted Cost Rate</u>
Total Cost of Debt			1.84216100%		<u>1.84%</u>
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		0.00%
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	<u>53.95%</u>	10.00%	<u>5.39459700%</u>	0.711079	<u>7.59%</u>
	<u>100.00%</u>		<u>7.23675800%</u>		<u>9.43%</u>
Pre-Tax Interest Coverage	5.12				
After-Tax Interest Coverage	3.93				
Tax Rate Complement (1-(21%+(9.99% X (1-21%)))	71.10790%				

Commission Final Allowance
Aqua Pennsylvania Wastewater, Inc. - New Garden
TABLE I(B) - Wastewater - New Garden
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	<u>1.00000000</u>
Less:	
Uncollectible Accounts Factor ^(*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors ^(*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	<u>0.00000000</u>
	0.98134529
State Income Tax Rate ^(*)	<u>0.09990000</u>
Effective State Income Tax Rate	<u>0.09803639</u>
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate ^(*)	<u>0.21000000</u>
Effective Federal Income Tax Rate	<u>0.18549487</u>
Revenue Factor (100% - Effective Tax Rates)	<u><u>0.69781403</u></u>

^(*) Company Main Brief

Commission Final Adjustments

TABLE II - Wastewater - New Garden
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

<u>Adjustments</u>	<u>Rate Base</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Depreciation</u>	<u>Taxes-Other</u>	<u>State Income Tax</u>	<u>Federal Income Tax</u>
	\$	\$	\$	\$	\$	\$	\$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(378)						
Taxes (Table V)	(18,230)						
O & M (Table VI)	(362)						
REVENUES:							
					0	0	0
EXPENSES:							
						0	0
Supp. Exec. Retire. Program ⁽¹⁾			(2,794)			279	528
General Inflation ⁽²⁾			(12,705)			1,269	2,402
Gen. Liab. Insurance ⁽³⁾			(676)			68	128
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
			0			0	0
TAXES:							
						0	0
Interest Synchronization (Table III)						35	66
TOTALS	<u>(18,970)</u>	<u>0</u>	<u>(16,175)</u>	<u>0</u>	<u>0</u>	<u>1,651</u>	<u>3,124</u>

Notes and Sources to Accompany Table II – Wastewater – New Garden

- (1) Remove SERP Expenses. The OCA's \$57,050 adjustment is allocated to each wastewater rate zone based on the relative percentage of management fees assigned to each rate zone per Aqua Exhibits 1-B to 1-G at Schedule C-1. Since New Garden is assigned \$85,388 of \$1,743,416 in total management fees, this adjustment is calculated as follows:
 $[-\$57,050 \times (\$85,388 / \$1,743,416) = -\$2,794]$.
- (2) Remove general inflation adjustment.
- (3) Adopt I&E's position regarding general liability insurance expense.

Commission Final Allowance
TABLE III - Wastewater -New Garden
Aqua Pennsylvania Wastewater, Inc. - New Garden
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount \$
Company Rate Base Claim ⁽¹⁾	30,246,226
Commission Rate Base Adjustments (From Table II)	<u>(18,970)</u>
Commission Rate Base (Line 1 - Line 2)	30,227,256
Weighted Cost of Debt (From Table IA)	<u>1.84216100%</u>
Commission Interest Expense (Line 3 x Line 4)	556,835
Company Claim ⁽¹⁾	<u>557,184</u>
Total Commission Adjustment (Line 6 - Line 5)	349
Company Adjustment ⁽¹⁾	<u>0</u>
Net Commission Interest Adjustment (Line 7 - Line 8)	349
State Income Tax Rate	<u>9.99%</u>
State Income Tax Adjustment (Line 9 x Line 10) (Flow to Table II)	<u>35</u>
Net Commission Interest Adjustment (Line 9)	349
State Income Tax Adjustment (Line 11)	<u>35</u>
Net Commission Adjustment for F.I.T. (Line 9 - Line 11)	314
Federal Income Tax Rate	<u>21.00%</u>
Federal Income Tax Adjustment (Line 12 x Line 13) (Flow to Table II)	<u><u>66</u></u>

⁽¹⁾ Company Main Brief

Commission Final Allowance

TABLE IV - Wastewater - New Garden
Aqua Pennsylvania Wastewater, Inc. - New Garden
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest			Preferred Stock Dividends	
	Long-Term Debt	Short-Term Debt		
Company Rate Base Claim	\$30,246,226	\$30,246,226	Company Rate Base Claim	\$30,246,226
Commission Rate Base Adjustments	<u>(\$18,970)</u>	<u>(\$18,970)</u>	Commission Rate Base Adjustme	<u>(\$18,970)</u>
Commission Rate Base	\$30,227,256	\$30,227,256	Commission Rate Base	\$30,227,256
Weighted Cost of Debt	<u>1.84216100%</u>	<u>0.00%</u>	Weighted Cost Pref. Stock	<u>0.00000000%</u>
Commission Annual Interest Exp.	<u>\$556,835</u>	<u>\$0</u>	Commission Preferred Dividends	<u>\$0</u>
Average Revenue Lag Days	22.9	22.9	Average Revenue Lag Days	22.9
Average Expense Lag Days	<u>91.3</u>	<u>91.3</u>	Average Expense Lag Days	<u>91.3</u>
Net Lag Days	<u>-68.4</u>	<u>-68.4</u>	Net Lag Days	<u>-68.4</u>
Working Capital Adjustment				
Commission Daily Interest Exp.	\$1,526	\$0	Commission Daily Dividends	\$0
Net Lag Days	<u>-68.4</u>	<u>-68.4</u>	Net Lag Days	<u>-68.4</u>
Commission Working Capital	(\$104,378)	\$0		\$0
Company Claim ⁽¹⁾	<u>(\$104,000)</u>	<u>\$0</u>	Company Claim ⁽¹⁾	<u>\$0</u>
Commission Adjustment	<u>(\$378)</u>	<u>\$0</u>		<u>\$0</u>
Total Interest & Dividend Adj.	<u>(\$378)</u>			

⁽¹⁾ Company Main Brief.

Commission Final Allowance
TABLE V - Wastewater -New Garden
 Aqua Pennsylvania Wastewater, Inc. - New Garden
 CASH WORKING CAPITAL -TAXES
 R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	Commission Adjustments	Commission Pro forma Tax Expense Present Rates	Commission Allowance	Commission Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PA PUC - General Assessments	\$19,402	\$0	\$19,402	\$17,047	\$36,449	\$100	-197.50	(\$19,722)
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
	\$0	\$0	\$0		\$0	\$0	0.00	\$0
State Income Tax	(\$75,351)	\$1,651	(\$73,700)	\$248,861	\$175,161	\$480	45.20	\$21,631
Federal Income Tax	(\$142,571)	\$3,124	(\$139,447)	\$470,870	\$331,423	\$908	33.40	\$30,328
	<u>(\$198,520)</u>	<u>\$4,775</u>	<u>(\$193,745)</u>	<u>\$736,778</u>	<u>\$543,033</u>	<u>\$1,488</u>	<u>21.71</u>	<u>\$32,297</u>

¹⁴¹ Company Main Brief

Average Lag Days in Receipt of Revenues	22.9
Average Lag in Payment of Taxes	<u>21.7</u>
Net Lag	1.2
Average Daily Tax Expense	1,488
Commission - Cash Working Capital for Taxes	1,770
Less Company Claim ¹⁴¹	<u>20,000</u>
Commission Adjustment	<u>(18,230)</u>

TABLE VI - Wastewater - New Garden
Aqua Pennsylvania Wastewater, Inc. - New Garden
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

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Notes and Sources to Accompany Table VI – Wastewater – New Garden

- ⁽¹⁾ Company Main Brief
- ⁽²⁾ See Table II - Wastewater - New Garden, Note 2. Reject increases Aqua made to all expense accounts included in its general inflation claim. Since Exhibits 1-A to 1-G at Schedules C-4.1 and G-5.2 use different item descriptions, the number of lag days used for this adjustment is equal to the weighted average O & M Expense lag days for this rate zone after all other adjustments are applied.
- ⁽³⁾ See Table II - Wastewater - New Garden, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
- ⁽⁴⁾ See Table II - Wastewater -New Garden, Note 3.



Aqua Exhibit C

May 23, 2022

VIA ELECTRONIC FILING

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

Re: Aqua Pennsylvania Wastewater, Inc. – Compliance Filing Original Tariff Sewer-PA P.U.C. No. 3 at Docket No. R-2021-3027386

Dear Secretary Chiavetta:

Pursuant to Commission Opinion and Order at Docket No. R-2021-3027386 entered May 16, 2022, Aqua Pennsylvania Wastewater, Inc. hereby files its Compliance Filing, Original Tariff Sewer-PA P.U.C. No. 3, bearing an effective date of May 19, 2022. Enclosed for electronic filing please find Aqua Pennsylvania Wastewater, Inc.'s Original Tariff Sewer-PA P.U.C. No. 3 consistent with the Pennsylvania Public Utility Commission's Order, Ordering Paragraphs No. 15 and No. 16, adopted May 12, 2022 in Docket No. R-2021-3027386.

In support of Original Tariff No. 3, we are also providing the following Exhibit:

Exhibit 5-B (Compliance) – Summary of rates by rate schedule and detailed proof of revenues associated with the base rate case

Should you have any questions regarding this filing, please contact me at (610) 520-5369.

Sincerely,

A handwritten signature in blue ink that reads "Erin Feeney".

Erin M. Feeney
Manager of Rates
Aqua Pennsylvania, Inc.

Enclosures

cc: Certificate of Service

AQUA PENNSYLVANIA WASTEWATER, INC.
CERTIFICATE OF SERVICE
(R-2021-3027385 and R-2021-3027386)

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), and the Prehearing Order dated October 19, 2021 (establishing the list of fully active parties in this proceeding).

VIA E-MAIL ONLY

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Pennsylvania Public Utility Commission
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(email to: pdiskin@pa.gov)

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Piscataway, NJ 08854
john@johnday.us

Dated: May 23, 2022



Erin M. Feeney
Manager of Rates
Aqua Pennsylvania, Inc

AQUA PENNSYLVANIA WASTEWATER, INC.
(hereinafter referred to as the "Company")

RATES, RULES, AND REGULATIONS

GOVERNING THE COLLECTIONS OF

WASTEWATER

IN PORTIONS OF

ADAMS, BERKS, BUCKS, CARBON, CHESTER, CLARION, CLEARFIELD, DELAWARE,
LACKAWANNA, LUZERNE, MONROE, MONTGOMERY, PIKE, SCHUYLKILL, VENANGO,
AND WYOMING COUNTIES

IN THE COMMONWEALTH OF PENNSYLVANIA

ISSUED: May 23, 2022

EFFECTIVE: May 19, 2022

By:

Marc Lucca, President
Aqua Pennsylvania, Inc.
762 Lancaster Avenue
Bryn Mawr, Pennsylvania 19010

NOTICE

THIS TARIFF PROPOSES INCREASES IN RATES AND CHANGES IN RULES
AND REGULATION OF SERVICE.

LIST OF CHANGES MADE BY THIS TARIFF

This proposed TARIFF WASTEWATER-PA P.U.C. NO. 3 as filed by Aqua Pennsylvania Wastewater, Inc. at Docket No. R-2021-3027386 on May 23, 2022 supersedes TARIFF WASTEWATER WATER-PA P.U.C. NO. 2.

This proposed tariff also resets the Distribution System Improvement Charge (DSIC) to zero percent, simultaneously with the effective date of the new base rates.

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DESCRIPTION OF TERRITORIES SERVED

	<u>Township</u>	<u>County</u>
RATE ZONE 1		
Bunker Hill Subdivision (Rate Zone 1A)	Clinton	Wyoming
Bridlewood Division	Thornbury (portion)	Chester
Eagle Rock Division	Black Creek (portion)	Luzerne
Eagle Rock Division	Hazle (portion)	Luzerne
Eagle Rock Division	East Union (portion)	Schuylkill
Eagle Rock Division	North Union (portion)	Schuylkill
Media Division*	Media	Delaware
Penn Township Division	Penn	Chester
Treasure Lake Division (Rate Zone 1A)*	Sandy	Clearfield
Village at Valley Forge Division (Rate Zone 1A)*	Upper Merion	Montgomery
RATE ZONE 2		
Emlenton Borough Division	Richland (portion)	Clarion
Emlenton Borough Division	Salem (portion)	Clarion
Emlenton Borough Division	Emlenton	Venango
Emlenton Borough Division	Richland (portion)	Venango
Pinecrest Division	Tobyhanna (portion)	Monroe
Rivercrest Division	Tunkhannock	Wyoming
Rivercrest Division	Washington	Wyoming
White Haven Division (Kidder)	Dennison (portion)	Carbon
White Haven Division (Kidder)	East Side (portion)	Carbon
White Haven Division (Kidder)	Dennison (portion)	Luzerne
White Haven Division (Kidder)	White Haven Borough	Luzerne
RATE ZONE 3		
Beech Mountain Lakes Division	Butler	Luzerne
Beech Mountain Lakes Division	Dennison	Luzerne
Deerfield Knoll Division	Willistown (portion)	Chester
Laurel Lakes Division (Wilbar)	Rice	Luzerne
Links at Gettysburg Division	Cumberland	Adams
Links at Gettysburg Division	Mount Joy	Adams
Stony Creek Division	Worcester (portion)	Montgomery
Thornhurst Division	Lehigh	Lackawanna
Willistown Woods Division (Chesterdale)	Westtown (portion)	Chester
Willistown Woods Division (Chesterdale)	Willistown (portion)	Chester
Woodloch Springs Division	Lackawaxen (portion)	Pike
Woodloch Springs Division (Woodloch Pines)	Lackawaxen (portion)	Pike

DESCRIPTION OF TERRITORIES SERVED

	<u>Township</u>	<u>County</u>
RATE ZONE 4		
Honeycroft Village Division	Londonderry (portion)	Chester
Lake Harmony Division	Kidder	Carbon
New Daleville Division	Londonderry (portion)	Chester
Peddlers View Division	Solebury (portion)	Bucks
Tobyhanna Township Division	Tobyhanna (portion)	Monroe
Twin Hills Division	West Pikeland (portion)	Chester
RATE ZONE 5		
Avon Grove School District	New London (portion)	Chester
Avon Grove School District	Penn (portion)	Chester
East Bradford Division (Brandywine)	East Bradford (portion)	Chester
Little Washington Division	East Brandywine (portion)	Chester
Plumsock Division*	Willistown (portion)	Chester
The Greens at Penn Oaks Division	Thornbury (portion)	Chester
Newlin Green Division	Newlin	Chester
Sage Hill Division	Thornbury (portion)	Chester
RATE ZONE 6		
CS Sewer Division (Masthope)	Lackawaxen	Pike
RATE ZONE 7		
Limerick Division	Limerick (portion)	Montgomery
RATE ZONE 8		
East Bradford Township Division	East Bradford (portion)	Chester
East Bradford Township Division	Birmingham (portion)	Chester
RATE ZONE 9		
Cheltenham Township Division	Cheltenham	Montgomery
Cheltenham Township Division	Jenkintown Borough (portion)	Montgomery
RATE ZONE 10		
East Norriton Township Division	East Norriton	Montgomery
RATE ZONE 11		
New Garden Township Division	New Garden	Chester

DESCRIPTION OF TERRITORIES SERVED

	<u>Township</u>	<u>County</u>
RATE ZONE 12		
Lower Makefield Township Division	Lower Makefield	Bucks

*All Divisions and Subdivisions above are billed on a per EDU basis, with the exception of the Media Division, Plumsock Division, Treasure Lake Division, and Village of Valley Forge Division

DESCRIPTION OF TERRITORIES SERVED

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SCHEDULE OF RATES

RATE ZONE 1 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 1 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 1	Rate Zone 1A
Fixed (per EDU)	\$ 47.35	\$ 47.35
<u>Meter Size:</u>		
5/8 inch	47.35	47.35
3/4 inch	71.03	47.35
1 inch	118.38	47.35
1-1/2 inch	236.75	94.70
2 inch	378.80	151.52
3 inch	710.25	284.10
4 inch	1,183.75	473.50
6 inch	2,367.50	763.71
8 inch	3,788.00	
10 inch	5,445.25	
Unmetered Charge (per EDU)	\$ 93.78	\$ 93.78

Special Charges

Bridlewood Division - Unmetered:

Apartment Complex will be billed at 217 EDU's

Children's World Daycare will be billed at 7 EDU's

MONTHLY CONSUMPTION CHARGE

Consumption Charge for all divisions (per 1,000 gallons water used)	\$ 11.6080	\$ 11.6080

SCHEDULE OF RATES

RATE ZONE 1 – METERED AND UNMETERED (cont'd)

RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 1	Rate Zone 1A
Fixed (per EDU)	\$ 48.20	\$ 48.20
<u>Meter Size:</u>		
5/8 inch	48.20	48.20
3/4 inch	72.30	48.20
1 inch	120.50	48.20
1-1/2 inch	241.00	96.40
2 inch	385.60	154.24
3 inch	723.00	289.20
4 inch	1,205.00	482.00
6 inch	2,410.00	777.42
8 inch	3,856.00	
10 inch	5,543.00	
Unmetered Charge (per EDU)	\$ 95.47	\$ 95.47

MONTHLY CONSUMPTION CHARGE

Consumption Charge for all divisions (per 1,000 gallons water used)	\$ 11.8170	\$ 11.8170

SCHEDULE OF RATES

RATE ZONE 2 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 2 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 2
Fixed (per EDU)	\$ 54.95
<u>Meter Size:</u>	
5/8 inch	54.95
3/4 inch	82.42
1 inch	137.37
1-1/2 inch	274.73
2 inch	439.57
3 inch	824.20
4 inch	1,373.67
6 inch	2,747.34
8 inch	4,395.75
10 inch	6,318.88
Unmetered Charge (per EDU)	\$ 100.00

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.3630

SCHEDULE OF RATES

RATE ZONE 2 – METERED AND UNMETERED (cont'd)

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 2
Fixed (per EDU)	\$ 54.95
<u>Meter Size:</u>	
5/8 inch	54.95
3/4 inch	82.42
1 inch	137.37
1-1/2 inch	274.73
2 inch	439.57
3 inch	824.20
4 inch	1,373.67
6 inch	2,747.34
8 inch	4,395.75
10 inch	6,318.88
Unmetered Charge (per EDU)	\$ 101.80

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.5850

SCHEDULE OF RATES

RATE ZONE 3 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 3 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 3
Fixed (per EDU)	\$ 65.20
<u>Meter Size:</u>	
5/8 inch	65.20
3/4 inch	97.80
1 inch	163.00
1-1/2 inch	326.00
2 inch	521.60
3 inch	978.00
4 inch	1,630.00
6 inch	3,260.00
8 inch	5,216.00
10 inch	7,498.00
Unmetered Charge (per EDU)	\$ 113.00

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.0480

QUARTERLY SPECIAL CHARGES**STONY CREEK - WHITEHALL ESTATES**

Customer Charge (\$)	
Fixed (per EDU)	\$ 195.60
Consumption Charge (per 1,000 gallons water used)	\$ 12.0480

SCHEDULE OF RATES

RATE ZONE 3 – METERED AND UNMETERED (cont'd)

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 3	
Fixed (per EDU)	\$	66.37
<u>Meter Size:</u>		
5/8 inch		66.37
3/4 inch		99.56
1 inch		165.93
1-1/2 inch		331.85
2 inch		530.96
3 inch		995.55
4 inch		1,659.25
6 inch		3,318.50
8 inch		5,309.60
10 inch		7,632.55
Unmetered Charge (per EDU)	\$	115.03

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$	12.2640

QUARTERLY SPECIAL CHARGESSTONY CREEK - WHITEHALL ESTATES

Customer Charge (\$)		
Fixed (per EDU)	\$	199.11
Consumption Charge (per 1,000 gallons water used)	\$	12.2640

SCHEDULE OF RATES

RATE ZONE 4 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 4 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 4
Fixed (per EDU)	\$ 84.60
<u>Meter Size:</u>	
5/8 inch	84.60
3/4 inch	126.90
1 inch	211.50
1-1/2 inch	423.00
2 inch	676.80
3 inch	1,269.00
4 inch	2,115.00
6 inch	4,230.00
8 inch	6,768.00
10 inch	9,729.00
Unmetered Charge (per EDU)	\$ 131.00

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.4573

SCHEDULE OF RATES

RATE ZONE 4 – METERED AND UNMETERED (cont'd)

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 4
Fixed (per EDU)	\$ 86.12
<u>Meter Size:</u>	
5/8 inch	86.12
3/4 inch	129.18
1 inch	215.30
1-1/2 inch	430.60
2 inch	688.96
3 inch	1,291.80
4 inch	2,153.00
6 inch	4,306.00
8 inch	6,889.60
10 inch	9,903.80
Unmetered Charge (per EDU)	\$ 133.35

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.6810

SCHEDULE OF RATES

RATE ZONE 5 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 5 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIAL**MONTHLY SERVICE CHARGE**

Customer Charge (\$)	Rate Zone 5
Fixed (per EDU)	\$ 97.20
<u>Meter Size:</u>	
5/8 inch	97.20
3/4 inch	145.80
1 inch	243.00
1-1/2 inch	486.00
2 inch	777.60
3 inch	1,458.00
4 inch	2,430.00
6 inch	4,860.00
8 inch	7,776.00
10 inch	11,178.00
Unmetered Charge (per EDU)	\$ 147.64

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.6100
Special Charges	
Avon Grove School District - Flat Rate	\$ 10,925.36
East Brandywine Township Water & Sewer Authority - Wastewater Treatment Plant Consumption Rate (per 1,000 gallons)	\$ 13.5000

SCHEDULE OF RATES

RATE ZONE 5 – METERED AND UNMETERED (cont'd)

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 5
Fixed (per EDU)	\$ 98.95
<u>Meter Size:</u>	
5/8 inch	98.95
3/4 inch	148.43
1 inch	247.38
1-1/2 inch	494.75
2 inch	791.60
3 inch	1,484.25
4 inch	2,473.75
6 inch	4,947.50
8 inch	7,916.00
10 inch	11,379.25
Unmetered Charge (per EDU)	\$ 150.30

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 12.8370

SCHEDULE OF RATES

RATE ZONE 6 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 6 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 6
Fixed (per EDU)	\$ 58.50
Unmetered Charge (per EDU)	\$ 67.00

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 2.7100

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 6
Fixed (per EDU)	\$ 59.55
Unmetered Charge (per EDU)	\$ 70.59

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 2.7590

SCHEDULE OF RATES

RATE ZONE 7 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 7 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 7	
Fixed (per EDU)	\$	41.39
Unmetered Charge	\$	60.00

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$	8.9400

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 7	
Fixed (per EDU)	\$	42.13
Unmetered Charge	\$	61.08

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$	9.1010

SCHEDULE OF RATES

RATE ZONE 8 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 8 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 8	
Fixed: per EDU	\$	40.25
Unmetered Charge	\$	102.90

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$	11.5300

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 8	
Fixed: per EDU	\$	57.61
Unmetered Charge	\$	104.75

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$	11.7370

SCHEDULE OF RATES

RATE ZONE 9 – METERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 9 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 9
Fixed (per EDU)	\$ 31.85

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 7.2200

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 9
Fixed (per EDU)	\$ 32.42

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons water used)	\$ 7.3500

Wastewater customers in Cheltenham Township are required to comply with the City of Philadelphia's wastewater control regulations adopted by Cheltenham Township and included in Exhibit H to the Application filed at Docket No. A-2019-3008491.

Sewer Charge Adjustment

The Company is authorized to allow deductions on sewer bills for water which is used but does not enter the Company's system. A request for deduction shall be subject to the following regulations:

RATE ZONE 9 – CONTINUED

- A. Deductions apply within the Cheltenham Division and, in particular, to those customers identified on Exhibit G of the Application filed by Aqua Pennsylvania Wastewater, Inc., dated March 13, 2019. The Application of the Company was approved by the Pennsylvania Public Utility Commission in its Order entered on November 5, 2019 at PUC Docket Number A-2019-3008491.
- B. No deduction shall be granted for customers who do not have a metered water supply
- C. No deduction shall be granted for customers who are delinquent in their payment for service.
- D. One hundred percent of any used water for which a deduction is requested must have been prevented from entering the system.
- E. It is the responsibility of the customer to purchase, install, and maintain the deduct meter at the approved and inspected water outlet on their property. The meter shall measure water not entering the system and shall be eligible for deduction of that used water monthly.
- F. Customers are responsible for the installation and removal of their meters at the approved service locations each year to prevent freezing and damage. Deduct meters shall be inspected by the Company at the time of installation at which time the customer agrees to allow the Company the right to enter upon their property for inspection. Every deduct meter shall be required to be inspected annually by the Company in order for the customer to be eligible for sewer adjustment charges. The inspection fee charged by the Company to the customer is \$100.00.
- G. All deduct meters shall be of a design approved by the Company, shall be registered with the Company prior to use, and shall be used only by the customer to whom it is registered and at the service location to which it is assigned in accordance with the Company's records.
- H. Customers are responsible for making their meter accessible to the Company for reading on a monthly basis. The Company shall then credit the customer's total gallons consumed by the gallons recorded from the customer's deduct meter.
- I. The Company shall be authorized to inspect meters for accuracy and calibration at any time the meter readings are suspect and/or not considered representative of usage. The customer shall be responsible for obtaining calibration of the meter if the Company determines it is not accurate.

SCHEDULE OF RATES

RATE ZONE 10 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 10 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

NON-RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 10	
Fixed (per EDU)	\$	34.94
Unmetered Charge (per EDU)	\$	64.89

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons)	\$	7.5900

RESIDENTIALMONTHLY SERVICE CHARGE

Customer Charge (\$)	Rate Zone 10	
Fixed (per EDU)	\$	35.57
Unmetered Charge (per EDU)	\$	66.06

MONTHLY CONSUMPTION CHARGE

Consumption Charge (per 1,000 gallons)	\$	7.7260

SCHEDULE OF RATES

RATE ZONE 11 – METERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 11 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

QUARTERLY SERVICE & CONSUMPTION CHARGES (\$)

		Gallons per Quarter	Rate Zone 11 Quarterly (\$)	
<u>RESIDENTIAL</u>	Base	0 to 5,000	\$ 136.38	
	Excess 1	5,001 to 15,000	\$ 23.2590	per 1000 gallons
	Excess 2	15,001 and over	\$ 33.4350	per 1000 gallons
<u>COMMERCIAL 1 & PUBLIC</u>	Base	0 to 5,000	\$ 187.56	
	Excess 1	5,001 to 15,000	\$ 34.8500	per 1000 gallons
	Excess 2	15,001 and over	\$ 44.8680	per 1000 gallons
<u>COMMERCIAL 2</u>	Base	0 to 5,000	\$ 187.56	
	Excess 1	5,001 to 15,000	\$ 44.5800	per 1000 gallons
	Excess 2	15,001 and over	\$ 50.0000	per 1000 gallons
<u>INDUSTRIAL</u>	Base	0 to 5,000	\$ 934.65	
	Excess 1	5,001 to 15,000	\$ 44.5800	per 1000 gallons
	Excess 2	15,001 and over	\$ 50.0000	per 1000 gallons

COMMERCIAL 1 class (Rate Zone 11 - New Garden Division only)

Shall be defined as each commercial, retail, industrial or institutional establishment and each bedroom unit of a motel, hotel or boardinghouse, having sanitary facilities, including stores, food markets, professional offices, mushroom houses, automotive repair garages and establishments not regularly preparing and/or dispensing food or beverages, but excluding those uses enumerated in the Commercial 2 class, and excluding industrial establishments discharging biodegradable industrial waste.

COMMERCIAL 2 class (Rate Zone 11 - New Garden Division only)

Shall be defined as each restaurant, bar, institution or establishment regularly preparing and/or dispensing food or beverages, whether for consumption on or off the premises, including but not limited to stores, food markets, delicatessens, food marts, schools, day-care centers, or other establishments requiring food-handling licensing, and beauty parlor and service stations.

SCHEDULE OF RATES

RATE ZONE 12 – METERED AND UNMETERED

The rates under this schedule apply to all customer classes in the territories served subject to Rate Zone 12 rates as noted in the Description of Territories Served section under this tariff unless otherwise specifically identified below.

QUARTERLY SERVICE & CONSUMPTION CHARGES (\$)A. Residential

Minimum Charge per quarter:

Per Dwelling Unit (private dwelling) \$160.48

Exception: Residential Building with 1 meter
meter and no more than 2 dwelling units \$269.22

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 10,000 gallons per quarter	\$4.37	per 1,000 gallons
Next 10,000 gallons per quarter	\$4.60	per 1,000 gallons
Next 10,000 gallons per quarter	\$4.81	per 1,000 gallons
Next 10,000 gallons per quarter	\$5.29	per 1,000 gallons
Next 10,000 gallons per quarter	\$5.90	per 1,000 gallons
Over 50,000 gallons per quarter	\$6.77	per 1,000 gallons

Unmetered (This charge is a flat fee for customers not metered for water consumption.)

Unmetered Charge \$269.22

B. Commercial - Apartments billed under the residential rate
by Lower Makefield Township**

Minimum Charge per quarter:

Per Dwelling Unit \$160.48

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 10,000 gallons per quarter	\$4.37	per 1,000 gallons
Next 10,000 gallons per quarter	\$4.60	per 1,000 gallons
Next 10,000 gallons per quarter	\$4.81	per 1,000 gallons
Next 10,000 gallons per quarter	\$5.29	per 1,000 gallons
Next 10,000 gallons per quarter	\$5.90	per 1,000 gallons
Over 50,000 gallons per quarter	\$6.77	per 1,000 gallons

RATE ZONE 12 – CONTINUEDQUARTERLY SERVICE & CONSUMPTION CHARGES (\$) continuedC. Commercial (Other than Customers in subsection B above), Industrial,
and Public Customers

Minimum Charge per quarter \$297.65

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 12,981 gallons per quarter	Included in Minimum Charge
Over 12,981 gallons per quarter	\$22.93 per 1,000 gallons

MONTHLY SERVICE & CONSUMPTION CHARGES (\$)A. Residential

Minimum Charge per month:

Per Dwelling Unit (private dwelling) \$53.49

Exception: Residential Building with 1 meter
meter and no more than 2 dwelling units \$89.74

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 3,400 gallons per month	\$4.37	per 1,000 gallons
Next 3,300 gallons per month	\$4.60	per 1,000 gallons
Next 3,300 gallons per month	\$4.81	per 1,000 gallons
Next 3,400 gallons per month	\$5.29	per 1,000 gallons
Next 3,300 gallons per month	\$5.90	per 1,000 gallons
Over 16,700 gallons per month	\$6.77	per 1,000 gallons

Unmetered (This charge is a flat fee for customers not metered for water consumption.)

Unmetered Charge \$89.74

RATE ZONE 12 – CONTINUED

MONTHLY SERVICE & CONSUMPTION CHARGES (\$) continuedB. Commercial - Apartments billed under the residential rate
by Lower Makefield Township**

Minimum Charge per month:

Per Dwelling Unit \$53.49

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 3,400 gallons per month	\$4.37	per 1,000 gallons
Next 3,300 gallons per month	\$4.60	per 1,000 gallons
Next 3,300 gallons per month	\$4.81	per 1,000 gallons
Next 3,400 gallons per month	\$5.29	per 1,000 gallons
Next 3,300 gallons per month	\$5.90	per 1,000 gallons
Over 16,700 gallons per month	\$6.77	per 1,000 gallons

C. Commercial (Other than Customers in subsection B above), Industrial,
and Public Customers

Minimum Charge per month \$99.22

Consumption Charge:

(Based on Water Usage or Sewage Flows, determined at the Company's discretion)

First 4,400 gallons per month	Included in Minimum Charge
Over 4,400 gallons per month	\$22.93 per 1,000 gallons

**For apartment complexes, the rate shall be determined by assessing each dwelling unit the minimum charge per quarter, and then measuring the total water consumption for the entire apartment building and dividing that consumption by the number of dwelling units therein to arrive at a water gallonage per dwelling unit, at which time each dwelling unit shall be charged on the average water consumption for each unit in addition to the minimum charge.

Wastewater customers in Lower Makefield Township are required to comply with the wastewater control regulations adopted by Lower Makefield Township and included in Exhibit H to the Application filed at Docket No. A-2021-3024267.

The DSIC surcharge shall not be applied to bills of wastewater customers in Lower Makefield Township; this will remain effective until an amended Long-Term Infrastructure Improvement Plan (LTIIP) is filed and approved which includes Lower Makefield. Following the approval of an amended LTIIP, the DSIC surcharge shall be applicable to wastewater customers in Lower Makefield Township

SCHEDULE OF RATES**DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)**

In addition to the net charges provided for in this Tariff, a surcharge of 0.00% shall apply to all bills issued on or after the Effective Date at the bottom of this page.

I. General Description

Purpose: To recover the reasonable and prudent costs incurred to repair, improve or replace eligible property which is completed and placed in service and recorded in the individual accounts, as noted below, between base rate cases and to provide the Company with the resources to accelerate the replacement of aging infrastructure, to comply with evolving regulatory requirements and to develop and implement solutions to regional supply problems. The costs of extending facilities to serve new customers are not recoverable through the DSIC. Utility projects receiving PENNVEST funding or using PENNVEST surcharges are not DSIC-eligible property.

Eligible Property: The DSIC-eligible property will consist of the following:

- Collection sewers, collecting mains and service laterals, including sewer taps, curb stops and lateral cleanouts installed as in-kind replacements for customers. Accounts. (360 & 361)
- Collection mains and valves for gravity and pressure systems and related facilities such as manholes, grinder pumps, air and vacuum release chambers, cleanouts, main line flow meters, valve vaults, and lift stations installed as replacements or upgrades for existing facilities that have worn out, are in deteriorated condition or are required to be upgraded by law, regulation or order. Accounts (360;361;362;363;364; & 365)
- Collection main extensions installed to implement solutions to wastewater problems that present a significant health and safety concern for customers currently receiving service from the wastewater utility. Accounts (360 & 361)
- Collection Main rehabilitation including inflow and infiltration projects. (Account 361)
- Unreimbursed cost related to highway relocation projects where a wastewater utility must relocate its facilities. Account (360;361;362;363;364; & 365)
- Other related capitalized costs. Account (389.2)

Effective Date: The DSIC will become effective for bills rendered on and after October 1, 2013.

II. Computation of the DSIC

Calculation: The initial charge, effective October 1, 2013, will be calculated to recover the fixed costs of eligible plant additions that have not previously been reflected in the Company's rates or rate base and will have been placed in service between June 1, 2013 and August 31, 2013. Thereafter, the DSIC will be updated on a quarterly basis to reflect eligible plant additions placed in service during the three month periods ending one month prior to the effective date of each DSIC update. Thus, changes in the DSIC rate will occur as follows:

SCHEDULE OF RATES

DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)

<u>Effective Date of Change</u>	<u>Date to Which DSIC Eligible Plant Additions Reflected</u>
April 1	December 1 to February 28/29
July 1	March 1 to May 31
October 1	June 1 to August 31
January 1	September 1 to November 30

The fixed costs of eligible distribution system improvement projects will consist of depreciation and pre-tax return, calculated as follows:

Depreciation: The depreciation expense will be calculated by applying to the original cost of DSIC-eligible property the annual accrual rates employed in the Company's last base rate case for the plant accounts in which each retirement unit of DSIC-eligible property is recorded.

Pre-tax Return: The pre-tax return will be calculated using the statutory state and federal income tax rates, the Company's actual capital structure and actual cost rates for long-term debt and preferred stock as of the last day of the three month period ending one month prior to the effective date of the DSIC and subsequent updates. The cost of equity will be the equity return rate approved in the Company's last fully litigated base rate proceeding for which a final order was entered not more than two years prior to the effective date of the DSIC. If more than two years shall have elapsed between the entry of such a final order and the effective date of the DSIC, then the equity return rate used in the calculation will be the equity return rate calculated by the Commission staff in the latest Quarterly Report on the Earnings of Jurisdictional Utilities released by the Commission.

DSIC Surcharge Amount: The charge will be expressed as a percentage carried to two decimal places and will be applied to the total amount billed to each customer for service under the Company's otherwise applicable rates and charges, excluding amounts billed for the State Tax Adjustment Surcharge (STAS). To calculate the DSIC, one-fourth of the annual fixed costs associated with all property eligible for cost recovery under the DSIC will be divided by the Company's projected revenue for wastewater service (including all applicable clauses and riders) for the quarterly period during which the charge will be collected.

SCHEDULE OF RATES

DISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)

Formula: The formula for calculation of the DSIC surcharge is as follows:

$$\text{DSIC} = \frac{(\text{DSI} \times \text{PTRR}) + \text{Dep}}{\text{PQR}} + \frac{e}{\text{PQR}}$$

Where:

DSI = The original cost of eligible distribution system improvement projects, net of accumulated depreciation.

PTRR = The pre-tax return rate applicable to eligible distribution system improvement projects.

Dep = Depreciation expense related to eligible distribution system improvement projects.

e = The amount calculated under the annual reconciliation feature or Commission Audit, as described below.

PQR = Projected quarterly revenue for wastewater service will be based on the applicable three-month period, (including all applicable clauses and riders) including revenue from existing customers plus netted revenue from any customers which will be gained or lost by the beginning of the applicable service period.

Quarterly Updates: Supporting data for each quarterly update will be filed with the Commission and served upon the Bureau of Investigation & Enforcement, the Office of Consumer Advocate, Bureau of Audits and the Office of Small Business Advocate at least ten (10) days prior to the effective date of the update.

III. Safeguards

All Customer Classes: The DSIC shall be applied equally to all customer classes, with the exception of Woodloch Pines and any future customers with negotiated contracts for which a reduction or exemption is shown to be reasonably necessary.

Cap: The DSIC will be capped at 5.00% of the amount billed to customers (including all applicable clauses and riders) as determined on an annualized basis.

SCHEDULE OF RATESDISTRIBUTION SYSTEM IMPROVEMENT CHARGE (DSIC)

Audits/Reconciliation: The DSIC will be subject to audit at intervals determined by the Commission. Any cost determined by the Commission not to comply with any provision of 66 Pa C.S. §§ 1350, et seq., shall be credited to customer accounts. It will also be subject to an annual reconciliation based on a reconciliation period consisting of the twelve months ending December 31 of each year or the utility may elect to subject the DSIC to quarterly reconciliation but only upon request and approval by the Commission. The revenue received under the DSIC for the reconciliation period will be compared to the Company's eligible costs for that period. The difference between revenue and costs will be recouped or refunded, as appropriate, in accordance with Section 1307(e), over a one-year period commencing on April 1 of each year, or in the next quarter if permitted by the Commission. If DSIC revenues exceed DSIC-eligible costs, such over-collections will be refunded with interest. Interest on the over-collections and credits will be calculated at the residential mortgage-lending rate specified by the Secretary of Banking in accordance with the Loan Interest and Protection Law (41 P. S. sec.101, et seq.) and will be refunded in the same manner as an over-collection. The utility is not permitted to accrue interest on under collections.

New Base Rates: The charge will be reset at zero as of the effective date of new base rates that provide for prospective recovery of the annual costs that had theretofore been recovered under the DSIC. Thereafter, only the fixed costs of new eligible plant additions that have not previously been reflected in the Company's rates or rate base would be reflected in the quarterly updates of the DSIC.

Earning Reports: The charge will also be reset at zero if, in any quarter, data filed with the Commission in the Company's then most recent Annual or Quarterly Earnings Report show that the Company will earn a rate of return that would exceed the allowable rate of return used to calculate its fixed costs under the DSIC as described in the Pre-tax return section. The utility shall file a tariff supplement implementing the reset to zero due to overearnings on one-days' notice and such supplement shall be filed simultaneously with the filing of the most recent Annual or Quarterly Earnings reports indicating that the utility has earned a rate of return that would exceed the allowable rate of return used to calculate its fixed costs.

Customer Notice: Customers shall be notified of changes in the DSIC by including appropriate information on the first bill they receive following any change. An explanatory bill insert shall also be included with the first billing.

Residual E-Factor Recovery Upon Reset to Zero: The utility shall file with the Commission interim rate revisions to resolve the residual over/under collection or E-factor amount after the DSIC rate has been reset to zero. The utility can collect or credit the residual over/under collection balance when the DSIC rate is reset to zero. The utility shall refund any over-collection to customers and is entitled to recover any under collections as set forth in Section III Safeguards – Audits/Reconciliations. Once the utility determines the specific amount of the residual over or under collection amount after the DSIC rate is reset to zero, the utility shall file a tariff supplement with supporting data to address that residual amount. The tariff supplement shall be served upon the Commission's Bureau of Investigation and Enforcement, the Bureau of Audits, the Office of Consumer Advocate, and the Office of Small Business Advocate at least ten (10) days prior to the effective date of the supplement.

SCHEDULE OF RATES

STATE TAX ADJUSTMENT SURCHARGE (STAS)

In addition to the net charges provided for in this Tariff, a surcharge of 0.00% will apply to all bills issued on or after the Effective Date at the bottom of this page.

The above surcharge will be recomputed using the element prescribed by the Commission in its policy at 52 PA Code section 69.51 et seq.:

- On or before March 31 of each year; and/or
- Whenever the Company experiences a material change in any of the taxes used in calculation of the surcharge due to a change in the applicable tax rates, or in the basis of calculating such tax rates, or due to changes in the state tax liability arising under the law.

The recalculation will be submitted to the Commission within 10 days after the occurrence of the event which occasions such recomputation or as prescribed in the Commission's regulations or orders. If the recomputed surcharge is less than the one in effect, the Company will, or if the recomputed surcharge is more than the one in effect, the Company may, submit with such recomputation a tariff or supplement to reflect such recomputed surcharge. The effective date of such tariff or supplement shall be 10 days after filing or as prescribed in the Commission's regulations or orders. In the event that the Company files an increased surcharge subsequent to 10 days after the occurrence of an event which occasions a recomputation, the effective date of such tariff or supplement shall be 60 days after filing in accordance with Section 1308(a) of the Public Utility Code, 66 Pa.C.S. § 1308(a) (regarding voluntary changes in rates), unless otherwise directed by the Commission.

The surcharge shall be rolled into base rates when increased or decreased base rates are made effective.

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SCHEDULE OF RATES**CUSTOMER ASSISTANCE PROGRAM RIDER****Customer Assistance Program (“CAP”):****I. Availability**

The CAP is a program designed to enroll residential Customers who satisfy the criteria set forth below (“CAP Program”).

Processing and verification by authorized agencies upon referral by the Company’s offices, other agencies, or the Commissions Bureau of Consumer Services.

Residential Customer of the Company.

Annual income no greater than 200 percent of the federal poverty limit (“FPL”). For payment purposes Customers will be defined as follows:

- a. Tier 1 – Customers whose annual income has been verified as being at or below 100 percent of FPL.
- b. Tier 2 – Customers whose annual income has been verified as being at or above 100 percent FPL or less than 150 percent of FPL.
- c. Tier 3 – Customers whose annual income has been verified as being at or above 150 percent FPL or less than 200 percent of FPL.

II. Rate Table

Eligible Customers will receive the discounted rate as set forth below:

<u>Tier</u>	<u>Customer Charge</u>	<u>Consumption Charge</u>
1	75% discount on Customer Charge	100% discount on first 2,000 gallons
2	65% discount on Customer Charge	50% discount on first 2,000 gallons
3	50% discount on Customer Charge	0% discount on first 2,000 gallons

SCHEDULE OF RATES**CUSTOMER ASSISTANCE PROGRAM RIDER (cont'd)****III. Surcharges**

All surcharges applicable under the Company's Rules and Regulations shall still apply to Customers under the CAP Program.

IV. Late Payment Charges

No late payment charges shall be applied to arrearages existing at the time the Customer begins receiving service under the CAP Program. Late payment charges will not be applied during participation in the CAP Program.

V. Rules and Regulations

If, at any time after acceptance into CAP, a Customer's family size or income changes, the Customer must notify the Company of the change within 30 days of the change. Failure to do so may result in the Company ending the Customer's opportunity to receive service under the CAP Program.

If a Customer no longer satisfies the criteria set forth under Availability, the Customer will no longer be eligible to receive service under the CAP Program.

At the time of application to the CAP Program, the Customer will be advised of the importance of timely payments. The CAP Program screening administrator will review relevant assistance programs and offer help in applying for such programs.

Failure to make payments will result in the Company returning the participant to the regular collection cycle and may lead to termination of service. To avoid termination, the participant must pay the amount set forth in the termination notice prior to the scheduled termination date.

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RULES AND REGULATIONS**SECTION A – INTRODUCTION**

These Rules and Regulations, files as part of the Company's Tariff, shall govern the manner in which wastewater service is provided to all Applicants and Customers. The Company may supplement these Rules and Regulations, and may revise and amend these Rules and Regulations from time to time subject to the approval of the Pennsylvania Public Utility Commission ("Commission"). The Company will follow Commission regulations not specifically addressed in these Rules and Regulations.

There are four classes of general metered service, based on the nature of the Customer and the use of the property receiving service, as follows:

Residential Class: An individually-metered or flat rate billed dwelling unit intended for human habitation (including a detached house, rowhome, townhouse, condominium and mobile home) or an individually-metered or flat rate billed home or building consisting of not more than two dwelling units.

Commercial Class: A building store restaurant or office which is primarily a site for the buying or selling of goods or the provision of professional or consumer services. In addition, apartments, condominium complexes, colleges, private and public schools, car washes, laundromats, construction sites, hotels, and motels are included in this class.

Industrial Class: A building or factory which is primarily a site for the manufacture or production of goods.

Public: A public building, library, park or playground which is owned by a governmental unit which has the power of taxation.

RULES AND REGULATIONS**SECTION B - DEFINITIONS**

Wherever used in the Rules and Regulations or elsewhere in the Tariff of the Company, the following terms shall have the meanings hereinafter set forth:

Applicant: A person, at least 18 years of age, who is not currently receiving service but has applied to the utility for service and whose name appears on the mortgage deed, or lease of the property for which service is requested.

Builder: Any person(s) requesting an extension to provide service to an existing lot or group of lots, either existing or to be subdivided, where service is to be provided to something other than a preexisting residential structure; namely, a newly constructed structure, structures to be constructed in the future, or to a preexisting non-residential structure.

Commission: The Pennsylvania Public Utility Commission.

Company: Aqua Pennsylvania Wastewater, Inc. and its duly authorized officers, agents and wastewater employees; each acting within the scope of his authority and employment.

Company Service Lateral: The pipe or line extending laterally out from the Company collection Main that connects to the building service line ("Service Connection") at the hypothetical or actual curb line, edge of the right-of-way or the actual property line.

Company's System: The aggregate of the Company's wastewater disposal plant, pumping equipment, trunk lines or Mains and connection facilities to the curb-line at each premise.

Construction Costs: All direct and indirect costs attributable to the material and installation of the subject Main extension, services and appurtenances, and/or removal of existing Company facilities (including the net book value of property replaced or retired) whether incurred by the Builder or the Company.

Contributory Industrial User: Any industrial user that the Company has determined discharges specific pollutants to the treatment works at concentrations greater than typical domestic/commercial wastewaters.

Customer: A person at least 18 years of age, or entity who is an owner, occupant or who contracts with the Company for or who takes or receives wastewater collection, treatment and/or disposal service.

Customer Service Line: The connecting facilities owned by the Customer from the Company wastewater supply lines or Mains at the curb-line into and within the Customer's premises.

Domestic Wastes: A combination of water-carried wastes, consisting of wash water, culinary wastes and liquid wastes containing only human excreta and similar matter flowing in or from a building drainage system of sewer originating from residences, business buildings, institutions, and commercial establishments.

RULES AND REGULATIONS**SECTION B – DEFINITIONS (cont'd)**

Equivalent Dwelling Unit or "EDU": The EDU is a measure based upon the estimated average daily wastewater flow for the type of business, as calculated by the Pennsylvania Department of Environmental Protection regulation at 25 Pa. Code § 73.17 divided by the typical estimated average daily wastewater flow from a current single-family unit. In the Company's sole discretion, the Company may assign more than one (1) EDU for a residential Property.

Grinder Pump: Any mechanical or powered device used to grind, macerate or fluidize waste so that it can be discharged into the Company's facilities. This device is a component of the Customer Service Line and the sole responsibility of the Customer to own, maintain and operate along with the balance of their Customer Service Line. The Customer shall be responsible for all power to operate the device in accordance with the manufacturer's specifications and guidelines.

Industrial Waste Permit or Contract: A wastewater permit or contract issued as required by the Company to an industrial user.

Industrial Waste Pretreatment Program: A program established by the Company that requires discharges to monitor, test, treat and control as necessary, pollutants in their wastewater prior to discharge into the sanitary and/or combined sewer.

Line Extension: An addition to the Company's System Mains which is necessary to serve the Premises of a Customer.

Main: The Company's pipe, excluding Service Connections, located in a public highway, street, alley, or private right-of-way which pipe is used in transporting Wastewater.

Maximum Allowable Industrial Loading: The maximum mass of pollutants that is allowed to be discharged to the treatment works from all contributory industrial users.

Nondomestic Waste or Industrial Waste: Any wastewater resulting from any process of industry, manufacturing, trade, or business or from the development or recovery of any natural resource, or any mixture of such waste with water or domestic wastewater, as distinct from domestic wastewater.

Person: Any individual, firm, company, association, society, corporation, institution, group, or any other legal entity.

Premise: A single lot or piece of ground consisting of a single residential unit, together with all buildings and structures erected thereon.

Pretreatment: The reduction or elimination of pollutants, or the alteration of the nature of pollutant properties prior to discharging into the wastewater system. This reduction or alteration can be obtained by physical, chemical, or biological processes, by process changes, or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.

Property: In general terms, a separate parcel of land owned in fee simple absolute, including any home(s), condominium(s), Home Owner's Association or building(s) affixed thereto, which is delineated by the description contained on the recorded deed, and which may be further delineated by any public roads.

RULES AND REGULATIONS**SECTION B – DEFINITIONS (cont'd)**

Prospective Customer: Any owner, tenant or lessee of a property that is expected to be receiving wastewater service for at least one year following the commencement of wastewater service.

Residential Structure: A home or building which contains only individually-metered or flat rate dwelling units intended for human habitation.

Sanitary Sewer: A sewer which primarily carries sanitary wastewater, together with such storm, surface and ground water as may be present.

Service Connection: See Definition for Company Service Lateral.

Shall: is mandatory; May is permissive.

Tariff: All the service rates, rules and regulations issued by the Company, together with any supplements and revisions thereto, officially approved by the Commission and contained in this document.

User or Discharger: Any person that discharges, causes, or permits the discharge of wastewater into a Company sewer.

Waste: Rejected, unutilized or superfluous substances in liquid, gaseous, or solid form resulting from domestic and nondomestic activities.

Wastewater: A combination of the water-carried waste from residences, businesses, buildings, institutions, and industrial establishments, together with any ground, surface, and storm water that may be present, whether treated or untreated, discharged into or permitted to enter a Company sewer.

RULES AND REGULATIONS**SECTION C – APPLICATION FOR SERVICE**

1. Application for Wastewater Service by a New Owner or Occupant at an Existing Service Property: Where a Customer's Service Line exists on a property to be served in compliance with the Company's rules, service will be furnished by the Company as soon as reasonably practicable after written or oral application of the owner or tenant of the property or his properly authorized agent. The Customer receiving service takes such service subject to the Company's Tariff, including its Rules and Regulations.

2. Application for Wastewater Service to a Proposed Service Property: Where an adequate sewer Main abuts the Customer's Property, a service connection will be made as soon as reasonably practicable after the appropriate application forms have been completed by the Property owner or his properly authorized agent and subsequently submitted to, and approved by, the Company. Where an adequate sewer Main does not abut the Customer's Property, the Customer must make necessary arrangements with the Company's New Business Office for the extension of sewer in accordance with the Company's Rules and Regulations. Service Connection application forms will be furnished by the Company on request.

All applications for service must be in writing on a form provided by the Company and signed by the owner or owners of the Property to which wastewater collection service will be provided; except that where a lessee of property occupies or uses the Property under a lease having a fixed term of more than six (6) months, the lessee may request service as an Applicant. The Company may, at its sole discretion, require that a separate contract for service be signed by the Applicant.

Nonresidential service customers which desire to discharge Nondomestic Wastes into the sanitary wastewater system or existing industrial/commercial users which desire to commence operations of a new facility or a new or different process that will affect the characteristics of the wastewater discharging into the Sanitary Sewer, shall notify the Company prior to the commencement of the new or different operations at the facility and provide such other information regarding the proposed discharge as the Company may request, including an application for an Industrial Waste Discharge Permit when deemed necessary.

RULES AND REGULATIONS**SECTION D – CONSTRUCTION AND MAINTENANCE OF FACILITIES****1. Provision of Service:**

- Connection of a Premise to the Company's System constitutes a contract for service subject to all Rules and Regulations and rate schedules as provided for in this Tariff.
- The Company will install a Company Service Lateral from the main to the curb, or such point as determined by the Company of a size and material determined by the Company in its discretion. Any additional or larger connection facilities requested by the Customer may be installed provided the proposed discharge into the system is within the capability of the system, complies with these Rules and Regulations, and the Customer pays the additional costs for the installation.
- No owner or tenant of any Premises connected with the Mains of the Company will be allowed to permit another person or premises to use or connect with its Customer Service Line, except upon written permit from the Company.
- Any violation of the Rules and Regulations of the Company shall render the contract between the Customer and the Company void, and service may be discontinued after due notice, remaining so until such time as the Company is satisfied that the Customer will observe the Rules and Regulations. Service will not be connected until the actual costs of the discontinuing and reconnections are paid in full.

Service Line Inspection Fee

- Charge for the Company's time involved in the inspection of a Customer Service Line tie-in to the Company's wastewater system shall be fifty dollars (\$50.00) per service line.

2. Customer Service Line: The Customer Service Line shall extend from the Property to the Curb Stop or cleanout or such point as designated by the Company. All connections, service lines and fixtures owned by the Customer shall be maintained by the Customer in good order, and all meters and appurtenances owned by the Company and located on the Property of the Customer shall be protected properly by the Customer. All leaks in or other deteriorated condition of the Customer's Service Line or any other pipe or fixture in or upon the Premises supplied must be repaired immediately by the owner or occupant of the Premises.

3. Size, Kind, and Location of Service Lines: The Company reserves the right to determine the size, kind and location of the service line, from the main to the curb, and from the curb to the property to be served. The Customer's service line shall not cross intervening properties unless the property is landlocked and there is no other way in which service can be provided (for example, because the property does not abut a public road) and an appropriate easement is obtained by the Customer for the Customer's benefit, a copy of which must be furnished to the Company. The service line from the curb stop or cleanout to the property shall be furnished, installed, owned, and maintained by the owner of the property, and where possible shall be laid in a straight line at right angles to the curb line within the building limits of the structure to be served and at a minimum depth of cover specified by the Company, and bedded in at least 6 inches of sand, in property owned in fee simple absolute.

SECTION D – CONSTRUCTION AND MAINTENANCE OF FACILITIES (cont'd)

4. Right to Reject: The Company may refuse to connect with any Customer Service Line or furnish wastewater collection, treatment and/or disposal through a service already connected if such system or service is not properly installed or maintained.

5. Separate Trench: The Customer Service Line shall not be laid in the same trench with drain or water pipe, the facilities of any other public utility or of any municipality or municipal authority that provides a utility service.

6. Customer Grinder Pump: In areas of the Company's System where the Company has installed a pressure sewage collection system or where required as determined by the Company, the Customer, in conjunction with the construction of their Customer Service Line, shall install, own, operate, and maintain and replace a Grinder Pump and holding tank at the Customer's expense as specified by the Company prior to connection and shall maintain such facilities in good order and repair. The Grinder Pump shall meet specifications as provided by the Company. The failure of a Customer to properly install and maintain a Grinder Pump, including replacement, shall construe grounds for the Company to initiate action to terminate service to the Customer and seek recovery for any damage to the Company's facilities caused by an improperly functioning Grinder Pump.

RULES AND REGULATIONS**SECTION D – CONSTRUCTION AND MAINTENANCE OF FACILITIES (cont'd)**

7. Individual Service Lines: Except as otherwise expressly authorized by the Company, each individual Customer shall be served only through a separate service line connected directly to the Company Service Lateral, and that Customer Service Line shall not cross over the Property of or serve any other Customer or Premise. The maximum Customer Service Line length shall be two hundred and fifty (250) feet from the Service Connection(s) with clean-outs every 50 feet. The Company shall have the right to waive this maximum length requirement at its sole discretion. No additional attachment may be made to any Customer Service Line for any purpose without the express written approval of the Company.

8. Customer Responsibilities:

a. Use shall be restricted to Domestic Wastes, unless a special agreement is made satisfactory to the Company as to other uses. No Customer shall discharge into the system roof, storm, surface or ground water, swimming pools, drainage from cesspools or drain fields, cistern, combustible gases or liquids, insoluble solids, industrial type waste or other harmful substances. Any Customer discharging any unauthorized matter into the system, which causes damage to Company facilities or interferes with the operation of the system, will be required to cease using the system and pay whatever damages and costs are incurred as a result.

b. Each Customer Service Line shall be installed and maintained by or on behalf of the Customer at its expense and in full accordance with the Company's specifications as to materials, size, location and underground construction, starting at the curb-line at a location designated by the Company.

c. No sewer connection, or disconnection, shall be made to the Company's Main except under the supervision, control and approval of the Company's authorized representative. All such connections shall be property of the Company and shall be accessible to it and under its control. The Company will furnish, install, and maintain all Company Service Laterals from the Main to the property line or right of way.

d. No repairs, alterations, or additions to any drain or Service Connection with the Company's System shall be made, unless the person desiring to make the same shall first receive permission from the Company for doing so.

e. Connections with sewers that run through private property shall, in all respects, be governed by these Rules and Regulations.

RULES AND REGULATIONS**SECTION D – CONSTRUCTION AND MAINTENANCE OF FACILITIES (cont'd)****9. Company's Service Lateral:**

Except for Service Connections made in accordance with the section, "Main Extensions", the Company will make all connections to its Mains and furnish, install and maintain the Company Service Laterals from the Main up to the hypothetical or actual curb line, edge of the right-of-way or the actual property line. The Company Service Laterals will be the property of the Company and under its control.

The maximum Company investment per Company Service Lateral to a Bona Fide Service Applicant shall be calculated under the same formula as described in the "Company Contribution" of Section I, "Main Extensions", of this Tariff.

The cost of any Company Service Lateral in excess of the applicable maximum Company investment shall be paid by the Customer. The Company may require payment of the estimated amount of such excess cost in advance of the installation and will make a partial repayment of the extent the actual cost is determined to be less than the estimate.

RULES AND REGULATIONS**SECTION E – TERMINATION, DISCONTINUANCE, RESTORATION OF SERVICE, AND SERVICE CONTINUITY****Termination and Discontinuance of Service:**Termination and Discontinuance by the Company

1. Service may be terminated by the Company for any one of the following reasons:
 - a. Failure of a Customer to maintain and repair its Customer Service Line(s);
 - b. Failure of a Customer to pay a bill for service in accordance with the Commission's regulations;
 - c. Vacancy of the Premises;
 - d. Violation by a Customer, or with his consent, of any of these Rules and Regulations.
2. The Company may, without notice, discontinue wastewater service if an emergency reasonably requires it in order to make necessary repairs or connections or to meet any other emergency; however, the Company will give notice of any discontinuance of service if it is reasonably possible to do so.
3. If you are a victim of domestic violence and have a Protection From Abuse Order or other court order that shows clear evidence of domestic violence, there are special protections available.

Discontinuance by the Customer

1. A Customer desiring the discontinuance of wastewater service shall give written notice to the office of the Company and the Customer will be responsible for service charges until such notice is given. A new application must be made on any change of Customers on a Property as required at the office of the Company, and the Company shall be at liberty to discontinue the service until such new application has been made and approved.
2. The Customer desiring abatement from wastewater bills shall report same in writing or call in person at the office of the Company. All vacancies shall date from the day reported at the office of the Company. When vacancy is properly reported, an allowance will be made for the period of vacancy, but not for less than one month.

Restoration of Service: After termination of service it will not be reconnected until all amounts due to the Company have been paid plus the cost of a fifty dollar (\$50.00) turn-on charge prior to service reconnection (with the exception of the Masthope Division).

RULES AND REGULATIONS**SECTION E – TERMINATION, DISCONTINUANCE, RESTORATION OF SERVICE, AND SERVICE CONTINUITY (cont'd)****Service Continuity and Liability:**

In the course of furnishing service that needs to be adequate, but not perfect, it is recognized that there will be times when service is subject to interruption or disruption as a result of Main breaks, the failure of equipment or facilities, and for other reasons. Accordingly, the liability of the Company shall be limited to two thousand dollars (\$2,000.00) in any legal action brought against the Company for damages in connection with: 1) a service interruption or delay, or cessation or lack of adequate, efficient, safe and reasonable service and facilities; and/or 2) a failure of equipment, including, but not limited to, a break or leak in a Main, service line or Meter owned by the Company.

In any legal action where a court does not recognize, or is being asked to interfere with or hamper, the jurisdiction of the Commission to authorize limitations of liability or to exclusively determine whether the service and facilities of a public utility are in conformity with the regulations and Orders of the Commission, the public utility may certify to the Commission the question of the appropriateness of such court action by filing a petition for declaratory judgment with the Commission.

Furthermore, the Company shall not be liable in any action where the loss or damage involves an act of God or does not involve a duty of the Company, including breaks or leaks on facilities that are not owned by the Company, such as breaks, leaks, defects or conditions in the Customer's Service Line, Meter, internal plumbing or fixtures, or due to the materials out of which those facilities are made. Further, the Company shall not be liable in any action where the loss or damage does not involve a breach of a duty of the Company, including where the Company does not receive actual notice, either written or oral, that a Company facility (located within the public right-of-way, in a sidewalk or on a Customer's Property) is in need of repair that is not proven to have been in that condition at the time of installation or that is caused by a plumber, developer, or the person or event.

From time to time, the Company may provide public notices, specific notices, correspondence or other notifications ("Notices") regarding the presence of conditions affecting the wastewater service provided by the Company. These Notices may contain information about actions members of the public may wish to, are recommended to, or should take in response to the conditions identified in the Notice. In the event the Company issues a Notice, the Company will not be liable for any expenses or costs incurred by a Customer or end-user for any action taken in response to any condition identified in the Notice.

RULES AND REGULATIONS**SECTION F – BILLING AND COLLECTION**

Methods of Payment: Bills are payable by mail, by direct debit, in person at any authorized pay agency or as otherwise authorized by the Company.

Landlord Assumption of Responsibility: If an Applicant for service, who is a landlord, assumes responsibility for rates and charges related to wastewater service provided to tenants and is billed for such service, the landlord must assume responsibility and be billed for both water and wastewater service, if such service is provided or billed by the Company.

Billing History: A Customer may obtain from the Company; at no charge to the Customer, the billing history for up to ten accounts per year in the name of the Customer, provided that the Customer submits a written request for such information directly to the Company. Additional requests will be processed subject to the Company's right to charge the Customer its incremental costs of providing such billing histories.

Delinquent Bills: If a rendered bill remains unpaid for a period of 20 days for residential customers and 15 days for non-residential customers, it shall be classified as delinquent. However, if the last day of such period falls on a Saturday, Sunday, a holiday or day when the Company's offices are closed, the delinquency date shall be the next succeeding business day. Payments by mail will be deemed made on the date of the postmark. Payments to the Company drop box or authorized payment agent will be deemed received when paid at that location. Service may be terminated for non-payment of bills in accordance with the Commission's regulations. If service is thus terminated, it will not be restored until all outstanding charges provided by the Commission's regulations and the tariff of the Company are paid or satisfactory arrangements are entered for payment.

Late Payment Charge: If payment has not been received by the Company for five days after the bill has been classified as delinquent, a late charge (penalty) of 1.25% will be applied to the account and such late charge (penalty) will be calculated every thirty days thereafter only on the overdue portion of the bill excluding previous late charges (penalties), and in no event shall the late charge (penalty) exceed more than 18% annually (simple interest).

Return Check Charge and Return Electronic Payment Charge: The Customer will be responsible for the payment of a charge of \$20.00 per incident where a check or electronic payment, which has been presented to the Company for payment of any bill, is returned by the bank for any reason including, but not limited to, non-sufficient funds, account closed, payment stopped, two signatures required, postdated, stale date, account garnished, no account, drawn against uncollected funds, balance held, and unauthorized signature. This charge is in addition to any and all charges assessed against the Customer by the bank. If a Customer's account shows a history of submitting payments that have been returned for insufficient funds or any other reason outlined above, the Company may require deposit or turn-on charges to be paid by cash, certified check, money order, or credit card or service may be terminated without additional notice in accordance with Commission regulations.

RULES AND REGULATIONS**SECTION F – BILLING AND COLLECTION (cont'd)**

Turn-on Charge: When service has been terminated to any Premise because of violation of the Company's Rules and Regulations or at the Customer's request, a charge of fifty dollars (\$50.00) payable in advance will be made for restoration of service. If the Customer request for restoration of service requires the Company to incur overtime or holiday costs, the Company reserves the right to bill the Customer for the additional cost incurred. If the Company incurs out of the ordinary expense to affect termination of service for non-payment of bills or due to lack of access to the Company's facilities, the Customer must reimburse the Company for those expenses in addition to the \$50.00 turn-on charge prior to service reconnection.

Turn-off at Customer's Request: Customers desiring to avoid payment for wastewater service during periods when Properties are vacant or during extended absences shall give notice in writing at the office of the Company requesting the wastewater to be shut off. If a minimum charge or Customer charge for water use is applicable, the bill will be based on the proportion that the period when wastewater service was available bears to the entire period on which such minimum charge or Customer charge is based. Metered consumption in excess of such adjusted minimum shall be billed at normal rates.

RULES AND REGULATIONS**SECTION G – DEPOSITS AND CREDIT STANDARDS**

General: Deposits may be required from Applicants for new service or extension of service. Residential Customers will not be required to pay a security deposit in order to receive service from the Company. The Company will pay income tax on any deposit, advance, contribution or other like amounts received from an Applicant which shall constitute taxable income to the Company as defined by the Internal Revenue Service and required by the Pennsylvania Public Utility Commission. Such income taxes shall be segregated in a deferred account for inclusion in rate base in a future base rate case proceeding. Such income tax associated with a deposit, advance, or contribution will not be charged to the Person providing such deposit, advance, or contribution.

Creditworthiness: Upon application for wastewater service, the Company may require the Applicant/Customer to provide valid identification, a valid deed lease or mortgage evidencing the Applicant/Customer's residency at the Property/Premise, and/or payment of an outstanding balance owed by the Customer which accrued within the past 4 years for which the Applicant/Customer is legally responsible.

The Company may determine liability for a past due balance by:

- Use of Company records that contain information previously provided to the Company;
- Information contained on a valid mortgage, lease or deed;
- Use of commercially available public records databases; and
- Government and property ownership record.

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS****General Requirements:**

1. The Customer or owner of the Property (defined as “User” within this Section H) agrees to cooperate with the Company in its efforts to implement or enforce its wastewater pre-treatment program, including any monitoring, reporting and treatment that the Company may deem necessary to ensure that discharges into the Company’s System are compatible with the capability of the Company’s system.
2. The User is required to install and maintain, at their own expense, all interconnecting lines, grease traps, pretreatment equipment, sampling wells and any lift stations required to collect wastewater at Service Connections per the Company’s approval.
3. It is agreed and understood that the User may not dispose of or permit disposal of waste generated offsite by the User, or any other party, by discharge through the User’s Service Connection(s).
4. Grease and oil traps shall be provided when necessary for the proper handling of liquid wastes containing grease or oil of an organic, mineral, or petroleum composition when required by the state plumbing codes or to comply with the Company’s oil and grease limitation. All traps and drains shall be located so as to be readily and easily accessible for cleaning and inspection. All grease and oil traps shall be maintained by the User, at the User’s expense. Prior to installation, plans shall be submitted to the Company for approval. The Company reserves the right to require User of grease, oil, sand traps, or interceptors to submit records of cleaning to the Company at a frequency of the Company’s discretion.
5. It is agreed and understood that User shall install and maintain a waste interceptor, grease trap or pre-treatment unit of sufficient design to prevent the discharge or introduction of trash, debris, grease, oil or any other solid material having maximum dimensions equal to or greater than one and one-half inches (1½”) into the Company’s System, and that the design of such interceptor or pre-treatment unit shall be subject to approval by the Company prior to commencement of discharge into the Company’s System.
6. The User will indemnify and hold harmless the Company from any and all claims, demands, damages, costs, fines, expenses (including attorney’s fees), judgments or liabilities arising out any damage, injury, or loss sustained by Company (“Losses”) on account of or in consequence of the introduction of any Prohibited Discharge (defined below), violation of any permit or contract, failure to install required Pretreatment, or failure to otherwise comply with the Company’s Pretreatment requirements by the User. The Company shall have the right to charge the User as a part of the User’s wastewater service charges any Losses incurred, including regulatory agency fines, or any other expenses or costs incurred by the Company including but limited to cleaning and removal on account of or in consequence of the introduction of any Prohibited Discharge, violation of any permit or contract, or failure to otherwise comply with the Company’s Pretreatment requirements by the User.

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS (cont'd)****General Requirements (cont'd):**

7. The Company shall have the right to terminate or otherwise refuse service in accordance with its rules and regulations to any user on account of or in consequence of the introduction of any Prohibited Discharge, violation of any permit or contract, failure to install required Pretreatment, failure to properly operate and maintain said Pretreatment, or failure to otherwise comply with the Company's Pretreatment requirements by the User.

8. The Company shall not be liable to the User for a failure to provide sewage collection services. It is understood and agreed that service interruptions may, from time to time, occur. The Company agrees to use its best efforts to provide continuous service.

9. If any measurement, test, inspection or analysis determines that a User has created a situation which is in violation of any statute, ordinance, rule or regulation, the User shall be required to pay all costs incurred to remedy the situation.

10. Where necessary in the Company's opinion, the User shall provide, at the User's expense, Pretreatment as may be necessary to reduce the water quality characteristics or constituents to within the maximum limits provided for in these Rules and Regulations or to control the quantities (mass loading) or rates of discharge of Wastewater or Wastes. Plans and specifications and other pertinent information shall be submitted for the approval of the Company and no construction of such facilities shall commence until said approvals are obtained in writing. Pretreatment facilities shall be operated and maintained continuously to provide satisfactory and effective operations. The User is solely responsible for meeting the water quality compliance limits herein and as may be imposed where the Company and the User enter into a contract which establishes site specific local limits for water quality parameters not listed herein which may be regulated by the Pennsylvania Department of Environmental Protection and/or the United States Environmental Protection Agency.

11. The Company reserves the right to refuse connection to its sanitary and/or combined sewer connection or to compel the discontinuance of the use of the sanitary and/or combined sewer where the company deems the discharge of the waste harmful to the sewer system or to have an adverse effect on the sewage treatment processes.

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS (cont'd)****General Requirements (cont'd):**

12. Wastewater raw Waste strength shall be limited to that illustrated below:

		Maximum Allowable Limits <u>(Grab Sample)</u>	Maximum Allowable Limits <u>(24 Hour Composite Sample)</u>
BOD ₅	(mg/l)	250	250
TSS	(mg/l)	250	250
COD	(mg/l)	500	500
Total Kjeldahl Nitrogen	(mg/l)	50	50
Total Phosphorus	(mg/l)	8	8
Ammonia Nitrogen	(mg/l)	45	45
pH	(s.u.)	6-9	N/A
Oil and Grease	(mg/l)	100	N/A

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS (cont'd)****General Prohibitions:**

1. No storm water from pavements, areas ways, roof runoff water, foundation drains, subsurface drains, water from springs, cooling water, basement sump pumps, sub-floor groundwater reduction systems, unpolluted industrial or commercial process water or other sources shall be admitted to the Company's System.

2. The discharge of garbage to the Company's System is expressly prohibited.

Prohibited Discharges: No person shall cause or permit to be discharged into the Company's System any toxic substances or wastes having any of the following characteristics:

1. Wastes containing gasoline, naphtha, fuel, oil or other liquids, solids or gases which by reason of their nature or quality may cause fire or explosion or be in any other way injurious to persons, the structures of the Company's System or its operation. Any pollutants which create a fire or explosion hazard in the collection and treatment system including, but not limited to, waste streams with a closed cup flash point of less than 140 degrees Fahrenheit, using the test methods specified in 40 CFR 261.21.

2. Any liquid or vapor having a temperature in excess of 150 degrees Fahrenheit or any substance which causes the temperature of the total wastewater treatment plant influent to exceed 104 degrees Fahrenheit. Any liquid or vapor less than 20 degrees F. Allowable temperatures may vary by facility.

3. Washes having a pH lower than 6.0 or higher than 9.0 having any corrosive property capable of causing damage or hazards to structures, equipment or personnel of the Company's System.

4. Wastes containing any noxious or malodorous gas or substance that either singly or by interaction with Wastewater or other Wastes is likely in the opinion of the Company to create a public nuisance or hazard to life or prevent entry to sewers for their maintenance and repair.

5. Wastes containing ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, hair, chemical or paint residues, greases, paunch, manure, cotton, wool, plastic or other fibers, lime, slurry or any other solid or viscous material of such character or in such quantity as in the opinion of the Company may cause an obstruction to the flow in sewers or otherwise interfere with the proper operation of the Company's System.

6. Wastes containing insoluble, non-flocculent substances having a specific gravity in excess of 2.65.

7. Wastes containing soluble substances in such concentrations as to cause the specific gravity to be greater than 1.1.

8. Wastes containing any substances which may affect the effluent and may cause violation of the National Pollutant Discharge Elimination System Permit or the ability to meet sludge standards or beneficial reuse of sludge

9. Wastes containing other matter detrimental to the operation of the Company's System causing erosion, corrosion or deterioration in sewers, equipment and structure of the Company's System.

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS (cont'd)****Prohibited Discharges (cont'd):**

10. Any liquid containing fats, wax, grease or oils of mineral or petroleum origin, whether emulsified or not, in excess of 100 mg/l or of animal or vegetable origin in excess of 100 mg/l. Lower limits may be applied to mineral oils where necessary to prevent interference with treatment plant operations or pass through. Allowable grease levels will vary by facility.

11. Wastes containing more than 10 mg/l of any of the following gases, hydrogen sulfide, sulfur dioxide, nitrous oxide, or any of the halogens.

12. Wastes containing a toxic or poisonous substance, in a sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to human or animals or create any hazard in the Company's System operation and such toxic wastes shall include, but not be limited to wastes containing cyanide, chromium and/or copper ions.

13. Any Waste containing toxic substance in quantities sufficient to interfere with the biochemical processes of the sewage treatment works or that will pass through the sewage treatment works and exceed the standard and/or federal requirements in respect thereof.

14. Any Waste containing radioactive isotopes.

15. Any Wastewater which imparts color which may affect the effluent or may cause violation of the National Pollutant Discharge Elimination System permit or the ability to meet sludge standards or beneficial reuse of sludge.

16. Waste discharged into the Company's System shall not include any hazardous waste as defined in the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., as amended, and the regulations thereunto, or in those sections of the Pennsylvania Administrative Code governing solid and hazardous Waste.

17. The Company reserves the right to set more stringent limitation if the Company determines that the limitation in this section may not be sufficient to protect the operation of the Company's System or to comply with the water quality standards or effluent limitations of the Company's applicable permits.

RULES AND REGULATIONS**SECTION H – WASTEWATER CONTROL REGULATIONS (cont'd)****Sampling Analysis:**

1. All measurements, tests and analyses of the characteristics of waters and wastes to which reference is made in these rules may be determined in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater" as prepared, approved, and published jointly by the American Public Health Association, the American Water Works Association, and/or the Water Pollution Control Federation or other reference sources specified by regulatory agency requirements, such as "Methods for Chemical Analysis of Water and Wastes," U.S.E.P.A. 1974 or its subsequent updated version.

2. All measurements, tests, inspection, and analyses deemed by the Company to be necessary under this Section or any other part of the Rules and Regulation of the Company, shall be done by the Company or its agents, employees or contractors. If the measurement, test, inspections and/or analyses determine that a Customer has created a situation which is in violation of any statute, ordinance, rule or regulation, then the Customer shall be required to pay all costs incurred in order to measure, test, inspect, analyze and remedy the situation. Otherwise, the costs involved are to be borne by the Company. Costs assessed against a Customer pursuant to this Section shall be in addition to any other fees charged by the Company. The costs shall be payable within 30 days of presentation of a bill for such costs by the Company to the Customer(s).

3. Where the Company deems advisable; it may require any person discharging Wastes to install and maintain, at his or her own expense, in a manner approved by the Company or its representative, a suitable device to continuously measure and record the pH of the Wastes discharged. The User shall install and maintain a suitable control manhole in the User's sewer lateral to facilitate observation, sampling and measurement of wastes. Any manhole and sampling device shall be publicly accessible and in a safe location, constructed in accordance with plans approved by the Company and installed and maintained at the expense of the User to whom wastewater service is provided.

4. Samples for analyses shall be by either grab sample or composite samples or a 24-hour composite sample collected and proportioned, as directed by the Company.

5. Copies of all operational records, analyses, shall be filed with the Company unless otherwise directed by the Company.

Disposal of Wastes From Septic Tanks and Cesspools: No person shall dispose of Wastes from septic tanks, cesspools, or other such sources of sanitary sewage to the Company's System, except as designated by the Company.

Penalties: The Company reserves the right to deny wastewater service for violation of any provision of these regulations, subject to Commission rules and regulations.

Damage to System and Indemnification: In the event of any damage to the Company's System caused by a Customer, such damage shall be immediately reported to the Company and said Customer shall reimburse Company for the costs of such repairs.

RULES AND REGULATIONS**SECTION I – MAIN EXTENSIONS****Definitions:**

Builder: Any person(s) requesting an extension to provide service to an existing lot or group of lots, either exiting or to be subdivided, where service is to be provided to something other than a preexisting Residential Structure; namely, a newly constructed structure, structures to be constructed in the future, or to a preexisting non-Residential Structure.

Bona Fide Service Applicant: A person or entity applying for wastewater service to an existing or proposed structure within the Company's franchise territory for which a valid occupancy or building permit has been issued if the structure is either a primary residence of the Applicant or a place of business. An Applicant shall not be deemed a Bona Fide Service Applicant if:

- An Applicant is requesting wastewater service to a building lot, subdivision or a secondary residential dwelling;
- The request for service is part of a plan for the development of a residential dwelling or subdivision; or
- The request for service requires Special Utility Service.

General Provisions:

1. At the time any request is made to the Company for a Main extension, the Company may request a site plan for the lot(s) to which service is to be provided. If such a request is made by the Company, the site plan must be provided within the time specified by the Company, which shall not be less than fourteen (14) days.

2. The Company shall have the exclusive right to determine the type and size of Mains to be installed, and any other facilities or fixtures required to render adequate service; provided, however, that where the Company decides to install pipe larger than eight (8) inches in diameter, and 8-inch pipe would render adequate service throughout the extension, at the company's discretion, estimated, or actual, cost figures contained in the "Sewer Main Extension Agreement" or "Sewer Main Extension Deposit Agreement" (collectively "Extension Agreement") will include the material cost for pipe eight (8) inches in diameter. All estimated, or actual, cost figures will include a reasonable allowance for overheads.

3. In determining the length and size of, and necessity for, Main extensions, the terminal point of such extensions will, in all cases, be at that point in the curb-line which is equidistant from the side property lines of the lot for which wastewater service is requested. A street Service Connection will be provided only for service lines from the curb to the premises to be served, and will be installed in a straight line, at right angles, to the curb line.

4. Should it be necessary, at the Company's sole discretion, to extend beyond the last lot in any street to connect to an existing Main to provide more adequate and reasonable service, this additional extension shall be considered part of the total and orderly system development so long as the last lot in the street is not more than one hundred fifty (150) feet from that existing Main, and may be included in the cost of the extension.

RULES AND REGULATIONS**SECTION I – MAIN EXTENSIONS (cont'd)**

Bona Fide Service Applicant Initiated Main Extensions: Where an adequate wastewater distribution Main does not abut a Bona Fide Service Applicant's Property such that a service connection cannot be made to serve such Property in accordance with these Rules and Regulations, the Bona Fide Service Applicant (or an authorized agent for the Bona Fide Service Applicant) must apply to the Company for a Main extension. Such extension will be made under and pursuant to the terms of an Extension Deposit Agreement for the Bona Fide Service Applicant subject to applicable provisions of these Rules and Regulations. The construction of facilities to serve such Bona Fide Service Applicant will not commence until an Extension Deposit Agreement for the Bona Fide Service Applicant has been executed and all applicable terms and conditions therein have been satisfied by the Applicant.

In conjunction with executing an Extension Deposit Agreement, a Bona Fide Service Applicant shall deposit with the Company an amount totaling \$1,000, representing a Service Line Deposit. Such amount shall be refunded to the Applicant within 90 days after the Applicant's requesting and receiving wastewater service from the Company, provided, however, that if the Applicant does not request connection to the Company's Main extension within six months of the completion of the Main extension, the Service Line Deposit shall become non-refundable.

Where a proposed Main extension is capable of serving multiple structures or facilities and at least 80% of the potential Customers who could receive service from the Main extension become Bona Fide Service Applicants and satisfy all applicable terms and conditions of the foregoing provisions, the Customer Advance, if any, required of each Bona Fide Service Applicant shall be calculated as if 100% of such potential Customers had become Bona Fide Service Applicants.

For a period of ten (10) years following completion of the Main extension, the Company shall refund to each Bona Fide Service Applicant his/her pro rata share of an amount equal to the Company Contribution for each additional Customer who attaches a service line to the main extension and requests service. No refunds shall be made, however, in those situations where at least 80%, but less than 100%, of the potential Customers who could receive service from the Main extension become Bona Fide Service Applicants and their Customer Advances are calculated as if 100% of such potential Customers had participated in the initial funding of the project. In addition, the total amount refunded shall not exceed the amount of the Customer Advance paid by the Bona Fide Service Applicant.

The Bona Fide Service Applicant must have complied with all other conditions of service provided elsewhere in these Rules and Regulations in order to receive wastewater service from the Main extension.

RULES AND REGULATIONS**SECTION I – MAIN EXTENSIONS (cont'd)**

Company Contribution: shall mean that portion of the Main extension costs which generate annual line extension costs equal to annual revenue from the line extension and that the Company will fund based upon the following formula, where X equals the Company Contribution attributed to each Bona Fide Service Applicant:

$$X = \frac{AR - O\&M}{(P \cdot I) + D}$$

Whereby:

AR = the expected annual revenue from the Bona Fide Service Applicant based upon the Company's currently effective Tariff rates and on the average annual usage of customers similar in nature and size to the Bona Fide Service Applicant.

O&M = the average annual operating and maintenance expenses associated with serving an additional Customer, including customer accounting, billing and collection, wastewater treated, power purchased, chemicals, and other variable costs based on the current total Company level of such costs, as well as any costs particular to the specific needs of the Bona Fide Service Applicant.

I = the Company's current debt ratio multiplied by its weighted cost of long-term debt; and

D = the Company's depreciation accrual rate for Account No. 360 (Collection Sewers – Force) or 361 (Collection Sewers – Gravity).

Customer Advance: shall mean (1) the Estimated Cost of the wastewater Main extension less (2) the Company Contribution.

Line extensions to Bona Fide Service Applicants shall be funded without Customer Advance where the annual revenue from the line extension will equal or exceed the Company's annual line extension costs. If the annual revenue from the line extension will not equal or exceed the Company's annual line extension costs, a Bona Fide Service Applicant may be required to provide a Customer Advance to the Company's cost of construction for the line extension.

Where a Customer Advance is required, and the Bona Fide Service Applicant is unable to advance the entire amount due, the Company, at its option, must either (1) allow the Bona Fide Service Applicant to pay the advance ratably over a period of not less than three years or (2) assist the Bona Fide Service Applicant in obtaining the necessary financing from an appropriate lending institution so that the Bona Fide Service Applicant can deposit the entire amount due. If the Company chooses option (1), it may require that up to one-third of the total advance be deposited prior to extending its facilities and may recover from the Bona Fide Service Applicant, over the payment term selected, its costs of financing the construction by applying to the amount outstanding interest charges calculated at the then-prevailing residential mortgage lending rate specified by the Secretary of Banking in accordance with the act of January 30, 1974 (P.L. 13, No. 6), known as the Loan Interest and Protection Law.

RULES AND REGULATIONS**SECTION I – MAIN EXTENSIONS (cont'd)**

Special Utility Service: shall mean residential or business service which exceeds that required for ordinary residential purposes. By way of illustration and not limitation, Special Utility Service shall include: the installation of facilities such as oversized mains, lift stations, wastewater treatment facility (“WWTF”) expansion, etc., as necessary to handle increased flows, hydraulic loading and / or organic loading, or service to large wastewater producing commercial and industrial facilities. An otherwise Bona Fide Service Applicant requesting service which includes a “Special Utility Service” component is entitled to a Bona Fide Service Applicant status, including the corresponding Company contribution toward the costs of the line extension which does not meet the Special Utility Service criteria.

Builder Initiated Main Extensions: In the event any Main extension is requested or required to provide service to newly constructed structure(s) to be constructed in the future on existing or subdivided lots, or to preexisting non-Residential Structures except as provided below, the Builder shall be required to install the wastewater Main and service lines through a pre-qualified contractor retained by the Builder and to pay all costs related thereto. At the sole discretion of the Company, the Company may undertake construction of facilities otherwise subject to this Rule, in which event, an Extension Agreement shall be applicable except that the Builder will retain financial responsibility for the installation of the wastewater Main, service lines and appurtenances as specified herein.

Under the provisions of this Rule, prior to construction, the Builder must enter into an Extension Agreement, in a form acceptable to the Company, detailing the terms and conditions under which the Company will accept, and provide service through, facilities constructed by Builder. All construction costs, whether initially incurred by the Company or the Builder, related to the Main extension shall be the responsibility of the Builder. The Extension Agreement shall contain, at a minimum, the following terms and conditions:

1. Main and service line installation work shall be performed in accordance with the specifications and conditions of the Company.
2. All costs of material and installation required to serve Builder's lots shall be the responsibility of Builder. Builder shall contract directly with a pre-qualified contractor, recognized and approved by the Company, for all Main and service line installation work, and all appurtenances required to serve the project.
3. Any specialty material required to interconnect with the Company's existing facilities shall be provided by the Company.
4. Any construction involving preexisting facilities of the Company, including but not limited to relocation of existing facilities and connections of Mains or services with existing facilities, shall be performed only by the Company unless Company approves this work to be completed by Builder's contractor.
5. Builder's estimate of the cost of construction must be acceptable to the Company. Estimates which appear to be understated may be rejected.
6. Builder shall obtain all necessary permits from federal, state and local authorities. If any of these authorities require the Company to obtain such permits, the Company shall apply for the permits.
7. All construction shall be subject to inspection by Company personnel. No trenches shall be backfilled prior to approval from Company inspectors.

RULES AND REGULATIONS**SECTION J – WAIVERS**

The Company may, at its sole discretion, waive any of the Rules and Regulations contained herein that operate for the benefit of the Company; provided, that no such waiver will be valid unless in writing and signed by an authorized representative of the Company, and provided that no waiver will be allowed where the waiver would constitute a violation of the Public Utility Code, the regulations of the Commission or of any other applicable statute, law or regulation.

SECTION K – AMENDMENT OF COMMISSION REGULATIONS

Whenever Commission regulations in Title 52 of the Pennsylvania Code are duly amended in such a way as would produce a difference between Commission regulations and this Tariff, the Tariff is deemed to be amended so as to be consistent with the amendments to the regulations, except that if application of the amendment to Title 52 is discretionary, this Tariff will remain unchanged.

SECTION L – PRIVILEGE TO INVESTIGATE/RIGHT TO ACCESS

The Company shall have the right by its employees to have access at all reasonable times to all parts of any Premises connected with the Company's System, including meters, Service Connections and other Property owned by it on the Premises of the Customer for the purpose of examining and inspecting the connections and fixtures, including the water and/or wastewater metering arrangement, or for disconnecting service for any proper cause or for purposes of replacement, maintenance, operation or repair thereof. The existing ground grade over any Sanitary Sewer in the utilities right of way shall not be changed nor shall any manhole be covered with earth and no shrubbery or trees be placed over Sanitary Sewer lines or facilities.

RULES AND REGULATIONS**SECTION M – INDUSTRIAL AND COMMERCIAL SERVICE LIMITATIONS**

Pretreatment: At the Customer's or owner of the Property's (defined as "User" within this Section M) expense, all industrial and commercial waste proposed for discharge into the wastewater system shall be studied to determine the degree of Pretreatment, if any, necessary in order that the Waste will not adversely affect the Company's System. The Company will have the authority to properly control any Waste discharged into the Company's System by regulating the rate of any Waste discharged into the Company's System by requiring necessary Pretreatment, and excluding certain Waste, if necessary, to protect the integrity of the Company's System.

Customer Limitations: Users specifically agree that service applies exclusively for domestic/household sewage. If any User discharges industrial or commercial Waste that:

- The existing wastewater treatment plant is unable to satisfactorily treat; or,
- Is not in compliance with discharge permit standards, disrupts the normal functioning of the existing wastewater treatment plant; or
- Requires the utilization of more wastewater treatment plant capacity per gallon of effluent than that required by average typical domestic wastewater.

Then the User shall provide, at the User's own expense, such Pretreatment as may be necessary before such Waste is discharged into the Company's System. No commercial or industrial Waste, whether pretreated or not, may be discharged without prior written authorization from the Company.

Company Limitations: The Company will not be liable nor bound to increase wastewater treatment plant operations to accommodate industrial or commercial Waste.

Specific Dangers: In general, any Waste will be considered harmful to the Company's System if it may cause any of the following damaging effects:

- Chemical reaction either directly or indirectly with the materials of construction of the Company's System in such a manner as to impair the strength or durability of the sewer structures;
- Mechanical action that will destroy the sewer structures;
- Restriction of the hydraulic capacity of the sewer structures;
- Restriction of the normal inspection or maintenance of the sewer structures;
- Danger to public health and safety; or
- Obnoxious condition contrary to public interest.

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Current and Proposed Rates

		RZ-1 - Meter Size			RZ-1 - EDU		
		Media Division			Bridlewood and Eagle Rock Divisions		
		Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
Non-Residential							
EDU Charge		\$ 31.00	\$ 47.35	52.7%	\$ 31.00	\$ 47.35	52.7%
Meter Size Charges					Per EDU		
5/8	1	31.00	47.35	52.7%	31.00	47.35	52.7%
3/4	1.5	46.50	71.03	52.7%	31.00	47.35	52.7%
1	2.5	77.50	118.38	52.7%	31.00	47.35	52.7%
1-1/2	5	155.00	236.75	52.7%	31.00	47.35	52.7%
2	8	248.00	378.80	52.7%	31.00	47.35	52.7%
3	15	465.00	710.25	52.7%	31.00	47.35	52.7%
4	25	775.00	1,183.75	52.7%	31.00	47.35	52.7%
6	50	1,550.00	2,367.50	52.7%	31.00	47.35	52.7%
8	80	2,480.00	3,788.00	52.7%	31.00	47.35	52.7%
10	115	3,565.00	5,445.25	52.7%	31.00	47.35	52.7%
Flat Rate Customer Charges							
		61.40	93.78	52.7%	61.40	93.78	52.7%
Consumption Charges:							
1st block		0.7600	1.1608	52.7%	0.7600	1.1608	52.7%
2nd block							
3rd block							
Block Size (100 gallons)	First Over						
SPECIAL CHARGES							
Customer Charges:	Media Division	31.00	47.35	52.7%	Bridlewood Apartment Complex		
					13,323.80	20,350.26	52.7%
					217 EDU's		
					Children's World Daycare		
					429.80	656.46	52.7%
					7 EDU's		
Consumption Charges:							
	SPECIAL CHARGES						
All Usage		0.7600	0.9598	26.3%			

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RZ-1A					RZ-1B		
Treasure Lake, Village at Valley Forge and Bunker Hill Divisions					Penn Township Division		
Current Rates			Proposed Rates	Change	Current Rates	Proposed Rates	Change
Non-Residential							
EDU Charge	\$	31.00	\$ 47.35	52.7%	31.00	47.35	52.7%
	Meter Size Charges				Per EDU		
5/8		31.00	47.35	52.7%	67.50	47.35	-29.9%
3/4		31.00	47.35	52.7%	67.50	47.35	-29.9%
1		31.00	47.35	52.7%	67.50	47.35	-29.9%
1-1/2		62.00	94.70	52.7%	67.50	47.35	-29.9%
2		99.20	151.52	52.7%	67.50	47.35	-29.9%
3		186.00	284.10	52.7%	67.50	47.35	-29.9%
4		310.00	473.50	52.7%	67.50	47.35	-29.9%
6		500.00	763.71	52.7%	67.50	47.35	-29.9%
8			-		67.50	47.35	-29.9%
10			-		67.50	47.35	-29.9%
Flat Rate Customer Charges		56.20	93.78	66.9%	80.00	93.78	17.2%
Consumption Charges:					Allowance Residential Only		
1st block		0.6300	1.1608	84.3%	-	1.1608	
2nd block					1.0000	1.1608	16.1%
3rd block							
Block Size (100 gallons)							
	First				10	10	0.0%
	Over						
SPECIAL CHARGES							
Customer Charges:							

Consumption Charges:
All Usage

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RZ-2				RZ-2			RZ-3		
Emlenton, Rivercrest, and White Haven (Kidder) Divisions				Pinecrest Division			Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stoney Creek, Thornhurst, and Willistown Woods Divisions		
	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
Non-Residential									
EDU Charge	\$ 36.00	\$ 54.95	52.6%				\$ 46.00	\$ 65.20	41.7%
	Meter Size Charges			Meter Size Charges			Meter Size Charges		
5/8	36.00	54.95	52.6%	-	-	-	46.00	65.20	41.7%
3/4	54.00	82.42	52.6%	-	-	-	69.00	97.80	41.7%
1	90.00	137.37	52.6%	-	-	-	115.00	163.00	41.7%
1-1/2	180.00	274.73	52.6%	-	-	-	230.00	326.00	41.7%
2	288.00	439.57	52.6%	-	-	-	368.00	521.60	41.7%
3	540.00	824.20	52.6%	-	-	-	690.00	978.00	41.7%
4	900.00	1,373.67	52.6%	-	-	-	1,150.00	1,630.00	41.7%
6	1,800.00	2,747.34	52.6%	-	-	-	2,300.00	3,260.00	41.7%
8	2,880.00	4,395.75	52.6%	-	-	-	3,680.00	5,216.00	41.7%
10	4,140.00	6,318.88	52.6%	-	-	-	5,290.00	7,498.00	41.7%
Fiat Rate Customer Charges									
	68.40	100.00	46.2%				80.00	113.00	41.3%
Consumption Charges:									
1st block	0.8100	1.2363	52.6%	3.0000	3.0000	0.0%	0.8500	1.2048	41.7%
2nd block									
3rd block									
Block Size (100 gallons)									
	First								
	Over								
SPECIAL CHARGES									
Customer Charges:									
	Emlenton Division (First 20 EDU)			Flat Rate - Various Divisions			Woodloch Springs		
	68.40	100.00	46.2%				71.50	113.00	58.0%
	Additional Charge - After 20 EDU						Woodloch Springs		
	34.20	50.00	46.2%				282.21	NA	
	Bridgeview Apartments								
	1,915.20	2,800.00	46.2%						
Consumption Charges:							SPECIAL CHARGES		
All Usage							Woodloch Springs - Clubhouse/Pool		
							0.1200	0.2590	115.8%

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RZ-4				RZ-5				SEASONAL RZ-6		
Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Divisions				Avon Grove School, East Bradford, Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock* Divisions				Masthope Division		
Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change
Non-Residential										
EDU Charge	\$ 62.00	\$ 84.60	36.5%	\$ 74.00	\$ 97.20	31.4%		\$ 39.64	\$ 58.50	47.6%
	Meter Size Charges			Meter Size Charges				Per EDU		
5/8	62.00	84.60	36.5%	74.00	97.20	31.4%		39.64	58.50	47.6%
3/4	93.00	126.90	36.5%	111.00	145.80	31.4%		39.64	58.50	47.6%
1	155.00	211.50	36.5%	185.00	243.00	31.4%		39.64	58.50	47.6%
1-1/2	310.00	423.00	36.5%	370.00	486.00	31.4%		39.64	58.50	47.6%
2	496.00	676.80	36.5%	592.00	777.60	31.4%		39.64	58.50	47.6%
3	930.00	1,269.00	36.5%	1,110.00	1,458.00	31.4%		39.64	58.50	47.6%
4	1,550.00	2,115.00	36.5%	1,850.00	2,430.00	31.4%		39.64	58.50	47.6%
6	3,100.00	4,230.00	36.5%	3,700.00	4,860.00	31.4%		39.64	58.50	47.6%
8	4,960.00	6,768.00	36.5%	5,920.00	7,776.00	31.4%		39.64	58.50	47.6%
10	7,130.00	9,729.00	36.5%	8,510.00	11,178.00	31.4%		39.64	58.50	47.6%
Flat Rate Customer Charges	100.00	131.00	31.0%	112.40	147.64	31.4%		43.64	67.00	53.5%
Consumption Charges:										
1st block	0.9500	1.2457	31.1%	0.9600	1.2610	31.4%		0.1000	0.2710	171.0%
2nd block										
3rd block										
Block Size (100 gallons)										
	First									
	Over									
SPECIAL CHARGES										
Customer Charges:				Newlin Geen Division						
				110.00	97.20	-11.6%				
				Sage Hill Division - Unmetered						
				180.00	147.64	-18.0%				
				Avon Grove School - Flat Rate						
				\$ 8,281.25	\$ 10,925.36	31.9%				
Consumption Charges:				SPECIAL CHARGES						
				Newlin Geen Division						
All Usage				0.7500	1.2610	68.1%				
				East Brandywine Twp						
				0.7740	1.2610	62.9%				

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RZ-7					RZ-8				RZ-9				RZ-10			
Limerick Division					East Bradford Division				Cheltenham Township Division				East Norriton, Whitpain Division			
Current Rates					Current Rates				Current Rates				Current Rates			
Proposed Rates					Proposed Rates				Proposed Rates				Proposed Rates			
Change					Change				Change				Change			
Non-Residential					Residential											
EDU Charge																
\$ 28.10 \$ 41.39 47.3%					\$ 26.00 \$ 56.62 117.8%				\$ 20.89 \$ 31.85				\$ 34.94			
Per EDU					Commercial				Per EDU				Per EDU			
5/8	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94	65.7%	
3/4	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
1	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
1-1/2	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
2	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
3	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
4	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
6	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
8	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
10	28.10	41.39	47.3%		26.00	40.25	54.8%		20.89	31.85	52.5%		21.08	34.94		
Flat Rate Customer Charges																
28.33 60.00 111.8%					68.09 102.90 51.1%				60.73				38.53 64.89 68.4%			
					52.72 102.90 95.2%											
Monthly					Allowance								Allowance			
Allowance - 2,493 gallons (KG)																
Consumption Charges:																
1st block					- 0.8940				- 1.1530				- 0.7590			
2nd block					0.6460 0.8940 38.4%				0.6900 1.1530 67.1%				0.6540 0.7590 16.1%			
3rd block																
Block Size (100 gallons)																
First					20 20 0.0%								13.33 13.33 0.0%			
Over																
					Birmingham											
					68.09 100.00											
SPECIAL CHARGES					NonResidential (First 10 EDU)								SPECIAL CHARGES - WHITPAIN			
Customer Charges:					68.40 102.90 50.4%								Residential - Under 6,666 Gals.			
					Additional Charge - After 10 EDU								31.66			
					34.20 102.90 200.9%								Residential - Over 6,666 Gals.			
													39.57			
													NonResidential - Up to 4,000 Gals.			
													56.00			
													NonResidential - Over 4,000 Gals.			
													Allowance			
													- 0.7590 #DIV/0!			
Consumption Charges:													0.8000 0.7590 -5.1%			
All Usage																

Current and Proposed Rates

All Usage

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RZ-1 - Meter Size					RZ-1 - EDU							
Media Division					Bridlewood and Eagle Rock Divisions							
		Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change					
Residential												
EDU Charge		\$	31.00	\$	48.20	55.5%	\$	31.00	\$	48.20	55.5%	
Meter Size Charges					Per EDU							
	5/8	1	31.00	48.20	55.5%		31.00	48.20	55.5%			
	3/4	1.5	46.50	72.30	55.5%		31.00	48.20	55.5%			
	1	2.5	77.50	120.50	55.5%		31.00	48.20	55.5%			
	1-1/2	5	155.00	241.00	55.5%		31.00	48.20	55.5%			
	2	8	248.00	385.60	55.5%		31.00	48.20	55.5%			
	3	15	465.00	723.00	55.5%		31.00	48.20	55.5%			
	4	25	775.00	1,205.00	55.5%		31.00	48.20	55.5%			
	6	50	1,550.00	2,410.00	55.5%		31.00	48.20	55.5%			
	8	80	2,480.00	3,856.00	55.5%		31.00	48.20	55.5%			
	10	115	3,565.00	5,543.00	55.5%		31.00	48.20	55.5%			
Flat Rate Customer Charges												
			61.40	95.47	55.5%				61.40	95.47	55.5%	
Consumption Charges:												
1st block			0.7600	1.1817	55.5%	0.7600		1.1817	55.5%			
2nd block												
3rd block												
Block Size (100 gallons)												
		First										
		Over										
SPECIAL CHARGES												
Customer Charges:												
		Media Division	31.00	48.20	55.5%	Bridlewood Apartment Complex			13,323.80	20,716.99	55.5%	
										217 EDU's		
							Children's World Daycare			429.80	668.29	55.5%
										7 EDU's		
Consumption Charges:												
SPECIAL CHARGES												
All Usage			0.7600	0.9598	26.3%							

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Current and Proposed Rates

RZ-1A				RZ-1B				
Treasure Lake, Village at Valley Forge and Bunker Hill Divisions				Penn Township Division				
	Current Rates	Proposed Rates	Change		Current Rates	Proposed Rates	Change	
Residential								
EDU Charge	\$	31.00	\$ 48.20	55.5%		31.00	48.20	55.5%

Residential
EDU Charge

RZ-2				RZ-2				RZ-3				
Emlenton, Rivercrest, and White Haven (Kidder)				Pinecrest Division				Beech Mountain Lakes, Deerfield Knoll, Laurel Lakes, Links at Gettysburg, Stoney Creek, Thornhurst, and Willistown Woods Divisions				
Divisions												
Current Rates				Proposed Rates				Current Rates				
Proposed Rates				Change				Proposed Rates				
Change								Change				
Residential												
EDU Charge	\$	36.00	\$	55.93	55.4%			\$	46.00	\$	66.37	44.3%
										</		

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Current and Proposed Rates

		RZ-4			RZ-5			SEASONAL RZ-6		
		Honeycroft Village, Lake Harmony, New Daleville, Peddlers View, Tobyhanna Township, Twin Hills Divisions			Avon Grove School, East Bradford, Little Washington, Greens at Penn Oaks, Sage Hill and Plumsock* Divisions			Masthope Division		
		Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
Residential										
EDU Charge		\$ 62.00	\$ 86.12	38.9%	\$ 74.00	\$ 98.95	33.7%	\$ 39.64	\$ 59.55	50.2%
	Meter Size Charges				Meter Size Charges			Per EDU		
	5/8	62.00	86.12	38.9%	74.00	98.95	33.7%	39.64	59.55	50.2%
	3/4	93.00	129.18	38.9%	111.00	148.43	33.7%	39.64	59.55	50.2%
	1	155.00	215.30	38.9%	185.00	247.38	33.7%	39.64	59.55	50.2%
	1-1/2	310.00	430.60	38.9%	370.00	494.75	33.7%	39.64	59.55	50.2%
	2	496.00	688.96	38.9%	592.00	791.60	33.7%	39.64	59.55	50.2%
	3	930.00	1,291.80	38.9%	1,110.00	1,484.25	33.7%	39.64	59.55	50.2%
	4	1,550.00	2,153.00	38.9%	1,850.00	2,473.75	33.7%	39.64	59.55	50.2%
	6	3,100.00	4,306.00	38.9%	3,700.00	4,947.50	33.7%	39.64	59.55	50.2%
	8	4,960.00	6,889.60	38.9%	5,920.00	7,916.00	33.7%	39.64	59.55	50.2%
	10	7,130.00	9,903.80	38.9%	8,510.00	11,379.25	33.7%	39.64	59.55	50.2%
	Flat Rate Customer Charges									
		100.00	\$ 133.35	33.4%	112.40	150.30	33.7%	43.64	\$ 70.59	61.7%
Consumption Charges:										
	1st block	0.9500	1.2681	33.5%	0.9600	1.2837	33.7%	0.1000	0.2759	175.9%
	2nd block									
	3rd block									
Block Size (100 gallons)	First Over									
SPECIAL CHARGES										
Customer Charges:					Newlin Geen Division					
					110.00	98.95	-10.0%			
					Sage Hill Division - Unmetered					
					180.00	150.30	-16.5%			
					Avon Grove School - Flat Rate					
					\$ 8,281.25	\$ 11,122.05	34.3%			
Consumption Charges:					SPECIAL CHARGES					
	All Usage				Newlin Geen Division					
					0.7500	1.2837	71.2%			
					East Brandywine Twp					
					0.7740	1.2837	65.9%			

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Current and Proposed Rates

			RZ-7			RZ-8			RZ-9			RZ-10		
			Limerick Division			East Bradford Division			Cheltenham Township Division			East Norriton, Whitpain Division		
			Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change	Current Rates	Proposed Rates	Change
Residential						Residential								
EDU Charge			\$ 28.10	\$ 42.13	49.9%	\$ 26.00	\$ 57.61	121.6%	\$ 20.89	\$ 32.42		\$ 35.57		
Per EDU									Per EDU			Per EDU		
5/8			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	68.7%
3/4			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
1			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
1-1/2			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
2			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
3			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
4			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
6			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
8			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
10			28.10	42.13	49.9%				20.89	32.42	55.2%	21.08	35.57	
Flat Rate Customer Charges			28.33	\$ 61.08	115.6%	68.09	104.75	53.8%		61.82		38.53	\$ 66.06	71.5%
						52.72	104.75	98.7%						
			Monthly			Allowance			Allowance			Allowance		
Consumption Charges:			Allowance - 2,493 gallons (KG)											
1st block			-	0.9101		-	1.1737					\$ 0.7726		
2nd block			0.6460	0.9101	40.9%	0.6900	1.1737	70.1%	0.3910	0.7350	88.0%	0.6540	\$ 0.7726	18.1%
3rd block														
Block Size (100 gallons)														
First						20	20	0.0%				13.33	13.33	0.0%
Over														
						Birmingham	68.09	100.00						
SPECIAL CHARGES												SPECIAL CHARGES - WHITPAIN		
Customer Charges:						NonResidential (First 10 EDU)						Residential - Under 6,666 Gals.		
						68.40			104.75			31.66		
						Additional Charge - After 10 EDU						Residential - Over 6,666 Gals.		
						34.20			104.75			39.57		
												NonResidential - Up to 4,000 Gals.		
												56.00		
												NonResidential - Over 4,000 Gals.		
Consumption Charges:												Allowance		
All Usage												-		
												0.8000		
												0.7726		
												#DIV/0!		
												-3.4%		

SPECIAL CHARGES
Customer Charges:

Consumption Charges:
All Usage

AQUA PENNSYLVANIA, INC.

COMPARISON OF RESIDENTIAL REVENUE - USP

	Revenue	Cacluated Cap Costs	Revenue	Difference	Check
	No USP Recovery	Per Area By Revenue	No USP Recovery		
RATE ZONE 1 -METER SIZE	1,856,055	33,337	1,889,417	33,362	25
RATE ZONE 1 -EDU	1,290,138	23,172	1,313,326	23,188	16
RATE ZONE 1A	2,360,297	42,394	2,402,733	42,436	42
RATE ZONE 1B	816,926	14,673	831,610	14,684	11
RATE ZONE 2	1,985,693	35,665	2,021,350	35,657	(8)
RATE ZONE 3	3,938,278	70,736	4,008,959	70,681	(55)
RATE ZONE 4	3,976,740	71,427	4,048,100	71,360	(67)
RATE ZONE 5	991,545	17,809	1,009,396	17,851	42
RATE ZONE 5 NG	110,366	1,982	112,353	1,987	5
RATE ZONE 6	1,046,454	18,796	1,065,333	18,879	83
WASTEWATER WITHOUT ACQUISITIONS	18,372,492	329,991	18,702,577	330,085	94
RATE ZONE 7	5,151,831	92,533	5,244,278	92,447	(86)
RATE ZONE 8	1,419,263	25,492	1,444,784	25,521	29
RATE ZONE 9	7,363,358	132,254	7,495,531	132,173	(82)
RATE ZONE 10	3,542,568	63,629	3,606,271	63,703	74
RATE ZONE 11	3,584,289	64,378	3,648,489	64,200	(178)
Total	39,433,800	708,277	40,141,929	708,128	(148)
Percentage		1.79600%			

AQUA PENNSYLVANIA INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 2) (3)	Ref.	Adjustment Factor (Schedule 3) (4)	Revenues Under Proposed Rates (5)=(3)X(4) (5)	Pro Forma Adjustments Proposed Rates (Schedule 2) (6)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6) (7)	Proposed Increase (8)=(7)-(2) (8)	Percent Increase (9)
METERED SALES									
Residential	\$ 13,419,396	\$ 18,702,577	Sch. 2	0.99508753	\$ 18,610,701	\$ 234,245	\$ 18,844,946		
Discount to Residential							\$ (329,991)		
Net Revenue							\$ 18,514,955	\$ 5,095,559	38.0%
Commercial	3,833,635	5,322,749	Sch. 2	0.99988844	5,322,155	-	5,322,155	1,488,520	38.8%
Industrial	743	1,081	Sch. 2	0.99988701	1,081	-	1,081	338	45.4%
Public Authority	141,718	206,253	Sch. 2	0.99948458	206,147	-	206,147	64,428	45.5%
Third Party Sales	1,280,031	1,439,251	Sch. 2	0.99907624	1,437,921	-	1,437,921	157,890	12.3%
Total Sales Related to Wastewater	\$ 18,675,524	\$ 25,671,911			\$ 25,578,006	\$ 234,245	\$ 25,482,260	\$ 6,806,736	36.4%
Contract Revenues	312,754	298,187		1.01363557	302,253	29,547	331,800	19,046	6.1%
Other Operating Revenues	23,436	23,436			23,436	8,385 (b)	31,821	8,385	35.8%
Total Wastewater Revenue	\$ 19,011,714	\$ 25,993,535			\$ 25,903,695	\$ 272,177	\$ 25,845,881	\$ 6,834,167	35.9%

(a) Excludes DSIC and Unbilled Revenue.

(b) Includes increase to forfeited discounts based on proposed revenues.

Revenue per Order \$ 25,849,065

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PROPOSED RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Rate Zone PUC Pg.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)
RZ 1 - Media Division	1	\$ 1,889,417	\$ 1,389,843	\$ 1,081	\$ 206,253		\$ 3,486,594
RZ 1 - Bridlewood, Eagle Rock	1	1,313,326	64,976				1,378,302
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill	1A	2,402,733	1,128,615				3,531,348
RZ 1B - Penn Township	1B	831,610	494,702				1,326,312
RZ 2 - Emlenton, Rivercrest, White Haven	2	2,021,350	610,900				2,632,250
RZ 2 - Pinecrest	2		65,646				65,646
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laure	3	4,008,959	376,813				4,385,772
RZ 3 - Woodloch Springs	3 - WS		16,272				16,272
RZ 4 - Honeycroft Village, Lake Harmony, New Dale	4	4,048,100	1,005,354				5,053,454
RZ 5 - Avon Grove School, East Bradford, Little Wa	5	1,009,396	146,645				1,156,041
RZ 5 - Newlin Green	5-NG	112,353					112,353
RZ 6 - Masthope Division	6	1,065,333	22,983				1,088,316
Total Sales Related to Wastewater		<u>\$ 18,702,577</u>	<u>\$ 5,322,749</u>	<u>\$ 1,081</u>	<u>\$ 206,253</u>	<u>\$ -</u>	<u>\$ 24,232,660</u>
Contract Sales			298,187				298,187
Total Sales with Contract		<u>\$ 18,702,577</u>	<u>\$ 5,620,936</u>	<u>\$ 1,081</u>	<u>\$ 206,253</u>	<u>\$ -</u>	<u>\$ 24,530,847</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PROPOSED RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Rate Zone PUC Pg.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)
<u>Third Party Revenues</u>							
Southdown Homes						\$ 152,650	152,650
East Brandywine						1,787	1,787
Foster Township						270,222	270,222
Dennison						58,023	58,023
Upper Providence						619,092	619,092
Elwyn						112,368	112,368
Penn Lake						135,940	135,940
East Side						89,169	89,169
Total Third Party Revenues		-	-	-	-	1,439,251	1,439,251
Total Sales with Contract and Third Party		18,702,577	5,620,936	1,081	206,253	1,439,251	25,970,098
<u>Pro Forma Adjustments</u>							
<u>Customer Growth/Decline Adjustments</u>							
RZ 1 - Media Division		(1,923)					(1,923)
RZ 1 - Bridlewood, Eagle Rock		35,170					35,170
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill							-
RZ 1B - Penn Township		29,612					29,612
RZ 2 - Emlenton, Rivercrest, White Haven		9,061					9,061
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Link		69,454					69,454
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddler		50,721					50,721
RZ 5 - Avon Grove School, East Bradford, Little Washington, Gre		(1,681)					(1,681)
RZ 6 - Masthope Division		43,831					43,831
Subtotal Adjustments		234,245	-	-	-	-	234,245
<u>Contract Sales Adjustments</u>							
Contract Sales - Commercial			29,547				29,547
		-	29,547	-	-	-	29,547
Total Pro Forma Revenues Under Proposed Rates		\$ 18,936,822	\$ 5,650,483	\$ 1,081	\$ 206,253	\$ 1,439,251	\$ 26,233,890

AQUA PENNSYLVANIA INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Adjustment to Per Books Revenue 3/31/2021 (3)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (4)	Bill Analysis Revenues, Present Rates (Schedule 4) (5)	Ref.	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(5)X(6)	Pro Forma Adjustments Present Rates (Schedule 4 and 6) (8)	Add Back Annualized DSIC Revenue (9)	Total Pro Forma Revenue Present Rates (10)=(7)+(8)+(9)
METERED SALES										
Residential	\$ 12,843,779	\$ (219,836) (b)	\$ 12,623,943	\$ 12,686,264	Sch. 4	0.99508753	\$ 12,623,943	\$ 161,140	\$ 634,313	\$ 13,419,396
Commercial	3,653,956	(2,895) (b)	3,651,062	3,651,469	Sch. 4	0.99988844	3,651,062	-	182,573	3,833,635
Industrial	708		708	708	Sch. 4	0.99988701	708	-	35	743
Public Authority	134,966		134,966	135,036	Sch. 4	0.99948458	134,966	-	6,752	141,718
Third Party Sales	1,094,369		1,094,369	1,095,381	Sch. 4	0.99907624	1,094,369	185,662		1,280,031
Total Sales Related to Wastewater	\$ 17,727,779	\$ (222,731)	\$ 17,505,048	\$ 17,568,858			\$ 17,505,048	\$ 346,802	\$ 823,674	\$ 18,675,524
Contract Revenues	284,903		284,903	281,070		1.01363557	284,903	27,851		312,754
Other Operating Revenues	23,436		23,436	23,436			23,436			23,436
Total Wastewater Revenue	\$ 18,036,118	\$ (222,731)	\$ 17,813,387	\$ 17,873,364		0.99664432	\$ 17,813,387	\$ 374,653	\$ 823,674	\$ 19,011,713

(a) Excludes DSIC, STAS and Unbilled Revenue.
(b) Adjusted to eliminate North Heidelberg Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PRESENT RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division	Div. Ref.	Residential	Commercial	Industrial	Public	Bulk Sales	Total Sales
(1)		(2)	(3)	(4)	(5)	(6)	(7)
RZ 1 - Media Division	1	\$ 1,215,176	\$ 909,951	\$ 708	\$ 135,036		\$ 2,260,871
RZ 1 - Bridlewood, Eagle Rock	1	844,664	42,540				887,204
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill	1A	1,427,269	632,577				2,059,846
RZ 1B - Penn Township	1B	520,083	438,977				959,060
RZ 2 - Emlenton, Rivercrest, White Haven	2	1,327,924	410,612				1,738,536
RZ 2 - Pinecrest	2		65,646				65,646
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lake	3	2,780,481	257,372				3,037,853
RZ 3 - Woodloch Springs	3 - WS		8,801				8,801
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, I	4	3,018,571	763,345				3,781,916
RZ 5 - Avon Grove School, East Bradford, Little Washingt	5	771,916	111,206				883,122
RZ 5 - Newlin Green	5-NG	96,334					96,334
RZ 6 - Masthope Division	6	683,846	10,442				694,288
Total		<u>\$ 12,686,264</u>	<u>\$ 3,651,469</u>	<u>\$ 708</u>	<u>\$ 135,036</u>	<u>\$ -</u>	<u>\$ 16,473,477</u>
Contract Sales			281,070				281,070
Total Sales with Contract		\$ 12,686,264	\$ 3,932,539	\$ 708	\$ 135,036	\$ -	16,754,547

AQUA PENNSYLVANIA, INC.
WASTEWATER WITHOUT ACQUISITIONS
SUMMARY OF APPLICATION OF PRESENT RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)
<u>Third Party Revenues</u>							
Southdown Homes						\$ 84,692	84,692
East Brandywine						1,404	1,404
Foster Twp						170,172	170,172
Dennison						36,540	36,540
Upper Providence						543,032	543,032
Elwyn						98,561	98,561
Penn Lake						85,608	85,608
East Side						75,372	75,372
Total Third Party Revenues		-	-	-	-	1,095,381	1,095,381
Total Sales with Contract and Third Party		12,686,264	3,932,539	708	135,036	1,095,381	17,849,928
Plus 5% DSIC excluding Ineligible Service Areas		634,313	182,573	35	6,752		823,674
Total Present Wastewater Revenue		13,320,577	4,115,112	743	141,788	1,095,381	18,673,602
<u>Pro Forma Adjustments</u>							
<u>Customer Growth/Decline Adjustments</u>							
RZ 1 - Media Division		(1,236)					(1,236)
RZ 1 - Bridlewood, Eagle Rock		22,619					22,619
RZ 1A - Treasure Lake, Villiage at VF, Bunker Hill							-
RZ 1B - Penn Township		21,594					21,594
RZ 2 - Emlenton, Rivercrest, White Haven		5,832					5,832
RZ 3 - Beech Mountan Lakes, Deerfield Knoll, Laurel Lakes, Links at C		48,335					48,335
RZ 4 - Honeycroft Village, Lake Harmony, New Daleville, Peddlers Vie		37,016					37,016
RZ 5 - Avon Grove School, East Bradford, Little Washington, Greens e		(1,257)					(1,257)
RZ 6 - Masthope Division		28,237					28,237
		161,140	-	-	-	-	161,140
<u>Contract Sales/3rd Party Adjustments</u>							
Contract Sales - Commercial			27,851				27,851
3rd Party Sales - Bulk						185,662	185,662
		-	27,851	-	-	185,662	213,513
Total Pro Forma Revenues							
Under Present Rates		\$ 13,481,717	\$ 4,142,963	\$ 743	\$ 141,788	\$ 1,281,043	\$ 19,048,254

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
MEDIA DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	19,861	-	\$ 31.00	\$ 615,694	\$ 48.20	\$ 957,305
3/4	84	-	46.50	3,925	72.30	6,102
1	419	-	77.50	32,465	120.50	50,477
1-1/2	108	-	155.00	16,740	241.00	26,028
2	12	-	248.00	2,976	385.60	4,627
Subtotal	20,484	-		671,800		1,044,539
1st block	-	714,968	0.7600	\$ 543,376	1.1817	\$ 844,878
Subtotal	-	714,968		543,376		844,878
Total Metered	20,484	714,968		\$ 1,215,176		\$ 1,889,417
TOTAL RESIDENTIAL	20,484	714,968		\$ 1,215,176		\$ 1,889,417
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,435	-	\$ 31.00	\$ 75,485	\$ 47.35	\$ 115,297
3/4	48	-	46.50	2,232	71.03	3,409
1	539	-	77.50	41,780	118.38	63,816
1-1/2	322	-	155.00	49,957	236.75	76,305
2	184	-	248.00	45,508	378.80	69,510
3	84	-	465.00	39,060	710.25	59,661
4	48	-	775.00	37,200	1,183.75	56,820
Subtotal	3,660	-		291,222		444,818
1st block	-	596,954	0.7600	\$ 453,685	1.1608	\$ 692,944
Subtotal	-	596,954		453,685		692,944
Total Metered	3,660	596,954		\$ 744,907		\$ 1,137,762
<u>Commercial - Unmetered</u>						
Customer Charge						
Apartment Complex	12	-	\$ 13,323.80	\$ 159,886	\$ 20,350.26	\$ 244,203
Day Care	12	-	429.80	5,158	656.46	7,878
Subtotal	24	-		165,044		252,081
TOTAL COMMERCIAL	3,684	596,954		\$ 909,951		\$ 1,389,843
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 31.00	\$ 372	\$ 47.35	\$ 568
Subtotal	12	-		372		568
1st block	-	442	0.7600	\$ 336	1.1608	\$ 513
Subtotal	-	442		336		513
TOTAL INDUSTRIAL	12	442		\$ 708		\$ 1,081

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
MEDIA DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Public - Monthly</u>						
Customer Charge						
5/8	169	-	\$ 31.00	\$ 5,233	\$ 47.35	\$ 7,993
3/4	12	-	46.50	558	71.03	852
1	108	-	77.50	8,370	118.38	12,785
1-1/2	36	-	155.00	5,580	236.75	8,523
2	24	-	248.00	5,952	378.80	9,091
3	36	-	465.00	16,740	710.25	25,569
4	24	-	775.00	18,755	1,183.75	28,647
Subtotal	409	-		61,188		93,460
1st block		97,168	0.7600	\$ 73,848	1.1608	\$ 112,793
Subtotal	-	97,168		73,848		112,793
TOTAL PUBLIC	409	97,168		\$ 135,036		\$ 206,253
TOTAL DIVISION	24,589	1,409,532		\$ 2,260,871		\$ 3,486,594

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1
BRIDLEWOOD AND EAGLE ROCK DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,286	-	\$ 31.00	\$ 504,863	\$ 48.20	\$ 784,980
3/4	24	-	31.00	744	48.20	1,157
1	37	-	31.00	1,147	48.20	1,783
Subtotal	16,347	-		506,754		787,920
1st block	-	443,649	0.7600	\$ 337,173	1.1817	\$ 524,260
Subtotal	-	443,649		337,173		524,260
Total Metered	16,347	443,649		\$ 843,927		\$ 1,312,180
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 61.40	\$ 737	\$ 95.47	\$ 1,146
TOTAL RESIDENTIAL	16,359	443,649		\$ 844,664		\$ 1,313,326
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	69	-	\$ 31.00	\$ 2,145	\$ 47.35	\$ 3,277
1	222	-	31.00	6,891	47.35	10,526
1-1/2	60	-	31.00	1,860	47.35	2,841
2	199	-	31.00	6,154	47.35	9,399
Subtotal	550	-		17,050		26,043
1st block	-	33,540	0.7600	\$ 25,490	1.1608	\$ 38,933
Subtotal	-	33,540		25,490		38,933
TOTAL COMMERCIAL	550	33,540		\$ 42,540		\$ 64,976
TOTAL DIVISION	16,909	477,189		\$ 887,204		\$ 1,378,302

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1A
TREASURE LAKE, VILLAGE AT VALLEY FORGE, AND BUNKER HILL DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	25,573	-	\$ 31.00	\$ 792,751	\$ 48.20	\$ 1,232,599
3/4	12	-	31.00	372	48.20	578
1	24	-	31.00	744	48.20	1,157
Subtotal	25,609	-		793,867		1,234,334
1st block		828,860	0.6300	\$ 522,182	1.1817	\$ 979,464
Subtotal Consumption		828,860		522,182		979,464
Total Metered	25,609	828,860		\$ 1,316,049		\$ 2,213,798
<u>Residential - Unmetered - Monthly</u>						
Customer Charge Unmetered	1,150	-	\$ 56.20	\$ 64,647	\$ 95.47	\$ 109,819
<u>Bunker Hill - Unmetered - Monthly</u>						
Customer Charge Unmetered	829	-	\$ 56.20	\$ 46,573	\$ 95.47	\$ 79,116
TOTAL RESIDENTIAL	27,588	828,860		\$ 1,427,269		\$ 2,402,733
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	250	-	\$ 31.00	\$ 7,747	\$ 47.35	\$ 11,833
1	42	-	31.00	1,293	47.35	1,974
2	192	-	99.20	19,046	151.52	29,092
3	36	-	186.00	6,696	284.10	10,228
4	126	-	310.00	39,060	473.50	59,661
6	83	-	500.00	41,500	763.71	63,388
Subtotal	729	-		115,342		176,176
1st block		815,638	0.6300	\$ 513,852	1.1608	\$ 946,793
Subtotal Consumption		815,638		513,852		946,793
Total Metered	729	815,638		\$ 629,194		\$ 1,122,969
<u>Commercial - Unmetered</u>						
Customer Charge Unmetered	60	-	\$ 56.20	\$ 3,383	\$ 93.78	\$ 5,646
TOTAL COMMERCIAL	789	815,638		\$ 632,577		\$ 1,128,615
TOTAL DIVISION	28,376	1,644,498		\$ 2,059,846		\$ 3,531,348

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 1B
 PENN TOWNSHIP DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	9,161	-	\$ 31.00	\$ 283,976	\$ 48.20	\$ 441,536
1	193	-	31.00	5,977	48.20	9,293
Subtotal	9,353	-		289,953		450,829
Allowance (1,000 Gallons)		92,102	-	\$ -	1.1817	\$ 108,837
1st block		230,130	1.0000	230,130	1.1817	271,944
Subtotal	-	322,232		230,130		380,781
Total Metered	9,353	322,232		\$ 520,083		\$ 831,610
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	-	-	\$ 80.00	\$ -	\$ 95.47	\$ -
TOTAL RESIDENTIAL	9,353	322,232		\$ 520,083		\$ 831,610
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	180	-	\$ 67.50	\$ 12,170	\$ 47.35	\$ 8,537
3/4	22	-	67.50	1,499	47.35	1,051
1	88	-	67.50	5,933	47.35	4,162
1 1/2	81	-	67.50	5,461	47.35	3,831
2	44	-	67.50	2,936	47.35	2,060
3	9	-	67.50	621	47.35	436
4	9	-	67.50	621	47.35	436
6	24	-	67.50	1,620	47.35	1,136
8	23	-	67.50	1,546	47.35	1,084
Subtotal	480	-		32,407		22,733
1st block		404,650	1.0000	\$ 404,650	1.1608	\$ 469,718
Subtotal Consumption	-	404,650		404,650		469,718
Total Metered	480	404,650		\$ 437,057		\$ 492,451
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	24	-	\$ 80.00	\$ 1,920	\$ 93.78	\$ 2,251
TOTAL COMMERCIAL	504	404,650		\$ 438,977		\$ 494,702
TOTAL DIVISION	9,857	726,882		\$ 959,060		\$ 1,326,312

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 2
EMLENTON, RIVERCREST AND WHITE HAVEN (KIDDER) DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	10,968	-	\$ 36.00	\$ 394,859	\$ 55.93	\$ 613,457
1	24	-	36.00	864	55.93	1,342
1 1/2	12	-	36.00	432	55.93	671
O	84	-	36.00	3,024	55.93	4,698
Subtotal	11,088	-		399,179		620,168
1st block	-	357,288	0.8100	\$ 289,403	1.2585	\$ 449,647
Subtotal	-	357,288		289,403		449,647
Total Metered	11,088	357,288		\$ 688,582		\$ 1,069,815
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	9,347	-	\$ 68.40	\$ 639,342	\$ 101.80	\$ 951,535
TOTAL RESIDENTIAL	20,435	357,288		\$ 1,327,924		\$ 2,021,350
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	407		\$ 36.00	\$ 14,645	\$ 54.95	\$ 22,352
3/4	36		36.00	1,296	54.95	1,978
1	96		36.00	3,456	54.95	5,275
1 1/2	24		36.00	868	54.95	1,324
8	12		2,880.00	34,560	4,340.80	52,090
Subtotal	575	-		54,825		83,019
1st block	-	148,266	0.8100	\$ 120,095	1.2363	\$ 183,301
Subtotal	-	148,266		120,095		183,301
Total Metered	575	148,266		\$ 174,920		\$ 266,320
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	3,110	-	\$ 68.40	\$ 212,710	\$ 100.00	\$ 310,980
Bridgeview Apartments	12		1,915.20	22,982	2,800.00	33,600
	3,122	-		235,692		344,580
TOTAL COMERCIAL	3,697	148,266		\$ 410,612		\$ 610,900
TOTAL DIVISION	24,132	505,554		\$ 1,738,536		\$ 2,632,250

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 2
PINECREST DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	24		\$ -	\$ -	\$ -	\$ -
2	12		-	-	-	-
4	12		-	-	-	-
Subtotal	48	-		-		-
1st block	-	21,882	3.0000	\$ 65,646	3.0000	\$ 65,646
Subtotal	-	21,882		65,646		65,646
Total Commercial	48	21,882		\$ 65,646		\$ 65,646
TOTAL DIVISION	48	21,882		65,646		65,646

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 3

BEECH MOUNTAIN LAKES, DEERFIELD KNOLL, LAUREL LAKES, LINKS AT GETTYSBURG, STONEY CREEK,
THORNHURST, AND WILLISTOWN WOODS DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	23,821	-	\$ 46.00	\$ 1,095,766	\$ 66.37	\$ 1,581,000
3/4	4	-	46.00	175	66.37	252
1	2,376	-	46.00	109,273	66.37	157,662
1 1/2	12	-	46.00	557	66.37	803
O	12	-	46.00	552	66.37	796
Subtotal	26,224	-		1,206,323.0		1,740,513.0
1st block	-	771,376	0.8500	\$ 655,670	1.2264	\$ 946,015
Subtotal	-	771,376		655,670		946,015
Total Metered	26,224	771,376		\$ 1,861,993		\$ 2,686,528
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	11,352	-	\$ 80.00	\$ 908,192	\$ 115.03	\$ 1,305,867
Special Charges	144	-	71.50	10,296	115.03	16,564
Subtotal	11,496	-		918,488		1,322,431
TOTAL RESIDENTIAL	37,721	771,376		\$ 2,780,481		\$ 4,008,959
<u>Commercial - Monthly</u>						
Customer Charge						
1	24		\$ 46.00	\$ 1,104	\$ 65.20	\$ 1,565
2	972		46.00	44,712	65.20	63,374
3	456		46.00	20,976	65.20	29,731
Subtotal	1,452	-		66,792		94,670
1st block	-	51,420	0.8500	\$ 43,707	1.2048	\$ 61,951
Subtotal	-	51,420		43,707		61,951
Total Metered	1,452	51,420		\$ 110,499		\$ 156,621
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	888	-	\$ 80.00	\$ 71,040	\$ 113.00	\$ 100,344
Special Charges	1,061	-	71.50	75,833	113.00	119,848
Subtotal	1,949	-		146,873		220,192
TOTAL COMERCIAL	3,401	51,420		\$ 257,372		\$ 376,813
TOTAL DIVISION	41,121	822,796		\$ 3,037,853		\$ 4,385,772

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 3
WOODLOCH SPRINGS DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Revised Number of Bills</u> (6)	<u>Proposed Rate</u> (6)	<u>Proposed Revenue</u> (7)
<u>Commercial - Monthly</u>							
Customer Charge							
2	24		\$ 282.21	\$ 6,773	144	\$ 113.00	\$ 16,272
Subtotal	24	-		6,773	144		16,272
1st block	-	16,904	0.1200	\$ 2,028		-	\$ -
Subtotal	-	16,904		2,028			-
Total Metered	24	16,904		\$ 8,801			\$ 16,272
Total Commercial	24	16,904		\$ 8,801	144		\$ 16,272

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 4HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE, PEDDLERS VIEW, TOBYHANNA, AND TWIN HILLS DIVISIONS
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,514	-	\$ 62.00	\$ 403,843	\$ 86.12	\$ 560,951
1	12	-	62.00	744	86.12	1,033
Subtotal	6,526	-		404,587		561,984
1st block	-	289,520	0.9500	\$ 275,044	1.2681	\$ 367,140
Subtotal	-	289,520		275,044		367,140
Total Metered	6,526	289,520		\$ 679,631		\$ 929,124
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	23,389	-	\$ 100.00	\$ 2,338,940	\$ 133.35	\$ 3,118,976
TOTAL RESIDENTIAL	29,915	289,520		\$ 3,018,571		\$ 4,048,100
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	1,007	-	\$ 62.00	\$ 62,409	\$ 84.60	\$ 85,158
1	181	-	62.00	11,203	84.60	15,287
1 1/2	168	-	62.00	10,416	84.60	14,213
3	204	-	62.00	12,648	84.60	17,258
Subtotal	1,559	-		96,676		131,916
1st block	-	84,125	0.9500	\$ 79,919	1.2457	\$ 104,795
Subtotal	-	84,125		79,919		104,795
Total Metered	1,559	84,125		\$ 176,595		\$ 236,711
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	5,868	-	\$ 100.00	\$ 586,750	\$ 131.00	\$ 768,643
TOTAL COMMERCIAL	7,427	84,125		\$ 763,345		\$ 1,005,354
TOTAL DIVISION	<u>37,342</u>	<u>373,645</u>		<u>\$ 3,781,916</u>		<u>\$ 5,053,454</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 5
 AVON GROVE SCHOOL, EAST BRADFORD, LITTLE WASHINGTON, GREENS AT PENN OAKS, SAGE HILL AND PLUMSOCK DIVISIONS
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,311	-	\$ 74.00	\$ 466,977	\$ 98.95	\$ 624,424
3/4	69	-	74.00	5,091	98.95	6,808
1	36	-	74.00	2,664	98.95	3,562
Subtotal	6,415	-		474,732		634,794
1st block		260,893	0.9600	\$ 250,457	1.2837	\$ 334,908
Subtotal		260,893		250,457		334,908
Total Metered	6,415	260,893		\$ 725,189		\$ 969,702
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 112.40	\$ 1,349	\$ 150.30	\$ 1,804
Sage Hill	252	-	180.00	45,378	150.30	37,890
Subtotal	264	-		46,727		39,694
TOTAL RESIDENTIAL	6,679	260,893		\$ 771,916		\$ 1,009,396
<u>Commercial - Monthly</u>						
Customer Charge						
1	30	-	\$ 74.00	\$ 2,220	\$ 97.20	\$ 2,916
3	12	-	370.00	4,477	486.00	5,881
Subtotal	42	-		6,697		8,797
1st block	-	5,348	0.9600	\$ 5,134	1.2610	\$ 6,744
Subtotal		5,348		5,134		6,744
Total Metered	42	5,348		\$ 11,831		\$ 15,541
<u>Commercial - Unmetered</u>						
Customer Charge						
Avon Grove School	12	-	\$ 8,281.25	\$ 99,375	\$ 10,925.36	\$ 131,104
TOTAL COMMERCIAL	54	5,348		\$ 111,206		\$ 146,645
TOTAL DIVISION	6,734	266,241		\$ 883,122		\$ 1,156,041

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 5
NEWLIN GREEN
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Newlin Green - Residential - Monthly</u>						
Customer Charge						
5/8	564	-	\$ 110.00	\$ 62,051	\$ 98.95	\$ 55,818
3/4	12	-	110.00	1,320	98.95	1,187
1	12	-	110.00	1,320	98.95	1,187
	<u>588</u>	<u>-</u>		<u>64,691</u>		<u>58,192</u>
1st block		42,191	0.7500	\$ 31,643	1.2837	\$ 54,161
Subtotal		<u>42,191</u>		<u>31,643</u>		<u>54,161</u>
Total Residential	588	42,191		\$ 96,334		\$ 112,353
TOTAL NEWLIN GREI	588	42,191		\$ 96,334		\$ 112,353

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 6
MASTHOPE DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

<u>Rate Block, 100 Gallons</u>	<u>Number of Bills</u>	<u>Consumption, 100 Gallons</u>	<u>Present Rate</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,432	-	\$ 39.64	\$ 651,380	\$ 59.55	\$ 978,549
3/4	8	-	39.64	317	59.55	476
1	12	-	39.64	476	59.55	715
Subtotal	16,452	-		652,173		979,740
1st block		301,022	0.1000	30,102	0.2759	\$ 83,052
Subtotal		301,022		30,102		83,052.00
Total Metered	16,452	301,022		\$ 682,275		\$ 1,062,792
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	36	-	\$ 43.64	\$ 1,571	\$ 70.59	\$ 2,541
TOTAL RESIDENTIAL	16,488	301,022		\$ 683,846		\$ 1,065,333
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 39.64	\$ 476	\$ 58.50	\$ 702
1 1/2	12	-	39.64	476	58.50	702
2	72	-	39.64	2,854	58.50	4,212
Subtotal	96	-		3,806		5,616
1st block	-	61,118	0.1000	\$ 6,112	0.2710	\$ 16,563
Subtotal		61,118		6,112		16,563
Total Metered	96	61,118		\$ 9,918		\$ 22,179
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	12	-	\$ 43.64	\$ 524	\$ 67.00	\$ 804
TOTAL COMMERCIAL	108	61,118		\$ 10,442		\$ 22,983
TOTAL DIVISION	16,596	362,140		\$ 694,288		\$ 1,088,316

AQUA PENNSYLVANIA, INC.
WASTEWATER
CONTRACT SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
Flat Rate						
April '20 to December '20	11	-	25,551.80	281,070	27,107.90	298,187
January '21 to March '21	-	-	26,318.35	-	27,921.14	-
	<u>11</u>	<u>-</u>		<u>281,070</u>		<u>298,187</u>
TOTAL DIVISION	<u>11</u>	<u>-</u>		<u>\$ 281,070</u>		<u>\$ 298,187</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER
CONTRACT SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Woodloch Pines - Monthly</u>						
Flat Rate						
January 14, '20 to January 14, '20	(2)		\$ 25,551.80	\$ (51,104)	\$ 27,107.90	\$ (54,216)
January '20 to December '20	3	-	26,318.35	78,955	27,921.14	83,763
	1			27,851		29,547
TOTAL DIVISION	1	-		\$ 27,851		\$ 29,547

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Quarterly - White Haven Division - Dennison Township</u>						
Customer Charge Flat Rate	420	-	\$ 87.00	\$ 36,540	\$ 138.15	\$ 58,023
Total Dennison	<u>420</u>	<u>-</u>		<u>\$ 36,540</u>		<u>\$ 58,023</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Bulk - Quarterly - White Haven Division - East Side Borough</u>						
Customer Charge (EDUs)						
Flat Rate	596	-	\$ 115.00	\$ 68,540	\$ 138.15	\$ 82,337
Flat Rate	244		28.00	6,832	28.00	6,832
Subtotal	840	-		75,372		89,169
Total East Side	840	-		\$ 75,372		\$ 89,169
<u>Bulk - Monthly - White Haven Division - Penn Lake Borough</u>						
Customer Charge (EDUs)						
Flat Rate	2,952		\$ 29.00	\$ 85,608	\$ 46.05	\$ 135,940
Subtotal	2,952	-		85,608		135,940
Total Foster Township	2,952	-		\$ 85,608		\$ 135,940
<u>Bulk - Monthly - Southdown Homes</u>						
Customer Charge						
All Usage	12	113,074	\$ 0.7490	84,692	\$ 1.3500	152,650
Total Southdown Homes	12	113,074		84,692		152,650
<u>Bulk - Quarterly - East Brandywine</u>						
Customer Charge						
Flat Rate	4		\$ 351.00	1,404	\$ 446.75	1,787
Total East Brandywine	4	-		1,404		1,787
<u>Bulk - Quarterly - Upper Providence</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 135,289.00	\$ 405,867	\$ 154,773.04	\$ 464,319
January '18 to March '18	1	-	\$ 137,165.00	137,165	\$ 154,773.04	154,773
	4	-		543,032		619,092
Total Upper Providence	4	-		\$ 543,032		\$ 619,092
<u>Bulk - Quarterly - Elwyn</u>						
Flat Rate						
April '17 to December '17	3	-	\$ 24,555.00	\$ 73,665	\$ 28,091.93	\$ 84,276
January '18 to March '18	1	-	\$ 24,896.00	24,896	\$ 28,091.93	28,092
	4	-		98,561		112,368
Total Elwyn	4	-		\$ 98,561		\$ 112,368
<u>Bulk - Quarterly - Foster Township</u>						
Customer Charge (EDUs)						
Hickory Hills Customers	1,352		\$ 87.00	\$ 117,624	\$ 138.15	\$ 186,779
AgMar Customers	424		87.00	36,888	138.15	58,576
Valley Gorge Customers	140		87.00	12,180	138.15	19,341
Route 940 Customers	40		87.00	3,480	138.15	5,526
Subtotal	1,956	-		170,172		270,222
Total Foster Township	1,956	-		\$ 170,172		\$ 270,222
TOTAL BULK SALES	6,192	113,074		\$ 1,095,381		\$ 1,439,251

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)
<u>Bulk - Quarterly - White Haven Division - Dennison Township</u>				
Customer Charge Flat Rate	420	-	\$ 51.15	\$ 21,483
Total Dennison	<u>420</u>	<u>-</u>		<u>\$ 21,483</u>

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue
(1)	(2)	(3)	(4)	(5)

Bulk - Quarterly - White Haven Division - East Side Borough

Customer Charge (EDUs)				
Flat Rate	596	-	\$ 23.15	\$ 13,797
Flat Rate			28.00	-
Subtotal	596	-		13,797
Total East Side	596	-		\$ 13,797

Bulk - Monthly - White Haven Division - Penn Lake Borough

Customer Charge (EDUs)				
Flat Rate	2,952	-	\$ 17.05	\$ 50,332
Subtotal	2,952	-		50,332
Total Foster Township	2,952	-		\$ 50,332

Bulk - Monthly - Southdown Homes

Customer Charge				
All Usage	-	-	\$ 0.7490	-
Total Southdown Homes	-	-		-

Bulk - Quarterly - East Brandywine

Customer Charge				
Flat Rate	-		\$ 351.00	-
Total East Brandywine	-	-		-

Bulk - Quarterly - Upper Providence

Flat Rate				
April '17 to December '17	-	-	\$ 135,289.00	\$ -
January '18 to March '18	-	-	\$ 137,165.00	-
	-	-		-
Total Upper Providence	-	-		\$ -

AQUA PENNSYLVANIA, INC.
WASTEWATER
THIRD PARTY SALES
APPLICATION OF PRESENT AND PROPOSED RATES TO ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)
<u>Bulk - Quarterly - Elwyn</u>				
Flat Rate				
April '17 to December '17	-	-	\$ 24,555.00	\$ -
January '18 to March '18	-	-	\$ 24,896.00	-
	-	-		-
Total Elwyn	-	-		\$ -
<u>Bulk - Quarterly - Foster Township</u>				
Customer Charge (EDUs)				
Hickory Hills Customers	1,352		\$ 51.15	\$ 69,155
AgMar Customers	424		51.15	21,688
Valley Gorge Customers	140		51.15	7,161
Route 940 Customers	40		51.15	2,046
Subtotal	1,956	-		100,050
Total Foster Township	1,956	-		\$ 100,050
TOTAL BULK SALES	5,924	-		\$ 185,662

AQUA PENNSYLVANIA, INC.
ADJUSTMENT 1 - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES
FOR THE TEST YEARS ENDING MARCH 31, 2021, 2022 AND 2023

	Rate Zone 1 Residential	Rate Zone 1EDU Residential	Rate Zone 1A Residential	Rate Zone 1B Residential	Rate Zone 2 Residential	Rate Zone 3 Residential	Zone 3 - Woodloch Sp Residential	Rate Zone 4 Residential	Rate Zone 5 Residential	Rate Zone 6 Residential
<u>Historic TY Customer Growth Calculation</u>							UNMETERED			
1 Number of Customers as of 3/31/21	1,719	1,379	69	814	1,709	2,764	417	2,459	606	1,382
2 Number of Customer as of 3/31/20	1,719	1,366	69	805	1,706	2,736	419	2,448	606	1,354
3 Projected Daily Usage in gallons	89	72	89	99	89	82		132	122	33
4 Monthly Volumes per Normalization (Gallons) Line 3 X (365 Days/12 Months)	2,700	2,200	2,700	3,000	2,700	2,500	-	4,000	3,700	1,000
5 HTY Customer Annualized Growth Bills (Line 2-Line 1) X 12 Divided by 2	-	78	-	54	18	168	(12)	66	-	168
6 HTY Customer Annualized Growth Volumes (HG) (Line 4 X Line 5 / 100)	-	1,716	-	1,620	486	4,200	-	2,640	-	1,680
<u>Future Test Year Customer Growth Calculation</u>										
7 Forecasted Customer Growth	(1)	17	-	13	6	24	(1)	14	(1)	22
8 Annualized Bills (Line 7 X 12)	(12)	198	-	150	72	288	(6)	162	(6)	258
9 HTY Customer Annualized Growth Volumes (HG) (Line 4 X Line 8)	(324)	4,356	-	4,500	1,944	7,200	-	4,374	(162)	6,966
10 Average Volumes Per Normalization										
<u>Fully Projected Future Test Year Customer Growth Calculation</u>										
11 Monthly Volumes per Normalization (Gallons) Line 3 X (366 Days/12 Months)	2,700	2,200	2,700	3,000	2,700	2,507	-	4,011	3,710	1,003
12 Forecasted Customer Growth	(1)	17	-	13	6	24	(1)	14	(1)	22
13 Annualized Bills (Line 12 X 12)	(12)	198	-	150	72	288	(6)	162	(6)	258
14 HTY Customer Annualized Growth Volumes (HG) (Line 11 X Line 12)	(324)	4,356	-	4,500	1,944	7,220	-	6,498	(223)	2,587
15 Average Volumes Per Normalization										
<u>Total Customer Growth Calculation</u>										
22 Total Bills	(24)	474	-	354	162	744	(24)	390	(12)	684
23 Priced for All Usage	(648)	10,428	-	10,620	4,374	18,620	-	13,512	(385)	11,233

AQUA PENNSYLVANIA, INC.
ADJUSTMENT 1 - CUSTOMER GROWTH REVENUE ADJUSTMENT UNDER PRESENT RATES
FOR THE TEST YEARS ENDING MARCH 31, 2021, 2022 AND 2023

	Rate Zone 1	Rate Zone 1EDU	Rate Zone 1A	Rate Zone 1B	Rate Zone 2	Rate Zone 3	Rate Zone 3 - Woo	Rate Zone 4	Rate Zone 5	Rate Zone 6
	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
29 Number of Customers										
30 Period Ending 3/31/19	1,721.0	1,346.0	69.0	789.0	1,697.0	2,716.0	418.0	2,432.0	607.0	1,339.0
31 Period Ending 3/31/20	1,719.0	1,366.0	69.0	805.0	1,706.0	2,736.0	419.0	2,448.0	606.0	1,354.0
32 Historic Test Year Period Ending 3/31/21	1,719.0	1,379.0	69.0	814.0	1,709.0	2,764.0	417.0	2,459.0	606.0	1,382.0
33 Increase 2019-2020	(2.0)	20.0	-	16.0	9.0	20.0	1.0	16.0	(1.0)	15.0
34 Increase 2020-2021	-	13.0	-	9.0	3.0	28.0	(2.0)	11.0	-	28.0
Average Growth/(Decline)	(1.0)	16.5	-	12.5	6.0	24.0	(0.5)	13.5	(0.5)	21.5

	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Total Adjustment Revenue - Under Present	(1,236.48)	22,619.28	-	21,594.00	5,832.00	50,050.77	(1,716.00)	37,016.17	(1,257.22)	28,237.07
Total Adjustment Revenue - Under Proposed	(1,922.54)	35,169.57	-	29,612.45	9,060.66	72,214.51	(2,760.72)	50,721.06	(1,681.12)	43,831.40

AQUA PENNSYLVANIA INC.
RATE ZONE 1 - MEDIA DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 32.55	\$ 48.20	\$ 15.65	48.08%
1,000	\$ 40.53	\$ 60.02	\$ 19.49	48.08%
2,000	\$ 48.51	\$ 71.83	\$ 23.32	48.08%
3,000	\$ 56.49	\$ 83.65	\$ 27.16	48.08%
3,700	\$ 62.08	\$ 91.92	\$ 29.85	48.08%
4,000	\$ 64.47	\$ 95.47	\$ 31.00	48.08%
5,000	\$ 72.45	\$ 107.29	\$ 34.84	48.08%
6,000	\$ 80.43	\$ 119.10	\$ 38.67	48.08%
7,000	\$ 88.41	\$ 130.92	\$ 42.51	48.08%
8,000	\$ 96.39	\$ 142.74	\$ 46.35	48.08%
9,000	\$ 104.37	\$ 154.55	\$ 50.18	48.08%
10,000	\$ 112.35	\$ 166.37	\$ 54.02	48.08%
11,000	\$ 120.33	\$ 178.19	\$ 57.86	48.08%
12,000	\$ 128.31	\$ 190.00	\$ 61.69	48.08%
13,000	\$ 136.29	\$ 201.82	\$ 65.53	48.08%
14,000	\$ 144.27	\$ 213.64	\$ 69.37	48.08%
15,000	\$ 152.25	\$ 225.46	\$ 73.21	48.08%
16,000	\$ 160.23	\$ 237.27	\$ 77.04	48.08%
17,000	\$ 168.21	\$ 249.09	\$ 80.88	48.08%
18,000	\$ 176.19	\$ 260.91	\$ 84.72	48.08%
19,000	\$ 184.17	\$ 272.72	\$ 88.55	48.08%
20,000	\$ 192.15	\$ 284.54	\$ 92.39	48.08%
25,000	\$ 232.05	\$ 343.63	\$ 111.58	48.08%
30,000	\$ 271.95	\$ 402.71	\$ 130.76	48.08%
35,000	\$ 311.85	\$ 461.80	\$ 149.95	48.08%
40,000	\$ 351.75	\$ 520.88	\$ 169.13	48.08%
45,000	\$ 391.65	\$ 579.97	\$ 188.32	48.08%
50,000	\$ 431.55	\$ 639.05	\$ 207.50	48.08%
60,000	\$ 511.35	\$ 757.22	\$ 245.87	48.08%
70,000	\$ 591.15	\$ 875.39	\$ 284.24	48.08%
80,000	\$ 670.95	\$ 993.56	\$ 322.61	48.08%
90,000	\$ 750.75	\$ 1,111.73	\$ 360.98	48.08%
100,000	\$ 830.55	\$ 1,229.90	\$ 399.35	48.08%
110,000	\$ 910.35	\$ 1,348.07	\$ 437.72	48.08%
120,000	\$ 990.15	\$ 1,466.24	\$ 476.09	48.08%
130,000	\$ 1,069.95	\$ 1,584.41	\$ 514.46	48.08%
140,000	\$ 1,149.75	\$ 1,702.58	\$ 552.83	48.08%
150,000	\$ 1,229.55	\$ 1,820.75	\$ 591.20	48.08%
160,000	\$ 1,309.35	\$ 1,938.92	\$ 629.57	48.08%
170,000	\$ 1,389.15	\$ 2,057.09	\$ 667.94	48.08%
180,000	\$ 1,468.95	\$ 2,175.26	\$ 706.31	48.08%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1 - BRIDLEWOOD AND EAGLE ROCK DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 32.55	\$ 48.20	\$ 15.65	48.08%
1,000	\$ 40.53	\$ 60.02	\$ 19.49	48.08%
2,000	\$ 48.51	\$ 71.83	\$ 23.32	48.08%
3,000	\$ 56.49	\$ 83.65	\$ 27.16	48.08%
3,700	\$ 62.08	\$ 91.92	\$ 29.85	48.08%
4,000	\$ 64.47	\$ 95.47	\$ 31.00	48.08%
5,000	\$ 72.45	\$ 107.29	\$ 34.84	48.08%
6,000	\$ 80.43	\$ 119.10	\$ 38.67	48.08%
7,000	\$ 88.41	\$ 130.92	\$ 42.51	48.08%
8,000	\$ 96.39	\$ 142.74	\$ 46.35	48.08%
9,000	\$ 104.37	\$ 154.55	\$ 50.18	48.08%
10,000	\$ 112.35	\$ 166.37	\$ 54.02	48.08%
11,000	\$ 120.33	\$ 178.19	\$ 57.86	48.08%
12,000	\$ 128.31	\$ 190.00	\$ 61.69	48.08%
13,000	\$ 136.29	\$ 201.82	\$ 65.53	48.08%
14,000	\$ 144.27	\$ 213.64	\$ 69.37	48.08%
15,000	\$ 152.25	\$ 225.46	\$ 73.21	48.08%
16,000	\$ 160.23	\$ 237.27	\$ 77.04	48.08%
17,000	\$ 168.21	\$ 249.09	\$ 80.88	48.08%
18,000	\$ 176.19	\$ 260.91	\$ 84.72	48.08%
19,000	\$ 184.17	\$ 272.72	\$ 88.55	48.08%
20,000	\$ 192.15	\$ 284.54	\$ 92.39	48.08%
25,000	\$ 232.05	\$ 343.63	\$ 111.58	48.08%
30,000	\$ 271.95	\$ 402.71	\$ 130.76	48.08%
35,000	\$ 311.85	\$ 461.80	\$ 149.95	48.08%
40,000	\$ 351.75	\$ 520.88	\$ 169.13	48.08%
45,000	\$ 391.65	\$ 579.97	\$ 188.32	48.08%
50,000	\$ 431.55	\$ 639.05	\$ 207.50	48.08%
60,000	\$ 511.35	\$ 757.22	\$ 245.87	48.08%
70,000	\$ 591.15	\$ 875.39	\$ 284.24	48.08%
80,000	\$ 670.95	\$ 993.56	\$ 322.61	48.08%
90,000	\$ 750.75	\$ 1,111.73	\$ 360.98	48.08%
100,000	\$ 830.55	\$ 1,229.90	\$ 399.35	48.08%
110,000	\$ 910.35	\$ 1,348.07	\$ 437.72	48.08%
120,000	\$ 990.15	\$ 1,466.24	\$ 476.09	48.08%
130,000	\$ 1,069.95	\$ 1,584.41	\$ 514.46	48.08%
140,000	\$ 1,149.75	\$ 1,702.58	\$ 552.83	48.08%
150,000	\$ 1,229.55	\$ 1,820.75	\$ 591.20	48.08%
160,000	\$ 1,309.35	\$ 1,938.92	\$ 629.57	48.08%
170,000	\$ 1,389.15	\$ 2,057.09	\$ 667.94	48.08%
180,000	\$ 1,468.95	\$ 2,175.26	\$ 706.31	48.08%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1A - TREASURE LAKE, VILLAGE AT VALLEY FORGE AND BUNKER HILL
DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 32.55	\$ 48.20	\$ 15.65	48.08%
1,000	\$ 39.17	\$ 60.02	\$ 20.85	53.24%
2,000	\$ 45.78	\$ 71.83	\$ 26.05	56.91%
3,000	\$ 52.40	\$ 83.65	\$ 31.26	59.65%
3,700	\$ 57.03	\$ 91.92	\$ 34.90	61.20%
4,000	\$ 59.01	\$ 95.47	\$ 36.46	61.78%
5,000	\$ 65.63	\$ 107.29	\$ 41.66	63.48%
6,000	\$ 72.24	\$ 119.10	\$ 46.86	64.87%
7,000	\$ 78.86	\$ 130.92	\$ 52.06	66.02%
8,000	\$ 85.47	\$ 142.74	\$ 57.27	67.00%
9,000	\$ 92.09	\$ 154.55	\$ 62.47	67.84%
10,000	\$ 98.70	\$ 166.37	\$ 67.67	68.56%
11,000	\$ 105.32	\$ 178.19	\$ 72.87	69.19%
12,000	\$ 111.93	\$ 190.00	\$ 78.07	69.75%
13,000	\$ 118.55	\$ 201.82	\$ 83.28	70.25%
14,000	\$ 125.16	\$ 213.64	\$ 88.48	70.69%
15,000	\$ 131.78	\$ 225.46	\$ 93.68	71.09%
16,000	\$ 138.39	\$ 237.27	\$ 98.88	71.45%
17,000	\$ 145.01	\$ 249.09	\$ 104.08	71.78%
18,000	\$ 151.62	\$ 260.91	\$ 109.29	72.08%
19,000	\$ 158.24	\$ 272.72	\$ 114.49	72.35%
20,000	\$ 164.85	\$ 284.54	\$ 119.69	72.61%
25,000	\$ 197.93	\$ 343.63	\$ 145.70	73.61%
30,000	\$ 231.00	\$ 402.71	\$ 171.71	74.33%
35,000	\$ 264.08	\$ 461.80	\$ 197.72	74.87%
40,000	\$ 297.15	\$ 520.88	\$ 223.73	75.29%
45,000	\$ 330.23	\$ 579.97	\$ 249.74	75.63%
50,000	\$ 363.30	\$ 639.05	\$ 275.75	75.90%
60,000	\$ 429.45	\$ 757.22	\$ 327.77	76.32%
70,000	\$ 495.60	\$ 875.39	\$ 379.79	76.63%
80,000	\$ 561.75	\$ 993.56	\$ 431.81	76.87%
90,000	\$ 627.90	\$ 1,111.73	\$ 483.83	77.06%
100,000	\$ 694.05	\$ 1,229.90	\$ 535.85	77.21%
110,000	\$ 760.20	\$ 1,348.07	\$ 587.87	77.33%
120,000	\$ 826.35	\$ 1,466.24	\$ 639.89	77.44%
130,000	\$ 892.50	\$ 1,584.41	\$ 691.91	77.52%
140,000	\$ 958.65	\$ 1,702.58	\$ 743.93	77.60%
150,000	\$ 1,024.80	\$ 1,820.75	\$ 795.95	77.67%
160,000	\$ 1,090.95	\$ 1,938.92	\$ 847.97	77.73%
170,000	\$ 1,157.10	\$ 2,057.09	\$ 899.99	77.78%
180,000	\$ 1,223.25	\$ 2,175.26	\$ 952.01	77.83%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 1B - PENN TOWNSHIP DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 32.55	\$ 48.20	\$ 15.65	48.08%
1,000	\$ 32.55	\$ 60.02	\$ 27.47	84.38%
2,000	\$ 43.05	\$ 71.83	\$ 28.78	66.86%
3,000	\$ 53.55	\$ 83.65	\$ 30.10	56.21%
3,700	\$ 60.90	\$ 91.92	\$ 31.02	50.94%
4,000	\$ 64.05	\$ 95.47	\$ 31.42	49.05%
5,000	\$ 74.55	\$ 107.29	\$ 32.74	43.91%
6,000	\$ 85.05	\$ 119.10	\$ 34.05	40.04%
7,000	\$ 95.55	\$ 130.92	\$ 35.37	37.02%
8,000	\$ 106.05	\$ 142.74	\$ 36.69	34.59%
9,000	\$ 116.55	\$ 154.55	\$ 38.00	32.61%
10,000	\$ 127.05	\$ 166.37	\$ 39.32	30.95%
11,000	\$ 137.55	\$ 178.19	\$ 40.64	29.54%
12,000	\$ 148.05	\$ 190.00	\$ 41.95	28.34%
13,000	\$ 158.55	\$ 201.82	\$ 43.27	27.29%
14,000	\$ 169.05	\$ 213.64	\$ 44.59	26.38%
15,000	\$ 179.55	\$ 225.46	\$ 45.91	25.57%
16,000	\$ 190.05	\$ 237.27	\$ 47.22	24.85%
17,000	\$ 200.55	\$ 249.09	\$ 48.54	24.20%
18,000	\$ 211.05	\$ 260.91	\$ 49.86	23.62%
19,000	\$ 221.55	\$ 272.72	\$ 51.17	23.10%
20,000	\$ 232.05	\$ 284.54	\$ 52.49	22.62%
25,000	\$ 284.55	\$ 343.63	\$ 59.08	20.76%
30,000	\$ 337.05	\$ 402.71	\$ 65.66	19.48%
35,000	\$ 389.55	\$ 461.80	\$ 72.24	18.55%
40,000	\$ 442.05	\$ 520.88	\$ 78.83	17.83%
45,000	\$ 494.55	\$ 579.97	\$ 85.42	17.27%
50,000	\$ 547.05	\$ 639.05	\$ 92.00	16.82%
60,000	\$ 652.05	\$ 757.22	\$ 105.17	16.13%
70,000	\$ 757.05	\$ 875.39	\$ 118.34	15.63%
80,000	\$ 862.05	\$ 993.56	\$ 131.51	15.26%
90,000	\$ 967.05	\$ 1,111.73	\$ 144.68	14.96%
100,000	\$ 1,072.05	\$ 1,229.90	\$ 157.85	14.72%
110,000	\$ 1,177.05	\$ 1,348.07	\$ 171.02	14.53%
120,000	\$ 1,282.05	\$ 1,466.24	\$ 184.19	14.37%
130,000	\$ 1,387.05	\$ 1,584.41	\$ 197.36	14.23%
140,000	\$ 1,492.05	\$ 1,702.58	\$ 210.53	14.11%
150,000	\$ 1,597.05	\$ 1,820.75	\$ 223.70	14.01%
160,000	\$ 1,702.05	\$ 1,938.92	\$ 236.87	13.92%
170,000	\$ 1,807.05	\$ 2,057.09	\$ 250.04	13.84%
180,000	\$ 1,912.05	\$ 2,175.26	\$ 263.21	13.77%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
 RATE ZONE 2 - EMLENTON, RIVERCREST AND WHITE HAVEN DIVISIONS
 COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 RESIDENTIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 37.80	\$ 55.93	\$ 18.13	47.96%
1,000	\$ 46.31	\$ 68.52	\$ 22.21	47.96%
2,000	\$ 54.81	\$ 81.10	\$ 26.29	47.97%
3,000	\$ 63.32	\$ 93.69	\$ 30.37	47.97%
3,700	\$ 69.27	\$ 102.49	\$ 33.23	47.97%
4,000	\$ 71.82	\$ 106.27	\$ 34.45	47.97%
5,000	\$ 80.33	\$ 118.86	\$ 38.53	47.97%
6,000	\$ 88.83	\$ 131.44	\$ 42.61	47.97%
7,000	\$ 97.34	\$ 144.03	\$ 46.69	47.97%
8,000	\$ 105.84	\$ 156.61	\$ 50.77	47.97%
9,000	\$ 114.35	\$ 169.20	\$ 54.85	47.97%
10,000	\$ 122.85	\$ 181.78	\$ 58.93	47.97%
11,000	\$ 131.36	\$ 194.37	\$ 63.01	47.97%
12,000	\$ 139.86	\$ 206.95	\$ 67.09	47.97%
13,000	\$ 148.37	\$ 219.54	\$ 71.17	47.97%
14,000	\$ 156.87	\$ 232.12	\$ 75.25	47.97%
15,000	\$ 165.38	\$ 244.71	\$ 79.33	47.97%
16,000	\$ 173.88	\$ 257.29	\$ 83.41	47.97%
17,000	\$ 182.39	\$ 269.88	\$ 87.49	47.97%
18,000	\$ 190.89	\$ 282.46	\$ 91.57	47.97%
19,000	\$ 199.40	\$ 295.05	\$ 95.65	47.97%
20,000	\$ 207.90	\$ 307.63	\$ 99.73	47.97%
25,000	\$ 250.43	\$ 370.56	\$ 120.13	47.97%
30,000	\$ 292.95	\$ 433.48	\$ 140.53	47.97%
35,000	\$ 335.48	\$ 496.41	\$ 160.93	47.97%
40,000	\$ 378.00	\$ 559.33	\$ 181.33	47.97%
45,000	\$ 420.53	\$ 622.26	\$ 201.73	47.97%
50,000	\$ 463.05	\$ 685.18	\$ 222.13	47.97%
60,000	\$ 548.10	\$ 811.03	\$ 262.93	47.97%
70,000	\$ 633.15	\$ 936.88	\$ 303.73	47.97%
80,000	\$ 718.20	\$ 1,062.73	\$ 344.53	47.97%
90,000	\$ 803.25	\$ 1,188.58	\$ 385.33	47.97%
100,000	\$ 888.30	\$ 1,314.43	\$ 426.13	47.97%
110,000	\$ 973.35	\$ 1,440.28	\$ 466.93	47.97%
120,000	\$ 1,058.40	\$ 1,566.13	\$ 507.73	47.97%
130,000	\$ 1,143.45	\$ 1,691.98	\$ 548.53	47.97%
140,000	\$ 1,228.50	\$ 1,817.83	\$ 589.33	47.97%
150,000	\$ 1,313.55	\$ 1,943.68	\$ 630.13	47.97%
160,000	\$ 1,398.60	\$ 2,069.53	\$ 670.93	47.97%
170,000	\$ 1,483.65	\$ 2,195.38	\$ 711.73	47.97%
180,000	\$ 1,568.70	\$ 2,321.23	\$ 752.53	47.97%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 2 - PINECREST DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
COMMERCIAL - MONTHLY
FLAT RATE

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ -	\$ -	\$ -	#DIV/0!
1,000	\$ 31.50	\$ 30.00	\$ (1.50)	-4.76%
2,000	\$ 63.00	\$ 60.00	\$ (3.00)	-4.76%
3,000	\$ 94.50	\$ 90.00	\$ (4.50)	-4.76%
3,700	\$ 116.55	\$ 111.00	\$ (5.55)	-4.76%
4,000	\$ 126.00	\$ 120.00	\$ (6.00)	-4.76%
5,000	\$ 157.50	\$ 150.00	\$ (7.50)	-4.76%
6,000	\$ 189.00	\$ 180.00	\$ (9.00)	-4.76%
7,000	\$ 220.50	\$ 210.00	\$ (10.50)	-4.76%
8,000	\$ 252.00	\$ 240.00	\$ (12.00)	-4.76%
9,000	\$ 283.50	\$ 270.00	\$ (13.50)	-4.76%
10,000	\$ 315.00	\$ 300.00	\$ (15.00)	-4.76%
11,000	\$ 346.50	\$ 330.00	\$ (16.50)	-4.76%
12,000	\$ 378.00	\$ 360.00	\$ (18.00)	-4.76%
13,000	\$ 409.50	\$ 390.00	\$ (19.50)	-4.76%
14,000	\$ 441.00	\$ 420.00	\$ (21.00)	-4.76%
15,000	\$ 472.50	\$ 450.00	\$ (22.50)	-4.76%
16,000	\$ 504.00	\$ 480.00	\$ (24.00)	-4.76%
17,000	\$ 535.50	\$ 510.00	\$ (25.50)	-4.76%
18,000	\$ 567.00	\$ 540.00	\$ (27.00)	-4.76%
19,000	\$ 598.50	\$ 570.00	\$ (28.50)	-4.76%
20,000	\$ 630.00	\$ 600.00	\$ (30.00)	-4.76%
25,000	\$ 787.50	\$ 750.00	\$ (37.50)	-4.76%
30,000	\$ 945.00	\$ 900.00	\$ (45.00)	-4.76%
35,000	\$ 1,102.50	\$ 1,050.00	\$ (52.50)	-4.76%
40,000	\$ 1,260.00	\$ 1,200.00	\$ (60.00)	-4.76%
45,000	\$ 1,417.50	\$ 1,350.00	\$ (67.50)	-4.76%
50,000	\$ 1,575.00	\$ 1,500.00	\$ (75.00)	-4.76%
60,000	\$ 1,890.00	\$ 1,800.00	\$ (90.00)	-4.76%
70,000	\$ 2,205.00	\$ 2,100.00	\$ (105.00)	-4.76%
80,000	\$ 2,520.00	\$ 2,400.00	\$ (120.00)	-4.76%
90,000	\$ 2,835.00	\$ 2,700.00	\$ (135.00)	-4.76%
100,000	\$ 3,150.00	\$ 3,000.00	\$ (150.00)	-4.76%
110,000	\$ 3,465.00	\$ 3,300.00	\$ (165.00)	-4.76%
120,000	\$ 3,780.00	\$ 3,600.00	\$ (180.00)	-4.76%
130,000	\$ 4,095.00	\$ 3,900.00	\$ (195.00)	-4.76%
140,000	\$ 4,410.00	\$ 4,200.00	\$ (210.00)	-4.76%
150,000	\$ 4,725.00	\$ 4,500.00	\$ (225.00)	-4.76%
160,000	\$ 5,040.00	\$ 4,800.00	\$ (240.00)	-4.76%
170,000	\$ 5,355.00	\$ 5,100.00	\$ (255.00)	-4.76%
180,000	\$ 5,670.00	\$ 5,400.00	\$ (270.00)	-4.76%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
 RATE ZONE 3 - BEECH MOUNTAIN LAKES, DEERFIELD KNOLL, LAUREL LAKES,
 LINKS AT GETTYSBURG, STONEY CREEK, THORNHURST, AND WILLSITOWN
 WOODS DIVISIONS
 COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 RESIDENTIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 48.30	\$ 66.37	\$ 18.07	37.41%
1,000	\$ 57.23	\$ 78.63	\$ 21.41	37.41%
2,000	\$ 66.15	\$ 90.90	\$ 24.75	37.41%
3,000	\$ 75.08	\$ 103.16	\$ 28.09	37.41%
3,700	\$ 81.32	\$ 111.75	\$ 30.42	37.41%
4,000	\$ 84.00	\$ 115.43	\$ 31.43	37.41%
5,000	\$ 92.93	\$ 127.69	\$ 34.77	37.41%
6,000	\$ 101.85	\$ 139.95	\$ 38.10	37.41%
7,000	\$ 110.78	\$ 152.22	\$ 41.44	37.41%
8,000	\$ 119.70	\$ 164.48	\$ 44.78	37.41%
9,000	\$ 128.63	\$ 176.75	\$ 48.12	37.41%
10,000	\$ 137.55	\$ 189.01	\$ 51.46	37.41%
11,000	\$ 146.48	\$ 201.27	\$ 54.80	37.41%
12,000	\$ 155.40	\$ 213.54	\$ 58.14	37.41%
13,000	\$ 164.33	\$ 225.80	\$ 61.48	37.41%
14,000	\$ 173.25	\$ 238.07	\$ 64.82	37.41%
15,000	\$ 182.18	\$ 250.33	\$ 68.16	37.41%
16,000	\$ 191.10	\$ 262.59	\$ 71.49	37.41%
17,000	\$ 200.03	\$ 274.86	\$ 74.83	37.41%
18,000	\$ 208.95	\$ 287.12	\$ 78.17	37.41%
19,000	\$ 217.88	\$ 299.39	\$ 81.51	37.41%
20,000	\$ 226.80	\$ 311.65	\$ 84.85	37.41%
25,000	\$ 271.43	\$ 372.97	\$ 101.55	37.41%
30,000	\$ 316.05	\$ 434.29	\$ 118.24	37.41%
35,000	\$ 360.68	\$ 495.61	\$ 134.94	37.41%
40,000	\$ 405.30	\$ 556.93	\$ 151.63	37.41%
45,000	\$ 449.93	\$ 618.25	\$ 168.33	37.41%
50,000	\$ 494.55	\$ 679.57	\$ 185.02	37.41%
60,000	\$ 583.80	\$ 802.21	\$ 218.41	37.41%
70,000	\$ 673.05	\$ 924.85	\$ 251.80	37.41%
80,000	\$ 762.30	\$ 1,047.49	\$ 285.19	37.41%
90,000	\$ 851.55	\$ 1,170.13	\$ 318.58	37.41%
100,000	\$ 940.80	\$ 1,292.77	\$ 351.97	37.41%
110,000	\$ 1,030.05	\$ 1,415.41	\$ 385.36	37.41%
120,000	\$ 1,119.30	\$ 1,538.05	\$ 418.75	37.41%
130,000	\$ 1,208.55	\$ 1,660.69	\$ 452.14	37.41%
140,000	\$ 1,297.80	\$ 1,783.33	\$ 485.53	37.41%
150,000	\$ 1,387.05	\$ 1,905.97	\$ 518.92	37.41%
160,000	\$ 1,476.30	\$ 2,028.61	\$ 552.31	37.41%
170,000	\$ 1,565.55	\$ 2,151.25	\$ 585.70	37.41%
180,000	\$ 1,654.80	\$ 2,273.89	\$ 619.09	37.41%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 4 - HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE,
PEDDLERS VIEW, TOBYHANNA TOWNSHIP, TWIN HILLS DIVISIONS
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 65.10	\$ 86.12	\$ 21.02	32.29%
1,000	\$ 75.08	\$ 98.80	\$ 23.73	31.60%
2,000	\$ 85.05	\$ 111.48	\$ 26.43	31.08%
3,000	\$ 95.03	\$ 124.16	\$ 29.14	30.66%
3,700	\$ 102.01	\$ 133.04	\$ 31.03	30.42%
4,000	\$ 105.00	\$ 136.84	\$ 31.84	30.33%
5,000	\$ 114.98	\$ 149.53	\$ 34.55	30.05%
6,000	\$ 124.95	\$ 162.21	\$ 37.26	29.82%
7,000	\$ 134.93	\$ 174.89	\$ 39.96	29.62%
8,000	\$ 144.90	\$ 187.57	\$ 42.67	29.45%
9,000	\$ 154.88	\$ 200.25	\$ 45.37	29.30%
10,000	\$ 164.85	\$ 212.93	\$ 48.08	29.17%
11,000	\$ 174.83	\$ 225.61	\$ 50.79	29.05%
12,000	\$ 184.80	\$ 238.29	\$ 53.49	28.95%
13,000	\$ 194.78	\$ 250.97	\$ 56.20	28.85%
14,000	\$ 204.75	\$ 263.65	\$ 58.90	28.77%
15,000	\$ 214.73	\$ 276.34	\$ 61.61	28.69%
16,000	\$ 224.70	\$ 289.02	\$ 64.32	28.62%
17,000	\$ 234.68	\$ 301.70	\$ 67.02	28.56%
18,000	\$ 244.65	\$ 314.38	\$ 69.73	28.50%
19,000	\$ 254.63	\$ 327.06	\$ 72.43	28.45%
20,000	\$ 264.60	\$ 339.74	\$ 75.14	28.40%
25,000	\$ 314.48	\$ 403.15	\$ 88.67	28.20%
30,000	\$ 364.35	\$ 466.55	\$ 102.20	28.05%
35,000	\$ 414.23	\$ 529.96	\$ 115.73	27.94%
40,000	\$ 464.10	\$ 593.36	\$ 129.26	27.85%
45,000	\$ 513.98	\$ 656.77	\$ 142.79	27.78%
50,000	\$ 563.85	\$ 720.17	\$ 156.32	27.72%
60,000	\$ 663.60	\$ 846.98	\$ 183.38	27.63%
70,000	\$ 763.35	\$ 973.79	\$ 210.44	27.57%
80,000	\$ 863.10	\$ 1,100.60	\$ 237.50	27.52%
90,000	\$ 962.85	\$ 1,227.41	\$ 264.56	27.48%
100,000	\$ 1,062.60	\$ 1,354.22	\$ 291.62	27.44%
110,000	\$ 1,162.35	\$ 1,481.03	\$ 318.68	27.42%
120,000	\$ 1,262.10	\$ 1,607.84	\$ 345.74	27.39%
130,000	\$ 1,361.85	\$ 1,734.65	\$ 372.80	27.37%
140,000	\$ 1,461.60	\$ 1,861.46	\$ 399.86	27.36%
150,000	\$ 1,561.35	\$ 1,988.27	\$ 426.92	27.34%
160,000	\$ 1,661.10	\$ 2,115.08	\$ 453.98	27.33%
170,000	\$ 1,760.85	\$ 2,241.89	\$ 481.04	27.32%
180,000	\$ 1,860.60	\$ 2,368.70	\$ 508.10	27.31%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.

RATE ZONE 4 - HONEYCROFT VILLAGE, LAKE HARMONY, NEW DALEVILLE,
 PEDDLERS VIEW, TOBYHANNA TOWNSHIP, TWIN HILLS DIVISIONS
 COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 RESIDENTIAL - MONTHLY
 FLAT RATE

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT	PROPOSED	AMOUNT	PERCENT
	RATES (2)	RATES (3)	(4)	(5)
0	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
1,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
2,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
3,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
3,700	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
4,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
5,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
6,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
7,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
8,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
9,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
10,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
11,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
12,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
13,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
14,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
15,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
16,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
17,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
18,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
19,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
20,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
25,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
30,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
35,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
40,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
45,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
50,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
60,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
70,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
80,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
90,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
100,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
110,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
120,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
130,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
140,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
150,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
160,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
170,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%
180,000	\$ 105.00	\$ 133.35	\$ 28.35	27.00%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
 RATE ZONE 5 - EAST BRADFORD, LITTLE WASHINGTON, GREENS AT PENN OAKS,
 AND PLUMSOCK DIVISIONS
 COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
 RESIDENTIAL - MONTHLY
 5/8 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES* (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 77.70	\$ 98.95	\$ 21.25	27.35%
1,000	\$ 87.78	\$ 111.79	\$ 24.01	27.35%
2,000	\$ 97.86	\$ 124.62	\$ 26.76	27.35%
3,000	\$ 107.94	\$ 137.46	\$ 29.52	27.35%
3,700	\$ 115.00	\$ 146.45	\$ 31.45	27.35%
4,000	\$ 118.02	\$ 150.30	\$ 32.28	27.35%
5,000	\$ 128.10	\$ 163.14	\$ 35.04	27.35%
6,000	\$ 138.18	\$ 175.97	\$ 37.79	27.35%
7,000	\$ 148.26	\$ 188.81	\$ 40.55	27.35%
8,000	\$ 158.34	\$ 201.65	\$ 43.31	27.35%
9,000	\$ 168.42	\$ 214.48	\$ 46.06	27.35%
10,000	\$ 178.50	\$ 227.32	\$ 48.82	27.35%
11,000	\$ 188.58	\$ 240.16	\$ 51.58	27.35%
12,000	\$ 198.66	\$ 252.99	\$ 54.33	27.35%
13,000	\$ 208.74	\$ 265.83	\$ 57.09	27.35%
14,000	\$ 218.82	\$ 278.67	\$ 59.85	27.35%
15,000	\$ 228.90	\$ 291.51	\$ 62.61	27.35%
16,000	\$ 238.98	\$ 304.34	\$ 65.36	27.35%
17,000	\$ 249.06	\$ 317.18	\$ 68.12	27.35%
18,000	\$ 259.14	\$ 330.02	\$ 70.88	27.35%
19,000	\$ 269.22	\$ 342.85	\$ 73.63	27.35%
20,000	\$ 279.30	\$ 355.69	\$ 76.39	27.35%
25,000	\$ 329.70	\$ 419.88	\$ 90.18	27.35%
30,000	\$ 380.10	\$ 484.06	\$ 103.96	27.35%
35,000	\$ 430.50	\$ 548.25	\$ 117.75	27.35%
40,000	\$ 480.90	\$ 612.43	\$ 131.53	27.35%
45,000	\$ 531.30	\$ 676.62	\$ 145.32	27.35%
50,000	\$ 581.70	\$ 740.80	\$ 159.10	27.35%
60,000	\$ 682.50	\$ 869.17	\$ 186.67	27.35%
70,000	\$ 783.30	\$ 997.54	\$ 214.24	27.35%
80,000	\$ 884.10	\$ 1,125.91	\$ 241.81	27.35%
90,000	\$ 984.90	\$ 1,254.28	\$ 269.38	27.35%
100,000	\$ 1,085.70	\$ 1,382.65	\$ 296.95	27.35%
110,000	\$ 1,186.50	\$ 1,511.02	\$ 324.52	27.35%
120,000	\$ 1,287.30	\$ 1,639.39	\$ 352.09	27.35%
130,000	\$ 1,388.10	\$ 1,767.76	\$ 379.66	27.35%
140,000	\$ 1,488.90	\$ 1,896.13	\$ 407.23	27.35%
150,000	\$ 1,589.70	\$ 2,024.50	\$ 434.80	27.35%
160,000	\$ 1,690.50	\$ 2,152.87	\$ 462.37	27.35%
170,000	\$ 1,791.30	\$ 2,281.24	\$ 489.94	27.35%
180,000	\$ 1,892.10	\$ 2,409.61	\$ 517.51	27.35%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - NEWLIN GREEN DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 115.50	\$ 110.00	\$ (5.50)	-4.76%
1,000	\$ 123.38	\$ 122.84	\$ (0.54)	-0.44%
2,000	\$ 131.25	\$ 135.67	\$ 4.42	3.37%
3,000	\$ 139.13	\$ 148.51	\$ 9.39	6.75%
3,700	\$ 144.64	\$ 157.50	\$ 12.86	8.89%
4,000	\$ 147.00	\$ 161.35	\$ 14.35	9.76%
5,000	\$ 154.88	\$ 174.19	\$ 19.31	12.47%
6,000	\$ 162.75	\$ 187.02	\$ 24.27	14.91%
7,000	\$ 170.63	\$ 199.86	\$ 29.23	17.13%
8,000	\$ 178.50	\$ 212.70	\$ 34.20	19.16%
9,000	\$ 186.38	\$ 225.53	\$ 39.16	21.01%
10,000	\$ 194.25	\$ 238.37	\$ 44.12	22.71%
11,000	\$ 202.13	\$ 251.21	\$ 49.08	24.28%
12,000	\$ 210.00	\$ 264.04	\$ 54.04	25.74%
13,000	\$ 217.88	\$ 276.88	\$ 59.01	27.08%
14,000	\$ 225.75	\$ 289.72	\$ 63.97	28.34%
15,000	\$ 233.63	\$ 302.56	\$ 68.93	29.50%
16,000	\$ 241.50	\$ 315.39	\$ 73.89	30.60%
17,000	\$ 249.38	\$ 328.23	\$ 78.85	31.62%
18,000	\$ 257.25	\$ 341.07	\$ 83.82	32.58%
19,000	\$ 265.13	\$ 353.90	\$ 88.78	33.49%
20,000	\$ 273.00	\$ 366.74	\$ 93.74	34.34%
25,000	\$ 312.38	\$ 430.93	\$ 118.55	37.95%
30,000	\$ 351.75	\$ 495.11	\$ 143.36	40.76%
35,000	\$ 391.13	\$ 559.30	\$ 168.17	43.00%
40,000	\$ 430.50	\$ 623.48	\$ 192.98	44.83%
45,000	\$ 469.88	\$ 687.67	\$ 217.79	46.35%
50,000	\$ 509.25	\$ 751.85	\$ 242.60	47.64%
60,000	\$ 588.00	\$ 880.22	\$ 292.22	49.70%
70,000	\$ 666.75	\$ 1,008.59	\$ 341.84	51.27%
80,000	\$ 745.50	\$ 1,136.96	\$ 391.46	52.51%
90,000	\$ 824.25	\$ 1,265.33	\$ 441.08	53.51%
100,000	\$ 903.00	\$ 1,393.70	\$ 490.70	54.34%
110,000	\$ 981.75	\$ 1,522.07	\$ 540.32	55.04%
120,000	\$ 1,060.50	\$ 1,650.44	\$ 589.94	55.63%
130,000	\$ 1,139.25	\$ 1,778.81	\$ 639.56	56.14%
140,000	\$ 1,218.00	\$ 1,907.18	\$ 689.18	56.58%
150,000	\$ 1,296.75	\$ 2,035.55	\$ 738.80	56.97%
160,000	\$ 1,375.50	\$ 2,163.92	\$ 788.42	57.32%
170,000	\$ 1,454.25	\$ 2,292.29	\$ 838.04	57.63%
180,000	\$ 1,533.00	\$ 2,420.66	\$ 887.66	57.90%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - AVON GROVE SCHOOL DISTRICT DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
COMMERCIAL - MONTHLY
6 INCH METERS

CONSUMPTION GALLONS (1)	BILLS UNDER		INCREASE	
	PRESENT RATES (2)	PROPOSED RATES (3)	AMOUNT (4)	PERCENT (5)
0	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
1,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
2,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
3,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
3,700	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
4,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
5,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
6,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
7,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
8,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
9,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
10,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
11,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
12,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
13,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
14,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
15,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
16,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
17,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
18,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
19,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
20,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
25,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
30,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
35,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
40,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
45,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
50,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
60,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
70,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
80,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
90,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
100,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
110,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
120,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
130,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
140,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
150,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
160,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
170,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%
180,000	\$ 8,695.31	\$ 11,122.05	\$ 2,426.74	27.91%

AQUA PENNSYLVANIA INC.
RATE ZONE 5 - SAGE HILL DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
ALL CUSTOMER CLASSES - MONTHLY
FLAT RATE

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
1,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
2,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
3,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
3,700	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
4,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
5,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
6,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
7,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
8,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
9,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
10,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
11,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
12,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
13,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
14,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
15,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
16,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
17,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
18,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
19,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
20,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
25,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
30,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
35,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
40,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
45,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
50,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
60,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
70,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
80,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
90,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
100,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
110,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
120,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
130,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
140,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
150,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
160,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
170,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%
180,000	\$ 189.00	\$ 150.30	\$ (38.70)	-20.48%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 6 - MASTHOPE DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 41.62	\$ 59.55	\$ 17.93	43.07%
1,000	\$ 42.67	\$ 62.31	\$ 19.64	46.02%
2,000	\$ 43.72	\$ 65.07	\$ 21.35	48.82%
3,000	\$ 44.77	\$ 67.83	\$ 23.06	51.49%
3,700	\$ 45.51	\$ 69.76	\$ 24.25	53.29%
4,000	\$ 45.82	\$ 70.59	\$ 24.76	54.04%
5,000	\$ 46.87	\$ 73.35	\$ 26.47	56.48%
6,000	\$ 47.92	\$ 76.10	\$ 28.18	58.81%
7,000	\$ 48.97	\$ 78.86	\$ 29.89	61.04%
8,000	\$ 50.02	\$ 81.62	\$ 31.60	63.17%
9,000	\$ 51.07	\$ 84.38	\$ 33.31	65.22%
10,000	\$ 52.12	\$ 87.14	\$ 35.02	67.18%
11,000	\$ 53.17	\$ 89.90	\$ 36.73	69.07%
12,000	\$ 54.22	\$ 92.66	\$ 38.44	70.89%
13,000	\$ 55.27	\$ 95.42	\$ 40.15	72.63%
14,000	\$ 56.32	\$ 98.18	\$ 41.85	74.31%
15,000	\$ 57.37	\$ 100.94	\$ 43.56	75.93%
16,000	\$ 58.42	\$ 103.69	\$ 45.27	77.49%
17,000	\$ 59.47	\$ 106.45	\$ 46.98	79.00%
18,000	\$ 60.52	\$ 109.21	\$ 48.69	80.45%
19,000	\$ 61.57	\$ 111.97	\$ 50.40	81.85%
20,000	\$ 62.62	\$ 114.73	\$ 52.11	83.21%
25,000	\$ 67.87	\$ 128.53	\$ 60.65	89.36%
30,000	\$ 73.12	\$ 142.32	\$ 69.20	94.63%
35,000	\$ 78.37	\$ 156.12	\$ 77.74	99.20%
40,000	\$ 83.62	\$ 169.91	\$ 86.29	103.19%
45,000	\$ 88.87	\$ 183.71	\$ 94.83	106.71%
50,000	\$ 94.12	\$ 197.50	\$ 103.38	109.83%
60,000	\$ 104.62	\$ 225.09	\$ 120.47	115.15%
70,000	\$ 115.12	\$ 252.68	\$ 137.56	119.49%
80,000	\$ 125.62	\$ 280.27	\$ 154.65	123.11%
90,000	\$ 136.12	\$ 307.86	\$ 171.74	126.16%
100,000	\$ 146.62	\$ 335.45	\$ 188.83	128.79%
110,000	\$ 157.12	\$ 363.04	\$ 205.92	131.06%
120,000	\$ 167.62	\$ 390.63	\$ 223.01	133.04%
130,000	\$ 178.12	\$ 418.22	\$ 240.10	134.79%
140,000	\$ 188.62	\$ 445.81	\$ 257.19	136.35%
150,000	\$ 199.12	\$ 473.40	\$ 274.28	137.74%
160,000	\$ 209.62	\$ 500.99	\$ 291.37	139.00%
170,000	\$ 220.12	\$ 528.58	\$ 308.46	140.13%
180,000	\$ 230.62	\$ 556.17	\$ 325.55	141.16%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 7 - LIMERICK DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 29.51	\$ 42.13	\$ 12.63	42.79%
1,000	\$ 29.51	\$ 51.23	\$ 21.73	73.63%
2,000	\$ 29.51	\$ 60.33	\$ 30.83	104.48%
3,000	\$ 32.94	\$ 69.43	\$ 36.49	110.76%
3,700	\$ 37.69	\$ 75.80	\$ 38.11	101.11%
4,000	\$ 39.73	\$ 78.53	\$ 38.81	97.68%
5,000	\$ 46.51	\$ 87.64	\$ 41.13	88.42%
6,000	\$ 53.29	\$ 96.74	\$ 43.44	81.52%
7,000	\$ 60.08	\$ 105.84	\$ 45.76	76.17%
8,000	\$ 66.86	\$ 114.94	\$ 48.08	71.91%
9,000	\$ 73.64	\$ 124.04	\$ 50.40	68.44%
10,000	\$ 80.42	\$ 133.14	\$ 52.72	65.55%
11,000	\$ 87.21	\$ 142.24	\$ 55.03	63.11%
12,000	\$ 93.99	\$ 151.34	\$ 57.35	61.02%
13,000	\$ 100.77	\$ 160.44	\$ 59.67	59.21%
14,000	\$ 107.56	\$ 169.54	\$ 61.99	57.63%
15,000	\$ 114.34	\$ 178.65	\$ 64.31	56.24%
16,000	\$ 121.12	\$ 187.75	\$ 66.62	55.00%
17,000	\$ 127.91	\$ 196.85	\$ 68.94	53.90%
18,000	\$ 134.69	\$ 205.95	\$ 71.26	52.91%
19,000	\$ 141.47	\$ 215.05	\$ 73.58	52.01%
20,000	\$ 148.25	\$ 224.15	\$ 75.90	51.19%
25,000	\$ 182.17	\$ 269.66	\$ 87.49	48.02%
30,000	\$ 216.08	\$ 315.16	\$ 99.08	45.85%
35,000	\$ 250.00	\$ 360.67	\$ 110.67	44.27%
40,000	\$ 283.91	\$ 406.17	\$ 122.26	43.06%
45,000	\$ 317.83	\$ 451.68	\$ 133.85	42.11%
50,000	\$ 351.74	\$ 497.18	\$ 145.44	41.35%
60,000	\$ 419.57	\$ 588.19	\$ 168.62	40.19%
70,000	\$ 487.40	\$ 679.20	\$ 191.80	39.35%
80,000	\$ 555.23	\$ 770.21	\$ 214.98	38.72%
90,000	\$ 623.06	\$ 861.22	\$ 238.16	38.22%
100,000	\$ 690.89	\$ 952.23	\$ 261.34	37.83%
110,000	\$ 758.72	\$ 1,043.24	\$ 284.52	37.50%
120,000	\$ 826.55	\$ 1,134.25	\$ 307.70	37.23%
130,000	\$ 894.38	\$ 1,225.26	\$ 330.88	36.99%
140,000	\$ 962.21	\$ 1,316.27	\$ 354.06	36.80%
150,000	\$ 1,030.04	\$ 1,407.28	\$ 377.24	36.62%
160,000	\$ 1,097.87	\$ 1,498.29	\$ 400.42	36.47%
170,000	\$ 1,165.70	\$ 1,589.30	\$ 423.60	36.34%
180,000	\$ 1,233.53	\$ 1,680.31	\$ 446.78	36.22%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 8 - EAST BRADFORD DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
SINGLE FAMILY UNMETERED - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
1,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
2,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
3,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
3,700	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
4,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
5,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
6,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
7,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
8,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
9,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
10,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
11,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
12,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
13,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
14,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
15,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
16,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
17,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
18,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
19,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
20,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
25,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
30,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
35,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
40,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
45,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
50,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
60,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
70,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
80,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
90,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
100,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
110,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
120,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
130,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
140,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
150,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
160,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
170,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%
180,000	\$ 71.49	\$ 104.75	\$ 33.26	46.51%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 8 - EAST BRADFORD DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
TOWNHOME - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 55.36	\$ 57.61	\$ 2.25	4.07%
1,000	\$ 55.36	\$ 69.35	\$ 13.99	25.27%
2,000	\$ 55.36	\$ 81.08	\$ 25.73	46.48%
3,000	\$ 55.36	\$ 92.82	\$ 37.47	67.68%
3,700	\$ 55.36	\$ 101.04	\$ 45.68	82.52%
4,000	\$ 55.36	\$ 104.56	\$ 49.20	88.88%
5,000	\$ 55.36	\$ 116.30	\$ 60.94	110.09%
6,000	\$ 55.36	\$ 128.03	\$ 72.68	131.29%
7,000	\$ 55.36	\$ 139.77	\$ 84.41	152.49%
8,000	\$ 55.36	\$ 151.51	\$ 96.15	173.69%
9,000	\$ 55.36	\$ 163.24	\$ 107.89	194.90%
10,000	\$ 55.36	\$ 174.98	\$ 119.62	216.10%
11,000	\$ 55.36	\$ 186.72	\$ 131.36	237.30%
12,000	\$ 55.36	\$ 198.45	\$ 143.10	258.50%
13,000	\$ 55.36	\$ 210.19	\$ 154.84	279.71%
14,000	\$ 55.36	\$ 221.93	\$ 166.57	300.91%
15,000	\$ 55.36	\$ 233.67	\$ 178.31	322.11%
16,000	\$ 55.36	\$ 245.40	\$ 190.05	343.32%
17,000	\$ 55.36	\$ 257.14	\$ 201.78	364.52%
18,000	\$ 55.36	\$ 268.88	\$ 213.52	385.72%
19,000	\$ 55.36	\$ 280.61	\$ 225.26	406.92%
20,000	\$ 55.36	\$ 292.35	\$ 236.99	428.13%
25,000	\$ 55.36	\$ 351.04	\$ 295.68	534.14%
30,000	\$ 55.36	\$ 409.72	\$ 354.36	640.15%
35,000	\$ 55.36	\$ 468.41	\$ 413.05	746.17%
40,000	\$ 55.36	\$ 527.09	\$ 471.73	852.18%
45,000	\$ 55.36	\$ 585.78	\$ 530.42	958.20%
50,000	\$ 55.36	\$ 644.46	\$ 589.10	1064.21%
60,000	\$ 55.36	\$ 761.83	\$ 706.47	1276.24%
70,000	\$ 55.36	\$ 879.20	\$ 823.84	1488.27%
80,000	\$ 55.36	\$ 996.57	\$ 941.21	1700.29%
90,000	\$ 55.36	\$ 1,113.94	\$ 1,058.58	1912.32%
100,000	\$ 55.36	\$ 1,231.31	\$ 1,175.95	2124.35%
110,000	\$ 55.36	\$ 1,348.68	\$ 1,293.32	2336.38%
120,000	\$ 55.36	\$ 1,466.05	\$ 1,410.69	2548.40%
130,000	\$ 55.36	\$ 1,583.42	\$ 1,528.06	2760.43%
140,000	\$ 55.36	\$ 1,700.79	\$ 1,645.43	2972.46%
150,000	\$ 55.36	\$ 1,818.16	\$ 1,762.80	3184.49%
160,000	\$ 55.36	\$ 1,935.53	\$ 1,880.17	3396.51%
170,000	\$ 55.36	\$ 2,052.90	\$ 1,997.54	3608.54%
180,000	\$ 55.36	\$ 2,170.27	\$ 2,114.91	3820.57%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 8 - EAST BRADFORD DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
SINGLE FAMILY DETACHED - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES*	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 71.49	\$ 57.61	\$ (13.88)	-19.42%
1,000	\$ 71.49	\$ 69.35	\$ (2.15)	-3.00%
2,000	\$ 71.49	\$ 81.08	\$ 9.59	13.41%
3,000	\$ 71.49	\$ 92.82	\$ 21.33	29.83%
3,700	\$ 71.49	\$ 101.04	\$ 29.54	41.32%
4,000	\$ 71.49	\$ 104.56	\$ 33.06	46.25%
5,000	\$ 71.49	\$ 116.30	\$ 44.80	62.66%
6,000	\$ 71.49	\$ 128.03	\$ 56.54	79.08%
7,000	\$ 71.49	\$ 139.77	\$ 68.27	95.50%
8,000	\$ 71.49	\$ 151.51	\$ 80.01	111.91%
9,000	\$ 71.49	\$ 163.24	\$ 91.75	128.33%
10,000	\$ 71.49	\$ 174.98	\$ 103.49	144.75%
11,000	\$ 71.49	\$ 186.72	\$ 115.22	161.16%
12,000	\$ 71.49	\$ 198.45	\$ 126.96	177.58%
13,000	\$ 71.49	\$ 210.19	\$ 138.70	194.00%
14,000	\$ 71.49	\$ 221.93	\$ 150.43	210.41%
15,000	\$ 71.49	\$ 233.67	\$ 162.17	226.83%
16,000	\$ 71.49	\$ 245.40	\$ 173.91	243.25%
17,000	\$ 71.49	\$ 257.14	\$ 185.64	259.66%
18,000	\$ 71.49	\$ 268.88	\$ 197.38	276.08%
19,000	\$ 71.49	\$ 280.61	\$ 209.12	292.50%
20,000	\$ 71.49	\$ 292.35	\$ 220.86	308.91%
25,000	\$ 71.49	\$ 351.04	\$ 279.54	391.00%
30,000	\$ 71.49	\$ 409.72	\$ 338.23	473.08%
35,000	\$ 71.49	\$ 468.41	\$ 396.91	555.16%
40,000	\$ 71.49	\$ 527.09	\$ 455.60	637.25%
45,000	\$ 71.49	\$ 585.78	\$ 514.28	719.33%
50,000	\$ 71.49	\$ 644.46	\$ 572.97	801.41%
60,000	\$ 71.49	\$ 761.83	\$ 690.34	965.58%
70,000	\$ 71.49	\$ 879.20	\$ 807.71	1129.74%
80,000	\$ 71.49	\$ 996.57	\$ 925.08	1293.91%
90,000	\$ 71.49	\$ 1,113.94	\$ 1,042.45	1458.08%
100,000	\$ 71.49	\$ 1,231.31	\$ 1,159.82	1622.24%
110,000	\$ 71.49	\$ 1,348.68	\$ 1,277.19	1786.41%
120,000	\$ 71.49	\$ 1,466.05	\$ 1,394.56	1950.58%
130,000	\$ 71.49	\$ 1,583.42	\$ 1,511.93	2114.74%
140,000	\$ 71.49	\$ 1,700.79	\$ 1,629.30	2278.91%
150,000	\$ 71.49	\$ 1,818.16	\$ 1,746.67	2443.08%
160,000	\$ 71.49	\$ 1,935.53	\$ 1,864.04	2607.24%
170,000	\$ 71.49	\$ 2,052.90	\$ 1,981.41	2771.41%
180,000	\$ 71.49	\$ 2,170.27	\$ 2,098.78	2935.58%

* Present rates include 5.00% DSIC.

AQUA PENNSYLVANIA INC.
RATE ZONE 9 - CHELTENHAM TOWNSHIP DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 20.89	\$ 32.42	\$ 11.53	55.19%
1,000	\$ 24.80	\$ 39.77	\$ 14.97	60.36%
2,000	\$ 28.71	\$ 47.12	\$ 18.41	64.12%
3,000	\$ 32.62	\$ 54.47	\$ 21.85	66.98%
3,700	\$ 35.36	\$ 59.62	\$ 24.26	68.61%
4,000	\$ 36.53	\$ 61.82	\$ 25.29	69.23%
5,000	\$ 40.44	\$ 69.17	\$ 28.73	71.04%
6,000	\$ 44.35	\$ 76.52	\$ 32.17	72.54%
7,000	\$ 48.26	\$ 83.87	\$ 35.61	73.79%
8,000	\$ 52.17	\$ 91.22	\$ 39.05	74.85%
9,000	\$ 56.08	\$ 98.57	\$ 42.49	75.77%
10,000	\$ 59.99	\$ 105.92	\$ 45.93	76.56%
11,000	\$ 63.90	\$ 113.27	\$ 49.37	77.26%
12,000	\$ 67.81	\$ 120.62	\$ 52.81	77.88%
13,000	\$ 71.72	\$ 127.97	\$ 56.25	78.43%
14,000	\$ 75.63	\$ 135.32	\$ 59.69	78.92%
15,000	\$ 79.54	\$ 142.67	\$ 63.13	79.37%
16,000	\$ 83.45	\$ 150.02	\$ 66.57	79.77%
17,000	\$ 87.36	\$ 157.37	\$ 70.01	80.14%
18,000	\$ 91.27	\$ 164.72	\$ 73.45	80.48%
19,000	\$ 95.18	\$ 172.07	\$ 76.89	80.78%
20,000	\$ 99.09	\$ 179.42	\$ 80.33	81.07%
25,000	\$ 118.64	\$ 216.17	\$ 97.53	82.21%
30,000	\$ 138.19	\$ 252.92	\$ 114.73	83.02%
35,000	\$ 157.74	\$ 289.67	\$ 131.93	83.64%
40,000	\$ 177.29	\$ 326.42	\$ 149.13	84.12%
45,000	\$ 196.84	\$ 363.17	\$ 166.33	84.50%
50,000	\$ 216.39	\$ 399.92	\$ 183.53	84.81%
60,000	\$ 255.49	\$ 473.42	\$ 217.93	85.30%
70,000	\$ 294.59	\$ 546.92	\$ 252.33	85.65%
80,000	\$ 333.69	\$ 620.42	\$ 286.73	85.93%
90,000	\$ 372.79	\$ 693.92	\$ 321.13	86.14%
100,000	\$ 411.89	\$ 767.42	\$ 355.53	86.32%
110,000	\$ 450.99	\$ 840.92	\$ 389.93	86.46%
120,000	\$ 490.09	\$ 914.42	\$ 424.33	86.58%
130,000	\$ 529.19	\$ 987.92	\$ 458.73	86.69%
140,000	\$ 568.29	\$ 1,061.42	\$ 493.13	86.77%
150,000	\$ 607.39	\$ 1,134.92	\$ 527.53	86.85%
160,000	\$ 646.49	\$ 1,208.42	\$ 561.93	86.92%
170,000	\$ 685.59	\$ 1,281.92	\$ 596.33	86.98%
180,000	\$ 724.69	\$ 1,355.42	\$ 630.73	87.03%

AQUA PENNSYLVANIA INC.
RATE ZONE 10 - EAST NORRITON DIVISION
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 21.08	\$ 35.57	\$ 14.49	68.74%
1,000	\$ 21.08	\$ 43.30	\$ 22.22	105.39%
2,000	\$ 25.44	\$ 51.02	\$ 25.58	100.54%
3,000	\$ 31.98	\$ 58.75	\$ 26.77	83.69%
3,700	\$ 36.56	\$ 64.16	\$ 27.60	75.48%
4,000	\$ 38.52	\$ 66.47	\$ 27.95	72.56%
5,000	\$ 45.06	\$ 74.20	\$ 29.14	64.66%
6,000	\$ 51.60	\$ 81.93	\$ 30.32	58.76%
7,000	\$ 58.14	\$ 89.65	\$ 31.51	54.19%
8,000	\$ 64.68	\$ 97.38	\$ 32.70	50.55%
9,000	\$ 71.22	\$ 105.10	\$ 33.88	47.57%
10,000	\$ 77.76	\$ 112.83	\$ 35.07	45.10%
11,000	\$ 84.30	\$ 120.56	\$ 36.25	43.00%
12,000	\$ 90.84	\$ 128.28	\$ 37.44	41.21%
13,000	\$ 97.38	\$ 136.01	\$ 38.63	39.66%
14,000	\$ 103.92	\$ 143.73	\$ 39.81	38.31%
15,000	\$ 110.46	\$ 151.46	\$ 41.00	37.11%
16,000	\$ 117.00	\$ 159.19	\$ 42.18	36.05%
17,000	\$ 123.54	\$ 166.91	\$ 43.37	35.11%
18,000	\$ 130.08	\$ 174.64	\$ 44.56	34.25%
19,000	\$ 136.62	\$ 182.36	\$ 45.74	33.48%
20,000	\$ 143.16	\$ 190.09	\$ 46.93	32.78%
25,000	\$ 175.86	\$ 228.72	\$ 52.86	30.06%
30,000	\$ 208.56	\$ 267.35	\$ 58.79	28.19%
35,000	\$ 241.26	\$ 305.98	\$ 64.72	26.82%
40,000	\$ 273.96	\$ 344.61	\$ 70.65	25.79%
45,000	\$ 306.66	\$ 383.24	\$ 76.58	24.97%
50,000	\$ 339.36	\$ 421.87	\$ 82.51	24.31%
60,000	\$ 404.76	\$ 499.13	\$ 94.37	23.31%
70,000	\$ 470.16	\$ 576.39	\$ 106.23	22.59%
80,000	\$ 535.56	\$ 653.65	\$ 118.09	22.05%
90,000	\$ 600.96	\$ 730.91	\$ 129.95	21.62%
100,000	\$ 666.36	\$ 808.17	\$ 141.81	21.28%
110,000	\$ 731.76	\$ 885.43	\$ 153.67	21.00%
120,000	\$ 797.16	\$ 962.69	\$ 165.53	20.76%
130,000	\$ 862.56	\$ 1,039.95	\$ 177.39	20.57%
140,000	\$ 927.96	\$ 1,117.21	\$ 189.25	20.39%
150,000	\$ 993.36	\$ 1,194.47	\$ 201.11	20.25%
160,000	\$ 1,058.76	\$ 1,271.73	\$ 212.97	20.11%
170,000	\$ 1,124.16	\$ 1,348.99	\$ 224.83	20.00%
180,000	\$ 1,189.56	\$ 1,426.25	\$ 236.69	19.90%

AQUA PENNSYLVANIA INC.
RATE ZONE 10 - WHITPAIN TOWNSHIP
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 31.66	\$ 35.57	\$ 3.91	12.35%
1,000	\$ 31.66	\$ 43.30	\$ 11.64	36.75%
2,000	\$ 31.66	\$ 51.02	\$ 19.36	61.16%
3,000	\$ 31.66	\$ 58.75	\$ 27.09	85.56%
3,700	\$ 31.66	\$ 64.16	\$ 32.50	102.64%
4,000	\$ 31.66	\$ 66.47	\$ 34.81	109.96%
5,000	\$ 31.66	\$ 74.20	\$ 42.54	134.37%
6,000	\$ 31.66	\$ 81.93	\$ 50.27	158.77%
7,000	\$ 39.57	\$ 89.65	\$ 50.08	126.57%
8,000	\$ 39.57	\$ 97.38	\$ 57.81	146.09%
9,000	\$ 39.57	\$ 105.10	\$ 65.53	165.62%
10,000	\$ 39.57	\$ 112.83	\$ 73.26	185.14%
11,000	\$ 39.57	\$ 120.56	\$ 80.99	204.67%
12,000	\$ 39.57	\$ 128.28	\$ 88.71	224.19%
13,000	\$ 39.57	\$ 136.01	\$ 96.44	243.71%
14,000	\$ 39.57	\$ 143.73	\$ 104.16	263.24%
15,000	\$ 39.57	\$ 151.46	\$ 111.89	282.76%
16,000	\$ 39.57	\$ 159.19	\$ 119.62	302.29%
17,000	\$ 39.57	\$ 166.91	\$ 127.34	321.81%
18,000	\$ 39.57	\$ 174.64	\$ 135.07	341.34%
19,000	\$ 39.57	\$ 182.36	\$ 142.79	360.86%
20,000	\$ 39.57	\$ 190.09	\$ 150.52	380.39%
25,000	\$ 39.57	\$ 228.72	\$ 189.15	478.01%
30,000	\$ 39.57	\$ 267.35	\$ 227.78	575.64%
35,000	\$ 39.57	\$ 305.98	\$ 266.41	673.26%
40,000	\$ 39.57	\$ 344.61	\$ 305.04	770.89%
45,000	\$ 39.57	\$ 383.24	\$ 343.67	868.51%
50,000	\$ 39.57	\$ 421.87	\$ 382.30	966.14%
60,000	\$ 39.57	\$ 499.13	\$ 459.56	1161.38%
70,000	\$ 39.57	\$ 576.39	\$ 536.82	1356.63%
80,000	\$ 39.57	\$ 653.65	\$ 614.08	1551.88%
90,000	\$ 39.57	\$ 730.91	\$ 691.34	1747.13%
100,000	\$ 39.57	\$ 808.17	\$ 768.60	1942.38%
110,000	\$ 39.57	\$ 885.43	\$ 845.86	2137.63%
120,000	\$ 39.57	\$ 962.69	\$ 923.12	2332.88%
130,000	\$ 39.57	\$ 1,039.95	\$ 1,000.38	2528.13%
140,000	\$ 39.57	\$ 1,117.21	\$ 1,077.64	2723.38%
150,000	\$ 39.57	\$ 1,194.47	\$ 1,154.90	2918.63%
160,000	\$ 39.57	\$ 1,271.73	\$ 1,232.16	3113.87%
170,000	\$ 39.57	\$ 1,348.99	\$ 1,309.42	3309.12%
180,000	\$ 39.57	\$ 1,426.25	\$ 1,386.68	3504.37%

AQUA PENNSYLVANIA INC.
RATE ZONE 11 - NEW GARDEN
COMPARISON OF BILLS UNDER PRESENT AND PROPOSED RATES
RESIDENTIAL - MONTHLY
ALL METERS

CONSUMPTION GALLONS	BILLS UNDER		INCREASE	
	PRESENT RATES	PROPOSED RATES	AMOUNT	PERCENT
(1)	(2)	(3)	(4)	(5)
0	\$ 37.64	\$ 45.46	\$ 7.82	20.79%
1,000	\$ 37.64	\$ 68.72	\$ 31.08	82.59%
2,000	\$ 42.69	\$ 91.98	\$ 49.29	115.46%
3,000	\$ 57.86	\$ 115.24	\$ 57.38	99.17%
3,700	\$ 68.48	\$ 131.52	\$ 63.04	92.06%
4,000	\$ 73.03	\$ 138.50	\$ 65.47	89.65%
5,000	\$ 88.20	\$ 161.76	\$ 73.56	83.40%
6,000	\$ 103.37	\$ 185.01	\$ 81.65	78.99%
7,000	\$ 118.54	\$ 208.27	\$ 89.73	75.70%
8,000	\$ 133.71	\$ 231.53	\$ 97.82	73.16%
9,000	\$ 148.88	\$ 254.79	\$ 105.91	71.14%
10,000	\$ 164.05	\$ 278.05	\$ 114.00	69.49%
11,000	\$ 179.22	\$ 301.31	\$ 122.09	68.12%
12,000	\$ 194.39	\$ 324.57	\$ 130.18	66.97%
13,000	\$ 209.56	\$ 347.83	\$ 138.27	65.98%
14,000	\$ 224.73	\$ 371.09	\$ 146.36	65.13%
15,000	\$ 239.90	\$ 394.35	\$ 154.45	64.38%
16,000	\$ 259.55	\$ 427.78	\$ 168.23	64.82%
17,000	\$ 279.20	\$ 461.22	\$ 182.02	65.19%
18,000	\$ 298.85	\$ 494.65	\$ 195.80	65.52%
19,000	\$ 318.50	\$ 528.09	\$ 209.59	65.80%
20,000	\$ 338.15	\$ 561.52	\$ 223.37	66.06%
25,000	\$ 436.40	\$ 728.70	\$ 292.30	66.98%
30,000	\$ 534.65	\$ 895.87	\$ 361.22	67.56%
35,000	\$ 632.90	\$ 1,063.05	\$ 430.15	67.96%
40,000	\$ 731.15	\$ 1,230.22	\$ 499.07	68.26%
45,000	\$ 829.40	\$ 1,397.40	\$ 568.00	68.48%
50,000	\$ 927.65	\$ 1,564.57	\$ 636.92	68.66%
60,000	\$ 1,124.15	\$ 1,898.92	\$ 774.77	68.92%
70,000	\$ 1,320.65	\$ 2,233.27	\$ 912.62	69.10%
80,000	\$ 1,517.15	\$ 2,567.62	\$ 1,050.47	69.24%
90,000	\$ 1,713.65	\$ 2,901.97	\$ 1,188.32	69.34%
100,000	\$ 1,910.15	\$ 3,236.32	\$ 1,326.17	69.43%
110,000	\$ 2,106.65	\$ 3,570.67	\$ 1,464.02	69.50%
120,000	\$ 2,303.15	\$ 3,905.02	\$ 1,601.87	69.55%
130,000	\$ 2,499.65	\$ 4,239.37	\$ 1,739.72	69.60%
140,000	\$ 2,696.15	\$ 4,573.72	\$ 1,877.57	69.64%
150,000	\$ 2,892.65	\$ 4,908.07	\$ 2,015.42	69.67%
160,000	\$ 3,089.15	\$ 5,242.42	\$ 2,153.27	69.70%
170,000	\$ 3,285.65	\$ 5,576.77	\$ 2,291.12	69.73%
180,000	\$ 3,482.15	\$ 5,911.12	\$ 2,428.97	69.75%

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Proposed Rates (3)	Ref.	Adjustment Factor (Schedule 2 RZ 7) (4)	Revenues Under Proposed Rates (5)=(3)X(4)	Pro Forma Revenue Adjustments (6)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6)	Proposed Increase (8)=(7)-(2)	Percent Increase (8)
<u>METERED SALES</u>									
Residential	\$ 2,758,337	\$ 5,244,959	Sch. 3 RZ 7	0.99987008	\$ 5,244,278		\$ 5,244,278		
Discount to Residential							(92,533)		
Net Revenue							\$ 5,151,745	\$ 2,393,407	86.8%
Commercial	1,198,307	2,061,440	Sch. 3 RZ 7	1.00001211	2,061,465		2,061,465	863,158	72.0%
Public Authority	13,120	18,355	Sch. 3 RZ 7	1.00002001	18,355		18,355	5,235	39.9%
Total Sales Related to Wastewater	\$ 3,969,765	\$ 7,324,754			\$ 7,324,098	\$ -	\$ 7,231,565	\$ 3,261,800	82.2%
Other Operating Revenues	8,808	8,808			8,808	7,225 (b)	16,032	7,225	82.0%
Total Wastewater Revenue	\$ 3,978,573	\$ 7,333,562			\$ 7,332,906	\$ 7,225	\$ 7,247,597	\$ 3,269,025	82.2%

(a) Excludes DSIC and Unbilled Revenue.

(b) Includes increase to forfeited discounts based on proposed revenues.

Revenue per Order \$ 7,249,205

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Adjustment to Per Books Revenue 3/31/2021 (3)	Adjusted Revenues, Per Books Present Rates 03/31/2021(a) (4)	Bill Analysis Revenues, Present Rates (5)	Ref.	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(6)X(5)	Add Back Annualized DSIC Revenue (8)	Revenues Under Present Rates (9)=(8)+(7)
<u>METERED SALES</u>									
Residential	\$ 3,191,879	\$ (564,907)	\$ 2,626,972	\$ 2,627,313	Sch. 3 RZ 7	0.9998701	\$ 2,626,972	\$131,366	\$ 2,758,337
Commercial	577,517	563,729	1,141,246	1,141,232	Sch. 3 RZ 7	1.0000121	1,141,246	57,062	1,198,307
Public Authority	11,317	1,178	12,495	12,495	Sch. 3 RZ 7	1.0000200	12,495	625	13,120
Total Sales Related to Wastewater	\$ 3,780,713	\$ (0)	\$ 3,780,713	\$ 3,781,040			\$ 3,780,713	\$ 189,052	\$ 3,969,765
Other Operating Revenues	8,808		8,808	8,808			8,808		8,808
Total Wastewater Revenue	\$ 3,789,521	\$ (0)	\$ 3,789,521	\$ 3,789,848			\$ 3,789,521	\$ 189,052	\$ 3,978,573

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 7
LIMERICK DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	50,815	-	\$ 28.10	\$ 1,427,893	\$ 42.13	\$ 2,140,823
1	4,153	-	28.10	116,688	42.13	174,949
1 1/2	11	-	28.10	309	42.13	463
2	6,116	-	28.10	171,860	42.13	257,667
Subtotal	61,094	-		1,716,750		2,573,902
Allowance (2,493 Gallons)	-	1,384,001	-	\$ -	0.9101	\$ 1,259,580
1st block	-	1,143,003	0.6460	738,380	0.9101	1,040,247
Subtotal	-	2,527,004		738,380		2,299,827
Total Metered	61,094	2,527,004		\$ 2,455,130		\$ 4,873,729
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered Per EDU	6,078	-	\$ 28.33	\$ 172,183	\$ 61.08	\$ 371,230
TOTAL RESIDENTIAL	67,172	2,527,004		\$ 2,627,313		\$ 5,244,959
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	7,072	-	\$ 28.10	\$ 198,737	\$ 41.39	\$ 292,730
3/4	1,272	-	28.10	35,742	41.39	52,646
1	1,955	-	28.10	54,942	41.39	80,927
1 1/2	8,404	-	28.10	236,153	41.39	347,842
2	1,583	-	28.10	44,473	41.39	65,506
6	1,188	-	28.10	33,386	41.39	49,177
8	297	-	28.10	8,348	41.39	12,296
10	10	-	28.10	276	41.39	407
Subtotal	21,781	-		612,057		901,531
Allowance (2,493 Gallons)	-	468,234	-	\$ -	0.8940	\$ 418,601
1st block	-	800,210	0.6460	516,936	0.8940	715,388
Subtotal	-	1,268,444		516,936		1,133,989
Total Metered	21,781	1,268,444		\$ 1,128,993		\$ 2,035,520
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered Per EDU	432	-	\$ 28.33	\$ 12,239	\$ 60.00	\$ 25,920
TOTAL COMMERCIAL	22,213	1,268,444		\$ 1,141,232		\$ 2,061,440
<u>Public - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 28.10	\$ 337	\$ 41.39	\$ 497
1	23	-	28.10	648	41.39	954
2	12	-	28.10	337	41.39	497
Subtotal	47	-		1,322		1,948
Allowance	-	1,057	-	\$ -	0.8940	\$ 945
1st block	-	17,295	0.6460	11,173	0.8940	15,462
Subtotal	-	18,352		11,173		16,407
TOTAL PUBLIC	47	18,352		\$ 12,495		\$ 18,355
TOTAL DIVISION	89,432	3,813,800		\$ 3,781,040		\$ 7,324,754

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification	Adjusted Revenues, Per Books Present Rates 03/31/2021(a)	Bill Analysis Revenues, Proposed Rates (Schedule 2)	Ref.	Adjustment Factor (Schedule 2 RZ 8)	Revenues Under Proposed Rates (5)=(3)X(4)	Pro Forma Adjustments Proposed Rates (Schedule 3)	Total Pro Forma Revenue Proposed Rates (7)	Proposed Increase (7)-(6)-(2)	Percent Increase (8)
(1)	(2)	(3)		(4)	(5)=(3)X(4)	(6)	(7)	(7)-(6)-(2)	(8)
METERED SALES									
Residential	\$ 856,967	\$ 1,467,615	Sch. 3 RZ 8	0.99997874	\$ 1,467,584	\$ (22,800)	\$ 1,444,784		
Discount to Residential							(25,492)		
Net Revenue							\$ 1,419,292	\$ 562,325	65.6%
Commercial	132,205	217,122	Sch. 3 RZ 8	1.00003511	217,130		217,130	84,925	64.2%
Public Authority	1,744	2,963	Sch. 3 RZ 8	1.00004214	2,963		2,963	1,219	69.9%
Total Sales Related to Wastewater	990,915	1,687,700			1,687,676	(22,800)	1,639,385	648,469	65.4%
Other Operating Revenues	23,653	853		1.00000000	853	23,346 (b)	24,199	546	
Total Wastewater Revenue	\$ 1,014,569	\$ 1,688,553			\$ 1,688,530	\$ 546	\$ 1,663,584	\$ 649,015	

(a) Excludes DSIC and Unbilled Revenue.

(b) Includes increase to forfeited discounts based on proposed revenues.

Revenue per Order \$ 1,663,639

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 4) (3)	Ref.	Adjustment Factor (4)=(2)/(3)	Revenues Under Present Rates (5)=(3)X(4)	Pro Forma Adjustments Present Rates (Schedule 3) (6)	Add Back Annualized DSIC Revenue (7)	Revenues Under Present Rates (8)=(5)+(6)+(7)
<u>METERED SALES</u>								
Residential	\$ 837,872	\$ 837,890	Sch. 3 RZ8	0.999978744	\$ 837,872	\$ (22,800)	\$ 41,895	\$ 856,967
Commercial	125,909	125,905	Sch. 3 RZ8	1.000035106	125,909		6,295	132,205
Public Authority	1,661	1,661	Sch. 3 RZ8	1.000042143	1,661		83	1,744
Total Sales Related to Wastewater	<u>\$ 965,443</u>	<u>\$ 965,456</u>			<u>\$ 965,443</u>	<u>\$ (22,800)</u>	<u>\$ 48,273</u>	<u>\$ 990,915</u>
Other Operating Revenues	<u>853</u>	<u>853</u>		1.000000000	<u>853</u>	<u>22,800</u>		<u>23,653</u>
Total Wastewater Revenue	<u><u>\$ 966,296</u></u>	<u><u>\$ 966,309</u></u>			<u><u>\$ 966,296</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 48,273</u></u>	<u><u>\$ 1,014,569</u></u>

(a) Excludes DSIC and Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 8
 EAST BRADFORD DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Bills (6)	Proposed Consumption (7)	Proposed Rate (8)	Proposed Revenue (9)
Residential - Unmetered and Metered								
Flat Rate								
Single Family	4,596	-	\$ 68.09	\$ 312,921	276		\$ 104.75	\$ 28,911
Single Family - Birmingham Twp.	228		68.09	15,525	228		104.75	23,883
Townhome	9,663	-	52.72	509,444	-			-
Subtotal	14,487	-		\$ 837,890	504			\$ 52,794
EDU Charge					13,983		\$ 57.61	\$ 805,555
All Usage		-	\$ -	\$ -		519,099	\$ 1.1737	\$ 609,266
TOTAL RESIDENTIAL	14,487	-		\$ 837,890	14,487	519,099		\$ 1,467,615
Commercial - Monthly								
EDU Charge								
5/8	60	-	\$ 26.00	\$ 1,560	60	-	\$ 40.25	\$ 2,415
3/4	24	-	26.00	624	24	-	40.25	966
1	48	-	26.00	1,248	48	-	40.25	1,932
1 1/2	20	-	26.00	520	20	-	40.25	805
2	180	-	26.00	4,680	180	-	40.25	7,245
3	24	-	26.00	624	24	-	40.25	966
4	12	-	26.00	312	12	-	40.25	483
6	24	-	26.00	627	24	-	40.25	970
Subtotal	392	-		10,195	392	-		15,782
Allowance (2,000 Gallons)		6,927	-	\$ -		6,927	1.1530	\$ 7,986
1st block	-	167,696	0.6900	115,710		167,696	1.1530	193,354
Subtotal	-	174,623		115,710		174,623		201,340
TOTAL COMMERCIAL	392	174,623		\$ 125,905		174,623		\$ 217,122
Public - Monthly								
Customer Charge								
3/4	12	-	\$ 26.00	\$ 312	12		\$ 40.25	\$ 483
3	12	-	26.00	312	12		40.25	483
Subtotal	24	-		624	24			966
Allowance (2,000 Gallons)		229	-	\$ -		229	1.1530	\$ 264
1st block	-	1,503	0.6900	1,037		1,503	1.1530	1,733
Subtotal	-	1,732		1,037		1,732		1,997
TOTAL PUBLIC	24	1,732		\$ 1,661		1,732		\$ 2,963
TOTAL DIVISION	14,903	176,355		\$ 965,456		695,454		\$ 1,687,700

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 8
EAST BRADFORD DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

<u>Rate Block, 100 Gallons</u> (1)	<u>Number of Bills</u> (2)	<u>Consumption, 100 Gallons</u> (3)	<u>Present Rate</u> (4)	<u>Present Revenue</u> (5)	<u>Proposed Bills</u> (6)	<u>Proposed Consumption</u> (7)	<u>Proposed Rate</u> (8)	<u>Proposed Revenue</u> (9)
<u>Residential - Unmetered</u>								
Flat Rate								
Single Family - Birmingham Twp.	<u>(228)</u>		\$ 68.09	<u>\$ (15,525)</u>	<u>(228)</u>		\$ 100.00	<u>(22,800)</u>
Subtotal	<u>(228)</u>	<u>-</u>		<u>\$ (15,525)</u>	<u>(228)</u>			<u>\$ (22,800)</u>
<u>Contract Sales for Resale - Unmetered</u>								
Single Family - Birmingham Twp.	<u>228</u>		\$ 68.09	<u>\$ 15,525</u>	<u>228</u>		\$ 100.00	<u>22,800</u>
Subtotal	<u>228</u>	<u>-</u>		<u>\$ 15,525</u>	<u>228</u>			<u>\$ 22,800</u>
TOTAL ADJUSTMENT	<u>-</u>	<u>-</u>		<u>\$ -</u>		<u>-</u>		<u>\$ -</u>

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification	Adjusted Revenues, Per Books Present Rates 03/31/2021(a)	Bill Analysis Revenues, Proposed Rates	Ref.	Adjustment Factor (Schedule 2 RZ 9)	Revenues Under Proposed Rates (5)=(3)X(4)	Pro Forma Revenue Adjustments	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6)	Proposed Increase (8)=(7)-(2)	Percent Increase (8)
(1)	(2)	(3)		(4)	(5)=(3)X(4)	(6)	(7)=(5)+(6)	(8)=(7)-(2)	(8)
METERED SALES									
Residential	\$ 4,415,789	\$ 7,496,342	Sch. 3 RZ9	0.99989180	\$ 7,495,531		\$ 7,495,531		
Discount to Residential							(132,254)		
Net Revenue							\$ 7,363,277	\$ 2,947,487	66.7%
Commercial	2,771,955	4,562,194	Sch. 3 RZ9	1.00000160	4,562,201		4,562,201	1,790,246	64.6%
Industrial	2,787	4,419	Sch. 3 RZ9	1.00040560	4,421		4,421	1,634	58.6%
Public Authority	47,830	79,815	Sch. 3 RZ9	1.00000711	79,816		79,816	31,985	66.9%
Total Sales Related to Wastewater	\$ 7,238,362	\$ 12,142,770			\$ 12,141,969	\$ -	\$ 12,009,714	\$ 4,771,352	65.9%
Other Operating Revenues	20,377	20,377			20,377	13,435 (b)	33,812	13,435	65.9%
Total Wastewater Revenue	\$ 7,258,739	\$ 12,163,147			\$ 12,162,346	\$ 13,435	\$ 12,043,526	\$ 4,784,787	65.9%

(a) Excludes Unbilled Revenue.

(b) Includes increase to forfeited discounts based on proposed revenues.

Revenue per Order \$ 12,044,410

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 4) (3)	Ref.	Adjustment Factor (4)=(2)/(3)	Revenues Under Present Rates (5)=(3)X(4)
<u>METERED SALES</u>					
Residential	\$ 4,415,789	\$ 4,416,267	Sch. 3 RZ9	0.999891802	\$ 4,415,789
Commercial	2,771,955	2,771,951	Sch. 3 RZ9	1.000001598	2,771,955
Industrial	2,787	2,786	Sch. 3 RZ9	1.000405599	2,787
Public Authority	47,830	47,830	Sch. 3 RZ9	1.000007109	47,830
Total Sales Related to Wastewater	7,238,362	7,238,834			7,238,362
Other Operating Revenues	20,377	20,377			20,377
Total Wastewater Revenue	<u>\$ 7,258,739</u>	<u>\$ 7,259,211</u>			<u>\$ 7,258,739</u>

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 9
CHELTENHAM TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	106,538	-	\$ 20.89	\$ 2,225,583	\$ 32.42	\$ 3,453,968
3/4	8,559	-	20.89	178,800	32.42	277,486
1	2,122	-	20.89	44,335	32.42	68,805
1 1/2	144	-	20.89	3,008	32.42	4,668
M	40	-	20.89	838	32.42	1,300
N	403	-	20.89	8,421	32.42	13,069
Subtotal	117,807	-		2,460,985		3,819,296
No Charge Customers		2,063	-	\$ -	0.7350	\$ 1,516
1st block	-	5,000,721	0.3910	1,955,282	0.7350	3,675,530
Subtotal	-	5,002,783		1,955,282		3,677,046
TOTAL RESIDENTIAL	117,807	5,002,783		\$ 4,416,267		\$ 7,496,342
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,690	-	\$ 20.89	\$ 56,188	\$ 31.85	\$ 85,667
3/4	478	-	20.89	9,990	31.85	15,231
1	5,545	-	20.89	115,831	31.85	176,602
1 1/2	14,582	-	20.89	304,620	31.85	464,440
2	20,824	-	20.89	435,015	31.85	663,248
3	6,063	-	20.89	126,664	31.85	193,119
4	27,076	-	20.89	565,607	31.85	862,355
6	4,092	-	20.89	85,482	31.85	130,330
8	1,560	-	20.89	32,588	31.85	49,686
Subtotal	82,910	-		1,731,985		2,640,678
No Charge Customers		1,621	-	\$ -	0.7220	\$ 1,170
1st block	-	2,659,760	0.3910	1,039,966	0.7220	1,920,346
Subtotal	-	2,661,380		1,039,966		1,921,516
TOTAL COMMERCIAL	82,910	2,661,380		\$ 2,771,951		\$ 4,562,194
<u>Industrial - Monthly</u>						
Customer Charge						
5/8	60	-	\$ 20.89	\$ 1,253	\$ 31.85	\$ 1,911
3/4	24	-	20.89	501	31.85	764
1	24	-	20.89	501	31.85	764
Subtotal	108	-		2,255		3,439
1st block	-	1,358	0.3910	531	0.7220	980
Subtotal	-	1,358		531		980
TOTAL INDUSTRIAL	108	1,358		\$ 2,786		\$ 4,419

<u>Public - Monthly</u>							
Customer Charge							
5/8	24	-	\$ 20.89	\$ 501	\$ 31.85	\$ 764	
3/4	12	-	20.89	251	31.85	382	
1	24	-	20.89	501	31.85	764	
1 1/2	192	-	20.89	4,011	31.85	6,115	
2	24	-	20.89	501	31.85	764	
3	504	-	20.89	10,529	31.85	16,052	
4	636	-	20.89	13,286	31.85	20,257	
Subtotal	1,416	-		29,580		45,098	
No Charge Customers		1,410	-	\$ -	0.7220	\$ 1,018	
1st block	-	46,675	0.3910	18,250	0.7220	33,699	
Subtotal	-	48,085		18,250		34,717	
TOTAL PUBLIC	1,416	48,085		\$ 47,830		\$ 79,815	
TOTAL DIVISION	<u>202,241</u>	<u>7,713,607</u>		<u>\$ 7,238,834</u>		<u>\$ 12,142,770</u>	

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2023(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 2 RZ 10) (3)	Less Adjustment (4)	Adjusted Bill Analysis Revenues, Proposed Rates (5)	Adjustment Factor (Schedule 3 RZ 10) (6)	Revenues Under Proposed Rates (7)=(5)X(6) (7)	Pro Forma Adjustments Proposed Rates (Schedule 2) (8)	Total Pro Forma Revenue Proposed Rates (9)=(7)+(8) (9)	Proposed Increase (10)=(9)-(2) (10)	Percent Increase (11)
METERED SALES										
Residential	\$ 2,099,876	\$ 2,678,419	\$ (160,080)	\$ 2,518,339	1.00157225	\$ 2,522,298	\$ 1,083,972	\$ 3,606,271		
Discount to Residential								(63,629)		
Net Revenue								\$ 3,542,642	\$ 1,442,766	68.7%
Commercial	816,460	716,144	(32,245)	683,899	0.99153351	678,109	349,968	1,028,077	211,617	25.9%
Total Sales Related to Wastewater	\$ 2,916,336	\$ 3,394,563	\$ (192,325)	\$ 3,202,238		\$ 3,200,407	\$ 1,433,940	\$ 4,570,719	\$ 1,654,383	56.7%
Other Operating Revenues	7,435	7,435	7,435	7,435		7,435	4,173 (b)	11,607	4,173	56.1%
Total Wastewater Revenue	\$ 2,923,770	\$ 3,401,997	\$ (184,890)	\$ 3,209,672		\$ 3,207,842	\$ 1,438,113	\$ 4,582,326	\$ 1,658,556	

(a) Excludes Unbilled Revenue.

(b) Includes increase to forfeited discounts based on proposed revenues.

Revenue per Order \$ 4,582,753

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF APPLICATION OF PROPOSED RATES
TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Rate Zone PUC Pg.	Residential (2)	Commercial (3)	Industrial (4)	Public (5)	Bulk Sales (6)	Total Sales (7)
RZ 10 - East Norriton Division	10	\$ 2,673,543	\$ 715,816				\$ 3,389,359
RZ 10 - East Norriton - Whitpain	10-WTP	4,876	328				5,204
		<u>2,678,419</u>	<u>716,144</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>3,394,563</u>
<u>Pro Forma Adjustments</u>							
Annualize Revenue - RZ 10 - East Norriton		1,082,568	349,968				1,432,536
Annualize Revenue - RZ 10 - East Norriton - Whitpain		1,404	-				1,404
June 2020 Advancement - RZ10 - East Norriton		<u>(160,080)</u>	<u>(32,245)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(192,325)</u>
Subtotal Adjustments		<u>923,892</u>	<u>317,723</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,241,615</u>
Total Pro Forma Revenues Under Proposed Rates		<u>\$ 3,602,311</u>	<u>\$ 1,033,867</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 4,636,178</u>

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON TOWNSHIP DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification	Revenues, Per Books Present Rates 03/31/2021(a)	Bill Analysis Revenues, Present Rates (Schedule 4 RZ10)	Less Adjustment	Adjusted Bill Analysis Revenues, Present Rates	Adjustment Factor (6)=(4)/(5)	Revenues Under Present Rates (7)=(5)X(6)	Pro Forma Adjustments Present Rates (Schedule 4 and 6 RZ10)	Total Pro Forma Revenue Present Rates (9)=(7)+(8)
(1)	(2)	(3)	(4)	(5)	(6)=(4)/(5)	(7)=(5)X(6)	(8)	(9)=(7)+(8)
<u>METERED SALES</u>								
Residential	\$ 1,463,700	\$ 1,557,407	\$ (96,005)	\$ 1,461,402	1.001572250	\$ 1,463,700	\$ 636,176	\$ 2,099,876
Commercial	536,265	565,659	(24,815)	\$ 540,844	0.991533511	536,265	280,195	816,460
Subtotal	<u>1,999,965</u>	<u>2,123,066</u>	<u>(120,820)</u>	<u>2,002,246</u>		<u>1,999,965</u>	<u>916,371</u>	<u>2,916,336</u>
Other Operating Revenues	<u>7,435</u>	<u>7,435</u>	<u>7,435</u>	<u>7,435</u>		<u>7,435</u>		<u>7,435</u>
Total Wastewater Revenue	<u>\$ 2,007,399</u>	<u>\$ 2,130,501</u>	<u>\$ (113,385)</u>	<u>\$ 2,009,681</u>		<u>\$ 2,007,399</u>	<u>\$ 916,371</u>	<u>\$ 2,923,770</u>

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
 EAST NORRITON DIVISION
 SUMMARY OF APPLICATION OF PRESENT RATES
 TO CUSTOMER CONSUMPTION ANALYSIS FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Division (1)	Div. Ref.	Residential (2)	Commercial (3)	Total Sales (7)
RZ 10 - East Norriton	10	1,555,269	565,157	2,120,426
RZ 10 - East Norriton - Whitpain	10-WTP	2,138	502	2,640
Total Present Wastewater Revenue		1,557,407	565,659	2,123,066
<u>Pro Forma Adjustments</u>				
Annualize Revenue - RZ 10 - East Norriton	10	635,552	280,195	915,747
Annualize Revenue - RZ 10 - East Norriton - Whitpain	10-WTP	624	-	624
June 2020 Advancement - RZ10 - East Norriton	10	(96,005)	(24,815)	(120,820)
		540,171	255,380	795,551
Total Pro Forma Revenues Under Present Rates		\$ 2,097,578	\$ 821,039	\$ 2,918,617

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
 EAST NORRITON DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	35,201	-	\$ 21.08	\$ 742,041	\$ 35.57	\$ 1,252,107
3/4	9	-	21.08	191	35.57	323
1	3,962	-	21.08	83,522	35.57	140,933
6	9	-	21.08	192	35.57	325
Subtotal	39,182	-		825,946		1,393,688
Allowance (1,333 Gallons)		491,429	-	\$ -	0.7726	\$ 379,678
1st block	-	1,004,491	0.6540	656,937	0.7726	776,070
Subtotal	-	1,495,921		656,937		1,155,748
Total Metered	39,182	1,495,921		\$ 1,482,883		\$ 2,549,436
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	1,879	-	\$ 38.53	\$ 72,386	\$ 66.06	\$ 124,107
TOTAL RESIDENTIAL	41,060	1,495,921		\$ 1,555,269		\$ 2,673,543
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	1,771	-	\$ 21.08	\$ 37,332	\$ 34.94	\$ 61,878
3/4	7	-	21.08	150	34.94	249
1	406	-	21.08	8,552	34.94	14,175
1-1/2	195	-	21.08	4,104	34.94	6,802
2	279	-	21.08	5,880	34.94	9,747
4	95	-	21.08	1,998	34.94	3,311
6	88	-	21.08	1,861	34.94	3,085
8	72	-	21.08	1,507	34.94	2,498
10	17	-	21.08	364	34.94	603
Subtotal	2,929	-		61,748		102,348
Allowance (1,333 Gallons)		31,511	-	\$ -	0.7590	\$ 23,917
1st block	-	754,203	0.6540	493,249	0.7590	572,440
Subtotal	-	785,714		493,249		596,357
Total Metered Commercial	2,929	785,714		\$ 554,997		\$ 698,705
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	264	-	\$ 38.53	\$ 10,160	\$ 64.89	\$ 17,111
TOTAL COMMERCIAL	3,193	785,714		\$ 565,157		\$ 715,816
TOTAL DIVISION	44,253	2,281,635		\$ 2,120,426		\$ 3,389,359

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
WHITPAIN TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Consumption (6)	Proposed Rate (7)	Proposed Revenue (8)
<u>Residential - Monthly</u>							
Customer Charge							
Up to 6,666 gals.	58	772	\$ 31.66	\$ 1,821		\$ 35.57	\$ 2,046
Over 6,666 gals.	8	2,522	39.57	317		35.57	285
	<u>66</u>	<u>3,294</u>		<u>2,138</u>			<u>2,331</u>
First Block					3,294	\$ 0.7726	2,545
TOTAL RESIDENTIAL	66	3,294		\$ 2,138	3,294		\$ 4,876
<u>Commercial - Monthly</u>							
Customer Charge							
4	9	-	\$ 56.00	\$ 502		\$ 34.94	\$ 313
Subtotal	<u>9</u>	<u>-</u>		<u>502</u>			<u>313</u>
Allowance (4,000 Gallons)		20	-	\$ -	\$ 20	0.7590	15
1st block	-	-	0.8000	-	-	0.7590	-
Subtotal	<u>-</u>	<u>20</u>		<u>-</u>	<u>20</u>		<u>15</u>
TOTAL COMMERCIAL	9	20		\$ 502	20		\$ 328
TOTAL WHITPAIN TOWNSHIP	75	3,314		\$ 2,640			\$ 5,204

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES FULL YEAR
FOR THE TWELVE MONTHS ENDED JUNE 30, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	47,276	-	\$ 21.08	\$ 996,582	\$ 35.57	\$ 1,681,615
3/4	12	-	21.08	254	35.57	429
1	5,338	-	21.08	112,532	35.57	189,885
6	12	-	21.08	256	35.57	431
Subtotal	52,639	-		1,109,624		1,872,360
Allowance (1,333 Gallons)		658,529	-	\$ -	0.7726	\$ 508,779
1st block	-	1,360,028	0.6540	889,459	0.7726	1,050,758
Subtotal	-	2,018,557		889,459		1,559,537
Total Metered	52,639	2,018,557		\$ 1,999,083		\$ 3,431,897
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	2,485	-	\$ 38.53	\$ 95,732	\$ 66.06	\$ 164,133
TOTAL RESIDENTIAL	55,123	2,018,557		\$ 2,094,815		\$ 3,596,030
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	2,387	-	\$ 21.08	\$ 50,314	\$ 34.94	\$ 83,395
3/4	13	-	21.08	273	34.94	452
1	553	-	21.08	11,664	34.94	19,333
1-1/2	265	-	21.08	5,576	34.94	9,243
2	379	-	21.08	7,993	34.94	13,249
4	132	-	21.08	2,775	34.94	4,600
6	122	-	21.08	2,563	34.94	4,248
8	98	-	21.08	2,073	34.94	3,436
10	25	-	21.08	534	34.94	884
Subtotal	3,974	-		83,765		138,840
Allowance (1,333 Gallons)		43,000	-	\$ -	0.7590	\$ 32,637
1st block	-	1,106,127	0.6540	723,407	0.7590	839,551
Subtotal	-	1,149,128		\$ 723,407		\$ 872,188
Total Metered Commercial	3,974	1,149,128		\$ 807,172		\$ 1,011,028
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	347	-	\$ 38.53	\$ 13,366	\$ 64.89	\$ 22,510
TOTAL COMMERCIAL	4,321	1,149,128		\$ 820,538		\$ 1,033,538
TOTAL DIVISION	59,444	3,167,685		\$ 2,915,353		\$ 4,629,568

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
 EAST NORRITON DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	14,037	-	\$ 21.08	\$ 295,906	\$ 35.57	\$ 499,306
3/4	4	-	21.08	75	35.57	126
1	1,598	-	21.08	33,687	35.57	56,843
6	4	-	21.08	83	35.57	140
Subtotal	15,643	-		329,751		556,415
Allowance (1,333 Gallons)		193,872	-	\$ -	0.7726	\$ 149,786
1st block	-	424,246	0.6540	277,457	0.7726	327,772
Subtotal	-	618,118		277,457		477,558
Total Metered	15,643	618,118		\$ 607,208		\$ 1,033,973
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	736	-	\$ 38.53	\$ 28,344	\$ 66.06	\$ 48,595
TOTAL RESIDENTIAL	16,378	618,118		\$ 635,552		\$ 1,082,568
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	713	-	\$ 21.08	\$ 15,031	\$ 34.94	\$ 24,914
3/4	6	-	21.08	122	34.94	203
1	169	-	21.08	3,570	34.94	5,917
1-1/2	80	-	21.08	1,684	34.94	2,791
2	116	-	21.08	2,450	34.94	4,061
4	46	-	21.08	978	34.94	1,621
6	40	-	21.08	840	34.94	1,393
8	33	-	21.08	689	34.94	1,143
10	8	-	21.08	169	34.94	281
Subtotal	1,211	-		25,533		42,324
Allowance (1,333 Gallons)		13,214	-	\$ -	0.7590	\$ 10,030
1st block	-	383,361	0.6540	250,718	0.7590	290,971
Subtotal	-	396,575		\$ 250,718		\$ 301,001
Total Metered Commercial	1,211	396,575		\$ 276,251		\$ 343,325
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	102	-	\$ 38.53	\$ 3,944	\$ 64.89	\$ 6,643
TOTAL COMMERCIAL	1,314	396,575		\$ 280,195		\$ 349,968
TOTAL DIVISION	17,692	1,014,693		\$ 915,747		\$ 1,432,536

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
EAST NORRITON DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	(1,962)	-	\$ 21.08	\$ (41,364)	\$ 35.57	\$ (69,798)
3/4	(1)	-	21.08	(11)	35.57	(19)
1	(222)	-	21.08	(4,677)	35.57	(7,891)
6	(1)	-	21.08	(20)	35.57	(33)
Subtotal	(2,186)	-		(46,072)		(77,741)
Allowance (1,333 Gallons)		(26,773)	-	\$ -	0.7726	\$ (20,685)
1st block	-	(68,709)	0.6540	(44,935)	0.7726	(53,084)
Subtotal	-	(95,482)		(44,935)		(73,769)
Total Metered	(2,186)	(95,482)		\$ (91,007)		\$ (151,510)
<u>Residential - Unmetered</u>						
Customer Charge						
Unmetered	(130)	-	\$ 38.53	\$ (4,998)	\$ 66.06	\$ (8,570)
TOTAL RESIDENTIAL	(2,315)	(95,482)		\$ (96,005)		\$ (160,080)
<u>Commercial - Monthly</u>						
Customer Charge						
5/8	(97)	-	\$ 21.08	\$ (2,049)	\$ 34.94	\$ (3,397)
3/4		-	21.08	-	34.94	-
1	(22)	-	21.08	(458)	34.94	(759)
1-1/2	(10)	-	21.08	(211)	34.94	(350)
2	(16)	-	21.08	(337)	34.94	(559)
4	(9)	-	21.08	(200)	34.94	(331)
6	(7)	-	21.08	(138)	34.94	(230)
8	(6)	-	21.08	(124)	34.94	(205)
10		-	21.08	-	34.94	-
Subtotal	(167)	-		(3,517)		(5,831)
Allowance (1,333 Gallons)		(1,726)	-	\$ -	0.7590	\$ (1,310)
1st block	-	(31,436)	0.6540	(20,559)	0.7590	(23,860)
Subtotal	-	(33,162)		\$ (20,559)		\$ (25,170)
Total Metered Commercial	(167)	(33,162)		\$ (24,076)		\$ (31,001)
<u>Commercial - Unmetered</u>						
Customer Charge						
Unmetered	(19)	-	\$ 38.53	\$ (739)	\$ 64.89	\$ (1,244)
TOTAL COMMERCIAL	(186)	(33,162)		\$ (24,815)		\$ (32,245)
TOTAL DIVISION	(2,501)	(128,644)		\$ (120,820)		\$ (192,325)

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 10
WHITPAIN TOWNSHIP DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENT
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Consumption (6)	Proposed Rate (7)	Proposed Revenue (8)
<u>Residential - Monthly</u>							
Customer Charge							
Up to 6,666 gals.	13	220	\$ 31.66	\$ 426		\$ 35.57	\$ 479
Over 6,666 gals.	5	747	39.57	198		35.57	178
	18	967		624			657
First Block					967	\$ 0.7726	747
TOTAL RESIDENTIAL	18	967		\$ 624	967		\$ 1,404
<u>Commercial - Monthly</u>							
Customer Charge							
4	-	-	\$ 56.00	\$ -		\$ 34.94	\$ -
Subtotal	-	-		-			-
Allowance (4,000 Gallons)		-	-	\$ -	\$ -	0.7590	-
1st block	-	-	0.8000	-	-	0.7590	-
Subtotal	-	-		-	-		-
Total Metered	-	-		\$ -	-		\$ -
TOTAL WHITPAIN TOWNSHIP	18	967		\$ 624			\$ 1,404

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PROPOSED RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Adjusted Revenues, Per Books Present Rates 03/31/2023(a) (2)	Bill Analysis Revenues, Proposed Rates (Schedule 3) (3)	Ref.	Adjustment Factor (Schedule 2) (4)	Revenues Under Proposed Rates (5)=(3)X(4)	Pro Forma Adjustments Proposed Rates (Schedule 3) (6)	Total Pro Forma Revenue Proposed Rates (7)=(5)+(6)	Proposed Increase (8)=(7)-(2)	Percent Increase (9)
<u>METERED SALES</u>									
Residential	\$ 2,291,038	\$ 926,302	Sch. 2	1.00133871	\$ 927,542	\$ 2,720,947	\$ 3,648,489		
Discount to Residential							(64,378)		
Net Revenue							\$ 3,584,111	\$ 1,293,073	56.4%
Commercial	577,122	285,742	Sch. 2	1.00167313	286,220	531,384	817,604	240,482	41.7%
Public Authority	-	880	Sch. 2	1.00000000	880	(880)	-	-	
Total Sales Related to Wastewater	\$ 2,868,160	\$ 1,212,924			\$ 1,214,642	\$ 3,251,451	\$ 4,401,715	\$ 1,533,555	53.5%
Other Operating Revenues	17,382	17,382			17,382	9,261 (b)	26,643	9,261	
Total Wastewater Revenue	\$ 2,885,542	\$ 1,230,306			\$ 1,232,024	\$ 3,260,712	\$ 4,428,358	\$ 1,542,816	53.5%
(a) Excludes Unbilled Revenue.									
(b) Includes increase to forfeited discounts based on proposed revenues.									
Revenue per Order							\$ 4,428,399		
Difference							\$ (41)		

AQUA PENNSYLVANIA INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
SUMMARY OF REVENUE UNDER PRESENT RATES AND PRO FORMA REVENUES UNDER PRESENT RATES
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021 AND 2023

Customer Classification (1)	Revenues, Per Books Present Rates 03/31/2021(a) (2)	Bill Analysis Revenues, Present Rates (Schedule 3) (3)	Ref.	Adjustment Factor (4)=(2)/(3) (4)	Revenues Under Present Rates (5)=(3)X(4) (5)	Pro Forma Adjustments Present Rates (Schedule 3) (6)	Add Back Annualized DSIC Revenue (7)	Total Pro Forma Revenue Present Rates (8)=(5)+(6)+(7) (8)
METERED SALES								
Residential	\$ 499,679	\$ 499,011	Sch. 3 RZ11	1.001338708	\$ 499,679	\$ 1,791,359	\$ -	\$ 2,291,038
Commercial	161,141	160,872	Sch. 3 RZ11	1.001673131	161,141	415,981	-	577,122
Public Authority	513	513	Sch. 3 RZ11	1.000000000	513	(513)	-	-
Total	\$ 661,333	\$ 660,396			\$ 661,333	\$ 2,206,827	\$ -	\$ 2,868,160
Other Operating Revenues	-	-			-	17,382		17,382
Total Wastewater Revenue	\$ 661,333	\$ 660,396			\$ 661,333	\$ 2,224,209	\$ -	\$ 2,885,542

(a) Excludes Unbilled Revenue.

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
 NEW GARDEN DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	6,080	-	\$ 37.64	\$ 228,826	\$ 45.46	\$ 276,391
Subtotal	6,080	-		228,826		276,391
Allowance (1,667 Gallons)		95,055	-	\$ -	2.3259	\$ 221,088
1st block (up to 5,000 gallons)		121,041	1.5170	183,618	2.3259	281,528
2nd block (Over 5,000 gallons)	-	44,054	1.9650	86,567	3.3435	147,295
Subtotal	-	260,150		270,185		649,911
Total Metered	6,080	260,150		\$ 499,011		\$ 926,302
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	1,177	-	\$ 52.71	\$ 62,041	\$ 62.52	\$ 73,592
Subtotal	1,177	-		62,041		73,592
Allowance (1,667 Gallons)		18,230	-	\$ -	3.4850	\$ 63,533
1st block (up to 5,000 gallons)		16,023	2.3500	37,655	3.4850	55,842
2nd block (Over 5,000 gallons)	-	8,647	3.0150	26,070	4.4868	38,796
Subtotal	-	42,901		63,725		158,171
Total Metered	1,177	42,901		\$ 125,766		\$ 231,763
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	90	-	\$ 64.31	\$ 5,800	\$ 62.52	\$ 5,639
Subtotal	90	-		5,800		5,639
Allowance (1,667 Gallons)		1,450	-	\$ -	4.4580	\$ 6,464
1st block (up to 5,000 gallons)		2,420	3.3020	7,991	4.4580	10,788
2nd block (Over 5,000 gallons)	-	3,400	4.1670	14,168	5.0000	17,000
Subtotal	-	7,270		22,159		34,252
Total Metered	90	7,270		\$ 27,959		\$ 39,891
Total Commercial	1,267	50,171		\$ 153,725		\$ 271,654

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
 NEW GARDEN DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 218.32	\$ 655	\$ 311.55	\$ 935
Subtotal	3	-		655		935
Allowance (1,667 Gallons)		250	-	\$ -	3.4850	\$ 871
1st block (up to 5,000 gallons)		48	2.3500	113	3.4850	167
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	298		113		1,038
Total Metered	3	298		\$ 768		\$ 1,973
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	10	-	\$ 180.69	\$ 1,873	\$ 257.85	\$ 2,673
Subtotal	10	-		1,873		2,673
Allowance (1,667 Gallons)		35	-	\$ -	3.4850	\$ 124
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	35		-		124
Total Metered	10	35		\$ 1,873		\$ 2,797
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 165.62	\$ 497	\$ 236.34	\$ 709
Subtotal	3	-		497		709
Allowance (1,667 Gallons)		200	-	\$ -	3.4850	\$ 697
1st block (up to 5,000 gallons)		247	2.3500	580	3.4850	861
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	447		580		1,558
Total Metered	3	447		\$ 1,077		\$ 2,267
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	3	-	\$ 143.05	\$ 429	\$ 204.14	\$ 612
Subtotal	3	-		429		612
Allowance (1,667 Gallons)		150	-	\$ -	3.4850	\$ 523
1st block (up to 5,000 gallons)		10	2.3500	24	3.4850	35
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	160		24		558
Total Metered	3	160		\$ 453		\$ 1,170

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
NEW GARDEN DIVISION
APPLICATION OF PRESENT AND PROPOSED RATES TO CONSUMPTION ANALYSIS
FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	6	-	\$ 127.98	\$ 768	\$ 182.63	\$ 1,096
Subtotal	6	-		768		1,096
Allowance (1,667 Gallons)		100	-	\$ -	3.4850	\$ 349
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	100		-		349
Total Metered	6	100		\$ 768		\$ 1,445
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	12	-	\$ 90.34	\$ 1,084	\$ 128.92	\$ 1,547
Subtotal	12	-		1,084		1,547
Allowance (1,667 Gallons)		350	-	\$ -	3.4850	\$ 1,220
1st block (up to 5,000 gallons)		260	2.3500	611	3.4850	906
2nd block (Over 5,000 gallons)	-	170	3.0150	513	4.4868	763
Subtotal	-	780		1,124		2,889
Total Metered	12	780		\$ 2,208		\$ 4,436
Total Combined Residential & Commercial	37	1,820		\$ 7,147		\$ 14,088
Total Commercial & Combined	1,305	51,991		\$ 160,872		\$ 285,742
<u>Public - Monthly</u>						
Customer Charge						
5/8	4	-	\$ 52.71	\$ 198	\$ 62.52	\$ 234
Subtotal	4	-		198		234
Allowance (1,667 Gallons)		61	-	\$ -	2.2849	\$ 140
1st block (up to 5,000 gallons)		82	1.5170	125	2.2849	188
2nd block (Over 5,000 gallons)	-	97	1.9650	190	3.2847	318
Subtotal	-	240		315		646
Total Metered	4	240		\$ 513		\$ 880
Total New Garden Division	7,388	312,381		\$ 660,396		\$ 1,212,924

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
 NEW GARDEN DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Residential - Monthly</u>						
Customer Charge						
5/8	16,912	-	\$ 37.64	\$ 636,516	\$ 45.46	\$ 768,826
Subtotal	16,912	-		636,516		768,826
Allowance (1,667 Gallons)		745	-	\$ -	2.3259	\$ 1,733
1st block (up to 5,000 gallons)		57,220	1.5170	86,803	2.3259	133,089
2nd block (Over 5,000 gallons)	-	543,532	1.9650	1,068,040	3.3435	1,817,299
Subtotal	-	601,498		1,154,843		1,952,121
Total Metered	16,912	601,498		\$ 1,791,359		\$ 2,720,947
<u>Commercial 1 - Monthly</u>						
Customer Charge						
5/8	875	-	\$ 52.71	\$ 46,113	\$ 62.52	\$ 54,699
Subtotal	875	-		46,113		54,699
Allowance (1,667 Gallons)		(9,680)	-	\$ -	3.4850	\$ (33,736)
1st block (up to 5,000 gallons)		115,471	2.3500	271,356	3.4850	402,416
2nd block (Over 5,000 gallons)	-	(8,647)	3.0150	(26,070)	4.4868	(38,796)
Subtotal	-	97,144		245,286		329,884
Total Metered	875	97,144		\$ 291,399		\$ 384,583
<u>Commercial 2 - Monthly</u>						
Customer Charge						
5/8	242	-	\$ 64.31	\$ 15,585	\$ 62.52	\$ 15,152
Subtotal	242	-		15,585		15,152
Allowance (1,667 Gallons)		(500)	-	\$ -	4.4580	\$ (2,229)
1st block (up to 5,000 gallons)		17,350	3.3020	57,290	4.4580	77,347
2nd block (Over 5,000 gallons)	-	14,124	4.1670	58,854	5.0000	70,619
Subtotal	-	30,974		116,144		145,737
Total Metered	242	30,974		\$ 131,729		\$ 160,889
Total Commercial	1,117	128,118		\$ 423,128		\$ 545,472

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
 NEW GARDEN DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons (1)	Number of Bills (2)	Consumption, 100 Gallons (3)	Present Rate (4)	Present Revenue (5)	Proposed Rate (6)	Proposed Revenue (7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 218.32	\$ (655)	\$ 311.55	\$ (935)
Subtotal	(3)	-		(655)		(935)
Allowance (1,667 Gallons)		(250)	-	\$ -	3.4850	\$ (871)
1st block (up to 5,000 gallons)		(48)	2.3500	(113)	3.4850	(167)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(298)		(113)		(1,038)
Total Metered	(3)	(298)		\$ (768)		\$ (1,973)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(10)	-	\$ 180.69	\$ (1,873)	\$ 257.85	\$ (2,673)
Subtotal	(10)	-		(1,873)		(2,673)
Allowance (1,667 Gallons)		(35)	-	\$ -	3.4850	\$ (124)
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(35)		-		(124)
Total Metered	(10)	(35)		\$ (1,873)		\$ (2,797)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 165.62	\$ (497)	\$ 236.34	\$ (709)
Subtotal	(3)	-		(497)		(709)
Allowance (1,667 Gallons)		(200)	-	\$ -	3.4850	\$ (697)
1st block (up to 5,000 gallons)		(247)	2.3500	(580)	3.4850	(861)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(447)		(580)		(1,558)
Total Metered	(3)	(447)		\$ (1,077)		\$ (2,267)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(3)	-	\$ 143.05	\$ (429)	\$ 204.14	\$ (612)
Subtotal	(3)	-		(429)		(612)
Allowance (1,667 Gallons)		(150)	-	\$ -	3.4850	\$ (523)
1st block (up to 5,000 gallons)		(10)	2.3500	(24)	3.4850	(35)
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(160)		(24)		(558)
Total Metered	(3)	(160)		\$ (453)		\$ (1,170)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(6)	-	\$ 127.98	\$ (768)	\$ 182.63	\$ (1,096)
Subtotal	(6)	-		(768)		(1,096)
Allowance (1,667 Gallons)		(100)	-	\$ -	3.4850	\$ (349)
1st block (up to 5,000 gallons)		-	2.3500	-	3.4850	-
2nd block (Over 5,000 gallons)	-	-	3.0150	-	4.4868	-
Subtotal	-	(100)		-		(349)
Total Metered	(6)	(100)		\$ (768)		\$ (1,445)

AQUA PENNSYLVANIA, INC.
WASTEWATER - RATE ZONE 11
 NEW GARDEN DIVISION
 APPLICATION OF PRESENT AND PROPOSED RATES TO BILLING ADJUSTMENTS
 FOR THE TWELVE MONTHS ENDED MARCH 31, 2021

Rate Block, 100 Gallons	Number of Bills	Consumption, 100 Gallons	Present Rate	Present Revenue	Proposed Rate	Proposed Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Combined Residential & Commercial - Monthly</u>						
Customer Charge						
5/8	(12)	-	\$ 90.34	\$ (1,084)	\$ 128.92	\$ (1,547)
Subtotal	(12)	-		(1,084)		(1,547)
Allowance (1,667 Gallons)		(350)	-	\$ -	3.4850	\$ (1,220)
1st block (up to 5,000 gallons)		(260)	2.3500	(611)	3.4850	(906)
2nd block (Over 5,000 gallons)	-	(170)	3.0150	(513)	4.4868	(763)
Subtotal	-	(780)		(1,124)		(2,889)
Total Metered	(12)	(780)		\$ (2,208)		\$ (4,436)
Total Combined Residential & Commercial	(37)	(1,820)		\$ (7,147)		\$ (14,088)
Total Commercial & Combined	1,080	126,297		\$ 415,981		\$ 531,384
<u>Public - Monthly</u>						
Customer Charge						
5/8	(4)	-	\$ 52.71	\$ (198)	\$ 62.52	\$ (234)
Subtotal	(4)	-		(198)		(234)
Allowance (1,667 Gallons)		(61)	-	\$ -	2.2849	\$ (140)
1st block (up to 5,000 gallons)		(82)	1.5170	(125)	2.2849	(188)
2nd block (Over 5,000 gallons)	-	(97)	1.9650	(190)	3.2847	(318)
Subtotal	-	(240)		(315)		(646)
Total Metered	(4)	(240)		\$ (513)		\$ (880)
Total New Garden Division	17,988	727,555		\$ 2,206,827		\$ 3,251,451



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

Aqua Exhibit D

June 3, 2022

Docket Nos. R-2021-3027385
R-2021-3027386

Erin M. Feeney
Aqua Pennsylvania, Inc.
762 W. Lancaster Avenue
Bryn Mawr, PA 19010

Re: Aqua Pennsylvania, Inc. Compliance Filing, Original Tariff Water-PA P.U.C. No. 3; and Aqua Pennsylvania Wastewater, Inc. Compliance Filing, Original Tariff Sewer-PA P.U.C. No. 3

Dear Ms. Feeney:

By Opinion and Order entered May 16, 2022, the Commission authorized Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. (the Company) to file tariff revisions designed to produce an annual revenue increase of approximately \$50,510,192 for water service, and an annual revenue increase of approximately \$18,740,978 for wastewater service, to become effective for service rendered on and after May 19, 2022.

On May 23, 2022, the Company filed Original Tariff Water-PA P.U.C. No. 3 and Original Tariff Sewer-PA P.U.C. No. 3, effective May 19, 2022 (Compliance Tariffs). The Company also filed a detailed proof of revenues, demonstrating that the filed tariff adjustments comply with the provisions of the final Opinion and Order.

Commission Staff reviewed the tariff revisions and proof of revenues and found that suspension or further investigation does not appear warranted at this time. Therefore, in accordance with 52 Pa. Code Chapter 53, the Commission will allow the Compliance Tariffs to become effective by operation of law according to the effective date contained on each page of the tariffs. However, approval of the Compliance Tariffs is subject to investigation, refund, and recoupment based on the outcome of the Commission's review of Petitions for Reconsideration and Clarification filed in the above dockets.¹ The Company may be required to file revised Compliance Tariffs as necessary.

¹ See *Petition for Reconsideration and/or Clarification of CAUSE-PA*, and *Petition for Reconsideration/Clarification of Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc.*, filed May 31, 2022 at Docket Nos. R-2021-3027385 and R-2021-3027386.



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

If you have any questions in this matter, please contact Marissa Boyle, Bureau of Technical Utility Services, at (717) 787-7237 or maboyle@pa.gov.

Sincerely,

A handwritten signature in black ink, reading "Rosemary Chiavetta". The signature is fluid and cursive, with the first name "Rosemary" and last name "Chiavetta" clearly distinguishable.

Rosemary Chiavetta
Secretary

Aqua Exhibit E

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS RATE ZONE 1 - WASTEWATER DIVISION YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Bill Analysis Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	1,449,087	49,227	\$ 4,131,011	1,486,231	51,003	\$ 4,143,936	1,513,963	52,329	\$ 4,160,675	\$ 55,755	\$ 4,216,430	\$ 4,104,558	-2.65%
Commercial	1,182,227	5,272	2,180,872	1,182,227	5,272	2,180,872	1,182,227	5,272	2,180,872	29,222	2,210,094	2,163,630	-2.10%
Industrial	559	12	1,217	559	12	1,217	559	12	1,217	17	1,234	1,213	-1.70%
Public	91,170	373	188,531	91,170	373	188,531	91,170	373	188,531	2,525	191,056	187,816	-1.70%
Total Rate Zone 1	2,723,043	54,883	\$ 6,501,631	2,760,187	56,659	\$ 6,514,556	2,787,919	57,985	\$ 6,531,295	\$ 87,519	\$ 6,618,814	\$ 6,457,217	-2.44%

	12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
Rate Zone 1 - Residential	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	Proforma w/ @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
Customer Charge															
5/8 - Meter	19,919	\$ 48.20	\$ 960,081	20,160	\$ 48.20	\$ 971,721	20,872	\$48.20	\$ 1,006,020	\$ 13,481	\$ 1,019,501	\$ 47.64	\$ 994,331	-2.47%	
3/4 - Meter	80	72.30	5,813	80	72.30	5,813	80	72.30	5,813	78	5,891	71.46	5,745	-2.48%	
1 - Meter	324	120.50	39,054	324	120.50	39,054	324	120.50	39,054	523	39,577	119.10	38,600	-2.47%	
1 1/2 - Meter	96	241.00	23,136	96	241.00	23,136	96	241.00	23,136	310	23,446	238.20	22,867	-2.47%	
2 - Meter	12	385.60	4,627	12	385.60	4,627	12	385.60	4,627	62	4,689	381.12	4,573	-2.47%	
3 - Meter	-	723.00	-	-	723.00	-	-	723.00	-	-	-	714.60	-	0.00%	
4 - Meter	-	1,205.00	-	-	1,205.00	-	-	1,205.00	-	-	-	1,191.00	-	0.00%	
6 - Meter	-	2,410.00	-	-	2,410.00	-	-	2,410.00	-	-	-	2,382.00	-	0.00%	
8 - Meter	-	3,856.00	-	-	3,856.00	-	-	3,856.00	-	-	-	3,811.20	-	0.00%	
Subtotal	20,431		\$ 1,032,711	20,673		\$1,044,351	21,384		\$1,078,650	\$14,454	\$1,093,104		\$1,066,116		
Charge by Number of EDUs															
EDU	28,732	\$ 48.20	\$ 1,384,863	28,940	\$ 48.20	\$ 1,394,913	29,555	\$48.20	\$ 1,424,528	\$ 19,089	\$ 1,443,617	\$ 47.64	\$ 1,407,978	-2.47%	
N	12	48.20	578	12	48.20	578	12	48.20	578	8	586	47.64	572	-2.39%	
O	24	48.20	1,157	24	48.20	1,157	24	48.20	1,157	16	1,173	47.64	1,143	-2.56%	
Subtotal	28,768		\$ 1,386,598	28,976		\$1,396,648	29,591		\$ 1,426,263	\$ 19,113	\$ 1,445,376		1,409,693		
Unmetered Customers	28	\$ 95.47	\$ 2,664	28	\$ 95.47	\$ 2,664	28	\$ 95.47	\$ 2,664	\$ 36	\$ 2,700	\$ 92.85	\$ 2,590	-4.07%	
Usage (in 100 Gallons)															
All Usage	1,449,087	\$ 1.1817	\$ 1,712,386	1,458,499	\$1.1817	\$ 1,723,508	1,486,231	\$1.1817	\$ 1,756,279	\$ 23,534	\$ 1,779,813	\$1.1681	\$ 1,736,066	-2.46%	
Low Income:															
Low Income Discount Tier 1			(\$2,177)			(\$69,928)			(\$116,547)	(\$1,562)	(\$118,109)	\$	(119,843)	1.47%	
Low Income Discount Tier 2			(833)			(\$30,996)			(51,660)	(692)	(52,352)		(53,067)	1.37%	
Low Income Discount Tier 3			(337)			(\$18,996)			(31,659)	(424)	(32,083)		(32,561)	1.49%	
RZ 1 Residential Bill Analysis Revenues			\$ 4,131,011												
Adjustment (1):															
5/8 - Meter	241	\$ 48.20	\$ 11,640	712	\$ 48.20	\$ 34,299	712	\$ 48.20	\$ 34,299	\$ 460	\$ 34,759	\$ 47.64	\$ 33,900	-2.47%	
EDU	209	48.20	10,050	614	48.20	29,615	614	48.20	29,615	397	30,012	47.64	29,271	-2.47%	
All Usage	9,411	\$1.1817	11,122	27,732	\$1.1817	32,771	27,732	\$1.1817	32,771	439	33,210	\$1.1681	32,394	-2.46%	
RZ 1 Residential Usage	1,458,499			1,486,231			1,513,963								
RZ 1 Residential Annualized/Proforma Revenues			\$ 4,163,823			\$ 4,143,936			\$ 4,160,675	\$ 55,755	\$ 4,216,430		\$ 4,104,558	-2.65%	

Note (1) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 1 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 1 - Commercial	12/31/2023			12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue			Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate		Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Customer Charge																		
5/8 - Meter	2,737	\$ 47.35	\$	129,611			2,737	\$ 47.35	\$ 129,611	2,737	\$47.35	\$ 129,611	\$ 1,737	\$ 131,348		\$ 47.64	\$ 130,405	-0.72%
3/4 - Meter	48	71.03		3,424			48	71.03	3,424	48	71.03	3,424	46	3,470		71.46	3,444	-0.75%
1 - Meter	588	118.38		69,655			588	118.38	69,655	588	118.38	69,655	933	70,588		119.10	70,078	-0.72%
1 1/2 - Meter	355	236.75		84,141			355	236.75	84,141	355	236.75	84,141	1,127	85,268		238.20	84,656	-0.72%
2 - Meter	204	378.80		77,275			204	378.80	77,275	204	378.80	77,275	1,035	78,310		381.12	77,748	-0.72%
3 - Meter	108	710.25		76,778			108	710.25	76,778	108	710.25	76,778	1,029	77,807		714.60	77,248	-0.72%
4 - Meter	48	1,183.75		56,820			48	1,183.75	56,820	48	1,183.75	56,820	761	57,581		1,191.00	57,168	-0.72%
6 - Meter	-	2,367.50		-			-	2,367.50	-	-	2,367.50	-	-	-		2,382.00	-	0.00%
8 - Meter	-	3,788.00		-			-	3,788.00	-	-	3,788.00	-	-	-		3,811.20	-	0.00%
Subtotal	4,089			\$497,704			4,089		\$ 497,704	4,089		\$ 497,704	\$ 6,668	\$ 504,372			\$ 500,747	
Charge by Number of EDUs																		
EDU	1,122	\$ 47.35	\$	53,131			1,122	\$ 47.35	\$ 53,131	1,122	\$ 47.35	\$ 53,131	\$ 712	\$ 53,843		\$ 47.64	\$ 53,457	-0.72%
Subtotal	1,122			\$53,131			1,122		\$ 53,131	1,122		\$ 53,131	\$ 712	\$ 53,843			\$ 53,457	-0.72%
Unmetered Customers	60	\$ 93.78	\$	5,627			60	\$ 93.78	\$ 5,627	60	\$ 93.78	\$ 5,627	\$ 75	\$ 5,702		\$ 92.04	\$ 5,523	-3.14%
Unmetered Apartment Complex	12	20,350.26		244,203			12	20,350.26	244,203	12	20,350.26	244,203	3,272	247,475		19,973.63	239,684	-3.15%
Unmetered Daycare	12	656.46		7,878			12	656.46	7,878	12	656.46	7,878	106	7,984		644.31	7,732	-3.16%
Subtotal	84			\$ 257,708			84		\$ 257,708	84		\$ 257,708	\$ 3,453	\$ 261,161			\$ 252,939	
Usage (in 100 Gallons)																		
All Usage	1,182,227	\$1.1608	\$	1,372,329			1,182,227	\$1.1608	\$1,372,329	1,182,227	\$1.1608	\$ 1,372,329	\$ 18,389	\$ 1,390,718		\$1.1474	\$ 1,356,487	-2.46%
RZ 1 Commercial Usage	1,182,227						1,182,227			1,182,227								
RZ 1 Commercial Revenues				\$ 2,180,872					\$ 2,180,872			\$ 2,180,872	\$ 29,222	\$ 2,210,094			\$ 2,163,630	-2.10%

Rate Zone 1 - Industrial	12/31/2023			12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue			Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate		Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Customer Charge																		
5/8 - Meter	12	\$ 47.35		\$568			12	\$ 47.35	\$568	12	\$47.35	\$ 568	\$ 8	\$ 576		\$ 47.64	\$572	-0.69%
3/4 - Meter	-	71.03		0			-	71.03	-	-	71.03	-	-	-		71.46	-	0.00%
1 - Meter	-	118.38		0			-	118.38	-	-	118.38	-	-	-		119.10	-	0.00%
1 1/2 - Meter	-	236.75		0			-	236.75	-	-	236.75	-	-	-		238.20	-	0.00%
2 - Meter	-	378.80		0			-	378.80	-	-	378.80	-	-	-		381.12	-	0.00%
3 - Meter	-	710.25		0			-	710.25	-	-	710.25	-	-	-		714.60	-	0.00%
4 - Meter	-	1,183.75		0			-	1,183.75	-	-	1,183.75	-	-	-		1,191.00	-	0.00%
6 - Meter	-	2,367.50		0			-	2,367.50	-	-	2,367.50	-	-	-		2,382.00	-	0.00%
8 - Meter	-	3,788.00		0			-	3,788.00	-	-	3,788.00	-	-	-		3,811.20	-	0.00%
Subtotal	12			\$568			12		\$568	12		\$568	\$8	\$576			\$572	
Unmetered Customers	-	\$ 93.78	\$	-			0	\$ 93.78	\$ -	0	\$ 93.78	\$ -	\$ -	\$ -		\$ 92.04	\$ -	0.00%
Usage (in 100 Gallons)																		
All Usage	559	\$1.1608		\$649			559	\$1.1608	\$649	559	\$1.1608	\$ 649	\$ 9	\$ 658		\$1.1474	\$641	-2.58%
RZ 1 Industrial Usage	559						559			559								
RZ 1 Industrial Revenues				\$1,217					\$1,217			\$1,217	\$17	\$1,234			\$1,213	-1.70%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 1 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 1 - Public	12/31/2023			12/31/2024			12/31/2025					12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Customer Charge</u>														
5/8 - Meter	157	\$ 47.35	\$ 7,415	157	\$ 47.35	\$ 7,415	157	\$ 47.35	\$ 7,415	\$ 99	\$ 7,514	\$ 47.64	\$ 7,460	-0.72%
3/4 - Meter	12	71.03	852	12	71.03	852	12	71.03	852	11	863	71.46	858	-0.58%
1 - Meter	96	118.38	11,364	96	118.38	11,364	96	118.38	11,364	152	11,516	119.10	11,434	-0.71%
1 1/2 - Meter	36	236.75	8,523	36	236.75	8,523	36	236.75	8,523	114	8,637	238.20	8,575	-0.72%
2 - Meter	24	378.80	9,091	24	378.80	9,091	24	378.80	9,091	122	9,213	381.12	9,147	-0.72%
3 - Meter	24	710.25	17,046	24	710.25	17,046	24	710.25	17,046	228	17,274	714.60	17,150	-0.72%
4 - Meter	24	1,183.75	28,410	24	1,183.75	28,410	24	1,183.75	28,410	381	28,791	1,191.00	28,584	-0.72%
6 - Meter	-	2,367.50	-	0	2,367.50	-	0	2,367.50	-	-	-	2,382.00	-	0.00%
8 - Meter	-	3,788.00	-	0	3,788.00	-	0	3,788.00	-	-	-	3,811.20	-	0.00%
Subtotal	373		\$82,701	373		\$82,701	373		\$82,701	\$1,107	\$83,808		\$83,208	
Unmetered Customers	-	\$ 93.78	\$0	0	\$ 93.78	\$0	0	\$ 93.78	\$ -	\$ -	\$ -	\$ 92.04	\$0	0.00%
Usage (in 100 Gallons)														
All Usage	91,170	\$ 1.1608	\$105,830	91,170	\$ 1.1608	\$ 105,830	91,170	\$ 1.1608	\$ 105,830	\$ 1,418	\$ 107,248	\$ 1.1474	\$ 104,608	-2.46%
RZ 1 Public Usage	91,170			91,170			91,170							
RZ 1 Public Revenues			\$188,531			\$188,531			\$188,531	\$2,525	\$191,056		\$187,816	-1.70%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 1A - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	707,077	27,104	\$ 2,196,694	743,806	27,350	\$ 2,148,824	746,614	27,506	\$ 2,117,150	\$ 28,371	\$ 2,145,521	\$ 2,087,940	-2.68%
Commercial	1,239,728	820	1,651,218	1,239,728	820	1,651,218	1,239,728	820	1,651,218	22,126	1,673,344	1,635,795	-2.24%
Total Rate Zone 1A	1,946,805	27,924	\$ 3,847,912	1,983,534	28,170	\$ 3,800,042	1,986,342	28,326	\$ 3,768,368	\$ 50,497	\$ 3,818,865	\$ 3,723,735	-2.49%

Rate Zone 1A - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Customer Charge														
5/8 - Meter	25,909	\$ 48.20	\$ 1,248,823	26,832	\$ 48.20	\$ 1,293,298	26,988	\$ 48.20	\$ 1,300,817	\$ 17,431	\$ 1,318,248	\$ 47.64	\$ 1,285,704	-2.47%
3/4 - Meter	12	48.20	578	12	48.20	578	12	48.20	578	8	586	47.64	572	-2.39%
1 - Meter	24	48.20	1,157	24	48.20	1,157	24	48.20	1,157	16	1,173	47.64	1,143	-2.56%
1 1/2 - Meter	-	96.40	-	-	96.40	-	-	96.40	-	-	-	95.28	-	0.00%
2 - Meter	-	154.24	-	-	154.24	-	-	154.24	-	-	-	152.45	-	0.00%
3 - Meter	-	289.20	-	-	289.20	-	-	289.20	-	-	-	285.84	-	0.00%
4 - Meter	-	482.00	-	-	482.00	-	-	482.00	-	-	-	476.40	-	0.00%
6 - Meter	-	777.42	-	-	777.42	-	-	777.42	-	-	-	768.39	-	0.00%
8 - Meter	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
Subtotal	25,945		\$ 1,250,558	26,868		\$1,295,033	27,024		\$1,302,552	\$17,455	\$1,320,007		\$1,287,419	-2.47%
Unmetered Customers	1,158	\$ 95.47	\$ 110,583	326	\$ 95.47	\$ 31,085	326	\$ 95.47	\$ 31,085	\$ 417	\$ 31,502	\$ 92.85	\$ 30,230	-4.04%
Usage (in 100 Gallons)														
All Usage	707,077	\$ 1.1817	\$ 835,553	740,998	\$1.1817	\$ 875,637	743,806	\$1.1817	\$ 878,956	\$ 11,778	\$ 890,734	\$1.1681	\$ 868,840	-2.46%
Low Income:														
Low Income Discount Tier 1						(\$37,185)		\$ (61,975)	\$ (830)	\$ (62,805)			(\$63,728)	1.47%
Low Income Discount Tier 2						(16,482)		(27,471)	\$ (368)	\$ (27,839)			(\$28,219)	1.37%
Low Income Discount Tier 3						(10,101)		(16,835)	\$ (226)	\$ (17,061)			(\$17,314)	1.48%
RZ 1A Residential Bill Analysis Revenues			2,196,694											
Adjustment (1):														
Unmetered Rate	(833)	\$ 95.47	\$ (79,498)											
5/8 - Meter	833	48.20	40,136											
All Usage	32,301	1.1817	38,170											
Adjustment (2):														
5/8 - Meter	90	\$48.20	\$4,338	156	\$48.20	\$7,519	156	\$48.20	\$ 7,519	\$ 101	\$ 7,620	\$47.64	\$7,432	-2.47%
All Usage	1,620	\$1.1817	1,914	2,808	\$1.1817	3,318	2,808	\$1.1817	3,318	44	3,362	\$1.1681	\$3,280	-2.44%
RZ 1A Residential Usage	708,697			743,806			746,614							
RZ 1A Residential Annualized/Proforma Revenues			\$ 2,201,754			\$ 2,148,824			\$ 2,117,150	\$ 28,371	\$ 2,145,521		\$ 2,087,940	-2.68%

Note (1) Adjustment for change of flat rate to metered customers.
Note (2) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 1A - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 1A - Commercial	12/31/2023			12/31/2024			12/31/2025					12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Customer Charge</u>														
5/8 - Meter	221	\$ 47.35	\$ 10,460	221	\$ 47.35	\$ 10,460	221	\$47.35	\$ 10,460	\$ 140	\$ 10,600	\$ 47.64	\$ 10,524	-0.72%
3/4 - Meter	-	47.35	-	-	47.35	-	-	47.35	-	-	-	47.64	-	0.00%
1 - Meter	36	47.35	1,705	36	47.35	1,705	36	47.35	1,705	23	1,728	47.64	1,715	-0.75%
1 1/2 - Meter	-	94.70	-	-	94.70	-	-	94.70	-	-	-	95.28	-	0.00%
2 - Meter	227	151.52	34,365	227	151.52	34,365	227	151.52	34,365	460	34,825	152.45	34,576	-0.72%
3 - Meter	36	284.10	10,228	36	284.10	10,228	36	284.10	10,228	137	10,365	285.84	10,290	-0.72%
4 - Meter	144	473.50	68,326	144	473.50	68,326	144	473.50	68,326	916	69,242	476.40	68,745	-0.72%
6 - Meter	108	763.71	82,557	108	763.71	82,557	108	763.71	82,557	1,106	83,663	768.39	83,063	-0.72%
8 - Meter	-	-	-	-	-	-	-	-	-	-	-	-	-	0.00%
Subtotal	772		\$207,641	772		\$ 207,641	772		\$ 207,641	\$ 2,782	\$ 210,423		\$ 208,913	-0.72%
Unmetered Customers	48	\$ 93.78	\$ 4,501	48	\$ 93.78	\$ 4,501	48	\$ 93.78	\$ 4,501	\$ 60	\$ 4,561	\$ 92.04	\$ 4,418	-3.14%
Usage (in 100 Gallons)														
All Usage	1,239,728	\$1.1608	\$ 1,439,076	1,239,728	\$1.1608	\$1,439,076	1,239,728	\$1.1608	\$ 1,439,076	\$ 19,284	\$ 1,458,360	\$1.1474	\$ 1,422,464	-2.46%
RZ 1A Commercial Usage	1,239,728			1,239,728			1,239,728							
RZ 1A Commercial Revenues			\$ 1,651,218			\$ 1,651,218			\$ 1,651,218	\$ 22,126	\$ 1,673,344		\$ 1,635,795	-2.24%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 2 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	365,148	20,920	\$ 1,981,421	484,771	21,364	\$ 1,791,665	489,001	21,646	\$ 1,759,757	\$ 23,581	\$ 1,783,338	\$ 1,760,110	-1.30%
Commercial	237,520	4,830	658,750	237,520	4,830	647,299	237,520	4,830	647,299	8,674	655,973	647,299	-1.32%
Public	370	60	3,754	370	60	3,754	370	60	3,754	50	3,804	3,754	-1.31%
Total Rate Zone 2	603,038	25,810	\$ 2,643,925	722,661	26,254	\$ 2,442,718	726,891	26,536	\$ 2,410,810	\$ 32,305	\$ 2,443,115	\$ 2,411,163	-1.31%

Rate Zone 2 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
EDU	13,250	\$ 55.93	\$ 741,056	19,639	\$ 55.93	\$ 1,098,389	19,921	\$55.93	\$ 1,114,161	\$ 14,930	\$ 1,129,091	\$ 55.93	\$ 1,114,161	-1.32%
Subtotal	13,250		\$ 741,056	19,639		\$ 1,098,389	19,921		\$ 1,114,161	\$ 14,930	\$ 1,129,091		\$ 1,114,161	-1.32%
Unmetered Customers	7,670	\$ 101.80	\$ 780,826	1,443	\$ 101.80	\$ 146,925	1,443	\$ 101.80	\$ 146,925	\$ 1,969	\$ 148,894	\$ 101.80	\$ 146,925	-1.32%
Usage (in 100 Gallons)														
All Usage	365,148	\$ 1.2585	\$ 459,539	480,541	\$ 1.2585	\$ 604,761	484,771	\$ 1.2585	\$ 610,084	\$ 8,175	\$ 618,259	\$ 1.2585	\$ 610,084	-1.32%
Low Income:														
Low Income Discount Tier 1						(\$46,139)			\$ (76,898)	\$ (1,030)	\$ (77,928)	\$	\$ (76,687)	-1.59%
Low Income Discount Tier 2						(21,425)			(35,708)	(478)	(36,186)		(35,617)	-1.57%
Low Income Discount Tier 3						(11,941)			(19,901)	(267)	(20,168)		(19,852)	-1.57%
RZ 2 Residential Bill Analysis Revenues			\$ 1,981,421											
<u>Adjustment (1):</u>														
Unmetered Rate	(6,227)	\$ 101.80	(\$633,902)											
EDU	6,227	55.93	348,272											
All Usage	112,963	1.2585	142,164											
<u>Adjustment (2):</u>														
5/8 - Meter	162	\$ 55.93	\$9,061	282	\$55.93	\$15,772	282	\$55.93	\$ 15,772	\$ 211	\$ 15,983	\$ 55.93	\$15,772	-1.32%
All Usage	2,430	\$ 1.2585	3,058	4,230	\$ 1.2585	5,323	4,230	\$ 1.2585	5,323	71	5,394	\$ 1.2585	\$5,323	-1.32%
RZ 2 Residential Usage	480,541			484,771			489,001							
RZ 2 Residential Annualized/Proforma Revenues			\$ 1,850,074			\$ 1,791,665			\$ 1,759,757	\$ 23,581	\$ 1,783,338		\$ 1,760,110	-1.30%

Note (1) Adjustment for change of flat rate to metered customers.

Note (2) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 2 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 2 - Commercial	12/31/2023			12/31/2023			12/31/2024			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate		Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs																					
EDU	2,303	\$ 54.95	\$	126,572	2,871	\$ 54.95	\$	157,783	2,871	\$ 54.95	\$	157,783	2,871	\$ 54.95	\$	157,783	\$ 2,114	\$ 159,897	\$ 54.95	\$ 157,783	-1.32%
Subtotal	2,303			\$126,572	2,871			\$ 157,783	2,871			\$ 157,783	2,871			\$ 157,783	\$ 2,114	\$ 159,897		\$ 157,783	-1.32%
Unmetered Customers	2,527	\$ 100.00	\$	252,670	1,959	\$ 100.00	\$	195,870	1,959	\$ 100.00	\$	195,870	1,959	\$ 100.00	\$	195,870	\$ 2,625	\$ 198,495	\$ 100.00	\$ 195,870	-1.32%
Usage (in 100 Gallons)																					
All Usage	226,084	\$ 1.2363	\$	279,508	237,520	\$ 1.2363	\$	293,646	237,520	\$ 1.2363	\$	293,646	237,520	\$ 1.2363	\$	293,646	\$ 3,935	\$ 297,581	\$ 1.2363	\$ 293,646	-1.32%
Adjustment (1):																					
Unmetered Rate	(568)																				
EDU	568																				
All Usage	11,436																				
RZ 2 Commercial Usage	237,520				237,520				237,520				237,520								
RZ 2 Commercial Revenues			\$	658,750			\$	647,299			\$	647,299			\$	647,299	\$ 8,674	\$ 655,973		\$ 647,299	-1.32%

Note (1) Adjustment for change of flat rate to metered customers.

Rate Zone 2 - Public	12/31/2023			12/31/2023			12/31/2024			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate		Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs																					
EDU	60	\$ 54.95	\$	3,297	60	\$ 54.95	\$	3,297	60	\$ 54.95	\$	3,297	60	\$ 54.95	\$	3,297	\$ 44	\$ 3,341	\$ 54.95	\$ 3,297	-1.32%
Subtotal	60			\$3,297	60			\$3,297	60			\$3,297	60			\$3,297	\$44	\$3,341		\$3,297	-1.32%
Unmetered Customers	-	\$ 100.00		\$0	0	\$ 100.00		\$0	0	\$ 100.00		\$0	0	\$ 100.00		-	\$ -	\$ -	\$ 100.00	\$0	0.00%
Usage (in 100 Gallons)																					
All Usage	370	\$ 1.2363		\$457	370	\$ 1.2363		\$ 457	370	\$ 1.2363		\$ 457	370	\$ 1.2363		\$ 457	\$ 6	\$ 463	\$ 1.2363	\$ 457	-1.30%
RZ 2 Public Usage	370				370				370				370								
RZ 2 Public Revenues				\$3,754				\$3,754				\$3,754				\$3,754	\$50	\$3,804		\$3,754	-1.31%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 3 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	754,932	39,646	\$ 4,127,521	1,151,745	40,552	\$ 3,994,648	1,161,915	41,230	\$ 3,974,202	\$ 53,255	\$ 4,027,457	\$ 3,963,725	-1.58%
Commercial	70,360	3,472	382,048	70,360	3,472	366,322	70,360	3,472	366,322	4,909	371,231	366,322	-1.32%
Total Rate Zone 3	825,292	43,118	\$ 4,509,569	1,222,105	44,024	\$ 4,360,970	1,232,275	44,702	\$ 4,340,524	\$ 58,164	\$ 4,398,688	\$ 4,330,047	-1.56%

Rate Zone 3 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs														
EDU*	27,917	\$ 66.37	\$ 1,852,871	39,718	\$ 66.37	\$ 2,636,084	40,396	\$66.37	\$ 2,681,083	\$ 35,927	\$ 2,717,010	\$ 66.37	\$ 2,681,083	-1.32%
Subtotal	27,917		\$ 1,852,871	39,718		\$ 2,636,084	40,396		\$ 2,681,083	\$ 35,927	\$ 2,717,010		\$ 2,681,083	-1.32%
Unmetered Customers	11,729	\$ 115.00	\$ 1,348,801	156	\$ 115.00	\$ 17,940	156	\$ 115.00	\$ 17,940	\$ 240	\$ 18,180	\$ 115.00	\$ 17,940	-1.32%
Usage (in 100 Gallons)														
All Usage	754,932	\$ 1.2264	\$ 925,849	1,141,575	\$1.2264	\$ 1,400,028	1,151,745	\$1.2264	\$ 1,412,500	\$ 18,928	\$ 1,431,428	\$1.2264	\$ 1,412,500	-1.32%
Low Income:														
Low Income Discount Tier 1						(\$67,390)			\$ (112,316)	\$ (1,505)	\$ (113,821)		(\$118,472)	4.09%
Low Income Discount Tier 2						(30,275)			(50,458)	(676)	(51,134)		(\$53,105)	3.86%
Low Income Discount Tier 3						(19,210)			(32,017)	(429)	(32,446)		(\$33,691)	3.84%
RZ 3 Residential Bill Analysis Revenues			\$ 4,127,521											
Adjustment (1):														
Unmetered Rate	(11,573)	115.00000	(\$1,330,861)											
EDU	11,573	66.37000	768,080											
All Usage	383,223	1.22640	469,985											
Adjustment (2):														
5/8 - Meter	228	\$ 66.37	\$15,132	678	\$ 66.37	\$44,999	678	\$ 66.37	\$ 44,999	\$ 603	\$ 45,602	\$ 66.37	\$44,999	-1.32%
All Usage	3,420	\$ 1.2264	4,194	10,170	\$ 1.2264	12,472	10,170	\$ 1.2264	12,472	167	12,639	\$ 1.2264	\$12,472	-1.32%
RZ 3 Residential Usage	1,141,575			1,151,745			1,161,915							
RZ 3 Residential Annualized/Proforma Revenues			\$ 4,054,051			\$ 3,994,648			\$ 3,974,202	\$ 53,255	\$ 4,027,457		\$ 3,963,725	-1.58%

Note (1) Adjustment for change of flat rate to metered customers.
Note (2) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 3 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 3 - Commercial	12/31/2023			12/31/2024			12/31/2025					12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
EDU*	1,452	\$ 65.20	\$ 94,670	2,318	\$ 65.20	\$ 151,127	2,318	\$ 65.20	\$ 151,127	\$ 2,025	\$ 153,152	\$ 65.20	\$ 151,127	-1.32%
Subtotal	1,452		\$94,670	2,318		\$ 151,127	2,318		\$ 151,127	\$ 2,025	\$ 153,152		\$ 151,127	-1.32%
Unmetered Customers	2,020	\$ 113.00	\$ 228,271	1,154	\$ 113.00	\$ 130,425	1,154	\$ 113.00	\$ 130,425	\$ 1,748	\$ 132,173	\$ 113.00	\$ 130,425	-1.32%
Usage (in 100 Gallons)														
All Usage	49,060	\$1.2048	\$ 59,107	70,360	\$1.2048	\$84,770	70,360	\$1.2048	\$ 84,770	\$ 1,136	\$ 85,906	\$1.2048	\$ 84,770	-1.32%
<i>Adjustment (1):</i>														
Unmetered Rate	(866)													
EDU	866													
All Usage	21,300													
RZ 3 Commercial Usage	70,360			70,360			70,360							
RZ 3 Commercial Revenues			\$ 382,048			\$ 366,322			\$ 366,322	\$ 4,909	\$ 371,231		\$ 366,322	-1.32%

Note (1) Adjustment for change of flat rate to metered customers.

*Billing determinants Includes Stony Creek - Whitehall Estates customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 4 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	259,669	31,496	\$ 4,209,160	276,469	32,564	\$ 4,104,783	293,269	33,236	\$ 4,030,485	\$ 54,008	\$ 4,084,493	\$ 4,076,688	-0.19%
Commercial	74,429	7,486	1,009,158	74,429	7,486	1,009,158	74,429	7,486	1,009,158	13,522	1,022,680	1,029,464	0.66%
Total Rate Zone 4	334,098	38,983	\$ 5,218,318	350,898	40,051	\$ 5,113,941	367,698	40,723	\$ 5,039,643	\$ 67,530	5,107,173	\$ 5,106,152	-0.02%

Rate Zone 4 - Residential	12/31/2023		12/31/2023	12/31/2024		12/31/2024	12/31/2025		12/31/2025	Proforma	12/31/2025	12/31/2025		
	Billing	Current	Bill Analysis	Billing	Current	Annualized	Billing	Current	Pro Forma	DSIC	Proforma w/ DSIC	Proposed	Proforma	% Percent
	Determinants	Rate	Revenue	Determinants	Rate	Revenue	Determinants	Rate	Revenues	Revenues	@ Present Rate	Rate	@ Proposed Rate	Change
<u>Charge by Number of EDUs</u>														
EDU	6,513	\$ 86.12	\$ 560,865	6,909	\$ 86.12	\$ 594,969	7,581	\$86.12	\$ 652,841	\$ 8,748	\$ 661,589	\$ 86.12	\$ 652,841	-1.32%
Subtotal	6,513		\$ 560,865	6,909		\$594,969	7,581		\$652,841	\$8,748	\$661,589		652,841	-1.32%
Unmetered Customers	24,984	\$ 133.35	\$ 3,331,563	24,984	\$ 133.35	\$ 3,331,563	24,984	\$ 133.35	\$ 3,331,563	\$ 44,643	\$ 3,376,206	\$ 135.20	\$ 3,377,670	0.04%
Usage (in 100 Gallons)														
All Usage	249,769	\$ 1.2681	\$ 316,732	259,669	\$1.2681	\$ 329,286	276,469	\$1.2681	\$ 350,590	\$ 4,698	\$ 355,288	\$1.2681	\$ 350,590	-1.32%
Low Income:														
Low Income Discount Tier 1						(\$128,392)			\$ (213,986)	\$ (2,867)	\$ (216,853)		\$ (213,927)	-1.35%
Low Income Discount Tier 2						(58,375)			(97,291)	(1,304)	(98,595)		(97,278)	-1.34%
Low Income Discount Tier 3						(43,445)			(72,408)	(970)	(73,378)		(72,386)	-1.35%
RZ 4 Residential Bill Analysis Revenues			4,209,160											
Adjustment (1):														
5/8 - Meter	396	\$ 86.12	\$34,104	672	\$86.12	\$57,873	672	\$86.12	\$ 57,873	\$ 775	\$ 58,648	\$ 86.12	\$57,873	-1.32%
All Usage	9,900	\$1.2681	12,554	16,800	\$1.2681	21,304	16,800	\$1.2681	21,304	285	21,589	\$1.2681	\$21,304	-1.32%
RZ 4 Residential Usage	259,669			276,469			293,269							
RZ 4 Residential Annualized/Proforma Revenues			\$ 4,255,818			\$ 4,104,783			\$ 4,030,485	\$ 54,008	\$ 4,084,493		\$ 4,076,688	-0.19%

Note (1) Adjustment to account for the growth (loss) in customers.

	12/31/2023		12/31/2023	12/31/2024		12/31/2024	12/31/2025		12/31/2025	Proforma	12/31/2025	12/31/2025		
Rate Zone 4 - Commercial	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
EDU	1,385	\$ 84.60	\$ 117,196	1,385	\$ 84.60	\$ 117,196	1,385	\$ 84.60	\$ 117,196	\$ 1,570	\$ 118,766	\$ 84.60	\$ 117,196	-1.00%
Subtotal	1,385		\$117,196	1,385		\$ 117,196	1,385		\$ 117,196	\$ 1,570	\$ 118,766		\$ 117,196	-1.00%
Unmetered Customers	6,101	\$ 131.00	\$ 799,244	6,101	\$ 131.00	\$ 799,244	6,101	\$ 131.00	\$ 799,244	\$ 10,710	\$ 809,954	\$ 134.33	\$ 819,552	1.00%
Usage (in 100 Gallons)														
All Usage	74,429	\$1.2457	\$ 92,718	74,429	\$1.2457	\$92,718	74,429	\$1.2457	\$ 92,718	\$ 1,242	\$ 93,960	\$1.2457	\$ 92,716	-1.00%
RZ 4 Commercial Usage	74,429			74,429			74,429							
RZ 4 Commercial Revenues			\$ 1,009,158			\$ 1,009,158			\$ 1,009,158	\$ 13,522	\$ 1,022,680		\$ 1,029,464	1.00%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 5 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	264,432	7,279	\$ 1,073,249	284,617	7,297	\$ 1,075,731	284,746	7,303	\$ 1,068,313	\$ 14,316	\$ 1,082,629	\$ 1,068,377	-1.32%
Commercial	10,587	54	148,536	10,587	54	148,536	10,587	54	148,536	1,991	150,527	148,635	-1.26%
Total Rate Zone 5	275,019	7,333	\$ 1,221,785	295,204	7,351	\$ 1,224,267	295,333	7,357	\$ 1,216,849	\$ 16,307	\$ 1,233,156	\$ 1,217,012	-1.31%

Rate Zone 5 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Customer Charge</u>														
5/8 - Meter	456	\$ 98.95	\$ 45,121	456	\$ 98.95	\$ 45,121	456	\$98.95	\$ 45,121	\$ 605	\$ 45,726	\$ 98.95	\$ 45,121	-1.32%
3/4 - Meter	-	148.43	-	-	148.43	-	-	148.43	-	-	-	148.43	-	0.00%
1 - Meter	-	247.38	-	-	247.38	-	-	247.38	-	-	-	247.38	-	0.00%
1 1/2 - Meter	-	494.75	-	-	494.75	-	-	494.75	-	-	-	494.75	-	0.00%
2 - Meter	-	791.60	-	-	791.60	-	-	791.60	-	-	-	791.60	-	0.00%
3 - Meter	-	1,484.25	-	-	1,484.25	-	-	1,484.25	-	-	-	1,484.25	-	0.00%
4 - Meter	-	2,473.75	-	-	2,473.75	-	-	2,473.75	-	-	-	2,473.75	-	0.00%
6 - Meter	-	4,947.50	-	-	4,947.50	-	-	4,947.50	-	-	-	4,947.50	-	0.00%
8 - Meter	-	7,916.00	-	-	7,916.00	-	-	7,916.00	-	-	-	7,916.00	-	0.00%
Subtotal	456		\$ 45,121	456		\$45,121	456		\$45,121	\$605	\$45,726		\$45,121	-1.32%
<u>Charge by Number of EDUs</u>														
EDU	6,559	\$ 98.95	\$ 648,983	6,823	\$ 98.95	\$ 675,116	6,829	\$98.95	\$ 675,710	\$ 9,055	\$ 684,765	\$ 98.95	\$ 675,710	-1.32%
Subtotal	6,559		\$ 648,983	6,823		\$675,116	6,829		\$675,710	\$9,055	\$684,765		675,710	-1.32%
Unmetered Customers	264	\$ 150.30	\$ 39,694	12	\$ 150.30	\$ 1,804	12	\$ 150.30	\$ 1,804	\$ 24	\$ 1,828	\$ 147.75	\$ 1,773	-3.01%
Usage (in 100 Gallons)														
All Usage	264,432	\$ 1.2837	\$ 339,451	284,488	\$1.2837	\$ 365,198	284,617	\$1.2837	\$ 365,363	\$ 4,896	\$ 370,259	\$1.2837	\$ 365,363	-1.32%
Low Income:														
Low Income Discount Tier 1						(\$6,967)			\$ (11,611)	\$ (156)	\$ (11,767)	\$	\$ (11,551)	-1.83%
Low Income Discount Tier 2						(3,129)			(5,216)	(70)	(5,286)		(5,202)	-1.57%
Low Income Discount Tier 3						(2,171)			(3,619)	(48)	(3,667)		(3,596)	-1.93%
RZ 5 Residential Bill Analysis Revenues			\$ 1,073,249											
<u>Adjustment (1):</u>														
Unmetered Rate	(252)	150.30000	(\$37,891)											
EDU	252	98.95000	24,945											
All Usage	19,799	1.28370	25,416											
<u>Adjustment (2):</u>														
EDU	12	\$98.95	\$1,187	6	\$98.95	\$594	6	\$98.95	\$ 594	\$ 8	\$ 602	\$98.95	\$594	-1.33%
All Usage	257	\$1.2837	331	129	\$1.2837	165	129	\$1.2837	166	2	168	\$1.2837	\$166	-1.19%
RZ 5 Residential Usage	284,488			284,617			284,746							
RZ 5 Residential Annualized/Proforma Revenues			\$ 1,087,237			\$ 1,075,731			\$ 1,068,313	14,316	\$ 1,082,629	\$ 1,068,377		-1.32%

Note (1) Adjustment for change of flat rate to metered customers.
Note (2) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 5 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023			12/31/2023			12/31/2024			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
Rate Zone 5 - Commercial	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change							
<u>Charge by Number of EDUs</u>																					
EDU	42	\$ 97.20	\$ 4,082	42	\$ 97.20	\$ 4,082	42	\$ 97.20	\$ 4,082	\$ 55	\$ 4,137	\$ 97.20	\$ 4,082	-1.33%							
Subtotal	42		\$4,082	42		\$ 4,082	42		\$ 4,082	\$ 55	\$ 4,137		\$ 4,082	-1.33%							
Unmetered - Avon Grove School	12	\$ 10,925.36	\$ 131,104	12	#####	\$ 131,104	12	#####	\$ 131,104	\$ 1,757	\$ 132,861	#####	\$ 131,203	-1.25%							
Usage (in 100 Gallons)																					
All Usage	10,587	\$1.2610	\$ 13,350	10,587	\$1.2610	\$13,350	10,587	\$1.2610	\$ 13,350	\$ 179	\$ 13,529	\$1.2610	\$ 13,350	-1.32%							
RZ 5 Commercial Usage	10,587			10,587			10,587														
RZ 5 Commercial Revenues			\$ 148,536			\$ 148,536			\$ 148,536	\$ 1,991	\$ 150,527		\$ 148,635	-1.26%							

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 6 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	213,133	16,755	\$ 1,056,960	216,193	16,959	\$ 1,049,958	217,908	17,073	\$ 1,043,890	\$ 13,988	\$ 1,057,878	\$ 1,031,457	-2.50%
Commercial	12,642	112	10,086	12,642	112	10,086	12,642	112	10,086	135	10,221	10,007	-2.09%
Total Rate Zone 6	225,775	16,867	\$ 1,067,046	228,835	17,071	\$ 1,060,044	230,550	17,185	\$ 1,053,976	\$ 14,123	\$ 1,068,099	\$ 1,041,464	-2.49%

Rate Zone 6 - Residential	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		Proforma		12/31/2025		12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues		Proforma @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>																	
EDU	16,719	\$ 59.55	\$	995,616	16,809	\$ 59.55	\$	1,000,976	16,923	\$59.55	\$ 1,007,765	\$ 13,504	\$	1,021,269	\$ 58.86	\$ 996,088	-2.47%
Subtotal	16,719		\$	995,616	16,809			\$1,000,976	16,923		\$ 1,007,765	\$ 13,504	\$	1,021,269		996,088	-2.47%
Unmetered Customers	36	\$ 70.59	\$	2,541	36	\$ 70.59	\$	2,541	36	\$ 70.59	\$ 2,541	\$ 34	\$	2,575	\$ 69.41	\$ 2,499	-2.95%
Usage (in 100 Gallons)																	
All Usage	213,133	\$ 0.2759	\$	58,803	214,483	\$0.2759	\$	59,176	216,193	\$0.2759	\$ 59,648	\$ 799	\$	60,447	\$0.2727	\$ 58,959	-2.46%
Low Income:																	
Low Income Discount Tier 1								(\$11,260)			\$ (18,767)	\$ (251)	\$	(19,018)	\$	(18,736)	-1.48%
Low Income Discount Tier 2								(5,281)			(8,802)	(118)		(8,920)		(8,786)	-1.50%
Low Income Discount Tier 3								(3,455)			(5,758)	(77)		(5,835)		(5,746)	-1.53%
RZ 6 Residential Bill Analysis Revenues			\$	1,056,960													
Adjustment (1):																	
5/8 - Meter	90	\$ 59.55		\$5,360	114	\$59.55		\$6,789	114	\$59.55	\$ 6,789	\$ 91	\$	6,880	\$ 58.86	\$6,710	-2.47%
All Usage	1,350	\$0.2759		372	1,710	\$0.2759		472	1,715	\$0.2759	473	6		479	\$0.2727	\$468	-2.30%
RZ 6 Residential Usage	214,483				216,193				217,908								
RZ 6 Residential Annualized/Proforma Revenues			\$	1,062,692			\$	1,049,958			\$ 1,043,890	\$ 13,988	\$	1,057,878		\$ 1,031,457	-2.50%

Note (1) Adjustment to account for the growth (loss) in customers.

Rate Zone 6 - Commercial	12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change	
<u>Charge by Number of EDUs</u>															
EDU	100	\$ 58.50	\$ 5,856	100	\$ 58.50	\$ 5,856	100	\$ 58.50	\$ 5,856	\$ 78	\$ 5,934	\$ 57.82	\$ 5,788	-2.46%	
Subtotal	100		\$5,856	100		\$ 5,856	100		\$ 5,856	\$ 78	\$ 5,934		\$ 5,788	-2.46%	
Unmetered Customers	12	\$ 67.00	\$ 804	12	\$ 67.00	\$ 804	12	\$ 67.00	\$ 804	\$ 11	\$ 815	\$ 69.41	\$ 833	2.21%	
Usage (in 100 Gallons)															
All Usage	12,642	\$0.2710	\$ 3,426	12,642	\$0.2710	\$3,426	12,642	\$0.2710	\$ 3,426	\$ 46	\$ 3,472	\$0.2679	\$ 3,386	-2.48%	
RZ 6 Commercial Usage	12,642			12,642			12,642								
RZ 6 Commercial Revenues			\$ 10,086			\$ 10,086			\$ 10,086	\$ 135	\$ 10,221		\$ 10,007	-2.09%	

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 7 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	2,284,019	63,909	\$ 4,870,246	2,307,119	65,325	\$ 4,917,017	2,330,282	66,249	\$ 4,948,481	\$ 66,310	\$ 5,014,791	\$ 6,053,395	20.71%
Commercial	1,613,664	28,863	2,644,581	1,613,664	28,863	2,644,581	1,613,664	28,863	2,644,581	35,438	2,680,019	3,244,010	21.04%
Public	31,271	48	29,944	31,271	48	29,944	31,271	48	29,944	402	30,346	38,168	25.78%
Total Rate Zone 7	3,928,954	92,821	\$ 7,544,771	3,952,054	94,237	\$ 7,591,542	3,975,217	95,161	\$ 7,623,006	\$ 102,150	\$ 7,725,156	\$ 9,335,573	20.85%

Rate Zone 7 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs														
EDU	58,212	\$ 42.13	\$ 2,452,483	58,704	\$ 42.13	\$ 2,473,211	59,628	\$42.13	\$ 2,512,139	\$ 33,663	\$ 2,545,802	\$ 47.64	\$ 2,840,691	11.58%
Subtotal	58,212		\$ 2,452,483	58,704		\$2,473,211	59,628		\$ 2,512,139	\$ 33,663	\$ 2,545,802		2,840,691	11.58%
Unmetered Customers	5,697	\$ 61.08	\$ 347,987	5,697	\$ 61.08	\$ 347,987	5,697	\$ 61.08	\$ 347,987	\$ 4,663	\$ 352,650	\$ 92.85	\$ 528,962	50.00%
Usage (in 100 Gallons)														
All Usage	2,274,229	\$ 0.9101	\$ 2,069,776	2,284,019	\$0.9101	\$ 2,078,686	2,307,119	\$0.9101	\$ 2,099,709	\$ 28,136	\$ 2,127,845	\$1.1681	\$ 2,694,946	26.65%
Low Income:														
Low Income Discount Tier 1						(\$24,654)			\$ (41,090)	(\$551)	(\$41,641)		\$ (47,509)	14.09%
Low Income Discount Tier 2						(10,857)			(18,095)	(242)	(18,337)		(20,846)	13.68%
Low Income Discount Tier 3						(7,306)			(12,177)	(163)	(12,340)		(13,925)	12.84%
RZ 7 Residential Bill Analysis Revenues			\$ 4,870,246											
Adjustment (1):														
5/8 - Meter	492	\$ 42.13	\$ 20,728	924	\$ 42.13	\$ 38,928	924	\$ 42.13	\$ 38,928	\$ 522	\$ 39,450	\$ 47.64	\$ 44,019	11.58%
All Usage	12,300	\$0.9101	11,194	23,100	\$ 0.9101	21,023	23,163	\$ 0.9101	21,081	282	21,363	\$1.1681	27,057	26.65%
Adjustment (2):														
Deduct Meter Usage	(2,510)	\$0.9101	\$ (2,284)											
RZ 7 Residential Usage	2,284,019			2,307,119			2,330,282							
RZ 7 Residential Annualized/Proforma Revenues			\$ 4,899,884			\$ 4,917,017			\$ 4,948,481	\$ 66,310	\$ 5,014,791		\$ 6,053,395	20.71%

Note (1) Adjustment to account for the growth (loss) in customers.
Note (2) Adjustment to account for Deduct Meter usage.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 7 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		12/31/2025		12/31/2025		12/31/2025		12/31/2025	
Rate Zone 7 - Commercial	Billing Determinants	Current Rate		Bill Analysis Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate		Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
Charge by Number of EDUs																		
EDU	28,471	\$ 41.39	\$	1,178,406	28,471	\$ 41.39	\$	1,178,406	28,471	\$ 41.39	\$	1,178,406	\$ 15,791	\$ 1,194,197	\$ 47.64	\$ 1,356,349	13.58%	
Subtotal	28,471			\$1,178,406	28,471			\$ 1,178,406	28,471			\$ 1,178,406	\$ 15,791	\$ 1,194,197		\$ 1,356,349	13.58%	
Unmetered Customers	393	\$ 60.00	\$	23,560	393	\$ 60.00	\$	23,560	393	\$ 60.00	\$	23,560	\$ 316	\$ 23,876	\$ 92.04	\$ 36,143	51.38%	
Usage (in 100 Gallons)																		
All Usage	1,613,664	\$0.8940	\$	1,442,615	1,613,664	\$0.8940		\$1,442,615	1,613,664	\$0.8940	\$	1,442,615	\$ 19,331	\$ 1,461,946	\$1.1474	\$ 1,851,518	26.65%	
RZ 7 Commercial Usage	1,613,664				1,613,664				1,613,664									
RZ 7 Commercial Revenues			\$	2,644,581				\$ 2,644,581				\$ 2,644,581	\$ 35,438	\$ 2,680,019		\$ 3,244,010	21.04%	

	12/31/2023				12/31/2023				12/31/2024				12/31/2024				12/31/2025				12/31/2025				12/31/2025			
Rate Zone 7 - Public	Billing Determinants		Current Rate		Bill Analysis Revenue		Billing Determinants		Current Rate		Annualized Revenue		Billing Determinants		Current Rate		Pro Forma Revenues		DSIC Revenues		Proforma w/ DSIC @ Present Rate		Proposed Rate		Proforma @ Proposed Rate		% Percent Change	
Charge by Number of EDUs																												
EDU	48	\$	41.39	\$	1,988	48	\$	41.39	\$	1,988	48	\$	41.39	\$	1,988	\$	27	\$	2,015	\$	47.64	\$	2,288	13.55%				
Subtotal	48				\$1,988	48				\$1,988	48				\$1,988	\$	27	\$	2,015				\$2,288	13.55%				
Unmetered Customers	-	\$	60.00		\$0	0	\$	60.00		\$0	0	\$	60.00		\$0	\$	-	\$	-	\$	-	\$	92.04		\$0	0.00%		
Usage (in 100 Gallons)																												
All Usage	31,271	\$	0.8940		\$27,956	31,271	\$	0.8940		\$27,956	31,271	\$	0.8940		\$27,956	\$	375	\$	28,331	\$	1.1474	\$	35,880	26.65%				
RZ 7 Public Usage	31,271					31,271					31,271					31,271												
RZ 7 Public Revenues					\$29,944					\$29,944					\$29,944				\$402		\$30,346				\$38,168	25.78%		

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 8 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	480,738	15,153	\$ 1,448,510	484,698	15,423	\$ 1,458,136	488,669	15,621	\$ 1,466,025	\$ 19,644	\$ 1,485,669	\$ 1,480,965	-0.32%
Commercial	360,238	406	431,700	360,238	406	431,700	360,238	406	431,700	5,785	437,485	468,075	6.99%
Public	7,101	24	9,153	7,101	24	9,153	7,101	24	9,153	123	9,276	10,121	9.11%
Other - Residential	-	228	23,461	-	228	23,461	-	228	23,461	314	23,775	22,800	-4.10%
Total Rate Zone 8	848,077	15,811	\$ 1,912,824	852,037	16,081	\$ 1,922,450	856,008	16,279	\$ 1,930,339	\$ 25,866	\$ 1,956,205	\$ 1,981,961	1.32%

Rate Zone 8 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs														
EDU	14,877	\$ 57.61	\$ 857,047	14,949	\$ 57.61	\$ 861,195	15,147	\$57.61	\$ 872,601	\$ 11,693	\$ 884,294	\$ 55.93	\$ 847,155	-4.20%
Subtotal	14,877		\$ 857,047	14,949		\$861,195	15,147		\$ 872,601	\$ 11,693	\$ 884,294		847,155	-4.20%
Unmetered Customers	276	\$ 104.75	\$ 28,911	276	\$ 104.75	\$ 28,911	276	\$ 104.75	\$ 28,911	\$ 387	\$ 29,298	\$ 101.80	\$ 28,097	-4.10%
Usage (in 100 Gallons)														
All Usage	479,298	\$ 1.1737	\$ 562,552	480,738	\$1.1737	\$ 564,242	484,698	\$1.1737	\$ 568,890	\$ 7,623	\$ 576,513	\$1.2585	\$ 609,992	5.81%
Low Income:														
Low Income Discount Tier 1						(\$6,967)			\$ (11,611)	\$ (156)	\$ (11,767)	\$	(11,551)	-1.83%
Low Income Discount Tier 2						(3,129)			(5,216)	(70)	(5,286)		(5,202)	-1.57%
Low Income Discount Tier 3						(2,171)			(3,619)	(48)	(3,667)		(3,596)	-1.93%
RZ 8 Residential Bill Analysis Revenues			\$ 1,448,510											
Adjustment (1):														
5/8 - Meter	72	\$ 57.61	\$4,148	198	\$57.61	\$11,407	198	\$57.61	\$ 11,407	\$ 153	\$ 11,560	\$ 55.93	\$11,074	-4.20%
All Usage	1,440	\$1.1737	1,690	3,960	\$1.1737	4,648	3,971	\$1.1737	4,661	62	4,723	\$1.2585	\$4,997	5.80%
RZ 8 Residential Usage	480,738			484,698			488,669							
RZ 8 Residential Annualized/Proforma Revenues			\$ 1,454,348			\$ 1,458,136			\$ 1,466,025	\$ 19,644	\$ 1,485,669	\$ 1,480,965		-0.32%

Note (1) Adjustment to account for the growth (loss) in customers.

Rate Zone 8 - Commercial	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs														
EDU	406	\$ 40.25	\$ 16,346	406	\$ 40.25	\$ 16,346	406	\$ 40.25	\$ 16,346	\$ 219	\$ 16,565	\$ 55.93	\$ 22,713	37.11%
Subtotal	406		\$16,346	406		\$ 16,346	406		\$ 16,346	\$ 219	\$ 16,565		22,713	37.11%
Unmetered Customers	-	\$ 102.90	\$ -	0	\$ 102.90	\$ -	-	\$ 102.90	\$ -	\$ -	\$ -	\$ 100.00	\$ -	0.00%
Usage (in 100 Gallons)														
All Usage	360,238	\$1.1530	\$ 415,354	360,238	\$1.1530	\$415,354	360,238	\$1.1530	\$ 415,354	\$ 5,566	\$ 420,920	\$1.2363	\$ 445,362	5.81%
RZ 8 Commercial Usage	360,238			360,238			360,238							
RZ 8 Commercial Revenues			\$ 431,700			\$ 431,700			\$ 431,700	\$ 5,785	\$ 437,485	\$ 468,075		6.99%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 8 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Rate Zone 8 - Public														
<u>Charge by Number of EDUs</u>														
EDU	24	\$ 40.25	\$ 966	24	\$ 40.25	\$ 966	24	\$40.25	\$ 966	\$ 13	\$ 979	\$ 55.93	\$ 1,342	37.00%
Subtotal	24		\$966	24		\$966	24		\$ 966	\$ 13	\$ 979		\$1,342	37.00%
Unmetered Customers	-	\$ 102.90	\$ -	-	\$ 102.90	\$ -	-	\$ 102.90	\$ -	\$ -	\$ -	\$ 100.00	\$ -	0.00%
Usage (in 100 Gallons)														
All Usage	7,101	\$1.1530	\$8,187	7,101	\$1.1530	\$8,187	7,101	\$1.1530	\$ 8,187	\$ 110	\$ 8,297	\$1.2363	\$8,779	6.00%
RZ 8 Public Usage	7,101			7,101			7,101							
RZ 8 Public Revenues			\$9,153			\$9,153			\$9,153	\$123	\$9,276		\$10,121	9.00%

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Rate Zone 8 - Other Residential														
<u>Charge by Number of EDUs</u>														
EDU	-	\$ 40.25	\$ -	-	\$ 40.25	\$ -	-	\$ 40.25	\$ -	\$ -	\$ -	\$ 55.93	\$ -	0.00%
Subtotal	-		\$ -	-		\$ -	-		\$ -	\$ -	\$ -		\$ -	0.00%
Unmetered Customers	228	\$ 102.90	\$23,461	228	\$ 102.90	\$23,461	228	\$ 102.90	\$ 23,461	\$ 314	\$ 23,775	\$ 100.00	\$22,800	-4.00%
Usage (in 100 Gallons)														
All Usage	-	\$ 1.1530	\$ -	-	\$ 1.1530	\$ -	-	\$ 1.1530	\$ -	\$ -	\$ -	\$ 1.2363	\$ -	0.00%
RZ 8 Other Usage	-			-			-							
RZ 8 Other Revenues			\$23,461			\$23,461			\$23,461	\$314	\$23,775		\$22,800	-4.00%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 9 - CHELTENHAM WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	4,551,020	119,214	\$ 7,204,632	4,567,820	120,174	\$ 7,210,577	4,584,666	120,846	\$ 7,216,201	\$ 96,697	\$ 7,312,898	\$ 11,030,182	50.83%
Commercial	2,781,963	83,401	4,664,905	2,781,963	83,401	4,664,905	2,781,963	83,401	4,664,905	62,510	4,727,415	7,165,257	51.57%
Industrial	3,189	107	5,697	3,189	107	5,697	3,189	107	5,697	76	5,773	8,737	51.34%
Public	89,566	1,249	104,435	89,566	1,249	104,435	89,566	1,249	104,435	1,400	105,835	162,251	53.31%
Total Rate Zone 9	7,425,738	203,971	\$ 11,979,669	7,442,538	204,931	\$ 11,985,614	7,459,384	205,603	\$ 11,991,238	\$ 160,683	\$ 12,151,921	\$ 18,366,427	51.14%

Rate Zone 9 - Residential	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		Proforma		12/31/2025		12/31/2025		
	Billing Determinants	Current Rate		Bill Analysis Revenue	Billing Determinants	Current Rate		Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	@	Proforma w/ DSIC Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs																	
EDU	119,214	\$ 32.42	\$	3,864,924	119,502	\$ 32.42	\$	3,874,261	120,174	32.42	\$ 3,896,048	\$ 52,207	\$	3,948,255	\$ 47.64	\$ 5,725,099	45.00%
Subtotal	119,214		\$	3,864,924	119,502		\$	3,874,261	120,174		\$ 3,896,048	\$ 52,207	\$	3,948,255		\$ 5,725,099	45.00%
Unmetered Customers	-	\$ -	\$	-	-	\$ -	\$	-	-	\$ -	\$ -	\$ -	\$	-	\$ -	\$ -	0.00%
Usage (in 100 Gallons)																	
All Usage	4,543,820	\$ 0.7350	\$	3,339,708	4,551,020	\$0.7350	\$	3,345,000	4,567,820	\$0.7350	\$ 3,357,348	\$ 44,988	\$	3,402,336	\$1.1681	\$ 5,335,671	56.82%
Low Income:																	
Low Income Discount Tier 1								(\$24,654)			(41,090)	\$ (551)	\$	(41,641)		(47,509)	14.09%
Low Income Discount Tier 2								(10,857)			(18,095)	(242)		(18,337)		(20,846)	13.68%
Low Income Discount Tier 3								(7,306)			(12,177)	(163)		(12,340)		(13,925)	12.84%
RZ 9 Residential Bill Analysis Revenues			\$	7,204,632													
Adjustment (1):																	
5/8 - Meter	288	\$ 32.42		\$9,337	672	\$32.42		\$21,786	672	\$32.42	\$ 21,786	\$ 292	\$	22,078	\$ 47.64	\$32,014	45.00%
All Usage	7,200	\$ 0.7350		5,292	16,800	\$ 0.7350		12,348	16,846	\$ 0.7350	12,382	166		12,548	\$ 1.1681	\$19,678	56.82%
RZ 9 Residential Usage	4,551,020				4,567,820				4,584,666								
RZ 9 Residential Annualized/Proforma Revenues			\$	7,219,261			\$	7,210,577			\$ 7,216,201	\$ 96,697	\$	7,312,898		11,030,182	50.83%

Note (1) Adjustment to account for the growth (loss) in customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 9 - CHELTENHAM WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023		12/31/2023	12/31/2024		12/31/2024	12/31/2025		12/31/2025	12/31/2025	12/31/2025			
Rate Zone 9 - Commercial	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Charge by Number of EDUs														
EDU	83,401	\$ 31.85	\$ 2,656,328	83,401	\$ 31.85	\$ 2,656,328	83,401	\$ 31.85	\$ 2,656,328	\$ 35,595	\$ 2,691,923	\$ 47.64	\$ 3,973,233	47.60%
Subtotal	83,401		\$ 2,656,328	83,401		\$ 2,656,328	83,401		\$ 2,656,328	\$ 35,595	\$ 2,691,923		\$ 3,973,233	47.60%
Unmetered Customers	-	\$ -	\$0	-	\$ -	\$0	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$0	0.00%
Usage (in 100 Gallons)														
All Usage	2,781,963	\$ 0.7220	\$ 2,008,577	2,781,963	\$ 0.7220	\$2,008,577	2,781,963	\$ 0.7220	\$ 2,008,577	\$ 26,915	\$ 2,035,492	\$ 1.1474	\$ 3,192,024	56.82%
RZ 9 Commercial Usage	2,781,963			2,781,963			2,781,963							
RZ 9 Commercial Revenues			\$ 4,664,905			\$ 4,664,905			\$ 4,664,905	\$ 62,510	\$ 4,727,415		\$ 7,165,257	51.57%

	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		12/31/2025		12/31/2025		12/31/2025		12/31/2025	
Rate Zone 9 - Industrial	Billing Determinants	Current Rate	Bill Analysis Revenue		Billing Determinants	Current Rate	Annualized Revenue		Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	Proforma w/ DSIC @ Present Rate		Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
<u>Charge by Number of EDUs</u>																		
EDU	107	\$ 31.85	\$ 3,395		107	\$ 31.85	\$ 3,395		107	\$31.85	\$ 3,395	\$ 45	\$ 3,440	\$ 47.64	\$ 5,078	48.00%		
Subtotal	107		\$ 3,395		107		\$ 3,395		107		\$ 3,395	\$ 45	\$ 3,440		\$ 5,078	48.00%		
Unmetered Customers	-	\$ -	\$ -		-	\$ -	\$ -		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%		
Usage (in 100 Gallons)																		
All Usage	3,189	\$0.7220	\$2,302		3,189	\$0.7220	\$2,302		3,189	\$0.7220	\$ 2,302	\$ 31	\$ 2,333	\$1.1474	\$3,659	57.00%		
RZ 9 Industrial Usage	3,189				3,189				3,189									
RZ 9 Industrial Revenues			<u>\$ 5,697</u>				<u>\$ 5,697</u>				<u>\$ 5,697</u>	<u>\$ 76</u>	<u>\$ 5,773</u>		<u>\$ 8,737</u>	51.00%		

	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		12/31/2025		12/31/2025		12/31/2025		12/31/2025	
Rate Zone 9 - Public	Billing Determinants	Current Rate	Bill Analysis Revenue		Billing Determinants	Current Rate	Annualized Revenue		Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	Proforma w/ DSIC @ Present Rate		Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
<u>Charge by Number of EDUs</u>																		
EDU	1,249	\$ 31.85	\$ 39,768		1,249	\$ 31.85	\$ 39,768		1,249	\$ 31.85	\$ 39,768	\$ 533	\$ 40,301	\$ 47.64	\$ 59,483	48.00%		
Subtotal	1,249		\$ 39,768		1,249		\$ 39,768		1,249		\$ 39,768	\$ 533	\$ 40,301		\$ 59,483	48.00%		
Unmetered Customers	-	\$ -	\$ -		-	\$ -	\$ -		-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%		
Usage (in 100 Gallons)																		
All Usage	89,566	\$ 0.7220	\$64,667		89,566	\$ 0.7220	\$ 64,667		89,566	\$ 0.7220	\$ 64,667	\$ 867	\$ 65,534	\$ 1.1474	102,768	57.00%		
RZ 9 Public Usage	89,566				89,566				89,566									
RZ 9 Public Revenues			\$ 104,435				\$ 104,435				\$ 104,435	\$ 1,400	\$ 105,835		\$ 162,251	53.00%		

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 10 - EAST NORRITON WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	1,917,666	55,524	\$ 3,525,190	1,924,866	56,094	\$ 3,511,406	1,932,086	56,382	\$ 3,482,860	\$ 46,883	\$ 3,545,565	\$ 4,967,094	40.09%
Commercial	1,540,066	4,324	1,329,774	1,540,066	4,324	1,329,774	1,540,066	4,324	1,329,774	17,819	1,347,593	1,987,571	47.49%
Total Rate Zone 10	3,457,732	59,848	\$ 4,854,964	3,464,932	60,418	\$ 4,841,180	3,472,152	60,706	\$ 4,812,634	\$ 64,702	\$ 4,893,158	\$ 6,954,665	42.13%

Rate Zone 10 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
EDU	53,168	\$ 35.57	\$ 1,891,186	53,450	\$ 35.57	\$ 1,901,217	53,738	\$35.57	\$ 1,911,461	\$ 25,614	\$ 1,937,075	\$ 47.64	\$ 2,560,078	32.16%
Subtotal	53,168		\$ 1,891,186	53,450		\$1,901,217	53,738		\$ 1,911,461	\$ 25,614	\$ 1,937,075		2,560,078	32.16%
Unmetered Customers	2,356	\$ 66.06	\$ 155,611	2,356	\$ 66.06	\$ 155,611	2,356	\$ 66.06	\$ 155,611	\$ 2,085	\$ 157,696	\$ 92.85	\$ 218,707	38.69%
Usage (in 100 Gallons)														
All Usage	1,913,530	\$ 0.7726	\$ 1,478,393	1,917,666	\$0.7726	\$ 1,481,589	1,924,866	\$0.7726	\$ 1,487,151	\$ 19,928	\$ 1,507,079	\$1.1681	\$ 2,248,436	49.19%
Low Income:														
Low Income Discount Tier 1						(\$24,654)			\$ (41,090)	\$ (551)	\$ (41,641)		\$ (47,509)	14.09%
Low Income Discount Tier 2						(10,857)			(18,095)	(242)	(18,337)		(20,846)	13.68%
Low Income Discount Tier 3						(7,306)			(12,177)	(163)	(12,340)		(13,925)	12.84%
RZ 10 Residential Bill Analysis Revenues			\$ 3,525,190											
<u>Adjustment (1):</u>														
5/8 - Meter	282	\$ 35.57	\$10,031	288	\$35.57	\$10,244	288	\$35.57		\$137	\$10,381	\$ 47.64	\$13,720	32.16%
All Usage	7,050	\$0.7726	5,447	7,200	\$0.7726	5,563	7,220	\$0.7726		75	5,653	\$1.1681	\$8,433	49.18%
<u>Adjustment (2):</u>														
Deduct Meter Usage	(2,914)	\$0.7726	\$ (2,251)											
RZ 10 Residential Usage	1,917,666			1,924,866			1,932,086							
RZ 10 Residential Annualized/Proforma Revenues			\$ 3,540,668			\$ 3,511,406			\$ 3,482,860	\$ 46,883	\$ 3,545,565		\$ 4,967,094	40.09%

Note (1) Adjustment to account for the growth (loss) in customers.
Note (2) Adjustment to account for Deduct Meter usage.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 10 - EAST NORRITON WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 10 - Commercial	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		12/31/2025		12/31/2025		12/31/2025		12/31/2025					
	Billing Determinants	Current Rate		Bill Analysis Revenue			Billing Determinants	Current Rate		Annualized Revenue			Billing Determinants	Current Rate		Pro Forma Revenues	Proforma DSIC Revenues		Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>																						
EDU	3,998	\$ 34.94		\$ 139,690			3,998	\$ 34.94		\$ 139,690			3,998	\$ 34.94		\$ 139,690	\$ 1,872		\$ 141,562	\$ 47.64	\$ 190,465	34.55%
Subtotal	3,998			\$ 139,690			3,998			\$ 139,690			3,998			\$ 139,690	\$ 1,872		\$ 141,562		\$ 190,465	34.55%
Unmetered Customers	326	\$ 64.89		\$ 21,174			326	\$ 64.89		\$ 21,174			326	\$ 64.89		\$ 21,174	\$ 284		\$ 21,458	\$ 92.04	\$ 30,034	39.97%
Usage (in 100 Gallons)																						
All Usage	1,540,066	\$ 0.7590		\$ 1,168,910			1,540,066	\$ 0.7590		\$ 1,168,910			1,540,066	\$ 0.7590		\$ 1,168,910	\$ 15,663		\$ 1,184,573	\$ 1.1474	\$ 1,767,072	49.17%
RZ 10 Commercial Usage	1,540,066						1,540,066						1,540,066									
RZ 10 Commercial Revenues				\$ 1,329,774						\$ 1,329,774						\$ 1,329,774	\$ 17,819		\$ 1,347,593		\$ 1,987,571	47.49%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 11 - NEW GARDEN DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	907,472	24,659	\$ 3,362,541	907,472	24,659	\$3,362,541	907,472	24,659	\$ 3,362,541	\$ 45,057	\$ 3,407,598	\$ 2,520,739	-26.03%
Commercial	180,929	5,187	1,020,311	180,929	5,187	1,020,311	180,929	5,187	1,020,311	13,672	1,033,983	513,776	-50.31%
Public	2,340	37	11,942	2,340	37	11,942	2,340	37	11,942	160	12,102	4,934	-59.23%
Total Rate Zone 11 - New Garden Division	1,090,741	29,882	\$4,394,794	1,090,741	29,882	\$4,394,794	1,090,741	29,882	\$4,394,794	\$58,889	\$4,453,683	\$3,039,449	-31.75%

Rate Zone 11 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Annualized Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Customer Charge</u>														
EDUs	24,659	\$ 45.46	\$1,121,003	24,659	\$ 45.46	\$1,121,003	24,659	\$45.46	\$ 1,121,003	\$ 15,021	\$ 1,136,024	\$ 55.93	\$1,379,183	21.40%
Subtotal	24,659		\$1,121,003	24,659		\$1,121,003	24,659		\$ 1,121,003	\$ 15,021	\$ 1,136,024		\$1,379,183	21.40%
Unmetered Customers	-	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
Usage (in 100 Gallons)														
Block 1	778,398	\$ 2.3259	1,810,476	778,398	\$ 2.3259	1,810,476	778,398	\$ 2.3259	1,810,476	24,260	1,834,736	\$ 1.2585	979,614	-46.61%
Block 2	129,074	3.3435	431,560	129,074	3.3435	431,560	129,074	3.3435	431,560	5,783	437,343	1.2585	162,440	-62.86%
Subtotal	907,472		2,242,036	907,472		2,242,036	907,472		2,242,036	30,043	2,272,079		1,142,054	
Low Income:														
Low Income Discount Tier 1			\$ (149)			\$ (149)			\$ (149)	\$ (2)	\$ (151)	\$ (149)	\$ (149)	
Low Income Discount Tier 2			(350)			(350)			(350)	(5)	(355)	(350)	(350)	
Low Income Discount Tier 3			-			-			-	-	-	-	-	
RZ 11 Residential Bill Analysis Revenues			\$ 3,362,541											
RZ 11 Residential Usage	907,472			907,472			907,472							
RZ 11 Residential Annualized/Proforma Revenues			\$3,362,541			\$3,362,541			\$3,362,541	\$45,057	\$3,407,598		\$2,520,739	-26.03%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 11 - NEW GARDEN DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Annualized Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ @ Present Rate	12/31/2025 Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Rate Zone 11 - Commercial 1&2														
<u>Customer Charge</u>														
Commercial 1 - EDUs	4,712	\$ 62.52	\$ 294,588	4,712	\$ 62.52	\$ 294,588	4,712	\$ 62.52	\$ 294,588	\$ 3,947	\$ 298,535	55.93	\$ 263,537	-11.72%
Subtotal	4,712		\$ 294,588	4,712		\$ 294,588	4,712		\$ 294,588	\$ 3,947	\$ 298,535		\$ 263,537	-11.72%
Unmetered Customers	-	\$0.00	\$0	-	\$0.00	\$0	-	\$0.00	\$ -	\$ -	\$ -	\$0.00	\$0	0.00%
Usage (in 100 Gallons)														
Block 1	120,249	\$ 3.4850	419,068	120,249	\$ 3.4850	419,068	120,249	\$ 3.4850	419,068	5,616	424,684	\$ 1.2363	148,664	-64.99%
Block 2	33,550	4.4868	150,532	33,550	4.4868	150,532	33,550	4.4868	150,532	2,017	152,549	1.2363	41,478	-72.81%
Subtotal	153,799		569,600	153,799		569,600	153,799		569,600	7,633	577,233		190,142	
<u>Customer Charge</u>														
Commercial 2 - EDUs	475	\$ 62.52	\$29,684	475	\$ 62.52	\$29,684	475	\$ 62.52	\$ 29,684	\$ 398	\$ 30,082	\$ 55.93	\$ 26,556	-11.72%
Subtotal	475		\$29,684	475		\$29,684	475		\$ 29,684	\$ 398	\$ 30,082		\$ 26,556	-11.72%
Unmetered Customers	-	\$0.00	\$0	-	\$0.00	\$0	-	\$0.00	\$ -	\$ -	\$ -	\$0.00	\$0	0.00%
Usage (in 100 Gallons)														
Block 1	16,993	\$ 4.4580	75,756	16,993	\$ 4.4580	75,756	16,993	\$ 4.4580	75,756	1,015	76,771	\$ 1.2363	21,009	-72.63%
Block 2	10,137	5.0000	50,683	10,137	5.0000	50,683	10,137	5.0000	50,683	679	51,362	1.2363	12,532	-75.60%
Subtotal	27,130		126,439	27,130		126,439	27,130		126,439	1,694	128,133		33,541	
RZ 11 Commercial Usage	180,929			180,929			180,929							
RZ 11 Commercial Revenues			\$1,020,311			\$1,020,311			\$1,020,311	\$13,672	\$1,033,983		\$513,776	-50.31%
Rate Zone 11 - Public														
<u>Customer Charge</u>														
EDUs	37	\$ 62.52	\$ 2,282	37	\$ 62.52	\$ 2,282	37	\$ 62.52	\$ 2,282	\$ 31	\$ 2,313	\$ 55.93	\$ 2,041	-11.76%
Subtotal	37		\$ 2,282	37		\$ 2,282	37		\$ 2,282	\$ 31	\$ 2,313		\$ 2,041	-11.76%
Unmetered Customers	-	\$0.00	\$0	-	\$0.00	\$0	-	\$0.00	\$ -	\$ -	\$ -	\$0.00	\$0	0.00%
Usage (in 100 Gallons)														
Block 1	838	\$ 3.4850	2,922	838	\$ 3.4850	2,922	838	\$ 3.4850	2,922	39	2,961	\$ 1.2363	1,036	-65.01%
Block 2	1,502	4.4868	6,738	1,502	4.4868	6,738	1,502	4.4868	6,738	90	6,828	1.2363	1,857	-72.80%
Subtotal	2,340		\$ 9,660	2,340		\$ 9,660	2,340		9,660	129	9,789		\$2,893	
RZ 11 Public Usage	2,340			2,340			2,340							
RZ 11 Public Revenues			\$11,942			\$11,942			\$11,942	\$160	\$12,102		\$4,934	-59.23%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 12 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	5,438,130	133,611	\$ 9,768,767	5,438,130	133,611	\$ 9,759,106	5,438,130	133,611	\$ 9,759,106	\$ -	\$ 9,759,106	\$ 12,793,629	31.09%
Commercial	688,711	10,712	1,740,691	688,711	10,712	1,740,691	688,711	10,712	1,740,691	-	1,740,691	1,300,545	-25.29%
Public	22,674	85	55,889	1,971	85	55,889	1,971	85	55,889	-	55,889	30,057	-46.22%
Total Rate Zone 12	6,149,514	144,408	\$ 11,565,347	6,128,811	144,408	\$ 11,555,686	6,126,840	144,408	\$ 11,555,686	\$ -	\$ 11,555,686	\$ 14,124,231	22.23%

Rate Zone 12 - Residential	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
EDU - Rate 1	130,076	\$ 53.49	\$ 6,958,197	130,076	\$ 53.49	\$ 6,958,197	130,076	\$53.49	\$ 6,958,197	\$ -	\$ 6,958,197	\$ 47.64	\$ 6,196,819	-10.94%
EDU - Rate 2	1,852	89.74	\$ 166,204	1,852	89.74	166,204	1,852	89.74	166,204	-	166,204	47.64	88,232	-46.91%
Subtotal	131,928		\$ 7,124,401	131,928		\$7,124,401	131,928		\$ 7,124,401	\$ -	\$ 7,124,401		\$ 6,285,051	
Unmetered Customers	1,683	\$ 89.74	\$ 151,071	1,683	\$ 89.74	\$ 151,071	1,683	\$ 89.74	\$ 151,071	\$ -	\$ 151,071	\$ 92.85	\$ 156,299	3.46%
Usage (in 100 Gallons)														
Minimum Usage	189	\$ -	\$ -	189	\$ -	\$ -	189	\$ -	\$ -	\$ -	\$ -	\$1.1681	\$ 221	0.00%
Block 1	3,582,506	0.4370	1,565,555	3,560,398	0.4370	1,555,894	3,560,398	0.4370	1,555,894	-	1,555,894	1.1681	4,158,901	167.30%
Block 2	1,179,257	0.4600	542,458	1,179,257	0.4600	542,458	1,179,257	0.4600	542,458	-	542,458	1.1681	1,377,490	153.93%
Block 3	316,136	0.4810	152,061	316,136	0.4810	152,061	316,136	0.4810	152,061	-	152,061	1.1681	369,278	142.85%
Block 4	131,368	0.5290	69,494	131,368	0.5290	69,494	131,368	0.5290	69,494	-	69,494	1.1681	153,451	120.81%
Block 5	69,568	0.5900	41,045	69,568	0.5900	41,045	69,568	0.5900	41,045	-	41,045	1.1681	81,262	97.98%
Block 6	181,214	0.6770	122,682	181,214	0.6770	122,682	181,214	0.6770	122,682	-	122,682	1.1681	211,676	72.54%
Subtotal	5,460,238		2,493,295	5,438,130		\$ 2,483,634	5,438,130		\$ 2,483,634	\$ -	\$ 2,483,634		\$ 6,352,279	
Low Income:														
Low Income Discount Tier 1						\$ -			\$ -	\$ -	\$ -			
Low Income Discount Tier 2						-			-	-	-			
Low Income Discount Tier 3						-			-	-	-			
RZ 12 Residential Bill Analysis Revenues			\$ 9,768,767											
Adjustment (1):														
Deduct Meter Usage	(22,108)	\$0.5284	\$ (11,682)											
RZ 12 Residential Usage	5,438,130			5,438,130			5,438,130							
RZ 12 Residential Annualized/Proforma Revenues			\$ 9,757,085			\$ 9,759,106			\$ 9,759,106	\$ -	\$ 9,759,106		\$ 12,793,629	31.09%

Note (1) Adjustment to account for Deduct Meter usage.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 12 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Rate Zone 12 - Commercial														
<u>Charge by Number of EDUs</u>														
EDU - (Apartments)	8,029	\$ 53.49	\$ 429,494	8,029	\$ 53.49	\$ 429,494	8,029	\$ 53.49	\$ 429,494	\$ -	\$ 429,494	\$ 47.64	\$ 382,498	-10.94%
EDU - (Other Commercial)	2,683	\$ 99.22	\$ 266,205	2,683	\$ 99.22	\$ 266,205	2,683	\$ 99.22	\$ 266,205	-	\$ 266,205	\$ 47.64	\$ 127,821	-51.98%
Subtotal	10,712		\$695,699	10,712		\$ 695,699	10,712		\$ 695,699	\$ -	\$ 695,699		\$ 510,319	
Unmetered Customers	0	\$ 89.74	\$ -	-	\$ 89.74	\$ -	-	\$ 89.74	\$ -	\$ -	\$ -	\$ 92.04	\$ -	0.00%
Usage (in 100 Gallons) - Com. Apartments														
Minimum Usage	309	\$ -	\$ -	309	\$ -	\$ -	309	\$ -	\$ -	\$ -	\$ -	\$ 1.1474	\$ 355	0.00%
Block 1	176,753	0.4370	77,241	176,753	0.4370	77,241	176,753	0.4370	77,241	-	77,241	1.1474	202,806	162.56%
Block 2	23,709	0.4600	10,906	23,709	0.4600	10,906	23,709	0.4600	10,906	-	10,906	1.1474	27,204	149.44%
Block 3	1,622	0.4810	780	1,622	0.4810	780	1,622	0.4810	780	-	780	1.1474	1,861	138.59%
Block 4	260	0.5290	138	260	0.5290	138	260	0.5290	138	-	138	1.1474	298	115.94%
Block 5	231	0.5900	136	231	0.5900	136	231	0.5900	136	-	136	1.1474	265	94.85%
Block 6	1,793	0.6770	1,214	1,793	0.6770	1,214	1,793	0.6770	1,214	-	1,214	1.1474	2,057	69.44%
Subtotal	204,677		\$ 90,415	204,677		\$ 90,415	204,677		\$ 90,415	\$ -	\$ 90,415		\$ 234,846	
Usage (in 100 Gallons) - Commercial 2														
Minimum Usage	67,733	0.00000	\$ -	67,733	\$ -	\$ -	67,733	\$ -	\$ -	\$ -	\$ -	1.14740	\$ 77,717	0.00%
Block 1	416,300	2.29300	954,577	416,300	2.2930	954,577	416,300	2.2930	954,577	-	954,577	1.14740	\$ 477,663	-49.96%
Subtotal	484,034		954,577	484,034		954,577	484,034		\$ 954,577	\$ -	\$ 954,577		\$ 555,380	
RZ 12 Commercial Usage	688,711			688,711			688,711							
RZ 12 Commercial Revenues			\$ 1,740,691			\$ 1,740,691			\$ 1,740,691	\$ -	\$ 1,740,691		\$ 1,300,545	-25.29%

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Rate Zone 12 - Public														
<u>Charge by Number of EDUs</u>														
EDU	85	\$ 99.22	\$ 8,417	85	\$ 99.22	\$ 8,417	85	\$ 99.22	\$ 8,417	\$ -	\$ 8,417	\$ 47.64	\$ 4,041	-51.99%
Subtotal	85		\$ 8,417	85		\$ 8,417	85		\$8,417	\$0	\$8,417		\$ 4,041	-51.99%
Unmetered Customers	-	\$ 89.74	\$0	0	\$ 89.74	\$0	0	\$ 89.74	\$ -	\$ -	\$ -	\$ 92.04	\$0	0.00%
Usage (in 100 Gallons)														
Minimum Usage	1,971	\$ -	\$0	1,971	\$ -	\$ -	1,971	\$ -	\$ -	\$ -	\$ -	\$ 1.1474	\$ 2,261	0.00%
Block 1	20,703	2.2930	\$47,472	20,703	2.2930	47,472	20,703	2.2930	47,472	-	47,472	1.1474	23,755	-49.96%
Subtotal	22,674		\$47,472	22,674		\$ 47,472	22,674		\$ 47,472	\$ -	\$ 47,472		\$ 26,016	
RZ 12 Public Usage	22,674			22,674			22,674							
RZ 12 Public Revenues			\$55,889			\$55,889			\$55,889	\$0	\$55,889		\$30,057	-46.22%

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 13 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	1,383,929	40,195	\$ 1,442,837	1,383,929	40,195	\$ 1,442,838	1,383,929	40,195	\$ 1,442,838	\$ -	\$ 1,442,838	\$ 3,008,331	108.50%
Commercial	758,775	46,888	1,705,059	758,775	46,888	1,706,051	758,775	46,888	1,706,051	-	1,706,051	3,534,201	107.16%
Industrial	64,612	10,124	366,251	64,612	10,124	366,251	64,612	10,124	366,251	-	366,251	810,578	121.32%
Public	-	42	1,989	11,713	57	2,708	11,713	57	2,708	-	2,708	12,865	375.07%
Total Rate Zone 13	2,207,316	97,249	\$ 3,516,136	2,207,316	97,264	\$ 3,517,848	2,207,316	97,264	\$ 3,517,848	\$ -	\$ 3,517,848	\$ 7,365,975	109.39%

Rate Zone 13 - Residential	12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
Unmetered Charge by EDU															
District A/B	30,022	\$ 33.33	\$ 1,000,743	4,289	\$ 33.33	\$ 142,966	4,289	\$33.33	\$ 142,966	\$ -	\$ 142,966	\$ 73.90	\$ 316,955	121.70%	
District C	372	45.17	16,802	60	45.17	2,710	60	45.17	2,710	-	2,710	73.90	4,434	63.62%	
District D	3,325	50.00	166,240	205	50.00	10,248	205	50.00	10,248	-	10,248	73.90	15,147	47.80%	
District E	6,476	40.00	259,052	935	40.00	37,389	935	40.00	37,389	-	37,389	73.90	69,077	84.75%	
Subtotal	40,195		\$ 1,442,837	5,489		\$193,313	5,489		\$193,313	\$0	\$193,313		405,613	109.82%	
Metered Charge by EDU -Proforma															
District A/B				25,733	\$ 33.33	\$ 857,778	25,733	\$ 33.33	\$ 857,778	\$ -	\$ 857,778	\$ 37.92	\$ 975,808	13.76%	
District C				312	45.17	14,092	312	45.17	14,092	-	14,092	37.92	11,831	-16.04%	
District D				3,120	50.00	155,992	3,120	50.00	155,992	-	155,992	37.92	118,304	-24.16%	
District E				5,542	40.00	221,663	5,542	40.00	221,663	-	221,663	37.92	210,136	-5.20%	
Subtotal				34,707		\$1,249,525	34,707		\$1,249,525	\$0	\$1,249,525		1,316,079	5.33%	
Usage (in 100 Gallons) -Proforma															
All Usage				1,383,929	\$ -	\$ -	1,383,929	\$ -	\$ -	\$ -	\$ -	\$0.9297	\$ 1,286,639	0.00%	
Low Income:															
Low Income Discount Tier 1						\$ -			\$ -	\$ -	\$ -				
Low Income Discount Tier 2						-			-	-	-				
Low Income Discount Tier 3						-			-	-	-				
RZ 13 Residential Bill Analysis Revenues			\$ 1,442,837												
Adjustment (1): Flat Rate to Metered															
District A/B	(25,733)	\$ 33.33	\$ (857,778)												
District C	(312)	45.17	(14,092)												
District D	(3,120)	50.00	(155,992)												
District E	(5,542)	40.00	(221,663)												
District A/B -Metered	25,733	33.33	857,778												
District C - Metered	312	45.17	14,092												
District D - Metered	3,120	50.00	155,992												
District E -Metered	5,542	40.00	221,663												
All Usage	1,383,929	\$ -	-												
RZ 13 Residential Usage															
	1,383,929														
RZ 13 Residential Annualized/Proforma Revenues			\$ 1,442,837	\$ 1,442,838			\$ 1,442,838			\$ -	\$ 1,442,838	\$ 3,008,331 108.50%			

Note (1) Adjustment for change of flat rate to metered customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 13 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proposed Rate	Proforma @ Proposed Rate	% Percent Change
Rate Zone 13 - Commercial														
<u>Unmetered Charge by EDU</u>														
District A/B	43,672	\$ 33.33	\$ 1,455,723	24,497	\$ 33.33	\$ 816,579	24,497	\$33.33	\$ 816,579	\$ -	\$ 816,579	\$ 73.90	\$ 1,810,356	121.70%
District C	12	45.17	542	12	45.17	542	12	45.17	542	-	542	73.90	887	63.65%
District D	-	50.00	-	-	50.00	-	-	50.00	-	-	-	73.90	-	0.00%
District E	3,084	40.00	123,360	2,892	40.00	115,680	2,892	40.00	115,680	-	115,680	73.90	213,719	84.75%
Subtotal	46,768		\$1,579,625	27,401		\$ 932,801	27,401		\$932,801	\$0	\$ 932,801		\$ 2,024,962	117.08%
<u>Metered Charge by EDU - Proforma</u>														
District A/B				19,174	\$ 33.33	\$ 639,144	19,174	\$ 33.33	\$ 639,144	\$ -	\$ 639,144	\$ 37.92	\$ 727,090	13.76%
District E				192	45.17	8,672	192	45.17	8,672	-	8,672	37.92	7,281	-16.04%
Subtotal				19,366		\$647,816	19,366		\$647,816	\$0	\$647,816		734,371	13.36%
<u>Usage (in 100 Gallons) - Proforma</u>														
All Usage				556,462	\$ -	\$ -	556,462	\$ -	\$ -	\$ -	\$ -	\$0.9132	\$ 508,161	0.00%
<u>High Volume Users</u>														
EDU	120	\$ -	\$ -	120	\$ -	\$ -	120	\$ -	\$ -	\$ -	\$ -	\$ 37.92	\$ 4,550	0.00%
Subtotal	120		\$0	120		\$ -	120		\$ -	\$ -	\$ -		\$ 4,550	0.00%
<u>Usage (in 100 Gallons)</u>														
All Usage	202,313	\$0.6200	\$ 125,434	202,313	\$0.6200	\$125,434	202,313	\$0.6200	\$ 125,434	\$ -	\$ 125,434	\$1.2958	\$ 262,157	109.00%
RZ 13 Commercial Bill Analysis Revenues			\$ 1,705,059											
<u>Adjustment (1): Flat Rate to Metered</u>														
District A/B	(19,174)	\$ 33.33	\$ (639,144)											
District E	(192)	40.00	(7,680)											
District A/B -Metered	19,174	33.33	639,144											
District E -Metered	192	45.17	8,672											
All Usage	556,462	\$0.0000	-											
RZ 13 Commercial Usage	758,775			758,775			758,775							
RZ 13 Commercial Revenues			\$ 1,706,051			\$ 1,706,051			\$ 1,706,051	\$ -	\$ 1,706,051		\$ 3,534,201	107.16%

Note (1) Adjustment for change of flat rate to metered customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 13 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Rate Zone 13 - Industrial	12/31/2023			12/31/2024			12/31/2025			12/31/2025		12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change
<u>Unmetered Charge by EDU</u>														
District A/B	10,088	\$ 33.33	\$336,267	9,742	\$ 33.33	\$324,750	9,742	\$33.33	\$ 324,750	\$ -	\$ 324,750	\$ 73.90	\$719,971	121.70%
Subtotal	10,088		\$336,267	9,742		\$324,750	9,742		\$ 324,750	\$ -	\$ 324,750		\$719,971	121.70%
<u>Metered Charge by EDU - Proforma</u>														
District A/B				346	\$ 33.33	\$ 11,517	346	\$ 33.33	\$ 11,517	\$ -	\$ 11,517	\$ 37.92	\$ 13,101	13.75%
Subtotal				346		\$11,517	346		\$11,517	\$0	\$11,517		13,101	13.75%
<u>Usage (in 100 Gallons) - Proforma</u>														
All Usage				16,251	\$ -	\$ -	16,251	\$ -	\$ -	\$ -	\$ -	\$ 0.9132	\$ 14,840	0.00%
<u>High Volume Users</u>														
EDU	36	\$ -	\$ -	36	\$ -	\$ -	36	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
Subtotal	36		\$0	36		\$ -	36		\$ -	\$ -	\$ -		\$ -	0.00%
<u>Usage (in 100 Gallons)</u>														
All Usage	48,361	\$0.6200	\$29,984	48,361	\$0.6200	\$29,984	48,361	\$0.6200	\$ 29,984	\$ -	\$ 29,984	\$1.2958	\$62,666	109.00%
RZ 13 Industrial Bill Analysis Revenues			\$ 366,251											
<u>Adjustment (1): Flat Rate to Metered</u>														
District A/B	(346)	\$ 33.33	\$ (11,517)											
District A/B -Metered	346	33.33	11,517											
All Usage	16,251	\$0.0000	-											
RZ 13 Industrial Usage			64,612	64,612			64,612							
RZ 13 Industrial Revenues			\$366,251	\$366,251			\$366,251			\$ -	\$366,251	\$810,578 121.32%		

Note (1) Adjustment for change of flat rate to metered customers.

Rate Zone 13 - Public	12/31/2023		12/31/2023		12/31/2024		12/31/2024		12/31/2025		12/31/2025		12/31/2025		12/31/2025	
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change		
<u>Unmetered Charge by EDU</u>																
District A/B	42	\$ 47.35	\$ 1,989	0	\$ 47.35	\$ -	0	\$ 47.35	\$ -	\$ -	\$ -	\$ 47.64	\$ -	0.00%		
Subtotal	42		\$ 1,989	0		\$ -	0		\$ -	\$ -	\$ -		\$ -	0.00%		
<u>Metered Charge by EDU - Proforma</u>																
District A/B				57	\$ 47.35	\$ 2,708	57	\$47.35	\$ 2,708	\$ -	\$ 2,708	\$ 37.92	\$ 2,169	-19.90%		
Subtotal				57		\$ 2,708	57		\$ 2,708	\$ -	\$ 2,708		\$ 2,169	-19.90%		
<u>Usage (in 100 Gallons) -Proforma</u>																
All Usage				11,713	\$ -	\$ -	11,713	\$ -	\$ -	\$ -	\$ -	\$ 0.9132	\$ 10,696	0.00%		
RZ 13 Public Bill Analysis Revenues			\$ 1,989													
<u>Adjustment (1): Flat Rate to Metered</u>																
District A/B	(42)	\$ 47.35	\$ (1,989)													
District A/B -Metered	57	47.35	2,708													
All Usage	11,713	-	-													
RZ 13 Public Usage			11,713	11,713			11,713									
RZ 13 Public Revenues			\$ 2,708	\$ 2,708			\$ 2,708			\$ -	\$ 2,708	\$ 12,865		375.07%		

Note (1) Adjustment for change of flat rate to metered customers.

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE 14 - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Residential	130,704	3,252	\$ 213,855	130,704	3,252	\$ 213,855	130,704	3,252	\$ 213,855	\$ 2,867	\$ 216,722	\$ 308,157	42.00%
Commercial	6,496	12	2,408	6,496	12	2,408	6,496	12	2,408	33	2,441	8,026	229.00%
Total Rate Zone 14	137,200	3,264	\$ 216,263	137,200	3,264	\$ 216,263	137,200	3,264	\$ 216,263	\$ 2,900	\$ 219,163	\$ 316,183	44.00%

Rate Zone 14 - Residential	12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
Charge by Number of EDUs															
EDU	3,240	\$ 28.00	\$ 90,728	3,240	\$ 28.00	\$ 90,728	3,240	\$28.00	\$ 90,728	\$ 1,216	\$ 91,944	\$ 47.64	\$ 154,368	68.00%	
Subtotal	3,240		\$ 90,728	3,240		\$ 90,728	3,240		\$ 90,728	\$ 1,216	\$ 91,944		\$ 154,368	68.00%	
Unmetered Customers	12	\$ 78.00	\$ 936	12	\$ 78.00	\$ 936	12	\$ 78.00	\$ 936	\$ 13	\$ 949	\$ 92.85	\$ 1,114	17.00%	
Usage (in 100 Gallons)															
Allowance	31,852	\$ -	\$ -	31,852	\$ -	\$ -	31,852	\$ -	\$ -	\$ -	\$ -	\$ 1.1681	\$ 37,206	0.00%	
Block 1	85,408	1.3060	111,543	85,408	1.3060	111,543	85,408	1.3060	111,543	1,495	113,038	1.1681	99,765	-12.00%	
Block 2	13,444	0.7920	10,648	13,444	0.7920	10,648	13,444	0.7920	10,648	143	10,791	1.1681	15,704	46.00%	
Subtotal	130,704		122,191	130,704		122,191	130,704		122,191	1,638	123,829		152,675		
Low Income:															
Low Income Discount Tier 1						\$ -			\$ -	\$ -	\$ -				
Low Income Discount Tier 2						-			-	-	-				
Low Income Discount Tier 3						-			-	-	-				
RZ 14 Residential Bill Analysis Revenues			\$ 213,855												
RZ 14 Residential Usage	130,704			130,704			130,704								
RZ 14 Residential Annualized/Prforma Revenues			\$ 213,855			\$ 213,855			\$ 213,855	\$ 2,867	\$ 216,722		\$ 308,157	42.00%	

Rate Zone 14 - Commercial	12/31/2023			12/31/2024			12/31/2025			12/31/2025			12/31/2025		
	Billing Determinants	Current Rate	Bill Analysis Revenue	Billing Determinants	Current Rate	Annualized Revenue	Billing Determinants	Current Rate	Pro Forma Revenues	Proforma DSIC Revenues	Proforma w/ DSIC @ Present Rate	Proposed Rate	Proforma @ Proposed Rate	% Percent Change	
Charge by Number of EDUs															
EDU	12	\$ 54.00	\$ 648	12	\$ 54.00	\$ 648	12	\$ 54.00	\$ 648	\$ 9	\$ 657	\$ 47.64	\$ 572	-13.00%	
Subtotal	12		\$648	12		\$ 648	12		\$ 648	\$ 9	\$ 657		\$ 572	-13.00%	
Unmetered Customers	-	\$ 78.00	\$ -	-	\$ 78.00	\$ -	-	\$ 78.00	\$ -	\$ -	\$ -	\$ 92.04	\$ -	0.00%	
Usage (in 100 Gallons)															
All Usage	6,496	\$ 0.2710	\$ 1,760	6,496	\$ 0.2710	\$1,760	6,496	\$ 0.2710	\$ 1,760	\$ 24	\$ 1,784	\$ 1.1474	\$ 7,454	318.00%	
RZ 14 Commercial Usage	6,496			6,496			6,496								
RZ 14 Commercial Revenues			\$ 2,408			\$ 2,408			\$ 2,408	\$ 33	\$ 2,441		\$ 8,026	229.00%	

AQUA PENNSYLVANIA, INC. - WASTEWATER OPERATIONS
APPLICATION OF PRESENT RATES AND PROPOSED RATES TO BILL ANALYSIS
RATE ZONE Contract - WASTEWATER DIVISION
YEAR ENDING DECEMBER 31, 2023, 2024, AND 2025

Customer Class	12/31/2023 Usage (in 100 Gallons)	12/31/2023 Number of Bills	12/31/2023 Bill Analysis Revenues	12/31/2024 Usage (in 100 Gallons)	12/31/2024 Number of Bills	12/31/2024 Proforma Revenues	12/31/2025 Usage (in 100 Gallons)	12/31/2025 Number of Bills	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
Contract	-	12	\$ 335,054	-	12	\$ 335,054	-	12	\$ 355,458	\$ -	\$ 355,458	\$ 355,458	0.00%
Third Party Sales	89,868	6,274	1,179,574	89,868	6,274	1,179,574	89,868	6,274	1,179,574	-	1,179,574	1,179,574	0.00%
Total Rate Zone Contract	89,868	6,286	\$ 1,514,628	89,868	6,286	\$ 1,514,628	89,868	6,286	\$ 1,535,032	\$ -	\$ 1,535,032	\$ 1,535,032	0.00%

Contract Sales	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Charge by Number of EDUs</u>														
Woodloch Pines	12	\$ 27,921.14	\$ 335,054	12	\$ 27,921.14	\$ 335,054	12	\$ 29,621.54	\$ 355,458	\$ -	\$ 355,458	\$ 29,621.54	\$ 355,458	0.00%
Subtotal	12		\$ 335,054	12		\$ 335,054	12		\$ 355,458	\$ -	\$ 355,458		\$ 355,458	0.00%
Contract Revenues			\$ 335,054			\$ 335,054			\$ 355,458	\$ -	\$ 355,458		\$ 355,458	0.00%

Third Party Sales	12/31/2023 Billing Determinants	Current Rate	12/31/2023 Bill Analysis Revenue	12/31/2024 Billing Determinants	Current Rate	12/31/2024 Annualized Revenue	12/31/2025 Billing Determinants	Current Rate	12/31/2025 Pro Forma Revenues	Proforma DSIC Revenues	12/31/2025 Proforma w/ DSIC @ Present Rate	Proposed Rate	12/31/2025 Proforma @ Proposed Rate	% Percent Change
<u>Flat Rate by Number of EDUs - Monthly</u>														
Southdown Homes	12	\$ -	\$ -	12	\$ -	\$ -	12	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.00%
Penn Lake	3,030	29.00	87,870	3,030	29.00	87,870	3,030	29.00	87,870	-	87,870	29.00	87,870	0.00%
<u>Flat Rate by Number of EDUs - Quarterly</u>														
Foster Twp.	1,956	\$ 87.00	\$ 170,172	1,956	\$ 87.00	\$ 170,172	1,956	\$ 87.00	\$ 170,172	\$ -	\$ 170,172	\$ 87.00	\$ 170,172	0.00%
Dennison Twp.	420	87.00	36,540	420	87.00	36,540	420	87.00	36,540	-	36,540	87.00	36,540	0.00%
Upper Providence Twp.	4	145,446.00	581,784	4	145,446.00	581,784	4	145,446.00	581,784	-	581,784	145,446.00	581,784	0.00%
Elwyn Twp.	4	26,398.50	105,594	4	26,398.50	105,594	4	26,398.50	105,594	-	105,594	26,398.50	105,594	0.00%
East Side 1	604	115.00	69,460	604	115.00	69,460	604	115.00	69,460	-	69,460	115.00	69,460	0.00%
East Side 2	244	28.00	6,832	244	28.00	6,832	244	28.00	6,832	-	6,832	28.00	6,832	0.00%
Subtotal	6,274		\$ 1,058,252	6,274		\$ 1,058,252	6,274		\$ 1,058,252	\$ -	\$ 1,058,252		\$ 1,058,252	0.00%
Third Party Usage (in 100 Gallons)														
Southdown Homes	89,868	\$ 1.3500	\$ 121,322	89,868	\$ 1.3500	\$ 121,322	89,868	\$ 1.3500	\$ 121,322	\$ -	\$ 121,322	\$ 1.3500	\$ 121,322	0.00%
Third Party Sales Usage	89,868			89,868			89,868							
Third Party Sales Revenues			\$ 1,179,574			\$ 1,179,574			\$ 1,179,574	\$ -	\$ 1,179,574		\$ 1,179,574	0.00%