BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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
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Alyssa Reinhart	:	C-2021-3028493
James Kolb	:	C-2021-3028497
Ronald Schneck	:	C-2021-3028547
Matthew Cicalese	:	C-2021-3028566
Ronald and Lora Roebuck	:	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
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29 Estates LLC	:	C-2021-3029417
David Bowers	:	C-2021-3029466
Joanne Smyth	:	C-2021-3029411
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Aqua Pennsylvania Wastewater, Inc.	:	

RECOMMENDED DECISION

Before
Mary D. Long
Administrative Law Judge

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I. INTRODUCTION

On August 20, 2021, Aqua Pennsylvania, Inc. filed Tariff Water-Pa P.U.C. No. 3 (Tariff Water No. 3) to become effective October 19, 2021. Tariff Water No. 3 would increase Aqua's total annual operating revenues for water service by approximately $86,118,612. This represents an increase in operating revenue for Aqua's water service of 16.9%. Also on August 20, 2021, Aqua Pennsylvania Wastewater, Inc., filed Tariff Sewer-Pa P.U.C. No. 3 (Tariff Sewer No. 3) to become effective October 19, 2021. Tariff Sewer No. 3 would increase Aqua Pennsylvania Wastewater, Inc.'s[1] total annual operating revenues for wastewater service by approximately $11,566,212, or 31.2%.

By order entered on October 7, 2021, the Commission suspended the rate filings 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. The Commission must act on Aqua's rate requests on or before the public meeting currently scheduled for May 12, 2022.

After making adjustments to rate base, expenses and the rate of return and an allocation of a portion of the wastewater revenue requirement to water customers, this decision recommends a maximum water revenue increase of approximately $15.2 million. This water revenue increase, when combined with adjusted *pro forma* present rate water revenues, results in an allowable annual revenue of approximately $528.4 million for Aqua's water service. This decision also recommends a maximum wastewater revenue increase of approximately $16.7 million that, when combined with adjusted *pro forma* present rate wastewater revenues results in an allowable annual revenue of $53.8 million. This represents an approximate 2.97% increase in water operating revenue and 45% increase in wastewater operating revenue.[2]

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[1] Hereafter, Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. are collectively referenced as "Aqua" or "Company."

[2] Tables setting forth the Rate of Return and summary of Adjustments and Comparison of Present and Proposed Water Rates are attached hereto as Appendix A and made a part of this Recommended Decision.

This decision also approves Aqua's universal service plan and universal service rider proposed in its filings, makes recommendations regarding pressure valve inspections and fire hydrants, and approves Aqua's proposal for continued deferral of COVID-19 uncollectible expenses.

II. HISTORY OF THE PROCEEDINGS

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

The Commission's Bureau of Investigation and Enforcement (I&E) entered its appearance in both the water and wastewater rate filings on September 3, 2021. On September 8, 2021, the Office of Small Business Advocate (OSBA) filed formal complaints at Docket Nos. C-2021-3028509 (water) and C-2021-3028511 (wastewater). On September 13, 2021, the Office of Consumer Advocate (OCA) filed formal complaints at Docket Nos. C-2021-3028466 (water) and C-2021-3028467 (wastewater). Additionally, numerous ratepayer complaints have been filed. The Coalition for Affordable Utility Service and Energy Efficiency in Pennsylvania (CAUSE-PA) filed a petition to intervene on September 20, 2021. Masthope Mountain Community Association filed a petition to intervene and formal complaints on October 5, 2021.

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 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.

By notice dated October 8, 2021, this matter was assigned to me and scheduled for a prehearing conference on October 15, 2021. A prehearing conference order was served on the parties on October 8, 2021.

Forty-five 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. The prehearing conference order notified these individuals of their options for participation in the proceedings: do nothing; testify at a public input hearing; or become a fully participating party of record.[3] 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)).

The prehearing conference convened as scheduled. Counsel for Aqua, I&E, OCA and OSBA appeared. Additionally counsel representing intervenor CAUSE-PA and complainants Aqua Large Users Group (C-2021-3029089), East Norriton Township (C-2021-3029019), and Masthope Mountain Community Association (C-2021-3028992; C-2021-3028996), appeared and participated.

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.

[3] Consumers who filed rate complaints after the prehearing conference were provided with a copy of the prehearing order and a letter which included instructions for becoming a fully participating party of record if the individual wished to do so.

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 58 witnesses testified.

The active parties engaged in discovery and served written direct, rebuttal, surrebuttal and rejoinder testimony. The evidentiary hearing convened as scheduled on December 20, 2021. The parties notified me that each party had waived cross-examination of witnesses and requested to move their written testimony into the record. This 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. AP Post-Hearing Exhibit 1 was admitted by interim order entered January 24, 2022, and the record was closed.

III. PUBLIC INPUT HEARINGS

Six public input hearings were convened to hear from customers of Aqua and Aqua Wastewater. Each of these hearings was conducted by telephone using a toll-free telephone number and PIN. Each witness was asked to register in advance to testify.

Universally the customers who testified provided thoughtful, and in some cases, thoroughly researched, testimony. In addition to customers, Senator Carolyn Comitta provided comments in opposition to the rate increases, as did Senator Katie Muth and Representative Christina Sappey.

A. November 8, 2021, at 6:00 p.m.

On November 8, 2021, a public input hearing was conducted by telephone. The hearing convened at 6:00 p.m. Seven witnesses testified under oath. None supported the rate increases.

Several witnesses testified that their rates were already higher than rates in other communities and questioned why Aqua needed a rate increase in view of the financial health of the company. Mary K. Owen noted that her rates are high even when she controls her consumption, has no pool and does not water grass. Shaylyn Forte noted that her water bills at her previous residence in Philadelphia were less than half what she currently pays in Elkins Park.

Suzanne Snajdr testified that it seemed that Aqua was increasing rates in order to expand and purchase other systems in order to benefit shareholders rather than customers. This sentiment was echoed by Swen Swenson and Edward Nathan. Mr. Nathan specifically noted Essentials Utilities, the parent of the Aqua companies, recently forecasted substantial earnings and projected revenue to increase by 64%. Stephen Moore also agreed with Mr. Nathan, noting that Aqua has little incentive to improve service or infrastructure because it is a monopoly. Mr. Nathan also testified that Aqua was likely to benefit from the recent infrastructure bill which customers are also paying for with tax dollars.

Many witnesses also complained that Aqua had been granted multiple rate increases in a short period of time. Christine Weaver and Mr. Swenson testified that the percentage of increases is higher than the rate of inflation and much higher than the average salary increase of 3%. In Mr. Nathan's view, the magnitude of these rate increases makes rate inflation structural rather than transitory.

Ms. Weaver, a customer in Lake Harmony, also complained that the flat rate she is charged for wastewater service is fundamentally unfair. Compared to the large rental homes in the area that can accommodate 15-40 people, she pays five times more per person in wastewater

charges because she is a small household, but is charged the same rate. Mr. Moore also believes the flat rate for wastewater is unfair to his small household.

B. November 9, 2021, at 1:00 p.m.

At 1:00 p.m. on November 9, 2021, the second public input hearing convened by telephone. Six witnesses testified under oath. Four witnesses were customers of Aqua and opposed the rate increase.

Like other Lake Harmony customers, Stephen Bogush and Frederick Anton complained that the flat rate for wastewater was unfair because large high-capacity rental homes pay the same rate as small households and homes that are only occupied a few days per year.

Henry Bienkowski testified that it was difficult to understand the rate filing. In view of decreasing costs because of automated meter reading and electronic bills, he could not understand why an increase in rates was justified.

Mr. Bogush and Carol Meerschaert also complained that successive double-digit rate increases were simply not sustainable, and that water and wastewater service were becoming unaffordable. Mr. Bogush specifically testified that his wastewater bill increased about 54% in 2019, and that the proposed increase would add another 22-25% increase.

James Coffey and Tim Senchel were not customers of Aqua, but testified regarding Aqua's support for environmental and education programs.

C. November 9, 2021, at 6:00 p.m.

The third public input hearing convened at 6:00 p.m. on November 9, 2021. Fourteen witnesses testified under oath.

Karina Gonzales delivered the statement of Senator Carolyn Comitta of the 19th District in Chester County in opposition to the proposed rate increases. Senator Comitta detailed the hardships and financial challenges already faced by her constituents, including the COVID-19 pandemic, ongoing economic downturn and significant damage caused by Hurricane Ida.[4]

Several witnesses opposed the rate increase because their rates were already higher than rates for similar services in surrounding communities. Adam Anders noted that he currently pays $100 per month for water and wastewater service before any consumption charges are added. He noted that Downingtown pays $6.28 per month, West Wheatland Township pays $23 per month and West Chester pays $30.11 per month. Upendra Tyagi agreed with Mr. Anders and noted that his rates are already high.

Another common complaint among the witnesses is that Aqua has requested an increase in rates when rates were increased recently. Donald Oskinski testified that there is no justification for the rates to increase, especially since "the ink hasn't dried from the last major increase…."[5] Elizabeth Kearns sated that the current rate increase is on top the 10% increase from two years ago. Catherine Moran stated that with the current proposed increase her rates will have increase by 28.8% in the last three years. Maureen Quimby testified that the proposed increase will make it impossible for her to stay in her home. Lorraine Rocci felt that the rate increase is unfair because her monthly fee will triple even though she is very careful to moderate her consumption of water and wastewater. Marguerite Woodeschick testified that her rate was $63 per month before Aqua acquired her system. After Aqua's acquisition, her rate increased to $103 per month. If the rate increase is approved, her rate will increase to $125 per month. John Goodale also testified that his rate for wastewater service will increase from $103 per month to $120 per month.

Several witnesses complained that they suffered from unresolved quality of service problems and question how Aqua was spending the increase revenue from successive

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[4] The Senator's written comments were admitted into the record without objection as Comitta Ex. 1.

[5] Tr. 200.

rate increases. Upendra Tyagi described problems with discolored water in his neighborhood. David Miller testified that he has had significant issues with maintaining pressure valves because the water pressure delivered to his home is too high. Conversely Tanmry Basb testified that he suffers from low water pressure. In his view, if Aqua wants more money it should provide better service.

Rosemary Horstman, a Limerick Township wastewater customer, testified that her bill was likely to double if the proposed increase is approved. She questioned whether Aqua had done everything possible to reduce operating costs and optimize efficiencies. She was concerned that the rate increase exceeds the rate of inflation.

Other customers, such as David Miller, John Goodale and Donald Oskinski, described Aqua as a financially successful company and questioned the necessity of the rate increases. In their view, Aqua was using ratepayers to fund the acquisition of other systems without providing added benefits. Jennifer Kasius noted that her rates are higher since Aqua acquired the system in Elkins Park.

More than one customer testified that Aqua should be required to install meters on their service because the regime of flat rates was unfair. Donald Osinski testified that his area is metered for water, but Aqua does not meter his wastewater. Instead, Aqua bases his rates on 4,000 gallons of consumption, which is far more than he uses. Marguerite Woodeschick of Lake Harmony owns a small vacation cottage that she uses five days per month. She complained that she pays the same as the large rental homes in her community that are often occupied to 15, 25 or 40 people year-round.

D. November 10, 2021, at 1:00 p.m.

Three witnesses testified at the fourth public input hearing which convened on November 10, 2021, at 1:00 p.m. Three witnesses testified in opposition to the proposed rate increases.

Carolyn Ziegler resides in Downingtown and is served by Aqua for both water and wastewater service. She testified that while she appreciates improvements that Aqua made to the sewer plant in her community, she thinks the proposed rate increases are too high. She testified that her rates are already the highest in Pennsylvania. The COVID-19 pandemic required her and her husband to make significant lifestyle changes and increased Aqua bills would create a significant hardship for her household.

Richard Gage took time to testify on his birthday and described the significant service problems he has had regarding the successive failures of pressure reduction valves due to very high water pressure from Aqua. In his view, the rate increase is not justified because Aqua is not spending capital to rectify the pressure problems.

Carroll Stroh resides in Honeycroft Village. He opposed the proposed wastewater increase because his rate is already too high.

E. November 10, 2021, at 6:00 p.m.

The fifth public input hearing convened as a "hybrid" public input hearing. Representatives Lawrence and Sappey made arrangements for constituents who wanted to testify to appear at the Penn Township Building. The Representatives provided a telephone for these individuals to call and provide their testimony. Eleven witnesses testified from the Penn Township Building, including Representative Sappey. Seven other witnesses who were not present at the Penn Township Building also testified. In total, 18 witnesses testified under oath. A few of these witnesses take both water and wastewater service from Aqua, but the majority were wastewater-only customers. All opposed the proposed increases.

Representative Christina Sappey testified on behalf of her constituents in the 158th Legislative District in Chester County, which includes West Goshen, East Bradford, West Bradford, East Marlborough, Newlin and New Garden Township. Her concern regarding the proposed increase stems in part from Aqua's ongoing attempts to purchase other water utilities in the region. She further observed that rate increases have a disproportionate effect on low-income

seniors and working families in her district, who are already struggling to make ends meet. Accordingly, the scale of the proposed increases, 17% for water and 33% for wastewater, are not sustainable for the community and should be denied by the Commission.

Many witnesses testified that they had been affected by the COVID-19 pandemic and that the proposed increases would cause a hardship due to their reduced or fixed incomes. Eileen Canci, and Jace Hepler, both of West Grove, stated that their rates were already too high and that a further increase would cause a substantial burden. Jeri Ramagnano and Danielle Sliffer also stated that when utility bills increase, they have less income left over to spend on other necessities, including spending in the local economy.

Nancy Deutsch, the Executive Director of the Jenner's Pond Retirement Community, testified that the cost of the rate increases would have to be passed onto residents. She further noted that the facility is still struggling with the effect of the COVID-19 pandemic and that she has a hard time securing supplies and staff. An increase in rates for wastewater would cause even further hardship.

Donald Campbell, a resident of West Chester, opposed the proposed fixed rate billing for wastewater use. He explained that he and his wife recently downsized to a condominium complex that also includes townhouses where families with children reside. In his view, it is not fair for his small household to pay the same for wastewater as a larger household that has greater consumption. He questioned why customers who are served by Aqua water with metered service should be charged a fixed rate for wastewater service instead of a metered rate. Fred Weiner, of Lake Harmony, also complained that the unmetered fixed rate for wastewater service in his community was too high and unfair. He advocated that Aqua should install meters in Lake Harmony.

John Stull complained that it was not fair to increase rates to residential customers while reducing the proposed rates charged to commercial customers. As a wastewater-only customer, he also complained that he was charged with high consumption in the summer because he waters his plants, but Aqua does not treat this wastewater in a wastewater treatment plant.

Several witnesses complained about successive rate increases within a short period of time. Wayne Weismandel of Honeycroft Village provided detailed testimony tracking the successive increases in wastewater rates. Specifically, on May 23, 2019, the monthly service charge for wastewater in Honeycroft was increased by 49.99%, from $66.67 to $100.00. The proposed increase for service in Zone 3 would add an additional increase of 25%. The customers of the Honeycroft system would suffer a total increase in rates of 87.49% in three years. In Mr. Weismandel's view, increases on this scale constitute rate shock.[6] George Pozega also observed that his rates had increased in 2019 and he has also been paying a DSIC, which has been increasing.

Douglas Otter testified that his rates increase every time Aqua acquires another system, but that no infrastructure improvements have been made to his system. This sentiment was echoed by James Lutweiler, a retired Aqua executive, and a wastewater customer in Limerick. In his view, Aqua has not only acquired poorly managed systems and made improvements – a good thing, but it has also acquired well-managed systems at exorbitant prices "as a vehicle for making money on the back of ratepayers."[7] He opposes the rate increase because the proposed increases are excessive and higher than rates in surrounding communities; the proposed rates are based on a rate base that includes contributed property that customers have already paid for; and that wastewater consumption includes water used for irrigation that does not require treatment. Other customers, including Nathan Russo and George Pozega also complained that their rates were much higher than rates for similar services in the surrounding communities.

Elizabeth Fleschar, Tamara Lesh, and Jacqueline Iverson offered coordinated testimony in opposition to the proposed rate increases. They are all combine water and wastewater customers of the Peddler's View system in New Hope. Ms. Fleschar, a retired water quality chemist, began by expressing her concern that while rates are increasing, she does not believe that the quality of service or commitment to safety has also increased. For example,

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[6] Mr. Weismandel cited *Lloyd v. Pa. Publ. Util. Comm'n*, 904 A.2d 1010 (Pa. Cmwlth. 2006), to support his definitions of rate shock and gradualism.

[7] Tr. 332.

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 Peddlar'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 Mrozimski 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. Mrozimski 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.

Mr. Day also noted that the proposed 21% increase is on the heels of a 54% increase that was approved by the Commission three years ago. Cumulatively these rate increases represent a 92% increase in rates over the last three years which flies in the face of the policy of gradualism in ratemaking.

Edward Coccia is a wastewater customer in East Norriton. He opposes the 40% rate increase proposed for East Norriton. Although Aqua's justification for the request is for infrastructure improvement, he has seen no large-scale improvement projects in his area. He also pointed out that Aqua's wastewater rates are already higher than the rates charged in other communities. For example, Conshohocken Borough charges $3.30 per 1,000 gallons and North Penn Borough charges $4.71 per 1,000 gallons. In contrast, if the rate increase is granted, East Norriton customers will pay $15.53 per 1,000 gallons. Mr. Coccia also explained that before Aqua acquired the East Norriton system, residents received a reduction in their taxes for seasonal watering and irrigation. Aqua rates do not include the same offset, therefore Aqua is making a profit for usage that is not actually serviced by Aqua.

Stephen Arraya of Downingtown, Pennsylvania opposed both the water and the wastewater increases proposed by Aqua. He also observed that Aqua's rates were two to three times the national average for water service. He explained the particular hardship that high water rates impose on families with children. He cannot allow his children to play in a sprinkler in the summertime and has to limit baths and showers in order to afford his water bill. In his view, Aqua has made a practice of acquiring other water systems to increase their profits at the expense of customers.

Robert Hyslop is a customer of the Cheltenham Township system. He argued that the rate increase likely is justified. He explained that he suffered many sewer backups in his home in the past. But Aqua took steps to improve the system and spends repair dollars more efficiently than Cheltenham Township did.

Eileen Summers is a staff attorney for the Health Education Legal Assistance Project, which provides assistance to low-income individuals in Delaware County. The purpose

of her testimony was to explain the many challenges faced by low-income families in Delaware County and to advocate for the approval of the proposed customer assistance program. She noted that 34.2% of households in Delaware County make less than $50,000 per year. Many of her clients face multiple challenges and have to make trade-offs among necessities in order to survive. She urged Aqua to implement a customer assistance program that is wide-spread, easy to navigate and consumer-friendly.

IV. FINDINGS OF FACT

1. Aqua Pennsylvania, Inc. provides water service to approximately 450,000 customers in portions of more than 200 municipalities throughout 32 Pennsylvania counties. (AP St. No. 1, p. 7).

2. Aqua Pennsylvania Wastewater, Inc provides wastewater service to approximately 40,000 customers in portions of more than 40 municipalities throughout 15 Pennsylvania counties. (AP St. No. 1, p. 7).

3. The Bureau of Investigation & Enforcement is the prosecutory bureau for purposes of representing the public interest in ratemaking and service matters before the Office of Administrative Law Judge. Implementation of Act 129 of 2008 Organization of Bureau and Offices, Docket No. M-2008-20071852 (Order entered August 11, 2011).

4. The Office of Consumer Advocate is authorized to represent the interests of consumers before the Commission. Act 161 of 1976, 71 P.S. § 309-2.

5. The Office of Small Business Advocate is authorized and directed to represent the interest of small business consumers of utility service in Pennsylvania under the provisions of the Small Business Advocate Act, Act 181 of 1988, 73 P.S. §§ 399.41- 399.50.

6. Masthope Mountain Community Association is an incorporated association whose members consist of owners of 2029 improved and unimproved lots within the service territory of Aqua's CS Water Division and CS Sewer Division. (C-2021-3028996, ¶ 2).

7. Aqua Large Users Group (Aqua LUG) includes the Building Owners & Managers Association (BOMA) of Philadelphia, Swarthmore College, Thomas Jefferson University. (C-2021-3029089, Appendix A (as updated).

8. The Coalition for Affordable Utility Services and Energy Efficiency in Pennsylvania (CAUSE-PA), is an unincorporated association of low-income individuals that advocates on behalf of its members to enable consumers of limited economic means to connect to and maintain affordable water, electric, heating and telecommunications services. (CAUSE-PA Petition to Intervene, ¶ 5).

9. The magnitude of the increase is driven primarily by infrastructure requirements, particularly the needed replacement of aging infrastructure. According to Aqua, this case reflects approximately $1.1 billion in additional plant investment since the end of the Fully Projected Future Test Year (FPFTY) in the last case. AP St. 1 at 3.

10. Schedule G-2 of AP Exhibit 1-A (water) and AP Exhibits 1-B through 1-G (wastewater) show the Company's actual utility plant in service as of March 31, 2021, and the projected utility plant in service per scheduled additions and retirements associated with the Future Test Year (FTY) and FPFTY. AP St. 2 at 14.

11. The Company's claim for both water and wastewater utility plant in service begins with the actual Historic Test Year HTY ending balance for each segment of its operations. AP St. 2 at 14. For water, this HTY ending balance was $4,909,729,427 and for wastewater the HTY ending balance was $500,221,311. AP St. 2 at 14; see also AP Exhibit 1-A, Schedule G-2; AP Exhibits 1-B through 1-G, Schedule G-2.

12. 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) associated with certain acquired systems. AP St. 2 at 14-15.

13. The anticipated additions and retirements of water assets for the FTY and FPFTY included improvements to the Company's infrastructure such as water supply, storage and distribution facilities. See AP St. 2 at 15; AP St. 2, Attachment 1.

14. For the FTY, the Company projected additions totaling $402,940,579 and retirements totaling ($36,896,955). AP St. 2, Attachment 1 at 1. For the FPFTY, the Company projected additions totaling $314,771,304 and retirements totaling ($28,466,740). AP St. 2, Attachment 1 at 2.

15. The majority of the Company's capital investment remains in distribution assets such as mains, services, hydrants valves, and meters. AP St. 2 at 15.

16. Major projects included in the Company's claimed wastewater utility plant in service, include:

- investments in the Penn Township Wastewater Treatment Plant (WWTP) to address operational reliability challenges and renew assets at the end of their useful life (see AP St. 9 at 4-5);
- the construction of a new headworks facility at the Little Washington WWTP (see AP St. 9 at 5-6);
- the installation of a new equalization tank and the installation of an influent screen at the Twin Hills WWTP (see AP St. 9 at 6);
- capital investment to optimize the amount of water that can be sprayed on available lands via spray irrigation with respect to the New Garden Township system (see AP St. 9 at 6-7);
- the second phase of the replacement of the Media WWTP (see AP St. 9 at 7);

- implementation of an abatement program and capital investment into the Cheltenham Township Wastewater System (see AP St. 9 at 7-8);

- numerous ongoing investments into Aqua PA's Northeast PA Wastewater Treatment facilities (see AP St. 9 at 8-10); and

- continued upgrades to the Treasure Lake Wastewater System (see AP St. 9 at 10-11).

17. For the FTY, the Company projected additions totaling $34,134,821 and retirements totaling ($3,416,157). AP St. 2, Attachment 2 at 1.

18. For the FPFTY, the Company projected additions totaling $38,897,468 and retirements totaling ($3,014,299). AP St. 2, Attachment 2 at 2.

19. On April 26, 2017, Aqua filed an application seeking the Commission's approval of its acquisition of a portion of the Borough of Phoenixville's assets, located in East Pikeland Township, Chester County, and Upper Providence Township, Montgomery County, Pennsylvania. The Commission approved the application and the Company purchased the system assets on December 5, 2019 (the Phoenixville System). OCA St. 2 at 9.

20. The depreciated cost of the Phoenixville 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. OCA St. 2 at 9.

21. At the time of the acquisition of the Phoenixville System, Aqua had no specified plans to improve the acquired assets, and as part of the Purchase Agreement the Borough of Phoenixville certified that it was in compliance with all applicable laws and regulations. OCA St. 2 at 11.

22. The Borough of Phoenixville was not failing to render reasonable and adequate service to its extraterritorial customers at the time it was acquired by Aqua. OCA St. 2 at 11; AP St. 2-R, p. 8.

23. The Company's lead/lag study[9] and 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 is appropriate. *See, e.g.*, I&E St. 1 at 30.

24. Aqua PA's rate base for water operations also includes an addition of $7,672,303 for materials and supplies. AP St. 1 at 27; AP Exhibit 1-A, Schedule G-4.

25. Aqua's claim for materials and supplies was developed by averaging the monthly balances in the Materials and Supplies account for water operations for the thirteen months ended March 31, 2021. AP St. 1 at 27.

26. Aqua PA'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. AP St. 1 at 27.

27. The Company's claim for CAC and CIAC reduced rate base for water operations by ($178,784,735). AP Exhibit 1-A, Schedule G-6.

28. The Company's claim for CAC and CIAC reduced rate base for wastewater operations by ($20,965,154). AP Exhibit 1-B, Schedule G-6.

29. Rather than assume that consumption by class in the future will be similar to usage patterns during the pandemic (i.e., the HTY), the Company instead projected consumption by class to be similar to usage patterns in its prior 2018 Base Rate Case, rather than utilizing usage patterns from the HTY, which reflected usage patterns unique to the COVID-19 pandemic. AP St. 5 at 17.

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[9] *See* AP St. 1 at 27 (describing the results of the lead/lag study).

30. The Company proposed an adjustment to its consumption projections to residential, commercial and public customer classes based on the average usage presented in the *pro forma* fully projected future test year used in the 2018 Base Rate Case. AP St. 5 at 17.

31. 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. The total overall change in revenue under present rates using this adjustment was a decrease in total water revenues of $64,639. AP St. 5 at 17.

32. The OCA's recommended escalation rates utilize the average of the U.S. Office of Management and Budget's and the Federal Reserve's forecasted inflation rates for 2021, 2022, and 2023 to provide an accurate depiction of inflation levels at the time of the FPFTY. OCA St. 4-SR at 9.

33. Aqua has sales for resale agreements with eleven different water utilities to supply water at various rates. I&E St. No. 4 PROPRIETARY, pp. 8-16.

34. Aqua's Tariff has a provision that describes the requirements to be met in order to grant a contract to a resale customer at less than full Tariff rate. I&E St. No. 4 PROPRIETARY, pp. 8-10; I&E St. No. 4-SR, pp. 5-7.

35. Aqua's Tariff requires proof of the existence of a viable competitive alternative to water service from the Company. I&E St. No. 4 PROPRIETARY, p. 9; I&E St. No. 4-SR, p. 6.

36. The anticipated increases in usage for Aqua new service under the New Wilmington sale for resale contract never materialized. AP St. No. 2-R, p. 24.

37. There is no Masury rate provision in Aqua's proposed tariff. I&E St. No. 4 PROPRIETARY, pp. 19-20.

38. Aqua and Masury have not entered into a water supply contract and there is no approved Affiliated Interest Agreement approved by the Commission. I&E St. No. 4 PROPRIETARY, pp. 19-20; I&E St. No. 4-SR, pp. 19-20.

39. A contract (affiliated interest agreement) between Masury (Aqua Ohio) and Aqua was signed on August 12, 2021 but only filed for Commission approval on November 30, 2021. I&E St. No. 4-SR, pp. 19-20.

40. The Company requested an allowance for a $2.2 million rate case expensed normalized over three years, or a rate case expense of $671,073 per year for Water Operations and $62,260 per year for Wastewater Operations. AP Schedule C-4.4.

41. The calculation of rate case expense included amounts for engineering, legal expenses, other consultants, including rate of return, notices and postage, and a "miscellaneous" cost. OCA Exh. LA-2, Sch. C-16.

42. Aqua's use of a lead/lag study for purposes of calculating cash working capital is appropriate in this instance. I&E St. No. 1-SR, p. 29.

43. Aqua's full-time vacancy rate is 2.88% for purposes of calculating labor expense, employee benefits, and federal and state payroll tax is appropriate in this instance. I&E St. No. 1-SR, p. 25; OCA St. 1, 44-45.

44. In Aqua's FPFTY cost of service, the Company included costs for (1) stock option compensation, (2) performance share units (PSU) and (3) restricted stock units (RSU). OCA St. 1 at 46.

45. The Supplemental Employee Retirement Plan (SERP) is a legacy retirement program for certain highly compensated individuals who did not qualify under the Company's former pension plan due to Internal Revenue Service (IRS) limitations. AP St. 1-SR at 11-12.

46. Effective April 2003, the Company froze both its pension plan and its SERP to employees hired before that date. Thus, contributions made to pension benefits, through the pension plan and the SERP, are not made for the benefit of any employees hired after that date. AP St. 1-SR at 11-12.

47. SERP is only available to a limited number of employees hired before 2003. AP St. 1-SR at 11-12.

48. The costs for non-rate case legal services are incurred during the normal course of business to protect and defend the Company's interest in a variety of legal matters. AP St. 3 at 6; see AP Exhibit 1-A, Schedule C-9.1.

49. The Company utilizes a three-year average of non-rate case legal expenses to reflect the costs incurred in a normal year, and normalizes this claim. AP St. 3 at 6.

50. Aqua's union contract negotiations are scheduled to occur during the FTY. AP St. 3-R at 10.

51. The Company's filing includes a claim for $4,135,311 in Purchased Water Expense during the FPFTY. AP Exhibit 1-A, Schedule C-7.1.

52. Details regarding the amounts claimed by supplier were provided for the periods ending March 31, 2019 through March 31, 2023. AP Exhibit 1-A, Schedule C-7.1.i.

53. Aqua's claim for purchased water expense includes $297,839 of purchased water expense from Aqua Ohio. AP Exhibit 1-A, Schedule C-7.1.i, Line 1.

54. Aqua's dredging expense is an ordinary routine operating expense. I&E St. No. 1-SR. p. 21.

55. The Company's initial filing includes a claim for Advertising Expense during the FPFTY of $368,810 for its water operations and $7,500 for its wastewater operations. Response to Filing Requirements C. Operating Expense, OE9; Exhibits 1-A and 1-B, Schedule C-4.9, Lines 5 and 3 respectively; see also OCA Exhibit LA-3, pages 17-18 of 58; Aqua PA response to I&E-RE-33-D.

56. Included in this claim for advertising expense is $75,000 for water operations and $7,500 for wastewater operations related to the advertising for the explanations of billing practices, rates, rules and regulations associated with the Company's proposed USP. See AP St. 2-R at 34-35; see also OCA Exhibit LA-3, pages 17-18 of 58.

57. The Company's adjustment for inflation impacts operating expenses not otherwise specifically adjusted in the case or not subject to inflation, or 22% of the total operating expenses were subject to the inflation factor. Aqua St. 3R at 2-3.

58. OCA averaged the forecasted CPIs for 2021, 2022, and 2023 for OMB and Federal Reserve (averages are 4.5%, 2.35%, and 2.25%, respectively) to determine its CPI adjustment. Schedule GAW-2SR.

59. Prior to the filing of the Company's 2018 Base Rate Case, Aqua PA made an election to change its method of income tax accounting for tax repairs. AP St. 8 at 4-5.

60. As a result of this election, the Company is permitted to claim a full tax deduction for certain capital additions qualifying as "repairs" for income tax purposes, rather than depreciate the asset for income tax purposes over time. AP St. 8 at 4-5.

61. For book accounting and ratemaking purposes, the Company uses "flow-through" accounting for the benefit of the tax repair deduction. AP St. 8 at 4-5.

62. This ratemaking treatment was memorialized in the settlement of the Company's 2018 base rate case. AP St. 8 at 4.

63. The Company has included a net total repair deduction of $159,060,000 in the FPFTY (water - $154,600,000, wastewater - $4,460,000). AP St. 8 at 5; AP Exhibit 1-A, Schedule F-2; AP Exhibit 1-B, Schedule F-2.

64. The claimed deduction is the projected deduction for the FPFTY, net any provision for uncertain tax positions (i.e., "FIN 48") and any amount for Allowance for Funds Used During Construction (AFUDC). AP St. 8 at 4; AP St. 8-R at 5.

65. The Company's claimed capital structure as it falls within the range of the I&E proxy group's 2020 capital structures, which is the most recent information available at the time of I&E's analysis. I&E St. No. 2, pp. 11-12; I&E St. No. 2-SR, p. 10.

66. The 2019 range consists of long-term debt ratios ranging from 33.18% to 53.48% and equity ratios ranging from 32.78% to 59.01%, with a five-year average of 40.29% for long-term debt and 47.60% for common equity. I&E St. No. 2, pp. 11-12; I&E St. No. 2-SR, p. 10; I&E Exhibit No. 2, Sch. 2.

67. The 2020 range consists of long-term debt ratios ranging from 44.41% to 59.33% and equity ratios ranging from 40.67% to 55.25%, with an overall five-year average of 46.88% debt and 53.05% common equity. I&E Ex.2, Sch. 2.

68. A reasonable calculated rate of return on equity using the Discounted Cash Flow method is 8.90%. I&E St. No. 2, p. 23.

69. A reasonable calculated overall rate of return is 6.64%. I&E St. No. 2, p. 27.

70. Aqua prepared a cost allocation study (AP Exhibit 5-A, Part I) for its water operations, as well as separate cost allocation studies (AP Exhibit 5-B, Part I) for its wastewater operations.

71. With respect to its wastewater operations, 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 AP St. 5 at 18-19.

72. The separate operating cost allocation studies from the Base Operations are wastewater systems acquired since the Company's 2018 Base Rate Case. AP St. 1 at 7.

73. 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. AP St. 5 at 3, 19.

74. The cost of service allocation study results indicate the relative cost responsibilities of each class of customer. AP St. 5 at 4.

75. The Company's water cost allocation study uses the base-extra capacity method, as described in water rates manuals published by the American Water Works Association, to allocate *pro forma* costs. AP St. 5 at 4; see also AP Exhibit 5-A, Part I, pages 3-4.

76. The Company's water cost allocation study method is a recognized method for allocating the cost of providing water service to customer classifications in proportion to the classifications' use of the commodity, facilities and services. AP St. 5 at 4.

77. The base-extra capacity method is generally accepted and has been used by the Company and accepted by the Commission in the Company's rate cases for over 30 years. AP St. 5 at 4.

78. The Company's wastewater cost allocation studies use the functional cost allocation method described in "Financing and Changes for Wastewater Systems," Manual of Practice No. 27, which is published by the Water Environment Federation. AP St. 5 at 20.

79. The functional cost allocation method allocates cost of providing wastewater service in proportion to each customer classifications' use of the service provider's facilities and services. AP St. 5 at 20.

80. The functional cost method is generally accepted in the industry. AP St. 5 at 20.

81. Aqua's wastewater systems include two sets of rate zones. Rate Zones 1 through 6, are systems that Aqua has owned at the time of Aqua's last rate case proceeding (Legacy Systems). Rate Zones 7 through 11, are five systems that Aqua has acquired pursuant to Section 1329 of the Public Utility Code since Aqua's last rate proceeding in 1329 (Acquired Systems).

82. On a collective basis, Aqua paid $75.9 million more than book value for the Acquired Systems which represented a fair market value (FMV) premium of 80.7%. OCA St. 4 at 6; OCA St. 4SR at 2.

83. Based upon the number of customers in each system, wastewater customers comprise only 8.5% of all Aqua customers, therefore, over 91% of Aqua water customers are not wastewater customers. I&E St. No. 5, p. 7.

84. Aqua's projected purchased energy costs will amount to only about 1.4% of its total water cost of service. OCA St. 4 at 25.

85. 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.

86. Aqua 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.

87. Aqua has voluntarily entered into its contracts to purchase water with various entities so those costs are not entirely beyond its control. See, e.g., Aqua Exh. 1-A, Sch. C-7.1.i.

88. Company's purchased water costs are $4.5 million, whereas Aqua's claimed water cost of service is $575.03 million. OSBA Statement No. 1, at 24.

89. 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 Statement No. 1, at 24.

90. Aqua's proposed USP was presented to and vetted by stakeholders participating in its Helping Hand Collaborative prior to this proceeding. AP St. 10 at 3.

91. The Helping Hand Collaborative included parties to this proceeding such as CAUSE-PA and OCA. AP St. 10 at 3.

92. Aqua drew upon the knowledge and expertise of their affiliates, the Peoples Companies, and the Peoples Companies' Director of Community Assistance Program, Ms. Rita Black, to develop the USP. AP St. 10 at 3.

93. Aqua will convert from its current customer information system to SAP in 2023. AP St. 10-R at 8.

94. The application process for existing Helping Hand and new CAP applicants is intended to be simple and does not require income documentation and, therefore, does not impose an unreasonable burden on CAP enrollees. See AP St. 10-R at 3.

95. Aqua 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 them to participate. AP St. 10-R at 3.

96. CAP customers can confirm their income via self-attestation, and enroll over the phone, online or through a participating agency. AP St. 10-R at 3.

97. Aqua records pressures annually at over 24,000 hydrants in its systems. AP St. 9-R p. 6.

98. Aqua has operational procedures in place including: (1) a 24/7 operations control center for the SEPA water system that monitors tank levels, adjusts pump operation, well supply and coordinates with its water plant to sustain tank levels and resultant system pressure targets; (2) in Greater PA, operations staff monitors pressures at points of entry to the system (water plants, well discharge), water storage tanks and pressure regulating vaults in addition to hydraulic models and SCADA information where available. AP St. 9-R p. 6.

99. Local recordings serve as proxy checks for system performance as the Company has established criteria for normal operating ranges for those pressures. AP St. 9-R p. 6.

100. If an operator observes an abnormality from the standard pressure, follow-up investigation occurs to check system performance. AP St. 9-R p. 6.

101. If a customer calls reporting a pressure problem, the Company dispatches system operators to investigate and correct the issue if the problem is Aqua's responsibility (e.g., Company owned facilities, mains and service lines). AP St. 9-R p. 6.

102. The Company takes pressure readings individually and as an operating system that occur at various times throughout the day including near minimum and maximum usage periods (e.g., the Company's operations control center is a 24/7 operation; SCADA systems at wells and other facilities record related pressure operational data 24/7 and the Company can evaluate if issues occur; lack of acute customer complaints; absence of chronic customer complaints; pressure testing of the large number of hydrants is done through the day nd night; tank levels are continuously recorded). AP St. 9-R, p. 7.'

103. The Company's SEPA system covers an area of over 500 square miles with elevations ranging from near sea level to over 700 feet about sea level. AP St. 9-R, p. 11-12.

104. To supply customers with adequate service, some areas of the Company's systems will have pressures above 125 psi. AP St. 9-R, p. 11-12.

105. Depending on location of a customer, either near a treatment plant or tank, the pressure may be higher in order to supply other customers downstream at a higher elevation within a system or distant from the entry point. AP St. 9-R, p. 11-12.

106. The SEPA system and many of its other systems are interconnected, therefore, the Company needs to have the ability to flow water between districts, both for normal operational service, and during contingency operations. AP St. 9-R, p. 11-12.

107. Approximately 58.7% of the 2,635 customer complaint work orders for the SEPA system concerned flushing. OCA St. 7SR at 9.

108. Over time sediments can build up in the pipes and could result in discolored water during flow surges resulting from firefighting and main breaks. Too much sediment in the mains can also affect the taste, clarity and color of water. OCA St. 7 at 17.

109. All critical valves have been identified and currently have an exercising schedule within Aqua's work order management system. AP St. 9-R.

110. Aqua exercises its 270 critical valves at least once every four years. AP St. 9-R.

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 total valves. AP Exhibit TMD-4-R.

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. AP St. 9-R at 37.

113. This Corrective Action Plan was recently approved by PADEP. AP Post-Hearing Ex. 1.

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. AP Post-Hearing Ex. 1.

115. 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. AP St. 9-R at 28.

116. Aqua's flat rates are based on assumed usage of 4,000 gallons per month, which correlates to the Company's average consumption for its existing systems. Day Exh. 1 at 7 (Aqua response to DW-I-13).

117. Customers' properties in Tobyhanna and Lake Harmony obtain their water supplies from individual wells not owned or operated by a utility or a municipality/municipal authority. AP St. 9-R at 28.

V. DISCUSSION

A. 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. 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). "Under traditional ratemaking,

utilities may not change rates charged to customers outside of a base rate case." *McCloskey v. Pa. Pub. Util. Comm'n*, 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. Pub. Util. Comm'n*, 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. . Pub. Util. Comm'n*, 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. *Pa. Gas & Water Co. v. Pa. Pub. Util. Comm'n*, 341 A.2d 239 (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 & Improvement Co. v. Pub. Serv. Comm'n of W.V.*, 262 U.S. 679 (1923) (*Bluefield*) and *Fed. Power Comm'n v. Hope Nat. Gas Co.*, 320 U.S. 591 (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 reasonable at one time and become 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); s*ee also, Lower Frederick Twp. Water Co. v. Pa. Pub. Util. Comm'n*, 409 A.2d 505 (Pa. Cmwlth. 1980) (*Lower Frederick*); *see also, Brockway Glass Co. v. Pa. Pub. Util. Comm'n*, 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* 409 A.2d 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. Pub. Util. Comm'n, 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 Ctr. Assocs. v. Pa. Pub. Util. Comm'n, 570 A.2d 149, 153 (Pa. Cmwlth. 1990) (citation omitted); *see also Pa. Pub. Util. Comm'n v. Equitable Gas Co.*, 73 Pa. P.U.C. 310 (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. Pub. Util. Comm'n v. Metro. Edison Co.*, 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. *U.S. Steel Corp. v. Pa. Pub. Util. Comm'n*, 456 A.2d 686 (Pa. Cmwlth. 1983).

When parties have been ordered to file briefs and fail to include all the issues they wish to have reviewed, the issues not briefed have been waived. *Jackson v. Kassab,* 812 A.2d 1233 (Pa. Super. 2002), *appeal denied, Jackson v. Kassab,* 825 A.2d 1261 (Pa. 2003), *Brown v. Pa. Dep't of Transp.,* 843 A.2d 429 (Pa. Cmwlth. Ct. 2004), *appeal denied,* 863 A.2d 1149 (Pa. 2004).

The Commission is not required to consider expressly and at length each contention and authority brought forth by each party to the proceeding. *Univ. of Pa. v. Pa. Pub. Util. Comm'n.,* 485 A.2d 1217 (Pa. Cmwlth. 1984). "A voluminous record does not create, by its bulk alone, a multitude of real issues demanding individual attention . . . ." *Application of Midwestern Fidelity Corp.,* 363 A.2d 892, 902, n.6 (Pa. Cmwlth. 1976). Further, a Commission decision is adequate where, on each of the issues raised, the Commission was merely presented with a choice of actions, each fully developed in the record, and its choice on each issue amounted to an implicit acceptance of one party's thesis and rejection of the other party's contention. *Popowsky v. Pa. Publ. Util. Comm'n,* 706 A.2d 1197 (Pa. 1997).

B. General Summary

Aqua PA's request for rate relief totaling $97.6 Million is based upon data for a FPFTY ending March 31, 2023. Aqua's last filing for a general rate increase was based upon a FPFTY ending March 31, 2020. Thus, it has been approximately three years since Aqua last sought a base rate increase. The magnitude of the increase is driven primarily by infrastructure requirements, particularly the needed replacement of aging infrastructure. According to Aqua, this case reflects approximately $1.1 billion in additional plant investment since the end of the FPFTY in the last case.[10]

[10] AP St. 1 at 3.

OCA has proposed a revenue decrease of more than $12.1 million.[11] I&E proposed an overall revenue increase of $33.9 million.[12]

C. Impact of the Pandemic

OCA urges 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.[13] This reality was central to the testimony of many of Aqua's water and wastewater customers as well as in the statements of politicians representing these communities. CAUSE-PA also offers an in-depth assessment of the affordability challenges faced by Aqua's low-income customers, which have been exacerbated as a result of the economic impacts suffered from COVID-19.

Neither I nor the Commissioners are deaf to these important concerns. However, the Commission has repeatedly taken the position that the existence of the pandemic does not suspend the consideration of utility rate increases.[14] Utilities are expected to continue to provide reasonable service and safe and reliable facilities. No party in this proceeding has challenged Aqua's infrastructure improvement spending or the value of its proposal to continue that spending in this proceeding. Indeed, some parties have recommended Aqua put into place additional universal service programming and customer service improvements which require financial investment to implement. Accordingly, my recommendations below are made in attempt to balance the many competing concerns of Aqua's ratepayers with Aqua's ongoing challenge not only to consider the affordability of service, but also to meet increasing environmental and infrastructure obligations in pursuit of safe and reliable water and wastewater utility service.

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[11] CAUSE-PA has adopted the OCA's position regarding Aqua's claimed rate base, revenues, expenses, taxes, rate of return and proposed allocation. CAUSE-PA MB, p. 7.

[12] I&E St. 1-SR at 6.

[13] OCA M.B. pp. 5-15; OCA Exhibit LA-5, Schedule A, p. 2.

[14] *See Pa. Pub. Util. Comm'n v. Columbia*, Docket R-2020-3018835 (Opinion and Order February 19, 2021) (*Columbia*), pp. 47-52.

VI. RATE BASE

The appropriate determination of a utility's rate base is the starting point for setting reasonable rates:

> A utility's rate base is essentially the company's "prudent" capital investment, net of accumulated depreciation, plus other additions, such as cash working capital (CWC), 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. Stated differently, it is the net asset base from which the utility provides electric, natural gas, or, in this instance, water service, and upon which the utility is provided the opportunity to earn a rate of return. Thus, the rate base value is a key variable in the determination of a utility's revenue requirement.[15]

Aqua's claimed combined rate base for its water and wastewater operations consists of (a) the depreciated original cost of its utility plant in service as of March 31, 2023, (b) the fair market value of its acquisition of the Phoenixville System, and (c) certain rate base additions and deductions described below.

A. Plant in Service

None of the other parties 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 positive acquisition adjustment associated with the Phoenixville System.

Schedule G-2 of AP Exhibit 1-A (water) and AP Exhibits 1-B through 1-G (wastewater) show the Company's actual utility plant in service as of March 31, 2021, and the projected utility plant in service per scheduled additions and retirements associated with the FTY and FPFTY. AP St. 2 at 14. The Company's claim for both water and wastewater utility plant in

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15 *Pa. Pub. Util. Comm'n v. City of Bethlehem – Water Dep't*, Docket R-2020-3020256 (Opinion and Order entered April 15, 2021), p. 51.

service begins with the actual HTY ending balance for each segment of its operations. AP St. 2 at 14. For water, this HTY ending balance was $4,909,729,427 and for wastewater the HTY ending balance was $500,221,311. AP St. 2 at 14; see also AP Exhibit 1-A, Schedule G-2; AP Exhibits 1-B through 1-G, Schedule 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 associated with certain acquired systems. AP St. 2 at 14-15. Company witness Erin Feeney[16] provided the anticipated additions and retirements of water assets for the FTY and FPFTY, which included needed improvements to the Company's infrastructure such as water supply, storage and distribution facilities. See AP St. 2 at 15; AP St. 2, Attachment 1. For the FTY, the Company projected additions totaling $402,940,579 and retirements totaling ($36,896,955). AP St. 2, Attachment 1 at 1. For the FPFTY, the Company projected additions totaling $314,771,304 and retirements totaling ($28,466,740). AP St. 2, Attachment 1 at 2. Ms. Feeney also explained that the majority of the Company's capital investment remains in distribution assets such as mains, services, hydrants, valves, and meters. AP St. 2 at 15.

Aqua witnesses described the anticipated additions and retirements of wastewater assets for the FTY and FPFTY, as well as the Company's capital investment planning process for wastewater operations. AP St. 9 at 3. Major projects included in the Company's claimed wastewater utility plant in service, include:

- investments in the Penn Township WWTP to address operational reliability challenges and renew assets at the end of their useful life (see AP St. 9 at 4-5);
- the construction of a new headworks facility at the Little Washington WWTP (see AP St. 9 at 5-6);
- the installation of a new equalization tank and the installation of an influent screen at the Twin Hills WWTP (see AP St. 9 at 6);

[16] Erin M. Feeney serves Aqua as Manager of Rates. AP. St. 2, p.1.

- capital investment to optimize the amount of water that can be sprayed on available lands via spray irrigation with respect to the New Garden Township system (see AP St. 9 at 6-7);
- the second phase of the replacement of the Media WWTP (see AP St. 9 at 7);
- implementation of an abatement program and capital investment into the Cheltenham Township Wastewater System (see AP St. 9 at 7-8);
- numerous ongoing investments into Aqua PA's Northeast PA Wastewater Treatment facilities (see AP St. 9 at 8-10); and
- continued upgrades to the Treasure Lake Wastewater System (see AP St. 9 at 10-11).

For the FTY, the Company projected additions totaling $34,134,821 and retirements totaling ($3,416,157). AP St. 2, Attachment 2 at 1. For the FPFTY, the Company projected additions totaling $38,897,468 and retirements totaling ($3,014,299). AP St. 2, Attachment 2 at 2.

Aqua projects that on March 31, 2023, the Company's rate base will equal approximately $198.4 million for its wastewater operations. I&E is recommending a total fair value for Aqua Wastewater rate base of $198,368,990. For wastewater operations, the OCA recommends a FPFTY rate base of $198.3 million, only slightly less than Aqua. OCA St. 1SR at Exh. LA-5, Sch. A.

I&E recommends that the Company provide the Commission's Bureaus of Technical Utility Services and Investigation & Enforcement 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 12 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, through the use of the 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.[17] While the FPFTY

[17] I&E St. No. 4, p. 5.

provides for such projections, there should be some timely verification of the projections.[18] Use of the 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.[19] The Company did not challenge I&E's recommendation to continue to provide the requested updates in this proceeding; therefore, I recommend that I&E's reporting request should be approved. This requirement is also consistent with Section 315(e) of the Public Utility 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.

B. Water Rate Base – Borough of Phoenixville

I&E and OCA contend that Aqua's rate base claim for its water operations be reduced by rejecting the acquisition adjustment related to the Company's purchase of portions of the Phoenixville System.

Aqua's claim for rate base for its water operations included an acquisition adjustment related to the Company's purchase of portions of the Borough of Phoenixville water system.[20] Aqua included a positive acquisition adjustment that reflects the fact the Company paid more than the depreciated original cost (DOC) for the assets.[21] The Company is seeking a

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[18] *Id.*

[19] *Id.*

[20] The acquisition of the water system assets was approved by the Commission in *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 No. A-2018-2642837 (Recommended Decision dated Sept. 13, 2019, Final Order entered Oct. 24, 2019) (Aqua-Phoenixville Order).

[21] AP St. 2 at 16; *see also* AP Exhibit 3-A.

positive acquisition adjustment of $2,437,305 as an addition to rate base and is proposing to amortize the acquisition adjustment as an expense over a period of 20 years.[22]

I&E and OCA objected to the adjustment to rate base. I&E asserted that the acquisition adjustment for the Phoenixville System should be denied because Aqua failed to present substantial evidence that the Phoenixville acquisition meets the criteria set forth in Section 1327(a).[23] Specifically, I&E and OCA contend that there is no evidence that the Borough of Phoenixville was not maintaining reasonable service to the extraterritorial customers served by the acquired facilities, which is a prerequisite for the recovery of the excess original cost.

Generally, Section 1327 permits the recovery of the cost that is in excess of the original cost of acquired utility assets when the selling utility was either "non-viable" or was not providing reasonable and adequate service:

> **(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:
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> . . .
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> (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:

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22 I&E St. No. 3, p. 6.

23 66 Pa.C.S. § 1327(a).

(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;

(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) (emphasis added).[24]

Aqua explains that the purchase of the assets of the extraterritorial customers of the Borough of Phoenixville had its genesis in a 2015 Commission determination that the extraterritorial water and wastewater service by the Borough was subject to Commission jurisdiction. In its petition the Borough explained that the Borough was deterred from seeking rate relief for service to these customers because the cost and manpower required to prepare and defend a rate filing posed a strain on Borough resources. As a result, the Borough's territorial customers were subsidizing service to the Borough's extraterritorial customers. 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.[25] Thereafter, the Borough reached an agreement with Aqua for the transfer of the system. The joint petition for settlement of the acquisition was approved by the Commission in 2019.

According to Aqua, it is entitled to a rebuttable presumption that the positive acquisition adjustment to rate base is reasonable because it has met the criteria set forth in Section 1327. Aqua characterizes the Phoenixville System as "troubled" because 1) meters were being read manually; 2) unaccounted for water was estimated to be 68%; and 3) 32 of 105 fire hydrants need to be repaired or replaced.

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[24] 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 and the PADEP.

[25] *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 (Opinion and Order entered May 19, 2015) (Phoenixville Petition Order).

I&E and OCA contend that there is no evidence that the Phoenixville acquisition was necessitated by the inability of the Borough of Phoenixville to render reasonable and appropriate service to customers at the time it was acquired by Aqua. Specifically, I&E argues that, (1) hydrants are utility plant that require periodic replacement based on known and knowable service life; (2) the Company 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. OCA agrees with I&E and adds that 1) the Company has not provided any evidence that the Borough was in violation of statutory or regulatory requirements of the Department of Environmental Protection or the Commission when the Company acquired the Borough's 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.

I&E and OCA have successfully rebutted the presumption of the reasonableness of the excess paid for the Phoenixville system. There is no evidence that the Borough of Phoenixville was failing to render reasonable and adequate service to its extraterritorial customers at the time it was acquired by Aqua. 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. Further, all systems need ongoing maintenance and investment. Aqua's meter replacement and routine maintenance only indicates that the Company is fulfilling its role as the new owner of the system. 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 contribute to unaccounted for water. Those factors alone, though, do not support a conclusion that the service rendered by Phoenixville was inadequate within the meaning of Section 1327.

In conclusion, I recommend that $2,437,305 be removed from Aqua's rate base, and the concomitant adjustments should be made to the accrued deprecation reserve[26] and annual amortization expense which is expressed as a depreciation expense in this filing.[27]

C. Additions to Rate Base

Cash Working Capital (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. The Company's CWC claims for water and wastewater operations include the necessary working capital associated with operations and maintenance (O&M) expense, taxes and interest. *See* AP Exhibit 1-A(a), Schedule G-5; *see, e.g.*, AP Exhibit 1-B(b), Schedule G-5.[28] For water operations, its CWC amount claim is $1,736,000. AP Exhibit 1-A(a), Schedule G-5. For wastewater base operations, its CWC amount claimed is $550,000. AP Exhibit 1-B(b), Schedule G-5.

No party challenged the Company's lead/lag study[29] 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. *See, e.g.*, I&E St. 1 at 30 (agreeing with the Company's use of the lead/lag study method).

I&E, however, recommended an adjustment to the CWC for water operations based on its recommended adjustments to revenue, O&M expenses and taxes. I&E St. 1 at 30-31; *see also* AP St. 1-R at 10. I&E did not recommend any adjustments to wastewater base

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[26] See Aqua MB, p. 18.

[27] These adjustments are reflected in Table II Water, Rows "Acquis. Adj. – Phoenixville" and "Amort. Phoenixville Acquis. Adj."

[28] 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.

[29] *See* AP St. 1 at 27 (describing the results of the lead/lag study).

operations, or any individual wastewater operations because the proposed adjustments did not result in material changes to the respective CWC claims. I&E St. 1 at 30.

OCA's proposed adjustments to CWC were initially limited to the interest component of CWC. OCA St. 1 at 24-25. However, OCA witness Mr. Smith[30] subsequently revised his recommendations to reflect updates of operating expenses based on OCA's proposed adjustments to operating expenses. OCA St. 1-SR at 12.

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 this recommended decision.

Aqua's rate base for water operations also includes an addition of $7,672,303 for materials and supplies. AP St. 1 at 27; AP Exhibit 1-A, Schedule G-4. This amount was developed by averaging the monthly balances in the Materials and Supplies account for water operations for the thirteen months ended March 31, 2021. AP St. 1 at 27. Aqua PA'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." AP St. 1 at 27.

No parties challenged the Company's claim for an addition to rate base for materials and supplies. Therefore, the Company's claim is approved without modification.

D. Deductions from Rate Base

Schedule G-6 of AP Exhibits 1-A and 1-B contain the Company's proposed reductions to rate base for CAC and CIAC. With respect to water operations, the Company's claim for CAC and CIAC reduced rate base by ($178,784,735). AP Exhibit 1-A, Schedule G-6. With respect to wastewater base operations, the Company's claim reduced rate base by

[30] Ralph C. Smith is a Senior Regulatory Consultant at Larkin & Associates, PLLC, 15728 Farmington Road, Livonia, Michigan.

($20,965,154). AP Exhibit 1-B, Schedule G-6.[31] Although OCA initially proposed adjustments to CAC and CAIC, those proposals were subsequently withdrawn.

Additionally, Aqua claimed a total of $392,515,121 for water and $9,356,312 for wastewater in accumulated deferred income tax (ADIT).[32] These amounts included normalized ADIT and the unamortized balance of excess ADIT resulting from various federal income tax rate reductions.[33] In rejoinder testimony, Aqua identified an 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").[34] This adjustment was reflected by Aqua in its rate case tables attached to its main brief.[35] OCA accepted the additional rate base deduction associated with uncertain tax positions, even though OCA continues to oppose the Company's treatment of uncertain tax positions in computing the flow-through deduction for tax repairs. OCA St. 1-SR at 13-15.

As explained below, I have accepted Aqua's treatment of its treatment of uncertain tax positions in computing the flow-through deduction for tax repairs. Any other adjustments to ADIT as a result of other rulings are accounted for in the rate tables attached to this decision.

VII. REVENUE

Aqua's updated FPFTY *pro forma* revenues at present rates are set forth in Schedule B-1 of AP Exhibits 1-A(a) through 1-G(g). Aqua witness Ms. Feeney explained that she prepared the Company's claimed revenues at present and proposed rates along with Aqua

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31 No adjustments for CAC and CIAC were included in Exhibits 1-C through 1-G.

32 *See* AP St. 8 at 14; *see also* AP Exhibit Nos. 1-A(a) through 1-G(g), Schedule G-7.

33 AP St. 8 at 14.

34 AP St. 8-R at 7; AP St. 8-RJ at 3.

35 *See* Aqua Table I Water, Column "Company Adjustments."

witness Constance E. Heppenstall.[36] AP St. 2 at 3. The schedules were further supported by a billing analysis and bill frequency analysis of the HTY. See AP Exhibits 5-A and 5-B. Similarly, Schedule B-2 of AP Exhibits 1-A(a) and 1-B(b) through 1-G(g) display the typical adjustments one would expect to see in the preparation of a utility billing analysis. AP St. 2 at 3. Then, projected customer additions during the FTY and FPFTY were determined on the basis of a three-year historical growth average exclusive of acquisitions. AP St. 2 at 4.

I&E and OCA proposed several adjustments. First, I&E proposed adjustments related to the "cancellation" of certain negotiated contracts that provide for sales for resale of water. Second, OCA proposed adjustments related to the proposed escalation provisions contained in the negotiated water contracts. Third, OCA recommended that the Commission accept only 75% of the Company's proposed COVID-19adjustment to reduce residential water usage to pre-pandemic levels. Finally, I&E proposed an adjustment to the Company's water revenues related to "forfeited discounts" or "late payment revenue." Each of the proposed adjustments is addressed below.

A. Rider DRS Contracts

1. Sharpsville, Schwenksville, Chemung, Horsham and New Wilmington[37]

Aqua's tariff includes a discounted rate rider which governs certain resale contracts for water, Rider DRS – Demand Based Resale Service. Aqua's tariff includes a discounted rate rider which governs certain resale contracts for water, Rider DRS – Demand Based Resale Service. Customers that can 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.[38] I&E argues that several of the contracts do not qualify for the tariff

[36] Constance E. Heppenstall is a Senior Project Manager at Gannett Flemming Valuation and Rate Consultants, LLC. She testified on behalf of Aqua on the topics of cost-of-service allocation and customer rate design. AP St. 5, p. 1.

[37] BIE withdrew its objections or had no objection to the contracts with United Water, Hubbard, Warwick, Downingtown and Bristol.

[38] AP St. 2-R at 11

discount and that these customers should begin to pay full approved tariff rates when they become effective. Specifically, 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.

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 settlement of the 2019 rate filing, the Company agreed to provide "updated competitive analysis data" in this base filing. I&E reviewed updated information provided by Aqua and found that the documentation was inadequate to demonstrate a competitive alternative for certain customers.

I agree with I&E that the documentation supplied by many of these customers is insufficient to demonstrate the existence of a competitive alternative. While an analysis of a competitive alternative need not be complex, more is required than simply a self-serving statement that competitive alternatives exist. It is not reasonable for Aqua to be satisfied by so little information. Accordingly, Chemung and Horsham should be subject to Aqua's full tariffed rate.. It should not be burdensome for the customer to include at least some description of what those alternatives may be. I also agree with I&E that the contract with New Wilmington does not comply with the terms of Rider DRS and should be subject to full tariff rates.[39]

Regarding the contract with the Borough of Sharpsville, the only competitive alternative identified in the documentation supporting the discounted sale rate was the potential

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[39] *See* BIE St. 4-SR at 17-18.

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.[40] The contract with the Borough of Sharpsville does not qualify for Rider DRS.

However, I find 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 letter is sufficiently reliable for the purpose of determining Schwenksville's qualification for Rider DRS. It is reasonable for the Company to be satisfied by this description of a competitive alternative for the purpose of offering discounted service.

I recommend that the Commission direct Aqua to charge Sharpsville, Chemung, Horsham, and New Wilmington the rates specified in Aqua's rate schedules that would otherwise apply to these customers absent Rider DRS upon the effective date of new base rates in this proceeding. This recommendation is without prejudice to the affected customers' ability to provide specific supporting documentation to Aqua that would satisfy the requirements of Rider DRS, including that the affected customer has a viable competitive alternative and intends to select that alternative.

2. Aqua Ohio Masury Division Contract

Aqua currently provides water to Aqua Ohio's Masury Division under a special tariff rate.[41] Aqua and Masury have negotiated a new contract under Rate DRS, but the contract, as an affiliated interested contract, requires review and approval by the Commission. 66 Pa.C.S. §§ 2101, *et seq.* I&E argues that the revenue attributed to the Masury contract should be at the full tariffed rate because Masury cannot qualify for Rider DRS.

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[40] *See* HIGHLY CONFIDENTIAL AP Ex. EMF-1-R.

[41] *See* Tariff Water – Pa. P.U.C. No. 2, Third Revised Page 12.4.

The Masury agreement between Aqua and Aqua's Masury Ohio affiliate was filed with the Commission on November 30, 2021.[42] The Commission has not yet reviewed and approved the contract. Therefore, it is premature to apply discounted rates to the sales to Masury and the discounted rate should not be reflected in the filing. Until the Commission makes a determination regarding the affiliate agreement, it is my recommendation that Masury be billed at full tariff rates, and present rate revenues should be increased accordingly.[43]

This recommendation is without prejudice to the Commission's disposition of the Masury agreement.

B. Late Payment Charges

I&E recommends that the Company's late payment claim under proposed rates be increased by the same percent increase as the overall base rate increase approved by the Commission.[44] And, while the Company argued that it already accounted for the increase to late payment charges for proposed rates in its present rate adjustment, I&E disagrees.[45] I&E asserts the late payment claim under present rates is designed to project the amount of revenue the Company would receive in the FPFTY if its rates were not increased.[46] I&E asserts it is reasonable to expect that late payment revenue will increase when a utility's base rates are increased as a result of a base rate proceeding.[47] Since late payment revenue is generally a percentage of a customer's bill, increasing revenue through a rate increase will cause revenues

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42 G-2021-3029918.

43 *See* Table II Water, Row "Water Contract Revenue." This adjustment includes Rider DRS and Aqua Ohio Masury Division contract adjustments.

44 I&E St. No. 4-SR, p. 5. I&E Witness Mr. Kubas also recommended that the Company's wastewater revenues for its New Garden system under present rates be increased to reflect $17,832 in late payment revenue. I&E St. 5 at 60. The Company agreed to this adjustment. *See* Aqua MB at p. 56.

45 I&E St. No. 4-SR, p. 5.

46 *Id*.

47 *Id*.

from late payments to increase over time.[48] The claim that the Company 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.[49]

Therefore, in consideration of the above and the record evidence presented by I&E, I&E recommends that the Company's late payment claim under proposed rates be increased by the same percent increase as the overall base rate increase approved by the Commission.

I agree with I&E and recommend that the Company's revenue projected for the FPFTY be adjusted for both water and wastewater accordingly. The total permitted operating revenue in this matter is inclusive of general service, forfeited discount, and other miscellaneous revenues. Ultimately, I recommend that Aqua 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. Aqua should demonstrate compliance with this directive through its proof of revenue in this manner. 52 Pa. Code §5.592(a). Attached as Table RevSum is an illustration of the recommended increase in forfeited discount revenues that would result from the recommended increase in general service revenues.[50]

Finally, I note that the revenue adjustments included in Table II Water and discussed in this recommended decision result in a concomitant adjustment to forfeited discount revenues. 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

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48 *Id.*, p. 29. *See also* I&E St. No. 5, p. 63.

49 *Id.*

50 In the Commission's *Pa. Pub. Util. Comm'n v. Wellsboro Electric*, Docket R-2019-3008208 (Opinion and Order entered April 29, 2020), the Commission accepted a recommended adjustment to increase *pro forma* present rate revenue due to incremental forfeited discount revenue resulting from proposed rates. An adjustment to *pro forma* present rate revenue does not appear to be appropriate since incremental forfeited discount revenue is included in incremental operating revenue.

Revenue Increase" of each rate case table, then it also must be reasonable to assume that Aqua will receive concomitant forfeited discount revenue from those customers that are causing the incremental bad debt expense by not making timely payments on their bills.[51] Concomitant forfeited discount revenue is determined by applying Aqua's proposed uncollectible account rate to the sum of other revenue adjustments. This adjustment is reflected in each rate case table under Table II, Row "Concomitant Forfeited Discounts."

C. Escalation Provisions of Negotiated Water Contracts

The OCA submits that Aqua's water utility revenue for the FPFTY should be increased by $236,777 for special contract revenue.[52] OCA argued that the Company's negotiated contract revenues should be increased on a different escalation rate than that used by the Company. The Company argues that its escalation factor is consistent with the escalation rate used in the contracts themselves.[53]

The Company agrees that an adjustment to current revenues to reflect the contractual escalation rates through March 31, 2021 is appropriate, but does not agree with the inflation factors to be used in making the adjustment.[54] The Company's escalation provisions in its contracts are tied to changes in the Consumer Price Index (CPI). The Company forecasted considerably lower inflation rates without providing a basis for their use.[55] According to Aqua, it calculated CPI for 2022 and the first quarter of 2023 using the forecasted GDP Chained Price Index from Q4 of 2021. Aqua Exhibit 1-A at Schedule C-4.1.i at Footnotes (b)-(c).

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[51] According to Original Page 46 of Aqua's proposed tariff, late payment charges are calculated only on the overdue portion of the bill, excluding previous late charges, thereby avoiding compounding of late payment charges on unpaid late payment charges.

[52] *See* OCA St. 1SR at 16; OCA Exh. LA-6, Sch. C-2; *see also* OCA St. 4SR at 11; HIGHLY CONFIDENTIAL OCA Sch. GAW-2SR.

[53] Aqua also argues that its inflation adjustment should be adopted because it is consistent with the general inflation adjustment used for some of its expenses. As set forth below, I recommend the Commission reject the proposed general escalation factor.

[54] AP St. 2R at 27-28.

[55] OCA Main Brief at 27.

Aqua's argument that the escalation factor is reasonably representative of projected revenue resulting from negotiated contracts should be rejected. The purpose of calculating the revenue requirement in a rate filing is to project the Company's revenue and expenses that can be expected in the FPFTY, which ultimately results in a reasonable fair opportunity for the Company to earn a fair rate of return. 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 OCA's adjustment to special contract revenue is based on a different escalation rate calculated using the average of the U.S. Office of Management and Budget's and the Federal Reserve's forecasted inflation rates for 2021, 2022, and 2023 to provide the most accurate depiction of inflation levels in the FPFTY. OCA M.B. at 26. These values have an apparent reliability and degree of impartiality because they are determined by government agencies. OCA averaged the forecasted CPI's for 2021, 2022, and 2023 for OMB and Federal Reserve (averages are 4.5%, 2.35%, and 2.25%, respectively) to determine its projected CPI.[56] OCA supported higher inflation for 2021 through a November 2021 government publication containing information up to October 2021 from the Bureau of Labor Statistics.

I recommend that the Company's special contract revenue be increased in the FPFTY to reflect the escalation rate calculated by OCA. This adjustment is reflected in Table II Water, Row "Negotiated Water Contracts." However, I did not include adjustments for the Rider DRS contracts that I am recommending be charged full tariff rates, since full tariff rates are not subject to an additional escalation rate.

D. Metered Residential Sale Adjustment

While it is not the Company's position that that the pandemic is over, the Company proposed an adjustment to water consumption related to the COVID-19 pandemic. AP St. 5 at 17; see AP Exhibit 5-A, Part II, Schedule 6. Rather than assume that consumption by class in the future will be similar to usage patterns during the pandemic (i.e., the HTY), the Company instead projected consumption by class to be similar to usage patterns in its prior 2018

[56] Schedule GAW-2SR.

Base Rate Case. AP St. 5 at 17. As such, it proposed an adjustment to residential, commercial and public customer classes based on the average usage presented in the *pro forma* fully projected future test year used in the 2018 Base Rate Case. AP St. 5 at 17. 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. The total overall change in revenue under present rates using this adjustment was a decrease in total water revenues of $64,639. AP St. 5 at 17.

OCA accepted the Company's proposed adjustment for commercial and public customers, but proposed that only 75% of the adjustment applicable to residential customers should be applied. OCA St. 1 at 37-38. This adjustment increased residential revenue from metered water sales by $2.757 million. OCA St. 1 at 36; OCA Exhibit LA-2, Schedule C-6. OCA witness Mr. Smith asserts that residential water usage increased in 2020 and, therefore, it is unreasonable to reduce HTY metered residential water sales by the amount proposed by the Company. OCA St. 1 at 36-37. He further claims Aqua's presumption that none of the 6.4% year-over-year increase in residential metered water sales would continue beyond 2020 and into the FPFTY "does not seem realistic." OCA St. 1 at 37.

Aqua rebutted these arguments. As an initial matter, OCA's proposed acceptance of this adjustment for commercial and public customers, but not for residential customers, is inconsistent. AP St. 5-R at 18. As explained by Aqua witness Ms. Heppenstall, 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. AP St. 5-R at 18.

Aqua's position that usage trends support its proposed adjustment to water consumption due to the COVID-19 pandemic is reasonable. The data used by the Company to project the return of consumption to trend toward pre-pandemic levels is credible. Further, 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.[57]

E. Third-party sales

Aqua has eight third-party sales customers.[58] The present rate revenue from the third-party sales is $1,095,381.[59] The Company proposed to increase rates for all but two (Southdown Homes and East Brandywine) of the third-party customers.[60] The remaining customers will experience a proposed increase in annual bills ranging from 14% to 58.8%.[61]

I&E originally recommended that the Southdown Homes usage rate increase from $0.749 per hundred gallons to $0.9535 per hundred gallons.[62] This equates to an increase of $0.2045 per hundred gallons or approximately 27.3%.[63] I&E also recommended that the East Brandywine customer charge be increased from $351.00 per month to $446.75 per month.[64] This equates to an increase of $95.75 per month or approximately 27.3%.[65] I&E based its recommendation on the average percentage increase for third-party customers.[66] I&E reasoned, this percentage increase is reasonable considering the higher percentage increase being proposed for other third-party customers and the higher percentage increases proposed by Aqua for other

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57 AP St. 5-R at 19.

58 I&E St. No. 5, p. 56.

59 *Id.*

60 *Id.*, pp. 56-57.

61 *Id.*, p. 57.

62 *Id.*

63 *Id.*

64 *Id.*

65 *Id.*, *citing* I&E Exh. No. 5, Sch. 9, p. 1, lines 11-15.

66 *Id.*

wastewater customers.[67] The I&E recommendation results in an overall increase of $113,097 which is $23,484 more than the $89,613 increase proposed by the Company.[68]

In rebuttal, the Company revised the proposed revenue for Southdown Homes.[69] The Company's revised proof of revenue show Southdown Homes paying a usage rate of $1.35 per hundred gallons.[70] I&E accepted this proposed usage rate.[71]

Aqua opposed the adjustment to the East Brandywine customer charge proposed by I&E which would increase the customer charge to East Brandywine, but offered no explanation for rejecting the adjustment.[72] Aqua offered no explanation as to why it was appropriate to retain the rates for East Brandywine customers when the rates to other third-party customers will be increased. In contrast, I&E's approach treats the third-party customers consistently and is more appropriate. Therefore, I&E's adjustment should be adopted. However, I note that this is a rate design issue that does not require an adjustment to Aqua's revenue requirement under present or proposed rates.

VIII. EXPENSES

The law is clear that a utility is entitled to recover its reasonably and prudently incurred expenses.[73] Operating and maintenance expenses, if properly and prudently incurred, are allowed as part of the overall rate computation. As such, a public utility is entitled to recover all reasonable and normal operating and maintenance expenses incurred by providing regulated

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67 *Id.*, pp. 57-58.

68 *Id.*, p. 58.

69 *See* I&E St. No. 5-SR, pp. 25-26.

70 *Id.*

71 *Id.*, p. 26.

72 Aqua RB, p. 18-19.

73 *UGI Utils. Corp. v. Pa. Publ. Util. Comm'n*, 410 A.2d 923 (Pa. Cmwlth. 1980).

service.[74] To the extent that expenses are not incurred, imprudently incurred, or abnormally overstated during the test year, they should be disallowed and found not recoverable through rates. The public utility requesting a rate increase and seeking to recover expenses has the burden of showing that the rate requested, including all claimed expenses, is just and reasonable.[75]

A. Rate Case Expense

Aqua is claiming approximately $2.2 million in rate case expense which is allocated to water and wastewater divisions based on the ratio of customers to total customers served. Aqua further proposes to normalize the cost for rate-making purposes over a 36-month period. OCA contends that Aqua should normalize its rate case expense over 39 months, and also argues that costs for "Other Consultants" and "Miscellaneous expense" be disallowed. I&E agrees with the Company's recommendations of a 36-month period.

Aqua's 36-month normalization period is reasonable. Aqua witness Christopher Manning[76] explained that OCA's calculated average is distorted by the time period between the Company'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.[77] Although rate cases should take into consideration the history of prior filings, there are circumstances that require the consideration of other factors.[78]

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

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[74] *W. Pa. Water Co. v. Pa. P.U.C.,* 422 A.2d 906 (Pa. Commw. 1980).

[75] 66 Pa. C.S. § 315(a); *See also Cup v. Pa. Pub. Util. Comm'n,* 556 A.2d 470 (Pa. Commw. 1989).

[76] Mr. Manning is a Finance and Rate Analyst employed by Aqua Pennsylvania, Inc. AP St. 3, p. 1.

[77] AP St. 3-R at 9.

[78] *See Emporium Water Co.*, Docket No. R-2014-2402324, at pp. 48-49 (Order Entered Jan. 18, 2015) (citing PPL Electric 2012).

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.[79]

I also find that Aqua provided sufficient justification for including forecasted expenses for consultants. Although OCA is correct that zero costs were incurred as of September 30, 2021, subsequent data provided by the Company supports the projected claim. Similarly, the additional $65,000 of Miscellaneous Expenses can reasonably be expected to be incurred given that this base rate case is being fully litigated.[80]

In sum, Aqua's claim for approximately $2.2 million in rate case expense is reasonable. This expense shall be normalized in a 36-month period.

B. General Liability Insurance Expense

The Company first proposed insurance expense claims in its direct testimony and again in rebuttal testimony in response to arguments presented in I&E direct testimony.[81] Both I&E and OCA recommended the use of a 4.38% escalation rate derived from a three-year average, rather than the five-year factor used by Aqua. I&E's witness Christine Wilson explained that the use of a three-year average "allows for consideration of more recent experience and is consistent with the Company's method for calculated uncollectible expense and legal expense."[82]

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[79] The Commission recently reviewed the benefits of a stay-out provision in a negotiated settlement in *Pa. Pub. Util. Comm'n v. Cmty. Utils. of Pa. Inc.*, Docket R-2021-3025206 (Opinion and Order entered January 13, 2022).

[80] AP St. 3-R at 7.

[81] I&E St. No. 1-SR, p. 14, *citing* AP St. No. 4-R, p. 6.

[82] I&E St. 1, p. 15.

Aqua updated its insurance claim to reflect actual information that became available after the case had been filed. Although Aqua noted that a five-year average is reasonable because it smooths out anomalies and volatility in changes in insurance premiums, the Company accepted the use of a three-year average. See AP St. 4-R at 6. However, the Company applied the three-year average increase of 4.38% to updated actual amounts accrued for FTY 2022, but disputes I&E's recommendation regarding the use of the three-year average to determine increases for the FTY and FPFTY. AP St. 4-R at 6-7.

OCA and I&E continue to dispute the Company's expense claim for general liability insurance. OCA witness Smith opposed the Company's updated claim, arguing that the Company "inconsistently mixes calculation elements." OCA 1-SR, at 40. I&E witness Wilson also opposed the Company's update, stating that she "questioned the reliability of the amounts stated." She 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. Furthermore, according to I&E, Aqua did not provide documentation for the recent 2022 accruals to support the proposed changes in general liability expense.

I recommend the Commission adopt I&E's adjustments to the Company's general liability insurance expense. 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. Accordingly, Aqua's claim for insurance expense should be decreased by $340,945 for water and increased by $29,967 for wastewater.[83] The wastewater adjustments are comprised of increases for Wastewater Base, Limerick, East Bradford, Cheltenham of $18,640, $3,533, $789, and $6,299, respectively, and a decrease for New Garden of $676. This adjustment is reflected in each rate case table under Table II, Row "Gen. Liab. Insurance."

[83] OCA's witness recommended a reduction of Aqua's proposed insurance expense for the FPFTY by $71,428 for water operations and $710 for wastewater operations. However, OCA did not object to I&E's proposed insurance adjustment in its brief.

C. Payroll

Aqua, OCA and I&E resolved their dispute regarding the vacancy rate adjustment used to calculate payroll expense and other adjustments. I&E withdrew its objection, and a full-time vacancy rate of 2.88% has been reflected in the Company's proposed payroll expense.

OCA also proposed a further adjustment to reduce the number of seasonal positions included in the Company's claim to reflect the level as of June 30, 2021. OCA St. 1 at 43-44. Mr. Smith argued it was reasonable to reduce the payroll expense for this category from 33 to 11 positions based on the most current actual data. OCA St. 1 at 43-44.

Aqua supported its projection of seasonal positions with the testimony of Erin Feeney. Ms. Feeney explained that the discovery response relied upon by Mr. Smith inadvertently omitted the number of seasonal employees in 2019, but that an updated response showed 31 seasonal employees had been hired during that period. AP St. 2-R at 38-39. Furthermore, Ms. Feeney explained that the 2020 data was "an outlier due to the restrictions and safety concerns related to COVID." AP St. 2-R at 39. Similarly, 2021 data was also impacted by COVID-19. AP St. 2-R at 39. However, the Company fully anticipates filling all seasonal positions during the FPFTY based upon anticipated normal operating conditions during that time. AP St. 2-R at 39.

The Company has provided adequate justification for the projection of seasonal positions. The Company's updated payroll expense claim utilizing a vacancy adjustment of 2.88% as reflected in AP Exhibits 1-A(a) and 1-B(b) through 1-G(g) should be accepted, and I recommend that OCA's further adjustment to disallow the cost of 22 seasonal positions be rejected.

D. Stock-Based Incentive Compensation

Aqua includes expenses related to its stock-based incentive compensation program. According to Aqua, this program is an important element of its overall compensation program. The expenses related to this program are reasonable and should be permitted.

OCA contends that based on the record in this proceeding, Aqua should not be permitted to assess costs to ratepayers for its stock-based compensation plan because there is insufficient evidence demonstrating that the plan benefits customers or improves operational efficiency.

The Commission has reviewed and approved incentive compensation programs in numerous prior rate cases.[84] In these cases, and others, the Commission has established a bright line test for incentive compensation expense. If the incentive compensation programs of the utility are reasonable and provide a benefit to ratepayers, then they may be recovered in their entirety.[85]

Aqua contends that Company has demonstrated that its stock reward plans include both financial and operating metrics and goals. The Company further demonstrated that its incentive compensation package is reasonable, prudently incurred and not excessive in amount. As witness Mr. 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

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[84] See e.g., *Pa. Pub. Util. Comm'n v. PPL Elec. Utils. Corp.*, Docket No. R-2012-2290597, (Recommended Decision dated Oct. 19, 2012) (PPL Electric 2012 RD); *Pa. Pub. Util. Comm'n v. PPL Elec. Utils. Corp.*, Docket No. R-2012-2290597, at p. 26 (Order entered Dec. 28, 2012) (PPL Electric 2012); Aqua 2008, at *20-26; *Pa. Pub. Util. Comm'n. Duquesne Light Co.*, 63 Pa. PUC 337, 1987 Pa. PUC LEXIS 342 (Order dated March 10, 1987); *Pa. Pub. Util. Comm'n v. PPL Gas Utils. Corp., Docket* No. R-00061398, 2007 Pa. PUC LEXIS 2 (Order entered Feb. 8, 2007); *Pa. Pub. Util. Comm'n v. Phila. Gas Works*, Docket No. R-2008-2073938, 2008 Pa. PUC LEXIS 32 (Order dated Dec. 19, 2008).

[85] *See, e.g., PPL Electric 2012*, p. 26; *Pa. Pub. Util. Comm'n v. UGI Utils., Inc. – Elec. Div.*, Docket No. R-2017-2640058 (Order entered October 25, 2018) (UGI Electric).

> service, productivity enhancements and compliance initiatives to ensure reasonable cost and high-quality service to our customers. In addition, some of the objections are geared toward O&M efficiencies which encourage the Company to be as efficient as possible. It would be inappropriate to eliminate from the Company's cost of service this particular component of compensation which is partially responsible for controlling the Company's cost of service while maintaining its high-quality service standard.[86]

Cost containment is a specific component of stock-based compensation.[87]

According to OCA, Aqua's stock-based compensation primarily benefits stockholders rather than ratepayers and exacerbates the discrepancy in wealth between utility executives, utility workers and ratepayers.

I accept Aqua's position that the stock-based compensation benefits ratepayers. First, the Company describes how the purpose of the plan is to tie compensation to employees accomplishing the Company's main objectives, which ultimately benefits consumers.[88] Second, the Company states that compensation from the program is both "competitive" and "appropriate."[89] Third, the Company argues that since the Company has been utilizing incentive compensation regularly since 1999, it must be a factor in the Company's ability to continue to achieve its key objectives. Finally, the Company claims that this payment program is a key element of its overall payment package in attracting and retaining an appropriately skilled workforce.[90] Specifically, the Company says that the program is geared toward cost containment, quality service, and compliance initiatives to ensure reasonable cost and high-

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86 AP St. 1-R at 17-18.

87 HIGHLY CONFIDENTIAL OCA Exhibit LA-4, at p. 13; HIGHLY CONFIDENTIAL OCA Exhibit LA-8 pages 33-34.

88 AP St. 1-R at 15-16.

89 *Id*. at 16.

90 *Id*. at 17.

quality service to customers.[91] OCA's charge that the program also benefits stockholders is not sufficient to demonstrate that the compensation program is unreasonable or excessive.

E. Supplemental Executive Retirement Plan (SERP)

The SERP is a legacy retirement program for certain highly compensated individuals who did not qualify under the Company's former pension plan due to IRS limitations.[92] Effective April 2003, the Company froze both its pension plan and its SERP to employees hired before that date. Thus, contributions made to pension benefits, through the pension plan and the SERP, are not made for the benefit of any employees hired after that date.[93] The SERP provides replacement retirement benefits for the limited number of past and present employees and their spouses who are not eligible for the Company's former pension plan.

Therefore, the SERP is not associated with retaining or recruiting executive talent. Nor did Aqua demonstrate that it is connected to employee performance metrics that relate to the provision of utility service. Unlike the stock-based compensation plan, it is not associated with cost-containment or the maintenance of high-quality service. Therefore, Aqua should not be permitted to recover costs associated with its SERP. I recommend that these 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, I recommend 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 Schedule C-1. 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 table under Table II, Row "Supp. Exec. Retire. Program." As noted in Table VI for each rate zone, the cash working

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91 *Id*. at 17-18.

92 AP St. 1-SR at 11-12.

93 AP St. 1-SR at 12

capital adjustment resulting from this SERP adjustment is recommended to be assigned to the management fee expense account for each rate zone.

F. Non-Rate Case Legal Expense

Aqua included a claim for $644,475 in non-rate case legal expenses for its water utility operations.[94] Aqua Witness Manning explained that the costs for non-rate case legal services are incurred during the normal course of business to protect and defend the Company's interest in a variety of legal matters.[95] The Company utilizes a three-year average of non-rate case legal expenses to reflect the costs incurred in a normal year, and normalizes this claim.[96]

OCA claims that Aqua's claim is overstated. Over the three years used to establish Aqua's claimed expense, the non-rate case legal expense incurred by the Company decreased, with the highest of the three periods being the one that ended on March 31, 2019, at $694,447. In the calendar year 2019, Aqua recorded $545,550 in non-rate case legal expenses, and in 2020 Aqua recorded $587,742 in non-rate case legal expenses.[97] By including that 2019 period when the Company had particularly high legal costs, Aqua's claim is overstated.[98] According to OCA, Aqua's non-rate legal expense claim should be reduced by $ 24,981 to reflect an amount for the FPFTY that is based on the average amounts recorded by Aqua for the twelve-month periods ending March 31, 2020 and March 31, 2021.

Aqua counters that it demonstrated that its claim for non-rate case legal expense based upon a three-year historic average is reasonable. Specifically, Mr. Manning explained that "[u]tilizing a three-year average allows for the Company to appropriately account for the ebbs

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94 AP Exhibit 1-A, Schedule C-9.

95 AP St. 3 at 6; *see* AP Exhibit 1-A, Schedule C-9.1.

96 AP St. 3 at 6.

97 OCA St. 1 at 58; OCA Exh. LA-2, Sch. C-17 at 2.

98 OCA St. 1 at 58.

and flows of expense accounts that can fluctuate due to the normal course of business."[99] For this particular category of expense, Aqua highlighted that these ebbs and flows include "union contract negotiations that will occur during the FTY."[100] The use of a two-year average, as proposed by OCA, would fail to capture expenses that normally occur on a two-year or more interval, such as the union contract negotiations identified by the Company.[101] Moreover, according to Aqua, the Company's proposal is consistent with its claims in prior rate cases, as well as other expense categories that exhibit similar ebbs and flows in this filing. AP St. 3-R at 10.

I agree with Aqua and find the claim for $644,475 in non-rate case legal expenses for its water utility operations is reasonable.

G. Purchased Water Expense

The Company's filing includes a claim for $4,135,311 in Purchased Water Expense during the FPFTY. AP Exhibit 1-A, Schedule C-7.1. Details regarding the amounts claimed by supplier were provided for the periods ending March 31, 2019 through March 31, 2023. AP Exhibit 1-A, Schedule C-7.1.i. This includes $297,839 of purchased water expense from Aqua Ohio. AP Exhibit 1-A, Schedule C-7.1.i, Line 1.

I&E proposed to decrease the Company's claim for Purchased Water Expense by $166,795. I&E St. 1 at 20. I&E witness Ms. Wilson[102] argued that if the Commission approves the Company's rate for service to the Masury Division of Aqua Ohio of $0.232 per hundred gallons, then it should disallow $166,795 of Aqua PA's actual purchased water expense to purchase water from Aqua Ohio – Struthers Division. See I&E St. 1 at 19 (recommending the

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99 AP St. 3-R at 10.

100 AP St. 3-R at 10.

101 *See* AP St. 3-R at 10.

102 Christine Wilson, CPA, is employed by the Commission in I&E as a Fixed Utility Financial Analyst Supervisor. I&E St. 1, p. 1.

Commission only allow Aqua to reflect water purchases from Aqua Ohio based on the implied rate for the Masury Division).

The adjustment proposed by I&E should be rejected. As explained by Aqua witness Ms. Feeney, I&E's recommendation ignores the fact that Aqua's sales to Masury and Aqua's purchases from the Struthers Division of Aqua Ohio are not comparable. AP St. 2-R at 33. Indeed, these sales and purchases take place in different geographic locations: "[AP's] sales to Masury are made from AP's Shenango service area, while AP's purchases are made from the Struthers Division to serve AP's Mahoning Valley service area." AP St. 2-R at 33. Moreover, the Masury and Struthers Divisions of Aqua Ohio are separate; each division has a separately determined cost of service, separate tariffs and separate and different rates. AP St. 2-R at 33.

I agree with Aqua. There is no evidence that the purchase of water from Aqua Ohio Struthers Division at tariffed rates is imprudent or excessive. In considering the Masury contract, the Commission will determine whether the sale of water to Masury at discounted rates is appropriate. As the purchase of water from Aqua Ohio – Struthers Division are 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. That rate is unaffected by the rate to be charged by Aqua to the Masury Division, which Aqua is proposing to be based upon a contract rate established based upon the cost of a competitive alternative available to the Masury Division.

H. Dredging Expense

The Company's claimed revenue requirement for water operations included an adjustment to Dredging Expense, to reflect changes to the Company's dredging process. AP Exhibit 1-A, Schedule C-7.3. Aqua proposed 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. AP St. 3 at 5. Moreover, the Company proposed that the reserve be recorded as a regulatory liability on the Company's books, subject to review for reasonableness or future adjustment in

later base rate proceedings. AP St. 3 at 6. The Company's proposal was done with the intent that it would result in annual savings to customers.

Specifically, this proposed adjustment would ultimately reduce dredging expense by approximately $300,000 over three years. AP St. 3 at 5. The reduction would occur by shifting the Company's past practice of mobilizing and demobilizing equipment (which has fixed costs of approximately $150,000 each time it occurs) three times over a three-year span, to only one time over a three-year span. AP St. 3 at 5. By mobilizing and demobilizing only once every three years, the Company is able to reduce the fixed costs associated with this practice, but is still able to dredge on an as needed basis. AP St. 3 at 5.

I&E recommends that Aqua's dredging expense be normalized and that the Company's proposed use of a reserve account and regulatory liability be rejected.[103] I&E recommends no adjustment to the claimed dollar amount. I&E argued, however, that this routine operating expense is more appropriately normalized for ratemaking purposes; and, accrual treatment via a regulatory liability should be rejected because dredging expense is not extraordinary in nature and regulatory liability treatment should not be granted.[104] Further, I&E argued normalized dredging expenses are no different than any other O&M expense in that the Company is given the opportunity to achieve full recovery.[105]

I agree with I&E that dredging expense should be normalized and that the requested approval for deferred accounting treatment should be rejected. To be eligible for deferred accounting treatment, deferred expenses must be, or must appear to be, extraordinary, nonrecurring, substantial, and within the scope of the type of items that the Commission has allowed as an exception to the general rule against retroactive recovery. While the claimed expense may be substantial, it does not appear to meet the other standards for deferred accounting treatment. Aqua, by its own admission, can predict with reasonable certainty the

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[103] I&E St. No. 1, pp. 21; I&E St. No. 1-SR, p. 21.

[104] I&E St. No. 1-SR, p. 21.

[105] *Id*.

amount and frequency of its dredging expenses, and changing from dredging once every year to once every three years does not change this fact. Thus, the expense is not, and does not appear to be, extraordinary nor nonrecurring. Further, Aqua's ability to reduce its costs on a normalized basis through more efficient mobilization practices does not require Commission approval of a regulatory liability. As such, I recommend that the adjustment Aqua made to this expense be accepted without approval of any accompanying regulatory liability treatment.

I. Advertising

The Company's initial filing includes a claim for Advertising Expense during the FPFTY of $368,810 for its water operations and $7,500 for its wastewater operations.[106] Included in this claim is $75,000 for water operations and $7,500 for wastewater operations related to the advertising for the "[e]xplanations of billing practices, rates, rules and regulations" associated with the Company's proposed USP.[107]

OCA recommended that the Company only be permitted to recover $25,000 for water operations and $2,500 for wastewater operations associated with this category of advertising.[108] OCA witness Mr. Smith argues that the costs associated with the "[e]xplanations of billing practices, rates, rules and regulations" for water and wastewater operations during the FPFTY is a "new item," which was not incurred in the HTY and FTY.[109] As such, Mr. Smith proposes to normalize the FPFTY amounts claimed by Aqua over three years.[110]

While normally, it would be correct to reject a projected expense that had not been incurred in the HTY and FTY, Aqua's claimed expense to advertise the proposed new USP

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[106] Response to Filing Requirements C. Operating Expense, OE9; Exhibits 1-A and 1-B, Schedule C-4.9, Lines 5 and 3 respectively; see also OCA Exhibit LA-3, pages 17-18 of 58 (Aqua response to I&E-RE-33-D).

[107] *See* AP St. 2-R at 34-35; see also OCA Exhibit LA-3, pages 17-18 of 58.

[108] OCA St. 1 at 40.

[109] OCA St. 1 at 40.

[110] OCA St. 1 at 41.

should be accepted, and OCA's adjustment should be rejected. Indeed, this "is a new expense which is related to customer education and outreach for its proposed Universal Service Program."[111] The program was not in effect in the HTY and will not be in effect during the FTY. However, it 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.[112] To "normalize" this expense with prior years when the new program did not exist is unfair in this base rate proceeding.

Furthermore, it is not disputed that customer education and outreach will be critical to the success of the proposed USP. In fact, OCA proposes increased outreach efforts to inform customers of the program.[113] However, OCA's response to this demonstrated need for increased advertising to support this new USP is to suggest that Aqua "re-prioritize" other unspecified advertising.[114] No party has challenged any aspect of the Company's other advertising as unreasonable or not in compliance with the provisions of Section 1316 of the Public Utility Code.[115] Given the importance of an intensified customer outreach necessitated by the launch of a considerably more robust universal service program, it is more appropriate to permit Aqua to claim the expenses related to the USP as part of its claim for advertising expenses rather than normalizing that portion of the expense claim for this base rate filing.

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[111] AP St. 2-R at 35.

[112] *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." (emphasis added)).

[113] OCA St. 5 at 49; *see also*, CAUSE-PA St. 1 at 63-65 (proposing increased customer outreach).

[114] OCA St. 1-SR at 29-30.

[115] 66 Pa.C.S. § 1316(a).

J. General Price Level Adjustment

The Company's filing reflects a "General Price Level Adjustment" that reflects the anticipated effect of inflation on operating expenses that were not specifically adjusted in this case. AP St. 3 at 2; AP Exhibits 1-A and 1-B through 1-G, Schedule C-4.1.

OCA characterizes the General Price Level Adjustment as a "blanket" adjustment for expenses. According to OCA, Aqua's adjustments for estimated blanket inflation are inconsistent with the law and should be removed, reducing FPFTY expenses by $1.07 million.[116] OCA asserts that Aqua did not adequately justify the purpose behind its inflation adjustments, stating only that the 'adjustment reflects the anticipated effect of inflation on operating expenses that were not specifically adjusted in this case." AP St. 3 at 3.

I agree with OCA 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." According to Aqua's witness, this general inflation factor would be applied to 22% of Aqua's total operating expenses.[117] While it may be simpler for Aqua to simply 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. To permit a large, sophisticated utility like Aqua in this modern age 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. Aqua has not demonstrated that tracking the changes in these expenses individually is unduly burdensome.

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. This results in an adjustment of $864,335 for water operations and $205,560 for wastewater operations. The wastewater adjustments are

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[116] OCA St. 1 at 34-35; OCA Exh. LA-2, Sch. C-5; Table II (Water, Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, New Garden).

[117] AP St. 3-R, p. 3.

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." As noted in Table VI 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.

K. Chemicals Expense

OCA proposed to increase the Company's claimed Chemicals Expense for water operations by $66,787. OCA St. 1 at 38. Similar to OCA's proposed adjustment for Purchased Power Expense (Water), this adjustment is based upon OCA's proposed adjustment to Metered Residential Water sales, which reflect only a portion of the Company's proposed COVID-19 usage adjustment. Aqua opposed this adjustment. See AP St. 3-R at 9; see also AP St. 5-R at 18-19.

I do not recommend any adjustments to Aqua's claim for Chemicals Expense, consistent with my recommendations above related to Metered Residential Water Sales revenue and Purchased Water Expense.

IX. TAXES

A. Payroll and Income Tax Adjustments[118]

The Company's payroll tax claim was updated in rebuttal testimony to reflect the Company's acceptance of a revised vacancy rate of 2.88%, as discussed above.[119] As a result, no

[118] Both OCA and I&E oppose Aqua's use of a Federal Tax Adjustment Surcharge, which is discussed in the Tariff Structure portion of the recommended decision.

[119] *See* Aqua Exhibit 1-A(a) at Schedule D-25 and Exhibits 1-B(b) through 1-G(g) at Schedule C-8.1.

further adjustments to payroll tax are necessary. Further, OCA's claim regarding interest synchronization as it relates to income taxes is resolved by the rejection of OCA's opposition to Aqua's capital structure which is discussed below.

B. Tax Repair Deduction

OCA challenges Aqua's treatment of its tax repair deduction. OCA proposes to increase the tax deduction for repairs, which would decrease the *pro forma* income tax expense for the FPFTY. Aqua opposes OCA's adjustments.

Prior to the filing of the Company's 2018 Base Rate Case, Aqua made an election to change its method of income tax accounting for tax repairs. AP St. 8 at 4-5. As a result of this election, the Company is permitted to claim a full tax deduction for certain capital additions qualifying as "repairs" for income tax purposes, rather than depreciate the asset for income tax purposes over time. For book accounting and ratemaking purposes, the Company uses "flow-through" accounting for the benefit of the tax repair deduction. This ratemaking treatment was memorialized in the settlement of the Company's 2018 base rate case. AP St. 8 at 4. The Company has included a net total repair deduction of $159,060,000 in the FPFTY (water $154,600,000, wastewater $4,460,000). AP St. 8 at 5; AP Exhibit 1-A, Schedule F-2; AP Exhibit 1-B, Schedule F-2. The claimed deduction is the projected deduction for the FPFTY, net any provision for uncertain tax positions (i.e., FIN 48) and any amount for AFUDC. AP St. 8 at 4; AP St. 8-R at 5.

The Company 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. When the Company assesses that a claim is less than 50% likely to be realized after ultimate resolution, the Company is required to establish a reserve for the amount of tax benefits that may be disallowed under the foregoing assessment. As Ms. 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. AP St. 8-R at 6. In this case, the Company has assessed that, under FIN 48, $4.0

million in estimated annual repairs deductions may be disallowed by the IRS after final review. AP St. 8-R at 5.

OCA contends 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 St. 1 at 31. OCA also eliminated the Company's $4 million adjustment for FIN 48 uncertain tax positions. OCA argues that 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 St. 1 at 34-35.

According to Aqua, OCA's expert arrived at his recommended tax repair deduction by averaging the Company's updated projected 2022 tax repair deduction with the original projected tax repair deductions for 2023 and 2024, instead of including updated tax repair projections for 2023 and 2024. AP St. 8-RJ at 5. According to Aqua, this "hybrid" approach seeks to capture the benefit of the highest year of projected repair deductions while ignoring lower years. OCA states that the original projected estimates for 2022 were understated, but does not explain why updated data for 2023 and 2024 were excluded from its analysis.

Aqua's "flow through" treatment for tax repairs was approved in connection with the settlement of its last base rate case. Aqua proposes to continue this tax deduction treatment in its current base rate proceeding. Although this approach may be "unusual," OCA did not explain in its brief that this tax treatment has, in fact, resulted in large amounts of excess earnings between rate cases and therefore should be abandoned. Further, although Aqua's originally projected data for 2022 may have been underestimated, this does not explain why OCA would continue to use original projections for 2023 and 2024 in calculating its recommended deduction.

Further, I am not convinced that removal of the FIN 48 adjustment from the tax repair deduction is required. Again, OCA contends that this treatment of the tax repair deduction

"may" result in excess earnings. Aqua explains 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. To 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. AP St. 8-R at 7. 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. If, in the future, the IRS in fact allows the full tax repair deduction, then the reserve balance will be returned to customers in rates. If the full deduction is disallowed, as the Company assesses is likely, the reserve will be debited for the disallowed amount. AP St. 8-R at 6-7. Customers will receive the benefit of the reserve balance amortized as a deduction to tax expense in future rate cases.

I recommend the Commission permit Aqua to continue utilizing the treatment of tax repair deductions which were approved in the settlement of Aqua's 2018 base rate. Similarly, I recommend the Commission reject OCA's objection to Aqua's "collar mechanism."[120] There is no convincing evidence that this tax treatment has resulted in excess earnings or has otherwise harmed ratepayers.

X. RATE OF RETURN

A. Introduction

Rate of return is one of the components of the revenue requirement formula. Specifically, it 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.

[120] Also, OCA did not address its witness's argument in surrebuttal testimony opposing the collar mechanism in its main brief.

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.

Bluefield and *Hope Natural Gas* are the seminal cases that present the legal standards applicable to regulators calculating utility rates of return. *Bluefield* and *Hope Natural Gas* set forth the principles,[121] listed below, that are generally accepted by Pennsylvania and other regulators throughout the country as the appropriate criteria for measuring a fair rate of return:

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

Aqua's proposed cost of capital[122] is as follows:

Type of Capital		**Weighted Cost Rate**
Long-Term Debt		1.84%
Common Equity		5.80%
		7.64%

[121] The language of these decisions has been often quoted. Rather than reproducing the language here, the reader is directed to *Bluefield*, 262 U.S. at 692-93, and *Hope Natural Gas*, 320 U.S. at 603.

[122] AP Exhibit 4-A, p. 1.

No party has challenged the Company's claimed cost rates for long-term debt. The issues of dispute involve Aqua's capital structure ratio and cost rate of common equity.

B. Capital Structure.

I&E recommends using the Company's claimed capital structure as it falls within the range of the I&E proxy group's 2020 capital structures, which is the most recent information available at the time of I&E's analysis. The 2020 range consists of long-term debt ratios ranging from 44.41% to 59.33% and equity ratios ranging from 40.67% to 55.25%, with an overall five-year average of 46.88% debt and 53.05% common equity. I&E Exh. No. 2, Sch. 2.

OCA objected to adopting the Company's capital structure and instead recommends a ratio of 50% Long-term Debt and 50% Common Equity. According to OCA, the use of this capital structure is appropriate because the common equity ratio of Aqua's requested capital structure is significantly higher than the average of the eight regulated water utilities in the proxy group (50.0%). See OCA Exh. DJG-14.

Aqua contends that the legal standard in Pennsylvania for deciding whether to use a hypothetical capital structure in setting rates is simple and straightforward. If a utility's actual capital structure is within the range of a similarly situated barometer group of companies, rates are set based on the utility's actual capital structure.[123] If a utility's actual capital structure is outside of the range of the barometer group, it is considered atypical, and the Commission can rely on a hypothetical capital structure to set rates for the utility.

I&E agrees with the Company's claimed capital structure because it falls within the range of the I&E proxy group's 2020 capital structures, which is the most recent information available at the time of I&E's analysis. The 2019 range consists of long-term debt ratios ranging

[123] *See e.g.*, *Columbia 2020*; *Pa. Pub. Util. Comm'n v. PPL Elec. Utils. Corp.*, Docket No. R-2012-2290597, at p. 68 (Order entered Dec. 28, 2012) (PPL Electric 2012); *Pa. Pub. Util. Comm'n v. ALLTEL Pa., Inc.*, Docket No. R-942710 et al., 59 Pa. PUC 447, 491, 1985 Pa. PUC LEXIS 53, *106-107 (Order entered May 24, 1985) ("ALLTEL").

from 33.18% to 53.48% and equity ratios ranging from 32.78% to 59.01%, with a five-year average of 40.29% for long-term debt and 47.60% for common equity.

I agree with Aqua that the legal standard is not whether the utility's capital structure deviates from the "average" capital structure of the barometer group, as claimed by OCA, but whether it is outside the range. Although, as OCA observes, the Commission has the discretion to use a hypothetical capital structure where the company's actual capital structure is unreasonable or uneconomical,[124] in this case, as pointed out by I&E, the Company's claimed capital structure is within the ranges of the proxy group and is not clearly unreasonable.

C. Cost of Long-Term Debt

No party has challenged the Company's claimed cost rate of long-term debt of 4.00%. I&E observes that 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%. Thus, Aqua's claimed cost of debt appears reasonable as it is representative of the industry

D. Return on Common Equity

I have reviewed the arguments by all of the parties regarding the calculated return on common equity (ROE). As Aqua correctly explains, this calculation necessarily includes a great deal of professional judgment. However, at a certain point, professional judgement tips to an unacceptable bias toward a certain result. Of the three ROE studies, I find the method employed by I&E which results in an 8.90% ROE is the most reasonable. First, I&E's recommendation is consistent with the methodology historically used by the Commission in base

[124] *Big Run Tel. Co. v. Pa. Pub. Util. Comm'n*, 449 A.2d 86, 89 (Pa. Cmwlth. 1982) (*Big Run*).

rate proceedings, even as recently as 2017, 2018, 2020, and 2021.[125] Second, I&E's calculation includes fewer biased inputs. Finally, I find that I&E's recommended ROE fairly balances the impacts of the overall rate increase between ratepayers and stockholders.[126]

I&E used the Discounted Cash Flow (DCF) method and Capital Asset Pricing Model (CAPM) to arrive at its recommended cost of equity of 8.90%. According to I&E, Commission precedent clearly prefers the DCF method.[127] According to I&E's witness, the DCF method is considered by the Commission to be the most reliable and appealing to investors.[128] I&E notes that Aqua's DCF calculation included the use of an inflated growth rate and an unnecessary leverage adjustment. Without these "adders," to Aqua's calculations, I&E notes that the Company's DCF would result in a 9.07% cost of equity, which is comparable to I&E's DCF result of 8.90%.[129]

As explained above, Aqua's DCF calculation included a growth rate that was higher than the average of the Company's proxy group. The calculation also added 234 basis points as a leverage adjustment. Aqua has failed to justify the appropriateness of utilizing a

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[125] *See, e.g., Pa. Pub. Util. Comm'n v. City of DuBois – Bureau of Water*, Docket No. R-2016-2554150, pp. 96-98 (Order Entered March 28, 2017) (Disposition of Cost Rate Models); *Pa. Pub. Util. Comm'n v. UGI Utils., Inc. – Elec. Div.*, Docket No. R-2017-2640058, p. 119 (Order Entered October 25, 2018) (Disposition of Cost of Common Equity); *Pa. Pub. Util. Comm'n v. Wellsboro Elec. Co.*, Docket No. R-2019-3008208, pp. 80-82 (Order Entered April 29, 2020) (Disposition of Primary Methodology to Determine ROE); *Pa. Pub. Util. Comm'n v. Citizens' Elec. Co. of Lewisburg, Pa.*, Docket No. R-2019-3008212, pp. 91-93 (Order Entered April 27, 2020) (Disposition of Cost of Common Equity); *Pa. Pub. Util. Comm'n v. Valley Energy, Inc.*; Docket No. R-2019-3008209, pp. 102-104 (Order Entered April 27, 2020) (Disposition of Methods for Determining the Cost of Common Equity); *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa., Inc.*, Docket No. R-2020-3018835, p. 131, Order Entered February 19, 2021 (*Columbia Gas*) (Disposition of Methods for Determining the Cost of Common Equity).

[126] *See Pa. Pub. Util. Comm'n v. Twin Lakes Utils., Inc.*, Docket R-2019-3010958 (Opinion and Order entered March 26, 2020) (noting the Commission has the discretion to consider a utility's quality of service and affordability issues in setting a reasonable rate of return).

[127] *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa., Inc.*, Docket No. R-2020-3018835 (Opinion and Order entered February 19, 2021) (*Columbia Gas*), p. 31 ("[T]he use of the DCF model has historically been our preferred methodology and was recently affirmed in *UGI Electric*. Like the ALJ, we find no reason to deviate from the use of this method in the instant case."); *see also UGI Utils., Inc. – Elec. Div.*, pp. 103-106 (rejecting the use of Risk Premium and Comparable Earnings methods).

[128] I&E St. No. 2, pp. 45-46.

[129] I&E St. No. 2, pp. 45-46.

higher growth rate or adding a leverage adjustment to the DCF calculation. Because of these unsupported adjustments, I do not believe Aqua's DCF calculation can be relied upon. Because the Commission prefers the DCF methodology, I am persuaded that I cannot rely upon the Company's ROE recommendation.

Similarly, I find the OCA's DCF calculation problematic, and the OCA's calculation of ROE should also be rejected for the reason's set forth by Aqua in its main brief.[130]

Aqua also includes an adjustment for management performance. The Company argues that Aqua has consistently provided its customers with safe and reliable water and wastewater service at reasonable rates.[131] This, they say, is the product of a mission based, dedicated, and knowledgeable workforce that is constantly seeking to improve quality and control costs.[132] Further, Aqua argued it is committed to providing safe and reliable service, the community, and the environment.[133] Aqua noted it continues to accept the challenge of acquiring troubled or weaker water and wastewater systems in an effort to promote the Commission's goal of regionalization.[134] Aqua also argues that it is helping the Commonwealth deal with the problems created by small, troubled or non-viable wastewater systems in its acquisition of Phoenixville Water and by acting as a receiver to three other systems.[135]

It is true that Aqua has been a strong partner with the Commission in acquiring troubled water systems. However, it is also true that Aqua has acquired water and wastewater systems that were not troubled and has asked its existing customer base to help pay for the costs

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130 Aqua MB, P. 126-28.

131 AP St. No. 1, pp. 30-31.

132 *Id*.

133 *Id*.

134 *Id*. In certain cases, this altruistic "goal," however, only became desirable after the legislature enacted 66 Pa.C.S. § 1329 allowing public utilities to incorporate the established fair market value of the acquired utility into the acquiring public utility's rate base in the acquiring utility's next base rate case.

135 *Id*.

to serve these newly acquired customers. Stated another way, the Company passes on capital expenditures to its ratepayers via base rates and is proposing to pass on the cost of the proposed Universal Service Plan (which would encompass the Helping Hand program) via a reconcilable surcharge mechanism,[136] or it can utilize a DSIC for capital expenditure recovery. The claimed savings to the ratepayers would likely be offset by the addition of basis points for management performance as ratepayers would have to fund the additional costs. This would defeat the purpose of cutting expenses to benefit ratepayers.[137]

Further, 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. Many customers described the additional economic burdens caused by job loss, elevated family care responsibilities and other hardships caused by the ongoing effects of the pandemic at the public input hearings. The legislators who offered testimony also emphasized the continued hardships on their constituents. To seek an additional premium from ratepayers during a pandemic is 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.[138]

In the recent *Columbia* decision,[139] the Commission agreed with the ALJ's analysis rejecting the inclusion of management performance points in calculated the ROE:

> [The ALJ] agreed with I&E, the OCA, and the OSBA that Columbia failed to provide sufficient evidence to support its proposal for an additional twenty-basis points for "strong management performance." The ALJ reasoned that while effective operating and maintenance cost measures should flow through to ratepayers and/or investors, Columbia's proposal

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136 *Id.*, *citing* I&E Exh. No. 2, Sch. 12.

137 *Id.*

138 *See* OCA Main Brief, pp. 5-15.

139 *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa.*, Docket R-2020-3018835 (Opinion and Order entered February 19, 2021) (*Columbia*).

> defeats the purpose of cutting expenses to benefit ratepayers, particularly during a pandemic when so many ratepayers have experienced reduced household income from job loss or reduction in hours. Therefore, the ALJ recommended that no upward management effectiveness adjustment be made to the Company's cost of equity.
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> . . . We find that the ALJ's recommendation is supported by amble record evidence and is just and reasonable.[140]

The same observations can be made on the record here. I also recommend that the Commission reject Aqua's request to add basis points to the ROE calculation on the basis of "strong management performance."

E. Conclusion

Based upon the recommended capital structure, debt cost, and return on common equity, the overall rate of return is as follows. The below values are rounded, and Table IA of each of my rate case tables uses Aqua's claimed ratios and cost rates included in Table IA of each of Aqua's rate case tables, other than Aqua's claimed cost rate for common equity:

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%

An overall rate of return of approximately 6.64% fairly balances the requirement that 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.[141]

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140 *Columbia*, p. 134-35.

141 *Twin Lakes*.

XI. RATE STRUCTURE

A. Cost of Service

The purpose of the cost allocation studies performed for Aqua is to allocate the total water and wastewater cost of service to the several customer classifications. No party disputes the method used by Aqua to calculate the cost of service for its water operations and wastewater operations.

Aqua prepared a cost allocation study (AP Exhibit 5-A, Part I) for its water operations, as well as separate cost allocation studies (AP Exhibit 5-B, Part I) for its wastewater operations. With respect to its wastewater operations, 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 AP St. 5 at 18-19. The separate operating cost allocation studies from the Base Operations are wastewater systems acquired since the Company's 2018 Base Rate Case. AP St. 1 at 7. 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. AP St. 5 at 3, 19. The cost-of-service allocation study results indicate the relative cost responsibilities of each class of customer. AP St. 5 at 4.

The cost-of-service study methods used by Aqua for its water and wastewater operation are reasonable and consistent with past practice.

B. Cost of Service – Wastewater

I&E recommends the Company continue to combine Wastewater Zones 1 through 6 in one cost of service study.[142] I&E also recommends the Company combine Wastewater Zones 7 through 11 into one cost of service study in its next base rate case because these zones

[142] I&E St. No. 5, p. 66.

include systems that were acquired under Section 1329[143] and they represent a unique group of zones and cost recovery requirements.[144] Therefore, I&E recommends these zones should continue to be grouped into one cost of service study in future cases.[145] I&E 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.[146] Also, future Section 1329 systems acquired subsequent to this rate proceeding should continue to have a separate cost of service study for each system included in Aqua's next base rate proceeding following the acquisition of those systems.[147]

The Company opposes I&E's recommendation and contends 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."[148] In Aqua's view, I&E's recommendation frustrates the goal of single tariff pricing and consolidation of rate zones.

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. While consolidating rate zones is important, it is also important to appropriately track 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. I&E's proposals are reasonable and sensible and well within the Commission's mandate to assure that a utility's rates are just and reasonable and meet the public interest and should be adopted.

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143 66 Pa. C.S. § 1329.

144 I&E St. No. 5, p. 66.

145 *Id*.

146 *Id*.

147 *Id*.

148 Aqua MB, p. 220.

C. Revenue Allocation

The allocation of revenue among a utility's various rate classes (and in this case, rate zones and services), while informed by science and engineering, also involves consideration of ratemaking policy and principles of gradualism. The application of science and policy to the allocation of a revenue increase is within the Commission's discretion: "[T]here is no set formula for determining proper ratios among the rates of different customer classes. What is reasonable under the circumstances, the proper difference among rate classes, is an administrative question for the Commission to decide."[149]

The Commission recently explained the interplay among ratemaking methodologies and the consideration of other factors to set just and reasonable rates:

> These norms, or traditional ratemaking methodologies, 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, gradualism, and rate affordability.
>
> We acknowledge that there are several factors that must be considered when designing a rate recovery proposal, one of which is the concept of gradualism and affordability, which are classic small water company challenges faced by many similar-sized utilities across the nation. However, while affordability is permitted to be considered, it is but one of many factors to be considered and weighed by the Commission in determining a 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 acquired troubled water utilities' distribution system; and the high costs associated with maintaining a distribution system necessary to provide safe and reliable water and wastewater service within the Commonwealth.[150]

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149 *Peoples Nat. Gas Co. v. Pa. Pub. Util. Comm'n*, 409 A.2d 446, 456 (Pa. Cmwlth. 1979)(citations omitted).

150 *Pa. Pub. Util. Comm'n v. Cmty. Utils. Inc.*, Docket R-2021-3025206 (Opinion and Order entered January 13, 2022)(citations omitted), at p. 65-66.

The Company's proposed revenue allocation for both water and wastewater involves a determination of the allocated cost responsibilities and the percentage of revenue under existing rates and a determination of the percentage cost responsibilities and percentage of *pro forma* revenues under proposed rates for each customer classification.[151] Once these determinations were made, the Company proposed revenues to be allocated to each customer classification that would be required to move that class toward the cost of service.[152] In addition, the Company determined an amount of wastewater revenues to be recovered in water rates pursuant to Section 1311 of the Public Utility Code,[153] commonly referenced as "Act 11."

This is the first Aqua rate case in which a portion of the wastewater rate increase which the Company proposes to allocate to water customers is related to acquisitions under Section 1329. While the statutory advocates agree that it is appropriate to allocate some portion of the wastewater revenue increase to water customers, I&E and OCA oppose the Company's method of determining an appropriate subsidy. OCA and I&E both recommend a larger portion of the proposed increase stay with wastewater customers in order to recognize the revenue requirement generated by the systems' acquisition under Section 1329. OSBA agrees with the Company's method of allocating the Act 11 revenue requirement to its water customers on a revenue neutral basis by customer class, but opposes the magnitude of Act 11 subsidy.

Act 11 became effective in 2012 and is codified in Section 1311(c) of the Public Utility Code. This section permits wastewater revenue to be allocated to a utility's water customers which is in the public interest to do so:

> 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

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151 See AP St. 5 at 10, 21.

152 See AP St. 5 at 10, 21; see also AP Exhibit 5-A, Part I, Schedule A and AP Exhibit 5-B, Part I, Schedule WW-A.

153 66 Pa.C.S. § 1311(c).

> 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.

Thus, Act 11 allows a utility that provides both water and wastewater service, such as Aqua, to allocate a portion of the wastewater requirement to the combined water and wastewater customer base if doing so is in the public interest. In its policy statement implementing Act 11, the Commission noted that one of the benefits of Section 1311(c) is that the costs of necessary upgrades to wastewater systems to maintain safe and reliable service, which can be substantial on a stand-alone basis, can be spread among the common customer base of water and wastewater utilities.[154] On this premise, the Commission has approved such allocation of revenue from wastewater customers to water customers.[155]

Section 1329 was not enacted until six years later. Therefore, Act 11 was based on the general premise that water and wastewater rate base would be based on the net original cost of property, excluding contributions. While Section 1327 authorizes rate base additions for costs above this value for qualifying acquisitions, Section 1327 also requires the utility to demonstrate that rates charged by the acquiring utility to its preacquisition customers would not increase unreasonably because of the acquisition and that the excess cost would amortize over a reasonable period of time. Also, Aqua's water customers are not afforded the same ability to shift costs to wastewater customers, whether under Section 1327, Section 1329, or otherwise, since Act 11 in unidirectional from wastewater to water, and its use is at Aqua's discretion.

I recommend an additional adjustment associated with shifting the wastewater revenue requirement to water customers. The wastewater revenue requirement is based upon the

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[154] Docket No. M-2012-2293611 (Tentative Implementation Order entered May 12, 2012, and Final Implementation Order entered August 2, 2012)

[155] See, e.g., *Pa. Pub. Util. Comm'n v. Aqua Pa., Inc.*, Docket Nos. R-2018-3003558, R-2018-3003561, et al., 2019 Pa. PUC LEXIS 170 (Order entered May 9, 2019) ("Aqua 2018"); *Pa. Pub. Util. Comm'n v. Pa.-Am. Water Co.*, Docket No. R-2017-2595853 (Order entered December 7, 2017) ("2017 PAWC Order"); *Pa. Pub. Util. Comm'n v. Pa.-Am. Water Co.*, Docket No. R-2013-2355276 (Order entered December 19, 2013) ("2013 PAWC Order"); *Pa. Pub. Util. Comm'n v. York Water Co.*, Docket Nos. R-2012-2336379, *et al.*, (Recommended Decision dated Dec. 6, 2013), adopted without modification (Order entered Jan. 9, 2014) ("York Water 2013").

expenses associated with wastewater service, including a bad debt expense that is determined using an uncollectible accounts factor. However, because water customers will ultimately pay the revenue requirement that is shifted to them, it is not reasonable to charge water customers for bad debt expenses at the wastewater uncollectible accounts factor, since Aqua would incur bad debt expenses from water customers at the water uncollectible accounts factor (approximately 0.51% of revenues) rather than at the wastewater uncollectible accounts factor (approximately 1.19% of revenues). Thus, when shifting the wastewater revenue requirement to water customers, the gross wastewater revenue requirement must be reduced to a net basis using the revenue factor for each service in Table I(B) to determine the water net income that the Company will receive and the wastewater net income that the Company would have received. Then, the difference between these net values is grossed up using the water revenue factor before being deducted from the gross allocated wastewater revenue requirement, resulting in an adjusted gross water revenue requirement that provides Aqua the same net income from water customers that it would have received from wastewater customers. This adjustment is detailed in Table Act 11.

1. Wastewater Allocation

Aqua's wastewater systems include two sets of rate zones. Rate Zones 1 through 6, are systems that Aqua owned at the time of Aqua's last rate case proceeding (Legacy Systems). Rate Zones 7 through 11 are five systems that Aqua has acquired pursuant to Section 1329 of the Public Utility Code since Aqua's last rate proceeding (Acquired Systems). I&E, OCA and OSBA contend that consideration of Section 1329 and the equities of requesting water customers to subsidize the rate increases in these new rate zones should limit the Act 11 subsidies requested by Aqua.

I&E Witness Joseph Kubas prepared a table which summarized each party's proposed allocation of revenue:

Aqua Pennsylvania, Inc

Zones 1 through 6 and Zones 7 through 11 and Grand Total for Aqua Wastewater

	Zone	COMPANY Increase**	Percent Increase**	I&E Increase*	Percent Increase*	I&E/OCA Difference	OCA Increase**	Percent Increase**	I&E/OSBA Difference	OSBA Increase***	Percent Increase***
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	TOTALS - Zone 1-6	$3,473,445	18.3%	$6,049,406	31.8%	$897,484	$6,946,890	36.6%	(1,395,222)	$4,654,184	24.5%
2	(Including Contracts)										
3	Limerick (Zone 7)	$2,968,877	74.8%	$2,982,144	75.0%	$2,205,199	$5,187,343	130.7%	(13,267)	$2,968,877	74.8%
4	East Bradford (Zone 8)	$358,379	35.9%	$610,765	60.2%	$222,489	$833,254	83.5%	(252,386)	$358,379	35.9%
5	Cheltenham (Zone 9)	$2,541,306	35.1%	$4,084,833	56.3%	($1,007,122)	$3,077,711	42.5%	(1,543,527)	$2,541,306	35.1%
6	East Norritan (Zone 10)	$1,157,851	39.7%	$1,528,396	52.3%	$1,259,223	$2,787,619	95.6%	(370,545)	$1,157,851	39.7%
7	New Garden (Zone 11)	$1,063,739	37.0%	$1,383,546	47.9%	$412,279	$1,795,825	62.5%	758,676	$2,142,222	74.6%
8	TOTALS - Zone 7-11	$8,090,152	45.0%	$10,589,684	58.6%	$3,092,068	$13,681,752	76.0%	(1,421,049)	$9,168,635	51.0%
9	WW TOTALS	$11,563,597	31.3%	$16,639,089	44.9%	$3,989,553	$20,628,642	55.8%	(2,816,270)	$13,822,819	37.3%

* I&E Exhibit No. 5, Sch. 1, column I
** OCA St. No. 4, page 10
*** OSBA Exhibit BK-4WW

Before arriving at his final recommendation, I&E's final Act 11 subsidy recommendation is $10,439,352.[156] This recommendation is based on Mr. Kubas' recommendation to shift some of the revenue increase from the Acquired Systems to the Legacy Systems rather than shifting the entire wastewater increase to water customers because most Aqua water customers are not wastewater customers. In Mr. Kubas' view, each type of utility service should recover as much of the cost of providing service as possible.[157] However, eliminating the entire subsidy would result in very large increases to the monthly customer charges, usage rates, unmetered rates, and average bills for both residential and commercial customers.[158] Accordingly, he reduced the subsidy allocated to water customers by recommending that the rate increases for Zones 1-6 be limited to the average residential usage

156 App. A, I&E Table VII – Water – Act 11 Allocation, col. D, line 13.

157 I&E St. 5, p. 7-8 (Zones 1-6); pp. 35-36 (Zones 7-11).

158 *Id.*

customer to less than 53%.[159] In Zones 7-11, he limited rate increases to the average residential usage customer to generally less than 100%.[160]

OCA Witness Watkins[161] offered a different analysis by taking into account the fair market value paid by Aqua to acquire each of the Acquired Systems and calculating the revenue requirements associated with "acquisition premium" paid by Aqua, which he defined as the amount paid above book value for the Acquired Systems.

OSBA also proposed reducing Aqua's Act 11 subsidy. OSBA agrees with I&E and OCA that the Legacy Systems should bear some of the disparity between the cost of service and revenue requirement of the wastewater systems rather than transferring the entire shortfall to water customers. Accordingly, OSBA witness Mr. Kalcic recommended reducing the Act 11 subsidy to $18.580 million.[162]

Aqua opposes the Act 11 subsidy proposals by the statutory advocates because the resulting revenue allocations will cause rate shock in some of Aqua's rate zones and fail to adhere to principles of gradualism.

It is not unusual in public utility regulation to approve the socialization of costs that benefit a subset of consumer to a larger group of consumers. This is particularly true of infrastructure improvements. This type of socialization is certainly the underlying premise of Act 11, which essentially permits the costs associated with wastewater system improvements to be shifted to water customers in order to avoid steep rate hikes to wastewater customers. Aqua has stated that the primary driver for the proposed revenue increase for both water and wastewater is infrastructure investment. However, it is important to understand that for the Acquired Systems, both the buyer, Aqua, and the selling municipalities should know that at the

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159 I&E St. 5, p. 10.

160 I&E St. 5, p. 38.

161 Glenn A. Watkins is President and Senior Economist of Technical Associates, Inc. OCA St. 4, p. 1

162 OSBA St. 1, pp. 16-17.

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. It should therefore not come to anyone's surprise that in order to meet the increased costs associated with system improvements, rates will have to be increased, in some cases substantially. Where the community representatives opted to sell their system in order to forgo increasing taxes or utility rates or both, they cannot now escape the consequences of that decision. The communities of the Acquired Systems achieved some benefit from the revenue generated by the sale of their wastewater systems. It is not equitable to Aqua's water customers to mitigate the resulting increases in expenses to care for the Acquired Systems and to take on the entire burden of filling the gap between the cost of service to serve these wastewater systems, when these communities have already enjoyed some benefit from the system sale, because the proceeds from their system sale are used to reduce, stabilize, or eliminate municipal costs recovered through taxes.[163] Indeed the Commission relied on these benefits when it determined that the acquisitions were in the public interest.

Further, some level of rate shock, as that term is generally defined, in this case is inevitable.[164] Increasing rates gradually to avoid rate shock is an important consideration in setting reasonable rates, but such gradualism is only one consideration among many that the Commission must consider.[165] Aqua's approach of simply allocating 30% of the proposed wastewater revenue requirement to water customers is arbitrary and does not result in just and reasonable rates.[166]

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[163] See AP St. 1-R, p. 25.

[164] Rate shock has been described as "the public outcry associated with rate increases." *Lloyd v. Pa. Pub. Util. Comm'n*, 904 A.2d 1010, 1018, n.14 (Pa. Cmwlth. 2006).

[165] *Id.*

[166] See *Lloyd*, 904 A.2d at 1020 ("The Commission defines gradualism as limiting the increase to 10% of the total bill—period. It does not explain why 10% of the total bill is the magic number that will prevent rate shock; it is just a number before which all other considerations must fall. It also never explains how the acknowledged discriminatory rate class structures are going to be lessened, only that gradualism is served by limiting the total bill increase by less than 10%. However, while permitted, gradualism is but one of many factors to be considered and weighed by the Commission in determining rate designs, and principles of gradualism cannot be allowed to trump all other valid ratemaking concerns and do not justify allowing one class of customers to subsidize the cost of service for another class of customers over an extended period of time.")

Aqua's proposal to shift 30% of the wastewater revenue requirement to water customers is not equitable. While avoiding rate shock is an important consideration in the setting of rates in certain circumstances, other factors must be considered as well.

Both I&E and Aqua agree that no scale back of the Company's proposed wastewater rates should occur until the total wastewater allocation is eliminated. AP St. 5-R at 25. Thus, any scale back of water rates will first reduce the Act 11 allocation.

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.

2. Water Revenue Allocation

But for the difference between the Company's and OCA's recommended Act 11 subsidy, the OCA accepted Aqua's revenue allocation approach for the metered water classes. In their respective Main Briefs, OSBA and Aqua LUG set forth their arguments to support the reasonableness of their recommendations.[167] Aqua and OCA's approach to revenue increases for water is more reasonable than the modifications proposed by OSBA and Aqua LUG, and should be adopted by the Commission.

Specifically, OCA argues that the results of Mr. Kalcic's class revenue allocations (before the Act 11 subsidy) are not reasonable. OCA St. 4R at 5-7. Even though the residential and industrial classes are currently earning close to parity, Mr. Kalcic's proposal would increase their revenue responsibility by 113% and 114% of the system average percentage increase,

[167] OSBA M.B. at 9-20; Aqua LUG M.B. at 8-11.

respectively. At the same time, the commercial class is also earning close to parity, but Mr. Kalcic recommends this class only receive 74% of the system average percentage increase.

Although Aqua recognized that OSBA's methodology was a reasonable alternative to revenue allocation, Aqua demonstrated that the Company's allocation is more reasonable. AP St. 5-R at 5. Importantly, 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. AP St. 5-R at 5. Rather, Aqua moves each customer classification toward its appropriate percentage cost of service including the Act 11 allocation. AP St. 5-R at 5. Aqua further provided a comparison of its proposed water revenue allocation, with OSBA's recommended revenue allocation in the chart below.

Customer Classification	Company Proposed Increase		OSBA Schedule Proposed Increase		Change in Increase
	Amount	Percent Increase	Amount	Percent Increase	
(1)	(10)	(11)	(12)	(13)	
Residential	$ 58,198,936	17.4%	$ 65,505,228	19.6%	$ 7,306,292
Commercial	19,090,526	16.0%	15,248,036	12.8%	(3,842,490)
Industrial	3,075,729	18.5%	3,082,333	18.5%	6,604
Public	1,362,174	16.0%	387,604	4.6%	(974,570)
Other Water Utilities	2,035	15.9%	-	0.0%	(2,035)
Private Fire Protection	2,822,599	17.5%	328,799	2.0%	(2,493,800)
Public Fire Protection	1,329,034	20.6%	1,329,034	20.6%	$ 0
Total Tariff Sales of Water	85,881,033	17.1%	85,881,034	17.1%	1

AP St. 5-R at 5. As can be seen in the chart, 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. However, from the perspective of customers, the effect of the increase includes both the water increase and the wastewater allocation. The Company's methodology better reflects the cost of service.

Aqua-LUG witness Mr. Baudino also recommended an alternative revenue allocation.[168] Under Mr. Baudino's proposal, the proposed increased to the Commercial and Public classes were reduced from 16.0% to 13.88%, and the proposed increase to the Residential class moved from 17.4% to 18.26%.[169]

While Aqua witness Ms. Heppenstall indicated she had "no philosophical problem" with Mr. Baudino's recommendation to the movement toward the relative rate of return by class, the Company opposed his recommendation. AP St. 5-R at 25. As explained by Ms. Heppenstall, Aqua-LUG's recommendation 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. AP St. 5-R at 25. This movement of revenue from the industrial class to the residential class would result in relative rates of return between 0.98 and 0.96 and, therefore, should be rejected. AP St. 5-R at 25. OCA further noted that Aqua LUG does not consider the many other complexities of this case, including: gradual movement of various divisions to a state-wide rate, the Public Fire revenue subsidy required by statute and subsidization of wastewater operations by water operations.[170]

In sum, but for the Act 11 subsidy allocated to water customers, the Company's allocation of revenues between all water customer classifications and all wastewater customer classifications is reasonable, and should otherwise be approved.

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168 Aqua-LUG St. 1 at 5; Exhibit RAB-2.

169 Aqua-LUG St. 1 at 5.

170 OCA St. 4R at 12.

D. Tariff Structure and Rate Design

1. Water Rate Design

Aqua's witness Constance Heppenstall described at length the Company's method for designing water rates. Ms. Heppenstall explained that the Company developed 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 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.

AP St. 5 at 11. Aqua's proposed water rates comply with these guidelines.[171]

OCA contended that Aqua's proposed increase to water customer charges was unsupported and that certain overhead costs were improperly included. Specifically, according to OCA, Aqua included indirect O&M expenses, indirect depreciation expenses and indirect rate base within its customer cost analysis.[172]

Aqua argues that the indirect costs included in its calculation of customer charges are sufficiently connected to the provision of service and consistent with Commission precedent.

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[171] AP St. 5 at 11. See Aqua MB, pp. 230-33.

[172] OCA Sch. GAW-6; OCA MB, p. 99-101.

Specifically, those costs related to indirect O&M expenses, indirect depreciation expenses and indirect rate base are essential to the maintenance of customer facilities, and related to the work of personnel working on customer facilities and customer accounting.[173]

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.[174] 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.

Aqua-LUG opposed certain industrial class customer charges, noting that Commercial and Industrial customer charges and rates for consumption blocks 1 through 4 are the same for both classes," but "Industrial class rates also have 5th and 6th blocks that Commercial customers do not have."[175] Aqua-LUG's witness Richard Baudino recommended that the Company keep charges for blocks 1-4 of the Commercial and Industrial Classes similar, while avoiding "excessive increases for blocks 5 and 6 of the Industrial class."[176] 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.[177]

Aqua-LUG's recommendation should be rejected. As explained by the Company, this proposal is not necessary.

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[173] AP St. 5-R, p. 9.

[174] *Pa. Pub. Util. Comm'n v. Aqua Pa., Inc.*, Docket No. R-00038805, 236 PUR 4th 218, 2004 Pa. PUC LEXIS 39 (Order entered Aug. 5, 2004) ("Aqua 2004 Order").

[175] Aqua-LUG St. 1 at 5.

[176] Aqua-LUG St. 1 at 5-6.

[177] Aqua-LUG St. 1 at 6.

2. Wastewater Rate Design

I&E and OCA objected to the Company's proposed wastewater rate design. As explained above, I&E's wastewater allocation was based on I&E witness Joseph Kubas' recommended rate designed for each wastewater rate zones and based on his proposals to reduce the Act 11 wastewater allocations to water customers. For the reasons explained above, I&E's rate design methodology for wastewater should be adopted.

3. Metered and Unmetered Charges

Aqua's unmetered wastewater rates, particularly in Lake Harmony, were raised by several witnesses in the public input hearings. OCA's witness Watkins summarized the concerns voiced by these customers:

> Several customers that own homes in Lake Harmony voiced concerns over their flat wastewater rates at the public input hearings. As noted by various witnesses, Lake Harmony is largely a vacation area in which there are a multitude of exceptionally large vacation properties with a large number of seasonal tenants. A few of the witnesses are year-around Aqua wastewater customers while others are also seasonal tenants but have more modest homes with few occupants. These Lake Harmony wastewater customers testified that it is not fair for their wastewater bills to be the same as those from much larger homes with numerous occupants.

OCA St. 4 Supp. at 1 (citing Tr. 69-71, 112-13, 166-68, 199, 201-04, 323-25, 439-40).[178]

Aqua explained that it serves 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. AP St. 9-R at 28. Unmetered, flat-rate wastewater customers make up the communities of Tobyhanna, Pennsylvania, (730 customers) and Lake Harmony, Pennsylvania, (995 customers). 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

[178] Two of the eight Lake Harmony customers who contributed to this testimony, Mr. Day and Mr. Weiner, are active Formal Complainants.

customers on a flat rate basis.[179] As part of the Company's filing, Aqua proposed to continue billing these customers at a flat rate. Customers' properties in Tobyhanna and Lake Harmony obtain their water supplies from individual wells not owned or operated by a utility or a municipality/municipal authority. AP St. 9-R at 28. To the best of the Company's knowledge, the water wells on each of these properties are not individually metered. AP St. 9-R at 28. And, even if they were, the meters exist on private property and reading the meters is not practical, nor the responsibility of a water or wastewater provider.[180]

OCA recommended that Aqua develop a pilot program to install meters for those customers who want them.[181] Aqua opposed this recommendation for a variety of reasons including cost and feasibility.[182]

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. However, I note that certain Aqua acquisitions include situations where the selling utility permitted deduct meters, and where Aqua continues permitting the use of such devices. For example, eligible customers in Aqua's Cheltenham rate zone may purchase, install, and maintain a "deduct meter", subject to

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179 AP St. 9-R at 28.

180 AP St. 9-R at 28.

181 Complainant John Day wrote in support of OCA's proposal. Letter in Lieu of Brief filed January 10, 2022.

182 AP St. 5-R at 17-18; AP St. 9-R at 29-30.

an annual inspection fee.[183] These situations effectively serve as "pilot programs" that provide useful cost and operational data that can be evaluated in the context of future rate proceedings.

OCA also pointed out that in certain Aqua rate zones that include both metered and unmetered rates, some zones have metered and unmetered rates that result in similar revenues. However, in other zones there is a significant different between the average metered rate customer and flat rate customer. Accordingly, OCA recommended that Aqua study the reasonableness of its unmetered rates and provide the results in its next base rate case.

According to Aqua, there are valid reasons for the differences between metered and unmetered rates. Aqua further explains that its unmetered rates assume an average usage of 4,000 gallons per month, which is standard industry practice.[184] 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.[185] Therefore, there is no need to study the reasonableness of unmetered rates.

I agree with the OCA that Aqua should study the reasonableness of its unmetered rates. While I recognized that the use of an average monthly usage of 4,000 gallons per month may be the industry standard and consistent with Aqua's system averages, this method may not result in fair rates in areas where there is a significant mix of types of housing. Mr. Duerr's explanation that customers must pay for the availability of service regardless of their residency status certainly supports the theory supporting customer charges. 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.

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[183] See Original Page Nos. 8.9.1 to 8.9.2 of Aqua's effective wastewater tariff and Original Page Nos. 10.9.1 to 10.9.2 of Aqua's proposed wastewater tariff for the Cheltenham rate zone deduct meter program.

[184] AP St. 5-R at 14-15.

[185] AP St. 9-R at 29.

In response to concerns raised in the testimony of customers and the OCA's rate structure witness in the Company's last base rate case, Aqua agreed to study the feasibility of implementing in Pennsylvania a summer wastewater usage cap. 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.

Aqua opposes further study of a cap on non-seasonal wastewater rates because Aqua complied with its prior commitment from the 2018 Base Rate Case to provide a study as a part of this base rate proceeding, and the results of the study revealed that a cap only benefits high water users.[186] 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 OCA will produce results similar to the analysis presented by Aqua in this case, and thus further studies are not necessary.

I agree with Aqua that no further study of a non-seasonal wastewater cap is necessary. OCA did not demonstrate that further study would yield better results.

E. Tariff Structure – Proposed Reconcilable Rider Mechanisms

1. Energy Cost Adjustment Mechanism (ECAM)

Aqua PA has also proposed to implement an Energy Cost Adjustment Mechanism (ECAM) in order to address both increases and decreases in the rates charged by energy suppliers from whom the Company purchases natural gas and electricity. According to Aqua, the "mechanism ensures that the Company recovers the costs of energy used to provide water service to its customers and only those costs" and that "[c]ustomers also benefit from any and all of the Company's efforts to control costs."[187]

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186 AP St. 5-R, p. 15; see also AP Exhibit 5-C.

187 AP St. 4 at 5.

I&E, OCA and OSBA oppose the use of this mechanism for the recovery of energy expenses. According to I&E, these expenses are routine O&M expenses and Aqua failed to provide a justification for using an adjustable rider to recover these costs. Aqua, failed to clearly explain how its claim for recovery of a routine operating expense through the ECAM mechanism would be appropriate.[188] According to I&E, 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.[189] I&E also charges that the ECAM would only apply to tariff rate customers and not rider rate customers, the proposed ECAM is discriminatory to tariff rate customers.[190] 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.[191] Finally, the Company's arguments that it reports earnings on a quarterly basis negates the single-issue nature of the ECAM fails.[192] The proposed surcharge would benefit Aqua by increasing revenue in lockstep with expense increases for specific individual expenses without allowing the full examination of all expenses and revenues as occurs in a base rate case.[193] The proposed ECAM surcharge should not be permitted as it circumvents the normal rate case process that allows all changes to be evaluated simultaneously.

OCA echoes I&E arguments and emphasizes that Aqua's proposal amounts to single-issue ratemaking.[194] According to OCA, these costs are not unique, unexpected, or non-recurring. Rather, the ECAM would apply to costs that are normal, ongoing costs of providing

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188 *See* I&E St. No. 3-SR, pp. 9-13.

189 I&E St. No. 1-SR, p. 65.

190 I&E St. No. 3, pp. 23-24; I&E St. No. 3-SR, pp. 11-13.

191 *Id.*, pp 22-23; *Id.*, pp. 9-13.

192 I&E St. No. 3-SR, pp. 10-11.

193 *Id.*, p. 11.

194 OSBA also argues that ECAM amounts to single issue ratemaking. OSBA Main Brief at 6.

water service, and as such, do not warrant special recovery separate and apart from other costs recovered through base rates. Aqua has exercised some control of purchased energy costs through its selection of suppliers.[195] Moreover, Aqua has already captured the potential for future changes in purchased water and energy costs as part of its adjustments to its FPFTY claims.[196]

OSBA notes that the use of the ECAM to recover energy costs is unreasonable because the Company would have no incentive to control its energy usage or costs. Cost increases would be automatically passed onto customers.[197] OSBA further notes that the ECAM would insulate the Company from fluctuating energy costs, thereby lowering Aqua's business risk. This should result in a lower return on equity (ROE) for Aqua, but the Company made no such proposal. Furthermore, by lowering Aqua's business risk, while not lowering the Company's ROE, the entities that would most benefit from the ECAM proposal are the Company's shareholders. OSBA Statement No. 1, at 21-22.

According to OSBA, the only way ratepayers would benefit from ECAM is if energy costs decrease between base rate proceedings. Given the economic challenges due to rising energy cost as well as the ongoing impact of the COVID-19 pandemic, the Commission should incentivize Aqua to aggressively control its energy costs by rejecting Aqua's ECAM proposals.

I agree with the statutory advocates and recommend that the ECAM for the recovery of energy costs be rejected. 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

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195 See Aqua Exh. 1-A, Schs. C-6.1.i., C-6.1.ii.

196 OCA St. 4 at 25; see Aqua Exh. 1-A, Schs. 6.1, 7.1.

197 OSBA St. 1, p. 20-22.

service."[198] Moreover, in the current economic climate, energy costs are not likely to decline, which is the only scenario where ratepayers would benefit from permitting the recovery of costs through a rider rather than through base rates.

Further, I also agree that the ECAM equates to single issue ratemaking. The Pennsylvania Commonwealth Court has declared that "single issue rate making is prohibited if it impacts on a matter considered in a base rate case."[199] "The 'cursory' review undertaken for a surcharge is not a substitute for the review undertaken in a base rate case to determine whether a rate is just and reasonable."[200] It 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. Moreover, to do so would violate the ratemaking principle of matching revenues, expenses, return and rate base.[201] Finally, 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.

2. Purchased Water Adjustment Clause (PWAC)

Aqua PA proposed a similar rider mechanism for the recovery of purchased water costs in order to address both increases and decreases in the rates charged by non-affiliated suppliers from whom the Company purchases water.[202] Aqua's proposal relies, in part, on the Commission's approval of a similar recovery mechanism for Newtown Artesian Water

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198 AP St. 4 at 6.

199 *Popowsky v. Pa. Pub. Util. Comm'n*, 869 A.2d 1144, 1151 (Pa. Cmwlth. 2005) (*CSIC*), appeal denied, 895 A.2d 552 (Pa. 2006) (citing *Phila. Elec. Co. v. Pa. Pub. Util. Comm'n*, 502 A.2d 722, 727-28, 93 Pa. Commw. 410, 422 (1985) (PECO 1985) and overturning Commission's grant of a wastewater utility's request to implement a Collection System Improvement Charge).

200 *CSIC*, 869 A.2d at 1157.

201 See OCA St. 3 at 15-16.

202 AP St. 4 at 2; see also Tariff Water No. 3.

Company.[203] The statutory advocates oppose the PWAC for many of the same reasons that they oppose the ECAM. I agree that the PWAC should be rejected and find that Aqua's reliance on Newtown Artesian Water is misplaced.

Like the ECAM, I&E argues 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. I&E argues the Company has unreasonably requested an exception to the normal rate making treatment for purchased water expense by requesting that future increases be automatically recovered through a reconcilable surcharge.[204] In the past, the Commission has only granted surcharge treatment when it has been 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.[205] Here, Aqua has not presented any such evidence.[206]

OCA adds that purchased water costs are known and are subject to agreements with the provider. Aqua has voluntarily entered into its contracts to purchase water with various entities so those costs are not entirely beyond its control.[207] OSBA observes 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. Finally, OSBA's expert witness Mr. Kalcic stated that the clause 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

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203 *Pa. Pub. Util. Comm'n. Newtown Artesian Water Co.*, Docket No. R-2009-2117550, Order at 6-17 (Apr. 15, 2010) (*Newtown*) (affirmed by *Popowsky v. Pa. Pub. Util. Comm'n*, 13 A.3d 583 (Pa. Cmwlth. 2011).

204 I&E St. 3, . 14.

205 *Id.*

206 *See* I&E St. No. 3, pp. 11-19; I&E St. No. 3-SR, pp. 7-8 for a full discussion of the PWA issue.

207 See, e.g., Aqua Exh. 1-A, Sch. C-7.1.i.

0.7% of the Company's total costs. Any changes in water costs will have a minimal impact on Aqua's earnings.[208]

I agree with the statutory advocates and recommend that Aqua recover its purchased waters costs in base rates rather than by the PWAC. Aqua's reliance on Newtown Artesian is misplaced. At the time its request, Newtown purchased nearly 60% of its water from other sources.[209] Its purchased water expense represented about 25% of its annual revenues and 34% of its O&M expenses for the same period.[210] In stark contrast, Aqua's projected purchased water costs will amount to only about 0.7% of its total water cost of service.[211] 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.

3. Federal Tax Adjustment Surcharge

Aqua proposes to implement an adjustment clause that will adjust its water and wastewater base rates for changes in federal corporate income tax rates, called the Federal Tax Adjustment Surcharge (FTAS).[212] Company witness Ms. Christine Saball explained that the FTAS was proposed for several reasons, and highlighted the fact that "significant changes in the

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208 OSBA Statement No. 1, at 24.

209 Newtown Artesian, at 3.

210 *Id.*; see also I&E St. 3 at 18-19; I&E Exh. 3, Sch. 3 at 1-2.

211 OCA St. 4 at 25.

212 AP St. 8 at 14-15; see also Tariff Water No. 3, Original Page 29-31, and Tariff Sewer No. 3, Original Page 16-18.

federal corporate income tax rate can drastically impact the Company's revenue requirement."[213] Citing recent experience with the Tax Cuts and Jobs Act of 2017 (TJCA), Ms. Saball explained that "any time delay in adjusting rates…can result in either significant refunds or retroactive collections after the effective date of the tax rate change."[214]

I&E opposes 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.[215] 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 Tax Cuts and Jobs Act (TCJA).[216] 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, there is no need for the proposed FTAS at this time.

I&E further observes, with regard to the excess ADIT concerns, 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.[217] It is important for the Commission to not allow rate adjustments in a surcharge mechanism for excess ADIT changes as the Company has proposed.[218]

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213 AP St. 8 at 15.

214 AP St. 8 at 15.

215 I&E St. No. 1-SR, pp. 32-46.

216 *Id.*, p. 32.

217 *Id.*, pp. 40-41.

218 *Id.*, p. 40.

OCA also opposes the implementation of the FTAS. The FTAS is designed to adjust base rates to reflect future increases or decreases in the federal corporate income tax rate.[219] The FTAS is premised on Aqua's belief that the federal corporate income tax rate may be increased from 21% to 28%. The Company implies that the Commission's implementation of the tax rate change resulting from the TCJA was too slow.[220]

According to 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. The OCA submits that changes to the federal corporate income tax rate should be addressed by the Commission on a generic basis for all of the public utilities under its jurisdiction.

I agree with OCA and I&E that Aqua's proposed FTAS should be rejected by the Commission. It is uncertain when the next change in the federal corporate income tax rate will occur and whether any future legislation enacting a change in the federal corporate tax rate would include other provisions which would affect tax liabilities. For example, the TCJA included provisions affecting the tax treatment of net operating loss carrybacks and caps and limited the net interest deduction.[221] Additionally, Aqua witness Saball noted in her rebuttal testimony that "I fully agree that no one can say with any certainty if/when an increase to the federal corporate income tax rate will take effect."[222] At this time there is no pending legislation proposing an increase to the federal corporate income tax rate. 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. While it may be true that 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. The FTAS proposal is premature and should be rejected.

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219 OCA St. 1 at 14-15.

220 OCA St. 2 at 15.

221 OCA St. 2 at 15 (internal citations omitted).

222 AP St. 8R at 10.

4. Universal Service Rider

Aqua proposed to implement a Universal Service Rider (USR) to recover the net costs of the universal service plan,[223] similar to the riders in place at the Peoples Companies and other energy utilities throughout the state. Aqua would recover the costs of its customer assistance program (CAP) from residential customers.[224] Cost related to CAP discounts, CAP arrearage forgiveness benefits, CAP administration by a third party (i.e., Dollar Energy Fund) and the proposed Conservation and Emergency Repair Program ($100,000 per year) were proposed to be recovered through the USR.[225] 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.[226] According to Aqua the use of the USR will ensure that ratepayers are only responsible for actual costs of the program, rather than projected costs that may not come to fruition.[227]

OCA contends that Aqua's net costs should be recovered in base rates. I&E strongly opposes OCA's recommendation to recover the USP costs through base rates. Instead, I&E recommends that it is preferable that the costs for a full-scale universal service plan be recovered via a reconcilable surcharge mechanism like that used by the Peoples Companies that tracks dollar-for-dollar net costs.[228]

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

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223 Aqua's proposed universal service plan is discussed below.

224 AP St. 10 at 9.

225 AP St. 10 at 9.

226 AP St. 10 at 10.

227 AP St. 10, p. 10.

228 I&E St. 1-R, p. 3.

electric distribution companies in Pennsylvania is preferable.[229] Further, the use of a rider allows actual costs to be maintained and tracked separately. That is, the costs proposed for inclusion in the Company's USR are easily identifiable, and adjustment of these costs is a simple mathematical exercise. Furthermore, "[t]he operation of the USR will be subject to audit by the Commission and will also be subject to an annual reconciliation process."[230]

Moreover, certain costs that the Company will incur under its CAP program are outside of its control. The fact that Aqua is the first water/wastewater utility in Pennsylvania to propose a reconcilable rate rider for its low-income program costs,[231] illustrates the point. Aqua is launching a new CAP that is more robust than any low-income program the Company has had to date. As such, although the Company has made enrollment projections, actual enrollment could be less than or exceed the projections. These projections include a substantial ramp-up in projected participation between Years 1 and 3 of the CAP.[232] There is no limit on the number of customers who could participate in the CAP. This means that costs may vary based on enrollment levels.[233] In this regard, the reconcilable nature of the proposed USR "ensure[s] ratepayers are only responsible for actual program costs which may be more or less than original projections."[234] The ability to adjust and reconcile the costs associated with such programs via

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229 *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)("*Aqua-Peoples Acquisition Order*"), pp. 147-150.

230 AP St. 2 at 18; see also Tariff Water No. 3, Original Page 32-34, and Tariff Sewer No. 3, Original Page 19-21.

231 OCA St. 5 at 42-43

232 AP St. 10 at 11.

233 AP St. 10-R at 12; see also AP Exhibit RFB-1-R (OCA witness Colton admitting no limitation on the number of customers who could participate was proposed).

234 AP St. 10-R at 13.

the USR "is particularly important when launching a new program that may not meet or could exceed enrollment expectations."[235]

On the other hand, including projected costs in base rates would allow the costs to be subsumed regardless of the potential difference between projected and actual costs. The Commission has recognized that recovery of universal service costs through a surcharge rather than in base rates is a more effective way to ensure robust customer assistance programs.[236] As Ms. Black explained the rider proposed in this case is very similar to that used by its sister utilities, the Peoples Companies. Further, the proposed rider is consistent with the general theme of the acquisition settlement to share best practices throughout Aqua and the Peoples Companies. This is reaffirmed by the plain language of the Aqua-Peoples Settlement.[237] The settlement makes clear that Aqua's proposal will include "a comparable funding mechanism that exists for electric and gas utilities in Pennsylvania."[238] The Commission approved this settlement as a part of the Aqua-Peoples Acquisition Order and, therefore, Aqua's proposed USR is consistent with the directives of the Commission and its obligation to comply with the terms of the settlement.

XII. MISCELLANEOUS

A. Universal Service Issues

As part of Aqua's base rate filing, it has included enhancements to its existing universal service programs. Aqua made certain commitments regarding its existing Helping Hand program 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,

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235 AP St. 10-R at 13.

236 Customer Assistance Programs: Funding Levels and Cost Recovery Mechanisms, Docket No. M-00051923, at p. 15 (Final Investigatory Order entered Dec. 18, 2006) ("Final CAP Investigatory Order"). See also testimony of Aqua witness Rita Black, AP St. 10 at 10.

237 See OCA St. 5 at 42-43.

238 *Aqua-Peoples Settlement* at ¶ 108 (emphasis added).

Inc., *f/k/a* Aqua America, Inc.[239] In the settlement agreement approved by the Commission in the *Aqua-Peoples Acquisition Order*,[240] it was agreed that:

> 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.

See Aqua-Peoples Settlement at ¶ 108. Furthermore, public utilities are authorized under the Code and the Commission's regulations to develop and implement a USP.[241] These enhancements were undertaken under the supervision of Rita Black, Director of Community Assistance Programs of Essential Utilities. Previously, she was responsible for developing and administering the Universal Service Rider and preparation of the Universal Service Energy and Conservation Plan (USECP) for the Peoples Companies. Since 2014, she has been responsible for oversight of all low-income programming for the Peoples Companies, including their CAP, Low Income Usage Reduction Program (LIURP), Emergency Repair Program, Hardship Fund and Customer Assistance, Referral and Evaluation Services (CARES).[242] The Company presented plan to the Helping Hand Collaborative prior to filing in this base rate case and utilized the best practices from the Peoples Companies.[243] The proposed USP included a rate rider to recover various program costs. According to Aqua, the use of a rate rider facilitates

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239 Aqua-Peoples Acquisition Order.

240 Docket Nos. A-2018-3006061, A-2018-3006062 and A-2018-3006063 (Joint Petition for Approval of Nonunanimous, Complete Settlement Among Most Parties dated June 26, 2019) ("*Aqua-Peoples Settlement*").

241 See generally 66 Pa.C.S. §§ 1401-1418; see also 52 Pa. Code § 69.265.

242 AP St. 10 at 1-2.

243 AP St. 10 at 3.

transparency, more directly encourages the promotion of the program, and is a recognized rate recovery method approved by the Commission.[244] The Company's proposal forms a comprehensive universal service program and this approach was vetted and agreed to in the *Aqua-Peoples Acquisition Order*.

Aqua has proposed to implement a new water and wastewater bill discount program and to offer a new conservation and repair program for its water and wastewater customers.[245] Aqua's proposed water customer discount program would provide the following discounts:

Income Level (Federal Poverty Level or FPL)	**Water Discount**
0-100% of FPL	100% discount on the fixed charges and 100% discount on the first 2,000 gallons of consumption for customers
101-150% of FPL	100% discount on the fixed charges and 50% discount on the first 2,000 gallons of consumption for customers
151-200% of FPL	100% discount on the fixed charges and 0% discount for customers

Aqua St. 10 at Exh. RFB-2. [246]

The proposed wastewater customer discount program would provide the following discounts:

Income Level (Federal Poverty Level or FPL)	**Wastewater Discount**
0-100% of FPL	75% discount on the fixed charges and 100% discount on the first 2,000 gallons of consumption for customers
101-150% of FPL	65% discount on the fixed charges and 50% discount on the first 2,000 gallons of consumption for customers
151-200% of FPL	50% discount on the fixed charges and 0% discount on consumption for customers

AP St. 10 at Exh. RFB-2.[247]

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[244] Aqua's proposal to recovery universal service costs with a rider mechanism is address in the discussion of Tariff issues.

[245] AP St. 10 at 7-8, Exh. RFB-2.

[246] Table was created by OCA from data included in Exhibit RFB-2.

[247] Table was created by OCA from data included in Exhibit RFB-2.

Aqua also proposed to continue its current arrearage forgiveness program which forgives $25 for each in full and timely payment.[248] The Company also proposed to allocate $100,000 for an annual budget for assistance to include conservation kits and an emergency component for those with leaks requiring repairs.[249] Aqua proposed to recover the costs of the program through a reconcilable rider similar to the one used by Peoples to collect its statutorily required universal service costs.[250] Aqua proposed to contract with Dollar Energy as its program administrator.[251]

1. Consideration of Affordability and CAP Design

OCA spends a substantial portion of its Main Brief analyzing the affordability of water and wastewater bills.[252] CAUSE-PA similarly argues that existing rates are unaffordable.[253] Therefore, both parties recommend modifications to Aqua's proposed CAP.

OCA argues that the benefits of the affordability program contemplated by the proposed USP should be modified to increase discounts afforded to customers. This in turn, OCA urges, will also generate positive benefits to the utility.

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. The Company contends that the program as designed does take 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 contends that OCA and CAUSE-PA fail to consider the effect of their proposed changes upon the rates of non-low-income

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248 AP St. 10 at 9.

249 AP St. 10 at 8.

250 AP St. 10 at 10.

251 AP St. 10 at 13.

252 See OCA MB at 120-131.

253 CAUSE-PA MB at 17-18.

customers. OCA's proposed increased discounts will increase costs by nearly $2 million for discounts alone, and will nearly double (from $25 to $45 per month) arrearage forgiveness costs. These increases could be even greater, depending upon low-income customer participation. Particularly in the case of a new program, with substantial uncertainties regarding the level of customer participation, it is not reasonable to substantially increase the benefits proposed by the Company to the levels recommended by OCA and CAUSE-PA.

I agree with the Company that substantial modification of Aqua's proposed CAP at this time is not appropriate. While I recognize that the Public Utility Code permits consideration of a broad array of issues in base rate proceedings, I do not believe this is the best format to consider the complex social and economic issues related to affordability as it impacts CAP design. OCA subsequently admits that the Commission has not established what water and wastewater burden should be deemed affordable, and concedes 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."[254]

For example, OCA and CAUSE-PA argue that Aqua should be required to implement a Percentage of Income Program (PIP) in its next base rate case. I agree with Aqua that this base rate proceeding is not an adequate venue for consideration of whether implementing a PIP is reasonable. Instead this complex issue is better reviewed in the universal service stakeholder process which will allow the parties to review data from the current program and its associated costs in a more flexible discourse than that provided within the constraints of a base rate proceeding.

Similarly, 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. Aqua explains that many of these recommendations cannot be efficiently executed until Aqua converts its current customer information system (CIS) to SAP in 2023. I agree with Aqua that

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[254] OCA MB at 135-136 (quoting OCA St. 5 at 31).

consideration of the structural changes proposed by OCA and CAUSE-PA should be deferred until Aqua's transition to SAP. Aqua states that it has committed to provide arrearage forgiveness benefits for each full CAP payment made, regardless of timeliness, when the conversion to SAP is completed.[255] As such, while Aqua opposes implementing this recommendation at this time, it has agreed to implement the recommendation once its CIS has been replaced.

OCA and CAUSE-PA have not demonstrated that the costs to make these changes while Aqua is still using its current CIS is reasonable. Further, these enhancements can be considered in the iterative process of evaluating the effectiveness of the design of Aqua's universal service program in the future.

OCA concedes that Aqua's proposed bill discount program will, in fact, improve affordability for low-income customers. As Aqua points out in its brief, Aqua's proposed USP was presented to and vetted by stakeholders participating in its Helping Hand Collaborative prior to this proceeding.[256] Those stakeholders included parties to this proceeding such as CAUSE-PA and OCA. Furthermore, Aqua was able to draw upon the knowledge and expertise of their affiliates, the Peoples Companies, and the Peoples Companies' Director of Community Assistance Program, Ms. Rita Black, to develop the USP. While a robust low-income program is certainly required to offset the inevitable rate increases proposed in this case, increasing cost to non-low-income customers should also be mitigated.

2. Income Verification

I&E generally agrees with the Company's proposed USP. However, I&E witness Ms. Wilson relatedly recommended that the Company be required to verify enrollees' income for

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[255] AP St. 10-R at 10.

[256] AP St. 10 at 3.

them to be eligible for CAP.[257] OCA and CAUSE-PA agreed with the Company's proposal to permit self-attestation of income for enrollees.[258]

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."[259] Moreover, self-attestation of income has previously been encouraged by the Commission.[260] During the periods where this was utilized, Ms. Black testified that the 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."[261] As with any income-based programs, there may be individuals that attempt to perpetrate fraud.[262] However, customers who are genuinely low-income are generally those that seek assistance, in Ms. Black's experience.[263]

I agree with Aqua that I&E's recommendation regarding income verification be rejected. 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.

3. Application Process: Transitioning Helping Hand customers to the new Customer Assistance Program

OCA and CAUSE-PA both recommended a streamlined application process for existing Helping Hand participants to participate in the proposed CAP.[264] However, Aqua

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257 I&E St. 1 at 45-47.

258 OCA MB at 143-144; CAUSE-PA St. 1-R at 4-6.

259 AP St. 10-R at 3.

260 AP St. 10-R at 4.

261 AP St. 10-R at 4.

262 AP St. 10-R at 4.

263 AP St. 10-R at 4.

264 OCA St. 5 at 62; CAUSE-PA St. 1 at 46-47.

explained that the lack of an automatic enrollment in CAP for existing Helping Hand customers is needed to ensure customers are eligible.[265] 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.[266] Indeed, Aqua 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 them to participate.[267] These customers can confirm their income via self-attestation, and enroll over the phone, online or through a participating agency.[268] Moreover, while the Company will encourage participation in the new program, existing Helping Hand customers should have the right to make an affirmative choice whether to enter the new CAP.

I agree with Aqua that the proposed application process to transition Helping Hand customers who qualify for the new CAP is reasonable and the modification proposed by OCA and CAUSE-PA should be rejected.

4. Community Education and Outreach Plan

OCA and CAUSE-PA recommended that Aqua implement an extensive community outreach program to promote the CAP. Aqua agreed that a Community Education and Outreach Plan (CEOP) is an important component of universal service programs.[269] 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 utilize 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

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265 AP St. 10-R at 3.

266 *See* AP St. 10-R at 3.

267 AP St. 10-R at 3.

268 AP St. 10-R at 3.

269 AP St. 10-R at 5.

to participation and encouraging customers to avail themselves of all beneficial programs."[270] In this regard, Aqua's 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.

The OCA 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."[271] Specifically, OCA recommended that the Company's CEOP include the following elements:

> * The outreach should focus on community-based outreach as well as utility-based outreach. "Touchpoints" can involve a presence at community centers, senior centers, local houses of worship, and local schools.
>
> * The outreach is best implemented through "trusted messengers" that are part of the community toward which outreach is directed. In addition to having utility customer service representatives or collection staff promoting the programs, there should be representatives from within the community who are involved.
>
> * The outreach should be focused through boots-on-the-ground grassroots strategies. Research consistently demonstrates that 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
>
> * The outreach should be focused on efforts to go to where the community is rather than making the community come to the utility. The strategy is to identify where the community lives, works, plays and prays and to be present at those locations rather than to sponsor "events" that community members must attend.

OCA St. 5-SR at 11. CAUSE-PA has further recommendations to enhance the outreach planned by Aqua.

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270 AP St. 10-R at 5-6.

271 *See* OCA St. 5 at 49; see also, OCA St. 5 at 47-50.

I recommend that Aqua continue to work to develop a CEOP as described by Ms. Black in her testimony. Aqua does not appear to oppose the recommendations of CAUSE-PA and OCA for the development of the CEOP, therefore Aqua should consider the input recommended by OCA and CAUSE-PA and incorporate their reasonable recommendations into Aqua's outreach program. If OCA and CAUSE-PA provide recommendations to Aqua which Aqua does not adopt, OCA and CAUSE-PA may seek appropriate relief from the Commission.

5. Modifications to the Hardship Fund

Aqua also agreed to modifications of its Hardship Fund as part of the overall modifications to its USP in this proceeding. Aqua further addressed an additional outreach-related recommendation from CAUSE-PA regarding the promotion and utilization of the Company's Hardship Fund.[272] The Company generally agreed with Mr. Geller's recommendations to:

- Promote the fund to contact center staff and utilize a community-based organization to manage the fund in order to increase referrals;
- Revise the maximum grant available on a one-per-calendar-year basis to $500 to allow the fund to be better utilized by more customers in need; and
- Carry-over unspent funds from one year to a subsequent year.[273]

I recommend that Aqua adopt these refinements to its CAP program.

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[272] AP St. 10-R at 6-7.

[273] *See* AP St. 10-R at 6-7.

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." [274] The term "Non-Revenue Usage and Allowance" includes "Main Flushing," "Blow-off Use," "Unavoidable Leakage," "Located & Repaired Breaks in Mains & Services" and "Other".[275] Calculating UFW is important because it determines the amount of non-revenue water in a distribution system, helping to identify leaks and inaccurate meter readings.[276] 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.[277] The Commission considers levels of UFW above 20% to be excessive.[278] Aqua has maintained its UFW below the Commission's target of 20% despite the fact that a number of recently acquired water systems have presented operational challenges.[279]

OCA does not argue that Aqua's UFW is underreported or excessive. Instead it contends that Aqua should modify its reporting of UFW by requiring it 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 AWWA Audits and the annual Chapter 110 Reports submitted to PADEP.[280] Aqua explains that this recommendation is inappropriate as Aqua's Section 500 Report is prepared on a consolidated basis across operating divisions. The Section

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274 OCA St. 7 at 3.

275 OCA St. 7 at 3.

276 OCA St. 7 at 4.

277 OCA St. 7 at 4.

278 52 Pa. Code § 65.20(4).

279 AP MB at 162.

280 OCA St. 7 at 6.

500 Report is a comprehensive report containing financial and operating data regarding the entire company, and Aqua should not be singled out among all utilities to prepare separate reports for operating divisions. In addition, Section 500 Reports require different information than Chapter 110 Reports submitted to PADEP. Finally, Aqua argues that AWWA Water Audits are a different measurement from UFW measurements prepared for the Section 500 reports. Further, 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.[281] According to Aqua's witness Todd Duerr, committing to file separate Schedule 500 reports for each operating division while that rulemaking is pending is "redundant, time consuming and inefficient.[282]

I agree with Aqua that OCA's proposed modification to the reporting of UFW should be rejected. OCA has not demonstrated that its modification will result in a significant benefit to Aqua's customers.

2. Pressure Measurements

OCA contends that Aqua is not in compliance with Commission regulations regarding the placement of measurement point to track water pressures within Aqua's system. Section 65.6(d) of the Commission's regulations[283] 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

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281 *See* Docket No. L-2020-3021932 *Proposed Water Audit Methodology Regulation* Order entered November 18, 2021.

282 AP St. 9-R, p. 4. See also AP MB at 163-164.

283 52 Pa.Code § 65.6(d).

> period of at least three years and shall be made available to representatives, agents, or employees of the Commission upon request.

According to OCA, appropriately "representative points" mean readings taken "at only a low and high pressure point." Aqua disputes this interpretation of the regulation and maintains that its method of conducting pressure surveys on its system is compliant with the regulation.

Aqua's witness Todd Duerr generally agreed with OCA witness Terry Fought's characterization of Aqua's current system for pressure surveys. Specifically, he notes that Aqua records pressures annually at over 24,000 hydrants in its systems. In further support of how the Company monitors system pressures, Aqua has operational procedures in place including: (1) a 24/7 operations control center for the SEPA water system that monitors tank levels, adjusts pump operation, well supply and coordinates with our water plant to sustain tank levels and resultant system pressure targets; (2) in Greater PA, our operations staff monitors pressures at points of entry to the system (water plants, well discharge), water storage tanks and pressure regulating vaults in addition to hydraulic models and SCADA information where available. Those local recordings serve as proxy checks for system performance as the Company has established criteria for normal operating ranges for those pressures. If an operator observes an abnormality from the standard, follow-up investigation occurs to check system performance. Finally, if a customer calls reporting a pressure problem, we dispatch system operators to investigate and correct the issue if in our system (e.g., Company owned facilities, mains and service lines).[284]

Section 65.6 of the Commission's regulations does not define what is meant by "representative points" on a water system. If the Commission intended to limit pressure surveys to those taken a "one high and one low pressure point" within a system in order to be sufficiently "representative," the regulation would include that language.

While Aqua's pressure surveys may be improved with the additional measurements recommended by OCA, 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

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[284] AP. St. 9-R, p. 6.

125 psi or that the points that measurements are taken are not sufficiently "representative." Mr. Duerr provided a description of Aqua's pressure survey methodology and explained how the existing system is used to target problem areas in Aqua's distribution systems.[285]

OCA also recommends that Aqua should reduce pressures to all customers below 125 psi, or be responsible for any damages resulting from higher pressures.[286] OCA further contends that Aqua should install pressure reducing valves for customers experiencing constant high pressures or be responsible for damages resulting from high pressures if it fails to reduce pressures to all customers below 125 psi.[287] OCA points to the public input testimony of Richard Gage, a water customer in Chesterbrook.[288] Mr. Gage spoke at length at the public input hearing and stated that he had experienced extremely high pressures, some as high as 200 psi, which has caused repeated damage to homes and the neighborhood. Mr. Gage indicated that neighbors described similar issues regarding pressures to him. These customers are at risk of damage through no fault of their own. According to OCA, Aqua is in a position to provide pressure reducing valves and/or otherwise offset any costs associated with damages that occur as a result of these pressures.

In response, Aqua relies on the Commission's decision rejecting a similar argument in *Public Utility Commission v. Pennsylvania-American Water Company* (*PAWC*).[289] In that case, the OCA recommended that, to protect customer service lines and inside plumbing in situations where PAWC elected to provide service at higher than 125 psi, PAWC should either provide a pressure reducer protecting the customer's service line; or provide an insurance policy covering repair or replacement of the service line. In the Commission's *PAWC* decision, the

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285 AP St. 9-R. pp 6-8.

286 OCA St. 7 at 13.

287 OCA St. 7, p. 13.

288 Tr. 230-243. Mr. Gage is also filed a formal complaint opposing Aqua's rate increase. Docket C-2021-3029393.

289 Docket R-2020-3019371 (Opinion and Order entered February 25, 2021).

Commission concluded that it was not reasonable to "impose the requirement of insuring the customer service line upon the distribution utility."[290]

Like PAWC, Aqua has areas in its service territory where water pressures exceed 125 psi, due to challenging terrain, and other operational characteristics:

> The Company has a variety of systems with varying system characteristics, geometry, elevation, and alternate operational plans when needed. The Company's SEPA system covers an area of over 500 square miles with elevations ranging from near sea level to over 700 feet about sea level. To supply customers with adequate service, some areas of the Company's systems will have pressures above 125 psi. Depending on location of a customer, either near a treatment plant or tank, the pressure may be higher in order to supply other customers downstream at a higher elevation within a system or distant from the entry point.
>
> Based on my experience, it is common in the water industry to have pressures higher than 125 psi in order to adequately serve customers. The high pressures are mitigated by properly engineered systems, materials used, creating of pressure districts via large pressure regulating valves, and requiring PRV's on customer lines. As stated above, the SEPA system and many of its other system are interconnected and the Company needs to have the ability to flow water between districts, both for normal operational service, and during contingency operations. In some cases, the need for pressures higher than 125 psi is necessary.[291] Like, customers of PAWC, Aqua's tariff requires customers to install and maintain a pressure reducing valve.[292]

According to OCA, Mr. Gage's experience distinguishes Aqua from PAWC. I agree with OCA that Mr. Gage's testimony painted a troubling picture of a customer's experience with the continued failure of pressure valves and his struggle to protect his property from damage. However, the Commission has repeatedly held that public utilities are not required to render perfect service.[293] A handful of customer experiences are not sufficient for the

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290 *PAWC,* at p. 127.

291 AP St. 9-R, pp. 11-12.

292 Tariff Water-PA P.U.C. No. 2, Original Page 45, Rule 31; AP St. 9-R at 11.

293 *E.g., Rounce v. PECO Energy Co.,* C-2015-2506941 (Opinion and Order entered December 9, 2016)*; Bertsch v. PPL Elec. Utils. Corp.,* C-2011-2251784 (Final Order April 2, 2012*).*

Commission to mandate operational changes on Aqua's distribution system at this point in time. As Aqua tracks pressure complaints more closely, as it has agreed to do, Aqua may be able to target areas such as Chesterbrook, that may require system improvements as suggested by OCA. Based on the record in this proceeding, I cannot conclude that Aqua should be directed to reduce upstream water pressures or install additional pressure valves.

3. Isolation Valves

a. Critical Isolation Valves

Aqua stated that all critical valves have been identified and currently have an exercising schedule within Aqua's work order management system.[294] Aqua indicated that it exercises its 270 critical valves at least once every four years. The OCA finds that this exercising schedule for Aqua's critical valves is reasonable. OCA recommends that critical valves that could not be exercised should be repaired or replaced as soon as practicable after they are found to be inoperable.

b. Non-Critical Isolation Valves

OCA objects to Aqua's 12-year non-critical valve inspection and exercising program. According to OCA, non-critical valves should be inspected on a 5-year cycle.

Aqua explained that it has committed to various non-critical valve inspection measures as part of its 2020 management audit with the Commission.[295] OCA contends, though, that the Company's schedule to exercise non-critical valves is too long. Aqua points out that OCA has not provided any cost estimates for the amount of time and additional workforce needed to accomplish OCA's non-critical valve recommendation, implying that the cost of the program may exceed any operational benefit.

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[294] Aqua M.B. at 171.

[295] AP MB at 171-172; AP St. 9-R at 13-14.

Mr. Duerr described the commitments already made to the Commission regarding a non-critical valve inspection and exercising program, including the identification of non-critical valves in the Aqua GIS asset registry and the development of a timeline to determine which non-critical valves are scheduled in year one, two, etc.[296] According to Aqua, OCA's proposed timeline is inefficient and redundant.

I find that OCA has not sustained its burden of proving that imposing a 5-year inspection cycle for non-critical valves is necessary or will derive a benefit to Aqua's system commensurate with the cost to implement the program. However, I recommend 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 base rate proceeding, which establishes a defined schedule for the Company to exercise each of its non-critical valves within a set inspection cycle and, subsequently, maintain records of its attempts to inspect and exercise its isolation valves and note whether it was successful.

4. Fire Hydrants

OCA and Aqua largely resolved their disputes regarding Aqua's plan to address 16 fire hydrants in the Company's system that cannot provide the minimum fire flow of 500 gallons per minute at 20 psi. However, OCA continues to assert that in addition to the commitments already made by Aqua, these hydrants should be marked for "use only for flushing and/or blow-offs" until they are moved or replaced. According to OCA, it is important for customers and fire companies to know that these hydrants are not to be relied on for fire protection. Therefore, the OCA maintains that Aqua should mark the hydrants for only flushing and/or blow-offs until they are moved or replaced, and the Company should report to the OCA and other parties when this is completed.

[296] AP St. 9-R, pp. 13-14.

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, OCA's recommendation is reasonable and should be adopted.[297]

5. Flushing

OCA recommends that Aqua improve its flushing program in its SEPA division by flushing the system once every three years. OCA observes that there are a substantial number of complaints regarding flushing-related issues. OCA witness Fought recommended that requiring Aqua to flush the entire SEPA system once every three years is reasonable. Aqua witness Duerr disagrees with this recommendation stating that flushing is labor-intensive, somewhat disruptive and can result in significant non-revenue water volume.[298] He stated that the Company's SEPA flushing process considers many factors including water quality samples, customer issues, the geometry of the system, volume of water traversing through an area on a daily basis and proximity to wells and talks. He stated that this information dictates how and when flushing occurs.

It may be that adopting a three-year flushing program would proactively eliminate many customer complaints, as recommended by OCA.[299] It may also be true that regular flushing would eliminate the need for Aqua to constantly assess the "many factors" listed by Mr. Duerr in determining whether and when to flush the system. However, in view of Mr. Duerr's credible testimony that flushing can be labor intensive and result in UFW, it is not possible to conclude that it is reasonable to impose the inevitable costs to ratepayers for a three-year flushing program which may or may not result in the benefits identified by OCA.

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[297] I note that Aqua is still expected to provide reasonable public fire protection service and can't abandon or condition its responsibility to provide reasonable service without Commission permission or authorization, including by restricting a public fire protection customer from using an existing public fire hydrant for its intended purposes.

[298] AP St. 9-R at 17.

[299] Approximately 58.7% of the 2,635 customer complaint work orders for the SEPA system concerned flushing OCA St. 7SR at 9.

6. Per- and Polyfluoroalkyl Substances (PFAS)

OCA witness Fought noted that Aqua maintains a website with information and treatment for PFAS.[300] OCA witness Fought also explained that, for some water sources, the most recent posted test was from sources taken in 2016, 2017, and 2018.[301] Mr. Fought acknowledged that this was likely due to those water sources testing below 13 parts per trillion (PPT) for PFAS, which is Aqua's standard. For sources that test below 13 PPT, Aqua ceases testing.[302] In light of his understanding of the Company's PFAS testing procedures, OCA witness Fought recommended that, for water sources that Aqua no longer tests for PFAS, Aqua add a statement to its website explaining why testing was stopped.[303] Aqua agreed to implement Mr. Fought's recommendations.

As no other party presented testimony on this issue, and Aqua has agreed to Mr. Fought's recommendations regarding PFAS Reporting, the Company's PFAS procedures should be accepted by the Commission.

C. Customer Service

OCA contends that Aqua failed to comply with several customer service-related commitments made by Aqua in the context of the merger settlement with the Peoples Companies. Some of these commitments include improvements to call center metrics; development of a live Excel spreadsheet to track customer complaints; and a reduction in the number of days to respond to customer complaints.

OCA contends that Aqua failed to meet its commitment to answer 82% of customer calls within 30 seconds. According to OCA, Aqua used Interactive Voice Response

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300 OCA St. 7 at 19.

301 OCA St. 7 at 19.

302 OCA St. 7 at 19.

303 OCA St. 7 at 19-20.

(IVR) data to calculate its performance related to the call center standards, which according to OCA is not consistent with the merger settlement requirements.[304] Aqua responds that it is appropriate to use IVR data and to report an aggregate percentage of calls answered because 1) this is a standard calculation in the contact center industry for service level performance; and 2) this is the method used by the Peoples Companies.[305]

I agree with Aqua that it has met the settlement commitment to answer 82% of customer calls within 30 seconds and that using aggregated data is consistent with the settlement and reasonable. Paragraph 83 of the Aqua-Peoples Settlement clearly references the standards of the Peoples Companies. Therefore, if the Peoples Companies customarily measure the number of calls answered within 30 seconds with aggregated data, it is reasonable for Aqua to do so.

OCA also charges that Aqua failed to meet its commitment to reduce its average call abandonment rate to 4% or less in 2020-21. Aqua concedes that it failed to meet this metric. However, Aqua's witness Ms. Black explained the failure to meet the metric was due to unanticipated postal service delays, which caused many customer bills to be delivered late and resulted in higher-than-normal call volumes. She noted that the settlement contemplated a situation where the Company may miss a benchmark and required a report to include reasons for the failure.[306]

I agree with Aqua that the settlement contemplated a situation where events outside of the Company's control do happen. Aqua transparently explained in the February 1st report the reason for its failure to meet the call abandonment benchmark for 2020-21. This isolated situation does not equate to a failure to comply with the settlement commitments.

OCA asserts that the Company is not in compliance with Paragraph 85 of the Aqua-Peoples Settlement, which provides that Aqua will develop a system to track Aqua

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304 Aqua-Peoples Acquisition.

305 AP St. 10-R, p. 14.

306 AP St. 10-R at 16-17.

customer complaints in a live Excel spreadsheet, and will review this information and conduct a root cause analysis (RCA) of adverse trends at least annually.[307] Ms. Black acknowledged that the live spreadsheet is not yet finalized, but pointed out that this was because the Company has been working with the OCA to develop the spreadsheet based upon OCA's requested parameters.[308] OCA and Aqua also dispute the significance of the Commission's 2020 UCARE report and OCA's witness observation that Aqua had the highest rate of "justified" complaints compared to other water utilities.

Aqua responds that RCA is an ongoing process. Ms. Black explained how Aqua processes information from informal complaints filed with the Bureau of Consumer Services and described efforts the Company is taking to formalize the RCA function. Specifically, upon the conversion to SAP, Ms. Black states that the "the Company's RCA efforts can be enhanced by increasing the visibility of case trends through enhanced reporting of case types."[309] She also noted improvements in the Company's justified complaint rate from the BCS 2021 reporting for the period of January 2021 through September 2021.[310]

I find that Aqua has sufficiently demonstrated its good faith efforts to come into compliance with the benchmarks set forth in the *Aqua-Peoples Settlement*. Achievement of customer service improvements is clearly an ongoing process. Ms. Black's testimony sufficiently demonstrates Aqua's commitment to continue to review and improve its customer service metrics as contemplated by the settlement agreement.

OCA charges that Aqua's customer service is poor is based, in part, on a customer satisfaction survey where only 73% of Aqua customers with recent telephone call center transactions rated satisfaction as "excellent" or "very good."[311] This level of satisfaction is low

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307 OCA St. 6 at 12.

308 AP St. 10-R at 17.

309 AP St. 10-R at 16-17.

310 AP St. 10-R at 18.

311 OCA St. 6 at 11; OCA M.B. at 191.

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.

Contrary to OCA's criticism that Aqua refuses to recognize the significance of the survey to its call center performance, Ms. Black recognized that survey results do provide an important baseline for the Company to identify and evaluate areas for improvement.[312] She went on to observe that these results are not in themselves indicative of poor customer service and, particularly during the COVID-19 timeframe where certain customer interactions have had to be limited, are given undue weight. I agree.

CAUSE-PA advocates for language access improvements to Aqua's policies and procedures. CAUSE-PA recommended that Aqua be required to (1) conduct a formal, county-specific needs assessment to determine whether it should expand language access policies to include document translation in languages other than Spanish;[313] (2) evaluate its process for determining the need for third-party interpretation and incorporate clear guidelines for determining the need for third-party interpretation services;[314] (3) provide certain translated billing information;[315] and (4) amend the language of termination notices to indicate in (at minimum) English and Spanish that the document is a termination notice and inaction may result in termination of water and/or wastewater services.[316]

Aqua explains that "the Company is currently evaluating the implementation of Language Line Translator, an entity that provides translation services and is currently used at the Peoples Companies."[317] Further, Ms. Black acknowledged Mr. Geller's recommendation to

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312 AP St. 10-R at 17.

313 CAUSE-PA MB at 45-48.

314 *Id*.

315 *Id*. at 46-47.

316 *Id*. at 47-48.

317 AP St. 10-R at 27.

conduct a foreign language access assessment, and agreed that the Company will conduct one, "county by county and review the results to determine whether any changes should be made to its existing policies."[318] However, Ms. Black also noted that "[a]ny changes to billing information in Spanish, however, would have to be incorporated into the SAP implementation timeline."[319]

At this time, it appears that the Company is adequately addressing CAUSE-PA's recommendation for improvements in Aqua's language access policies and procedures. These improvements should be included in the ongoing review of Aqua's customer service programs. I do not recommend further action by the Commission at this time.

D. Masthope Mountain Community Association

Masthope Mountain Community Association (Masthope) contends that the Commission should deny Aqua's request to raise rates for Masthope water and wastewater customers given systematic and unresolved instances of hydraulic overload conditions affecting the Masthope Wastewater Treatment Plant (WWTP) since at least 2018, resulting in restrictions on Aqua's ability to make new wastewater connections. Masthope submits that insufficient planning, investment, maintenance, and operation over the past several years caused the hydraulic overload conditions and ensuing building restrictions within Masthope (as opposed to COVID-19 or unseasonably high precipitation events over that same period as advanced by Aqua). Given that the Commission recently approved rate increases, yet substantial service issues remain unresolved for Masthope customers, any additional rate increase would be unjust and unreasonable.

Aqua contends that it has prudently planned for the capacity needs of Masthope and has undertaken the appropriate steps to upgrade the wastewater system and related facilitates that serve the Masthope community. The Company states that it evaluated capacity needs at the

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318 AP St. 10-R at 27-28.

319 AP St. 10-R at 28.

Masthope community and the connection needs of the system.[320] Based on its evaluation, the Company determined that a project known as the "Treatment Train Project" would be required to address the system's increasing capacity needs and to avoid future hydraulic exceedance.[321] 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.[322] The Company is also actively seeking to reduce inflow and infiltration (I&I) in the collection system as described in its 2020 Chapter 94 Report. AP St. 9-R at 37.

During the course of the Treatment Train Project, two intervening events beyond the Company's control occurred that ultimately led to hydraulic overloads on the system. A combination of elevated precipitation levels and shifts to more full-time use of the residences at Masthope, as a result of the COVID-19 pandemic, caused hydraulic overloads on the system. AP St. 9-R at 33-36. PADEP issued a moratorium on new connections to mitigate the hydraulic overloads caused by these events. In response, Aqua submitted a Corrective Action Plan to PADEP, which is targeted at restoring or otherwise making available capacity to current and future connections at Masthope.[323] This Corrective Action Plan was recently approved by PADEP.[324] 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.

According to Masthope, PADEP's approval of the Corrective Action Plan does not resolve its contention that the Commission should not approve an increase in rates because of "continued" unreasonable service. In its reply brief, Masthope points to shortcomings in the

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320 AP St. 9-R at 36-37.

321 AP St. 9-R at 36-37.

322 AP St. 9-R at 37.

323 AP St. 9-R at 37.

324 AP Post-Hearing Ex. 1.

PADEP approval and argues that the Corrective Action Plan does not adequately address the hydraulic overload issue.

It is important to keep the procedural posture of this case in mind. Masthope's complaint is directed to Aqua's request to increase rates. A complaint against a utility's rates is not a full determination of "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."[325] 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.

The Masthope community is clearly experiencing challenges due to hydraulic overload at the WWTP. However, Aqua has not ignored this problem. Instead, Aqua has begun the execution of a project to address these concerns and appears to be working with PADEP to address the sewage planning and regulatory issues within that agency's purview.[326] Accordingly, I do not recommend that the Commission deny Aqua's request for a rate increase or decline to increase rates attributable to the cost of providing service to Masthope or direct additional service changes or the installation of additional facilities.

E. COVID-19 Uncollectible Deferral

Rather than requesting recovery of its existing COVID-19 deferral amounts in this current rate case, Aqua proposes to continue recording amounts in its COVID-19 deferral account and seek recovery in a future rate case. Aqua proposed to receive continued authorization to defer incremental bad debt expense related to the COVID-19 pandemic. AP St. 1 at 23-24. Aqua explained that the Commission previously authorized utilities to create

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[325] Masthope RB, p. 4.

[326] I note that Masthope is free to file an appeal to the Environmental Hearing Board if it believes that PADEP's response to the sewage planning issues are inadequate. See AP Post-Hearing Ex. 1.

regulatory assets for incremental uncollectible expenses related to COVID-19 above those already embedded in base rates. AP St. 1 at 22.

Aqua explained the background of the COVID-19 deferral authorization. As anticipated by the Commission, Aqua experienced increased levels of unpaid billings or "bad debt," due to the service termination moratorium.[327] 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 2018 Base 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.

Although the service termination mortarium has ended, the Commonwealth of Pennsylvania continued to be impacted by the COVID-19 pandemic at the time of the Company's filing, and the Company explained that it is continuing to incur incremental levels of uncollectibles beyond the end of the HTY.[328] As such, 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.[329]

Aqua asserts that the Company was not asking for "any time value of the money related to these deferrals."[330] The Company and its shareholders are currently funding, and will continue to fund, the delayed cash inflow from aging accounts receivable.[331] Thus, the

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327 AP St. 1 at 23.

328 AP St. 1 at 23.

329 AP St. 1 at 24.

330 AP St. 1-R at 7.

331 AP St. 1-R at 7.

Company's customers will not fund this aspect of the incremental costs the Company has incurred to provide continuous and reliable service in the face of a global pandemic.

Moreover, the Company has not sought authorization to defer "any incremental expenses for safety supplies, masks, hand sanitizers, social distancing signage, which were required in many facilities."[332] In this regard, the Company has been and will continue to be conservative in seeking to recover incremental COVID-19 related expense.

I&E recommended the Company be required to track further COVID-19 related reductions to uncollectibles by Water and the individual Wastewater revenue requirements; and, that the balances be claimed in the next rate filing, which is anticipated to be filed in 2024.[333] Further, that the Company propose amortization of the balance at that time, amortized over a period of years, to be claimed in the next rate proceeding; and, that the Company be allowed to claim no interest or any time value of money component associated with the delay.[334] Also, I&E recommends that the Company be allowed to claim no increases to COVID-19 related uncollectibles beyond the effective date of new rates in this proceeding, particularly since Aqua has expressed that its motivation in delaying the amortization of the balance is to mitigate the impact on ratepayers.[335] Any new increases to the COVID-19 related uncollectibles should not be recoverable in a future proceeding. I&E is recommending this delay based on Aqua's assertion that the COVID-19 related uncollectibles 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.[336] Any new increases to the COVID-19 related uncollectibles should not be recoverable in a future proceeding.[337]

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332 AP St. 1-R at 7.

333 I&E MB, p. 58.

334 I&E St. No. 1-SR, p. 51.

335 *Id.*, *citing* AP St. No. 1-R, pp. 8-9.

336 I&E St. 1-SR, p. 47., *citing* AP St. No. 1-R, pp. 7-8.

337 *Id.*

OCA recommended that Aqua should offset any claimed costs with savings that it has recognized during the pandemic. Aqua agreed with this recommendation. However, OCA contends that indefinite continued deferrals for beyond the FPFTY is unreasonable and should not be permitted, and that the end of the FPFTY is 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.

I agree that the Commission should continue to authorize Aqua to defer its COVID-19-related uncollectibles expenses. However, I also I agree with I&E that Aqua be required to track further COVID-19 related reductions to uncollectibles by Water and the individual Wastewater revenue requirements. The burden is on Aqua to demonstrate that these expenses are "prudently incurred incremental extraordinary, nonrecurring expenses related to COVID-19."[338] I further agree with OCA that these expenses should be offset by any savings, as Aqua has agreed to do.

To date, the Commission has declined to impose a hard cutoff for the accumulation of deferred expenses related to COVID-19. The provisions of the May 13, 2020 Secretarial Letter have not been modified. As the Commission observed in *PAWC COVID Deferral Order*[339] in September 2021, the effects of the COVID-19 pandemic are still being felt by utilities. Therefore, it is premature to establish a hard cut-off date for the accumulation of deferred expenses and savings in this base rate proceeding. I am persuaded by the Company'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.[340] The Company also represents that it is not

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[338] Re: COVID-19 Cost Tracking and Creation of Regulatory Asset, Docket No. M-2020-3019775 (Secretarial Letter dated May 13, 2020) (Secretarial Letter).

[339] *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 (Opinion and Order entered Sept. 15, 2021) (*PAWC COVID Deferral Order*).

[340] AP St. 1-R, p. 7.

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, social distancing signage, that were required in many facilities.[341] Uncollectibles may be further mitigated by the enhancements to Aqua's universal service program and from recent federal funding dedicated to reducing unpaid utility bills.

F. Directed Questions of Commissioner Yanora

On September 16, 2021, Commissioner Ralph V. Yanora posed ten (10) Directed Questions to be answered and examined as a part of these proceedings. Commissioner Yanora's questions were in the nature of requests for data and information from Aqua. As directed, Aqua provided responses to these questions in AP Ex. TMD-4-R sponsored by Aqua witness Duerr with his rebuttal testimony and included as Appendix D to Aqua's main brief.

XIII. CONCLUSIONS OF LAW

1. The Commission has jurisdiction over the parties and subject matter in this proceeding. 66 Pa.C.S.A. §§ 501, 1301, 1308(d).

2. Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable, and in conformity with regulations or orders of the commission. 66 Pa. C.S. § 1301.

3. "No public utility shall … make or grant any unreasonable preference to any person, corporation … No public utility shall establish or maintain any unreasonable difference as to rates, either as between localities or as between classes of service." 66 Pa. C.S. § 1304.

[341] *Id.*

4. The burden of proving the justness and reasonableness of every element of the utility's rate increase rests solely upon the public utility. 66 Pa. C.S. § 315(a); *Lower Frederick Twp. v. Pa. Pub. Util. Comm'n*, 409 A.2d 505 (Pa. Cmwlth. Ct. 1980).

5. While the burden of proof remains with the public utility throughout the rate proceeding, the Commission has stated that where a party proposes an adjustment to a ratemaking claim of a utility, the proposing party bears the burden of presenting some evidence or analysis tending to demonstrate the reasonableness of the adjustment. *Pa. Pub. Util. Comm'n v. Aqua Pa., Inc.*, Docket No. R-00072711 (Opinion and Order entered July 17, 2008).

6. The Commission must consider the efficiency, effectiveness and adequacy of service of each utility when determining just and reasonable rates in exchange for customers paying rates for service, which include the cost of utility plant in service and a rate of return. 66 Pa. C.S. § 523.

7. The Commission has the discretionary authority to deny a proposed rate increase, in whole or in part, if the Commission finds that the service rendered by the public utility is inadequate. 66 Pa. C.S. § 526(a); *Pa. Pub. Util. Comm'n v. Columbia Gas of Pa. Inc.*, Docket No. R-2020-3018835 (Order entered February 19, 2021).

8. A Commission decision is adequate where, on each of the issues raised, the Commission was merely presented with a choice of actions, each fully developed in the record, and its choice on each issue amounted to an implicit acceptance of one party's thesis and rejection of the other party's contention. *Popowsky v. Pa. Pub. Util. Comm'n*, 550 Pa. 449, 706 A.2d 1197 (1997).

9. A utility is entitled to recover its reasonably incurred expenses. *UGI Utils. Corp. v. Pa. Pub. Util. Comm'n*, 410 A.2d 923 (Pa. Cmwlth. 1980). Expenses include such items as the cost of operations and maintenance (labor, fuel and administrative costs, e.g.), depreciation and taxes. *Pa. Power Co. v. Pa. Pub. Util. Comm'n*, 561 A.2d 43, 47 (Pa. Cmwlth. 1989).

10. The rate of 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 raise the money necessary for the proper discharge of public duties. *Bluefield Waterworks & Improvement Co. v. Pub. Serv. Comm'n of W.V.*, 262 U.S. 679 (1923).

11. Establishment of a rate structure is an administrative function peculiarly within the expertise of the Commission. *Emporium Water Co. v. Pa. Pub. Util. Comm'n*, 955 A.2d 456, 461 (Pa. Cmwlth. 2008); *City of Lancaster v. Pa. Pub. Util. Comm'n*, 769 A.2d 567, 571-72 (Pa. Cmwlth. 2001). The question of reasonableness of rates and the difference between rates in their respective classes is an administrative question for the Commission to decide. *Pa. Power & Light Co. v. Pa. Pub. Util. Comm'n*, 516 A.2d 426 (Pa. Cmwlth. 1986); *Park Towne v. Pa. Pub. Util. Comm'n*, 433 A.2d 610 (Pa. Cmwlth. 1981).

12. The basic factor in allocating revenue is to have the rates reflect the cost of service. *Lloyd v. Pa. Pub. Util. Comm'n*, 904 A.2d 1010, 1020 (Pa. Cmwlth. 2006).

13. Section 1311(c) of the Public Utility Code, more commonly referred to as Act 11, permits utilities that provide both water and wastewater service to combine the revenue requirements by allocating a portion of the wastewater revenue requirement to the water customer base if doing so is in the "public interest.". 66 Pa. C.S. § 1311.

XIV. ORDER

THEREFORE

IT IS RECOMMENDED:

1. That Aqua Pennsylvania, Inc., shall not place into effect the rules, rates and regulations contained in proposed Tariff Water – PA. P.U.C. No. 3 as filed.

2. That Aqua Pennsylvania Wastewater, Inc shall not place into effect the rules, rates and regulations contained in proposed Aqua Original Tariff Sewer – PA P.U.C. No. 3 as filed.

3. That Aqua Pennsylvania, Inc be 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 $528,408,929, to become effective for service rendered on and after May 19, 2022.

4. 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 $53,763,200, to become effective for service rendered on and after May 19, 2022.

5. That Aqua Pennsylvania Inc. Aqua Pennsylvania, Inc. shall file detailed calculations with its water and wastewater tariff filings, which shall demonstrate to this Commission's satisfaction that the filed rates comply with the proof of revenues, in the form and manner customarily filed in support of compliance tariffs.

6. 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 within each rate schedule, in the manner prescribed in the Commission's Opinion and Order in this matter.

7. That Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. shall file with the Commission's Secretary's Bureau at this docket and provide the Commission's Bureaus of Technical Utility Services and Investigation & 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.

8. That Aqua Pennsylvania, Inc. and Aqua Pennsylvania Wastewater, Inc. shall comply with all directives, conclusions, and recommendations contained in this decision that are not the subject of individual ordering paragraphs as if they were the subject of specific ordering paragraphs.

9. That in its next base rate proceeding Aqua shall provide combined cost-of-services studies for its wastewater rate zones, as set forth below:

a. Wastewater Zones 1 through 6
b. Wastewater Zones 7 through 11

10. That in the first base rate case that includes any system acquired under Section 1329 and approved by the Commission subsequent to this proceeding, Aqua shall prepare a separate cost-of-service study for each acquired system consistent with typically filed rate making exhibits including, but not limited to the following: Rate Base (Measures of Value), Statement of Operating Income, and Rate of Return, which correspond to the applicable test year, future test year, and fully projected future test year measurement periods.

11. That Aqua be directed 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 base rate proceeding, which establishes a defined schedule for the Company 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.

12. That Aqua shall appropriately mark any public fire hydrants in the Company's system that cannot provide the minimum fire flow of 500 gallons per minute at 20 psi within 30 days of the Commission's final order in this matter.

13. That the 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.

14. That the 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.

15. That the complaint of the Masthope Mount Community Association at Docket No. C-2021-3028992 and C-2021-3028996 are dismissed and shall be marked closed.

16. That the complaint of the Aqua Large Users Group, Docket C-2021-3029089 is dismissed and shall be marked closed.

17. That the following Aqua Pennsylvania, Inc. formal complaints are dismissed and 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, Aqua Large Users Group at Docket No. C-2021-3029089, 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, Jane O'Donovan at Docket No. C-2021-3029532.

18. That the following Aqua Pennsylvania Wastewater, Inc. formal complaints are dismissed and 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, Joanne Smyth at Docket No. C-2021-3029411.

Date: February 18, 2022

/s/
Mary D. Long
Administrative Law Judge

APPENDIX

TABLES CALCULATING ALLOWED REVENUE INCREASE

Table Act 11	Act 11 Water and Wastewater Revenue Requirement Summary
Table RevSum	Water and Wastewater Revenue Summary
Table I Water	Income Summary
Table IA Water	Rate of Return
Table IB Water	Revenue Factor
Table II Water	Summary of Adjustments
Table III Water	Interest Synchronization
Table IV Water	Cash Working Capital: Interest and Dividends
Table V Water	Cash Working Capital: Taxes
Table VI Water	Cash Working Capital: O&M Expense
Table I Wastewater Base	Income Summary
Table IA Wastewater Base	Rate of Return
Table IB Wastewater Base	Revenue Factor
Table II Wastewater Base	Summary of Adjustments
Table III Wastewater Base	Interest Synchronization
Table IV Wastewater Base	Cash Working Capital: Interest and Dividends
Table V Wastewater Base	Cash Working Capital: Taxes
Table VI Wastewater Base	Cash Working Capital: O&M Expense
Table I Limerick	Income Summary
Table IA Limerick	Rate of Return
Table IB Limerick	Revenue Factor
Table II Limerick	Summary of Adjustments
Table III Limerick	Interest Synchronization
Table IV Limerick	Cash Working Capital: Interest and Dividends
Table V Limerick	Cash Working Capital: Taxes

Table VI Limerick	Cash Working Capital: O&M Expense
Table I East Bradford	Income Summary
Table IA East Bradford	Rate of Return
Table IB East Bradford	Revenue Factor
Table II East Bradford	Summary of Adjustments
Table III East Bradford	Interest Synchronization
Table IV East Bradford	Cash Working Capital: Interest and Dividends
Table V East Bradford	Cash Working Capital: Taxes
Table VI East Bradford	Cash Working Capital: O&M Expense
Table I Cheltenham	Income Summary
Table IA Cheltenham	Rate of Return
Table IB Cheltenham	Revenue Factor
Table II Cheltenham	Summary of Adjustments
Table III Cheltenham	Interest Synchronization
Table IV Cheltenham	Cash Working Capital: Interest and Dividends
Table V Cheltenham	Cash Working Capital: Taxes
Table VI Cheltenham	Cash Working Capital: O&M Expense
Table I East Norriton	Income Summary
Table IA East Norriton	Rate of Return
Table IB East Norriton	Revenue Factor
Table II East Norriton	Summary of Adjustments
Table III East Norriton	Interest Synchronization
Table IV East Norriton	Cash Working Capital: Interest and Dividends
Table V East Norriton	Cash Working Capital: Taxes
Table VI East Norriton	Cash Working Capital: O&M Expense
Table I New Garden	Income Summary
Table IA New Garden	Rate of Return
Table IB New Garden	Revenue Factor
Table II New Garden	Summary of Adjustments

Table III New Garden	Interest Synchronization
Table IV New Garden	Cash Working Capital: Interest and Dividends
Table V New Garden	Cash Working Capital: Taxes
Table VI New Garden	Cash Working Capital: O&M Expense

Act 11

Docket Nos. R-2021-3027385, R-2021-3027386

AQUA PENNSYLVANIA, INC.

TABLE ACT 11 - WATER AND WASTEWATER REVENUE REQUIREMENT - SUMMARY

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)
Present Rate Revenue	$ 550,264,523	$ 513,188,030	$ 19,011,761	$ 3,978,573	$ 1,014,569	$ 7,258,740	$ 2,923,770	$ 2,889,080
Additional Revenue Requirement	31,978,066	5,077,191	13,926,030	5,089,068	731,234	2,349,324	2,523,645	2,281,574
Act 11 Allocation, Gross, Unadjusted (1)	(0)	10,214,169	(7,829,008)	(2,106,924)	(120,469)	1,735,509	(995,249)	(898,028)
Revenue Factor (2)	-	70.27%	69.78%	69.78%	69.78%	69.78%	69.78%	69.78%
Net Income Available for Return (3)	49,510	7,177,100	(5,463,192)	(1,470,241)	(84,065)	1,211,062	(694,499)	(626,656)
Act 11 Allocation Adjustment, Gross (4)	(70,461)	(70,461)	-	-	-	-	-	-
Act 11 Allocation, Gross, Adjusted (5)	(70,461)	10,143,708	(7,829,008)	(2,106,924)	(120,469)	1,735,509	(995,249)	(898,028)
Proposed Revenues (6)	$ 582,172,129	$ 528,408,929	$ 25,108,784	$ 6,960,717	$ 1,625,334	$ 11,343,572	$ 4,452,166	$ 4,272,626
Rate Increase/(Decrease) - $	$ 31,907,606	$ 15,220,899	$ 6,097,022	$ 2,982,144	$ 610,765	$ 4,084,833	$ 1,528,396	$ 1,383,546
Rate Increase/(Decrease) - %	5.80%	2.97%	32.07%	74.96%	60.20%	56.27%	52.27%	47.89%

Notes:
(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.

TABLE REVSUM - WATER AND WASTEWATER REVENUE SUMMARY

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)
Current General Service Revenues (1) (3)	$ 548,733,164	$ 511,734,963	$ 18,988,325	$ 3,969,765	$ 1,013,716	$ 7,238,362	$ 2,916,335	$ 2,871,698
Proposed General Service Revenues	$ 580,580,704	$ 526,934,011	$ 25,077,869	$ 6,945,322	$ 1,623,968	$ 11,311,728	$ 4,440,886	$ 4,246,920
Rate Increase/(Decrease) - $	$ 31,847,540	$ 15,199,048	$ 6,089,544	$ 2,975,557	$ 610,252	$ 4,073,366	$ 1,524,551	$ 1,375,222
Rate Increase/(Decrease) - %	5.81%	2.97%	32.07%	74.96%	60.20%	56.27%	52.28%	47.89%
Current Forfeited Discount Revenues (2)	$ 813,782	$ 735,710	$ 23,317	$ 8,788	$ 853	$ 20,377	$ 7,355	$ 17,382
Proposed Forfeited Discount Revenues	$ 873,848	$ 757,561	$ 30,795	$ 15,375	$ 1,367	$ 31,844	$ 11,200	$ 25,706
Rate Increase/(Decrease) - $	$ 60,066	$ 21,851	$ 7,478	$ 6,587	$ 514	$ 11,467	$ 3,845	$ 8,324
Rate Increase/(Decrease) - %	5.81%	2.97%	32.07%	74.96%	60.20%	56.27%	52.28%	47.89%
Current Miscellaneous Revenues (3) (4)	$ 717,577	$ 717,357	$ 120	$ 20	$ -	$ -	$ 80	$ -
Proposed Miscellaneous Revenues	$ 717,577	$ 717,357	$ 120	$ 20	$ -	$ -	$ 80	$ -
Rate Increase/(Decrease) - $	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Rate Increase/(Decrease) - %	0.00%	0.00%	0.00%	0.00%			0.00%	
Total Operating Revenues (5)	$ 582,172,129	$ 528,408,929	$ 25,108,784	$ 6,960,717	$ 1,625,334	$ 11,343,572	$ 4,452,166	$ 4,272,626
Proposed Revenues (6)	$ 582,172,129	$ 528,408,929	$ 25,108,784	$ 6,960,717	$ 1,625,334	$ 11,343,572	$ 4,452,166	$ 4,272,626
Difference, Lines 14 and 13	-	-	-	-	-	-	-	-

Notes and Sources:

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 attibutable 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.

TABLE I WATER
Aqua Pennsylvania, Inc.
INCOME SUMMARY
R-2021-3027385, R-2021-3027386

	Pro Forma Present Rates (1)	Company Adjustments (1) (2)	Pro Forma Present Rates (Revised) (1) (2)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (3)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 510,006,687	$ -	$ 510,006,687	$ 3,181,343	$ 513,188,030	$ 5,077,191	$ 518,265,221
Expenses:							
O & M Expense	116,459,234	-	116,459,234	(1,884,596)	114,574,639	26,008	114,600,647
Depreciation	122,166,578	-	122,166,578	(121,865)	122,044,713	-	122,044,713
Taxes, Other	12,450,066	-	12,450,066	21,365	12,471,430	34,096	12,505,526
Income Taxes:							
State	5,345,514	11,184	5,356,698	520,721	5,877,419	501,207	6,378,626
Federal	7,677,005	21,161	7,698,166	985,256	8,683,422	948,335	9,631,757
Total Expenses	264,098,397	32,345	264,130,742	(479,119)	263,651,623	1,509,646	265,161,269
Net Inc. Available for Return	$ 245,908,290	$ (32,345)	$ 245,875,945	$ 3,660,462	$ 249,536,407	$ 3,567,546	$ 253,103,953
Rate Base	3,818,456,012	(6,077,218)	3,812,378,794	(2,496,154)	3,809,882,640		3,809,882,640
Rate of Return	6.44%		6.45%				6.64335300%

Increase % 0.99%

(1) Company Main Brief
(2) Company Main Brief Section III.E.2 & AP Stmt. 8-R
(3) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A): Water
Aqua Pennsylvania, Inc.
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B): Water
Aqua Pennsylvania, Inc.
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.00512242
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98816198
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09871738
Factor After Local and State Taxes	0.88944460
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18678337
Revenue Factor (100% - Effective Tax Rates)	0.70266123

(*) Company Main Brief

TABLE II: WATER
Aqua Pennsylvania, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027365, R-2021-3027366

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	5,718						
Taxes (Table V)	96,855						
O & M (Table VI)	(161,422)						
Acquis. Adj. - Phoenixville (1)	(2,437,305)						
REVENUES:							
Water Contract Revenue (2) (7) (8)		2,983,780	15,284		20,038	294,551	557,320
Negotiated Water Contracts (6) (7) (8)		181,350	929		1,218	17,902	33,873
Concomitant Forfeited Discounts (7) (8)		16,213	83		109	1,601	3,028
EXPENSES:							
						0	0
Supp. Exec. Retire. Program (3)			(695,612)			69,492	131,485
General Inflation (4)			(864,335)			86,347	163,377
Gen. Liab. Insurance (5)			(340,945)			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
Amort. Phoenixville Acquis. Adj. (1) (8)				(121,865)		12,174	23,035
TAXES:							
Interest Synchronization (Table III)						4,594	8,692
TOTALS	(2,496,154)	3,181,343	(1,884,596)	(121,865)	21,365	520,721	985,256

Notes and Sources:
(1) Remove Phoenixville acquisition adjustment and associated amortization expense.
(2) Add imputed general service revenue for certain Rider DRS contracts.
(3) Remove Supplemental Executive Retirement Program expenses.
(4) Remove general inflation adjustment.
(5) Adopt BIE position regarding general liability insurance expense.
(6) Adopt OCA position regarding negotiated water contracts, excluding any additional revenues from Rider DRS Contracts that have imputed revenue. See Highly Confidential Schedule GAW-2SR and Note 2.
(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 isn't adjusted for non-cash expenses (i.e., incremental bad debt expense and amortization expense).

TABLE III: WATER
Aqua Pennsylvania, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	3,812,378,794
ALJ Rate Base Adjustments	(2,496,154)
ALJ Rate Base	3,809,882,640
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	70,184,172
Company Claim (1)	70,342,109
Total ALJ Adjustment	157,937
Company Adjustment (1) (2)	111,952
Net ALJ Interest Adjustment	45,985
State Income Tax Rate	9.99%
State Income Tax Adjustment	4,594
Net ALJ Interest Adjustment	45,985
State Income Tax Adjustment	4,594
Net ALJ Adjustment for F.I.T.	41,391
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	8,692

(1) Company Main Brief
(2) Rate Base Company Adjustment times weighted cost of de

TABLE IV WATER
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$3,812,378,794	$3,812,378,794	Company Rate Base Claim	$3,812,378,794
ALJ Rate Base Adjustments	($2,496,154)	($2,496,154)	ALJ Rate Base Adjustments	($2,496,154)
ALJ Rate Base	$3,809,882,640	$3,809,882,640	ALJ Rate Base	$3,809,882,640
Weighted Cost of Debt	1.84216100%	0.00%	Weighted Cost Pref. Stock	0.00000000%
ALJ Annual Interest Exp.	$70,184,172	$0	ALJ Preferred Dividends	$0
Average Revenue Lag Days	45.1	45.1	Average Revenue Lag Days	45.1
Average Expense Lag Days	90.3	90.3	Average Expense Lag Days	90.3
Net Lag Days	-45.2	-45.2	Net Lag Days	-45.2
Working Capital Adjustment				
ALJ Daily Interest Exp.	$192,285	$0	ALJ Daily Dividends	$0
Net Lag Days	-45.2	-45.2	Net Lag Days	-45.2
ALJ Working Capital	($8,691,282)	$0		$0
Company Claim (1) (2)	($8,697,000)	$0	Company Claim (1) (2)	$0
ALJ Adjustment	$5,718	$0		$0
Total Interest & Dividend Adj.	$5,718			

(1) Company Main Brief.
(2) Company claim rounded to nearest thousandth

TABLE V: WATER
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments (2)	$3,425,001	$21,365	$3,446,366	$34,096	$3,480,462	$9,535.51	-197.50	($1,883,263)
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	$0	$1,073,227		$1,073,227	$2,940.35	-167.00	($491,038)
FICA Taxes - Hourly	$2,470,719	$0	$2,470,719		$2,470,719	$6,769.09	8.50	$57,537
FICA Taxes - Executive & Exempt	$1,729,006	$0	$1,729,006		$1,729,006	$4,737.00	12.00	$56,844
Federal Unemployment Tax	$26,883	$0	$26,883		$26,883	$73.65	75.00	$5,524
PA Unemployment Tax	$276,017	$0	$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	$520,721	$6,303,817	$501,207	$6,805,024	$18,643.90	45.20	$842,704
Federal Income Tax	$13,101,742	$985,256	$14,086,998	$948,335	$15,035,333	$41,192.69	33.40	$1,375,836
	$32,685,691	$1,527,342	$34,213,032	$1,483,638	$35,696,670	$97,799.08	(1.31)	($127,743)

(1) Company Main Brief
(2) See II Water, Note 2.

Average Lag Days in Receipt of Revenues	45.1
Average Lag in Payment of Taxes	(1.3)
Net Lag	46.4
Average Daily Tax Expense	97,799
ALJ Cash Working Capital for Taxes	4,538,855
Less Company Claim (1)	4,442,000
ALJ Adjustment	96,855

TABLE VI: WATER
Aqua Pennsylvania, Inc.
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro Forma Expense	ALJ	ALJ 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 (3)	$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 (5)	$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	0.00	$0
	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0
	$112,989,731	($1,900,892)	$111,088,839	25.90	$2,875,216,087

ALJ Average Revenue Lag	45.1	
Less: ALJ Avg. Expense Lag	25.9	
Net Difference	19.2	Days
ALJ Pro forma O & M Expense per Day	$304,353	
ALJ CWC for O & M	$5,843,578	
Less: Company Claim (1) (2)	$6,005,000	
ALJ Adjustment	($161,422)	

Notes and Sources:
(1) Company Main Brief
(2) Company claim rounded to nearest thousandth
(3) See II Water, Note 3. Most SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II Water, Note 4. 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 II Water, Note 5.

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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 19,011,761	$ -	19,011,761	$ -	$ 19,011,761	$ 13,926,030	$ 32,937,792
Expenses:							
O & M Expense	9,830,816	-	9,830,816	(150,101)	9,680,715	166,264	9,846,979
Depreciation	7,780,016	-	7,780,016	-	7,780,016	-	7,780,016
Taxes, Other	303,529	-	303,529	-	303,529	93,522	397,051
Income Taxes:							
State	(1,181,921)	-	(1,181,921)	14,642	(1,167,279)	1,365,258	197,979
Federal	(1,086,251)	-	(1,086,251)	27,704	(1,058,547)	2,583,207	1,524,660
Total Expenses	15,646,188	-	15,646,188	(107,755)	15,538,433	4,208,251	19,746,684
Net Inc. Available for Return	$ 3,365,573	$ -	$ 3,365,573	$ 107,755	$ 3,473,329	$ 9,717,779	$ 13,191,108
Rate Base	198,368,990	-	198,368,990	192,011	198,561,001		198,561,001
Rate of Return	1.70%		1.70%				6.64335300%

(1) Company Main Brief

Increase % 73.25%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B) WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(863)						
Taxes (Table V)	202,235						
O & M (Table VI)	(9,361)						
REVENUES:							
		0				0	0
EXPENSES:							
Supp. Exec. Retire. Program (1)			(23,373)			2,335	4,418
General Inflation (2)			(145,368)			14,522	27,478
Gen. Liab. Insurance (3)			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:							
Interest Synchronization (Table III)						(353)	(669)
TOTALS	192,011	0	(150,101)	0	0	14,642	27,704

Notes and Sources:

(1) Remove SERP Expenses. 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 Base is assigned $714,262 of $1,743,416 in total management fees, this adjustment equals - $57,050 x ($714,262 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	198,368,990
ALJ Rate Base Adjustments	192,011
ALJ Rate Base	198,561,001
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	3,657,813
Company Claim (1)	3,654,276
Total ALJ Adjustment	(3,537)
Company Adjustment	0
Net ALJ Interest Adjustment	(3,537)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(353)
Net ALJ Interest Adjustment	(3,537)
State Income Tax Adjustment	(353)
Net ALJ Adjustment for F.I.T.	(3,184)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(669)

(1) Company Main Brief

TABLE IV WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	$198,368,990	$198,368,990
ALJ Rate Base Adjustments	$192,011	$192,011
ALJ Rate Base	$198,561,001	$198,561,001
Weighted Cost of Debt	1.84216100%	0.00%
ALJ Annual Interest Exp.	$3,657,813	$0
Average Revenue Lag Days	50.2	50.2
Average Expense Lag Days	91.3	91.3
Net Lag Days	-41.1	-41.1
Working Capital Adjustment		
ALJ Daily Interest Exp.	$10,021	$0
Net Lag Days	-41.1	-41.1
ALJ Working Capital	($411,863)	$0
Company Claim (1)	($411,000)	$0
ALJ Adjustment	($863)	$0
Total Interest & Dividend Adj.	($863)	

Preferred Stock Dividends	
Company Rate Base Claim	$198,368,990
ALJ Rate Base Adjustments	$192,011
ALJ Rate Base	$198,561,001
Weighted Cost Pref. Stock	0.00000000%
ALJ Preferred Dividends	$0
Average Revenue Lag Days	50.2
Average Expense Lag Days	91.3
Net Lag Days	-41.1
ALJ Daily Dividends	$0
Net Lag Days	-41.1
	$0
Company Claim (1)	$0
	$0

(1) Company Main Brief.

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	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments	$127,675	$0	$127,675	$93,522	$221,197	$606	-197.50	($119,689)
Local, County, School, & Municipal Ta	$175,853	$0	$175,853		$175,853	$482	-167.00	($80,459)
	$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	($1,178,637)	$14,642	($1,163,995)	$1,365,258	$201,263	$551	45.20	$24,924
Federal Income Tax	($2,225,857)	$27,704	($2,198,153)	$2,583,207	$385,054	$1,055	33.40	$35,235
	($3,100,965)	$42,346	($3,058,619)	$4,041,987	$983,368	$2,694	-51.96	($139,989)

Average Lag Days in Receipt of Revenues	50.2
Average Lag in Payment of Taxes	(52.0)
Net Lag	102.2
Average Daily Tax Expense	2,694
ALJ Cash Working Capital for Taxes	275,235
Less Company Claim (1)	73,000
ALJ Adjustment	202,235

(1) Company Main Brief

TABLE VI WASTEWATER BASE
Aqua Pennsylvania Wastewater, Inc. - Base
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
Hourly Labor	$1,098,103	$0	$1,098,103	7.50	$8,235,769
Non-Union Labor	$995,114	$0	$995,114	11.00	$10,946,249
Management Fee (3)	$714,262	($23,373)	$690,889	16.00	$11,054,219
Electric Power	$888,526	$0	$888,526	20.73	$18,415,943
Employee Group Insurance	$1,255,930	$0	$1,255,930	16.00	$20,094,875
Liability Insurance (4)	$23,324	$18,640	$41,964	-1.37	($57,484)
SFI Postage	$51,111	$0	$51,111	-7.96	($406,901)
All Other Expenses	$5,707,866	$0	$5,707,866	25.50	$145,550,579
General Inflation (2)	$0	($145,368)	($145,368)	19.90	($2,892,832)
	$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
	$10,734,236	($150,101)	$10,584,134	19.90	$210,940,417

ALJ Average Revenue Lag	50.2	
Less: ALJ Avg. Expense Lag	19.9	
Net Difference	30.3	Days
ALJ Pro forma O & M Expense per Day	$28,998	
ALJ CWC for O & M	$878,639	
Less: Company Claim (1)	$888,000	
ALJ Adjustment	($9,361)	

Notes and Sources:

(1) Company Main Brief
(2) See II WW Base, 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 II WW Base, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW Base, Note 3.

TABLE I 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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 3,978,573	$ -	$ 3,978,573	$ -	$ 3,978,573	$ 5,089,068	$ 9,067,641
Expenses:							
O & M Expense	2,041,053	-	2,041,053	(27,778)	2,013,275	60,759	2,074,034
Depreciation	1,998,881	-	1,998,881	-	1,998,881	-	1,998,881
Taxes, Other	26,719	-	26,719	-	26,719	34,176	60,895
Income Taxes:							
State	(146,426)	-	(146,426)	2,647	(143,779)	498,914	355,135
Federal	(211,135)	-	(211,135)	5,008	(206,127)	943,996	737,869
Total Expenses	3,709,091	-	3,709,091	(20,123)	3,688,968	1,537,845	5,226,813
Net Inc. Available for Return	$ 269,482	$ -	$ 269,482	$ 20,123	$ 289,605	$ 3,551,223	$ 3,840,828
Rate Base	57,744,861	-	57,744,861	69,745	57,814,606		57,814,606
Rate of Return	0.47%		0.47%				6.64335300%

(1) Company Main Brief

Increase % 127.91%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300% (1)		8.59%
Pre-Tax Interest Coverage	4.66				
After-Tax Interest Coverage	3.61				

(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.

TABLE I(B) LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(389)						
Taxes (Table V)	71,622						
O & M (Table VI)	(1,488)						
REVENUES:							
		0				0	0
EXPENSES:							
Supp. Exec. Retire. Program (1)			(8,035)			803	1,519
General Inflation (2)			(23,275)			2,325	4,400
Gen. Liab. Insurance (3)			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
TAXES:							
Interest Synchronization (Table III)						(128)	(243)
TOTALS	69,745	0	(27,778)	0	0	2,647	5,008

Notes and Sources:

(1) Remove SERP Expenses. 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 equals -$57,050 x ($245,560 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	57,744,861
ALJ Rate Base Adjustments	69,745
ALJ Rate Base	57,814,606
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	1,065,038
Company Claim (1)	1,063,753
Total ALJ Adjustment	(1,285)
Company Adjustment	0
Net ALJ Interest Adjustment	(1,285)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(128)
Net ALJ Interest Adjustment	(1,285)
State Income Tax Adjustment	(128)
Net ALJ Adjustment for F.I.T.	(1,157)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(243)

(1) Company Main Brief

TABLE IV LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$57,744,861	$57,744,861	Company Rate Base Claim	$57,744,861
ALJ Rate Base Adjustments	$69,745	$69,745	ALJ Rate Base Adjustments	$69,745
ALJ Rate Base	$57,814,606	$57,814,606	ALJ Rate Base	$57,814,606
Weighted Cost of Debt	1.84216100%	0.00%	Weighted Cost Pref. Stock	0.00000000%
ALJ Annual Interest Exp.	$1,065,038	$0	ALJ Preferred Dividends	$0
Average Revenue Lag Days	49.7	49.7	Average Revenue Lag Days	49.7
Average Expense Lag Days	91.3	91.3	Average Expense Lag Days	91.3
Net Lag Days	-41.6	-41.6	Net Lag Days	-41.6
Working Capital Adjustment				
ALJ Daily Interest Exp.	$2,918	$0	ALJ Daily Dividends	$0
Net Lag Days	-41.6	-41.6	Net Lag Days	-41.6
ALJ Working Capital	($121,389)	$0		$0
Company Claim (1)	($121,000)	$0	Company Claim (1)	$0
ALJ Adjustment	($389)	$0		$0
Total Interest & Dividend Adj.	($389)			

(1) Company Main Brief.

TABLE V LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

Description	Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments	$26,719	$0	$26,719	$34,176	$60,895	$167	-197.5	($32,949)
	$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	0.0	$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	$0	0.0	$0
	$0	$0	$0		$0	$0	0.0	$0
	$0	$0	$0		$0	$0	0.0	$0
State Income Tax	($146,426)	$2,647	($143,779)	$498,914	$355,135	$973	45.2	$43,978
Federal Income Tax	($277,054)	$5,008	($272,046)	$943,996	$671,950	$1,841	33.4	$61,488
	($396,762)	$7,655	($389,107)	$1,477,086	$1,087,979	$2,981	24.3	$72,517

Average Lag Days in Receipt of Revenues	49.7
Average Lag in Payment of Taxes	24.3
Net Lag	25.4
Average Daily Tax Expense	2,981
ALJ Cash Working Capital for Taxes	75,622

(1) Company Main Brief

TABLE VI LIMERICK
Aqua Pennsylvania Wastewater, Inc. - Limerick
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
Hourly Labor	$322,628	$0	$322,628	7.50	$2,419,712
Non-Union Labor	$147,980	$0	$147,980	11.00	$1,627,776
Management Fee (3)	$245,560	($8,035)	$237,524	16.00	$3,800,390
Electric Power	$249,039	$0	$249,039	20.73	$5,161,671
Employee Group Insurance	$282,365	$0	$282,365	16.00	$4,517,836
Liability Insurance (4)	$8,019	$3,533	$11,552	-1.37	($15,824)
SFI Postage	$17,572	$0	$17,572	-7.96	($139,891)
All Other Expenses	$711,728	$0	$711,728	25.50	$18,149,058
General Inflation (2)	$0	($23,275)	($23,275)	17.90	($416,629)
	$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
	$1,984,890	($27,778)	$1,957,112	17.90	$35,104,099

ALJ Average Revenue Lag	49.7	
Less: ALJ Avg. Expense Lag	17.9	
Net Difference	31.8	Days
ALJ Pro forma O & M Expense per Day	$5,362	
ALJ CWC for O & M	$170,512	
Less: Company Claim (1)	$172,000	
ALJ Adjustment	($1,488)	

(1) Company Main Brief
(2) See II WW Lim, 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 II WW Lim, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW Lim, Note 3.

TABLE I 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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 1,014,569	$ -	$ 1,014,569	$ -	$ 1,014,569	$ 731,234	$ 1,745,803
Expenses:							
O & M Expense	1,113,197	-	1,113,197	(7,802)	1,105,395	8,730	1,114,125
Depreciation	158,552	-	158,552	-	158,552	-	158,552
Taxes, Other	11,413	-	11,413	-	11,413	4,911	16,324
Income Taxes:							
State	(42,221)	-	(42,221)	762	(41,459)	71,688	30,229
Federal	(68,340)	-	(68,340)	1,443	(66,897)	135,640	68,743
Total Expenses	1,172,601	-	1,172,601	(5,597)	1,167,004	220,969	1,387,973
Net Inc. Available for Return	$ (158,032)	$ -	$ (158,032)	$ 5,597	$ (152,435)	$ 510,265	$ 357,830
Rate Base	5,377,205	-	5,377,205	9,083	5,386,288		5,386,288
Rate of Return	-2.94%		-2.94%				6.64335300%

(1) Company Main Brief

Increase % 72.07%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) EAST BRADFORD
Aqua Pennsylvania Wastewater, Inc. - East Bradford
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B) EAST BRADFORD
Aqua Pennsylvania Wastewater, Inc. - East Bradford
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II EAST BRADFORD
Aqua Pennsylvania Wastewater, Inc. - East Bradford
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	250						
Taxes (Table V)	9,143						
O & M (Table VI)	(310)						
REVENUES:							
		0				0	0
EXPENSES:							
Supp. Exec. Retire. Program (1)			(1,763)			176	333
General Inflation (2)			(6,828)			682	1,291
Gen. Liab. Insurance (3)			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:							
Interest Synchronization (Table III)						(17)	(32)
TOTALS	9,083	0	(7,802)	0	0	762	1,443

Notes and Sources:

(1) Remove SERP Expenses. 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 equals -$57,050 x ($53,881 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III EAST BRADFORD
Aqua Pennsylvania Wastewater, Inc. - East Bradford
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	5,377,205
ALJ Rate Base Adjustments	9,083
ALJ Rate Base	5,386,288
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	99,224
Company Claim (1)	99,057
Total ALJ Adjustment	(167)
Company Adjustment	0
Net ALJ Interest Adjustment	(167)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(17)
Net ALJ Interest Adjustment	(167)
State Income Tax Adjustment	(17)
Net ALJ Adjustment for F.I.T.	(150)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(32)

(1) Company Main Brief

TABLE IV EAST BRADFORD
Aqua Pennsylvania Wastewater, Inc. - East Bradford
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$5,377,205	$5,377,205	Company Rate Base Claim	$5,377,205
ALJ Rate Base Adjustments	$9,083	$9,083	ALJ Rate Base Adjustments	$9,083
ALJ Rate Base	$5,386,288	$5,386,288	ALJ Rate Base	$5,386,288
Weighted Cost of Debt	1.84216100%	0.00%	Weighted Cost Pref. Stock	0.00000000%
ALJ Annual Interest Exp.	$99,224	$0	ALJ Preferred Dividends	$0
Average Revenue Lag Days	48.1	48.1	Average Revenue Lag Days	48.1
Average Expense Lag Days	91.3	91.3	Average Expense Lag Days	91.3
Net Lag Days	-43.2	-43.2	Net Lag Days	-43.2
Working Capital Adjustment				
ALJ Daily Interest Exp.	$272	$0	ALJ Daily Dividends	$0
Net Lag Days	-43.2	-43.2	Net Lag Days	-43.2
ALJ Working Capital	($11,750)	$0		$0
Company Claim (1)	($12,000)	$0	Company Claim (1)	$0
ALJ Adjustment	$250	$0		$0
Total Interest & Dividend Adj.	$250			

(1) Company Main Brief.

TABLE V 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	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PA PUC - General Assessments	$6,813	$0	$6,813	$4,911	$11,724	$32	-197.50	($6,344)
Local, County, School, & Municipal Tax	$4,600	$0	$4,600		$4,600	$13	-167.00	($2,104)
	$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	($42,221)	$762	($41,459)	$71,688	$30,229	$83	45.20	$3,743
Federal Income Tax	($79,886)	$1,443	($78,443)	$135,640	$57,197	$157	33.40	$5,234
	($110,694)	$2,205	($108,489)	$212,239	$103,750	$284	1.86	$529

Average Lag Days in Receipt of Revenues	48
Average Lag in Payment of Taxes	1.9
Net Lag	46
Average Daily Tax Expense	284
ALJ Cash Working Capital for Taxes	13,143

(1) Company Main Brief

TABLE VI 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	ALJ	ALJ 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
	$0	$0	$0	0.00	$0
	$1,099,356	($7,802)	$1,091,553	24.80	$27,085,423

ALJ Average Revenue Lag	48.1	
Less: ALJ Avg. Expense Lag	24.8	
Net Difference	23.3	Days
ALJ Pro forma O & M Expense per Day	$2,991	
ALJ CWC for O & M	$69,690	
Less: Company Claim (1)	$70,000	
ALJ Adjustment	($310)	

(1) Company Main Brief
(2) See II WW E Br, 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 II WW E Br, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW E Br, Note 3.

TABLE I 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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 7,258,740	$ -	$ 7,258,740	$ -	$ 7,258,740	$ 2,349,324	$ 9,608,064
Expenses:							
O & M Expense	4,552,450	-	4,552,450	(16,469)	4,535,981	28,049	4,564,030
Depreciation	1,011,770	-	1,011,770	-	1,011,770	-	1,011,770
Taxes, Other	48,747	-	48,747	-	48,747	15,777	64,524
Income Taxes:							
State	(10,260)	-	(10,260)	1,561	(8,699)	230,319	221,620
Federal	164,955	-	164,955	2,954	167,909	435,788	603,697
Total Expenses	5,767,661	-	5,767,661	(11,954)	5,755,708	709,933	6,465,641
Net Inc. Available for Return	$ 1,491,079	$ -	$ 1,491,079	$ 11,954	$ 1,503,032	$ 1,639,391	$ 3,142,423
Rate Base	47,256,177	-	47,256,177	45,590	47,301,767		47,301,767
Rate of Return	3.16%		3.16%				6.64335300%

(1) Company Main Brief

Increase % 32.37%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B) CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(397)						
Taxes (Table V)	47,632						
O & M (Table VI)	(1,645)						
REVENUES:							
		0				0	0
EXPENSES:							
Supp. Exec. Retire. Program (1)			(14,049)			1,403	2,656
General Inflation (2)			(8,719)			871	1,648
Gen. Liab. Insurance (3)			6,299			(629)	(1,191)
			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:							
Interest Synchronization (Table III)						(84)	(159)
TOTALS	45,590	0	(16,469)	0	0	1,561	2,954

Notes and Sources:

(1) Remove SERP Expenses. 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 equals -$57,050 x ($429,319 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	47,256,177
ALJ Rate Base Adjustments	45,590
ALJ Rate Base	47,301,767
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	871,375
Company Claim (1)	870,535
Total ALJ Adjustment	(840)
Company Adjustment	0
Net ALJ Interest Adjustment	(840)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(84)
Net ALJ Interest Adjustment	(840)
State Income Tax Adjustment	(84)
Net ALJ Adjustment for F.I.T.	(756)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(159)

(1) Company Main Brief

TABLE IV CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	$47,256,177	$47,256,177
ALJ Rate Base Adjustments	$45,590	$45,590
ALJ Rate Base	$47,301,767	$47,301,767
Weighted Cost of Debt	1.84216100%	0.00%
ALJ Annual Interest Exp.	$871,375	$0
Average Revenue Lag Days	57.2	57.2
Average Expense Lag Days	91.3	91.3
Net Lag Days	-34.1	-34.1
Working Capital Adjustment		
ALJ Daily Interest Exp.	$2,387	$0
Net Lag Days	-34.1	-34.1
ALJ Working Capital	($81,397)	$0
Company Claim (1)	($81,000)	$0
ALJ Adjustment	($397)	$0
Total Interest & Dividend Adj.	($397)	

Preferred Stock Dividends	
Company Rate Base Claim	$47,256,177
ALJ Rate Base Adjustments	$45,590
ALJ Rate Base	$47,301,767
Weighted Cost Pref. Stock	0.00000000%
ALJ Preferred Dividends	$0
Average Revenue Lag Days	57.2
Average Expense Lag Days	91.3
Net Lag Days	-34.1
ALJ Daily Dividends	$0
Net Lag Days	-34.1
	$0
Company Claim (1)	$0
	$0

(1) Company Main Brief.

TABLE V CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
$0	$48,747	$15,777	$64,524	177	-197.50	($34,914)
$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
$0	$0		$0	-	0.00	$0
$0	$0		$0	-	0.00	$0
$0	$0		$0	-	0.00	$0
$1,561	($8,699)	$230,319	$221,620	607	45.20	$27,445
$2,954	($16,459)	$435,788	$419,329	1,149	33.40	$38,372
$4,515	$23,588	$681,884	$705,472	1,933	16.00	$30,903

Average Lag Days in Receipt of Revenues	57.2
Average Lag in Payment of Taxes	16.0
Net Lag	41.2
Average Daily Tax Expense	1,933
ALJ Cash Working Capital for Taxes	79,632
Less Company Claim (1)	32,000
ALJ Adjustment	47,632

TABLE VI CHELTENHAM
Aqua Pennsylvania Wastewater, Inc. - Cheltenham
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
Hourly Labor	$55,850	$0	$55,850	7.50	$418,878
Non-Union Labor	$309,953	$0	$309,953	11.00	$3,409,478
Management Fee (3)	$429,319	($14,049)	$415,270	16.00	$6,644,319
Employee Group Insurance	$219,482	$0	$219,482	16.00	$3,511,709
Liability Insurance (4)	$14,020	$6,299	$20,319	-1.37	($27,833)
SFI Postage	$30,721	$0	$30,721	-7.96	($244,571)
All Other Expenses	$3,391,357	$0	$3,391,357	25.50	$86,479,591
General Inflation (2)	$0	($8,719)	($8,719)	22.60	($197,047)
	$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
	$0	$0	$0	0.00	$0
	$4,450,701	($16,469)	$4,434,232	22.60	$99,994,524

ALJ Average Revenue Lag	57.2	
Less: ALJ Avg. Expense Lag	22.6	
Net Difference	34.6	Days
ALJ Pro forma O & M Expense per Day	$12,149	
ALJ CWC for O & M	$420,355	
Less: Company Claim (1)	$422,000	
ALJ Adjustment	($1,645)	

(1) Company Main Brief
(2) See II WW Chel, 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 II WW Chel, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW Chel, Note 3.

TABLE I 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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 2,923,770	$ -	$ 2,923,770	$ -	$ 2,923,770	$ 2,523,645	$ 5,447,415
Expenses:							
O & M Expense	2,271,778	-	2,271,778	(14,318)	2,257,460	30,130	2,287,590
Depreciation	952,641	-	952,641	-	952,641	-	952,641
Taxes, Other	19,635	-	19,635	-	19,635	16,948	36,583
Income Taxes:							
State	(84,197)	-	(84,197)	1,390	(82,807)	247,409	164,602
Federal	(147,480)	-	(147,480)	2,629	(144,851)	468,123	323,272
Total Expenses	3,012,378	-	3,012,378	(10,299)	3,002,078	762,610	3,764,688
Net Inc. Available for Return	$ (88,608)	$ -	$ (88,608)	$ 10,299	$ (78,309)	$ 1,761,035	$ 1,682,726
Rate Base	25,307,104	-	25,307,104	22,369	25,329,473		25,329,473
Rate of Return	-0.35%		-0.35%				6.64335300%

(1) Company Main Brief

Increase % 86.31%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B) EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(322)						
Taxes (Table V)	23,443						
O & M (Table VI)	(752)						
REVENUES:							
		0				0	0
EXPENSES:							
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
TAXES:							
Interest Synchronization (Table III)						(41)	(78)
TOTALS	22,369	0	(14,318)	0	0	1,390	2,629

Notes and Sources:

(1) Remove SERP Expenses. 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 equals -$57,050 x ($215,006 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	25,307,104
ALJ Rate Base Adjustments	22,369
ALJ Rate Base	25,329,473
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	466,610
Company Claim (1)	466,198
Total ALJ Adjustment	(412)
Company Adjustment	0
Net ALJ Interest Adjustment	(412)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(41)
Net ALJ Interest Adjustment	(412)
State Income Tax Adjustment	(41)
Net ALJ Adjustment for F.I.T.	(371)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(78)

(1) Company Main Brief

TABLE IV EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	$25,307,104	$25,307,104
ALJ Rate Base Adjustments	$22,369	$22,369
ALJ Rate Base	$25,329,473	$25,329,473
Weighted Cost of Debt	1.84216100%	0.00%
ALJ Annual Interest Exp.	$466,610	$0
Average Revenue Lag Days	44.1	44.1
Average Expense Lag Days	91.3	91.3
Net Lag Days	-47.2	-47.2
Working Capital Adjustment		
ALJ Daily Interest Exp.	$1,278	$0
Net Lag Days	-47.2	-47.2
ALJ Working Capital	($60,322)	$0
Company Claim (1)	($60,000)	$0
ALJ Adjustment	($322)	$0
Total Interest & Dividend Adj.	($322)	

Preferred Stock Dividends	
Company Rate Base Claim	$25,307,104
ALJ Rate Base Adjustments	$22,369
ALJ Rate Base	$25,329,473
Weighted Cost Pref. Stock	0.00000000%
ALJ Preferred Dividends	$0
Average Revenue Lag Days	44.1
Average Expense Lag Days	91.3
Net Lag Days	-47.2
ALJ Daily Dividends	$0
Net Lag Days	-47.2
	$0
Company Claim (1)	$0
	$0

(1) Company Main Brief.

TABLE V 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	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
Assessments	$19,635	$0	$19,635	$16,948	$36,583	$100	-197.50	($19,795)
	$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)	$1,390	($82,807)	$247,409	$164,602	$451	45.20	$20,384
Federal Income Tax	($159,309)	$2,629	($156,680)	$468,123	$311,443	$853	33.40	$28,499
	($223,871)	$4,019	($219,852)	$732,480	$512,628	$1,404	20.71	$29,088

Average Lag Days in Receipt of Revenues	44.1
Average Lag in Payment of Taxes	21.0
Net Lag	23.1
Average Daily Tax Expense	1,404
ALJ Cash Working Capital for Taxes	32,443

(1) Company Main Brief

TABLE VI EAST NORRITON
Aqua Pennsylvania Wastewater, Inc. - East Norriton
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
Non-Union Labor	$137,423	$0	$137,423	11.00	$1,511,649
Management Fee (3)	$215,006	($7,036)	$207,970	16.00	$3,327,518
Electric Power	$122,439	$0	$122,439	20.73	$2,537,718
Employee Group Insurance	$82,454	$0	$82,454	16.00	$1,319,257
Liability Insurance (4)	$7,021	$1,382	$8,403	-1.37	($11,511)
SFI Postage	$15,385	$0	$15,385	-7.96	($122,481)
All Other Expenses	$1,649,556	$0	$1,649,556	25.50	$42,063,673
General Inflation (2)	$0	($8,665)	($8,665)	22.80	($197,551)
	$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
	$0	$0	$0	0.00	$0
	$2,229,283	($14,318)	$2,214,964	22.80	$50,428,272

ALJ Average Revenue Lag	44.1	
Less: ALJ Avg. Expense Lag	22.8	
Net Difference	21.3	Days
ALJ Pro forma O & M Expense per Day	$6,068	
ALJ CWC for O & M	$129,248	
Less: Company Claim (1)	$130,000	
ALJ Adjustment	($752)	

(1) Company Main Brief
(2) See II WW E Norr, 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 II WW E Norr, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW E Norr, Note 3.

TABLE I 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)	ALJ Adjustments	ALJ Pro Forma Present Rates	ALJ Revenue Increase (2)	Total Allowable Revenues
	$	$	$	$	$	$	$
Operating Revenue	$ 2,889,080	$ -	$ 2,889,080	$ -	$ 2,889,080	$ 2,281,574	$ 5,170,654
Expenses:							
O & M Expense	1,845,024	-	1,845,024	(16,175)	1,828,849	27,240	1,856,089
Depreciation	735,834	-	735,834	-	735,834	-	735,834
Taxes, Other	19,402	-	19,402	-	19,402	15,322	34,724
Income Taxes:							
State	(75,351)	-	(75,351)	1,647	(73,704)	223,677	149,973
Federal	(40,533)	-	(40,533)	3,118	(37,415)	423,220	385,805
Total Expenses	2,484,377	-	2,484,377	(11,410)	2,472,967	689,459	3,162,426
Net Inc. Available for Return	$ 404,704	$ -	$ 404,704	$ 11,410	$	416,114	$ 1,592,114 $ 2,008,228
Rate Base	30,246,226	-	30,246,226	(17,095)	30,229,131		30,229,131
Rate of Return	1.34%		1.34%				6.64335300%

(1) Company Main Brief

Increase % 78.97%

(2) Revenue increases before Section 1311(c) allocation from water to wastewater

TABLE I(A) NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
RATE OF RETURN
R-2021-3027385, R-2021-3027386

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			1.84216100%		
Long-term Debt	46.05%	4.00%	1.84216100%		1.84%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	53.95%	8.90%	4.80119200%	0.711079	6.75%
	100.00%		6.64335300%		8.59%

Pre-Tax Interest Coverage	4.66
After-Tax Interest Coverage	3.61

TABLE I(B) NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
REVENUE FACTOR
R-2021-3027385, R-2021-3027386

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA, DPC Assessment Factors (*)	0.00671560
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98134529
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09803639
Factor After Local and State Taxes	0.88330890
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18549487
Revenue Factor (100% - Effective Tax Rates)	0.69781403

(*) Company Main Brief

TABLE II NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
SUMMARY OF ADJUSTMENTS
R-2021-3027385, R-2021-3027386

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(378)						
Taxes (Table V)	(16,355)						
O & M (Table VI)	(362)						
REVENUES:							
		0				0	0
EXPENSES:							
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:							
Interest Synchronization (Table III)						31	60
TOTALS	(17,095)	0	(16,175)	0	0	1,647	3,118

Notes and Sources:

(1) Remove SERP Expenses. 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 equals -$57,050 x ($85,388 / $1,743,416).
(2) Remove general inflation adjustment.
(3) Adopt BIE position regarding general liability insurance expense.

TABLE III NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
INTEREST SYNCHRONIZATION
R-2021-3027385, R-2021-3027386

	Amount $
Company Rate Base Claim	30,246,226
ALJ Rate Base Adjustments	(17,095)
ALJ Rate Base	30,229,131
Weighted Cost of Debt	1.84216100%
ALJ Interest Expense	556,869
Company Claim (1)	557,184
Total ALJ Adjustment	315
Company Adjustment	0
Net ALJ Interest Adjustment	315
State Income Tax Rate	9.99%
State Income Tax Adjustment	31
Net ALJ Interest Adjustment	315
State Income Tax Adjustment	31
Net ALJ Adjustment for F.I.T.	284
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	60

(1) Company Main Brief

TABLE IV NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
CASH WORKING CAPITAL - Interest and Dividends
R-2021-3027385, R-2021-3027386

Accrued Interest	Long-Term Debt	Short-Term Debt
Company Rate Base Claim	$30,246,226	$30,246,226
ALJ Rate Base Adjustments	($17,095)	($17,095)
ALJ Rate Base	$30,229,131	$30,229,131
Weighted Cost of Debt	1.84216100%	0.00%
ALJ Annual Interest Exp.	$556,869	$0
Average Revenue Lag Days	22.9	22.9
Average Expense Lag Days	91.3	91.3
Net Lag Days	-68.4	-68.4
Working Capital Adjustment		
ALJ Daily Interest Exp.	$1,526	$0
Net Lag Days	-68.4	-68.4
ALJ Working Capital	($104,378)	$0
Company Claim (1)	($104,000)	$0
ALJ Adjustment	($378)	$0
Total Interest & Dividend Adj.	($378)	

Preferred Stock Dividends	
Company Rate Base Claim	$30,246,226
ALJ Rate Base Adjustments	($17,095)
ALJ Rate Base	$30,229,131
Weighted Cost Pref. Stock	0.00000000%
ALJ Preferred Dividends	$0
Average Revenue Lag Days	22.9
Average Expense Lag Days	91.3
Net Lag Days	-68.4
ALJ Daily Dividends	$0
Net Lag Days	-68.4
	$0
Company Claim (1)	$0
	$0

(1) Company Main Brief.

TABLE V NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
CASH WORKING CAPITAL -TAXES
R-2021-3027385, R-2021-3027386

Company Proforma Tax Expense Present Rates	ALJ Adjustments	ALJ Pro forma Tax Expense Present Rates	ALJ Allowance	ALJ Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
$19,402	$0	$19,402	$15,322	$34,724	$95	(197.50)	($18,788)
$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
$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
($75,351)	$1,647	($73,704)	$223,677	$149,973	$411	45.20	$18,572
($142,571)	$3,118	($139,453)	$423,220	$283,767	$777	33.40	$25,966
($198,520)	$4,765	($193,755)	$662,219	$468,464	$1,283	20.06	$25,750

Average Lag Days in Receipt of Revenues	22.9
Average Lag in Payment of Taxes	20.1
Net Lag	2.8
Average Daily Tax Expense	1,283
ALJ Cash Working Capital for Taxes	3,645
Less Company Claim (1)	20,000
ALJ Adjustment	(16,355)

TABLE VI NEW GARDEN
Aqua Pennsylvania Wastewater, Inc. - New Garden
CASH WORKING CAPITAL -- O & M EXPENSE
R-2021-3027385, R-2021-3027386

Description	Company Pro forma F.T.Y. Expense	ALJ	ALJ Pro forma Expenses	Lag Days	Lag Dollars
Non-Union Labor	$12,085	$0	$12,085	11.00	$132,931
Management Fee (3)	$85,388	($2,794)	$82,594	16.00	$1,321,496
Electric Power	$130,877	$0	$130,877	20.73	$2,712,602
Employee Group Insurance	$7,251	$0	$7,251	16.00	$116,012
Liability Insurance (4)	$2,788	($676)	$2,112	-1.37	($2,894)
SFI Postage	$6,110	$0	$6,110	-7.96	($48,642)
All Other Expenses	$1,563,192	$0	$1,563,192	25.50	$39,861,387
General Inflation (2)	$0	($12,705)	($12,705)	24.40	($310,002)
	$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
	$0	$0	$0	0.00	$0
	$1,807,690	($16,175)	$1,791,515	24.40	$43,782,890

ALJ Average Revenue Lag	22.9	
Less: ALJ Avg. Expense Lag	24.4	
Net Difference	-1.5	Days
ALJ Pro forma O & M Expense per Day	$4,908	
ALJ CWC for O & M	($7,362)	
Less: Company Claim (1)	($7,000)	
ALJ Adjustment	($362)	

(1) Company Main Brief
(2) See II WW E Norr, 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 II WW N Gar, Note 1. SERP expenses are under the management fee account. OCA Exhibit LA-3 at Page 63.
(4) See II WW N Garden, Note 3.