COMMONWEALTH OF PENNSYLVANIA

OFFICE OF CONSUMER ADVOCATE
555 Walnut Street, 5th Floor, Forum Place
Harrisburg, Pennsylvania 17101-1923
(717) 783-5048
800-684-6560

@pa_oca
/pennoca

FAX (717) 783-7152
consumer@paoca.org

January 21, 2022

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

Re: Pennsylvania Public Utility Commission
v.
Aqua Pennsylvania, Inc. and
Aqua Pennsylvania Wastewater, Inc.
Docket Nos. R-2021-3027385 (Water)
C-2021-3028466 (Water)
R-2021-3027386 (Wastewater)
C-2021-3028467 (Wastewater)

Dear Secretary Chiavetta:

Attached for electronic filing please find the Office of Consumer Advocate's Reply Brief in the above-referenced proceedings.

Copies have been served per the attached Certificate of Service.

Respectfully submitted,

/s/ Erin L. Gannon
Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Enclosures:
cc: The Honorable Mary D. Long **(via FedEx and email)**
Office of Special Assistants (**email only**: ra-OSA@pa.gov)
Certificate of Service
*323024

CERTIFICATE OF SERVICE

Re: Pennsylvania Public Utility Commission	:	
	:	Docket Nos. R-2021-3027385 (Water)
v.	:	C-2021-3028466 (Water)
	:	R-2021-3027386 (WW)
Aqua Pennsylvania, Inc. and Aqua	:	C-2021-3028467 (WW)
Pennsylvania Wastewater, Inc.	:	

I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate's Reply Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 21st day of January 2022.

SERVICE BY E-MAIL ONLY

Scott B. Granger, Esquire
Bureau of Investigation & Enforcement
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120
sgranger@pa.gov

Steven C. Gray, Esquire
Office of Small Business Advocate
555 Walnut Street
1st Floor, Forum Place
Harrisburg, PA 17101-1923
sgray@pa.gov

Michael W. Hassell, Esquire
Garrett Lent, Esquire
Post & Schell, P.C.
17 North Second Street, 12th Floor
Harrisburg, PA 17101-1601
MHassell@postschell.com
GLent@postschell.com

Kimberly A. Joyce, Esquire
Mary McFall Hopper, Esquire
Alexander R. Stahl, Esquire
Aqua Pennsylvania, Inc.
762 W. Lancaster Ave.
Bryn Mawr, PA 19010
KAJoyce@essential.co
MMHopper@aquaamerica.com
AStahl@aquaamerica.com

John W. Sweet, Esquire
Ria M. Pereira, Esquire
Elizabeth R. Marx, Esquire
Lauren Berman, Esquire
Pennsylvania Utility Law Project
118 Locust Street
Harrisburg, PA 17101
PULP@pautilitylawproject.org

Brian Kalcic
Excel Consulting
225 S. Meramec Avenue
Suite 720 T
St. Louis, MO 63105
excel.consulting@sbcglobal.net
Consultant for OSBA

SERVICE BY E-MAIL ONLY *(continued)*

Adeolu A. Bakare, Esquire
Charis Mincavage, Esquire
McNees Wallace & Nurick LLC
100 Pine Street
P. O. Box 1166
Harrisburg, PA 17108-1166
abakare@mcneeslaw.com
cmincavage@mcneeslaw.com
Counsel for Aqua Large Users Group

George A. Bibikos, Esquire
GA BIBIKOS LLC
5901 Jonestown Road #6330
Harrisburg, PA 17112
gbibikos@gabibikos.com
Counsel for Masthope Mountain Community Association

Francine Weiner
1903 2nd Street
Langhorne, PA 19047
fhwhome@gmail.com

John Day
614 Runyon Avenue
Piscataway, NJ 08854
john@johnday.us

Richard J. Gage
120 Treaty Drive
Chesterbrook (Wayne), PA 19087
brittagage@aol.com

/s/ Erin L. Gannon
Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Mackenzie C. Battle
Assistant Consumer Advocate
PA Attorney I.D. # 330879
E-Mail: MBattle@paoca.org

Harrison W. Breitman
Assistant Consumer Advocate
PA Attorney I.D. # 320580
E-Mail: HBreitman@paoca.org

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org

Lauren E. Guerra
Assistant Consumer Advocate
PA Attorney I.D. # 323192
E-Mail: LGuerra@paoca.org

Counsel for:
Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152
Dated: January 21, 2022
*323025

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	Docket Nos. R-2021-3027385 (Water)
v.	:	C-2021-3028466 (Water)
	:	R-2021-3027386 (WW)
Aqua Pennsylvania, Inc. and Aqua	:	C-2021-3028467 (WW)
Pennsylvania Wastewater, Inc.	:	

REPLY BRIEF
OF THE
OFFICE OF CONSUMER ADVOCATE

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Harrison W. Breitman
Assistant Consumer Advocate
PA Attorney I.D. # 320580
E-Mail: HBreitman@paoca.org

Lauren E. Guerra
Assistant Consumer Advocate
PA Attorney I.D. # 323192
E-Mail: LGuerra@paoca.org

Mackenzie C. Battle
Assistant Consumer Advocate
PA Attorney I.D. # 330879
E-Mail: MBattle@paoca.org

Counsel for
Patrick M. Cicero
Acting Consumer Advocate

Dated: January 21, 2022

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

Cases

Administrative Decisions

Statutes

Other Authorities

I. INTRODUCTION

The OCA submits this Reply Brief in response to the Main Brief filed by Aqua Pennsylvania, Inc. (AP or Aqua or the Company). The OCA specifically will respond to those matters raised by Aqua that were not previously addressed or that require clarification. The OCA does not waive its opposition on contested issues because it does not repeat arguments here and incorporates by reference the arguments and analysis in its Main Brief.[1]

A summary table showing the OCA's recommended revenue requirements on a total Company basis and the seven individual revenue requirements is attached to this Brief in Appendix A (Summary Table). Tables that show the revenue requirement for each system, reflecting the OCA's accounting adjustments and cost of capital, are also attached to this Brief in Appendix A.[2] *See* OCA R.B., Appendix A (Tables I-VI (Water), Tables I-VI (Wastewater Base), Tables I-VI (Limerick), Tables I-VI (East Bradford), Tables I-VI (Cheltenham), Tables I-VI (East Norriton), Tables I-VI (New Garden)).

A. History of the Proceeding

As discussed in the Main Briefs, on August 20, 2021, Aqua Pennsylvania Inc. (Aqua or Company) filed Original Tariff Water – Pa. P.U.C. No. 3 (Tariff Water No. 3) and Original Tariff Sewer – Pa. P.U.C. No 3 (Tariff Sewer No. 3) with the Pennsylvania Public Utility Commission to become effective on October 19, 2021. Through its proposed tariffs, Aqua proposes to increase the Company's total annual operating revenues by approximately $97,684,824 million per year, or approximately 17.86% over the amount of annual revenues anticipated for the Fully Projected

[1] The OCA submitted a Public Version and a Confidential Version of its Main Brief on January 11, 2022. As the page numbering in those briefs is identical, the OCA will cite to both versions as OCA M.B.

[2] The OCA notes that the only difference between the tables attached to its Main and Reply Briefs is that the presentation of Aqua's numbers has been updated to reflect what the Company filed with its Main Brief. There has been no change to the OCA's adjustments.

Future Test Year (FPFTY) ending March 31, 2023. Aqua also proposes to collect $20 million of its wastewater revenue requirement from its water customers pursuant to 66 Pa. C.S. § 1311(c).

The OCA continues to oppose Aqua's propose rate increase for the reasons discussed in the Main Brief, and below. The OCA's recommended adjustments result in an overall revenue decrease for the Company, but they result in an increase to wastewater revenue for the Company. As noted above, tables that show the revenue requirement for each system are provided in Appendix A to this Brief. *See* OCA R.B., App. A.

B. Burden of Proof

Both the Company and the OCA established that Aqua bears the burden of proof to establish the justness and reasonableness of every element of its requested rate increase. OCA M.B. at 3; Aqua M.B. at 6. The Company did not mention in its brief that Pennsylvania law is clear that there is no similar burden for a party proposing an adjustment to a utility base rate filing. *See, e.g.*, *Berner v. Pa. P.U.C.*, 382 Pa. 622, 116 A.2d 738 (1955) (*Berner*). The OCA demonstrated in its Main Brief, and as further elaborated in its arguments below, the Company has failed to satisfy its statutory burden and, thus, the Commission must deny the Company's requested relief.

C. Impact of Pandemic

The economic repercussions of the COVID-19 pandemic are real and significant in Aqua's service territory and the OCA submits that the Commission should acknowledge the circumstances facing consumers during these extraordinary times in setting rates in this proceeding. The continued impact of the COVID-19 pandemic on Aqua's service territory further supports the necessity of the lowest reasonable return on equity in this proceeding, and adoption of other OCA

recommendations. The OCA will further discuss these substantive issues in its sections below and has provided further discussion in its Main Brief. OCA M.B. at 5-15.

In its Main Brief, Aqua argues that the pandemic has exacerbated its need to obtain rate relief because of the twin issues of supply chain disruptions and inflation. Aqua M.B. at 8. Aqua also raises specific objections to the OCA's adjustments to residential usage and the period for deferring its uncollectible expenses, related to the pandemic's impact. *Id.* at 12, 53-55, 200-06. The reasonableness of the OCA's adjustments is addressed in the OCA's Main Brief and also below in Sections IV.A and VI.

Aqua also argues that, notwithstanding the pandemic, the Company should be awarded a higher return on equity (ROE). The Company attempts to differentiate the instant proceeding from the Columbia 2020 base rate case where, "in the midst of the pandemic," the utility did not pursue a leverage adjustment after it was rejected by the Presiding Officer. Aqua M.B. at 116; *see Pa. P.U.C. v. Columbia Gas of Pa., Inc.*, Docket No. R-2020-3018835, R.D. at 184 (Dec. 4, 2020). To be clear, the impact of the pandemic continues and the lowest reasonable return on equity should be adopted in this proceeding. Not only should the leverage adjustment be rejected but Aqua's proposal to increase its ROE as a reward for its management's performance should be denied.

OCA witness Colton provided unrefuted testimony showing that the economic crisis is ongoing and continues to severely impact the lives of Aqua's ratepayers. The OCA provided PULSE data, showing that Pennsylvania residents, particularly Pennsylvania residents who are ages 25 to 39 and those who identify as Hispanic or Latino, are experiencing job loss. OCA M.B. at 9. Similarly, the evidence on record specific to Pennsylvania residents shows that the lower a household's income, the greater the impact the pandemic has on income loss. *Id.* at 10.

Importantly, the OCA also provided the latest data at the time of briefing showing a significant increase in the number of active COVID-19 cases and deaths in Pennsylvania. OCA M.B. at 13-14. Unemployment rates in Aqua's service territory are rising, that there is an increase in Aqua's At-Risk Accounts and Aggregate Arrears, and that the arrearages across Aqua's service territory continue to be significantly higher than they were pre-pandemic. *Id.* at 5-8. Portions of Aqua's service territory[3] have the highest hospitalization rates for COVID-19 in the United States. *See* OCA M.B. at 5; Aqua M.B. at 116. At the same time, the OCA has also identified that Aqua has charged a significant level of late fee payments during the COVID-19 pandemic and, even during the moratorium on terminations, as discussed *infra* in Section X.D.6.

For all of these reasons, the continued impact of the COVID-19 pandemic should be taken into account in the Commission's consideration of appropriate ROE and the OCA's other recommendations related to the pandemic, to keep any Aqua rate increase to the lowest possible cost for ratepayers.

[3] Northumberland and Columbia counties.

II. SUMMARY OF ARGUMENT

This Commission should not approve any rate increase for Aqua's water customers at this time, and should approve revised rate increases for Aqua's wastewater customers. Aqua is seeking to increase rates for its water and wastewater operations by a total of $97.684 million, or by 17.86%. Many of the arguments raised in Aqua's Main Brief were fully addressed in the OCA's Main Brief. Due to the extreme economic and personal hardships being endured by Aqua's customers, and the public in general, any rate increase at this time would not result in just and reasonable rates. The evidence establishes that a no rate increase approach will not have a material impact on Aqua at this time. In fact, the OCA's recommended adjustments result in a $12.142 million revenue decrease, or a 2.21% decrease on a total Company basis.

Based on the evidence of record in this proceeding, Aqua cannot meet its burden of proof to show that proposed increases and subsidies will result in just and reasonable rates. Moreover, the OCA identified the large subsidies that water customers are being asked to bear and has recommended reasonable ratemaking alternatives. In addition, the OCA identified numerous issues related to the low-income programs, customer service, rate base, operation and maintenance expenses, revenues, taxes, and quality of service that Aqua has not sufficiently addressed. The OCA further showed that Aqua's request for a 10.75% return on equity is excessive, would create unnecessary cost for ratepayers, and should be rejected. For the reasons set forth in this Reply Brief and in the OCA's Main Brief, the OCA respectfully requests that the Commission reject Aqua's proposed rate increase.

III. RATE BASE

A. Plant in Service

The OCA continues to recommend a rate base of approximately $3.809 billion for Aqua's water operations, which is approximately $9.5 million lower than the Company's proposal. 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. The OCA fully addressed each of the adjustments it made to arrive at these recommended rate bases in its main brief and discusses them again below to address the arguments made by the Company in its main brief.

B. Borough of Phoenixville Acquisition Adjustment

The Company asserts that it has satisfied all of the requirements of 66 Pa. C.S. §1327(a) necessary to include the amount of the Phoenixville Water Acquisition Adjustment in its rate base, including Section 1327(a)(3), which requires the Company to demonstrate that the Borough of Phoenixville was not "at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service and facilities." 66 Pa. C.S. §1327(a); Aqua M.B. at 22. The Company argues that the "high level of non-revenue water" and the need to repair or replace 32 out of 105 fire hydrants conclusively indicate that the Borough of Phoenixville was not providing adequate service. Aqua M.B. at 25. As is discussed in detail in the OCA's Main Brief at pages 19-21, these facts alone are not sufficient to meet the requirements of Section 1327. While prudent management dictates that they do so, the Company has not been ordered to reduce the "high levels of non-revenue water." Moreover, replacing hydrants is normal maintenance, not an indication of a troubled system. OCA M.B. at 205. Aqua itself has fire hydrants that need maintenance in order to provide minimum fire flow. OCA M.B. at 213. Since Aqua has not been found to be in violation of Section 1501 due to these maintenance issues, it cannot argue that similar issues in the Borough

of Phoenixville system are sufficient to bring that system under Section 1327. 66 Pa. C.S. § 1501; 66 Pa. C.S. § 1327.

Aqua argues that the Commission encouraged the sale of the Phoenixville assets as further support for its assertion that the Company has satisfied the requirements of Section 1327. Aqua M.B. at 22-24. While this may be true, it is not dispositive of the issue of whether the system was failing. The Commission encouraged the sale of the Phoenixville assets to Aqua in part to resolve the Borough's inability to fund rate cases before the Commission, since as the Borough described, the costs of rate filings are significant and disproportionate to the "minimal revenues recovered from the Borough's small extraterritorial customer base." Aqua M.B. at 20 (citing Phoenixville Petition Order at 3-4). However, as the OCA noted in its Main Brief, the Commission has found that where a system does not have the financial resources to supply service outside of its service territory, or to remedy water quality problems near its territory, that does not indicate that the system was failing to maintain adequate, efficient, safe, and reasonable service and facilities at the time of the acquisition. *See Pa. P.U.C. v. Citizens Util. Water Co.*, 1996 Pa. P.U.C. LEXIS 167 at *20, *27-28.

The Company also argues that the 'condition [of the system] at the time of its acquisition demonstrates that the Borough was not providing adequate, efficient, safe, or reliable service," Aqua M.B. at 25. This statement belies the facts. When Aqua acquired the system, it had no specified plans for capital improvements or to otherwise improve the assets and the Borough certified that the system was in compliance with all applicable laws and regulations. *See* OCA M.B. at 19-20; OCA St. 2 at 11. Furthermore, the Commission itself made no findings of inadequate financial, managerial, or technical ability of the Borough. *See Joint Application of Aqua Pennsylvania, Inc. and the Borough of Phoenixville*, Docket No. A-2018-2642873, Order at

2-5 (Oct. 23, 2019) *(Phoenixville 2019*). The Company's investigation of unaccounted for water issues, its efforts to address metering issues, and its fire hydrant maintenance indicate that the Company is fulfilling its role as the owner of the system. OCA M.B. at 21. But they are insufficient to demonstrate that the Borough of Phoenixville was "not, at the time of acquisition, furnishing and maintaining adequate, efficient, safe and reasonable service." 66 Pa. C.S. § 1327(a)(3). Thus, Aqua's claim of a positive acquisition adjustment for the portion of the system that it acquired, along with its $121,865 amortization expense associated with the Phoenixville acquisition, should be disallowed. *See* OCA M.B. at 19; Aqua M.B. at 58; Table II (Water).

C. Cash Working Capital

The OCA proposed adjustments to operating expenses and to interest, and these adjustments necessarily caused proposed changes to Cash Working Capital (CWC). *See infra* Section V (Expenses). The Company objected to all of those expense adjustments. Aqua M.B. at 32. The Company objects specifically to the OCA's proposed CWC adjustments because it argues that "the use of a hypothetical capital structure is improper" and that the OCA failed to show that the Company's proposed capital structure was "atypical or unreasonable." Aqua M.B. at 32. However, the OCA does not have the burden of demonstrating that the Company's proposed capital structure is "atypical or unreasonable." It is the Company's responsibility to demonstrate that every aspect of its case is just and reasonable, and it is not the OCA's responsibility to prove the opposite. 66 Pa. C.S. § 315; *Pa. P.U.C. v. Pennsylvania American Water Co*., 2004 Pa. P.U.C. LEXIS 29 at *16-18 (*PAWC 2004*). Further, as explained in the OCA's Main Brief, the OCA's calculations represent proper synchronization and coordination of the OCA's recommended weighted cost of debt and rate base, and the Commission has acknowledged that adjustments to interest necessarily impact other elements of a utility's rate base, including CWC. *See* OCA M.B.

at 23 (citing *Pa. P.U.C. v. Pennsylvania Power & Light Co.*, 1995 Pa. P.U.C. LEXIS 190 at *43 (1995) (*PPL 1995*)).

D. Aqua Understated Its Contributions in Aid of Construction and Customer Advances

The Company appeared to understate its amounts of Contributions in Aid of Construction (CIAC) and Customer Advances when it calculated its starting rate bate amount, and in response the OCA proposed a rate base adjustment to reflect actual CIAC and Customer Advances balances as of March 31, 2021. *See* OCA M.B. at 23. However, the Company explained in rebuttal testimony that the discrepancies identified by OCA witness Smith were because the Company had properly excluded non-utility plant items from its CIAC and Customer Advances balances. Aqua St. 2R at 10. Both the Company and the OCA identify in their Main Briefs that the OCA has withdrawn any adjustments to the Company's claimed reductions to rate base associated with CIAC and Customer Advances. Aqua M.B. at 34; OCA M.B. at 23.

IV. REVENUES

A. Aqua's Adjustment to FPFTY Metered Residential Sales Should More Accurately Depict the Percentage of Residential Consumers Spending More Time at Home.

The Company proposed to reduce projected residential revenues by $11.03 million in the FPFTY. Aqua M.B. at 53. The OCA recommended an adjustment that reflected 75% of Company's proposed reduction. OCA M.B. at 24. The Company's metered residential water sales in 2020 were 1,181,614,000 gallons higher than in 2019, a pre-pandemic period. With increased residential water usage in 2020 it would be unreasonable for Aqua to reduce HTY metered residential water sales by such a significant quantity for the purpose of deriving sales levels for the FPFTY. The Company opposes the OCA's proposed adjustment to residential metered water sales because it argued that the best indicator of future water sales is average usage from the 2018 Base Rate Case (pre-pandemic). Aqua M.B. at 53. The Company also argued that it was inconsistent of the OCA to accept the Company's revenue adjustments for commercial and public customers, but not residential customers. *Id*. at 53-54. Aqua has failed to support its projected residential revenues and OCA's adjustment should be adopted.

The Company inexplicably tries to support its argument that residential usage is trending towards pre-pandemic levels by using a chart that only includes data about water usage during the pandemic. Aqua M.B. at 54; Aqua St. 5R at 19. While the chart shows that usage has declined slightly between fall 2020 and fall 2021, it does not show a return to pre-pandemic levels. Instead, Aqua's data demonstrates that, on the whole, residential water usage has increased since 2019, indicating that people are still using water at home. OCA M.B. at 25; OCA St. 1SR at 28.

The OCA recognized that some adjustment from the HTY residential consumption was needed, and accepted 75% of Aqua's proposed adjustment for the FPFTY. Aqua dismisses the OCA's 25% adjustment as "inconsistent and not supported by the record." Aqua M.B. at 55.

Aqua's claims are incorrect. The evidence in the record (and in the chart below) clearly supports that pandemic is ongoing, and that residential water usage is not reasonably likely to return to pre-pandemic levels in the FPFTY. OCA M.B. at 25; OCA St. 1SR at 27-28.

Aqua Pennsylvania							
Water Usage Comparison - 1000 Gallons							
					2020-2021		2021 versus 2019
	Pre-Pandemic			2020-2021	Percentage	2021 versus 2019	Percentage
Description	Oct-19	Oct-20	Oct-21	Change	Change	Change	Change
	(A)	(B)	(C)	(D) = (C) - (B)	(E) = (D) / (B)	(F) = (C) - (A)	(G) = (F) / (A)
Residential	1,416,205	1,636,326	1,545,471	(90,855)	-5.6%	129,266	9.1%
Commercial	784,081	805,189	877,755	72,566	9.0%	93,674	11.9%
Public	62,994	43,714	58,915	15,201	34.8%	(4,079)	-6.5%
	2,263,280	2,485,230	2,482,141	(3,089)	-0.1%	218,861	9.7%
	Pre-Pandemic			2020-2021	Percentage	2021 versus 2019	Percentage
	Sep-19	Sep-20	Sep-21	Change	Change	Change	Change
Residential	1,528,962	1,706,364	1,636,859	(69,505)	-4.1%	107,897	7.1%
Commercial	848,893	870,301	935,491	65,190	7.5%	86,598	10.2%
Public	64,813	54,027	59,981	5,954	11.0%	(4,832)	-7.5%
	2,442,668	2,630,691	2,632,331	1,639	0.1%	189,663	7.8%
Notes and Source:							
Columns B through E: Aqua PA witness Heppenstall Rebuttal Testimony, page 19							
September and October 2019 Information: Aqua PA response to OCA Informal Discovery							
Columns F and G: Calculated using the 2021 and 2019 water sales information provided by Aqua PA							

OCA St. 1SR at 28.

Aqua itself acknowledges that "it is not the Company's position that it can be said with any certainty that the pandemic is over", yet Aqua continues to argue that residential water usage going forward will be as it was pre-pandemic. Aqua M.B. at 53-54. This argument fails to acknowledge that while numbers are slowly adjusting towards pre-pandemic levels, they are not there yet, and residential water usage is likely to remain high into the future. OCA M.B. at 25. Thus, the OCA continues to recommend that only 75% of the Company's proposed decrease in residential water consumption be approved, which results in an increase in residential revenue received by the Company totaling a $2.757 million. OCA M.B. at 26; Table II (Water).

B. Aqua's Special Contract Revenue Should Be Increased to Accurately Reflect Inflation in the FPFTY.

The Company continues to recommend an adjustment to special contract revenue based on its own inflation adjustments. The Company's adjustments were calculated based on the GDP Chained Price Index and which it also used to calculate the General Price Level adjustment for expense purposes. Aqua M.B. at 52. 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. The Company objects to the OCA's proposed escalation rate because it claims that the rate Aqua calculated is more consistent with the escalation provisions in its negotiated rate contracts, and because the inflation factor to adjust certain revenues should be the same as the inflation factor used to adjust certain expenses. Aqua M.B. at 52-53.

Apart from this argument about consistency, the Company provides no reasoning for why its inflation calculations are more accurate than the OCA's. OCA witness Watkins demonstrated that his estimates are reasonable and conservative because they represent the *actual* annual rate of inflation through October 2021 and because for the ten months ending October 2021, the CPI has increased by 5.5%. OCA St. 4S at 10; OCA Sch. GAW-1SR. The Company's only argument for its (significantly lower) escalation rate is that Aqua's rate is more consistent with the escalation provisions in its contracts. However, the OCA's estimated escalation rates are arguably more consistent because they rely on CPI, which is the same metric described in the contract itself. Thus, for the reasons outlined more fully in Section VIII.E below, the OCA's inflation calculation should be adopted as a more realistic estimate of what inflation rates will be in the FPFTY. OCA M.B.

at 110-11. As such, the OCA's adjustment to special contract revenue should be adopted to reflect those rates. *See* OCA M.B. at 26, 110-11.

C. Miscellaneous Revenues

The OCA reflected the impact of the Company's adjustment to increase Miscellaneous revenue by $150,172 to normalize the impact of COVID-19 in its own calculations. *See* OCA M.B. at 27; OCA Exh. LA-6, Sch. C-19; *see* OCA Table II (Water). *See* Aqua M.B. at 56.

D. New Garden Late Fee Revenue for Water Utility

The Company stated in rebuttal testimony and in its Main Brief that it continues to accept I&E's proposal that the Company increase late payment revenues associated with the New Garden wastewater system and annualize it to reflect a full year. Aqua M.B. at 56-57; Aqua St. 2R at 30. The OCA reflected the impact of this additional revenue in its adjustments. OCA M.B. at 27; OCA Table II (New Garden).

V. EXPENSES

A. Aqua's General Inflation Adjustment Should Be Removed.

The Company defends its general inflation adjustment as appropriate because the inflation adjustment applies only to those expenses that are not already specifically adjusted in the case or not subject to inflation. Aqua M.B. at 60. This is inappropriate. Applying the inflation adjustment generally to *all* expenses that are not already adjusted or subject to inflation is not a targeted adjustment, it is a speculative catch all adjustment that is inconsistent with Commission's treatment of such expenses. *See* OCA M.B. at 28. The Commission has repeatedly required specificity by the Company when using an inflation factor, and the Commission has disallowed inflation factors that are too speculative in nature. *Pa. P.U.C. v. Philadelphia Elec. Co.*, 58 Pa. P.U.C. 7 (1983) (*PECO 1983*); *National Fuel Gas Dist. Corp. v. Pa. P.U.C.*, 677 A.2d 861 (Pa. Cmwlth. 1986) (*NFG 1986*).

The Company cites *Pa. P.U.C. v. Columbia Gas of Pennsylvania, Inc. Pa. P.U.C. v. Columbia Gas of Pennsylvania, Inc.*, 1990 Pa. P.U.C. LEXIS 162 (*Columbia 1990*). In *Columbia 1990*, the Commission did not allow the gas utility to use its proposed inflation factor. *Id.* at *44 (where the Company proposed to apply an inflation factor to Materials and Supplies expenses for a thirteen month period to project future expenses). The Commission in that case used a thirteen month average of the "actual, most recent" Materials and Supplies expenses to determine the appropriate allowance for those expenses going forward, rather than adopting the inflation rate requested by the Company. *Id.* Thus, Columbia *1990* does not support Aqua's argument that the Commission should approve the Company's application of an inflation factor to all of its residual expenses. Instead, it indicates that the Commission requires specificity when projecting these future expenses. *Id.*

The Company also cites to *Philadelphia Suburban Water Co.* In that case, the Commission approved the inflation adjustment only when PSWC demonstrated that the expenses at issue had increased at a rate higher than the adjustment proposed. *Pa. P.U.C. v. Philadelphia Suburban Water Co.*, 2002 Pa. P.U.C. LEXIS 55 (*PSWC 2002*). Aqua has not done that here. The Company also cited to *PSWC 2002* to support the assertion that the Commission routinely accepts the type of inflation adjustment proposed by Aqua in this case. Aqua M.B. at 62. In *PSWC 2002*, the Commission does acknowledge that is has "consistently accepted inflation adjustments *where supported by historic data demonstrating that the utility has experienced cost increases that exceed the claimed inflation increases." PSWC 2002 at *54-55* (emphasis added). The record in this case does not support Aqua's proposed adjustment.

Here, the Company has provided examples of a few expenses that have grown at levels higher than its proposed inflation adjustment, but rather than limit the inflation adjustment to those expenses, it argues that it should be applied broadly. Aqua M.B. at 63. This is inconsistent with the very cases cited by Aqua. As discussed in the OCA's Main Brief, if the Company has specific evidence to support increases to individual expense items, then it should provide that evidence rather than lumping these expense claims in with other expenses not subject to the same inflationary factors. OCA M.B. at 30. While it may be simpler for Aqua, grouping these expenses does not adhere to the Commission precedent that requires specificity if an inflation factor is utilized. OCA M.B. at 28. Aqua has not met its burden of demonstrating that it is entitled to this general inflation adjustment as it has not provided the required specificity. As such, Aqua's adjustments for estimated blanket inflation are inconsistent with the law and should be removed. This will reduce Aqua's FPFTY expenses by $1.07 million. *Id.*; OCA R.B., App. A, Table II (Water, Wastewater Base, Limerick, East Bradford, Cheltenham, East Norriton, New Garden).

B. OCA's Recommended Adjustment to Proposed Revenue from Residential Metered Water Sales Has an Impact on Certain Expenses.

The OCA continues to recommend that the Company's Purchased Power Expense be increased by $96,312 to reflect the OCA's recommended adjustment to proposed revenue from residential metered water sales. OCA M.B. at 30; Table II (Water). The OCA also continues to recommend that Chemical Expense be increased by $66,787 to reflect the adjustment to proposed revenue from residential metered water sales as well. *Id.*; OCA Table II (Water). The Company opposes both of these adjustments because the Company opposes the OCA's recommended adjustments to residential metered water sales revenue. Aqua M.B. at 83-84; *see supra* Section III.A.

C. The Portion of Aqua's Advertising Expense Being Introduced for the First Time in This Case Should Be Normalized over Three Years.

The OCA proposed to normalize the Company's new advertising expense for "Explanation of billing practices, rates, rules, and regulations" over three years, since this expense is a normal operating expense being introduced for the first time in this case. Aqua M.B. at 86-87; OCA M.B. at 31. The Company objects because it states that this expense is being incurred in support for a program not in effect in the HTY and that will not be in effect during the FTY. Aqua M.B. at 87. Aqua believes that the entire expense should be included without normalization. Aqua M.B. at 86. As stated by the OCA, normalization is appropriate when a cost is being introduced for the first time in the FPFTY but may fluctuate in future rate cases. *Pa. P.U.C. v. Pennsylvania American Water Co.*, 2003 Pa. P.U.C. LEXIS 498 at *101-02 (*PAWC 2003*). That is exactly the circumstance here. Normalizing the cost over three years would also make it more bearable for ratepayers and smooth out the effects of introducing a new expense, which if anything makes normalization most fair option. OCA M.B. at 31. The proposed normalization of this new expense, will result in a

reduction to Aqua's proposed advertising expense of $50,000 for the water utility and $5,000 for the wastewater utility. OCA St. 1 at 40; OCA Exh. LA-2, Sch. C-10, Table II (Water); Table II (Wastewater Base).

The Company also implies that the OCA contradicts itself by proposing to normalize this advertising expense, because the OCA has advocated for increased outreach efforts to inform customers about Aqua's Universal Service Program (USP). Aqua M.B. at 87. The OCA submits normalizing advertising expense is appropriate and need not come at the expense of facilitating more efficient outreach efforts by the Company about the USP. Both can occur through the normal prioritization of advertising done by the Company in the regular course of business.

D. Payroll Expenses

1. The Proposed Vacancy Rate by Aqua Is Unreasonable and Does Not Align with the Company's Actual Experience.

The Company's initially proposed vacancy rate of 2.5% was not reasonably aligned with the Company's actual experience. This was recognized by the Company who accepted the OCA's proposed adjustment to use a 2.88% vacancy rate instead of the Company's proposed rate. Aqua M.B. at 66. The OCA's suggested vacancy rate represents the difference between actual regular hours and authorized regular hours during the HTY, and most accurately reflects Aqua's experience. *See* OCA M.B. at 33-34.

a. Aqua's Payroll Expense for Seasonal Positions Should More Accurately Reflect the Number of Positions Filled.

The Company does not accept the OCA's recommendation to reduce payroll expenses relating to the number of non-union seasonal employees in the FPFTY, because the Company "anticipates filling all seasonal positions during the FPFTY based upon anticipated normal operating conditions during that time." Aqua M.B. at 67; Aqua St. 2R at 39. The Company's

anticipation aside, the facts do not support the conclusion that 100% of the Company's seasonal positions will be filled in the FPFTY. The Company only filled 31 out of 33 authorized seasonal positions in 2019 before the pandemic, and most recently in 2021, the Company only filled 11 out of 33 authorized seasonal positions. OCA M.B. at 34-35. The pandemic is ongoing, and it is unreasonable for the Company to claim that data collected in summer 2020 and summer 2021 should be discounted because it was impacted by COVID without assurances that 2022 will be any different. Thus, it is more appropriate to budget for seasonal employees going forward by using the most recent number of seasonal employees from the summer of 2021 (11 employees). OCA St. 1SR at 32-33. OCA's adjustment to disallow the cost of 22 seasonal positions is based on the most recent data available and should be accepted. OCA M.B. at 34-35.

2. Aqua's Stock-Based Compensation Expense Should Not Be Borne by Ratepayers.

Without supporting evidence, the Company claims that its stock-based incentive compensation program has "meaningful customer benefits" and is "directly related to the provision of service." Aqua M.B. at 70, 71. The Company also cites to cases where the Commission has approved incentive compensation programs, but each of the programs at issue in these cases directly related to customer service. *See* Aqua M.B. at 69; *see also Pa. P.U.C. v. PPL Elec. Util. Corp.*, 2012 P.U.C. LEXIS 1757, *R.D.* at *45-46 (describing how both shareholders and employees engaged in customer service were benefiting from the incentive compensation program) (*PPL 2012*); *Pa. P.U.C. v. Duquesne Light Co.*, 1987 Pa. P.U.C. LEXIS 342 at *101 (describing an incentive bonus plan which was only awarded to executives if the Company met certain performance standards and levels of operation, directly benefiting consumers) (*Duquesne 1987*); *Pa. P.U.C. v. PPL Gas Util. Corp.*, 2007 Pa. P.U.C. LEXIS 2 at *57 (describing how the Commission has held ratepayers have no duty to pay for incentive compensation related to the

achievement of financial or profitability goals) (*PPL 2007*); *Pa. P.U.C. v. Philadelphia Gas Works*, 2008 Pa. P.U.C. LEXIS 32 at *60-61 (describing how the incentive compensation plan at issue in this case was performance based, and how PGW was required to file a "narrative explanation" of the plan outlining its benefits) (*PGW 2008*).

Aside from the Company's assertion that it is so, there is no evidence in the case that the Company's stock based compensation program benefits consumers. While the Company states that some employee objectives of the program are geared toward customer service, and thus the entire cost of the program should be borne by ratepayers. Aqua M.B. at 70-71; Aqua St. 1R at 17, the Company does not provide sufficient detail about how ratepayers benefit from the stock-based compensation program other than an empty assertion that the program contributes to the Company maintaining its "high-quality service standard." Aqua M.B. at 70. Without more, this is insufficient.

The Company also fails to address the fact that in Essential Utilities Proxy Statement, Aqua's corporate parent, it described how the program places a heavy emphasis on performance share units and restricted stock units, which have the primary purpose of benefiting Essential Utilities shareholders rather than those employees directly providing service to consumers. OCA M.B. at 37; Essential Utilities Proxy Statement, March 22, 2021 at 58.[4] Aqua has failed to support its claim to recover the stock- based compensation expense from ratepayers. Thus, all stock-based compensation expenses should be removed, an adjustment that would decrease Aqua's FPFTY cost of service by $780,493 for water operations and by $66,000 for wastewater operations. *See* Table II (Water); Table II (Wastewater Base).

[4] *Available at* https://www.essential.co/static-files/18867cab-fde9-441f-a7ba-4f6b47586a4f.

3. Payroll Tax Expenses

Based on adjustments noted above, the OCA continues to maintain that complementary adjustments to payroll tax expense must be made related to the reduction in the number of the Company's non-union seasonal employees, and to remove stock-based compensation from the FPFTY cost of service. OCA M.B. at 40. *See supra* Section IV.D.1.a; Section IV.D.2. The adjustments reduce Aqua's payroll tax expense by $93,467 for water operations and by $7,448 for wastewater operations, totaling a reduction of $100,915. *See* Table II (Water); Table II (Wastewater).

E. Insurance

1. Aqua's Expense for Employee Group Insurance Should Be Adjusted Using the More Accurate 2.88% Vacancy Rate.

The Company and the OCA are in agreement that a 2.88% vacancy rate is more appropriate than the 2.5% vacancy rate originally proposed by the Company. Aqua M.B. at 66; *see supra* Section V.D.1. Thus, the Company should apply this 2.88% vacancy adjustment to employee group insurance for water and wastewater operations. OCA M.B. at 40-41.

2. Aqua's General Insurance Expense Calculation Used Outdated Data.

The Company accepted the OCA's proposed expense increase of 4.38%, but the Company inconsistently mixed calculations to derive a higher FPFTY claim for General Insurance Expense than was in its original filing. OCA M.B. at 42. Aqua proposed a 4.38% increase to FTY to derive an FPFTY claim for general insurance expense that is $95,961 higher than what was reflected in its original filing. Using the same percent increase, the OCA submits that Aqua's proposed insurance expense should be reduced by $71,428 for water operations and $710 for wastewater operations. *See* OCA M.B. at 42. The Company defended its calculations as "not unusual or

improper" and argued that the calculations should be accepted because they reflect the Company's actual FY 2022 insurance expense. Aqua M.B. at 77. The OCA submits that the proposed 4.38% increase would result in lower insurance expenses for water operations and wastewater operations than what the Company has proposed, and Aqua's further adjustments to General Insurance Expense should not be adopted. The OCA's recommendations should be accepted. This results in a total negative adjustment of $72,138. *See* Table II (Water); Table II (Wastewater Base).

F. Aqua's Rate Case Expense Should Be Adjusted to Reflect More Accurate Costs and Normalized over 3.3 Years.

The Company stated in testimony that it proposed to amortize rate case expense, but it clarified in its Main Brief that it is actually proposing to normalize the rate case expense over a three year period. Aqua M.B. at 77-78; Aqua St. 3R at 8. While the OCA agrees with the Company's updated position to normalize rate case expense, the OCA submits that this normalization should occur over 3.3 years to most accurately follow the historic frequency of the Company's rate base filings. OCA M.B. at 44. The Company acknowledges that rate cases should take into consideration the history of prior filings, but argues that the time period between the Company's 2011 and 2018 base rate cases should not be taken into account because that gap was based on a specific circumstance in the 2011 settlement that would not reoccur in the future. Aqua M.B. at 78.

The Commission relies heavily on a utility's *actual* historic frequency of rate filings, not the utility's intentions, when determining the appropriate normalization period (emphasis added). *Pa. P.U.C. v. City of Lancaster – Bureau of Water*, 2011 Pa. P.U.C. LEXIS 1685, *56-57 (*Lancaster 2011*); *Pa. P.U.C. v. Metropolitan Edison Co.*, 2007 Pa. P.U.C. LEXIS 5 (*Met-Ed 2007*). The Company states that the Commission does occasionally consider other circumstances outside of historic filing frequency to determine an appropriate normalization period, but fails to

describe what those circumstances would be. Aqua M.B. at 79. Thus, the actual periods of time between the Company's prior rate cases are the best indicator of what the appropriate normalization period should be, and the OCA's recommended 3.3 year normalization period for rate case expense should be adopted. OCA M.B. at 44-45.

The Company also erroneously claimed that the OCA is proposing to disallow $165,000 of expenses that the Company has claimed for "Miscellaneous" costs and "Other Consultants." Aqua M.B. at 79-80. The OCA accepted all of the "Miscellaneous" costs that the Company stated it expected to incur if this case were fully litigated, and the OCA accepted $40,068 in costs for "Other Consultants" that the Company stated in testimony it had already incurred. OCA M.B. at 43. The only amount of these expenses that the OCA proposes to remove is an additional $59,932 for "Other Consultants" that the Company has claimed but not actually incurred. The OCA continues to recommend that this $59,932 be removed because there is no evidence that these expenses have been, or will be, incurred in this proceeding. OCA M.B. at 43; Aqua M.B. at 79-80. *See* Table II (Water); Table II (Wastewater Base).

G. Aqua's Calculation for Non-Rate Case Legal Expense (Water) Should Exclude the Twelve Month Period ending March 31, 2019.

The Company objects to the OCA's proposal to reduce the Company's non-rate case legal expense by $24,981 to more accurately reflect the average amounts recorded by Aqua for the twelve month periods ending March 31, 2020, and March 31, 2021. OCA M.B. at 47. The Company argues that basing non-rate case legal expense upon a three-year historic average is more reasonable, because doing so allows the Company to capture expenses that do not occur on a two-year or less interval. Aqua M.B. at 81. As the OCA has noted, its suggested two-year time frame excludes the 2019 year because the expense in that year was unusual and is not representative of current or future levels of non-rate case legal expense. OCA M.B. at 47. Given the fact that the

year 2019 appears to be an outlier in terms of this expense, and given that Aqua itself has been inconsistent about whether a three-year time frame is appropriate for determining non-rate case legal expense, the OCA submits that the two-year time frame provides a more realistic determination of non-rate case legal expenses. OCA M.B. at 47; Aqua St. 3R at 10; Aqua St. 4R at 6.

H. Ratepayers Should Not Be Responsible for the Costs of Supplemental Executive Retirement Plant Expense - Executive Compensation.

The Company defends its Supplemental Executive Retirement Plan (SERP) as being a necessary part of the compensation package so as to "obtain and retain qualified executives", despite the fact that the Company has acknowledged several times that the program applies only to executives hired prior to 2003. Aqua M.B. at 73. This indicates that the SERP program does not serve the purpose of attracting new employees. OCA M.B. at 49-50. In fact, the Company specifically states that the "SERP is no longer a part of the compensation package offered new executives" but still argues that its cost should be borne by ratepayers. Aqua M.B. at 73.

Aqua misconstrues the OCA's concern. The OCA concedes that Aqua can maintain the SERP and it does takes no position on whether it is a "valid pension cost." Aqua M.B. at 73; OCA M.B. at 47-48. The OCA only points out that the SERP has *no ties to the provision of utility service*, and thus it is not an appropriate expense that has to be paid by utility customers through rates. OCA M.B. at 48. If the Company wishes to continue providing the benefits of the SERP to top executives, then its shareholders should be responsible for the costs of doing so.

The Company also does not address the fact that by its very name the SERP is supplemental and that that without the SERP, the Company's executives still have the option of receiving the retirement benefits available to all other Aqua employees. OCA M.B. at 49. This makes the SERP expense an unreasonable expense for rate payers because it is duplicative and unnecessary. This

expense should be disallowed and excluded for ratemaking purposes. *Pa. P.U.C. v. Pennsylvania American Water Co.,* 1993 Pa. P.U.C. LEXIS 79 at *136-39 (*PAWC 1993*). As such, the OCA recommends removing the requested FPFTY expenses of $695,612 for the water utility and $57,050 for the wastewater utility altogether. OCA Exh. LA-2, Sch. C-18; Table II (Water); Table II (Wastewater Base).

I. COVID-19 Deferral Account

The Company partially agrees with the OCA's recommendation that in future filings seeking to recover deferred COVID-19 costs by the Company, Aqua should offset any claimed costs with savings that it has recognized during the pandemic. Aqua M.B. at 205; OCA M.B. at 50. The Company also notes that it has been and will continue to be conservative regarding the COVID-19 related expenses that it will seek to recover. Aqua M.B. at 203-04. However, the Company continues to object to the OCA's recommendation that the Commission limit Aqua's ability to continue recording costs related to COVID-19 into a deferral account. Aqua M.B. at 202-03. As explained in its Main Brief, the OCA submits 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.

VI. RATE OF RETURN

A. Introduction

1. Overview of the Cost of Capital Recommendation

As outlined in full in the OCA's main brief, the Company's request for a 10.75% return on equity and overall cost of capital of 7.64% is overstated because it relied on an equity analysis that is materially flawed. OCA M.B. at 53 Rather than rely on the results of its own Discounted Cash Flow (DCF) analysis, Company witness Moul advocates for an unsupported and unjustified leverage adder, presumably because the DCF results in a lower-than-desired cost of equity for the Company. The Company also seeks to further inflate their cost of equity request through the use of a management performance adder, which is not warranted and completely unreasonable according to the record of evidence. The Company's FPFTY capital structure ratio is atypical, with a higher equity ratio, from what the Company's capital structure would be in a competitive environment.

The end result is that Company's cost of equity and overall cost of capital claim is not appropriate to establish just and reasonable rates in this proceeding. The OCA recommends, based on the evidence in this proceeding, that Aqua be allowed the opportunity to earn an 8.0% return on equity applied to a common equity ratio of 50% that is based upon recent financial market data and appropriate to establish a fair cost of capital for Aqua.

B. Legal Standards for Cost of Capital and Rate of Return

The OCA addressed the legal framework for review of the Company's rate of return request in the OCA Main Brief. OCA M.B. at 54-56. The OCA Main Brief also addressed the Company's affirmative burden under Section 315, requirements which extend to the Company's cost of capital request based upon its FPFTY. OCA M.B. at 3-5. Section 523(a) and (b) provide the Commission

with discretion and guidance as to a proper record to evaluate a request for an adjustment for management performance. 66 Pa. C.S. § 523(a), (b). The end goal of such an evaluation is the establishment of just and reasonable rates.

The Company Main Brief discusses some of the same legal standards as OCA's Main Brief, such as *Hope* and *Bluefield*. Aqua M.B. at 99. Absent from the Company's review of these cases, is recognition of the Commission's duty to consider the interests of Aqua's ratepayers, "The rate-making process . . ., i.e., the fixing of 'just and reasonable rates, involves a balancing of the investor **and consumer interests**. . ." *Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) (Hope)* (emphasis added); *Pa. P.U.C. v. Pennsylvania Gas and Water*, 424 A.2d 1213, 1217, 492 Pa. 326, 332, (1980) (stating that property must be regulated in the interest of the public no less than in the interest of the utility). Though the Company stresses how the investment community would be concerned if OCA's recommendations concerning rate of return is granted, the Company in no way addresses the burden that ratepayers would face if required to pay rates based on an unsupported and excessive rate of return. During the Public Input Hearing numerous ratepayers testified about the effects of the Company's proposed rate increase, which the company is attempting to enlarge through unsupported aggressively high rate of return:

- Mary Owen testified that Aqua is seeking a large increase when her community is still dealing with the effects of the pandemic. Tr. 51-52.
- Suzanne Snajdr testified about her concern that Aqua is addressing shareholder concerns and not ratepayer concerns. Tr. 57-58.
- Carol Meerschaert testified that the rate increase is not sustainable for individuals on fixed incomes. Tr. 104.
- Karina Gonzalez testified on behalf of State Senator Carolyn Comitta of the 19th District in Chester County, noting the undue burden the rate increase will place on those with fixed incomes. Tr. 141.
- Elizabeth Kearns testified that Aqua is making it impossible for fixed-income customers like her to pay for their utilities from Aqua without assistance. Tr. 157.
- Rosemary Horstman inquired about whether Aqua had a low-income assistance program to prevent people from being disconnected. Tr. 160.

- Lorraine Rocci testified that as a fixed-income ratepayer she is worried that she will be forced out of her home since she will not be able to afford her bill. Tr. 171.
- Catherine Moran testified that Aqua is placing the costs of acquiring smaller utilities on current ratepayers. Tr. 173.
- Jennifer Kasius testified that her bill has increased from $40 a month before Aqua took over her service to $75-$100 a month once Aqua acquired the water company servicing her. She objected to further increases. Tr. 193.
- Maureen Quimby testified that she is worried that Aqua's pattern of continuing rate increases is going to prohibit her from being able to stay in her home because she cannot afford the rate increases as a fixed-income customer. Tr. 97.
- Cynthia Ziegler testified that the requested rate increase was extraordinarily high. Tr. 224-26.
- State Representative Christina Sappey of the 158th Legislative District testified that 30% of residents over 75 in Chester County are economically insecure, and that the rate increase should be denied. Tr. 279-81.
- Elien and Michael Canci testified about how the rate increase would be difficult for them as retirees on a fixed income. Tr. 283-84.
- Jace Hepler testified that the Commission should reject the increase because rates are already excessive. Tr. 287.
- Robert Larson testified that the proposed increase would increase his rates to $125 a month according to the Company, and that would be an 87% increase in only 3 years. Tr. 290.
- Jeri Ramagnano testified that the rate increase in going to affect his ability to spend money supporting his local economy. Tr. 295.
- Danielle Slifer testified that as a senior on a fixed income she cannot afford the rate increase. Tr. 297-98.
- Nancy Deutsch testified that her community is still dealing with the effects of the pandemic, and that as a business owner, she will have to increase her prices, which the community will have to absorb. Tr. 315.
- Nathan Russo testified about his average bill of $220 a month for a family of four before the rate increase, including $94 a month before any water usage. Tr. 319-21.
- State Senator Katie Muth testified that her constituents are concerned about being able to afford the increase. Tr. 381-82.
- Stephen Arraya testified about his family's limits on water usage due to the already high rates. Tr. 424.
- Eileen Somers testified that she is an attorney representing low-income families in Delaware County, and that many of her clients already pay more than 50% of their incomes towards rents and bills. She testified that about the impact that the rate increase would have on her clients. Tr. 430-33.

See Appendix E attached to OCA M.B. Of the 58 people who testified at the Public Input Hearings, including at least two individuals who admitted testifying at Aqua's request, 38% of the testifiers discussed the extreme financial effects of Aqua's proposed rate increase. *Id.* Reading Aqua's

Main Brief, one gets the impression that the only concern the Commission should have is for investor interests, but this is not the standard. Instead, the Commission must consider the effects of the Company's unjustifiably high rate of return on ratepayers and appropriately balance the interests of ratepayers with that of investors. *Hope* at 603. The evidence in this proceeding demonstrates that the balance is level based on the capital structure and return on equity proposed by the OCA.

C. Capital Structure

The OCA has contested the Company's proposed capital structure. The 54% 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. OCA M.B. at 56. The Commission has the discretion to use a hypothetical capital structure where the company's actual capital structure is unreasonable or uneconomical. *Big Run Tel. Co. v. Pa. P.U.C.*, 68 Pa. Commw. 296, 301-02, 449 A.2d 86, 89 (1982) (*Big Run*). Given that Mr. Moul's position regarding the return on equity and the capital structure results in an unreasonably high cost of capital estimate, the Commission must stand in the shoes of a competitive environment and select a capital structure that does not unfairly penalize ratepayers. OCA M.B. at 58-59.

The Company claims that the OCA would direct the Commission to use a "hypothetical structure any time the equity component in an actual capital structure exceeds the proxy group average. Thus, only actual capital structures with an equity component at or below the proxy group average would be accepted." Aqua M.B. at 106. This is not accurate. Instead the OCA's use of a hypothetical capital structure that is the average of the proxy group used by Company witness Moul is the recommendation in this case based on the evidence here. Aqua does not provide sufficient evidence to support its actual capital structure that has an equity component that is 400

basis points above the proxy group average. Use of an equity structure that unfairly subsidizes investors at the expense of ratepayers is not reasonable. OCA M.B. at 57; OCA St. 3 at 61-62. This aberration from the Water Group's average would not exist in a competitive environment. OCA M.B. at 58. Since the Company operates in a state sanctioned monopoly, the Commission should assign a capital structure that might exist in a competitive environment. *Id.* Additionally, the Commission should assign a capital structure that properly balances the concerns of ratepayers and investors, rather than the one-sided investor-friendly approach of the Company. *See Hope* at 603.

The Company notes that actual common equity ratios of the Water Group companies range from 40.2% to 55.1%. Aqua M.B. at 102; *see* Aqua St. 7 at 20. The Company determined its own debt and equity ratios for the purpose of the base rate case. Rather than using the average equity ratio of the Water Group that the Company has selected for the purposes of calculating its equity analyses, the Company selected an equity ratio that exceeds the average of the Water Group by approximately 4%. After selecting a high-than-average equity structure, the Company includes unsupported upward adjustments to increase its cost of equity analyses, such as the CAPM size adjustment and the DCF leverage adjustment. These decisions by the Company to impute its preferred capital structure is not reflective of a capital structure that might actually exist in a competitive environment. OCA M.B. at 59; OCA. St. 3SR at 4; *see* OCA M.B. at 59 (discussing competitive U.S. firms with higher debt ratios than 50%). The Company's use of a 53.95% equity ratio is unreasonable for ratemaking purposes because it inflates costs to ratepayers and does so without any sound financial or reasonable basis. OCA M.B. at 59. The Commission should use the OCA's suggested hypothetical capital structure in establishing rates.

The OCA has not challenged the Company's proposed long-term debt cost rate of 4%. OCA St. 3 at 3; Aqua M.B, at 107.

D. Cost of Common Equity

The OCA recommends a DCF-derived cost of equity of 8.0%. OCA M.B. at 52. This cost rate is consistent with investor expectations and current market conditions and is appropriate in today's financial market. Moreover, as discussed in the OCA's Main Brief, the Company's 10.75% equity cost rate is both overstated and derived from the application of multiple flawed models, flawed upward adjustments, and flawed analyses. *See, e.g.,* OCA M.B. at 66. As such, the Company's proposed cost of equity should be rejected. OCA witness Garrett stated, "Nonetheless, even if multiple models produce the same results, if key assumptions and inputs violate accepted tenets in finance and valuation, the use of those flawed multiple models should be avoided". OCA M.B. at 60.

Aqua witness Moul arrived at his recommended 10.75% return on equity recommendation through a combination of analyses, including a DCF model with a leverage adjustment, a CAPM method including a size adjustment, a Risk Premium approach, and a Comparable Earnings (CE) analysis. Aqua M.B. at 108. Additionally, Mr. Moul recommends an unquantified basis point increase to recognize "management performance." Aqua M.B. at 129.

The Company's analytical framework does not provide a sound basis to adopt the Company's overall 10.75% cost of equity request nor the Company's unquantified management performance claim. For the Company's DCF analysis, Mr. Moul's dividend yield and stock price showed no significant differences from the dividend yield used by Mr. Garrett. OCA M.B. at 62. Mr. Moul assigns an aggressive growth rate of 7.5%, higher than Mr. Garrett's proposed growth rate of 6.3%. It is important to reiterate that even Mr. Garrett's growth rate of 6.3% presumes that

Aqua's qualitative growth in earnings will exceed the nominal growth rate of the entire U.S. economy over the long term. OCA M.B. at 63. Mr. Moul's 7.5 % aggressive growth rate would require an even higher exceedance of the nominal growth rate by Aqua. *See* OCA St. 3 at 32-33. This is an unreasonable assumption unsupported by the record in this case.

After performing his DCF analysis, Mr. Moul made an unsupported and unreasonable upward leverage adjustment of 2.34%, or an addition of another 25% to his DCF result. *See* OCA M.B. at 66-68. This type of leverage adjustment increase to DCF results is conceptually unsound, as explained by OCA witness Garrett, and has been properly rejected by the Commission in numerous cases since 2008. *See, e.g., Pa. P.U.C. v. Aqua Pa., Inc.*, 2008 Pa. P.U.C. LEXIS 50, 47 (*Aqua 2008)* (declining Aqua's request for a leverage adjustment); *Lancaster 2011* at 79 (declining a leverage adjustment); *PPL 2012, R.D.* (declining a proposed leverage adjustment). Aqua devoted substantial portions of its testimony to distinguishing holdings concerning leverage in those cases to support its leverage adjustment in this proceeding. *See* Aqua M.B. at 112-17. For two of these cases, *Aqua 2008* and *PPL 2012*, Aqua argues that the Commission found a cost of equity at the higher end of the ranges proposed by the parties in the case. *Id.* at 114-15, 116. The Company argues, regarding *Lancaster 2011*, that "the Commission simply exercised its discretion in that proceeding not to adopt a leverage adjustment, citing the Aqua 2008 case that it was unnecessary to adopt the leverage adjustment in that proceeding. This is consistent with the Commission's actions in other proceedings where it has **reviewed the entire record and either chose to adopt or chose not to adopt a leverage adjustment based upon the specific circumstances of each case**." Aqua M.B. at 115 (internal citations removed, emphasis added). In this case, the record does not support the leverage adjustment proposed by Aqua as discussed *supra*. The record clearly demonstrates that the primary reason for the Company's inclusions of

the leverage adjustment is because the Company wants a higher return on equity than the data indicates. Aqua M.B. at 117 *("The unadjusted DCF results… demonstrate[] that the DCF is currently producing unreasonable results that do not fully take into account the risk facing Aqua PA."*). While Aqua raises the prospect of risks of investors, the Company never acknowledges that as a public utility, the Company is less risky than the average company in the competitive marketplace. OCA M.B. at 67. Aqua's argument that it should have a higher return on equity results in a large transfer of wealth from ratepayers to investors which is not supported by the record. *See* OCA St. 3 at 38. Additionally, the Company makes no effort to take into account the additional risks they would be imputing on ratepayers should the Commission approve such a leverage adjustment. *E.g.*, Tr. at 171 (ratepayer concerned she will be forced out of her home), Tr. at 97 (ratepayer concerned she will be forced out of her home). The Company's inclusion of the leverage adjustment clearly violates the standards of *Hope*, which require the Commission to consider the interests of ratepayers in the ratemaking process. *Hope* at 603.

However, as evidenced by the cases above, it is clear the Commission exercises its discretion in denying unreasonable upward leverage adjustments of the type the Company is requesting as an arbitrary and unsupported adjustment. *Id.* The record in this case does not support the Company's 2.34% increase to its DCF results as a reasonable adjustment or an adjustment that is in the public interest. The Company's DCF results, without the leverage adjustment, of a 7.5% growth rate plus a 1.94% dividend, totaling 9.44% is still overstated and not reasonable. *See* OCA M.B. at 65.

The OCA Main Brief indicates how Mr. Moul's other cost of equity analyses are flawed and rely upon improper inputs. OCA M.B. at 53; OCA St. 3 at 49-52; OCA St. 3SR at 5-9. Nothing in Aqua's Main Brief changes that result or the arguments presented. In particular, the OCA has

opposed Mr. Moul's CAPM analysis which includes an upward adjusted size premium of 1.02% which is conceptually unnecessary. OCA M.B. at 70; OCA St. 3 at 50-52. OCA witness Garrett testified that Mr. Moul's approach to determining a risk free rate of 2.75% is unreliable. OCA M.B. at 70-71; OCA St. 3 at 49. The Company's use of the Risk Premium and Comparable Earnings analyses do not provide useful information for the Commission's consideration. OCA M.B. at 60.

E. Mr. Moul's Addition of a Management Performance Adder Is Wholly Unsupported.

In its Main Brief, Aqua claims that the Company has "demonstrated performance in the area of management effectiveness, which should be recognized by the Commission through an appropriate addition to the cost of common equity." Aqua M.B. at 128. The Company recalled the Company's 2008 rate case in which the Commission granted Aqua a 22 basis point increment for superior management performance. *Id.* at 29. Aqua indicates that the Commission recognized the Company's exceptionality in the areas of federal and state compliance with drinking water standards, minimal taste and odor water quality complaints, its leadership role in solving regional water supply problems, infrastructure rehabilitation programs, and its customer assistance program and history of community involvement. Aqua M.B. at 129. The evidence on the record in this rate case, however, thoroughly demonstrates that Aqua's management has not performed effectively in a variety of metrics, including but not limited to these areas discussed further below: water quality, wastewater treatment compliance, system reliability, cost containment, rates, COVID-19 response, customer service, low-income customer assistance programs, infrastructure rehabilitation, tax programs, and environmental initiatives.

The Company claims that "suboptimal performance" in multiple areas should not prevent the Commission's award of a basis point increase for superior management performance. *See*

Aqua M.B. at 139. However, Aqua's claims of *exemplary* performance across a wide range of categories is contrary to the record. Aqua wants a management adder for merely providing what it is required to provide by law. Aqua is required under the Public Utility Code to provide safe, adequate, reasonable, and efficient service. 66 Pa. C.S. § 1501. The record indicates that in many areas Aqua is falling short of these standards or is at best, meeting the standards. Meeting standards is not the same as exemplary performance. Meeting its obligations as a certificated public utility, which Aqua has done in some areas and not in others, does not establish *exemplary* performance. The evidence in this case does not support a management performance adder, as discussed below.

Ms. Alexander addressed many concerns about Aqua's customer service in OCA Statements 6 and 6SR, as discussed in more detail in OCA's Main Brief at 188 to 204 and Section X, *infra*. Regarding Aqua's claim of exemplary management, Ms. Alexander states:

> Aqua should be held accountable for the failure to comply with these provisions documented in my testimony with a critical view of Aqua's proposed Return on Equity. Considering my findings and those documented by Mr. Roger Colton on behalf of the OCA, there is sufficient justification to reject Aqua's claim of "exemplary" management as well as support for a consideration of an ROE that reflects the lower bound of reasonableness. My review of the customer service benefits identified by Aqua in its Section 1329 acquisition proceedings and the lack of any documentation of those customer service performance benefits in this rate case also supports this recommendation.

OCA St. 6 at 23.

Mr. Colton addressed numerous areas where Aqua has fallen short in OCA Statement 5 and 5SR. His testimony on these issues is discussed in OCA's Main Brief at 178 to 187 and Section IX, *infra*. For example, Aqua's justified complaint rate was higher than every other Pennsylvania Class A water utility. OCA St. 5SR at 33. Aside from the justified customer complaint rate, as of the end of September 2021, 22% of the reviews of Aqua's Payment Arrangement Request (PAR) challenges presented to the Bureau of Consumer Services were

"justified," as compared to 12% for PAWC and 8% for all other Class A water utilities. *See* OCA St. 5 at 69; OCA St. 5SR at 33.

Significant numbers of Aqua PA customers were less than "very satisfied" with Aqua PA's performance in that time period. Only 72% of customers having contact with the utility since April 1, 2020 were either "very" or "extremely" satisfied with respect to their "overall satisfaction." OCA St. 5 at 71. That means that nearly one-of-three persons who had contact with the Company were less than very satisfied. Indeed, nearly one-in-five expressed that they were "not satisfied" (either "not very satisfied" or "not at all satisfied"). *Id.* One of the areas in which customers were less than satisfied was in the area of "customer effort." Nearly one-in-three customers (29%) having contact with the utility either disagreed or neither agreed nor disagreed with the Aqua PA's customer effort when they had contact with Aqua PA. OCA St. 5 at 71. Regarding Aqua's collections performance, OCA witness Colton's analysis demonstrated, both the level of arrears and the Bills Behind increased. OCA St. 5SR at 33-34. Regarding environmental compliance, Mr. Colton pointed out the circularity of Aqua's arguments related to exemplary performance. *See* Section IX.E.9, *infra*. Masthope identified a long-term moratorium on connections due to plant inadequacies that is impacting its community. Masthope M.B. at 9-16. Many customers raised concerns about Aqua's service at the Public Input Hearing. Tr. 69-71, 112-13, 166-68, 199, 201-04, 323-25, 439-40.

Aqua has failed to provide sufficient evidence to support any management performance adder. Its request should be denied.

VII. TAXES

A. Income Tax Expense – Repairs Deduction

There are three important issues with respect to repairs deductions in the current Aqua base rate case: (1) appropriately setting the amount of repairs deductions in the calculation of income tax expense; (2) rejecting Aqua's attempt to keep $4 million of income tax deductions for repairs that are claimed or are expected to be claimed on Aqua's income tax returns for the benefit of Aqua's shareholders merely because Aqua has classified those claimed or to-be-claimed tax deductions as "uncertain"; and (3) rejecting Aqua's proposed "collar mechanism" or deadband above or below the repairs deduction amount used in the income tax calculation in the current rate case or limiting it to a reasonable range. *See* OCA St. 1 at 31-34; OCA St. 1SR at 16-23.

With regard to the first issue, as discussed in the OCA's Main Brief, Aqua has been applying "flow through" treatment for its tax repairs deductions. OCA M.B. at 77-81. This has reduced current income taxes. OCA *Id.* at 77. It also reduces Aqua's effective tax rate by treating tax deductions for repairs as if it were a permanent difference between tax and book amounts, rather than a temporary difference as is the case here. OCA M.B at 77. Aqua claims that OCA's witness "improperly cherry-picks data to derive his average." Aqua M.B. at 93. Aqua further claims that the second "error" in the OCA's proposed tax deduction for repairs is the removal of the FIN 48 adjustment. *Id.* at 94. Additionally, Aqua argues that the OCA's proposed change to the collar mechanism should not be adopted. Aqua M.B. at 95.

Aqua's claim that the OCA has improperly cherry-picked data to derive an average is incorrect and not supported by record evidence. As discussed in further detail in the OCA's Main Brief, OCA witness Smith recommended using an amount for Repairs Deductions of $167.3 million, per the Company's response to OCA-X-27, which updated the Repairs Deduction amount to $167.3 million from the $163.5 million amount that was identified in Aqua's direct testimony.

OCA M.B. at 77. As such, it is uncontested that Aqua expects to have repairs deductions in 2022 of $167.396 million. The allocation of the $167.3 million Repairs Deduction between water and wastewater was then allocated proportionately by OCA witness Smith to Aqua's allocation of the Company's proposed $159.06 million deduction. OCA M.B. at 78. Aqua's critique of OCA witness Smith utilizing a three year average instead of utilizing updated projected data for 2023 and 2024 is without merit. The updated actual 2022 data showed that the original projected estimates for 2022 were understated in comparison to the actual data. As such, OCA witness Smith recommended utilizing a three year average.

With regard to the second issue, uncertain tax positions, Aqua's claim that the OCA committed an error in proposing the removal of the FIN 48 adjustment is equally without merit. As discussed at length in the OCA's Main Brief, Aqua is proposing a "FIN 48" adjustment for uncertain tax positions to offset the benefits of its claimed income tax deductions for repairs in order to not reflect repairs deductions related to a reserve. OCA M.B. at 77-81. When the OCA asked Aqua about the impacts of its "FIN 48" uncertain tax positions, Aqua identified $4,000,000 as a "FIN 48 removal" account. OCA M.B. at 78. OCA witness Smith noted that Aqua appears to be attempting to not reflect the income tax impacts of the $4,000,000 that it considers uncertain tax positions in its proposed ratemaking income tax calculation. OCA M.B. at 78.

The OCA's Main Brief contains an extensive discussion of these issues. OCA M.B. at 78-80. In short, the repairs deduction used in Aqua's income tax calculation for FPFTY income taxes should reflect the amount expected to be deducted for repairs and should not include any offset for uncertain tax positions. This approach is similar to how FERC treats FIN 48 reserves, and is in accordance with appropriate ratemaking policies. As noted by OCA witness Smith, the Company's current treatment is unusual in the utility industry and can result in large amounts of

excess earnings between rate cases. OCA M.B. at 77. Permitting Aqua's unsupported FIN 48 claims to exacerbate excess earnings would not be reasonable for ratemaking purposes .Lastly, Aqua's claim that the OCA presented a "last-minute proposal to shrink the collar amount" and that the OCA argued for the collar mechanism "for the first time" in surrebuttal testimony is misleading. Aqua M.B. at 95-96. In rebuttal testimony responding to OCA witness Smith's Direct Testimony, Aqua witness Saball stated that a reserve for a potential disallowance of Aqua's uncertain tax positions should be provided.[5] OCA St. 1SR at 20. In response to Aqua witness Saball's rebuttal testimony on Mr. Smith's proposed adjustment, OCA witness Smith testified in Surrebuttal as follows:

> **Q. If a "collar" amount were to be utilized prospectively, do you have an opinion as to whether the $6 million collar in Aqua's last rate case settlement would continue to be appropriate?**
> A. In my opinion, if any "collar" amount around the repairs deduction amount that is used to compute income tax expense in the current Aqua PA rate case were to be used going-forward, the "collar" should be no wider than $4 million per year. The $4 million reflects Aqua's current estimates of the amount of its annual repairs deductions that Aqua has identified as being uncertain. Allowing a collar amount larger than $4 million could allow Aqua to unfairly manipulate its earnings between rate cases, particularly if an inadequate level of repairs deductions is used for the calculation of income tax expense in the current rate case.

OCA St. 1SR at 23. To be clear, OCA witness Smith re-iterated his recommendation in surrebuttal testimony as follows:

> **Q. How does your proposal for the ratemaking treatment of repairs deductions claimed or to be claimed on income tax returns provide for equitable treatment of ratepayers and investors?**
> A. My recommendation is to reflect all amounts of repairs deductions claimed or to be claimed on income tax returns in the calculation of income tax expense in the current Aqua PA rate case. The normal amount of repairs deductions without any reduction for uncertain tax positions is shown on Exhibit LA-6, Schedule C-3. If the full amounts of the repairs deductions are reflected in the calculation of

[5] The OCA notes that the "collar" which Aqua refers to was a provision of settlement of the 2018 Base Rate Case and does not bind any parties to future ratemaking treatment. *Pa. P.U.C. v. Aqua Pennsylvania, Inc.*, Docket No. R-2018-3003558, Settlement at 10-11, ¶ 30 (Feb. 8, 2019).

> income tax expense for ratemaking purposes, such as I am recommending in the current Aqua PA rate case, and if then some of Aqua's deductions for repairs that Aqua claims on its income tax returns were to ultimately be disallowed by the IRS, and only then would establishing a regulatory asset for the impact of such income tax disallowances be appropriate. As long as Aqua's repairs deductions that are claimed on income tax returns are fully reflected for ratemaking purposes (without any offset for uncertain tax positions), I would not be opposed to allowing the regulatory asset treatment which would only apply in the event that some portion of the uncertain repairs deductions being claimed by Aqua were to be disallowed by the IRS.

OCA St. 1SR at 22. As such, Aqua's assertion that OCA witness Smith proposed an unjustified "last-minute proposal" to reduce the collar amount is a mischaracterization of both the Company's and the OCA's testimony on the tax repairs deduction issue. If any "collar" were to be continued, it should be narrowed to a band that is $2 million more or less that the repairs deduction amount that is being used in the derivation of income tax expense in Aqua's current base rate case. OCA St. 1SR at 23.

Aqua has not supported its modifications to its income tax claims. The OCA's recommendations are reasonable for ratemaking and should be adopted. *See* OCA Table II.

B. Income Tax Expense – Interest Synchronization

The OCA calculated the interest synchronization impact of the OCA's weighted cost of debt resulting from the OCA's recommended hypothetical capital structure, discussed in Section VI.C. OCA M.B. at 81-82. The OCA's recommendation to utilize the interest synchronization method is a routine ratemaking adjustment consistent with long-standing Commission precedent. *Pa. P.U.C. v. West Penn Power Co.*, 1990 Pa. P.U.C. LEXIS 142, *131 ("We believe that the correct calculation of interest for tax purposes is made using the final rate base and weighted cost of debt in the rate case. In this way, all segments of the rate case, including the tax calculation, are properly synchronized.") Aqua disagreed with the OCA's recommended change to the Company's weighted cost of debt, and thus disagreed with the OCA's corollary adjustment interest

synchronization. Aqua M.B. at 90. As discussed in greater detail in the OCA's Main Brief, OCA witness Smith recommends applying an interest synchronization adjustment to the Company's proposal, which applies the weighted cost of debt to the adjusted rate base in deriving the interest deduction applicable to the calculation of test year income tax expense. OCA M.B. at 81-82. The OCA submits that doing otherwise would *understate the tax deduction* the Company receives on its actual filings, and *overstate the tax expense* the Company incurs to the detriment of its customers. OCA M.B. at 81-82. Moreover, As the OCA's recommended hypothetical capital structure is reasonable, the OCA's interest synchronization adjustment should be adopted in this proceeding. *See* OCA Table III.

C. Federal Tax Adjustment Surcharge

As discussed in detail in the OCA's Main Brief, the OCA recommends that the Commission deny Aqua's proposal for a new water and wastewater Federal Tax Adjustment Surcharge (FTAS) as part of its filing. OCA M.B. at 82-83. The FTAS is designed to adjust base rates to reflect future increases or decreases in the federal corporate income tax rate. OCA M.B. at 82. The FTAS is premised on Aqua's belief that the federal corporate income tax rate may be increased from 21% to 28%. OCA M.B. at 82. As any future legislation changing the federal corporate income tax rates may impact other provisions which affect corporate federal income tax liabilities, the OCA submits that the Commission should deny Aqua's request to create an FTAS. It is based on speculation about what could occur in the future without any basis to believe that it is imminent or reasonably likely to occur.

Aqua argues that the FTAS has no impact on customers if there is no change in the federal corporate income tax rate and that the assertion that any that any change in federal corporate income tax rates should be addressed on a generic statewide basis disregards the circumstances of

each utility that must be taken into consideration in individual cases by the Commission. Aqua M.B. at 262. Aqua further claims that OCA witness DeAngelo "appears to concede this point" with respect to the impacts of the TCJA, but "fails to acknowledge that tax provisions need to be analyzed as they apply to an individual utility's circumstances." Aqua M.B. at 262. Aqua additionally argues that when the Commission addressed the change in the federal corporate income tax rate under the TCJA, it both recognized that utilities that were currently in a base rate proceeding required different treatment from utilities that were currently not in a base rate proceeding and that each utility not in a base rate proceeding should individually calculate the impacts of the TCJA upon their rates, reflecting the unique circumstances of each utility, and subsequently issued individual orders for each utility to implement the appropriate surcharge mechanism to reflect these impacts. Aqua M.B. at 262.

The OCA submits that Aqua's argument regarding the TCJA is misplaced as the TCJA effectively changed the federal corporate income tax, yet here, there is no evidence of any pending federal corporate income tax change. The TCJA was certain, the need for the FTAS is nothing more than a speculative uncertainty. Indeed, 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." OCA M.B. at 83.

Moreover, Aqua's contention that that OCA witness DeAngelo "appears to concede" the impacts of the TCJA proceeding and "fails to acknowledge" that tax provisions need to be analyzed as they apply to an individual utility's circumstances is misleading. Indeed, as noted by OCA witness DeAngelo, the Commission initiated a generic proceeding on the TCJA and in July 2018, after the TCJA was signed into law in mid-December 2017 and took effect on January 1, 2018. OCA St. 2 at 15. As discussed in the OCA's Main Brief and OCA witness DeAngelo's testimony,

the TCJA included provisions affecting the tax treatment of net operating loss carrybacks and caps and limited the net interest deduction. OCA M.B. at 83. Those nuances are discreet and specific. There are no similar changes to the federal corporate income tax rate at issue in this proceeding.

Aqua's proposal to create a FTAS is unnecessary and is unsupported by record evidence. Simply put, 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. When and if this occurs, the Commission will develop a process to address it for all utility sectors – whether that process be in a generic proceeding or in the context of utility rate cases. Regardless, there simply is no need for the FTAS. As such, and for the reasons stated in the OCA's Main Brief, the Commission should reject Aqua's proposal to create an FTAS.

VIII. RATE STRUCTURE

A. Introduction

As noted in the OCA's testimony and Main Brief, OCA witness Watkins' revenue allocations are at Aqua's proposed revenue requirement rather than OCA's recommended revenue requirement in order to permit an illustrative apples-to-apples comparison to Aqua's proposals. OCA St. 4 at 2; OCA M.B. at 84. The OCA's testimony addressed its recommendations for the allocation of wastewater revenue requirement to water customers, rate design, and the scale back to the Act 11 shift and rates for water and wastewater customers if the Commission approves a lesser increase or a decrease to Aqua's revenue requirement. OCA St. 4 at 3-22. Mr. Watkins' testimony also provided specific recommendations to address the concerns raised by active Formal Complainants and other customers who testified at the Public Input Hearings regarding Aqua's unmetered (flat) wastewater rates. OCA St. 4 Supp. at 1-2. Finally, Mr. Watkins' testimony supports (1) an adjustment to Aqua's projected revenues for the FPFTY related to water negotiated rate contracts and (2) denial of Aqua's proposal to create two new surcharges for purchased water and energy costs. OCA St. 4 at 22-25. The OCA will address the arguments presented by Aqua and other parties, if any, on the contested issues. The OCA maintains that Mr. Watkins' recommendations should be adopted in this proceeding.

B. Class Cost of Service Study

The OCA recommends no changes to Aqua's water and wastewater cost of service studies. OCA St. 4 at 2; OCA M.B. at 84.

The OCA supports Mr. Kubas recommendation that newly acquired Section 1329 systems subsequent to this rate proceeding should continue to have a separate COSS included in the first base rate proceeding where those systems are included in Aqua's wastewater system. *See* OCA

M.B. at 85; I&E St. 5 at 66. In the absence of fairer alternatives, the OCA also supported Mr. Kubas' recommendation that, in its next base rate case, Aqua should combine Zones 7 through 11 into one COSS. OCA M.B. at 85-86; I&E St. 5 at 66. Aqua objects to these recommendations as being inconsistent with the objective of single tariff pricing and consolidation of rates and that, over time, Aqua will be able to "balance" the recovery of cost of service of the systems acquired under Section 1329. Aqua M.B. at 219-20. Aqua also argues that Mr. Kubas' recommendations will require Aqua to spend additional money to prepare multiple cost of service studies. Aqua M.B. at 219, n. 68. Moreover, Aqua argues that the Commission does not have *authority* to require Aqua to file multiple cost of services studies. *Id.* at 219-20.

Addressing the threshold legal issue first – whether the Commission has authority to require Aqua to file separate cost of service studies – Aqua ignores that the Commission has explicit statutory authority to impose conditions on the approval of applications under Sections 1103 and 1329 of the Public Utility Code and on the approval of rates under Section 1301 and Act 11 subsidy under Section 1311(c). *See* 66 Pa. C.S. §§ 1103(a), 1329(d)(3), 1301, 1311(c). The Commission has determined in the context of Section 1329 and non-Section 1329 acquisition proceedings that the acquiring utility should provide a separate cost of service study when issues such as an acquisition premium and cross subsidization are involved. *See Joint Application of Pennsylvania American Water Co. and the Sewer Authority of the City of Scranton*, Docket No. A-2016-2537209, Order at 70-71, 92 (Oct. 19, 2016) (requiring the buyer to provide a COSS that fully separated the costs of providing stormwater service in the acquired system and a second COSS that separated the costs of serving the acquired system as a whole) (*Scranton*); *Application of Aqua Pennsylvania Wastewater, Inc.*, Docket No. A-2016-2580061, Order at 69-70 (June 29, 2017) (*Newtown*).

Moreover, the Commission has directed the acquiring utility to address the pros and cons of designing rates on this separated basis. *Scranton* at 86, 92. Referencing *Scranton*, the Commission elaborated on the basis for these conditions in its Order approving Aqua's acquisition of the New Garden wastewater system:

> A Commission Order approving the transaction is permitted to include "[a]dditional conditions of approval." 66 Pa. C.S. § 1329(d)(3)(ii). Accordingly, as a condition to approval of this acquisition, we direct Aqua to file a cost-of-service analysis in its next base rate proceeding, similar to the outcome we directed in PAWC Scranton Order. Specifically, Aqua shall develop and file a cost-of-service study in its next rate case pursuant to our Regulations that separates the costs, capital, and operating expenses of providing wastewater service to the New Garden customers as a stand-alone rate group. Moreover, we shall also direct Aqua to address the pros and cons of designing New Garden rates as a separate rate group. These conditions will ensure that all Parties and the Commission will be informed of the overall rate impact that the acquisition will have on Aqua customers and, alternatively, the result of establishing New Garden as a separate rate zone. These requirements are not intended to limit what Aqua may file or the positions that it or any party may take in that rate case.

Application of Aqua Pennsylvania Wastewater, Inc., Docket No. A-2016-2580061, Order at 69-70 (June 29, 2017). As noted above, the Commission's authority to direct what COSS will be provided in its rate filings and to require Aqua to address separate rate zones for acquired customers, also exists under its broad authority to ensure that rates are just and reasonable under Section 1301 and its consideration of wastewater subsidies under Section 1311(c). 66 Pa. C.S. §§ 1301(a), 1311(c).

The OCA recognizes that providing separate COSSs causes additional cost and complexity; however, the OCA submits that the cost is minimal relative to the amount of revenue requirement at issue[6] and the concern that rates should be reasonably cost-based. Moreover, as discussed in

[6] By way of example, Aqua claims that full cost of service for the five Section 1329 systems is $33.5 million. Aqua Exhs. 5-A, Part I, 5-B, Part I; OCA St. 4 at 4, Table 1.

the OCA's Main Brief, one of the ways to reduce complexity of maintaining separate rate zones is to group the systems acquired under Section 1329 into one rate zone. OCA M.B. at 85-86.

C. Revenue Distribution

1. Aqua's Proposal to Make Water Customers Pay $20.8 Million to Subsidize Its Wastewater Operations Is Unreasonable and Not in the Public Interest.

Aqua's proposal for its water customers to pay *one-third* of its wastewater customers' revenue requirement is not reasonable.[7] OCA M.B. at 90-96; OCA St. 4 at 4; Aqua Exhs. 5-A, Part I, 5-B, Part I.; OCA St. 4S at 3-4. Establishing a subsidy close to one-third of the wastewater revenue requirement would mean that wastewater rates do not bear a reasonable relationship to the utility's cost of serving the customer. *See* OCA M.B. at 89-91.

Aqua argues that the legal standard under Section 1311(c) is "public interest," without regard to the provisions of Section 1329. As discussed in the OCA's Main Brief, however, Section 1311(c) was enacted six years before fair market valuation was permitted under Section 1329 and thus based on the general premise that rate base in wastewater service areas would be based on the net original cost of property.[8] OCA M.B. at 91. Under Section 1329, Aqua has paid purchase prices for five acquisitions that have been as much as 2.26 times net original cost (OCA St. 4 at 6). The OCA submits that it is not in the public interest to use Section 1311 and 1329 in combination to require water customers to subsidize nearly 75% of the revenue requirement generated by fair market value premiums for those five wastewater systems. *Id.* at 89; OCA St. at 4 (Table 1), 7-8; OCA Sch. GAW-2. The bottom line, however, is that the public interest standard

[7] Total wastewater revenue requirement of $69.5 million ÷ Aqua subsidy of $20.8 million. Note: the OCA does not separately respond to the OSBA proposed Act 11 subsidy because the OSBA has largely adopted Aqua's recommendation ($18.6 million compared to $20.8). OSBA St. 1 at 17. Thus the OCA's arguments should be considered to apply to both.
St. 1 at 17.
[8] *Act 11 of 2012*, Pa. H.B. 1294, 2011-2012 (eff. Apr. 16, 2012).

has to be met. Thus, even if Section 1329 acquisitions were not a factor, the proposal for water customers to pay one-third of the revenue requirement for all wastewater operations in this case does not meet that standard.

The OCA's more moderate Act 11 subsidy of $11.774 million is in the public interest because it more fairly balances the interest of Aqua's water customers with the interest of its legacy wastewater customers and newly acquired wastewater customers. For water customers, it recognizes that they receive no direct or indirect benefit from FMV premiums paid to residents of the seller municipalities. OCA St. 4 at 7; I&E St. 5 at 66. For the legacy wastewater customers, it mitigates the impact of rate increases by shifting a substantial amount (roughly $7 million) of their share of the wastewater increase ($16.9 million) to water customers. OCA St. 4 at 4, 8-9; OCA St. 4SR at 3-4. For wastewater customers in the Section 1329 systems, it recognizes the benefit those customers receive from the FMV premiums *and* mitigates the impact of the rates increases by shifting roughly $5 million of their share of the wastewater increase ($15.5 million) to water customers. *Id.*

Aqua argues that a $20.8 million subsidy is necessary to mitigate significant rate impacts for wastewater customers, particularly in the acquired systems. Aqua M.B. at 216-17. The Company claims that the more moderate subsidies recommended by the OCA and I&E produce wastewater rate increases that are not sufficiently gradual. *Id.* at 216-17. Aqua M.B. at 218, 220-21. Of course, Aqua neglects the role that FMV ratemaking rate base and the Company's requested high ROE play in exacerbating the impact to the customers of the acquired systems.

In response to similar arguments raised in testimony, Mr. Watkins pointed out that Aqua's requested revenue requirement increase is driven, in part, by the addition to ratemaking rate base from the $75.9 million more than book value that Aqua paid, on a collective basis, for five

acquisitions and the level of return that Aqua seeks on its rate base (including the FMV premiums it paid for the acquired systems). He stated that, as a result:

> [A]ll experts have been confronted with the dilemma of fairly and equitably assigning revenue responsibility across water and wastewater operations with the constraint that Aqua's shareholders are allowed a fair and reasonable rate of return on its investment (including the acquisition premiums it paid for the acquired systems). Toward this end, the benefits that the residents (Aqua wastewater customers) of the municipalities served by the acquired systems obtained by selling their wastewater systems largely above book value must be weighed against the prices they should now pay Aqua for wastewater service when considering the concept of rate gradualism.

OCA St. 4SR at 2. Mr. Watkins provided the following analogy to show the reasonableness of his recommendation to assign more of the revenue requirement generated by the Section 1329 premiums to the same customers whose communities benefit from those premiums. He stated:

> As an analogy, suppose I purchased my home many years ago for $100,000 and still had a small mortgage on the home. I decided to sell my home at fair market value for $200,000 and rent it back from the investor. In the concept of gradualism, it would not be reasonable for me to propose that my new rental payment be based only slightly higher than my original mortgage, and at the same time, also ask all of the other investor's renters to subsidize my monthly rental payment. Clearly, as a result of my decision to sell my house at fair market value, I would be expected to rent it back at a rent that reflected the fair market value that is much higher than my original mortgage.

OCA St. 4SR at 3. Again, under the OCA's recommended rate increases to the customers of the five systems acquired under fair market value, the acquired wastewater customers (and the legacy wastewater customers) will not pay the full cost of service to serve them, which is why there remains a $11.774 million subsidy by water customers. *Id.*

Here, the OCA notes that the I&E and OCA recommended Act 11 subsidy's differ. Although the total amount of the subsidy is relatively similar ($10.126 million and $11.744, respectively), the OCA submits that its recommendation is preferable, first, because it is tied to the FMV premiums, specifically, rather than the entire revenue requirement associated with each acquired system (to recognize that the customers whose communities benefited more or less from

the sale of their respective wastewater systems based on the difference between purchase price and book value). OCA St. 4 at 7. Second, the OCA allocates additional revenue requirement to the legacy systems and makes rate design recommendations to mitigate significant rate impacts for wastewater customers in the acquired systems, in comparison to I&E's recommendations. *See*, *e.g.,* OCA St. 4 at 4, 8-9; OCA St. 4SR at 3-4; AP St. 5R at 20-24.

Finally, the OCA will respond to Aqua's argument that the OCA's proposed allocation of its reduction to the subsidy assigned to water operations is flawed because it is done "across the board." Aqua M.B. at 220-21. To be clear, Aqua is criticizing OCA witness Watkins for using the same allocation that the Company used for its proposed revenue increase. Aqua St. 5R at 7. Moreover, the OCA does not agree that Aqua's proposed allocation is the "proper" one. Rather, there is a difference of opinion. OCA St. 4SR at 4-5. Mr. Watkins attempted to avoid that disagreement by utilizing Aqua's methodology. *Id*. Additionally, he demonstrated that the difference between the Aqua and OCA recommendations is minor, particularly so in the larger context of this base rate case. *Id.* at 5.

> [T]his case involves a multitude of complexities and constraints including: the policy to gradually move zone rates to a state-wide rate; the statutory Public Fire water subsidy requirement; the impact of Act 11 revenue shifting between water and wastewater operations; and, differences in the mix of customer classes across various division and operating areas. Ms. Heppenstall's concern over miniscule differences in class allocations are only one of the concerns and constraints that must be considered in this case.

As such, Aqua's argument regarding the mechanics of the OCA's allocation of the recommended reduction to water operations revenue requirement for a reduced Act 11 subsidy should be rejected. Further, for all of the reasons discussed above, the subsidy by water customers should be $11.774 million and not the $20.8 million proposed by Aqua.

2. The OCA's Recommended Allocation to the Masthope System Is Reasonable and May Not Be an Issue if Masthope's Primary Position Is Adopted.

Masthope Mountain Community Association (Masthope) asks the Commission to deny Aqua's request to increase rates for Masthope customers, to reflect Aqua's failure to resolve service issues. Masthope M.B. at 9-16. The OCA agrees with Masthope that, if the Commission finds that service to the Masthope community is inadequate, the Commission may deny all or part of the proposed rate increase for those customers. Masthope M.B. at 9-16; *see* 66 Pa. C.S. §§ 523, 526(a). The OCA seeks to clarify, however, that this remedy should *not* impose costs on other Aqua wastewater or water customers. If it is not reasonable for Masthope customers to pay higher rates because service is inadequate, it would be equally unreasonable for other customers to pay higher rates for Masthope service. As such, the revenue requirement associated with the rates set for Masthope should be eliminated rather than reallocated.

If Masthope's requested rate relief is not granted, Masthope requests that the Commission impose conditions on Aqua "to *timely* resolve the hydraulic overload conditions and take all necessary steps to permanently remove restrictions on new connections to the Masthope [wastewater treatment plant]." Masthope M.B. at 17 (emphasis in original). The OCA has no objection to the specific conditions that Masthope recommends but requests that any reports that Aqua is required to provide also be provided to the OCA.

The only issue that the OCA takes with Masthope is its conditional opposition to the OCA's recommended subsidy for the Masthope system (current Zone 6). Masthope M.B. at 19-23. This objection is conditional because it only applies if the impact of the OCA's recommendation would increase the wastewater revenue requirement for Zone 6 more than the amount originally proposed by Aqua. *Id.* at 21-22. That will not be the case if the Commission agrees with OCA or I&E that there must be substantial reductions to Aqua's filed-for revenue requirement and to the Act 11

shift. OCA 1SR at 6-8; OCA R.B., App. A; I&E M.B. at 16-17 and App. A. If the Commission does not sufficiently reduce the overall wastewater revenue requirement (and does not otherwise reduce Masthope rates for inadequate service to that system), then it is possible, under the OCA's recommendations that the Masthope system increase would be greater than the amount that Aqua originally proposed. Masthope M.B. at 21. The OCA maintains, however, that its recommendation for the legacy system increase is reasonable and appropriate for the reasons discussed in Section C.1 above.

In addition, the OCA reiterates that, under its recommended subsidy, the legacy systems will still pay *less than half* of their full cost of service required increase. OCA St. 4 at 9. The cost of service required increase to the legacy systems is $16.926 million. The OCA's recommended increase to the legacy systems is $6.947 million, or 41% of that amount. *Id.* at 4, 9. Also, Masthope recognizes that the OCA's prorated proposal maintains Aqua PA's distribution and design and does not extraordinarily impact the Masthope system. Masthope M.B. at 21. This is reflected in the table below.

TABLE 5
Aqua Wastewater – Aqua & OCA Proposed Increases
($000)

Current Rate Zone	Division	Aqua Proposed Increase	OCA Increase	Aqua Pct. Increase	OCA Pct. Increase
RZ1	Media	$477,615	$955,230	20.2%	40.4%
RZ1-EDU	Bridlewood, Eagle Rock	$192,876	$385,751	20.3%	40.6%
RZ1A	Tres. Lake, Valley Forge, Bunker Hill	$717,746	$1,435,493	33.3%	66.6%
RZ1B	Penn Township	$78,677	$157,354	7.7%	15.3%
RZ2	Emlenton, River Crest, White Haven	$143,391	$286,781	7.9%	15.7%
RZ2	Pinecrest	-$3,282	-$6,565	-4.8%	-9.5%
RZ3	Beech Mtn, Deerfield Knoll, Laurel Lakes	$668,300	$1,336,600	20.7%	41.5%
RZ3	Woodloch Springs [9]	$20,920	$41,840	6.5%	13.0%
RZ4	Honeycroft, Lake Harmony, New Daleville	$761,910	$1,523,820	19.1%	38.2%
RZ5	Avon Grove, East Bradford, Little Washington	$165,759	$331,518	18.0%	35.9%
RZ5	Newlin Green	$4,906	$9,813	4.9%	9.7%
RZ6	Masthope	$155,015	$310,030	20.6%	41.1%
Bulk	Southdown Home	$0	$0	0.0%	0.0%
Bulk	East Brandywine	$0	$0	0.0%	0.0%
Bulk	Foster Township	-$92	-$185	0.0%	-0.1%
Bulk	Dennison	-$20	-$40	0.0%	-0.1%
Bulk	Upper Providence	$75,990	$151,979	14.0%	28.0%
Bulk	Elwyn	$13,794	$27,588	14.0%	28.0%
Bulk	Penn Lake	-$46	-$93	0.0%	-0.1%
Bulk	East Side	-$13	-$25	0.0%	0.0%
Total Legacy System		$3,473,445	$6,946,890	18.3%	36.6%

OCA St. 4 at 10 (highlighting added). To be clear, these increases are at Aqua's full revenue requirement request. If the Commission authorizes a lower revenue requirement, as supported by the OCA's witnesses, these percentage increases will be reduced. *Id.*

Finally, Masthope acknowledges that if Aqua makes the upgrades and expansions to its wastewater treatment plant that Masthope indicates are needed, other customers will subsidize those costs. Masthope M.B. at 22-23. As stated by OCA witness Watkins, the OCA's proposed allocation of a portion of the FMV premium to the legacy systems (rather than assigning all of it to the five acquired systems) is appropriate for this reason. He explained:

> The rationale for moving all wastewater systems to a statewide rate is that while there may be large rate increases to a particular system at any point in time, these systems will receive benefits from being part of a larger statewide wastewater network.

[9] Excludes $19,046 increase to contract revenues.

OCA St. 4 at 9. For all of these reasons, the OCA's recommended allocation to the legacy systems, and to the Masthope system specifically, is reasonable and Masthope's arguments to the contrary should be rejected.

Masthope makes a further, alternative recommendation in its Main Brief. On page 24, Masthope states its belief that rate consolidation into a uniform statewide tariff "may be best accomplished through interim incremental [annual] changes between rate cases." Masthope M.B. at 24. The OCA strongly opposes this proposal. First, the OCA notes that Aqua is regularly filing base rate cases. It filed in 2018 and 2021 and anticipates filing its next case in 2024. OCA St. 1 at 56; Aqua St. 3 at 3. Second, changing base rates outside of a base rate proceeding would not be reasonable without reviewing all costs and revenues at the same time, as is done in a rate case. Masthope ignores that things do not remain static between cases. After this base rate case, Aqua will continue to acquire other systems, thus, there will be additional customers and different revenues and billing determinants. It would effectively require a mini rate case to determine what are the incremental interim changes on which to set rates. For these reasons, Masthope's alternative recommendation should be rejected.

3. Scale Back

Aqua and the OCA's proposed scale back to wastewater rates differ. The Company's position is that no scale back of its proposed wastewater rates should occur until the total wastewater allocation is eliminated. Aqua M.B. at 225. If the Commission adopts the OCA's recommendation to assign more revenue requirement to the five systems acquired under Section 1329, that revenue requirement is calculated based on Aqua's authorized ROE. OCA St. 4 at 11-12. Thus, if Commission adopts that recommendation and also adopts a different capital structure and/or lower ROE than proposed by Aqua, the scale back should first reduce the revenue

requirement associated with the FMV premiums, to the benefit of the acquired customers. *Id.* If the Commission reduces revenue requirement for non-ROR reasons, the OCA agrees that the benefit should be applied to reduce the subsidy by water operations. *Id*. The reasonableness of this proposal is addressed further in the OCA's Main Brief. OCA M.B. at 96-98.

The OCA and I&E addressed the Act 11 subsidy and scale back differently, however, I&E did not object to most of the OCA's proposed wastewater revenue allocations across the various systems. *See* I&E St. at 3-23; OCA St. 4SR at 5. I&E recommended a larger revenue requirement be assigned to the Cheltenham wastewater system through its scale back of the subsidy ($4.084 million minus $3.078 million). OCA St. 4SR at 5. The OCA does not support this proposal because, if adopted, Cheltenham's resulting rates (at the Company's revenue requirement) would be higher than its cost of service.[10] *Id.* at 6. While the OCA agrees that the wastewater subsidy should be reduced, the OCA does not agree with I&E witness Kubas that "[e]ach wastewater system should provide as much revenue as possible to reduce the total wastewater subsidy coming from Aqua water customers regardless of the cost of providing service to that zone." I&E St. 4SR at 14. Rather, the revenue allocations should be guided by cost-causation. *A Guide to Utility Ratemaking*, James H. Cawley & Norman J. Kennard (Pa. P.U.C. 2018) at 138-39; *Principles of Public Utility Rates*, James C. Bonbright (New York, N.Y. 1961) (1st Ed.) at 82-92; *The Process of Ratemaking*, Leonard Saul Goodman (Arlington, V.A. 1998), vol. II, at 893-95.

[10] Cheltenham's revenue requirement (cost of service) is $10.316 million. Under Mr. Kubas' proposal, Cheltenham's revenues would be increased to $11.342 million ($10.336 million OCA plus $1.006 million additional I&E). OCA St. 4SR at 6, n.5.

4. The OCA's Recommended Class Water Revenue Allocation Is More Reasonable than That Recommended by OSBA or AQUA LUG.

The table below presents a comparison of each parties' recommended class water revenue increases, recognizing that OSBA and Aqua LUG's witnesses have accepted Aqua's proposed revenues associated with Act 11 subsidy by water operations and the OCA recommends a lesser subsidy. OCA St. 4R at 1, 3.

TABLE 3
Aqua Pennsylvania
Comparison of Recommended Water Revenue Increases

	Percent of System Average Increase			
Class	Aqua	OCA	OSBA	LUG
Residential	103%	103%	116%	108%
Commercial	94%	94%	75%	82%
Industrial	109%	109%	109%	106%
Public	94%	94%	27%	82%
Other Water Utilities	94%	93%	0%	94%
Private Fire Protection	103%	103%	12%	103%
Public Fire Protection	122%	136%	122%	122%
Total Full Tariff Sales of Water	101%	101%	101%	101%
Contract Sales	25%	28%	25%	25%
Total Sales of Water	100%	100%	100%	100%

As shown in this table, 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.[11] In their respective Main Briefs, OSBA and Aqua LUG set forth their arguments to support the reasonableness of their recommendations. OSBA M.B. at 9-20; Aqua LUG M.B. at 8-11. For the following reasons, the OCA submits that its recommendations (and Aqua's) are more reasonable.

With regard to OSBA's recommendations, the underlying error is that OSBA witness Kalcic utilized Ms. Heppenstall's calculated "cost of service" related to sales provided in response

[11] The OCA's relative increases to Public Fire Protection and Contract Sales are larger than Aqua's relative increases due to the fact that the OCA accepted the Company's proposed absolute levels of Public Fire Protection and Contract Sales increases ($1,329,034 and $303,705, respectively). OCA St. 4R at 3, n.1.

to OSBA-I-1 (current rates). At current rates, no class is at its actual cost of service according to Aqua, who is claiming a revenue deficiency (and shifting revenue responsibility under Act 11). Further, Ms. Heppenstall's calculated "cost of service" contains numerous allocations that do not reflect the true profitability of classes or the cost to serve each class. OCA witness Watkins addressed the specific failings at length on pages 5 to 6 of his rebuttal. OCA St. 4R at 5-6. These failings significantly distort Mr. Kalcic's assessment of each class's profitability. *Id*.

The results of Mr. Kalcic's class revenue allocations (before the Act 11 subsidy) are not reasonable, as Mr. Watkins' explained. 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, 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.

TABLE 7
Comparison of Indexed RORs at Current Rates
And OSBA Water Revenue Allocation
(Before Act 11 Revenue Transfer)

	Indexed ROR			
Class	Excluding Public Fire Revenue Shortfall	Including Public Fire Revenue Shortfall	Kalcic Percent Increase	Percent Of Sys. Average Increase
Residential	107%	96%	14.59%	113%
Commercial	110%	107%	9.46%	74%
Industrial	94%	93%	18.53%	144%
Public	122%	118%	3.45%	27%
Other Water Utilities	1577%	1577%	0.00%	0%
Private Fire Protection	125%	125%	2.04%	16%
Public Fire Protection	-25%	97%	20.64%	161%
Total Full Tariff Sales	100%	100%	12.98%	101%
Contract Sales	--	--	4.18%	33%
Total Sales of Water	--	--	12.85%	100%

OCA St. 4R at 7. In Aqua's Main Brief, the Company addresses additional reasons why Aqua's (and thus OCA's) recommend class water revenue allocations are more reasonable than what is proposed by OSBA. Aqua M.B. at 228-29.

After the shift of revenue requirement to water operations, OSBA's results are even more skewed and unreasonably favor the Commercial class, by giving 18-19% increases to residential and industrial customers and only a 12% increase to commercial customers – again, when each of those classes is earning close to parity. OCA St. 4R at 9-10. Such a result would clearly be inequitable. As further discussed in OCA witness Watkins' rebuttal, OSBA's recommended total class water increases are unreasonable and should not be given any weight. *Id.* at 11.

Aqua LUG claims that there has been little movement in relative (indexed) RORs from the last case to the current case as well as little movement under Aqua's proposed revenue allocations. Aqua LUG M.B. at 9. As a result, Aqua LUG recommends more class movement to parity. *Id.* at 9-10. Specifically, it recommends the following:

> Residential move from 96% to 98%;
> Commercial move from 107% to 102%;
> Industrial move from 93% to 99%; and
> Public Authority move from 118% to 115%.

Id. OCA witness Watkins explained that Aqua LUG is "splitting hairs with regard to the relationship between imprecise cost allocations and his recommended class revenue increases." OCA St. 4R at 12. 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. *Id.*

OCA witness Watkins aptly summarized why Aqua's methodology to assign water class revenue increases is reasonable, stating:

> Both Mr. Kalcic and Mr. Baudino have made their recommendations based on assumptions that the Company's class cost of service studies are surgically precise. Virtually all experts agree that class cost allocations are simply approximations. Indeed, the U.S. Supreme Court has shared this view and opined in an important regulatory case involving Colorado Interstate Gas Company and the Federal Power Commission (predecessor to FERC) wherein the Courts stated:
>
>> But where, as here, several classes of services have a common use of the same property, difficulties of separation are obvious. Allocation of costs is not a matter for the slide-rule. It involves judgment on a myriad of facts. It has no claim to an exact science.

OCA St. 4R at 12-13 (citing *Colorado Interstate Gas Co. v. Federal Power Comm'n*, 324 U.S. 581, 589, 65 S. Ct. 829, 833 (1945)). The Commission should reject OSBA's and Aqua LUG's adjustments.

D. Rate Design

1. Aqua's Water and Wastewater Customer Cost Analysis Produces an Inflated Result Because It Includes Costs that Are Not Reasonably Related to Connecting and Maintaining Customer Accounts and Does Not Support Increasing Charges for Aqua's Main Water and Wastewater Divisions.

In its Main Brief, Aqua makes two principal arguments in support of its proposed customer charges. First, that Aqua witness Heppenstall's customer costs analysis properly included numerous indirect costs because they "are necessary and essential to providing service to customers and maintaining customer facilities" and, second, that inclusion of these costs is consistent with Commission precedent. Aqua M.B. at 234-36, 238-39. The OCA fully addressed these arguments in its Main Brief, pages 99 to 101, and provides brief, additional response here.

Under the sweeping definition applied by Aqua, the only limitation on the types of costs that can be recovered in a customer charge is that they be fixed. Ms. Heppenstall's analysis includes numerous costs that are simply overhead costs that Aqua incurs as a provider of utility service. OCA St. 4SR at 7. The fact that these costs do not vary widely is of no concern. They are, like other costs, the costs of doing business and Aqua has not demonstrated that there is any

reasonable relation to connecting and maintaining a customer's account to support collecting the costs from a fixed customer charge.

Aqua's interpretation of Commission precedent is flawed. The Commission has not approved the broad range of overhead costs utilized in Aqua's study in this proceeding. Rather, the Commission has taken a more limited approach in permitting "allocated portions of indirect costs, such as employee benefits, local taxes and other general and administrative costs, in a cost study." *Pa. P.U.C. v. Philadelphia Suburban Water Co.*, Docket No. R-00038805, Order at 72 (Aug. 5, 2004) (*PSWC 2004*). Significantly, the Commission stated: "We caution that these are costs which may be considered for inclusion in the customer charge, but such claims are subject to scrutiny on a case-by-case basis." *Id.*

In addition to his direct cost analysis, which the OCA supports as the proper measure for evaluating customer charges because it is properly limited to costs that are directly related to the provision of a service line, meter, and bill to a customer, Mr. Watkins performed an indirect cost analysis. OCA St. 4SR at 7; OCA Sch. GAW-7. That analysis included the types of costs that the Commission allowed in *PWSC 2004* (employee benefits, workers compensation insurance, and payroll taxes associated with direct labor costs). Even when the additional types of costs that the Commission allowed in *PSWC 2004* are included, the indicated customer costs are *below the current water Main division 5/8" customer charge of $18.00*. OCA St. 4 at 16. There is no reasonable basis for Aqua's proposal to increase the existing residential water customer charges in Main Division and Zones 2 and 3 above current rates.[12] OCA St. 4 at 16.

Aqua's proposal to increase the wastewater Zone 1 5/8" residential customer charge by $8.10 per month, from $31.00 to $39.10, should likewise be rejected, because the study that Aqua

[12] The OCA accepted Aqua's proposed increases to the customer charges for Bunker Hill and Phoenixville because the current rates and proposed rates are significantly lower than the current Main division rates. OCA St. 4 at 16.

relies on improperly includes indirect overhead costs that are not sufficiently related to connecting and maintaining a customer's account. OCA St. 4 at 17; Aqua Exh. 5-B, Part I, Sch. D-WW. For example, Aqua includes allocated costs for Administrative & General expenses ($837,377) and 100% of uncollectibles ($428,675). Aqua Exh. 5-B, Part I, Sch. D-WW.

Over the course of many decades and base rate cases, the Commission has clearly defined what is included in the basic customer costs for determining the customer charge as (only) those costs which directly relate to the utility's investment in services and meters as well as the operating expenses associated with meter reading, customer service, accounting and customer records and collections. *See Pa. P.U.C. v. Metropolitan Edison Co.*, 60 Pa. P.U.C. 349 (1985) (*MetEd 1985*); *Pa. P.U.C. v. West Penn Power Co.*, 59 Pa. P.U.C. 552 (1985) (*West Penn 1985*); *Pa. P.U.C. v. West Penn Power Co.*, 1994 Pa. P.U.C. LEXIS 144, *154 (*West Penn 1994*). In a 1994 National Fuel Gas base rate proceeding, the Commission provided further guidance as follows:

> Commission precedent is clear that indirect customer costs are not properly included in the customer charge. Only those costs which represent items that the utility must have in place each month for each customer are 'basic customer costs" which are properly recovered in the customer charge.

Pa. P.U.C. v. National Fuel Gas Dist. Corp., 83 Pa. P.U.C. 262, 371 (1994) (*NFG 1994*); *Pa. P.U.C. v. PPL Gas Util. Corp.*, Docket No. R-00061398, Order at 137 (Feb. 8, 2007) (*PPL 2007*); *Pa. P.U.C. v. PPL Elec. Util. Corp.*, 2004 Pa. P.U.C. LEXIS 40, 82-84 (*PPL 2004*). As such, Aqua's proposed increase for wastewater Zone 1 5/8" customer charges should be rejected.

2. <u>The OCA's Proposed Residential Wastewater Rates for the Systems Acquired under Section 1329 Are Reasonable and Should Be Adopted.</u>

With regard to the Limerick, East Bradford and East Norriton, the only area of disagreement is whether the residential wastewater customer charges should be $31.00, which is the rate recommended by the OCA for residential Zone 1, rather than the Company's proposed

charges of $39.48, $39.10 and $32.37, respectively. Aqua M.B. at 240-41; OCA M.B. at 102-03; OCA St. 4 at 18-19. For the same reasons discussed in Section VIII.D.1 above, the OCA's recommended limitation to the residential customer charge increases for Limerick, East Bradford and East Norriton should be adopted. This results in a more reasonable level of increases than proposed by Aqua and also serves to consolidate the residential customer charges with the main wastewater rate zone.

The OCA accepted Aqua's proposed customer charge increase for residential Cheltenham customers. *See* OCA M.B. at 241; Aqua M.B. at 241. The OCA addressed I&E's proposed revenue allocation and resulting rates for Cheltenham in Section VIII.C.3 above.

With regard to New Garden, Aqua proposed to maintain a rate structure with a usage allowance and inverted-block usage rate above the allowance, and to increase the fixed monthly customer charge from $37.64 to $51.71 per month. Aqua Exh. 5-B, Part II at 71. The OCA recommended eliminating the usage allowance, as Mr. Watkins explained:

> Eliminating the usage allowance is reasonable because it more fairly charges customers for their actual usage, sends proper price signals to customers and encourages conservation by giving customers greater control of their bill.

OCA St. 4 at 18. The OCA also objected to increasing the fixed monthly charge from $37.64 to $51.71 per month and recommended holding it at the current level, to avoid moving the charge further from the $31.00 residential customer charge recommended by the OCA for most of the wastewater rate zones. *Id.*; OCA M.B. at 103. Aqua objects to the OCA's position due to the impact of eliminating the allowance for customers who use just over the current minimum (1,667 gallons per month). Aqua M.B. at 242. This is at Aqua's revenue requirement, however, and the OCA has recommended that a lesser overall wastewater revenue requirement be approved. Further, the OCA has recommended that its proposed allocation to the New Garden system be scaled back if the Commission adopts a lesser ROE than Aqua requested.

3. OCA Proposals to Address Flat, Unmetered Rates Respond to Concerns Raised by Customers Whether Aqua's Usage Assumptions and Resulting Rates Are Reasonable.

a. Lake Harmony Customers without Metered Water

During the Public Input Hearings in this proceeding, ten customers raised concerns about flat wastewater rates. Aqua M.B. at 177-78. Eight of those customers were from Lake Harmony and object to being charged flat rates for wastewater service.[13] Although they use less water (smaller size homes with few and/or seasonal occupants), they have to pay the same bill as customers who use much more water. Tr. 62, 69-71, 112-13, 148, 150-51, 163-64, 166-68, 185-87, 189, 199, 201-04, 232-37, 241, 249-50, 323-25, 439-40, 443-44; OCA St. 4 Supp. at 1.

Aqua acknowledges that these customers may have below average usage. Aqua M.B. at 178. The Company argues, however, that its proposal to continue charging flat rates to customers in Lake Harmony and Tobyhanna because the use of flat rates is "standard practice" and the "traditional method" when usage is not known. *Id.* To the contrary, the standard and fairer practice is to obtain metered usage data so that metered rates can be charged. *See* Aqua St. 9R at 28; OCA M.B. at 104-05. That is why, for systems that have metered water service, Aqua "designs rates that include a volumetric portion" by obtaining volumetric usage information from the investor-owned utility or a municipality/municipal authority. *Id.*; Day Exh. 1 at 7 (Aqua response to DW-I-15). Clearly, Aqua takes this step in recognition that metered rates are more fair.[14] Further, it is consistent with the Commission's policy to encourage conservation by moving customers to metered, usage-based rates. *PPL 2004*; *Pa. P.U.C. v. Total Envtl. Solutions, Inc. - Treasure Lake Water Div. and Treasure Lake Wastewater Div.*, 103 Pa. P.U.C. 110, 160-61 (2008) (*TESI 2008*);

[13] The OCA notes that two of the eight Lake Harmony customers who contributed to this testimony, Mr. Day and Mr. Weiner, are active Formal Complainants.

[14] In the current case, Aqua proposed to eliminate minimum allowance for wastewater customers in its Limerick and East Norriton systems. See Aqua Exh. 5-B, Part II at 51, 66.

Pa. P.U.C. v. Emporium Water Co., 95 Pa. P.U.C. 191, 213, 208 PUR4th 502, 524 (2001); *Pa. P.U.C. v. Lemont Water Co.*, 81 Pa. P.U.C. 392, 420-421 (1994).

Recognizing that customers in Lake Harmony have private water wells on their property that are not individually metered, the OCA proposed a pilot program in Lake Harmony to install meters on an opt-in basis for those customers who request metered wastewater service. OCA St. 4 Supp. at 2. Aqua objects to this proposal, however, arguing that metered rates would likely increase bills for higher-usage customers, such that only lower-usage customers would opt-in for metered rates. Aqua M.B. at 179 (citing Aqua St. 5R at 17-18). As noted in its fuller discussion of this matter on pages 104 to 106 of the OCA's Main Brief, the OCA agrees that some customers would pay more under metered rates; some customers may pay the same and some may pay less. The OCA submits that all of those results may be reasonable if rates are usage-based and aligned with cost of service. The OCA disagrees, however, that rates could not be designed in the next base rate case, when data and experience is available, to incentivize higher-usage customers to opt for metered rates.

Aqua also raises the concern that the costs of installing meters could be "substantial," but provides no basis for that claim. Aqua M.B. at 179 (citing Aqua St. 5R at 18). In response to DW-II-11, Aqua witness Packer stated that the Company had not analyzed what the cost would be to install meters for all Aqua PA customers in Lake Harmony/Kidder Township. Day Exh. 2 at 13. Mr. Packer indicated that the cost for installing a water meter can range from $170-$180 and that Aqua has generally recovered the costs for installing water meters through base rates and DSIC rates. Day Exh. 2 at 14-15 (Aqua response to DW-II-12, DW-II-13). The OCA submits that installing and reading meters are considered acceptable and normal costs for providing utility

service based on the principle that rates should be usage-based. Aqua St. 9R at 28; Day Exh. 2 at 15; *see* 52 Pa. Code §§ 65.7, 56.12.

Finally, Aqua says that it is "problematic" for the Company to access customer's property to install and maintain a meter near the water well. Aqua M.B. at 180 (citing Aqua St. 9R at 29-30). The OCA submits that issue is addressed by its proposal that the pilot program be opt-in. Granting Aqua permission to install and access the meter would be required for participation. Other logical and reasonable conditions may also be necessary, which is why the OCA recommended that Aqua and the OCA (and other interested parties) should meet to discuss those details of the pilot. OCA St. 4 Supp. at 2.

Aqua should be directed to adopt a program, on a pilot basis, as a reasonable and measured response to the concerns raised by its customers regarding flat rates.

b. Rate Zones with Metered and Unmetered Rates

OCA witness Watkins identified that nine current wastewater rate zones have both metered and unmetered residential rates. OCA St. 4 at 20; OCA Sch. GAW-8. His analysis showed that the metered and unmetered rates are very close in East Norriton and relatively close in Zone 1A and 6. There is a significant difference between the average metered rate customer and flat rate customer in Zone 5. *Id*. In response to the OCA's recommendation that Aqua review the basis for significant differences and consider adjusting the unmetered rates in its next rate case to the extent unmetered rates are expected to continue. OCA St. 4 at 21.

Aqua opposes this recommendation and argues that its assumed usage of 4,000 gallons per month accurately reflects average usage for all of its residential customers. Aqua M.B. at 243-44. The OCA does not dispute Aqua's calculation. Rather, the OCA's concern is that a system-wide average may not be representative of usage in a particular area of Aqua's service territory. Day

Exh. 1 at 3. Where that is causing an unreasonable disparity in the rates charged to metered and unmetered customers, it is reasonable for Aqua to study and propose adjustments to its unmetered rates, which may include an adjustment to the usage assumption applied in a particular territory. The OCA's recommendation should be adopted.

4. OCA Proposals for Additional Study Are a Reasonable Way to Address Potential Inaccuracies in Calculating Wastewater Volumetric Charges based on Water Usage.

As discussed on pages 108 to 110 of the OCA's Main Brief, the OCA recommended that Aqua conduct an additional study on ways to address potential inaccuracies in Aqua's calculation of wastewater volumetric charges during the summer months when irrigation, swimming pool filling, and other outside watering activities are traditionally in use. *See* OCA St. 4 at 21-22; OCA M.B. at 108-09 (citing *Aqua Illinois, Inc. Proposed Rate Increases for Water and Sewer Servs.*, 2018 Ill. P.U.C. LEXIS 385, *123 (Mar. 7, 2018)).

Aqua's opposition to doing further study on the feasibility of installing irrigation water meters on an opt-in basis – the second approach recommended by Mr. Watkins – is not reasonable. Aqua M.B. at 244-45. First, while higher use customers would benefit from a capping mechanism, it remains that some customers use a significant amount of water for irrigation that does not flow into the wastewater system. OCA St. 4 at 22. As addressed in the prior sections regarding Aqua wastewater customers who are not metered, rates are based on assumptions, e.g., a metered customer's wastewater and water usage are equivalent or an unmetered customer's wastewater usage is the same as the system-wide average usage. It is reasonable for Aqua to test those assumptions.

Second, if further study supports implementation of a capping mechanism and some wastewater rates increase as a result, Aqua claims that "more Act 11 shifting would be needed to

mitigate the increase." Aqua M.B. at 245. To be clear, Aqua has no future entitlement to make its water customers pay the level of revenue requirement allowed in this base rate proceeding or the prior one. The Company states this explicitly in its Main Brief, in response to I&E's witness's concern that the allocation proposed by Aqua in this proceeding will be indefinitely applied. Aqua M.B. at 219. The Company states:

> As explained by Mr. Packer, "[i]t is not the Company's position that once an allocation is established in a previous rate case, that the same allocation will be used indefinitely." AP St. 1R at 25. Indeed, the Company's goal is to gradually group and consolidate divisions towards Rate Zones. AP St. 1 at 29.

Id. Aqua's claim that "more" shifting will be needed to address potential wastewater rate increases related to a capping mechanism should be rejected for that reason. Additionally, a capping mechanism would not create more revenue requirement, it would impact rate design for the purpose of making rates more closely align with cost causation.

Finally, the OCA is only recommending further study to provide information on which a future determination will be made whether installing irrigation water meters on an opt-in basis is feasible. OCA St. 4 at 21-22. This is a reasonable recommendation and should be adopted.

E. The OCA's Projection of Inflation Adjustments for Special Contract Revenue Properly Matches the FPFTY Used by Aqua to Calculate Its Other Revenues and the Measure of Inflation Specified in Each of the Contracts.

As discussed above, in Section IV (Revenues) and in the OCA's Main Brief, the OCA proposed an adjustment to the revenues associated with negotiated rate contracts for sales for resale and for end-use Industrial and Public Authority customers. OCA M.B. at 110-12; OCA St. 4 at 23. Specifically, the OCA recommended an adjustment to current revenues to reflect the contractual escalation rates through March 31, 2023 (the end of the FPFTY). Aqua agreed that an adjustment was appropriate (Aqua St. 2R at 27-28), however, the OCA and Aqua do not agree on which inflation factors should be used to determine each contract's revenues at the end of the

FPFTY. OCA St. 4SR at 9-10. The reasonableness of the OCA's inflation factors is set forth on pages 110 to 112 of its Main Brief and will not be restated here. The OCA provides the following additional response to certain arguments raised in Aqua's Main Brief.

Aqua claims that OCA witness Watkins included forecasted inflation rates for 2023 in his calculations and argues that this is improper because the rate case is based upon a FPFTY ending March 31, 2023 so 2023 inflation rates will not impact the contracts. Aqua M.B. at 52-53. In fact, Mr. Watkins did not apply the 2023 inflation factor for all of 2023. He applied it only to three months of 2023, *i.e.* January, February and March 2023, because those three months are within the FPFTY ending March 31, 2023. OCA St. 4SR at 9; OCA Highly Confidential Sch. GAW-2SR. Thus, Mr. Watkins is reflecting the contract rates at the end of the FPFTY just as Aqua has calculated its estimated revenues, customers served, operating expenses and rate base at March 31, 2023 in this proceeding. Aqua St. 1 at 12.

Aqua forecasted inflation rates at the end of the FPFTY based on the GDP Chained Price Index. This is the same measure used to calculate the General Price Level adjustment that the Company used for expense purposes, and the Company argues that this is appropriate as a matter of consistency. Aqua M.B. at 52-53. The escalation provisions in each of the seven contracts at issue specify, however, that escalation is tied to changes in the Consumer Price Index (CPI), not the GDP. OCA St. 4SR at 10. The OCA used forecasted inflation rates for the CPI to calculate the contract rate increases.[15] OCA St. 4SR at 10; Highly Confidential OCA Sch. GAW-9. Aqua did not; it used the GDP and, for this reason, its projection of inflation adjustments should be denied.

[15] Specifically, OCA witness Watkins used the average of the U.S. Office of Management and Budget's and the Federal Reserve's forecasted inflation rates for the CPI. OCA St. 4SR at 10; Highly Confidential OCA Sch. GAW-9.

Moreover, the OCA emphasizes that the forecast for the CPI has already proven to be conservative. OCA St. 4SR at 10; OCA Sch. GAW-1SR. OCA Schedule GAW-1SR shows that the actual annual rate of inflation through October 2021 was 6.2% (October 2020 – October 2021). For the ten months ending October 2021, the CPI has increased by 5.5%. Mr. Watkins' average forecasts for the CPI projected a rate of 4.50% for 2021. OCA St. 4SR at 10. This compares to Aqua's proposal to use considerably lower rates ranging between 0.78% and 3.10% for the same period. Aqua M.B. at 52.

Mr. Watkins' forecasts are reasonable, conservative, and consistent with the terms of the actual contracts. As such, the OCA adjustment to revenues for these contracts should be adopted. This adjustment of $236,777 is reflected by OCA witness Smith in OCA Exhibit LA-6, Schedule C-2 and Table II (Water).

F. Aqua's Proposed Purchased Water and Energy Cost Surcharges Are Unnecessary and Contrary to Ratemaking Principles and Precedent Because the Costs Are Not Extraordinary nor Substantial.

The OCA, I&E, OSBA and Aqua LUG oppose the Company's proposal to add two new surcharges to water bills to guarantee recovery of its purchased water and purchased energy (electric and gas) costs for its water operations. *See* OCA M.B. at 112-15; I&E M.B. at 91-95; OSBA M.B. at 5-7; Aqua LUG M.B. at 4-6. Their witnesses provided compelling testimony supporting rejection of the proposed Purchased Water Adjustment (PWA) and Energy Cost Adjustment Mechanism (ECAM). OCA St. 4 at 24-25; I&E St. 1 at 49-53; I&E St. 4 at 14-24; I&E St. 1SR at 61-68; I&E St. 3SR at 7-13; OSBA St. 1 at 21-22, 24-25.

Aqua's principle argument is that other expense surcharges have been allowed despite the prohibition against single issue ratemaking, most notably the purchased water adjustment mechanism approved for Newtown Artesian Water Company. *Pa. P.U.C. v. Newtown Artesian*

Water Co., Docket No. R-2009-2117550, Order at 6-17 (Apr. 15, 2010) (*Newtown*) (affirmed by *Popowsky v. Pa. P.U.C.*, 13 A.3d 583 (Pa. Cmwlth. 2011). As discussed by the OCA, I&E, OSBA and Aqua LUG, however, Newtown's situation was very different from that of Aqua.[16] Aqua's projected purchased water and energy costs will amount to only about 0.7% and 1.4% of its total water cost of service, respectively. OCA St. 4 at 25. The costs at issue meet none of the criteria that the Commission and Courts have applied in approving a surcharge. They are not extraordinary, substantial, unexpected or non-recurring. Instead, they are normal, ongoing costs of providing water service that are such a small percentage of Aqua's overall cost of service that any fluctuations will have minimal impact. There is simply no need for the proposed PWA or ECAM.

Aqua attempts to argue that none of these criteria matter, that the legal standard for approval of a surcharge under Section 1307 is only that the costs are easily identifiable and beyond the utility's control. Aqua M.B. at 253 (citing *Popowsky v. Pa. P.U.C.*, 13 A.3d 583, 591 (Pa. Cmwlth. 2011) (*Popowsky 2011*); *Popowsky v. Pa. P.U.C.*, 869 A.2d 1144, 1160 (Pa. Cmwlth. 2005), *appeal denied*, 895 A.2d 552 (Pa. 2006) (*Popowsky 2005*); *Masthope Rapids Property Owners Council v. Pa. P.U.C.*, 581 A.2d 994, 1000 (*Pa. Cmwlth. 1990*) (*Masthope*), and *Pa. Indus. Energy Coal. v. Pa. P.U.C.*, 653 A.2d 1336, 1350 (Pa. Cmwlth 1995), *aff'd*, 670 A.2d 1152 (Pa. 1996) (*PIEC*)). First, Aqua does have some control over its costs. Aqua has voluntarily entered into its contracts to purchase water with various entities for a known cost with known conditions. *See, e.g.,* Aqua Exh. 1-A, Sch. C-7.1.i. Likewise, for purchased energy, Aqua has exercised some control through its selection of suppliers. *See* Aqua Exh. 1-A, Schs. C-6.1.i., C-6.1.ii. Although

[16] At the time its request, Newtown purchased nearly 60% of its water from other sources. *Newtown* at 3. Its purchased water expense represented about 25% of its annual revenues and 34% of its O&M expenses for the same period. *Id.*; *see also* I&E St. 3 at 18-19; I&E Exh. 3, Sch. 3 at 1-2.

Aqua does not control the volume of water used by its customers, which impacts its purchased water and energy costs (Aqua M.B. at 254), Aqua has already captured the potential for future changes in purchased water and energy costs – whether due to changes in customer usage or changes in rates charged by suppliers – as part of its adjustments to its FPFTY claims. OCA St. 4 at 25; *see* Aqua Exh. 1-A, Schs. 6.1, 7.1.

Second, review of the cases where the PUC has approved an expense surcharge under Section 1307(a) show that the Commission has required a showing that costs are extraordinary, substantial, unexpected or non-recurring. For example, in approving a proposed surcharge for recovery of storm damage expenses, the Commission required a showing, *inter alia*, that the expense in question was substantial, *i.e.* "capable of degrading utility return on rate base to a significant degree." *Pa. P.U.C. v. PPL Elec. Util. Corp.*, Docket No. R-2012-2290597, Order at 20-21 (Apr. 3, 2014) (*PPL 2014*). The Commission further expounded:

> It is worth noting that the language of Section 1307(a) requires an equitable or reasonable basis for a surcharge to provide a just and reasonable return on the rate base of the utility. As such, a non-statutory Section 1307 surcharge must address a significant expense. That is, the requested recovery must represent an expense capable of substantially degrading a utility's reasonable return on rate base. Section 1307 surcharges are not favored and utilities should not turn to Section 1307 as a cure for all revenue-related ills. The Commonwealth Court has been clear that "the PUC should not use it [Section 1307] to disassemble the traditional rate-making process." *Newtown* at 589.

PPL 2014 at 18.[17] Review of the costs at issue in the cases relied on by Aqua confirms that the costs were substantial relative to the utility's overall cost of service. *See, e.g., Popowsky 2011* (Newtown's purchased water costs, were 29% of its total O&M and depreciation expense for the same period (I&E Ex. No. 3, Sch. 3 at 2)); *Popowsky 2005* at 1159 (wastewater collection system

[17] The Commission emphasized in *PPL 2014* that in addition to showing that a proposed surcharge under Section 1307(a) is in the public interest, it must be shown to comply with the just and reasonable mandate of Section 1301. *PPL 2014* at 18.

improvement costs, up to 5% of all customer bills), *Masthope* at 441 (Pennvest loan repayments equaling 26% of its revenue requirement).[18]

The Commission should reject the proposed PWA and ECAM as unnecessary and contrary to ratemaking principles for all of the above reasons. If the Commission determines to approve either mechanism, however, such approval should be accompanied by a reduction to the authorized ROE. These mechanisms would insulate the Company from fluctuating costs, thereby lowering Aqua's business risk. OSBA St. 1 at 21-22; *see also* OSBA M.B. at 5.

G. Summary

As set forth in the OCA's Main Brief, based on the recommendations of OCA witness Watkins, the OCA recommends that Aqua's proposal for water customers to subsidize $20.8 million of its wastewater revenue requirement should be reduced by $9.1 million. If the Commission approves an increase in revenues less than what Aqua has requested, the OCA proposes how the revenue reduction should be scaled-back depending on whether (and to what degree) the reduction is related to cost of capital.

With regard to Residential rate design, the OCA recommends several changes to Aqua's proposal, including holding the current water Main division and wastewater Zone 1 customer residential customer charges at their current rates, moving other water customer charges toward the Main division rate, and moving other wastewater rate zone customer charges up to, but not above, the Zone 1 customer charge.

The OCA addresses Aqua's flat, unmetered wastewater rates and recommends a pilot program to install meters and to study and propose adjustments to its unmetered rates where they

[18] More recently, in 2019, the Commission authorized a surcredit to flow back the savings to ratepayers based on its determination that the savings represented "an extraordinary and substantial, non-recurring reduction in utility expenses." Tax Cuts and Jobs Act of 2017, Docket No. M-2018-2641242, Order at 15 (May 17, 2018).

differ unreasonably from average metered rates. The OCA also recommends continued study for ways to recognize irrigation use in assessing wastewater usage.

The OCA recommends a small upward adjustment to the Company's proforma fully projected future test year water revenues to reflect escalation clauses in negotiated rate contracts.

Finally, the Commission should reject Aqua's proposed PWA and ECAM as unnecessary and contrary to ratemaking principles and precedent which require that costs be extraordinary and non-recurring.

IX. LOW INCOME CUSTOMERS

A. Introduction

The OCA's Main Brief set forth a complete discussion of the OCA's recommendations regarding modifications to Aqua's proposed low-income water and wastewater discount programs; arrearage forgiveness program; and its outreach program in order to achieve affordability for its low-income customers. OCA M.B. at 117-78. The OCA's Main Brief also discussed OCA witness Colton's review of the Company's customer service data, customer satisfaction data, collections performance data, and environmental compliance metrics to evaluate whether Aqua's performance merited a management performance adder, and the OCA found that the Company's record in these critical areas of customer service and collections do not support a conclusion of exemplary or superior management performance that would support a management performance adder. The OCA submits that the OCA's recommended modifications to the discount program, arrearage forgiveness, and outreach should be approved, and the Company's proposed performance management adder should be denied.

The OCA addresses below the arguments advanced by Aqua in its Main Brief regarding the proposed universal service program and the Company's performance metrics. *See* Aqua M.B. at 137-40; 140-61. The OCA also addresses I&E's recommendations regarding income verification and cost recovery through a universal service rider. *See* I&E M.B. at 59-63.

B. Aqua Has a Substantial Affordability Problem for Its Low-Income Customers.

1. Background

As discussed in the OCA's Main Brief more fully, OCA witness Colton analyzed the affordability of Aqua's proposed program based on a 4.0% metric of affordability (1.5% for water and 2.5% for wastewater). OCA M.B. at 120-23. For its part, in briefing Aqua did not directly

address OCA's recommended metric of affordability of 4.0% or OCA witness Colton's analysis that Aqua has a substantial affordability problem for its low-income customers. No reply is necessary and the OCA asserts that the positions taken in its main brief on this issue should be adopted.

2. OCA Witness Colton's Analysis of Affordability

In its Main Brief, Aqua did not directly address OCA witness Colton's analysis of affordability. As discussed in Section IX.C below, Aqua claims that its program is designed to *improve* affordability, but Aqua did not consider the impact of its actual proposed design on affordability. *See*, OCA St. 5 at 25-26. The OCA more fully discussed Mr. Colton's analysis of affordability on pages 123 to 126 of the OCA's Main Brief.

3. Increased Discounts Will Generate Positive Impacts to the Utility.

In its Main Brief, Aqua did not directly address OCA witness Colton's testimony regarding the positive impact that increased discounts would have on the utility. *See* OCA M.B. at 126-30. No reply is necessary and the OCA asserts that the positions taken in its main brief on this issue should be adopted.

C. Aqua's Proposed Low-Income Bill Discount Program Does Not Adequately Address Affordability Concerns and Improve Payment Patterns

1. Affordability Impacts of Aqua PA's Low-Income Bill Discount

a. Introduction

In its Main Brief, Aqua argues that the proposed design of the program is to improve affordability for low-income customers and that the Company designed the discount based on an analysis of the needs in the Company's service territory. Aqua M.B. at 144-46. The OCA submits that OCA witness Colton directly refuted the Company's arguments and specifically examined the

impact of the proposed design on customers from 0-50% of the Federal Poverty Level. *See* OCA M.B. at 133-36. Mr. Colton specifically analyzed the impact of the proposed design on water affordability and concluded that although the proposed discount would improve affordability, that improvement would be insufficient to improve payment patterns for customers. *See* OCA M.B. at 133-34; OCA St. 5 at 27.

b. OCA Witness Colton Determined that Aqua PA's Proposed Discount Program Design Will Not Achieve Bill Affordability for Low-Income Customers.

In its Main Brief, Aqua argues that it completed a needs analysis of the service territory in order to design the program. Aqua M.B. at 144-46. Aqua argues that its proposed discount will be "robust" and Aqua considered the affordability impact by utilizing a tiered design structure. Aqua M.B. at 145-46. Aqua stated that:

> a Tier 1 low income customer with an average usage of 4,000 gallons per month would pay $31.94 under proposed rates, a 61% total discount. For wastewater, a Tier 1 low income wastewater customer that is in Rate Zone 1 would pay $28.97 (63% discount), Rate Zone 2 would pay $35.99 (64% discount) and Rate Zone 3, which includes Tobyhanna, Lake Harmony, and Honeycroft systems, would pay $43.13 (66% discount).

Aqua M.B. at 146. While the OCA supports the proposed tiered discount design at this time, the OCA does not agree with the proposed discount levels of the tiers and that the proposed design will provide affordable bills for low-income customers. Ultimately, the OCA recommends that the Company develop a percentage of income discount program to achieve targeted affordability, but certain policy decisions would need to be made in order to achieve the objective. In the interim, until the next base rate proceeding, the OCA recommends that the Company modify its income tiers and design. The Company's Main Brief does not identify any reasons, either system limitations or policy reasons, why Mr. Colton's proposed modifications should not be adopted.

OCA witness Colton examined the actual impact of the proposed design on low-income customers by completing a zip code and bill payment analysis and found that the proposed design would not improve payment patterns for customers. OCA M.B. at 133-36. In particular, OCA witness Colton examined the impact of the proposed bill design on the lowest income customers, customers from 0-50% of the FPL. Mr. Colton's analysis showed that Aqua's proposed discount would not address the unique needs of customers between 0-50% of the FPL.

Aqua's proposed design provides discounts to customers from 0-100% of FPL; 101-150% of FPL; and 151-200% of FPL. As the OCA discussed in its Main Brief, in order to address Aqua's system limitations, OCA witness Colton revised his recommendation in his Surrebuttal Testimony from a four-tiered design to a three-tiered design with discounts at 0-50% of FPL; 51-150% of FPL; and 151-200% of FPL. OCA M.B. at 138-39. Under the Company's proposal, as OCA witness Colton testified:

> A three-person household with a 2021 income at 100% of Poverty ($21,960) receives the same discount as a three-person household with a 2021 income of 50% of Poverty ($10,980). A three-person household with a 2021 income at 100% of Poverty ($21,960) receives the same discount as a one-person household with a 2021 income ($6,440).

OCA St. 5SR at 13-14. As OCA witness Colton discusses in his testimony, Aqua's proposed design significantly under-serves those customers with less than 50% of FPL. The more homogenous group involves customers from 51-150% of FPL. As OCA witness Colton discussed in his testimony, the data clearly shows that the population at 0-50% of FPL is distinct from the higher income populations and require a greater discount. *See* OCA M.B. at 137-38. OCA St. 5 at 28, Table 7; OCA St. 5SR at 24-25.

OCA witness Colton completed a needs assessment as shown in Table 6 of his Surrebuttal Testimony that supports his proposed design tiers. OCA St. 5SR at 25, Table 6 (demonstrating the significant need for greater assistance for customers from 0-50% of the FPL). The OCA's

proposal would provide the same number of tiers but would instead provide a greater targeting of the discounts to those customers with the most significant need. For the reasons set forth above and in the OCA's Main Brief, the OCA submits that the proposed design modifications for the water and wastewater discount should be adopted. OCA M.B. at 137-42.

2. Aqua PA's Proposed Discount Program Should Be Revised.

a. Introduction

Aqua's proposed water and wastewater discount programs should be revised. In Surrebuttal Testimony, due to the system limitations identified by Aqua witness Black, OCA witness Colton revised his proposed water discounts. OCA St. 5SR at 26. For wastewater, OCA witness Colton modified his wastewater discount recommendations due to the identified system limitations. OCA St. 5SR at 26-27. The proposed modifications are designed to achieve a metric of 1.5% for water affordability and 2.5% for wastewater affordability.

For the reasons set forth in the OCA's Main Brief and addressed above, the OCA recommends that the proposed water discounts should be increased to achieve greater affordability and separated into two income blocks from 0-50% of FPL and 51-150% of FPL in order to provide more targeted benefits to customers with the greatest need. OCA M.B. at 137-42.

b. The Income Block from 0-100% of FPL for Water Discounts Should Be Separated into Two Income Blocks and the Water Discounts Should Be Increased.

In its Main Brief, Aqua does not directly address the revised tier recommendations proposed by OCA witness Colton. Aqua M.B. at 151. Aqua summarily addresses both OCA and CAUSE-PA's recommendations and proposes that they be denied. *Id.* Aqua states that because the Company will be transitioning to an SAP system in 2023 that programmatic changes to the

existing system are not recommended. Aqua M.B. at 151. Aqua also states that OCA's recommended fourth tier modifications for customers from 0-50% of the FPL be denied due to system limitations. Aqua M.B. at 154. Aqua's Main Brief appears to disregard the modifications that OCA witness Colton proposed in response to the system limitations. The OCA submits that it is because of these identified system limitations that OCA witness Colton changed his recommendation from a four-tiered discount to a three-tiered discount. The three-tiered discount proposed by OCA witness Colton would mirror the design proposed by Aqua in this case. The only difference would be to change the FPL tiers from 0-100% and 101-150% to 0-50% and 51-150%. The Company has not identified in its testimony, Main Brief, or any other evidence, any system limitation regarding changing the income ranges for the three tiered system and has not provided any justification for not adopting the proposed modifications. The OCA's proposed modifications will provide greater affordability and will target the customers with the greatest need.

For the reasons set forth in the OCA's Main Brief and addressed above, the OCA recommends that the proposed water discounts should be increased to achieve greater affordability and separated into two income blocks from 0-50% of FPL and 51-150% of FPL in order to provide more targeted benefits to customers with the greatest need. OCA M.B. at 137-42.

c. OCA Witness Colton Calculated the Incremental Costs of the Proposed Changes to the Water Discount.

In its Main Brief, Aqua did not address the incremental costs of the proposed changes to the water discount or the reasonableness of the costs in light of the greater affordability achieved. The OCA fully discusses the incremental costs of the proposed changes to the water discount on pages 140 to 141 of its Main Brief.

d. The Income Block from 0-100% of FPL for Wastewater Discounts Should Be Separated into Two Income Blocks and the Wastewater Discounts Should Be Increased.

In its Main Brief, as it did in response to OCA's recommended water discounts, Aqua does not directly address the tier recommendations proposed by OCA witness Colton concerning wastewater. Aqua M.B. at 151. Aqua summarily addresses both OCA and CAUSE-PA's recommendations and again states simply that because the Company will be transitioning to an SAP system in 2023 that programmatic changes to the existing system are not recommended. Aqua M.B. at 151. For the reasons set forth in the OCA's Main Brief and addressed above concerning the Company's propose water tiers, the OCA recommends that the proposed waste water discounts should be separated into two income blocks from 0-50% of FPL and 51-150% of FPL in order to provide more targeted benefits to customers with the greatest need.

e. OCA Witness Colton Calculated the Incremental Costs of the Changes to the Wastewater Discount.

In its Main Brief, Aqua did not address the incremental costs of the proposed changes to the wastewater discount or the reasonableness of the costs in light of the greater affordability achieved. The OCA fully discusses the incremental costs of the proposed changes to the wastewater discount on pages 141 to 142 of its Main Brief.

f. Income Verification

In its Main Brief, I&E recommends that the Company should implement an income verification component to the program in order to prevent fraud or abuse of the program. I&E M.B. at 60-62. Aqua and the OCA opposed the proposed income verification recommendation as

unnecessary.[19] Aqua M.B. at 150. As the Company discussed in its Main Brief, Aqua witness Black noted that water discount programs do not typically require income verification and that providing the income documentation can be a barrier to participation. Aqua M.B. at 150. In response to I&E witness Wilson's concerns, Aqua witness Black noted that the theoretical problems with the use of self-attested income, when tested in the real world, did not occur. Aqua St. 10R at 4.

As the OCA discussed in its Main Brief, the OCA agrees and recommends that the self-attestation proposal be approved with one minor modification. Mr. Colton recommended:

> Rather than merely committing to "continue to review and monitor" the situation going forward, it would not be unreasonable for Aqua PA to commit to engage in a review of a designated percentage of CAP participants, randomly selected, and report "error rates" (i.e., over-income customers who were enrolled) to the Bureau of Consumer Services (BCS). If error rates were higher than deemed to be reasonable, BCS and Aqua PA could develop appropriate remedial actions. In suggesting this, I note that this process may not only identify the presence (or absence) of high error rates overall, but also the presence (or absence) of high error rates for particular points of program entry. I do not propose a particular remedy because different types of error rates may well merit different remedial action.

OCA St. 5SR at 5. The OCA submits that the Company should be permitted to use self-attestation of income and that income verification should not be required for participation in the program. The OCA recommends that the Company review the income qualifications for randomly selected CAP participants and report error rates to BCS. To the extent that error rates are note reasonable, BCS and Aqua should develop appropriate remedial action. *See* OCA M.B. at 144; OCA St. 5SR at 5.

[19] The OCA notes that although Aqua witness Black identified in her Rejoinder testimony that DollarEnergy had included the costs of income verification in its proposal, Ms. Black did not change her recommendation. Aqua M.B. at 150, fn. 52, citing Aqua St. 10-RJ at 2-3. Instead Ms. Black identified that Aqua's costs of the program could be reduced by $89,000 with the removal of the one additional agent included in the DollarEnergy proposal for income verification. Aqua M.B. at 150, fn. 52, citing Aqua St. 10-RJ at 2-3.

3. Aqua PA Should Be Required to Propose a Percentage of Income Program in Its Next Base Rate Proceeding.

OCA witness Colton recommended that the Company propose a percentage of income program in the Company's next base rate proceeding in order to better address affordability issues. OCA M.B. at 144-52; OCA St. 5SR at 23. In its Main Brief, Aqua argues that a percentage of income program would be more costly than the tiered discount program. Aqua M.B. at 154. Aqua also argues that the "Company's three-tier structure provides significant benefits, encourages conservation and controls program costs." Aqua M.B. at 155. As the OCA discussed in its Main Brief, the Company's arguments against a proposed percentage of income program are without merit. OCA M.B. at 144-52.

Aqua summarily argues without evidence that the percentage of income program would be more costly. Aqua M.B. at 154. As OCA witness Colton discussed in Surrebuttal Testimony, Aqua witness Black did not provide any quantitative support for this assertion. OCA St. 5SR at 19-23. Moreover, Mr. Colton examined the potential cost impacts of a percentage of income program. First, a percentage of income plan program delivers benefits only to customers in need and, even then, only in the amount needed. OCA St. 5SR at 19-20. Second, the costs of providing bill assistance that might increase due to a move to a percentage of income plan for bills for current service may well be offset by cost reductions in other program components. OCA St. 5SR at 20-21. Third, Ms. Black does not acknowledge that PIPs in Pennsylvania have adopted a series of "cost control mechanisms" that would not be available to help control the costs of Aqua PA's tiered discount program such as a minimum payment. OCA St. 5SR at 21. Fourth, Ms. Black does not acknowledge that under a PIP, every gallon of reduced water consumption that occurs as a result of water conservation investments yields reduced program costs to non-participants. OCA St. 5SR at 21. Finally, even if one accepts the conclusory assertion that the cost of a PIP would be

more than the cost of Aqua's tiered discount, the tiered discount provides more expenditures than are necessary to provide in some instances, and fewer expenditures than are necessary, in other instances. OCA St. 5SR at 22-23. In either case, the tiered discount fails to accomplish the same objectives as a PIP would accomplish.

In its Main Brief, Aqua also claims that the tiered discount provides a conservation benefit and would conserve costs. Aqua M.B. at 155. As discussed in the OCA's Main Brief, OCA witness Colton directly refuted Aqua witness Black's conservation argument with the example of Aqua's sister company, Peoples', experience with a conservation effect of a percentage of income program. OCA M.B. at 145-51. In fact, in the experience of the independent evaluation of Peoples' percentage of income program, the program design has actually been shown to decrease customer usage. *See* OCA M.B. at 147; OCA St. 5SR at 17-18.

Moreover, the Company's arguments do not acknowledge that the tiered discount program do not achieve the same objectives as a percentage of income program. *See* OCA M.B. at 151; OCA St. 5SR at 22-23. In particular, the assertion does not include the impact of the proposed design on cash working capital. *See* OCA M.B. at 151; OCA St. 5SR at 22-23.

For the reasons set forth above and in the OCA's Main Brief, Aqua should be directed to propose a percentage of income program in its next base rate proceeding. OCA M.B. at 144-52.

4. The Costs of the Water and Wastewater Discount Programs Should Be Recovered in Base Rates.

In its Main Brief, Aqua argues that the costs of the water and wastewater discount programs should be recovered through a Universal Service Rider (USR). Aqua M.B. at 155-61. I&E similarly argues that the costs of the program should be recovered through a rider similar to the rider used for the Peoples companies. I&E M.B. at 13. For the reasons set forth below and in the OCA's Main Brief, the costs of the program should be recovered through base rates. OCA M.B.

at 152-60. OCA witness Colton has also recommended that only the net costs be recovered rather than the gross costs and that those costs should be included in base rates including a cost offset to reflect the benefits of the program to Aqua's uncollectible expenses.[20] OCA St. 5 at 42.

OCA witness Colton testified:

> Aqua PA should not be allowed to recover billings that it would not have collected even in the absence of the program. When Aqua PA was asked to "provide, by year for the three most recent years available, all collectability studies assessing the rate at which the Company converts billings into collected revenue, whether for water or wastewater, "it responded that it "does not have any studies." (OCA-II-45). Moreover, Aqua PA states that it has not studied the source of bad debt to the Company disaggregated by socio-economic status of the customer (for residential bad debt)(OCA-II-52); nor has it studied that disaggregated the source of arrears to the Company by socio-economic status of the customer (for residential arrears).(OCA-II-52). Aqua PA does state, however, that it has collections contracts which provide contingency fees of from 18% to 40% of the amount collected. (OCA-II-47). I recommend an offset in the middle of that range (28%). The costs of Aqua PA's bill discount program as identified above should be reduced by this lost revenue adjustment.

OCA St. 5 at 42.

In its Main Brief, Aqua opposes recovery of the net costs of the program.[21] Aqua M.B. at 1601-61, citing Aqua St. 10R at 13-14. Aqua witness Black testified that "over time, as participation in the program grows and matures to a stable level, bad debt levels will adjust accordingly, reflecting appropriate levels of collectability for the Company." Aqua St. 10R at 14. Ms. Black also testified that the "basis for the proposed adjustments is the Company does not have a collection study to reflect the historical percentage of billings collected from low-income customers." Aqua St. 10R at 13 - 14.

---

[20] As set forth in OCA witness Smith's testimony, Mr. Colton's recommendations "concerning the expansion of customer bill discounts and changes to Aqua's proposed Universal Service Programs relate to prospective rate design for Aqua's water and wastewater utility operations, rather than adjustments to Aqua's FPFTY cost of service and revenue requirement." OCA St. 1 at 39; *see also* OCA St. 4 at 22 (OCA witness Watkins identifies Mr. Colton's rate design adjustments.)

[21] I&E witness Wilson does not dispute that the costs recovered should only be net costs. *See* I&E St. 1R at 5; OCA St. 5SR at 37-38.

The OCA submits that the Company's arguments are without merit. Ms. Black's testimony does not provide a justification for denying the lost revenue adjustment that OCA witness Colton identifies. As OCA witness Colton testified:

> The "basis" for my recommended lost revenue adjustment is not that Aqua PA has performed no collectability analysis. The basis for my adjustment is that, in the absence of such an adjustment, Aqua PA will recover some parts of low-income rates twice. Aqua PA's proposal to include 100% of its low-income discount through rates assumes that, in the absence of the discount, 100% of the billed revenue to discount participants would have been collected. Only given this assumption is it reasonable to say that the dollar amount of the discount needs to be replaced by separately including that discounted revenue in rates. We know, however, that Aqua PA does not collect 100% of its low-income billings in the absence of the discount.

OCA St. 5SR at 30-31 (emphasis in original).

As OCA witness Colton explained in Direct Testimony:

- Nearly three-of-four (71.9%) of Aqua PA's low-income customers are in arrears;
- Of those low-income customers in arrears, the average arrears is $595.12.
- Of those low-income customers in arrears, the customers are 7.8 bills behind;
- Of the low-income customers who are disconnected, the average arrears at the time of disconnection is $667.10.

OCA St. 5 at 31. These unpaid dollars are currently reflected in base rates. OCA witness Colton testified "What Aqua PA proposes to do is to *continue* to reflect those unpaid dollars in rates and, *in addition*, to collect 100% of its discounted revenues *again* as though all of the discounted revenue would have been collected in the absence of the discount program." OCA St. 5SR at 31 (emphasis in original). The OCA submits that given that the Company concedes that it has performed no collectability study for its low-income customers, the clearest way to prevent the double collection is to adopt the OCA recommended lost revenue adjustment.

In its Main Brief, Aqua also argues that the use of a reconcilable surcharge renders the lost revenue adjustment unnecessary. Aqua M.B. at 161; Aqua St. 10R at 14. OCA witness Colton testified:

> Those unpaid dollars are currently reflected in rates. What Aqua PA proposes to do is to continue to reflect those unpaid dollars in rates and, in addition, to collect 100% of its discounted revenues again as though all of the discounted revenue would have been collected in the absence of the discount program. My adjustment reflects the principle that Aqua PA cannot have it both ways. And, given that the Company concedes that it has performed no collectability study for its low-income customers, the only way to prevent the double collection is to adopt my recommended lost revenue adjustment.

OCA St. 5SR at 32.

The OCA submits that the reconcilable surcharge does not prevent the double recovery. For example, PGW proposed a reconcilable surcharge for its universal service costs. The OCA recommended that PGW should only be able to recover the incremental costs imposed on PGW as a result of a customer's participation in CRP because of the potential for double recovery of uncollectible expenses in both the surcharge and base rates. *Pa. P.U.C. v. Philadelphia Gas Works*, Docket No. R-0006193, Order at 38(Sept. 28, 2007) (*PGW 2007*).

The Commission agreed that double recovery was still a possibility. In PGW's base rate proceeding at Docket No. R-0006193, the Commission upheld the ALJs' determination that double recovery is a possibility. *PGW 2007* at 42.

In its Main Brief, Aqua argues that the *Merger Settlement* language contemplated the use of a reconcilable surcharge. Aqua M.B. at 157. The OCA does not agree with the Company's interpretation of the *Merger Settlement* language. The language of the Settlement must be read in its full context. Paragraph 108 of the *Merger Settlement* stated:

> Paragraph 108 of the Aqua-Peoples Settlement pertains to low-income programming for Aqua PA. It notes that, through the Helping Hand Collaborative process, Aqua PA was to consider development of a comprehensive universal service and conservation program. <u>The items for evaluation</u> included a customer

> assistance program, hardship fund, water conservation program, low-income service repair program and a comparable funding mechanism as utilized by energy utilities in the Commonwealth. Following this evaluation, Aqua PA would propose a recoverable universal service plan in its next base rate proceeding using input from the Helping Hand Collaborative and best practices from the Peoples Companies.

Aqua St. 10 at 2-3; *see also* OCA St. 5 at 7 (emphasis added). As OCA witness Colton correctly noted, the *Merger Settlement* language did not *require* adoption of a reconcilable rider but instead required evaluation of the use of the a comparable funding mechanism. As OCA witness Colton testified:

> While, as noted by Ms. Black (Aqua PA St. 10-R, at 12), the Peoples acquisition settlement paragraph 108 required that Aqua PA "evaluate" the use of "a comparable funding mechanism as utilized by energy utilities in the Commonwealth," that settlement did not require the adoption of such a funding mechanism.

OCA St. 5SR at 29.

Aqua also argues that public utilities are permitted to implement a universal service program (USP) under the Public Utility Code and the Commission's regulations. Aqua M.B. at 142-43, citing to 66 Pa. C.S. §§ 1401-1418; *see also* 52 Pa. Code § 69.265. Aqua also argues that "use of a rate rider facilitates transparency, more directly encourages the promotion of the program, and is a recognized rate recovery method approved by the Commission." Aqua M.B. at 143. Aqua argues that the proposed rider will mirror the rider in place for the Peoples Companies. Aqua M.B. at 144.

As discussed in the OCA's Main Brief and in the testimony of OCA witness Colton, the proposed program should not be treated like its energy utility universal service rider. Those riders are specific statutory exception to the rule that costs such as these should be provided for through rates. While the OCA supports the development of a water and wastewater discount and arrearage forgiveness program, the OCA submits that Aqua's citation to Chapter 14 protections and the CAP

Policy Statement do not support implementation of a water and wastewater universal service rider for the cost recovery of the programs. The OCA submits that the riders at the Peoples Companies and for other natural gas and electric distribution utilities are not analogous models to base the cost recovery for these programs because they are grounded in statutes (electric and gas choice acts) that are not applicable to water and waste water utilities. The OCA addressed this issue fully in its Main Brief. *See* OCA M.B. at 155-60.

In its Main Brief, Aqua argues that the OCA's recommendation to recover the costs through base rates is disconnected from its recommendations regarding the CAP design and that there is no enrollment cap proposed. Aqua M.B. at 159-60. Aqua argues that OCA witness Colton recommends best practices for energy utilities but does not agree with the proposal to recover the costs like energy utilities. Aqua M.B. at 160.

First, no other Pennsylvania water utility recovers the costs of its discount programs through a reconcilable surcharge. Every other water utility with a discount program recovers through its costs through base rates. As OCA witness Colton notes, both Pittsburgh Water and Sewer Authority (PWSA) and Pennsylvania-American Water Company (PAWC) recover the costs of their respective programs through base rates. OCA St. 5SR at 28-29. Contrary to Aqua's arguments, in particular, PWSA offers a robust tiered discount and arrearage forgiveness program with additional benefits to customers with income at or below 50% of Poverty similar to what Mr. Colton has proposed in this proceeding. OCA St. 5SR at 29. PWSA recovers the costs of its program through base rates.

Second, the OCA submits that the costs of Aqua's proposed low-income programs are normal operating costs of the utility and the costs of the current Helping Hand program have been previously treated as normal operating expenses. As OCA witness Colton testified:

> The amount of that expense should be built into rates based upon the level of expense incurred during the test year, including the Fully Projected Future Test Year Aqua PA should not be guaranteed cost recovery for all low-income programming costs. Rather, as with any other Aqua PA expense, it is ensured, it is allowed a reasonable opportunity to recover the costs incurred in providing service. As the Commission noted with respect to the energy CAP cost recovery, this was "the cost recovery policy followed by the Commission prior to the General Assembly's requirement of full cost recovery" specifically for energy CAPs.
>
> Whether costs should be subject to a reconcilable recovery through a rate rider is not based on the total costs to be recovered. Rather, it is based on the magnitude of the variability of the costs that fluctuate outside of the utility's control. That variability simply does not exist with the Aqua PA proposal. Whether the Aqua PA program ultimately is based on the discount levels proposed by the Company, or is ultimately based on the discounts I recommend herein, the discounts are a small portion of the total revenues experienced by the Company.

OCA St. 5 at 44-45.

Section 1307(a) of the Public Utility Code does not authorize the Commission to approve surcharges other than in limited circumstances. *See* 66 Pa. C.S. § 1307(a); *CSIC* at 1160; *see also PIEC*. The general rule for expense items is that if the item in question is normally considered in a base rate case, then singling that item out for recovery outside of a base rate case is not appropriate. *CSIC* at 1157; *PIEC* at 1350.[22]

Third, cost recovery through a reconcilable surcharge is not necessary because unlike with energy utilities, Aqua does not anticipate that there will be substantial fluctuations in costs. OCA St. 5 at 45. OCA witness Colton testified:

> The variability in costs, such as would be found in the energy CAPs, would also not be present in the Aqua PA program because, except for a small portion attributable to discounts on Tier 2 consumption for the lowest income, the vast bulk of discounts provided –whether using Aqua PA's proposed discounts or mine—are discounts applicable only to the base facility charge and to the first tier of consumption (i.e., the first 2,000 gallons of use). Program costs, in other words,

[22] In *CSIC* and *PIEC*, the Commonwealth Court cautioned against an overuse of automatic adjustment clauses that would tend to "disassemble" the general ratemaking process. *CSIC* at 1157; *PIEC* at 1349. As explained in *CSIC*, the General Assembly has authorized the Commission to approve automatic adjustment clauses only in limited circumstances, for easily identifiable expenses beyond a utility's control, such as tax rate changes (§1307(g.1)) or changes in the cost of fuel (§1307(c), (d), (f)). *CSIC* at 1156.

> will not vary widely based on changes in total consumption as would occur with the energy CAPs (whether the discounts are applicable to the total bill).

OCA St. 5 at 45-46.

In its Main Brief, Aqua also identifies that it only proposes to recover the costs of the program from residential ratepayers. Aqua M.B. at 156, citing 52 Pa. Code § 69.266(b). The OCA does not agree with this proposed approach, but does not think that the issue should be resolved at this time through this proceeding. The OCA does not believe that it is necessary to address the cost allocation at this time. The OCA submits that it has specifically reserved the right to address cost allocation to all ratepayers in a future base rate proceeding. OCA M.B. at 160. As OCA witness Colton testified:

> While increasing vaccination rates appear to be helping Pennsylvania to gain greater control of the public health crisis associated with the novel coronavirus pandemic (COVID-19), the economic crisis continues. A discussion of the appropriate allocation of Aqua PA's universal service program costs should occur once Pennsylvania has moved past the economic hardships that are being imposed on all customer classes. Moreover, one reason the PUC has previously noted for allocating universal service charges over all customer classes involves the increasing burden which imposing those costs exclusively on the residential class has on residential ratepayers. Given that Aqua PA projects a participation rate of only 5% in Year One of its bill discount program, and only 15% in Year Two, it is clear that Aqua PA is not yet at the point where it can expect to experience any type of normal universal service expenditures. Accordingly, I take no position on Ms. Black's recommendation in this proceeding. I recommend that final resolution of the cost allocation issue be addressed in a future rate case. Further, I reserve the right to challenge any future recommendation that low-income programming costs be allocated exclusively to residential customers in a future rate case.

OCA St. 5 at 46-47 (footnote omitted).

For the reasons set forth above and in the OCA's Main Brief, the OCA submits that only the net costs of the program should be recovered and the costs of the program should be recovered through base rates. OCA M.B. at 152-60.

5. Aqua Should Develop a Community Education and Outreach Plan.

In its Main Brief, Aqua identifies that the Company plans to implement a proposed Community Education and Outreach Plan (CEOP) and agrees that a CEOP is an important component of a universal service plan. Aqua M.B. at 150-51. While Aqua agrees that a CEOP is an important component of a universal service plan, Aqua does not appear to adopt the OCA's recommendations regarding what that outreach should look like. OCA M.B. at 161-64. 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." *See* OCA St. 5 at 49; *see also*, OCA St. 5 at 47-50.

As the OCA discussed in its Main Brief, OCA witness Colton performed a zip code analysis to examine the effectiveness of the Company's proposed outreach strategy. OCA M.B. at 161-62. Mr. Colton's analysis showed that the percentage of low-income customers enrolled in the Helping Hands arrearage forgiveness program in zip codes with a concentration of households having income of $20,000 or less is not substantially different from the percentage when no concentration exists. OCA St. 5 at 48, Table 15.

In order to address the problems with effectiveness of the strategy, Mr. Colton 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. 5SR at 11. Mr. Colton found that each of these elements was missing from the Company's proposed outreach plan.

For the reasons set forth in the OCA's Main Brief and above, the Commission should direct Aqua to develop a Community Education and Outreach Plan the above-identified elements. OCA M.B. at 164. The outreach plan should be focused on information to identify the community partners with which the Company proposes to work; to specifically identify the grassroots community organizations that will provide boots-on-the-ground efforts; and to identify those times and places where the Company proposes to meet the community where members of that community live, work, pray and play.

D. Aqua's Proposed Arrearage Forgiveness Program Should Be Revised.

1. Introduction

As discussed in its Main Brief, Aqua proposes to extend its current $25 arrearage forgiveness program without modification. Aqua M.B. at 151. For the reasons set forth below and in the OCA's Man Brief, the OCA recommends that the Company increase its arrearage forgiveness credit from $25 to $45 in order to allow customers to achieve forgiveness in approximately three years. OCA M.B. at 165-73.

2. The Current Arrearage Forgiveness Program Design Is Insufficient.

a. Introduction

Aqua's current arrearage forgiveness program provides for a bill credit for pre-existing arrears of $25/month for each full and timely payment. Aqua St. 10 at 9. Aqua has not proposed any changes to the arrearage forgiveness program component. The OCA submits that the current $25 level of bill credit is not sufficient to improve affordability and payment behavior for customers. The $25 bill credit results in an unreasonably long period over which the customer would reduce their pre-existing arrears to a $0 balance. Moreover, Aqua proposes to maintain the bill discount program and arrearage forgiveness component as two separate programs with two separate applications.

b. The Current Arrearage Forgiveness Program Design Does Not Achieve the Desired Objectives.

The OCA fully addressed this issue in its Main Brief and discusses in Section IX.D.2.d. below why a $45 credit should be approved. OCA M.B. at 166-67. No further reply is necessary.

c. Upon Implementation of the New Customer Information System, Aqua Has Agreed to Eliminate the "Timely" Payment Requirement to Receive Arrearage Forgiveness.

In its Main Brief, Aqua confirms that due its current system limitations, the Company cannot apply arrearage forgiveness unless the payments are full and timely. Aqua M.B. at 153. Pursuant to the commitment made in the Rebuttal Testimony of Aqua witness Black, the Company, however, will eliminate the "timely" payment requirement to receive arrearage forgiveness upon implementation of the new CIS system. Aqua M.B. at 153; Aqua St. 10-R at 10. OCA witness Colton accepted this proposal as a resolution to his concern. *See* OCA M.B. at 167-68.

d. The $25 Credit Proposed Should Be Increased to $45.

In its Main Brief, Aqua argues that experience should be gained with the program prior to revising the $25 credit to $45. Aqua M.B. at 152-53. As the OCA discussed in its Main Brief, due to system limitations, the Company was unable to implement the three-year arrearage forgiveness recommendation that OCA witness Colton made in his Direct Testimony. In response, OCA witness Colton revised his recommendation to utilize the Company's existing structure and to increase the proposed credit from $25 to $45 in order to achieve an approximate 3 year forgiveness for the average customer. OCA St. 5SR at 5-8.

The OCA notes that Ms. Black did not address OCA witness Colton's revised recommendation in her Rejoinder testimony. The experience argument is made by the Company for the first time in its Main Brief without any justification for why experience is needed in order to provide the increased benefit. In fact, *experience* has shown that the proposed continuation of the $25 credit is not sufficient. In his Direct and Surrebuttal Testimonies, OCA witness Colton identified why the proposed $25 credit is not sufficient. Even though the approach recommended by Mr. Colton changed as a result of the Company's identified system limitations, the foundation for the need for increased assistance remains the same.

In Direct Testimony, OCA witness Colton examined two aspects of the operation of the arrearage forgiveness program to determine whether the program design reasonably allowed customers to have arrearages forgiven in a timely manner. Mr. Colton specifically analyzed: (1) the number of months that a low-income customer participated in the arrearage forgiveness program before exiting the program (Schedule RDC-1) and (2) the number of months from the date a low-income customer enrolled in the arrearage forgiveness program to the date a low-income customer exited the arrearage forgiveness program (Schedule RDC-2). OCA St. 5 at Sch. RDC-1, RDC-2. OCA witness Colton's Schedule RDC-1 showed:

> of the 1,884 low-income customers who enrolled in Aqua PA's arrearage forgiveness program, only 646 (34%) remained participants as of October 2021. Nearly two-of-three of program enrollees, in other words, failed to remain in the program. Of the 1,490 low-income customers who enrolled in 2020, only 445 remained in the program as of October 2021. Of the 683 who enrolled in the program in the first six months of 2020, only 168 (25%) remain in the program as of October 2021.

OCA St. 5 at 58, Sch. RDC-1.

Schedule RDC-2 examined the number of months after enrollment that the low-income customer exited the program. OCA St. 5 at 58, Sch. RDC-2. Mr. Colton found:

> For example, Schedule RDC-2 shows that, as of October 1, 2021:
>
> - None of the 30 customers who had enrolled 20 or 21 months prior to October 2021 remained in the program as of October.
>
> - Of the 191 customers who enrolled 19 months prior to October 2021, only 46 (24%) remained (145 had exited the program). Of the 145 who exited the program, 74 had exited the program in the first twelve months of participation.
>
> - Of the 264 customers who enrolled in the program 15 months prior to October 2021, only 66 (25%) remained in the program (198 had exited the program). Of those 198 who exited the program, 102 had exited the program in the first ten months of participation.

OCA St. 5 at 58-59, Sch. RDC-2 (footnote omitted). As discussed in the OCA's Main Brief more fully, OCA witness Colton found that the experience of the existing arrearage forgiveness design impacted the ability of customers to achieve arrearage forgiveness. OCA M.B. at 169-72.

In its Brief, Aqua cites to the example used by its witness Ms. Black that "for customers with arrearages less than $900 when entering the program, $25 per month would allow for exhaustion of pre-program arrears in a timeframe shorter than three years." Aqua St. 10-R at 9. As the OCA discussed in its Main Brief, the problem with this example is that Aqua's data shows that the average arrears at the time its existing Helping Hands customers entered the program was never as low as $900. OCA St. 5SR at 6. OCA witness Colton's Table 1 shows the average arrears from May 2020 through August 2021:

Table 1. Average Arrears at Time of Helping Hands Enrollment

(CAUSE-PA 1-27 Supplement)[23]

Month of Enrollment	Avg Arrears at Time of Enrollment	Credit	Months to Retire
May-20	$983.56	$25	39
Jun-20	$1,311.36	$25	52
Jul-20	$1,049.92	$25	42
Aug-20	$1,074.20	$25	43
Sep-20	$1,087.46	$25	43
Oct-20	$1,113.41	$25	45
Nov-20	$1,133.69	$25	45
Dec-20	$1,155.82	$25	46
Jan-21	$1,177.78	$25	47
Feb-21	$1,212.91	$25	49
Mar-21	$1,248.55	$25	50
Apr-21	$1,254.71	$25	50
May-21	$1,415.81	$25	57
Jun-21	$1,404.57	$25	56
Jul-21	$1,337.26	$25	53
Aug-21	$1,311.36	$25	52

OCA St. 5SR at 7. Table 1 shows that with the $25 credit, it would take approximately four to five years with timely and in full payments to retire the arrearage. OCA St. 5SR at 7, Table 1.

OCA witness Colton calculated that a $45/month credit, however, would allow customers for this same time period to have arrearages forgiven from between 27 months to 39 months. OCA St. 5SR at 8, Table 2. Mr. Colton testified that this $45/month credit "allows a three-year

[23] Aqua PA states that data before May 2020 was not available. (CAUSE-PA-1-27, Supplement).

forgiveness for customers with arrearages up to 25% greater than the average." OCA St. 5SR at 8, Table 2. The OCA submits that given the Company's system limitation, the proposed increased credit would allow participants to receive an approximate three year arrearage forgiveness.

e. The Application Process Should Be Modified.

Both OCA witness Colton and CAUSE-PA witness Geller recommended that the proposed application process be modified. OCA St. 5 at 62-63; CAUSE-PA St. 1 at 46-48. In its Main Brief, Aqua argues that the proposed application process should be used. Aqua M.B. at 149. The Company's proposal in this proceeding is to replace the existing bill discount program, Helping Hand, with a discount program that includes both the affordability and arrearage forgiveness components. Aqua St. 10R at 2. Participants who enter the new program with an arrearage would receive the arrearage forgiveness benefit, and there would not be two separate applications or programs. Aqua St. 10R at 2. Customers, however, who are currently enrolled in the Helping Hand arrearage forgiveness program would need to apply for the new program. Aqua St. 10R at 3.

The OCA submits that as discussed in the OCA's Main Brief, the OCA continues to have concerns with the approach. OCA M.B. at 174-75. While the Company plans to mail a letter to existing Helping Hand participants to encourage customers to apply, the existing Helping Hand arrearage forgiveness would no longer exist once the bill discount program is established. *Id.*; OCA St. 5SR at 2-3; Aqua M.B. at 149. Arrearage forgiveness and the discount are designed to work hand-in-hand to address affordability issues. Separate enrollments and applications mean that not all low-income customers currently enrolled in the arrearage forgiveness program will continue to receive assistance either through the to-be-defunct arrearage forgiveness program or the new bill discount program.

For the reasons set forth above and in the OCA's Main Brief, the OCA recommends that the existing Helping Hands participants automatically be migrated to the new bill discount program. OCA witness Colton testified that if Aqua needs to ensure only customers who are eligible enroll, "it could limit the participation of those automatically migrated exclusively to the CAP arrearage forgiveness program component unless and until those customers submit a new application." OCA St. 5SR at 3. The OCA submits, however, that this limited migration may generate confusion and would be less ideal than automatically migrating existing Helping Hand program participants to the new bill discount program.

f. A Similar Cost Recovery Mechanism Should Be Established for Arrearage Forgiveness as Set Forth for the Discount Program.

The OCA recommends a similar cost recovery mechanism for its arrearage forgiveness program as for its discount program. As with the discount program, the OCA recommends the Company should only be permitted to recover its net costs for its arrearage forgiveness program costs. OCA M.B. at The OCA will not repeat its arguments here and has addressed more completely above why the costs of the program should continue to be recovered through base rates.

As with the discount program, OCA witness Colton recommends that Aqua should only be permitted to recover the net costs of the arrearage forgiveness program. In its Main Brief, Aqua opposes recovery of the net costs of the arrearage forgiveness program. Aqua M.B. at 160-61. The same reasons as to why only a net cost recovery is appropriate for a discount program would apply to the arrearage forgiveness program. The OCA discusses below the unique reasons why net cost recovery is appropriate for arrearage forgiveness costs.

Aqua has proposed a 70% payment compliance rate, and based upon experiences with the energy universal services program, Mr. Colton proposes utilizing an 85% payment compliance

rate. OCA St. 5 at 65. OCA witness Colton identified the proposed costs with 85% payment compliance as follows:

Table 2. Estimated Incremental Cost Increases Due to Arrearage Forgiveness Modifications			
Water	**10%**	**15%**	**25%**
Projected Arrearage Forgiveness at 85% Payment Compliance	$1,239,908	$1,859,862	$3,099,770
Projected Arrearage Forgiveness at 70% Payment Compliance	$1,021,101	$1,531,651	$2,552,752
Incremental Cost of Increasing to 85%	$ 218,807	$328,211	$47,018
Wastewater	**10%**	**15%**	**25%**
Projected Arrearage Forgiveness at 85% Payment Compliance	$122,029	$183,043	$305,072
Projected Arrearage Forgiveness at 70% Payment Compliance	$100,494	$150,742	$251,236
Incremental Cost of Increasing to 85%	$21,535	$32,302	$53,836

OCA St. 5 at 65, Table 21.

OCA witness Colton has also projected the offset to be utilized. OCA St. 5 at 66. Aqua also garners a benefit from the program, and that benefit should be factored into base rates. In particular, Aqua saves on collection costs for customers that are enrolled in the arrearage forgiveness program. As Mr. Colton testified:

> For qualified Aqua PA customers who participate in the arrearage forgiveness program, pre-program arrears are frozen at the time of enrollment. Once enrolled in the program, Aqua PA no longer pursues collection of the customers' existing (or pre-program) arrears. Given that even though the pre-program arrears remain part of the customer's balance even though they are not enforced upon, those arrearages are included in the Aqua PA billings against which actual collections (i.e., receipts) will be compared to determine the total Company collection factor. By definition, however, those pre-program arrearages are no longer being subject to collection once the customer enrolls in the arrearage forgiveness program. If they are not removed from the billings in the calculation of the total Company collection factor, rates will be increased to reflect the resulting reduced collection factor. Accordingly, an adjustment needs to be made, as I have done, to the arrearage forgiveness credits that are allowed to be separately included in rates.

OCA St. 5 at 66.

The OCA submits that the purpose of the offset factor is to prevent Aqua from double-collecting a portion of the arrearage forgiveness credits and reflects the fact that even in the absence of the arrearage forgiveness program, Aqua would not collect 100% of its low-income arrears. OCA St. 5 at 66. As OCA witness Colton testified, Aqua has not prepared a collectability study. OCA St. 5 at 66. Mr. Colton explained the impact:

> Without having prepared a collectability study, it is not possible for Aqua PA to have adjusted rates to prevent a double-collection. If it does not know what percentage of its billed revenue it is collecting in the first place, it has no baseline against which to compare how much *less* billed revenue it provides arrearage forgiveness credits.

OCA St. 5 at 66.

OCA witness Colton applied a 25% Lost Revenue Factor offset (which is an acknowledgement that Aqua PA would fail to collect 75% of the arrears subject to forgiveness).OCA St. at 67. The offsets proposed are similar to the offset that Mr. Colton proposed in Philadelphia Water Department's 2021 rate proceeding and in his work completing a Water Affordability Plan for the City of Toledo, Ohio. OCA St. 5 at 66-68.

For the reasons set forth above and in the OCA's Main Brief, the OCA submits that a net offset should also be applied to the costs of the arrearage forgiveness component. OCA M.B. at 175-78.

E. Aqua's Customer Complaints, Customer Satisfaction, Collections Performance, and Environmental Compliance Metrics Data Do Not Support a Conclusion of Superior or Exemplary Performance.

In its Main Brief, Aqua argues that the Company should still be permitted a performance management adder even though the OCA has pointed "to instances in which Aqua PA's efforts may not have been top in class." Aqua M.B. at 139. The instances in which Aqua's efforts are not top in class represent important metrics of customer complaints, customer satisfaction,

collections performance, and environmental compliance metrics. The OCA submits that the Company cannot be said to be providing superior management performance when its service is deficient in these important quality of service areas.

1. Customer Complaints

Regarding the justified customer complaints, Aqua argues that OCA witness Colton's arguments lack context. Aqua M.B. at 139. The Company argues that an increase in the number of complaints is not an indicator of responding to customer concerns; the number of customer complaints increased across all utilities; and the number of justified complaints fell from 15% to 10%. Aqua M.B. at 139, citing Aqua St. 10-R at 22-23. The OCA submits that it is instead Aqua's arguments that lack context.

As OCA witness Colton testified in Surrebuttal, Ms. Black's discussion regarding the justified complaint rates does not respond to several key concerns raised by Mr. Colton. Although the justified complaint decreased, Ms. Black's testimony "did not respond, however, to the fact that even after the improvement, Aqua's justified complaint rate was higher than every other Pennsylvania Class A water utility." OCA St. 5SR at 33, citing OCA St. 5 at 69. Ms. Black also did not respond to the observation that while the justified complaint rate declined from 15% to 10% from 2020 to 2021, the total number of complaints increased by 725% through the Third Quarter of 2021. Mr. Colton directly compared the total number of complaints increase to PAWC and other Class A utilities. Aqua is woefully inadequate compared to its peers. Mr. Colton found that the 72% increase for Aqua "compared to 33% for PAWC and negative-2% for all other Class A water utilities." OCA St. 5SR at 33, citing OCA St. 5 at 70. Aqua's overall performance on complaints did not improve in 2021. OCA St. 5SR at 33. Moreover, the Company did not respond to the observation that, aside from the justified customer complaint rate, as of the end of September

2021, 22% of the reviews of Aqua's Payment Arrangement Request (PAR) challenges presented to the Bureau of Consumer Services were "justified," as compared to12% for PAWC and 8% for all other Class A water utilities. See OCA St. 5 at 69; OCA St. 5SR at 33.

For the reasons set forth above and in the OCA's Main Brief, Aqua has not established superior or exemplary performance with the treatment of its justified customer complaints. *See* OCA M.B. at 178-81.

2. Customer Satisfaction

In its Main Brief, Aqua responded to customer satisfaction concerns raised by OCA witnesses Colton and Alexander. Aqua M.B. at 186-87. In particular, the Company responded to OCA witness Colton's concerns regarding reductions to the timeframe for complaint times. *Id.* at 186. The Company argued that Aqua is on track to meet its *Merger Settlement* requirement to reduce the complaint response timeframe to under 10 days. *Id.* Aqua witness Black and the Company's Main Brief, however, do not directly respond to the concerns identified by OCA witness Colton's testimony. Commitment to a Merger Settlement agreement to address deficient quality of service is different from providing superior or exemplary customer service.

In particular, OCA witness Colton addressed the customer satisfaction with the Company's response, and the Company did not respond to those customer satisfaction results. OCA witness Colton testified:

> Significant numbers of Aqua PA customers were less than "very satisfied" with Aqua PA's performance in that time period. Only 72% of customers having contact with the utility since April 1, 2020 were either "very" or "extremely" satisfied with respect to their "overall satisfaction." That means that nearly one-of-three persons who had contact with the Company were less than very satisfied. Indeed, nearly one-in-five expressed that they were "not satisfied" (either "not very satisfied" or "not at all satisfied"). One of the areas in which customers were less than satisfied was in the area of "customer effort." Nearly one-in-three customers (29%) having contact with the utility either disagreed or neither agreed nor disagreed with the Aqua PA's customer effort when they had contact with Aqua PA.

OCA St. 5 at 71.

For the reasons set forth above and in the OCA's Main Brief, Aqua's customer satisfaction does not demonstrate superior or exemplary performance. OCA M.B. at 181-82.

3. Collections Performance

In its Main Brief, Aqua argued that the collections performance statistics raised by OCA witness Colton were "misleading." Aqua M.B. at 192-93. Aqua is incorrect.

In its Main Brief, Aqua argued that the increases in average arrears for active customers "are likely attributable to those rate changes rather than lack of collection success." Aqua M.B. at 192, citing Aqua St. 10R at 25. The Company argued that water rate increases occurred over the same time period as the increases in arrears. *Id.* The OCA submits that the rate increases do not explain the increase in arrears. As OCA witness Colton's analysis demonstrated, both the level of arrears and the Bills Behind increased during that same time period. OCA witness Colton testified:

> As I explain in my Direct Testimony, Pennsylvania's Bureau of Consumer Services (BCS) developed its Bills Behind statistic precisely to allow a comparison of arrears between companies with differing rate levels and between time periods with differing rate levels. With Aqua PA, not only did the level of arrears increase, but as I document in my Direct Testimony (which Ms. Black did not respond to), the Aqua Pa Bills Behind increased by 21% during that same time period (from 2.4 Bills Behind to 2.9 Bills Behind). (OCA St. 5, at 73). Aqua PA's collection outcomes had deteriorated, in other words, even after taking into consideration any increase in bills due to rate increases such as those posited by Ms. Black.

OCA St. 5SR at 33-34.

In addition, OCA witness Colton examined the number of disconnections for this same time period. He found that:

> this deterioration in Aqua PA arrears has occurred despite the fact that Aqua PA has increased the number of accounts it disconnects more than ten-fold since 2012. In 2018, Aqua PA disconnected more than 7,400 residential customers. Its rate of residential nonpayment disconnections (1.85 per 100 customers) was the highest of the seven years reported to the legislature.

OCA St. 5 at 73 (footnote omitted). The OCA submits that even though Aqua has increased its number of residential customer disconnections, arrearages in absolute dollars and Bills Behind, has increased. OCA St. 5 at 73.

In its Main Brief, Aqua also argued that Mr. Colton's testimony regarding the ten-fold increase in the number of accounts disconnected was misleading because Aqua has increased the number of its customers due to acquisitions of other water companies. Aqua M.B. at 193; Aqua St. 10R at 25. OCA witness Colton noted, "what Ms. Black did not address, however, is that my observation applied not only to the *total* number of disconnections, but also to the number of disconnections *per 100 customers*." OCA St. 5SR at 34 (emphasis in original). Mr. Colton explained:

> In 2012, Aqua PA disconnected 0.14 residential accounts for each 100 residential accounts it had. By 2018, that rate of disconnection had increased to 1.85 disconnections for each 100 accounts, an increase of more than 1300% (i.e., more than ten-fold). (OCA St. 5, at 73). Contrary to Ms. Black's rebuttal, while the growth in the total number of disconnections may be affected by the growth in the size of the utility (due to acquisition), the growth in the *rate* of disconnections (per 100 customers) would not be so affected.

OCA St. 5SR at 33 (emphasis in original).

For the reasons set forth above and in the OCA's Main Brief, the OCA submits that in the area of collections performance, Aqua has not exhibited superior or exemplary management performance. OCA M.B. at 182-85.

4. Environmental Performance Metrics

In its Main Brief, Aqua argues that the OCA's citation to four of the Company's permit violations in 2020 and 2021 are "unfair and improper" when discussing the Company's management performance. Aqua M.B. at 139-40. Aqua argues that violations may occur due to weather or aging infrastructure. *Id.*

As discussed in the Direct Testimony of OCA witness Colton, the OCA identified four permit violations that occurred between May of 2020 and October of 2021. The OCA submits that the citation to the permit violations is entirely appropriate, particularly when the Company is arguing superior or exemplary management performance. In response to Mr. Colton's testimony, Company witness Duerr did not identify that any of the four permit violations identified by the OCA were directly related to either weather or aging infrastructure.

Aqua witness Duerr argued that "superior management includes how the Company responds to non-compliance events." Aqua PA St. 9-R at 40. As the OCA discussed in its Main Brief, Mr. Duerr's argument is circular. OCA M.B. at 189-90. As OCA witness Colton testified:

> If superior management can be found from a utility's response to environmental non-compliance, then environmental non-compliance becomes a non-factor in reviewing management performance. If the Company maintains compliance, it argues it is engaging in superior management. If it fails to maintain compliance, it argues that its response involves superior management.

OCA St. 5SR at 35.

Moreover, if Mr. Duerr's statements are true that the response to non-compliance events can be assumed to be indicative of superior performance. In fact, Aqua has not addressed one of the four issues of its non-compliance identified by OCA witness Colton. Mr. Colton cited to the permit violations identified in the November 30, 2020 letter from DEP to Aqua regarding wastewater service to the Masthope community. OCA St. 5 at 74. As discussed in the Main Brief of the Masthope Community Association, the permit violations remain unresolved. In its Brief, Masthope highlights the continuing hydraulic overload conditions with Aqua's wastewater service to the community that remain unresolved. Masthope M.B. at 9-16. As discussed in the Masthope Brief, the conditions began in or around 2018 and Aqua does not anticipate fully addressing the situation potentially for five years, or until 2026. *Id.* The OCA submits that such an unresolved issue that will persist likely for at least eight years does not demonstrate superior management.

For the reasons set forth above and in the OCA's Main Brief, Aqua's environmental performance and related permit violations do not demonstrate that Aqua PA has exhibited superior or exemplary service. *See* OCA M.B. at 185-87.

5. Conclusion

For the reasons set forth in the OCA's Main Brief and above, the OCA submits that Aqua PA's performance in the areas of customer service, collections, and environmental compliance do not demonstrate superior or exemplary management performance that would support a higher return on equity.

X. CUSTOMER SERVICE ISSUES

During this proceeding the OCA raised a number of customer service issues, including Aqua's noncompliance with the *Merger Settlement*, noncompliance with certain Chapter 56 requirements related to termination and reconnection, key call center performance issues, unfulfilled promises of customer service benefits in Section1329 acquisitions, and failure to follow best practices regarding identification of customer disputes and third-party fees. OCA M.B. at 188-204; OCA St. 6 and St. 6SR. In its Main Brief at 182-95, Aqua attempts to minimize these issues, while in another section of its Main Brief, it proclaims its exemplary performance in these same areas. *See* Aqua M.B. at 128-40. For the reasons set forth in the OCA's Main Brief and testimony, and discussed below, Aqua's unwillingness, or inability, to comply with basic regulatory requirements, the *Merger Settlement*, and best practices should be addressed by adopting the OCA's recommendations in the problem areas identified by Ms. Alexander.

A. Aqua's Commitments from the Merger Settlement

Paragraphs 83-89 of the *Merger Settlement* set forth customer service commitments made by Aqua as part of the resolution of the merger applications. OCA M.B. at 188-89; OCA St. 6 at 9. Of those commitments, Ms. Alexander found that Aqua failed to meet the following commitments:

- two of the three annual average performance levels specified in ¶ 83 of the *Merger Settlement*: calls answered and the abandonment rate. OCA St. 6 at 10; OCA M.B. at 190-93.
- the requirement to develop a "live" customer complaint spreadsheet and perform a root cause analysis of customer complaint data as set forth in ¶ 85 of the *Merger Settlement*. OCA St. 6 at 11-12; OCA M.B. at 193-95.
- significantly reduce the number of days to respond to customer complaints so that within 24 months, the average is less than 10 as set forth in ¶86 of the *Merger Settlement*. OCA St. 6 at 14; OCA M.B. at 195.

As discussed below Aqua's arguments should not be accepted and Aqua should be directed to remedy these remaining compliance issues, while being held accountable for its failure to meet the commitments.

B. Aqua's Customer Service Performance

Aqua uses two call centers located in Illinois and North Carolina to handle calls from Pennsylvania customers. OCA St. 6 at 9. Since both call centers handle calls from all of Aqua's customers in several states, the performance standards reflect the average of all calls at both call centers. OCA St. 6 at 9. However, Aqua used Interactive Voice Response (IVR) data to calculate its performance related to the call center standards, which is not consistent with the *Merger Settlement* requirements, as Ms. Alexander explained in her testimony and as discussed below.

The data on OCA Exhibit BA-2, excerpts replicated below, shows the actual data related to calls handled by customer service representatives and Aqua's calculated aggregate data that adds the IVR data. The use of the CSR data clearly shows that Aqua has not met the Merger Settlement requirements at issue in this proceeding. As discussed below, Aqua's compliance with the Merger Settlement provisions should be determined based on the calls handled by customer service representatives, not the aggregate data that adds the IVR calls.

2019

Call Center Performance	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	
CSR Percentage of Calls Answered in 30 Seconds by CSR	71.90%	88.64%	74.94%	73.41%	60.48%	63.94%	61.32%	69.96%	60.93%	88.57%	61.63%	71.06%	70.56%
Aggregate Percentage of Calls Answered in 30 Seconds by CSR	82.70%	91.63%	85.43%	84.19%	77.59%	80.37%	78.80%	83.10%	78.44%	92.21%	79.71%	84.94%	83.26%
CSR Abandonment Rate	3.98%	1.24%	3.89%	3.98%	7.63%	7.15%	7.19%	3.56%	5.09%	1.22%	5.28%	4.49%	4.56%
Aggregate Abandonment Rate	6.55%	4.30%	5.50%	5.51%	7.53%	6.85%	6.61%	4.94%	6.00%	3.71%	5.81%	5.07%	5.70%

2020

Call Center Performance	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	
CSR Percentage of Calls Answered in 30 Seconds by CSR	71.55%	73.87%	76.99%	76.33%	85.12%	89.11%	74.81%	67.18%	65.98%	79.72%	52.47%	61.13%	72.86%
Aggregate Percentage of Calls Answered in 30 Seconds by CSR	83.97%	85.78%	87.36%	86.65%	90.06%	92.57%	86.70%	82.16%	80.88%	87.15%	71.22%	79.30%	84.48%
CSR Abandonment Rate	4.74%	2.72%	3.24%	3.50%	2.48%	1.08%	2.91%	4.33%	4.74%	2.46%	9.49%	10.08%	4.32%
Aggregate Abandonment Rate	5.60%	4.35%	4.57%	5.71%	5.76%	4.01%	5.87%	5.92%	6.22%	6.13%	13.59%	10.62%	6.53%

Call Center Performance	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	2021
CSR Percentage of Calls Answered in 30 Seconds by CSR	27.30%	48.24%	40.22%	78.15%	47.06%	45.84%	67.68%	50.64%
Aggregate Percentage of Calls Answered in 30 Seconds by CSR	68.26%	78.75%	75.69%	90.73%	78.82%	78.11%	87.20%	79.65%
CSR Abandonment Rate	21.38%	24.91%	18.07%	3.40%	10.36%	9.30%	4.59%	13.15%
Aggregate Abandonment Rate	9.64%	11.50%	8.43%	1.57%	4.86%	4.47%	2.15%	6.09%

OCA Exh. BA-2 (excerpt) (OCA-I-1(a) - Attachment).

1. Call Center Performance

The crux of the disagreement as to whether Aqua has met its commitment to meet or exceed answering at least 82% of its calls in 30 seconds or less and the abandonment rate, is whether Aqua's calculation using IVR calls in the calculation, is reasonable. In its Main Brief, Aqua claims that it is the way its Peoples' affiliate calculates its numbers. Aqua M.B. at 184-85. The Merger Settlement does not use the term aggregate in relation to the standard of answering at least 82% of its calls in 30 seconds. As can be seen in the charts above, Aqua's data for the call center representatives shows that it has not met the requirements in the *Merger Settlement*.

a. Calls Answered

Regarding calls answered, OCA witness Alexander points out that Aqua has never met the 82% call answering standard as measured by the typical measurement of the percentage of calls in which the customer affirmatively seeks to talk to a live representative. OCA St. 6 at 10; (See Exh. BA-2 for calculation of annual average results for each of the performance standards using monthly information provided by Aqua). As measured by the calls in which the customer selects the option to speak with a representative, the annual calls answered average for 2019 was 70.56%, for 2020 was 72.86%, and for 2021 through July was 50.64%. *Id.*

Aqua includes calls in its "aggregate" calculation where customers utilize the IVR process and do not seek to speak to a representative. OCA St. 6 at 10. The use of data from customers choosing to use the IVR process does not equate to customers trying to reach a person. From the customers' perspective, the "aggregate" does not measure a customer's experience with attempting to reach a representative. OCA St. 6 at 10-11. Moreover, the Merger Settlement does not refer to the "aggregate" measurement. OCA St. 6SR at 4-5. Therefore, the OCA submits that Aqua's use of "aggregate" calculations in determining its calls answered average obfuscates the relatively low number of calls (ranging from 51% to 73%) that are answered within 30 seconds from the perspective of its water and wastewater customers who seek to speak to a person in North Carolina and Illinois. As a measure of Aqua's compliance with the requirement from the *Merger Settlement*, it is not reasonable and Aqua's argument should be rejected.

b. Abandonment Rate

Aqua acknowledges that its abandonment rate for 2020 was above the 4 % requirement from the *Merger Settlement*. Aqua M.B. at 185. Note that the abandonment rate over 4% is calculated using Aqua's aggregate calculation that mixes IVR calls with calls that involve a call center representative. OCA St. 6 at 10; OCA M.B. at 192. Also, the abandonment rate in 2019 and 2021 also exceeded the 4% requirement from the *Merger Settlement*. *See* OCA Exh. BA-2 excerpt *supra*.

Aqua argues that it would have met the service commitment of less than 4% abandonment rate in 2020 (by 0.01%) if its bills had not been delayed due to unforeseen circumstances. Aqua M.B. at 185-86. Although Aqua's explanation is related to the circumstances at the end of December 2020, it does not change the fact that its abandonment rate was higher than 4%. Moreover, the data provided in this case for 2021 shows that as of July 2021, the abandonment

rate was 13.15% and in 2019 was 4.56%. In the year before and in the partial year following the unusual circumstances in 2020, Aqua did not meet the "no higher than 4%" for its call abandonment rate, even when calculated using the aggregate calls that included IVR data. OCA St. 6SR at 5; OCA M.B. at 192-93. Aqua has not met the 4% abandonment rate in any of the last two and one half years.

c. Customer Satisfaction Survey

Only 73% of Aqua customers with recent telephone call center transactions rated satisfaction as "excellent" or "very good." OCA St. 6 at 11; OCA M.B. at 191. This level of satisfaction is low compared to Pennsylvania electric and gas companies where over 80% of customers typically express that they are "very satisfied" with their interaction with the utility's representative. *Id.*

Aqua's refusal to recognize that its call center performance is a component of its poor performance in the customer satisfaction survey is baffling. *See* Aqua M.B. at 185, n.62. Choosing to speculate that the poor performance in the survey is due only to other circumstances rather than recognizing that the issues raised by OCA are part of its customers' satisfaction with Aqua, is not supported by any evidence in this proceeding.

2. Live Customer Complaint Spreadsheet and Root Cause Analysis of Customer Complaint Data

In the *Merger Settlement*, Aqua agreed to develop a "live" customer complaint spreadsheet and perform a root cause analysis of customer complaint data. Merger Settlement ¶ 85. Aqua admitted that it is still working on meeting this requirement. OCA St. 6 at 12; OCA M.B. at 193-95. Pennsylvania public utilities are required to inform customers on how to file informal and formal complaints. OCA St. 6 at 11-12; 52 Pa. Code § 56.201(b)(7). Pennsylvania utilities are

also required to investigate and respond to disputes received directly from customers in accordance with 52 Pa. Code § 56.151. The *Merger Settlement* requirements related to track and evaluate customer complaints are important because it provides a framework that will likely permit Aqua to spot issues and concerns that requires attention and perhaps a change in policies or processes. *See* OCA St. 6 at 12; OCA M.B. at 194. This is a critical component for Aqua to complete. Aqua had the highest number of justified complaints. Aqua had the highest percentage of "justified" consumer complaints [24]in 2020 compared to other Pennsylvania water utilities—16% of the closed and evaluated customer complaints compared to 5% for other major water utilities. 2020 Utility Consumer Activities Report and Evaluation, at 12. https://www.puc.pa.gov/media/1380/ucare_2020-4q.pdf. OCA St. 6 at 13; OCA M.B. at 194. In its Main Brief, Aqua argues that the January 2021-September 2021 reporting to the Bureau of Consumer Services reporting shows that the justified rate is 10% and that reliance on the 2020 UCARE report is unwarranted. Aqua M.B. at 188. However, in **October 2021**, Aqua's justified average complaint percentage was 13%. OCA St. 6 at 14; OCA Exh. BA-5.

In its Main Brief, Aqua acknowledges that it has not met the requirement of providing a live spreadsheet. However, regarding the root cause analysis, Aqua appears to be disagreeing with what that means, although Aqua witness Black states that Aqua is in the process of formalizing the root cause analysis process. *See* Aqua M.B. at 187-88. It should be very clear to Aqua as to what is required in a root cause analysis. Ms. Alexander provided an explanation of what a root cause analysis is (OCA St. 6 at 12; OCA M.B.at 194) and it was included in Aqua's commitment

[24] A justified consumer complaint is one where, "prior to BCS intervention, the company did not comply with Commission Orders, policies, regulations, reports, Secretarial Letters, tariffs, or guidelines when the consumer brought the complaint to the company's attention." *See e.g.,* 52 Pa. Code §§ 54.152 and 62.32.

contained in Merger Settlement ¶ 85. Aqua should be required to meet its *Merger Settlement* ¶85 commitment.

3. Requirement to Significantly Reduce Number of Days to Respond to Customer Complaints

In the Merger Settlement, Aqua committed to a significant reduction in the number of days to respond to customer complaints so that, within 24 months, the average is less than 10 days. *Merger Settlement ¶ 86*; OCA St. 6 at 8; OCA M.B. at 189, 195. Aqua's response time to customer complaints averaged 15 days in 2020 and 13 days in 2021 through October. OCA St. 6 at 14; OCA Exh. BA-5' OCA M.B. at 195. The OCA recognizes Aqua's efforts in reducing the rate and encourages the Company to continue to maintain an average of under 10 days going forward consistent with the settlement obligation. *Id.*

C. Aqua's Promises for Customer Service Benefits in Section 1329 Acquisition Proceedings

Ms. Alexander reviewed Aqua's statements related to improved customer service for the customers acquired pursuant to Sections 1102 and 1329 of the Public Utility Code. 66 Pa. C.S. §§ 1102, 1329; OCA St. 6 at 8; OCA M.B. at 195-96. The call center is not performing according to these promised standards. According to Aqua's response to OCA-IX-20, it appears that municipal offices are not available for customers to pay Aqua bills and handle routine customer service requests and other issues. *Id.* Therefore, the OCA submits that Aqua is not meeting its promises to provide "enhanced customer service."

D. Aqua's Compliance with Consumer Protection Regulations and Best Practices Pursuant to Chapter 56

1. Oversight of Call Center Compliance with Pennsylvania Consumer Protection Rules and Policies.

As explained above, Aqua operates call centers in Illinois and North Carolina that handle calls for Aqua's customers in Pennsylvania and other states in which Aqua has utility operations. There is no evidence that Aqua routinely conducts auditing to ensure that there is compliance with Pennsylvania regulations. Although Aqua has provided training documents that provide information about Pennsylvania consumer protection policies requirements, Aqua has not provided any evidence that it has a program or process in place to regularly review compliance with the training materials it provides to its employees. OCA St. 6 at 16; OCA M.B. at 196-97. Therefore, it is not possible to determine whether Aqua's call center is complying with Pennsylvania's customer protection requirements. Aqua should be required to develop and submit a plan that describes specific auditing and oversight policies applicable to its call centers with regular reporting on the results of such evaluations and audits. OCA St. 6 at 24; OCA M.B. at 197.

In its Main Brief, Aqua asserted that it has an ongoing quality evaluation program to assess all CSRs' performance and compliance with operational procedures, including applicable Pennsylvania regulations through a Quality Assurance team that scores call center performance based upon a lengthy set of criteria, as shown in OCA Exhibit BA-8 (Aqua response to OCA IX-36). Aqua M.B. at 188-89. However, the training materials contained in the OCA Exh. BA-8 (response to OCA IX-36) focuses solely on standard training of call center staff and does not respond to the specific consumer protection requirements of Pennsylvania law and regulations. OCA St. 6SR at 9.

Although Aqua provided training materials specific to Pennsylvania, the issue is the lack of internal auditing or oversight to ensure compliance with those training materials that are Pennsylvania-specific. There is no evidence that Aqua has a program in place to undertake a regular review of compliance with those training materials. OCA St. 6SR at 9-10. Such a regular review and oversight would also help in the investigation of whether Justified Complaints and complaint trends can identify the need for reforms and additional training. OCA St. 6SR at 10. Aqua should be required to submit a plan that documents an audit and/or oversight process of their call center to ensure compliance with Pennsylvania-specific consumer protection policies and requirements. *Id.*

2. Termination of Service

Aqua is obligated to attempt personal contact with a responsible adult at a property immediately prior to termination of service. 52 Pa. Code §§ 56.94, 56.334; OCA M.B. at 197-98. Personal contact is required to ensure that the customer's rights are recognized in the event of:

> (1) allegation of payment; (2) presence of medical emergency; (3) assertion of rights pursuant to victims of domestic violence or abuse; and (4) availability of universal service programs.

OCA St. 6 at 17; *Id.* Although Aqua was asked to provide any internal training materials or documentation that it meets this regulatory requirement, it has failed to do so. Aqua witness Black agreed that the training documentation provided to the OCA in this proceeding should be updated to clearly reflect this requirement and that Aqua will update its process. Aqua St. 10R at 20. OCA M.B. at 197-98. At the close of the record the updated training documentation has not been provided. OCA St. 6SR at 10; *Id.* In its Main Brief, Aqua claims that Ms. Black's statement addresses the OA's concern. Aqua M.B. at 189-90. However, Aqua has failed to provide updated documentation does not address the missing documentation. Aqua should be directed to provide

updated training documentation that meets all requirements related to personal contact prior to terminating service as part of the final order in this proceeding.

3. Reconnection of Service

Aqua does not properly track reconnections after termination and thus does not comply with documentation regarding certain requirements of Pennsylvania regulations. See OCA St. 6 at 10-11; 52 Pa. Code § 56.421. Aqua reported a significant difference between accounts it terminated for nonpayment and the reconnections of service for those customers. OCA M.B. at 198-99. There were 14,101 disconnections documented between January 2019 and September 2021 but only 8,973 reconnections were made. OCA St. 6 at 19; OCA M.B. at 198. When asked about the difference of approximately 5,000 residential customers who were not identified as reconnected following termination for nonpayment in the last several years, Aqua stated that its customer information system treats customers who were terminated as a "move in" or a new customer account rather than a reconnection. The problem with Aqua's process is that it is impossible to accurately track whether a customer whose service has been terminated has been reconnected, whether it be as a "move in" in the same location or in a new location resulting in the OCA's (and the Commission's) inability to assess whether termination and reconnection customer protection requirements are being met. OCA M.B. at 198-99. Ms. Alexander recommended that Aqua should provide or update its internal documentation of how the rights of customers who are seeking reconnection at the same location are met. OCA St. 6 at 19, 24; OCA M.B. at 198-99.

In rebuttal, Aqua stated that its call center representatives are trained in reconnection requirements and that the Company's current customer information system "cannot easily distinguish between reconnected service and a "move in" for service for customers who are activating water service after a period of time." Aqua St. 10R at 21-22. Aqua should be required

to file a follow up report, with the Commission and the parties, when its new customer information system is in place this year, that addresses the distinctions between a "move in" and a "reconnection" which the Company states exist because of limitations with its current system. OCA M.B. at 199.

In its Main Brief, Aqua argues that its call center representatives are fully trained in reconnection requirements and Ms. Alexander's recommendation should be rejected. *See* Aqua M.B. at 190-91. Despite this assertion, there is no way to test whether this is true given because of grossly inadequate manner in which Aqua has been tracking terminations and reconnections. While one hopes that the new customer information system will allow Aqua an opportunity to address this issue, Aqua should be specifically ordered to do so without delay.

4. Best Practices in Identifying Customer Disputes

Aqua's training materials do not reflect an obligation to affirmatively ask whether a customer is satisfied with the resolution of their contact with Aqua when reporting an issue. OCA St. 6 at 20; OCA M.B. at 199-200. Instead, it appears that Aqua relies on a customer's indication that they are not satisfied with the resolution or explanation provided during the transaction. *Id.* This approach is not best practice for the following reason:

> This approach may significantly undercount the actual customer disputes because unless a customer is affirmatively informed that their "satisfaction" is crucial to the resolution of the transaction, customers who are speaking to a monopoly utility may not understand their rights and fail to express their views. Customers do not routinely know or have detailed knowledge of their rights and remedies. Aqua should affirmatively seek to determine whether a customer is satisfied.

OCA St. 6 at 20; OCA M.B. at 199-200.

In rebuttal Aqua provided documentation that it claimed refuted Ms. Alexander's testimony. First, the Pennsylvania-specific documentation provided by Aqua does not explicitly require Aqua's customer service representative to ask the customer if they are satisfied with the

Company's response. Rather, the documentation leaves it to the customer to indicate their dissatisfaction by stating that: "[a] dispute is **when the customer indicates they are not satisfied** with the resulting resolution/explanation pertaining to the subject of the bill." OCA St. 6SR at 11(emphasis added). There is no evidence to support Aqua's statement that it affirmatively asks the customer if they are satisfied with the Company's response to the customer's issue. OCA M.B. at 200. A customer may not be willing to speak up about whether they are satisfied with the result of a call without being asked. Second, in its Main Brief, Aqua relies on the documentation contained in OCA Exh. BA-8 which is a generic training document, not linked to specific Pennsylvania regulations about disputes, where the question is posed regarding whether the customer is satisfied. Aqua M.B. at 189. However, there is no link to the answer to that question to recording a dispute as required by Pennsylvania regulations. OCA St. 6SR at 9. In the absence of a clearer process, Aqua has no means of ensuring that a customer is not disputing their bill or service. Therefore, Aqua should be required to specifically and affirmatively ask the customer if they are satisfied following the Company's response and tie the response (if no) to recording a dispute, as required by Pennsylvania regulations. *Id.*

5. Third Party Payment Fees

Aqua promotes bill payment by methods which require payment of fees to third-party vendors. OCA St. 6 at 20-22; OCA M.B. at 200-03. Aqua's website and Interactive Voice Response system promote the option for a customer to pay via credit/debit card or check. *Id.* at 20. Additionally, Aqua's termination notices promote payment by this method with a separate toll-free number printed in bold that connects the customer to Aqua's payment processing center. *Id.* at 20-21. This option requires the customer to pay a $2.25 processing fee which is charged by Aqua's third-party vendor, Speedpay. *Id.* at 21. Aqua's web portal also offers payment at a variety

of retail locations via Western Union for a fee not identified on its web portal. *Id.* Aqua received about 27,000 customer payments via Speedway per month in 2021 which amounts to around $60,750 per month in processing fees paid by customers. OCA St. 6 at 21; OCA M.B. at 200-01.

Because it promotes these payment methods for an additional fee, Aqua should be required to consider the effects of its decision to promote fee-based methods on its customers:

> Aqua has a responsibility to consider the impact of this policy on those who are forced by their personal circumstances to pay a bill (current or overdue) to avoid further collection actions that may result in termination of service.

OCA St. 6 at 21; OCA M.B. at 201.

Ms. Alexander recommended that Aqua provide no-fee payment options and include reasonable or necessary payment processing fees in its revenue requirement, similar to handling payments via mail. *Id.* She states that this approach is likely to generate a higher volume of customer payments and reduce costs associated with handling payments via the mail system which has been notoriously slower than in the past. *Id.* Elimination of payment fees could lead to increased ability to recover overdue bills as well as promote ongoing payment of current bills. *Id.* According to Aqua's operating expenses, Aqua expects a bill processing and postage expense of $2,206,957 for the three year period ending March 31, 2023. Aqua Exh. 1-A. In exploring no-fee payment options via its Interactive Voice Response system and e-billing web portal, the Company may be able to reduce this bill processing and postage expense. Aqua should evaluate any costs and benefits associated with this recommendation and report to stakeholders. OCA St. 6 at 24; OCA M.B. at 201.

Aqua's position is that the third party (Speedpay) imposed the fee. The fact that the fee is a Speedpay fee and not an Aqua and that other non-fee options exist is a distinction without a difference and wholly irrelevant because Aqua is promoting and widely advertising use of the fee-based payment method to its customers. Promotion of the fee-based payment option on

termination notices is especially concerning because a customer faced with a termination notice likely feels a sense of urgency to settle the overdue amounts as quickly as possible to avoid termination and additional fees. OCA M.B. at 202.

The OCA submits that Aqua's decision to promote fee-based payment options should come with Aqua's responsibility to explore promotion of no-fee options. This recommendation is not borne out of regulatory requirement but is a proposal for improved customer service and a chance for Aqua to explore whether promoting such options may result in a decrease in costs associated with more expensive mail and in-person payment options which are included in rates.

In its Main Brief, Aqua claims that it has no-fee options, and that the fee is imposed by a third party, and OCA's recommendation should be rejected. Aqua M.B. at 191. Aqua's position ignores the reality that each month its customers pay more than $60,000 in fees to pay their bills in no significant part because Aqua is promoting the use of this system. Aqua cannot promote the use of a third party then disclaim the harm that third party is causing, this is particularly true because Aqua affirmatively promotes the Speedpay option on its termination notices. For the reasons stated above, the OCA's recommendations should be adopted.

6. Late Fees during COVID-19 Pandemic

As explained in the OCA's Main Brief, Aqua reports over $700,000 in late fees recovered from its customers during the COVID-19 pandemic for the period April 2020 through March 2021. OCA St. 6 at 22; OCA M.B. at 202-03. Aqua has been charging late fees even though terminations were halted during the pandemic pursuant to the March 13 Emergency Order issued by Chairman Gladys Brown Dutrieuille. *Emergency Order*, Docket No. M-2020-3019244 (March 13, 2020). Charging late fees, particularly to low-income customers, for the time period when there was a

moratorium on terminations, and customers were informed of this change in collection policy, is not reasonable or appropriate. Specifically, as OCA witness Alexander points out:

> When customers are informed of a halt to termination, most might assume that they would not incur a penalty for the late payment or be at risk of building up a larger overdue bill.

OCA St. 6 at 22. Therefore, Ms. Alexander recommends that Aqua be required to evaluate its communications to customers during the pandemic and consider a policy of forgiveness of late fees imposed during this time, particularly to low-income customers. OCA St. 6 at 25.

Aqua witness Black stated that customer were informed of their continuing obligation to pay late fees even though termination was halted, pointing to monthly bills which include late fees and pandemic-specific communication to customers. Aqua St. 10R at 26-27. Ms. Black attached Exhibit RFB-3R which is a copy of a letter that was sent monthly to customers who were not making payments during the pandemic encouraging them to contact the Company. However, this letter does *not* inform customers that late fees will accrue. It is designed only to encourage customers to call the Company to negotiate payment plans.

The OCA submits that the lack of information on customer communication or elsewhere during the pandemic could reasonably result in customers being unaware that late fees would accrue on their accounts during the termination moratorium. Therefore, the OCA maintains that Aqua should not be permitted to charge late fees that accrued during the moratorium as a result of the pandemic to its low income customers. OCA M.B. at 203.

In its Main Brief at 192, Aqua repeats its contention that customers should have known and it is not required to waive the late fees even for its low income customers. For the reasons stated above, Aqua should not be permitted to charge late fees that accrued during the moratorium as a result of the pandemic to its low income customers. OCA M.B. at 203.

E. Remedy for Aqua's Non-Compliance with Settlement Terms

Instead of developing additional performance measures, OCA witness Alexander recommends that Aqua be held accountable for these previously agreed-to performance standards. OCA St. 6 at 23 OCA M.B. at 203. Aqua should develop and submit a compliance plan to the stakeholders that, after review, should be submitted to the Commission for approval and implementation. *Id.* The plan should include specific action steps and deadlines for achieving compliance. *Id.*

Regarding Aqua's claim of exemplary management, Ms. Alexander states:

> Aqua should be held accountable for the failure to comply with these provisions documented in my testimony with a critical view of Aqua's proposed Return on Equity. Considering my findings and those documented by Mr. Roger Colton on behalf of the OCA, there is sufficient justification to reject Aqua's claim of "exemplary" management as well as support for a consideration of an ROE that reflects the lower bound of reasonableness. My review of the customer service benefits identified by Aqua in its Section 1329 acquisition proceedings and the lack of any documentation of those customer service performance benefits in this rate case also supports this recommendation.

OCA St. 6 at 23. In addition, Ms. Alexander identified other practices that should be reviewed or reformed to address Chapter 56 issues. The OCA submits that Ms. Alexander's recommendations should be adopted.

XI. QUALITY OF SERVICE

A. Unaccounted for Water

Aqua discussed the differences between the AWWA Audit reports and Schedule 500, explaining that OCA witness Fought's recommendation that Aqua utilize Section 500 Reports for each of its operating divisions should be rejected because "the Company already provides its total Company water supplied and water sales information in the Schedule 500 Reports, and provides the Commission with AWWA Audit reports on an annual basis for all six of its operating divisions." Aqua M.B. at 164. Aqua stated that there is currently a Notice of Proposed Rulemaking (NOPR) concerning water loss reporting before the Commission and requiring Aqua to prepare Section 500 Reports for each of its divisions would be "redundant, time consuming, and inefficient." *Id.* The Company stated that "instructing one Company to report differently is not appropriate at this time[,]" as the Commission will be providing guidance on water reporting requirements in the future. *Id.*

Aqua's argument that it should not be required to provide Section 500 Reports for each of its operating divisions because there is an NOPR on water loss reporting before the Commission is without merit. The NOPR is not yet final and Section 500 Reports are currently required by the Commission. Aqua cannot evade its regulatory responsibility because the regulations may change at some point in the future. Thus, requiring Aqua to provide Section 500 Reports for each of its divisions is not only consistent with Commission requirements but reasonable to determine levels of unaccounted for water which is a localized issue. Therefore, the OCA's recommendation should be adopted and Aqua's arguments should be rejected.

B. Pressure and Pressure Surveys

The Company disagrees with Mr. Fought's recommendation that the "representative points" under 52 Pa. Code § 65.6(d) should be interpreted to mean a high and low pressure point within the system. Aqua M.B. at 167. However, Aqua does not offer an alternative interpretation of the meaning of "representative points." Therefore, the Commission should adopt the OCA's recommendation.

The purpose of Section 65.6 is to require utilities to maintain normal operating pressures between the range of 25 psi and 125 psi with certain exceptions. 52 Pa. Code § 65.6(a). Pursuant to that purpose, subsection (d) requires utilities to:

> 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.

52 Pa. Code § 65.6(d).

In its Main Brief, Aqua merely reiterated arguments from its testimony which lack merit as previously demonstrated by the OCA. OCA M.B. at 207-11. For example, Aqua reiterated that it "complies with the location criteria given the many engineering tools, operational methods, and physical methods as [Mr. Duerr] described above." The "tools" and "methods" to which Mr. Duerr refer include 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." Aqua's discussion of these "tools" and "methods" do not support Aqua's compliance with the requirement that pressures be surveyed at "representative points" pursuant to Section 65.6(d).

As explained in the OCA's Main Brief, it is logical and consistent with the OCA's understanding and Mr. Fought's experience that the "representative points" contemplated by Section 65.6(d) are one high and one low pressure point within a system. OCA M.B. at 211. Pressures surveyed at these points allow a determination to be made regarding whether a utility is in compliance with the requirement in subsection (a) that it is maintaining pressures in the normal operating range between 25 psi and 125 psi. Pressure surveys taken at any other points would not be "representative" of the pressures of the entire system and would not be useful in demonstrating compliance, or lack thereof, with Section 65.6. Therefore, the OCA maintains that since Aqua is not surveying pressures at one high and one low pressure point, Aqua is not in compliance with Section 65.6. Aqua should be required to take pressures at one high and one low pressure point within its systems consistent with the OCA's recommendation and the intent behind 52 Pa. Code § 65.6.

Aqua also discusses the "extensive efforts undertaken by the Company to monitor pressures throughout its various pressure systems[.]" Aqua M.B. at 166-67. However, the Commission's regulation does not concern itself with the "efforts" undertaken by Aqua to monitor system pressures. As discussed above, the regulation requires Aqua to survey pressures at representative points to ensure pressures are within a normal range. For these reasons, Aqua's arguments should be rejected and OCA's recommendation regarding pressures and pressure surveys should be adopted.

1. Pressure Category in Customer Complaint Logs

Mr. Fought recommended that the Company's customer complaint logs provide a separate category for "pressure" complaints, especially considering the number of pressure complaints. OCA M.B. at 210. Aqua agreed to highlight pressure issues within the Water Complaint logs

when this information is submitted in Aqua's next base rate case. Aqua St. 9R at 9. This response addresses the OCA's concerns.

2. Aqua Should Be Responsible for Damages to Customers with Pressures over 125 psi.

Mr. Fought recommended 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. OCA M.B. at 210. Aqua stated that the Commission does not have the authority to award damages and that there are locations within the Company's system where it is necessary to maintain pressures above 125 psi. Aqua MB at 168-69. It also noted that the Commission rejected a "virtually identical argument presented by OCA in the recent Pennsylvania American Water Company ("PAWC") rate case" where the OCA recommended that PAWC should either provide pressure reducers to protect customer service lines or an insurance policy covering repair or replacement of the service line. Aqua M.B. at 169. However, the decision in that case arose from a separate set of facts and circumstances distinct from the situation here. In this case, Richard Gage, a water customer in Chesterbrook indicated extremely high pressures, some as high as 200 psi, which has caused repeated damage to homes and the neighborhood. OCA Appendix E at 4-5. Mr. Gage indicated that neighbors described similar issues regarding pressures to him. *Id.* These customers are at risk of damage through no fault of their own. 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. Therefore, the OCA submits that Aqua should provide pressure reducing valves to customers experiencing pressures over 125 psi and Aqua's arguments should be rejected.

C. Isolation Valves

1. Critical Valves

Aqua stated that all critical valves have been identified and currently have an exercising schedule within Aqua's work order management system. Aqua M.B. at 171. In response to OCA-VIII-9, 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. Critical valves that could not be exercised should be repaired or replaced as soon as practicable after they are found to be inoperable. OCA M.B. at 212.

2. Non-critical Valves

Mr. Fought recommended that Aqua exercise, or attempt to exercise, 16,700 isolation valves per year until all the non-critical valves have been exercised in a 5-year period. OCA M.B. at 212. Additionally, Mr. Fought recommended that Aqua start maintaining records of their attempts to exercise every isolation valve and whether it was successful. *Id.* Aqua reiterated arguments from its rebuttal testimony stating that the Company has made commitments to the Commission regarding a 12-year non-critical valve inspection and exercising program. Aqua M.B. at 171. Aqua stated that "Aqua PA agreed that non-critical valve inspection and exercising program is warranted, but respectfully had concerns with the suggested exercising frequency outlined in the report." Aqua M.B. at 171.

As explained in its Main Brief, the OCA explained that a 12-year period proposed by Aqua is too long and a 5-year program is more reasonable. OCA M.B. at 213. In its Main Brief, Aqua did not explicitly take issue with the OCA's recommendation for a 5-year period for exercising non-critical valves. Instead, Aqua argued that OCA's recommendation should be rejected because "OCA has not undertaken any analysis of issues such as frequency of use, location, procedures for

inspection and exercising and resources available in developing its 5-year exercising proposal." Aqua M.B. at 172. The OCA submits that it is not the OCA's responsibility to undertake the analysis described by Aqua. Rather, the Company should analyze the issues it raised in determining how to manage its valve exercising program. As stated above, Aqua did not argue against a 5-year period. Therefore, Aqua should be required to exercise all its non-critical valves within a 5-year period consistent with the OCA's recommendation and Aqua's arguments should be rejected.

D. Fire Hydrants

Mr. Fought recommended that the 16 fire hydrants in the Company's systems that cannot provide the minimum fire flow of 500 gallons per minute at 20 psi should be marked so that they will only be used for flushing or blow-offs and should provide confirmation to the OCA and other parties when this is completed. OCA M.B. at 213. Mr. Duerr explained in rebuttal that the Company has planned main replacement projects to address these hydrants within the next three years and during this time, the Company will either find alternative locations for the hydrants or remove them. Aqua M.B. at 172. Mr. Fought did not disagree with this approach so long as the hydrants will be marked for use only for flushing and/or blow-offs until they are moved or replaced. OCA M.B. at 214. In response, Aqua stated that "[n]o other party presented testimony on this issue and, due to the Company's ongoing main replacement plans and plans to relocated or remove these hydrants, Mr. Fought's recommendations are unnecessary and should be rejected."

The OCA submits that simply because the Company has an "ongoing main replacement plan" and plans to relocate or remove these hydrants does not render Mr. Fought's recommendation unnecessary. Aqua did not provide a timeline or detailed plan for how and when it will remove or replace these hydrants. 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.

E. Flushing

1. Discrepancy between Number of Work Orders and Complaints

Mr. Fought noted that the Company opened 4,008 flushing related work orders between January 1, 2019 and September 30, 2021 but the Company's Water Complaint Log for that period only showed 3,633 work orders with 2,705 concerning flushing. OCA M.B. at 214. He also recommended that if the Company proposes to use its work order logs as Complaint Logs for base rate case purposes, that it provide the entire work order log. *Id.*

In its Main Brief, Aqua reiterated explanations regarding its Water Complaint Log that it made during testimony, explaining that the number of flushing work orders and customer complaints related to flushing are not likely to be equal. Aqua M.B. at 173-74. As explained in surrebuttal, Mr. Fought had concerns that the log may have been a work order log sanitized to be a customer complaint log, and therefore, may be incomplete. OCA St. 7SR at 5. Without any evidence or argument, Aqua stated that the OCA's concern is without merit. Contrary to Aqua's unsupported statement, the OCA maintains that the concern that the Company's customer complaint log that appears to be based off of a work order log is incomplete. If the Company will be using its work order log as Complaint Logs in future rate cases, it should provide the entire work order log.

2. Flushing the SEPA System

Mr. Fought's recommendation that the entire SEPA system be flushed at least once every three years is reasonable. OCA M.B. at 214. Mr. Duerr disagrees, stating that the flushing process

is labor-intensive, somewhat disruptive to customers and the community and can result in significant non-revenue water volume. Aqua M.B. at 174. Aqua reiterated its flushing process that was presented in its testimony, listing the "many factors" that its process considers to determine if and when it should flush its systems. *Id.* at 175-75.

Considering the 3,600 customer complaints related to flushing, the OCA maintains that establishing a regular flushing program of at least once every three years may proactively eliminate a number of these complaints. Additionally, it would be more efficient and less cumbersome than Aqua's current flushing process which requires constant evaluation of many factors before the Company can determine if and when it should flush its systems. For these reasons, the OCA's recommendation should be adopted and Aqua's arguments should be rejected.

F. PFAS

Mr. Fought noted that Aqua maintained a website with PFAS treatment information. OCA M.B. at 215. He explained that for some sources, the most recent information was from 2016, 2017 and 2018. *Id.* He recommended that Aqua provide information on its website explaining why testing stopped for these sources. OCA M.B. at 215. Aqua agreed to Mr. Fought's recommendation. Aqua M.B. at 176.

G. Customer Complaint Logs

As explained in its Main Brief, the OCA has concerns that the Water Complaint Log is incomplete because the high pressures of 190 to 200 psi from Chesterbrook are not included. OCA M.B. at 216. In future rate cases, Aqua should ensure that it provides a complete log of all customer complaints.

H. Public Input Hearing Testimony

Aqua reiterated some interactions it had with customers regarding "more discrete and individualized issues" raised at the public input hearings. Aqua M.B. at 181. As stated in surrebuttal, the OCA finds that Aqua has properly responded to each customer's complaint or testimony related to quality of service issues with the exception of the issues raised by Formal Complainants Day, Weiner and Gage. OCA M.B. at 217. Regarding Mr. Day and Mr. Weiner's complaints regarding unmetered rates in the Lake Harmony service area, the OCA addresses the Company's arguments in Section VIII.D.3.a., *supra*. *See also* OCA M.B. at 104-06.

With regard to Mr. Gage's complaints regarding high pressures in the Chesterbrook area, the OCA recommends that, Aqua support why that is good engineering practice to provide normal pressures of 190 to 200 psi and why no reasonable alternative is available. OCA St. 1SR at 13. The OCA further recommends that if there are no reasonable alternatives that Aqua should be required to reduce upstream pressures, possibly by installing pressure reducing valves (PRVs) upstream of each service line, to address Mr. Gage's complaints. *Id.*

In its Main Brief, Aqua contends that "there are locations within the Company's system where it is necessary to maintain pressures above 125 psi" and notes that 52 Pa. Code § 65.6(a) allows pressures above 125 psi where compliance with such requirements would prevent it from furnishing adequate service to any customer or where called for by good engineering practices. Aqua M.B. at 168-69. However, the Company fails to make this showing. Nor did it show that no reasonable alternatives are available.

Aqua also pointed to its tariff to support its argument that it is the customer's responsibility to install a PRV at their expense. Aqua M.B. at 169. As explained below, Mr. Gage has a PRV and continues to experience significant problems.

Aqua argues that the Commission recently considered and rejected a "virtually identical" argument presented by the OCA in the recent Pennsylvania American Water Company (PAWC) rate case where the OCA recommended that where PAWC was furnishing water at pressures above 125 psi that the Company either install a PRV to protect the customer's service line or provide an insurance policy covering repair or replacement of the service line. Aqua M.B. at 169. However, the decision in that case arose from a separate set of facts of circumstances than the situation here. In this case, Mr. Gage and others in the Chesterbrook area continue to experience significant, continuously high pressures of 190 to 200 psi. Tr. 230-43. He testified that he already has a PRV installed and has still experienced damages in his home and neighborhood as a result of high pressures including burst PRVs, spraying water in his home, and street flooding. *Id.*

Aqua continues to make general statements that it provides pressure in excess of 125 psi in "those situations where it is needed to serve customers in challenging terrain, and where needed to flow water between operating districts with different pressures[,]" but it has failed to provide any documentation or support specific to Chesterbrook or other areas where customers experience normal pressures above 125 psi, to establish that this is good engineering practice and there is no reasonable alternative. Absent this showing, Aqua should be required to reduce pressure below 125 psi upstream of the customers' service lines to provide safe, reasonable and adequate service to these customers. For these reasons, the OCA's recommendation should be adopted and Aqua's arguments should be rejected.

XII. CONCLUSION

For the reasons set forth in its Main and Reply Briefs, the OCA respectfully requests the Commission to deny the water rate increase requested by Aqua and approve a smaller wastewater increase than requested by Aqua. The COVID-19 pandemic and its continued impact on Aqua's service territory in particular, should be taken into account to keep any Aqua rate increase to the lowest possible cost for ratepayers.

Respectfully Submitted,

/s/ Erin L. Gannon

Erin L. Gannon
Senior Assistant Consumer Advocate
PA Attorney I.D. # 83487
E-Mail: EGannon@paoca.org

Christine Maloni Hoover
Senior Assistant Consumer Advocate
PA Attorney I.D. # 50026
E-Mail: CHoover@paoca.org

Christy M. Appleby
Assistant Consumer Advocate
PA Attorney I.D. # 85824
E-Mail: CAppleby@paoca.org

Lauren E. Guerra
Assistant Consumer Advocate
PA Attorney I.D. # 323192
E-Mail: LGuerra@paoca.org

Harrison W. Breitman
Assistant Consumer Advocate
PA Attorney I.D. # 320580
E-Mail: HBreitman@paoca.org

Mackenzie C. Battle
Assistant Consumer Advocate
PA Attorney I.D. # 330879
E-Mail:MBattle@paoca.org

Office of Consumer Advocate
555 Walnut Street
5th Floor, Forum Place
Harrisburg, PA 17101-1923
Phone: (717) 783-5048
Fax: (717) 783-7152

Counsel for:
Patrick M. Cicero
Acting Consumer Advocate

Dated: January 21, 2022
322333

Appendix A
Rate Case Tables

SUMMARY TABLE
Aqua Pennsylvania, Inc.
R-2021-3027385 and R-2021-3027386

Line No.	Description	Reference[*]	Total Company (A)	Water (B)	Wastewater Base Operations (C)	Limerick Wastewater (D)	East Bradford Wastewater (E)	Cheltenham Wastewater (F)	East Norriton Wastewater (G)	New Garden Wastewater (H)
1	Adjusted rate base	B	$ 4,173,417,917	$3,809,175,354	$ 198,337,990	$ 57,735,861	$ 5,376,205	$ 47,252,177	$ 25,303,104	$ 30,237,226
2	Rate of return	D		6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
3	Net operating income required		$ 250,405,075	$ 228,550,521	$ 11,900,279	$ 3,464,152	$ 322,572	$ 2,835,131	$ 1,518,186	$ 1,814,234
4	Adjusted net operating income	C	$ 259,052,356	$ 253,353,244	$ 3,697,000	$ 303,033	$ (152,130)	$ 1,503,939	$ (78,264)	$ 425,535
5	Net operating income deficiency		$ (8,647,281)	$ (24,802,723)	$ 8,203,280	$ 3,161,119	$ 474,702	$ 1,331,192	$ 1,596,450	$ 1,388,699
6	Gross revenue conversion factor	A-1		1.422652	1.432530	1.432530	1.432530	1.432530	1.432530	1.432530
7	Revenue deficiency (Sufficiency)		$ (12,142,476)	$ (35,285,637)	$ 11,751,447	$ 4,528,399	$ 680,025	$ 1,906,973	$ 2,286,963	$ 1,989,353
8	Operating Revenue at Current Rates	C	$ 549,967,611	$ 512,891,121	$ 19,011,761	$ 3,978,573	$ 1,014,569	$ 7,258,740	$ 2,923,766	$ 2,889,080
9	Percentage Increase	L7 / L8	-2.2%	-6.9%	61.8%	113.8%	67.0%	26.3%	78.2%	68.9%

Notes and Source
See referenced schedules

Act 11: Per Aqua Exhibit 1-A, Act 11

10	Present Rate Revenue		$ 549,967,611	$ 512,891,121	$ 19,011,761	$ 3,978,573	$ 1,014,569	$ 7,258,740	$ 2,923,766	$ 2,889,080
11	Additional Revenue Requirement		$ (12,142,476)	$ (35,285,637)	$ 11,751,447	$ 4,528,399	$ 680,025	$ 1,906,973	$ 2,286,963	$ 1,989,353
12	Proposed Revenues before Act 11 Allocation		$ 537,825,135	$ 477,605,484	$ 30,763,208	$ 8,506,973	$ 1,694,594	$ 9,165,713	$ 5,210,729	$ 4,878,434
	OCA Act 11 Allocation	Notes [A, B]	$ -	$ 8,410,788	$ (6,790,182)	$ (823,750)	$ (84,939)	$ 291,038	$ (296,127)	$ (706,827)
	OCA Revenue Increase After Act 11 Allocation		$ (12,142,476)	$ (26,874,849)	$ 4,961,265	$ 3,704,649	$ 595,086	$ 2,198,011	$ 1,990,836	$ 1,282,526
	OCA Proposed Revenues After Act 11 Allocation		$ 537,825,135	$ 486,016,271	$ 23,973,026	$ 7,683,222	$ 1,609,655	$ 9,456,751	$ 4,914,602	$ 4,171,606
14	Rate Increase/(Decrease) - %		-2.21%	-5.24%	26.10%	93.12%	58.65%	30.28%	68.09%	44.39%

* References for lines 1-8 are to Schedules in OCA St. 1SR, Exh LA-5
Note [A]: See the testimony of OCA Witness Glenn Watkins for OCA's recommended Act 11 allocation. OCA St. 4; OCA St. 4SI
Note [B]: The OCA Act 11 Allocations were used to calculate the rate impact shown in Appendix B to the OCA's Main Brie

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

Water Operations

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$	$	$	$	$	$	$
	(A)	(B) = (C) - (A)	(C)	(D)	(E) = (A) + (D)	(F)	(G) = (E) + (F)
Operating Revenue	509,746,949	259,737	510,006,687	3,144,172	512,891,121	(35,285,637)	477,605,484
Expenses:							
O & M Expense	116,492,928	(33,693)	116,459,234	(2,709,716)	113,783,212	(180,748)	113,602,464
Depreciation	122,166,578	0	122,166,578	(121,865)	122,044,713	0	122,044,713
Taxes, Other	12,279,861	170,204	12,450,066	(93,467)	12,186,394	(224,485)	11,961,909
Income Taxes:							
State	5,330,258	26,440	5,356,698	(503,039)	4,827,220	(3,484,552)	1,342,668
Federal	7,901,552	(203,386)	7,698,166	(951,801)	6,949,751	(6,593,129)	356,622
Amort of ITC and Excess DFIT	(253,413)	253,413	0	0	(253,413)	0	(253,413)
Total Expenses	263,917,764	212,977	264,130,742	(4,379,888)	259,537,876	(10,482,914)	249,054,962
Net Inc. Available for Return	245,829,185	46,760	245,875,945	7,524,059	253,353,244	(24,802,723)	228,550,521
Rate Base	3,818,296,012	(5,917,218)	3,812,378,794	(9,120,658)	3,809,175,354		3,809,175,354
				Note 2	Note 2	Note 2	Note 2
Rate of Return	6.44%		6.45%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

Water Operations	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

Water Operations	
100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.00512242
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98851564
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09875271
Factor After Local and State Taxes	0.88976293
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18685022
Revenue Factor (100% - Effective Tax Rates)	0.70291271

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

Water Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(719,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
Utility Plant Acquisition Adjustments - Phoenixville Water	(2,315,440)						
Adjustment to Contributions in Aid of Construction (CIAC) and Customer Advances for Construction (CAC)	0						
Accumulated Deferred Income Tax Offset that had been Erroneously Omitted by Aqua in its Application	(3,386,218)						
Adjustment to ADIT for ADIT Offset that had been Erroneously Omitted by Aqua in its Application Through 3/31/2023	(2,700,000)						
REVENUES:							
Special Contract Revenue		236,777				23,654	44,756
Revenue for Post-COVID Customer Metered Water Sales		2,757,223				275,447	521,173
Water Miscellaneous Revenue Adjustment from Aqua's Rebuttal Filing		150,172				15,002	28,386
EXPENSES:							
Utility Plant Acquisition Adjustments Amortization - Phoenixville Water				(121,865)		12,174	23,035
General Inflation			(864,335)			86,347	163,377
Purchased Power Expense			96,312			(9,622)	(18,205)
Chemicals Expense			66,787			(6,672)	(12,624)
Universal Service Program Expense			0			0	0
Advertising Expense			(50,000)			4,995	9,451
Payroll Expense			(267,031)			26,676	50,475
Stock-Based Compensation			(780,493)			77,971	147,530
Payroll Tax Expense					(93,467)	9,337	17,667
Employee Group Insurance			(23,285)			2,326	4,401
Insurance Expense			(71,428)			7,136	13,501
Rate Case Expense			(95,651)			9,556	18,080
Non-Rate Case Legal Expense			(24,981)			2,496	4,722
Supplemental Executive Retirement Program (SERP)			(695,612)			69,492	131,485
TAXES:							
Income Tax Expense - Repairs Deduction						(528,744)	(1,000,437)
Interest Synchronization (Table III)						(580,610)	(1,098,574)
TOTALS	(9,120,658)	3,144,172	(2,709,716)	(121,865)	(93,467)	(503,039)	(951,801)

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

Water Operations	Amount $
Company Rate Base Claim	3,818,296,012
OCA Rate Base Adjustments	(9,120,658)
OCA Rate Base	3,809,175,354
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	76,183,507
Company Claim (1)	70,371,594
Total OCA Adjustment	(5,811,913)
Company Adjustment	0
Net OCA Interest Adjustment	(5,811,913)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(580,610)
Net OCA Interest Adjustment	(5,811,913)
State Income Tax Adjustment	(580,610)
Net OCA Adjustment for F.I.T.	(5,231,303)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(1,098,574)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Sm

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

Water Operations

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$3,818,296,012	$3,818,296,012	Company Rate Base Claim	$3,818,296,012
OCA Rate Base Adjustments	($9,120,658)	($9,120,658)	OCA Rate Base Adjustments	($9,120,658)
OCA Rate Base	$3,809,175,354	$3,809,175,354	OCA Rate Base	$3,809,175,354
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$76,183,507	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	45.1	45.1	Average Revenue Lag Days	45.1
Average Expense Lag Days	90.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-45.2	45.1	Net Lag Days	45.1
Working Capital Adjustment				
OCA Daily Interest Exp.	$208,722	$0	OCA Daily Dividends	$0
Net Lag Days	-45.2	45.1	Net Lag Days	45.1
OCA Working Capital	($9,434,234)	$0		$0
Company Claim (1)	($8,715,000)	$0	Company Claim (1)	$0
OCA Adjustment	($719,234)	$0		$0
Total Interest & Dividend Adj.	($719,234)			
Rounded to $1,000	($719,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

TABLE V

Aqua Pennsylvania, Inc.

CASH WORKING CAPITAL -TAXES

R-2021-3027385 and R-2021-3027386

Water Operations

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	($224,485)	($224,485)	($615.03)	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($503,039)	($503,039)	($3,484,552)	($3,987,591)	($10,924.91)	0.00	$0
Federal Income Tax	$0	($951,801)	($951,801)	($6,593,129)	($7,544,930)	($20,671.04)	0.00	$0
	$0	($1,454,839)	($1,454,839)	($10,302,166)	($11,757,005)			

OCA Allowance	0
Company Claim (1)	0
OCA Adjustment	0

(1) OCA did not adjust cash working capital for taxes

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

Water Operations

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	#DIV/0!	$0

OCA Average Revenue Lag	45.1	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	45.1	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim (1)	$0	
OCA Adjustment	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

Wastewater Base Operations

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$	$	$	$	$	$	$
	(A)	(B) = (C) - (A)	(C)	(D)	(E) = (A) + (D)	(F)	(G) = (E) + (F)
Operating Revenue	19,011,761	0	19,011,761	0	19,011,761	11,751,447	30,763,209
Expenses:							
O & M Expense	9,874,361	(43,545)	9,830,816	(306,457)	9,567,904	140,302	9,708,206
Depreciation	7,780,016	0	7,780,016	0	7,780,016	0	7,780,016
Taxes, Other	296,805	6,724	303,529	(7,448)	289,357	74,762	364,119
Income Taxes:							
State	(1,185,776)	3,854	(1,181,921)	(14,936)	(1,200,711)	1,152,485	(48,226)
Federal	(1,093,544)	7,292	(1,086,251)	(28,260)	(1,121,804)	2,180,619	1,058,815
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	15,671,863	(25,675)	15,646,188	(357,101)	15,314,762	3,548,168	18,862,930
Net Inc. Available for Return	3,339,899	25,675	3,365,573	357,101	3,697,000	8,203,280	11,900,279
Rate Base	198,372,990	(4,000)	198,368,990	(35,000)	198,337,990		198,337,990
				Note 2	Note 2	Note 2	Note 2
Rate of Return	1.68%		1.70%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

Wastewater Base Operations

	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%

Pre-Tax Interest Coverage	3.82
After-Tax Interest Coverage	3.00

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

Wastewater Base Operations	
100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

Wastewater Base Operations

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(35,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
Adjustment to Contributions in Aid of Construction (CIAC) and Customer Advances for Construction (CAC)	0						
REVENUES:							
		0				0	0
EXPENSES:							
General Inflation			(145,368)			14,522	27,478
Universal Service Program Expense			0			0	0
Advertising Expense			(5,000)			500	945
Payroll Expense			(19,342)			1,932	3,656
Stock-Based Compensation			(66,000)			6,593	12,475
Payroll Tax Expense					(7,448)	744	1,408
Employee Group Insurance			(4,113)			411	777
Insurance Expense			(710)			71	134
Rate Case Expense			(8,874)			887	1,677
Supplemental Executive Retirement Program (SERP)			(57,050)			5,699	10,784
TAXES:							
Income Tax Expense - Repairs Deduction						(15,254)	(28,861)
Interest Synchronization (Table III)						(31,041)	(58,734)
TOTALS	(35,000)	0	(306,457)	0	(7,448)	(14,936)	(28,260)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

Wastewater Base Operations	Amount $
Company Rate Base Claim	198,372,990
OCA Rate Base Adjustments	(35,000)
OCA Rate Base	198,337,990
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	3,966,760
Company Claim (1)	3,656,035
Total OCA Adjustment	(310,725)
Company Adjustment	0
Net OCA Interest Adjustment	(310,725)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(31,041)
Net OCA Interest Adjustment	(310,725)
State Income Tax Adjustment	(31,041)
Net OCA Adjustment for F.I.T.	(279,684)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(58,734)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

Wastewater Base Operations

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$198,372,990	$198,372,990	Company Rate Base Claim	$198,372,990
OCA Rate Base Adjustments	($35,000)	($35,000)	OCA Rate Base Adjustments	($35,000)
OCA Rate Base	$198,337,990	$198,337,990	OCA Rate Base	$198,337,990
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$3,966,760	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	50.2	50.2	Average Revenue Lag Days	50.2
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.1	50.2	Net Lag Days	50.2
Working Capital Adjustment				
OCA Daily Interest Exp.	$10,868	$0	OCA Daily Dividends	$0
Net Lag Days	-41.1	50.2	Net Lag Days	50.2
OCA Working Capital	($446,675)	$0		$0
Company Claim (1)	($412,000)	$0	Company Claim (1)	$0
OCA Adjustment	($34,675)	$0		$0
Total Interest & Dividend Adj.	($34,675)			
Rounded to $1,000	($35,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

Wastewater Base Operations

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$74,762	$74,762	$204.83	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($14,936)	($14,936)	$1,152,485	$1,137,549	$3,116.57	0.00	$0
Federal Income Tax	$0	($28,260)	($28,260)	$2,180,619	$2,152,359	$5,896.87	0.00	$0
	$0	($43,196)	($43,196)	$3,407,866	$3,364,670			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

Wastewater Base Operations

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	50.2	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	50.2	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

Limerick Wastewater

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$	$	$	$	$	$	$
	(A)	(B) = (C) - (A)	(C)	(D)	(E) = (A) + (D)	(F)	(G) = (E) + (F)
Operating Revenue	3,978,573	0	3,978,573	0	3,978,573	4,528,399	8,506,972
Expenses:							
O & M Expense	2,055,513	(14,460)	2,041,053	(23,275)	2,032,238	54,065	2,086,303
Depreciation	1,998,881	0	1,998,881	0	1,998,881	0	1,998,881
Taxes, Other	25,311	1,407	26,719	0	25,311	28,809	54,120
Income Taxes:		0					
State	(147,783)	1,357	(146,426)	(6,709)	(154,493)	444,108	289,615
Federal	(213,702)	2,567	(211,135)	(12,695)	(226,397)	840,298	613,901
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	3,718,220	(9,129)	3,709,090	(42,680)	3,675,540	1,367,280	5,042,820
Net Inc. Available for Return	260,353	9,129	269,483	42,680	303,033	3,161,119	3,464,152
Rate Base	57,746,861	(2,000)	57,744,861	(11,000)	57,735,861		57,735,861
				Note 2	Note 2	Note 2	Note 2
Rate of Return	0.45%		0.47%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

Limerick Wastewater	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

Limerick Wastewater	
100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

Limerick Wastewater

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(11,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
REVENUES:							
		0				0	0
EXPENSES:							
General Inflation			(23,275)			2,325	4,400
TAXES:							
Interest Synchronization (Table III)						(9,035)	(17,094)
TOTALS	(11,000)	0	(23,275)	0	0	(6,709)	(12,695)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

Limerick Wastewater	Amount $
Company Rate Base Claim	57,746,861
OCA Rate Base Adjustments	(11,000)
OCA Rate Base	57,735,861
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	1,154,717
Company Claim (1)	1,064,281
Total OCA Adjustment	(90,437)
Company Adjustment	0
Net OCA Interest Adjustment	(90,437)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(9,035)
Net OCA Interest Adjustment	(90,437)
State Income Tax Adjustment	(9,035)
Net OCA Adjustment for F.I.T.	(81,402)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(17,094)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

Limerick Wastewater

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$57,746,861	$57,746,861	Company Rate Base Claim	$57,746,861
OCA Rate Base Adjustments	($11,000)	($11,000)	OCA Rate Base Adjustments	($11,000)
OCA Rate Base	$57,735,861	$57,735,861	OCA Rate Base	$57,735,861
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$1,154,717	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	49.7	49.7	Average Revenue Lag Days	49.7
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-41.6	49.7	Net Lag Days	49.7
Working Capital Adjustment				
OCA Daily Interest Exp.	$3,164	$0	OCA Daily Dividends	$0
Net Lag Days	-41.6	49.7	Net Lag Days	49.7
OCA Working Capital	($131,622)	$0		$0
Company Claim (1)	($121,000)	$0	Company Claim (1)	$0
OCA Adjustment	($10,622)	$0		$0
Total Interest & Dividend Adj.	($10,622)			
Rounded to $1,000	($11,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

Limerick Wastewater

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$28,809	$28,809	$78.93	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($6,709)	($6,709)	$444,108	$437,399	$1,198.35	0.00	$0
Federal Income Tax	$0	($12,695)	($12,695)	$840,298	$827,603	$2,267.41	0.00	$0
	$0	($19,404)	($19,404)	$1,313,215	$1,293,811			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

Limerick Wastewater

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	49.7	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	49.7	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

East Bradford Wastewater

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$ (A)	$ (B) = (C) - (A)	$ (C)	$ (D)	$ (E) = (A) + (D)	$ (F)	$ (G) = (E) + (F)
Operating Revenue	1,014,569	0	1,014,569	0	1,014,569	680,025	1,694,594
Expenses:							
O & M Expense	1,115,524	(2,327)	1,113,197	(6,828)	1,108,696	8,119	1,116,815
Depreciation	158,552	0	158,552	0	158,552	0	158,552
Taxes, Other	11,054	359	11,413	0	11,054	4,326	15,380
Income Taxes:		0					
State	(42,422)	201	(42,221)	(159)	(42,581)	66,691	24,110
Federal	(68,721)	381	(68,340)	(301)	(69,022)	126,187	57,165
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	1,173,988	(1,386)	1,172,601	(7,289)	1,166,700	205,323	1,372,023
Net Inc. Available for Return	(159,419)	1,386	(158,032)	7,289	(152,130)	474,702	322,572
Rate Base	5,377,205	0	5,377,205	(1,000)	5,376,205		5,376,205
				Note 2	Note 2	Note 2	Note 2
Rate of Return	-2.96%		-2.94%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

East Bradford Wastewater	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

East Bradford Wastewater

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

East Bradford Wastewater

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(1,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
REVENUES:							
		0				0	0
EXPENSES:							
General Inflation			(6,828)			682	1,291
TAXES:							
Interest Synchronization (Table III)						(841)	(1,592)
TOTALS	(1,000)	0	(6,828)	0	0	(159)	(301)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

East Bradford Wastewater	Amount $
Company Rate Base Claim	5,377,205
OCA Rate Base Adjustments	(1,000)
OCA Rate Base	5,376,205
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	107,524
Company Claim (1)	99,102
Total OCA Adjustment	(8,422)
Company Adjustment	0
Net OCA Interest Adjustment	(8,422)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(841)
Net OCA Interest Adjustment	(8,422)
State Income Tax Adjustment	(841)
Net OCA Adjustment for F.I.T.	(7,581)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(1,592)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

East Bradford Wastewater

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
OCA Rate Base Adjustments	($1,000)	($1,000)	OCA Rate Base Adjustments	($1,000)
OCA Rate Base	$5,376,205	$5,376,205	OCA Rate Base	$5,376,205
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$107,524	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	48.1	48.1	Average Revenue Lag Days	48.1
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-43.2	48.1	Net Lag Days	48.1
Working Capital Adjustment				
OCA Daily Interest Exp.	$295	$0	OCA Daily Dividends	$0
Net Lag Days	-43.2	48.1	Net Lag Days	48.1
OCA Working Capital	($12,744)	$0		$0
Company Claim (1)	($12,000)	$0	Company Claim (1)	$0
OCA Adjustment	($744)	$0		$0
Total Interest & Dividend Adj.	($744)			
Rounded to $1,000	($1,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

East Bradford Wastewater

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$4,326	$4,326	$11.85	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($159)	($159)	$66,691	$66,532	$182.28	0.00	$0
Federal Income Tax	$0	($301)	($301)	$126,187	$125,886	$344.89	0.00	$0
	$0	($460)	($460)	$197,204	$196,744			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

East Bradford Wastewater

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	48.1	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	48.1	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

Cheltenham Wastewater

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$ (A)	$ (B) = (C) - (A)	$ (C)	$ (D)	$ (E) = (A) + (D)	$ (F)	$ (G) = (E) + (F)
Operating Revenue	7,258,740	0	7,258,740	0	7,258,740	1,906,973	9,165,712
Expenses:							
O & M Expense	4,575,924	(23,474)	4,552,450	(8,719)	4,567,205	22,768	4,589,973
Depreciation	1,011,770	0	1,011,770	0	1,011,770	0	1,011,770
Taxes, Other	46,180	2,567	48,747	0	46,180	12,132	58,312
Income Taxes:		0			0		
State	(12,394)	2,134	(10,260)	(6,527)	(18,921)	187,020	168,099
Federal	160,916	4,038	164,955	(12,349)	148,567	353,861	502,428
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	5,782,396	(14,735)	5,767,661	(27,595)	5,754,801	575,781	6,330,582
Net Inc. Available for Return	1,476,344	14,735	1,491,079	27,595	1,503,939	1,331,192	2,835,131
Rate Base	47,259,177	(3,000)	47,256,177	(7,000)	47,252,177		47,252,177
				Note 2	Note 2	Note 2	Note 2
Rate of Return	3.12%		3.16%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

Cheltenham Wastewater	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

Cheltenham Wastewater	
100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

Cheltenham Wastewater

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(7,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
REVENUES:							
		0				0	0
EXPENSES:							
General Inflation			(8,719)			871	1,648
TAXES:							
Interest Synchronization (Table III)						(7,398)	(13,997)
TOTALS	(7,000)	0	(8,719)	0	0	(6,527)	(12,349)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

Cheltenham Wastewater	Amount $
Company Rate Base Claim	47,259,177
OCA Rate Base Adjustments	(7,000)
OCA Rate Base	47,252,177
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	945,044
Company Claim (1)	870,992
Total OCA Adjustment	(74,052)
Company Adjustment	0
Net OCA Interest Adjustment	(74,052)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(7,398)
Net OCA Interest Adjustment	(74,052)
State Income Tax Adjustment	(7,398)
Net OCA Adjustment for F.I.T.	(66,654)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(13,997)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

Cheltenham Wastewater

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$47,259,177	$47,259,177	Company Rate Base Claim	$47,259,177
OCA Rate Base Adjustments	($7,000)	($7,000)	OCA Rate Base Adjustments	($7,000)
OCA Rate Base	$47,252,177	$47,252,177	OCA Rate Base	$47,252,177
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$945,044	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	57.2	57.2	Average Revenue Lag Days	57.2
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-34.1	57.2	Net Lag Days	57.2
Working Capital Adjustment				
OCA Daily Interest Exp.	$2,589	$0	OCA Daily Dividends	$0
Net Lag Days	-34.1	57.2	Net Lag Days	57.2
OCA Working Capital	($88,285)	$0		$0
Company Claim (1)	($81,000)	$0	Company Claim (1)	$0
OCA Adjustment	($7,285)	$0		$0
Total Interest & Dividend Adj.	($7,285)			
Rounded to $1,000	($7,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

Cheltenham Wastewater

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$12,132	$12,132	$33.24	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($6,527)	($6,527)	$187,020	$180,493	$494.50	0.00	$0
Federal Income Tax	$0	($12,349)	($12,349)	$353,861	$341,512	$935.65	0.00	$0
	$0	($18,876)	($18,876)	$553,013	$534,137			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

Cheltenham Wastewater

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	57.2	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	57.2	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

East Norriton Wastewater

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$	$	$	$	$	$	$
	(A)	(B) = (C) - (A)	(C)	(D)	(E) = (A) + (D)	(F)	(G) = (E) + (F)
Operating Revenue	2,923,766	3	2,923,770	0	2,923,766	2,286,963	5,210,730
Expenses:							
O & M Expense	2,283,124	(11,346)	2,271,778	(8,665)	2,274,460	27,304	2,301,764
Depreciation	952,641	0	952,641	0	952,641	0	952,641
Taxes, Other	18,601	1,034	19,635	0	18,601	14,550	33,151
Income Taxes:							
State	(85,251)	1,054	(84,197)	(3,094)	(88,344)	224,286	135,942
Federal	(149,474)	1,994	(147,480)	(5,853)	(155,327)	424,373	269,046
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	3,019,642	(7,264)	3,012,378	(17,611)	3,002,031	690,513	3,692,544
Net Inc. Available for Return	(95,875)	7,268	(88,608)	17,611	(78,264)	1,596,450	1,518,186
Rate Base	25,308,104	(1,000)	25,307,104	(5,000)	25,303,104		25,303,104
				Note 2	Note 2	Note 2	Note 2
Rate of Return	-0.38%		-0.35%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

East Norriton Wastewater	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

East Norriton Wastewater

100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

East Norriton Wastewater

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(5,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
REVENUES:							
		0				0	0
EXPENSES:							
General Inflation			(8,665)			866	1,638
TAXES:							
Interest Synchronization (Table III)						(3,959)	(7,491)
TOTALS	(5,000)	0	(8,665)	0	0	(3,094)	(5,853)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

East Norriton Wastewater	Amount $
Company Rate Base Claim	25,308,104
OCA Rate Base Adjustments	(5,000)
OCA Rate Base	25,303,104
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	506,062
Company Claim (1)	466,431
Total OCA Adjustment	(39,631)
Company Adjustment	0
Net OCA Interest Adjustment	(39,631)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(3,959)
Net OCA Interest Adjustment	(39,631)
State Income Tax Adjustment	(3,959)
Net OCA Adjustment for F.I.T.	(35,672)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(7,491)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

East Norriton Wastewater

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$25,308,104	$25,308,104	Company Rate Base Claim	$25,308,104
OCA Rate Base Adjustments	($5,000)	($5,000)	OCA Rate Base Adjustments	($5,000)
OCA Rate Base	$25,303,104	$25,303,104	OCA Rate Base	$25,303,104
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$506,062	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	44.1	44.1	Average Revenue Lag Days	44.1
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-47.2	44.1	Net Lag Days	44.1
Working Capital Adjustment				
OCA Daily Interest Exp.	$1,386	$0	OCA Daily Dividends	$0
Net Lag Days	-47.2	44.1	Net Lag Days	44.1
OCA Working Capital	($65,419)	$0		$0
Company Claim (1)	($60,000)	$0	Company Claim (1)	$0
OCA Adjustment	($5,419)	$0		$0
Total Interest & Dividend Adj.	($5,419)			
Rounded to $1,000	($5,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

East Norriton Wastewater

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$14,550	$14,550	$39.86	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($3,094)	($3,094)	$224,286	$221,192	$606.01	0.00	$0
Federal Income Tax	$0	($5,853)	($5,853)	$424,373	$418,520	$1,146.63	0.00	$0
	$0	($8,947)	($8,947)	$663,209	$654,262			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

East Norriton Wastewater

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	44.1	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	44.1	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense

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

New Garden Wastewater

	Aqua Pro Forma Original Filing Present Rates (1)	Company Adjustments	Aqua Pro Forma Rebuttal Filing (Revised) (3)	OCA Adjustments	OCA Pro Forma Present Rates	OCA Revenue Increase/ (Decrease)	Total Allowable Revenues
	$	$	$	$	$	$	$
	(A)	(B) = (C) - (A)	(C)	(D)	(E) = (A) + (D)	(F)	(G) = (E) + (F)
Operating Revenue	2,871,698	17,382	2,889,080	17,382	2,889,080	1,989,353	4,878,433
Expenses:							
O & M Expense	1,848,890	(3,866)	1,845,024	(12,705)	1,836,185	23,751	1,859,936
Depreciation	735,834	0	735,834	0	735,834	0	735,834
Taxes, Other	18,270	1,132	19,402	0	18,270	12,656	30,926
Income Taxes:							
State	(77,386)	2,035	(75,351)	(1,720)	(79,106)	195,099	115,993
Federal	(44,384)	3,851	(40,533)	(3,254)	(47,638)	369,148	321,510
Amort of ITC and Excess DFIT	0	0	0	0	0	0	0
Total Expenses	2,481,224	3,152	2,484,378	(17,678)	2,463,545	600,654	3,064,199
Net Inc. Available for Return	390,474	14,230	404,704	35,061	425,535	1,388,699	1,814,234
Rate Base	30,246,226	0	30,246,226	(9,000)	30,237,226		30,237,226
				Note 2	Note 2	Note 2	Note 2
Rate of Return	1.29%		1.34%				6.00000000%

(1) Company's Original Application
(2) See OCA Statement 1SR, Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5
(3) Company's Main Brief

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

New Garden Wastewater	Structure	Cost	After-Tax Weighted Cost	Effective Tax Rate Complement	Pre-Tax Weighted Cost Rate
Total Cost of Debt			2.00000000%		
Long-term Debt	50.00%	4.00%	2.00000000%		2.00%
Short-term Debt	0.00%	0.00%	0.00000000%		
Preferred Stock	0.00%	0.00%	0.00000000%	0.711079	0.00%
Common Equity	50.00%	8.00%	4.00000000%	0.711079	5.63%
	100.00%		6.00000000%		7.63%
Pre-Tax Interest Coverage	3.82				
After-Tax Interest Coverage	3.00				

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

New Garden Wastewater	
100%	1.00000000
Less:	
Uncollectible Accounts Factor (*)	0.01193911
PUC, OCA, OSBA Assessment Factors (*)	0.00636194
Gross Receipts Tax	0.00000000
Other Tax Factors	0.00000000
	0.98169895
State Income Tax Rate (*)	0.09990000
Effective State Income Tax Rate	0.09807173
Factor After Local and State Taxes	0.88362723
Federal Income Tax Rate (*)	0.21000000
Effective Federal Income Tax Rate	0.18556172
Revenue Factor (100% - Effective Tax Rates)	0.69806551

(*) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-5, Schedule A-1)

TABLE II
Aqua Pennsylvania Wastewater, Inc.
SUMMARY OF ADJUSTMENTS
R-2021-3027385 and R-2021-3027386

New Garden Wastewater

Adjustments	Rate Base	Revenues	Expenses	Depreciation	Taxes-Other	State Income Tax	Federal Income Tax
	$	$	$	$	$	$	$
RATE BASE:							
CWC:							
Int. & Div. (Table IV)	(9,000)						
Taxes (Table V)	0						
O & M (Table VI)	0						
REVENUES:							
New Garden Late Payment Revenue from Aqua's Rebuttal Filing		17,382				1,736	3,286
EXPENSES:							
General Inflation			(12,705)			1,269	2,402
TAXES:							
Interest Synchronization (Table III)						(4,726)	(8,941)
TOTALS	(9,000)	17,382	(12,705)	0	0	(1,720)	(3,254)

TABLE III
Aqua Pennsylvania Wastewater, Inc.
INTEREST SYNCHRONIZATION
R-2021-3027385 and R-2021-3027386

New Garden Wastewater	Amount $
Company Rate Base Claim	30,246,226
OCA Rate Base Adjustments	(9,000)
OCA Rate Base	30,237,226
Weighted Cost of Debt	2.00000000%
OCA Interest Expense	604,745
Company Claim (1)	557,441
Total OCA Adjustment	(47,303)
Company Adjustment	0
Net OCA Interest Adjustment	(47,303)
State Income Tax Rate	9.99%
State Income Tax Adjustment	(4,726)
Net OCA Interest Adjustment	(47,303)
State Income Tax Adjustment	(4,726)
Net OCA Adjustment for F.I.T.	(42,577)
Federal Income Tax Rate	21.00%
Federal Income Tax Adjustment	(8,941)

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule C-4)

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

New Garden Wastewater

Accrued Interest	Long-Term Debt	Short-Term Debt	Preferred Stock Dividends	
Company Rate Base Claim	$30,246,226	$30,246,226	Company Rate Base Claim	$30,246,226
OCA Rate Base Adjustments	($9,000)	($9,000)	OCA Rate Base Adjustments	($9,000)
OCA Rate Base	$30,237,226	$30,237,226	OCA Rate Base	$30,237,226
Weighted Cost of Debt	2.00000000%	0.00%	Weighted Cost Pref. Stock	0.00000000%
OCA Annual Interest Exp.	$604,745	$0	OCA Preferred Dividends	$0
Average Revenue Lag Days	22.9	22.9	Average Revenue Lag Days	22.9
Average Expense Lag Days	91.3	0.0	Average Expense Lag Days	0.0
Net Lag Days	-68.4	22.9	Net Lag Days	22.9
Working Capital Adjustment				
OCA Daily Interest Exp.	$1,657	$0	OCA Daily Dividends	$0
Net Lag Days	-68.4	22.9	Net Lag Days	22.9
OCA Working Capital	($113,339)	$0		$0
Company Claim (1)	($104,000)	$0	Company Claim (1)	$0
OCA Adjustment	($9,339)	$0		$0
Total Interest & Dividend Adj.	($9,339)			
Rounded to $1,000	($9,000)			

(1) OCA Statement 1SR (Surrebuttal Testimony of Ralph C. Smith, Exhibit LA-6, Schedule B-3)

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

New Garden Wastewater

Description	Company Proforma Tax Expense Present Rates	OCA Adjustments	OCA Pro forma Tax Expense Present Rates	OCA Allowance	OCA Adjusted Taxes at Present Rates	Daily Expense	Net Lead/ Lag Days	Accrued Tax Adjustment
PUC Assessment	$0	$0	$0	$12,656	$12,656	$34.67	0.00	$0
Public Utility Realty	$0	$0	$0		$0	$0.00	0.00	$0
Capital Stock Tax	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
	$0	$0	$0		$0	$0.00	0.00	$0
State Income Tax	$0	($1,720)	($1,720)	$195,099	$193,379	$529.81	0.00	$0
Federal Income Tax	$0	($3,254)	($3,254)	$369,148	$365,894	$1,002.45	0.00	$0
	$0	($4,974)	($4,974)	$576,903	$571,929			

OCA Allowance	0
Company Claim	0
OCA Adjustment (1)	0

(1) OCA did not adjust cash working capital for taxes

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

New Garden Wastewater

Description	Company Pro forma F.T.Y. Expense	OCA	OCA Pro forma Expenses	Lag Days	Lag Dollars
Service Company	$0	$0	$0	0.00	$0
Chemicals	$0	$0	$0	0.00	$0
Group Insurance	$0	$0	$0	0.00	$0
Insurance, Other	$0	$0	$0	0.00	$0
Labor	$0	$0	$0	0.00	$0
Leased Equip./Rent	$0	$0	$0	0.00	$0
Leased Vehicles	$0	$0	$0	0.00	$0
Miscellaneous	$0	$0	$0	0.00	$0
Natural Gas	$0	$0	$0	0.00	$0
Power	$0	$0	$0	0.00	$0
Purchased Water	$0	$0	$0	0.00	$0
Telephone	$0	$0	$0	0.00	$0
Waste Disposal	$0	$0	$0	0.00	$0
Post Retirement Benefits	$0	$0	$0	0.00	$0
Pensions	$0	$0	$0	0.00	$0
	$0	$0	$0	0.00	$0

OCA Average Revenue Lag	22.9	
Less: OCA Avg. Expense Lag	0.0	
Net Difference	22.9	Days
OCA Pro forma O & M Expense per Day	$0	
OCA CWC for O & M	$0	
Less: Company Claim	$0	
OCA Adjustment (1)	$0	

(1) OCA did not adjust cash working capital for O&M expense