

APPLICATION OF
AQUA VIRGINIA, INC.

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CASE NO. PUR-2022-00118

For an Annual Informational Filing

APPLICATION OF
AQUA VIRGINIA, INC.

CASE NO. PUR-2023-00073

For an Increase in Rates

REPORT OF M. RENAE CARTER, SENIOR HEARING EXAMINER

July 25, 2024

I recommend the Commission adopt the proposed Stipulation in resolution of the issues presented in the above-captioned dockets. I also provide additional recommendations, in further resolution of the 2023 Rate Case, pertaining to Aqua Virginia's Tariff and to service and quality issues.

HISTORY OF THE CASE

On July 27, 2023, Aqua Virginia, Inc. ("Aqua Virginia" or "Company") filed with the State Corporation Commission ("Commission") an application ("Application") pursuant to Chapter 10 of Title 56 (§ 56-232 *et seq.*) of the Code of Virginia ("Code"), Rule 5 VAC 5-20-80 of the Commission's Rules of Practice and Procedure ("Rules of Practice"),¹ and the Rules Governing Utility Rate Applications and Annual Informational Filings of Investor-owned Water Utilities ("Rate Case Rules").²

Through the Application, the Company requested a combined increase of \$6,911,013, constituting a 29.49% increase, broken down as follows:³

Water	Increase of \$5,214,892, or 33.88%
Wastewater	Increase of \$1,696,121, or 21.09%

The Company has in place a Water and Wastewater Infrastructure Service Charge ("WWISC"). The Company proposed to reset the WWISC to \$0.00 as part of the requested increase.⁴

¹ 5 VAC 5-20-10 *et seq.*

² Exhibit ("Ex.") 5 (Application) at 1. The Rate Case Rules are located at 20 VAC 5-201-10 *et seq.*

³ Ex. 5 (Application) at 2.

⁴ Ex. 6 (Aulbach Direct) at 8.

Since the Commission's 2009 Consolidation Order, Aqua Virginia has been moving toward a consolidated rate structure.⁵ In the Application, Aqua Virginia proposed to increase its three water rate groups (W0, W1, and W2) to four (adding rate group W3), and to maintain its three wastewater groups (S0, S1, and S2).⁶ Aqua Virginia also proposed to change to its Rules and Regulations to increase the connection fees for water and wastewater service to \$2,500 and \$4,500, respectively.⁷ Finally, the Company requested authority to make the proposed new rates effective, subject to refund and pending a Commission final order in this proceeding, no later than 180 days after the Commission deemed the Application complete.⁸ This case will be referred to in this Report as the "2023 Rate Case."

On September 7, 2023, the Commission issued an Order for Notice and Hearing in the 2023 Rate Case, which, among other things, required public notice of the Application; established a procedural schedule, including the opportunity for the filing of comments and notices of participation; provided for the filing of testimony on the Application; required Commission Staff ("Staff") to investigate the Application and file testimony and exhibits thereon; scheduled a hearing for April 30, 2024; and appointed a Hearing Examiner to conduct further proceedings in this matter on behalf of the Commission. The Order for Notice and Hearing also allowed Aqua Virginia to implement its proposed rates on an interim basis, subject to refund with interest, for service rendered on and after February 5, 2024.⁹

Concurrent with the filing of its Application, Aqua Virginia filed a Motion for Protective Order. On September 11, 2023, a Protective Ruling was issued.

On September 21, 2023, Staff filed, in this docket and in Case No. PUR-2022-00118,¹⁰ the Motion to Conduct 2022 AIF Concurrent with Rate Case ("Concurrence Motion"). Therein, Staff noted that on April 14, 2023, Aqua Virginia filed its 2022 Annual Informational Filing ("2022 AIF") for the twelve months ended March 31, 2022. Staff averred that the 2022 AIF Case, as well as the 2023 Rate Case, have overlapping review periods and the potential for overlapping issues and discovery. The Concurrence Motion requested that the Hearing Examiner appointed to the 2023 Rate Case concurrently conduct all further proceedings in Aqua Virginia's 2022 AIF Case.¹¹ On September 27, 2023, the Commission issued an Order Assigning Hearing Examiner in Case No. PUR-2022-00118, which assigned the 2022 AIF Case to a

⁵ *Application of Alpha Water Corporation; Aqua Virginia, Inc. (Lake Monticello); Aqua S/L, Inc. (Shawnee Land); Aqua Utility-Virginia, Inc. (Lake Shawnee); Blue Ridge Utility Company; Caroline Utilities, Inc.; Earlysville Forest Water Company; Heritage Homes of Virginia, Inc.; Indian River Water Company; James River Service Corporation; Aqua Lake Holiday Utilities, Inc.; Land'Or Utility Company, Inc.; Mountainview Water Company, Inc.; Powhatan Water Works, Inc.; Rainbow Forest Water Corporation; Sydnor Water Corporation; and Water Distributors, Inc., For an increase in water and sewer rates*, Case No. PUE-2009-00059, 2010 S.C.C. Ann. Rep. 346, 350, Order (Oct. 29, 2010) ("2009 Consolidation Order").

⁶ Ex. 5 (Application) at 4-5.

⁷ *Id.* at 3.

⁸ *Id.* at 5.

⁹ Order for Notice and Hearing at 5.

¹⁰ See generally, *Application of Aqua Virginia, Inc., For an Annual Informational Filing*, Case No. PUR-2022-00118 ("2022 AIF Case").

¹¹ Concurrence Motion at 1-2.

Hearing Examiner to conduct further proceedings in that case on behalf of the Commission, including ruling on the Concurrence Motion.¹²

On September 28, 2023, I issued a Ruling directing that the 2022 AIF Case proceed concurrently with 2023 Rate Case. This Report makes findings and recommendations pertaining to both the 2022 AIF Case and the 2023 Rate Case.

Notices of Participation in the 2023 Rate Case were filed by: the Office of the Attorney General’s Division of Consumer Counsel (“Consumer Counsel”), and the following counties: Botetourt County, Virginia (“Botetourt”); Fluvanna County, Virginia (“Fluvanna”); Accomack County, Virginia (“Accomack”); Caroline County, Virginia (“Caroline”); and Culpeper County, Virginia (“Culpeper”). Botetourt, Fluvanna, Accomack, Caroline, and Culpeper are collectively referred to herein as the “Participating Counties.”

A Notice of Participation in the 2022 AIF Case was filed by Consumer Counsel.

On November 16, 2023, the Company filed proof of compliance with the notice, service and publication requirements of Ordering Paragraphs (9), (10), and (11) of the Order for Notice and Hearing in the 2023 Rate Case.¹³

On December 27, 2023, the Company filed, in both the 2022 AIF Case and the 2023 Rate Case, its Affiliate Study 2018-2021.¹⁴

On February 27, 2024, Fluvanna filed the testimony of Thomas M. Diggs, J.D., Ph.D., in the 2023 Rate Case.

On March 26, 2024, Staff filed the testimonies of Justin M. Morgan, Mackenzie L. Lenahan, Cameron T. Hunt, and Thomas P. Handley.¹⁵

On April 9, 2024, Aqua Virginia filed the rebuttal testimonies of John J. Aulbach, Richard F. Hale, Jr., Andrew J. Barnes, P.E., and Dylan W. D’Ascendis.¹⁶

On April 26, 2024, the Company and Staff filed, in both the 2022 AIF and the 2023 Rate Case, a Stipulation of Settlement and a Joint Motion to Approve Stipulation (“Joint Motion”).

¹² 2022 AIF Case, Order Assigning Hearing Examiner at 1-2 (Sept. 27, 2023).
¹³ Ex. 17 (Nov. 16, 2023 Proof of Notice). Several Ruther Glen area customers commented that they were unaware of the April 23, 2024 deadline for the filing of comments on the Company’s rate application until they received a notice in the mail on or about April 19. A few of the commenters represented that this notice came from Caroline County. See Comments of Ralph Anzelmo, Wes Clark, Tyler Kittle, Joe Razowski, and Michael Laporte (Apr. 22, 2024); Comments of John Reynolds and Erin Weldon (Apr. 23, 2024). I asked the Company to confirm customers in the Ruther Glen area were sent direct mail notice of the Company’s Application. In response, the Company provided Exhibit No. 37 (Ruther Glen Notice Verification). See also Tr. at 166-70 (Aulbach).
¹⁴ This document was marked and admitted as Exhibit No. 21 in the 2023 Rate Case.
¹⁵ Staff’s testimony was filed in the 2023 Rate Case. During the hearing, the testimonies of Mackenzie L. Lenahan and Justin M. Morgan also were marked and admitted in the 2022 AIF Case as Exhibit Nos. 8 and 9, respectively.
¹⁶ The Company’s rebuttal testimony was filed in the 2023 Rate Case. During the hearing, the rebuttal testimony of Richard F. Hale, Jr., also was marked and admitted in the 2022 AIF Case as Exhibit No. 10.

On April 30, 2024, the hearing for both the 2022 AIF Case and the 2023 Rate Case was convened in the Commission's courtroom. John K. Byrum, Jr., Esquire, of Woods Rogers Vandevanter Black PLC, and Mary McFall Hopper, Esquire, of Essential Services, Inc., appeared on behalf of Aqua Virginia. Michael W. S. Lockaby, Esquire, of Spilman Thomas & Battle, PLLC, appeared on behalf of Botetourt. Christopher M. Mackenzie, Esquire, of Sands Anderson, appeared on behalf of Caroline. Dan N. Whitten, Esquire, appeared on behalf of Fluvanna. C. Meade Browder, Jr., Esquire, and Carew S. Bartley, Esquire, appeared on behalf of Consumer Counsel. Kati K. Dean, Esquire, and Kelli J. Cole, Esquire, appeared on behalf of Staff.

PUBLIC COMMENTS FROM PUBLIC OFFICIALS

The Commission received approximately 2,800 public comments on the Application. Public comments of those other than public officials are summarized later in this report. The summarized comments from public officials are below.

The Honorable Robert D. Orrock, Sr., Virginia House of Delegates, commented that on behalf of his constituents, who have no alternatives for purchasing water, he opposes Aqua Virginia's requested increase.¹⁷

Fluvanna County Board of Supervisors Member Anthony O'Brien, representing the Rivanna District, indicated all his constituents are Aqua Virginia customers. He urged the Commission to deny the increase, stating current rates already are double the average rates of other water and sewer systems in Virginia, and asserting the proposed increase as "extremely out of line" with increases of similar public utilities. He asserted Aqua Virginia is using its monopoly status to exaggerate expenses to increase shareholder profits, hurting local residents, the local economy, and area housing market values.¹⁸

Bret Shardein, County Administrator for Powhatan County, asked that the case be deferred for lack of documentary, accounting, and engineering support for the rate increase. Concerned about rate shock to customers, he requested that Aqua Virginia provide documentation for its rate increase proposal and also a five-to-ten-year outlook so customers can prepare for rate increases. Additionally, Mr. Shardein requested a public communications plan if the Application is not deferred. He affirmed the value of Powhatan County's relationship with Aqua Virginia but asserted more information is needed in this particular case.¹⁹

Matthew L. Walker, County Administrator for Middlesex County, filed comments noting the Middlesex County Board of Supervisors' opposition to the rate increase considering Aqua Virginia recently had a rate increase and the lack of clarity as to why another increase is needed.²⁰

¹⁷ Comments of Delegate Robert D. Orrock, Sr. (Apr. 2, 2024).

¹⁸ Comments of Anthony O'Brien (Jan. 23, 2024).

¹⁹ Comments of Bret Shardein (Jan. 30, 2024).

²⁰ Comments of Matthew L. Walker (Feb. 2, 2024).

Amanda Spivey, Nelson County Board of Supervisors, filed a copy of Nelson County’s Resolution 2024-16 signed by Candice W. McGarry, County Supervisor, opposing the requested rate increase and urging Staff and Consumer Counsel to carefully investigate the Application and thoroughly analyze the basis therefor.²¹

Jan L. Proctor, County Attorney for Accomack County, filed comments on behalf of Accomack, opposing the rate increase. Accomack contended that its county supervisors and personnel frequently receive complaints about water quality, water odor, water pressure, and billing issues from the Captain’s Cove development, and asserted Aqua Virginia has not proposed any solutions to improve these conditions. Accomack claimed Aqua Virginia has not shown its requested increase is just when customers purchase bottled water because the water the Company provides is undrinkable. Accomack requested that if the rate increase is granted, the Commission require Aqua Virginia to provide reports and information that it is furnishing appropriate service to the public.²²

SUMMARY OF THE RECORD

PUBLIC WITNESSES

Fourteen members of the public testified concerning the Application, as follows:

Jane Apicela from Manakin Sabot, Virginia, testified that water companies should be concerned with humanity and not with making profits. She stated her Aqua Virginia bill is now almost \$150 per month, when the typical Social Security check is only around \$1,200 and the cost of food is increasing. She asserted that, “Americans can do better for Americans.”²³

Patrick Wells from Mechanicsville, Virginia, estimated he has experienced a nearly 50% increase in his bill, which he stated was extreme. He indicated he could tolerate a smaller increase, in the 25% range.²⁴

Catherine Leonard, a resident of Manakin Farms, testified she has been in her home for 36 years and, in all that time, rates have increased about 30% to \$100. She stated that from December 2023 to Spring 2024, her rate has increased another 30%. She stated her water bill is more than her electric bill, and she fears she will have to move.²⁵

Judith Holzgreffe of Manakin Farms stated that the requested rate increase is extremely large, and it is difficult for those on a fixed income to adjust to such an increase. She asserted the Company should have handled the increase in a better way for customers on fixed incomes, such as by implementing smaller incremental increases.²⁶

²¹ Comments of Amanda Spivey (Mar. 13, 2024) (including a copy of Resolution No. R2024-16 approved March 12, 2024, and signed by Candice W. McGarry, County Administrator).

²² Comments of Jan L. Proctor (Apr. 23, 2024).

²³ Tr. at 13-15 (Apicella).

²⁴ *Id.* at 15-19 (Wells).

²⁵ *Id.* at 20-22 (Leonard).

²⁶ *Id.* at 22-25 (Holzgreffe).

Mary Tillman of Queens Lake in upper York County, testified that over the past 18 years, her bill has doubled, and her previous month's bill was almost \$70 for two people's usage. She stated this amount seems excessive considering her household's usage. She asserted her area is served with old lines, and she has seen no infrastructure improvements. She contended she has no recourse as a customer.²⁷

Dr. John R. Richard of Greenbackville, Virginia, stated that since 2008, his monthly rates have risen from \$40 to over \$100. He asserted he has experienced multiple rate increases, and the Company is not controlling water quality. He complained that his water is brown and has an unpleasant odor, so he does not drink it. He protested the amount he must pay for water used to power wash his house. He asserted people have to move because they can't keep up with Aqua Virginia's bill increases. He urged the Commission to tell the Company to live within its budget. He also noted he had to pay close to \$6,000 a few years ago to install a grinder pump; had he not done so, Aqua Virginia would have shut off his water service.²⁸

Marjorie Schimmel from Greenbackville, Virginia, stated she visits her home in Captain's Cove usually one weekend per month, and her bill is around \$50 to \$60. She explained that the previous month, she was at her Captain's Cove residence for five days and received a bill for \$123. She asserted this bill is high compared to her primary residence in Maryland, where she pays \$78 per month for water. She complained that the water quality at Captain's Cove is poor, she is being charged for a product she is not using, and she does not see any improvements with the water system there. She also claimed she suspects her meter has a problem.²⁹

Donna Sheets of Greenbackville, Virginia, stated she has been a full-time resident of Captain's Cove for the past seven years, and her bill was in the range of \$45 to \$48 per month until the latest 30% increase. She stated the increase occurred with no explanation, and she is using the same amount of water as usual. She indicated a \$5 per month increase would be reasonable, but not a 30% increase. She also expressed consternation at being mailed information about buying a filtration system; she asserted her home is not old enough to need such a system.³⁰

Jane Cropper of Greenbackville, Virginia, testified that she experiences poor water quality and that she purchases bottled water to drink. She explained that her water has a high saline content and leaves spots and sediment when she tries to wash her windows or cars. She testified that from February to March, her bill went from \$40 to \$50, a 20% increase, which she considers unfair given the poor water quality.³¹

²⁷ *Id.* at 25-28 (Tillman).

²⁸ *Id.* at 28-33 (Richard).

²⁹ *Id.* at 33-38 (Schimmel).

³⁰ *Id.* at 38-41 (Sheets). Later during the hearing, Company witness Aulbach testified that Aqua Virginia "do[es] not direct market water treatment systems to any of our customers, or any other customers." *Id.* at 161 (Aulbach).

³¹ *Id.* at 41-44 (Cropper). Mr. Aulbach later testified that saline residue could potentially result from a water softener, if a customer had installed such, and that a water softener would be a customer-owned device that is not the Company's responsibility. *Id.* at 161-62 (Aulbach).

Robin Jackson of Ruther Glen, Virginia, testified that even though she does not use much water and is not home much, her bill for water service increased from \$22 to \$24 a month, to \$32 a month. She stated she lives alone and budgets her bills and does not want her bill to increase. She also asserted that in the mornings the water smells sometimes. She stated the water was dirty for a time, but the dirt issue seems to have resolved.³²

William Leslie of Greenbackville, Virginia, testified that he is Vice-President of the Concerned Citizens of Captain's Cove and attends meetings of the Accomack-Northampton County Groundwater Committee. He stated that after 15 years, he has just begun to drink the water at his home after installing a reverse osmosis system. He stated he installed the system because the water was giving his wife rashes. He claimed his system requires extra service due to the poor water quality. He asserted that Aqua Virginia's rate increase request should be considered on the basis of product quality. He asserted the Company patches infrastructure instead of making long-lasting fixes.³³

Jeffrey Black of Ruther Glen, Virginia, stated that he is on the Caroline County Board of Supervisors and represents 5,000 people, and the primary complaint he hears from constituents is about Aqua Virginia. He noted this is the fourth time he has testified to the Commission about the Company. He asserted his constituents are disappointed because they feel their voices are not being heard since Aqua Virginia usually receives most of the increase amount it requests. Supervisor Black stated that he, and many of his constituents, do not drink the water because of its poor quality. He claimed Aqua Virginia is price gouging because the Caroline County public water system charges \$44 less for each 5,000 gallons of water and also charges less for combined water and sewer service. He contended that "people feel defeated about" their water and sewer situation.³⁴

Dion Oakes of Ruther Glen, Virginia, questioned why the price for his water is rising when he cannot drink it. He stated that because of the high price of water, he does not water his lawn and has had to give up his garbage pickup service. He testified that he would prefer to get water from Caroline County. He also questioned the practice of monthly billing and asserted the typical practice is to pay quarterly for water service.³⁵

Stuart Armstrong of Nellysford, Virginia, stated he resides in the Stoney Creek neighborhood. He testified that he works in the affordable housing industry and is currently working on a 140-home project called Renaissance Ridge. A portion of the units in this development, he explained, are for people who live and work in the local area. He stressed the need for affordable housing and explained Aqua Virginia's requested increase will harm the Renaissance Ridge development because of the proposed increase in connection fees (which he estimated was a \$350,000 issue for the community) and because the added monthly cost will be a deterrent for people wanting to move into the community.³⁶

³² *Id.* at 44-49 (Johnson).

³³ *Id.* at 49-53 (Leslie).

³⁴ *Id.* at 53-60 (Black).

³⁵ *Id.* at 60-63 (Oakes).

³⁶ *Id.* at 63-68 (Armstrong).

AQUA VIRGINIA DIRECT TESTIMONY

Aqua Virginia offered the testimony of the following witnesses: **John J. Aulbach, II, P.E.**, President of Aqua Virginia; **Matthew D. Cooke, Sr.**, Operations Manager of Aqua Virginia; **Andrew J. Barnes, P.E.**, State Engineer of Aqua Virginia; **Richard F. Hale, Jr.**, Virginia State Controller of Aqua Virginia; **Dylan W. D'Ascendis**, a Partner at ScottMadden, Inc.; **Constance E. Heppenstall**, Senior Project Manager, Rate Studies, at Gannett Fleming Valuation and Rate Consultants, LLC ("Gannett Fleming"); and **Gregory R. Herbert**, Analyst, Rate Studies, at Gannett Fleming.

John J. Aulbach, II, P.E., described the need for the rate increase and discussed the proposed changes to the Rules and Regulations of Aqua Virginia's Tariff.³⁷ He explained that the Company comprises 191 water systems and nine wastewater systems across 37 counties in Virginia, and is staffed by over 60 employees.³⁸ He noted that Aqua Virginia is a subsidiary of Essential Utilities, Inc. ("Essential"), and that the Company receives support services from Aqua Services, Inc. ("Aqua Services"), including customer service, billing and collections, regulatory compliance, accounting, financing, and legal services.³⁹

According to Mr. Aulbach, the major driver for the rate increase request is the infrastructure improvements the Company has made.⁴⁰ He explained that the requested increase will include the WWISC, through which the Company has been recovering service charges related to certain accelerated waterline and collection system inflow and infiltration ("I&I") projects. He noted the WWISC will be reset to \$0.00 as a result of the 2023 Rate Case.⁴¹

Mr. Aulbach described Aqua Virginia's staff. He stated the Company ensures its staff receives necessary training classes to maintain licenses and receives safety training and safety equipment. He explained Aqua Virginia has added four water system field operators, in part due to the increased number of weekly routine visits to public water systems required by the Virginia Department of Health. He reported Aqua Virginia also regraded two positions and provided career development and professional advancement opportunities by implementing operations team leader positions for the Company's eastern and western areas.⁴²

Mr. Aulbach explained that Aqua Virginia's water and wastewater divisions each currently utilize three rate groups: W0, W1, and W2; and S0, S1, and S2.⁴³ Given the merger of Great Bay Utilities, Inc. ("Great Bay"), a wholly owned subsidiary of Aqua Virginia, with Aqua Virginia being the surviving entity,⁴⁴ Mr. Aulbach reported that the Company seeks to

³⁷ Ex. 6 (Aulbach Direct) at 4.

³⁸ *Id.* at 5.

³⁹ *Id.*

⁴⁰ *Id.* at 6.

⁴¹ *Id.* at 8.

⁴² *Id.* at 9.

⁴³ *Id.* at 10.

⁴⁴ The merger was pending at the time the Application was filed but has since been approved by the Commission. See *Joint Petition of Aqua Virginia, Inc., and Great Bay Utilities, Inc., For approval of a change in control of all of the assets of a public utility*, Case No. PUR-2023-00044, 2023 S.C.C. Ann. Rep. 410, Final Order (Aug. 21, 2023) ("Great Bay Merger Order").

incorporate the Great Bay systems into the W0 rate group, and also add another rate group, W3.⁴⁵ He stated the Application covers systems serving 26,382 water customers, 538 Great Bay customers, and 8,296 wastewater customers, a grand total of 35,216 customers.⁴⁶

Mr. Aulbach addressed the size of the rate increase request. He stressed the project spending the Company recently engaged in and proposes for the near future to maximize efficient water and wastewater system improvements.⁴⁷ He opined the increases requested in the 2023 Rate Case and the 2020 Rate Case⁴⁸ are comparable and that the increases being requested in the 2023 Rate Case are acceptable in light of the capital campaign’s positive impact.⁴⁹

Mr. Aulbach reported that Aqua Virginia distributed funds received through the Coronavirus Aid, Relief, and Economic Security (“CARES”) Act⁵⁰ to offset some customer arrearages, and used American Rescue Plan Act (“ARPA”)⁵¹ funds to help customers pay down and offset portions of arrearages and hardships caused by the COVID-19 pandemic.⁵²

Mr. Aulbach also addressed environmental justice, asserting that upgrading, repairing, or replacing existing utility facilities improves conditions for environmental justice communities.⁵³ He suggested that the Application provides for fair treatment of environmental justice communities in Aqua Virginia’s service territory by contributing to the consolidation of rates “to promote the equitable consideration of all customers in” providing service and to ensure that no population bears “a disproportionate share of any negative environmental or ratemaking consequence resulting from the upgrade and replacement of outdated” infrastructure and facilities.⁵⁴

Mr. Aulbach stated the Company’s intention to track and follow up on customer comments received in this case as it has done in prior proceedings.⁵⁵

Matthew D. Cooke, Sr., discussed certain operational characteristics of Aqua Virginia’s water and wastewater systems and reviewed system improvements resulting from capital improvements since 2020.⁵⁶

System Descriptions. Mr. Cooke described the Aqua Virginia water systems collectively as:

- 191 systems
- Serving 26,382 customers

⁴⁵ Ex. 6 (Aulbach Direct) at 2, 10-11.

⁴⁶ *Id.* at 13-14.

⁴⁷ *Id.* at 11.

⁴⁸ *See Application of Aqua Virginia, Inc., For an Increase in Rates*, Case No. PUR-2020-00106, 2021 S.C.C. Ann. Rep. 226, Final Order (June 22, 2021) (“2020 Rate Case Order” or “2020 Rate Case,” as applicable).

⁴⁹ Ex 6 (Aulbach Direct) at 11-12.

⁵⁰ Pub. L. 116-136, 134 Stat. 281 (2020).

⁵¹ Pub. L. 117-2, 135 Stat. 4 (2021).

⁵² Ex. 6 (Aulbach Direct) at 12.

⁵³ *Id.* at 14.

⁵⁴ *Id.* at 15.

⁵⁵ *Id.* at 15-16.

⁵⁶ Ex. 8 (Cooke Direct) at 2.

- With an average of 3.4 million gallons per day (“MGD”) of water
- From 270 water tanks that can collectively store over 8.2 million gallons of water
- Sourced 85% from groundwater (using 370 wells), 4.2% from purchased water, and 10.8% from surface water (from two surface water plants)
- Running through 603 miles of water mains.⁵⁷

Similarly, he described the Aqua Virginia wastewater systems collectively as:

- 9 systems
- Serving approximately 8,296 customers
- By conveying and treating an average of 1.3 MGD of wastewater to facilities for treatment
- Through 156 miles of wastewater mains
- Using gravity flow, 91 wastewater pump stations, and almost 2,000 individual grinder pump stations to convey wastewater to facilities for treatment.⁵⁸

Mr. Cooke stated that approximately 75% of Aqua Virginia’s wastewater collection systems are gravity lines, and the remainder are pressurized force mains.⁵⁹ He reported that the Company regularly tests its water and wastewater and ensures that the related infrastructure is properly maintained and operated according to federal and state laws.⁶⁰

Improvements. Mr. Cooke also described the major improvements Aqua Virginia has made since the 2020 Rate Case to improve service and reliability, address compliance risks, and address aesthetic water quality issues.⁶¹ He noted that in addition to WWISC projects, Aqua Virginia has:

- Added or placed into service new wells at ten water systems;
- Installed generators at one wastewater plant and 15 water facilities;
- Installed water meters on the Bells Cove water system;
- Added meters in 12 other water systems;
- Installed new filters and upgraded existing filters at multiple systems to ensure iron and manganese concentrations remain well under the Secondary Maximum Contaminant Level (“SMCL”);
- Installed a new backup generator and automatic transfer switch at the Lake Monticello surface water plant (which installation was in progress at the time the Application was filed);
- Installed a new backup generator and automatic transfer switch, as well as other equipment, at the Lake Monticello wastewater treatment plant;
- Replaced two pump stations to improve reliability and ensure adequacy of pumping capacity during wet weather;

⁵⁷ *Id.* at 2.

⁵⁸ *Id.* at 3.

⁵⁹ *Id.*

⁶⁰ *Id.* at 2-3.

⁶¹ *Id.* at 3-4.

- Installed economical mixers at numerous lift stations;
- Replaced outdated wastewater treatment plant monitoring systems with new supervisory control and data acquisition (“SCADA”) on the Lake Monticello and Lake Holiday systems; and
- Completed a rerate of the Blacksburg Country Club wastewater treatment plant.⁶²

Mr. Cooke explained the WWISC and non-WWISC I&I projects have reduced inflow to Aqua Virginia’s systems and have decreased sanitary system overflow incidents, which in turn have enabled the Company to lower the number of wastewater leaks and to decrease chemical and process costs.⁶³

Mr. Cooke stated that since the 2020 Rate Case, the Company has installed approximately 989 new water connections and approximately 479 new wastewater connections. He estimated these additions have increased rate base by \$1,387,864 and \$558,701 for water and wastewater services, respectively, over three years.⁶⁴

Mr. Cooke advised Essential has taken steps to address the presence of the contaminants Perfluorooctanoic acid (“PFOA”), Perfluorooctanesulfonic acid (“PFOS”) and Perfluorononanoic acid (“PFNA”). He confirmed Essential has established an internal standard for PFOA, PFOS, and PFNA based on the most stringent standards adopted or proposed by a state (New Jersey) ahead of possible federal standards.⁶⁵

Risk. Mr. Cooke contended, despite its purchasing power and efficiencies, Aqua Virginia shares many of the same risks as a small utility. He pointed out that 88 of Aqua Virginia’s 191 water systems are single well systems that lack redundancy, creating challenges when wells require maintenance or decline in production or water quality. He also pointed to the Company’s environmental regulation risks. He outlined the difficulty predicting increases in operating expenses.⁶⁶

Safety. Mr. Cooke affirmed Aqua Virginia’s commitment to safety for employees and its operations, noting the Company has a rate of less than one lost time incident per year.⁶⁷

Successes. Finally, Mr. Cooke highlighted the water plant at Lake Monticello, which for 17 years “has continued to earn the annual Virginia Department of Health Operational Excellence award for outstanding performance in producing potable water as well as achieving an even higher level of water quality than the minimum required by federal and state regulations.”⁶⁸ He further noted the Lake Caroline water plant received its first award for “outstanding quality level of water excellence.”⁶⁹

⁶² *Id.* at 3-7.

⁶³ *Id.*

⁶⁴ *Id.* at 8.

⁶⁵ *Id.* at 8-9.

⁶⁶ *Id.* at 10-12.

⁶⁷ *Id.* at 12.

⁶⁸ *Id.* at 13.

⁶⁹ *Id.*

Andrew J. Barnes, P.E., testified concerning the capital planning and improvement projects Aqua Virginia has undertaken since the 2020 Rate Case. As to WWISC projects, he reported the Company has engaged in six water projects involving almost 13 miles of waterline replacement across six systems, and engaged in three sewer main rehabilitation projects impacting three systems. Mr. Barnes stated the WWISC-related work at Lake Land'Or and Lake Monticello has been completed, while the work at Lake Holiday was scheduled for completion by October 31, 2023, coinciding with the estimated end date of the current WWISC plan.⁷⁰

Mr. Barnes stressed the need across the water and wastewater industry to replace aging infrastructure. He reported that historically Aqua Virginia's pipe replacement rate has been 0.3%, less than the 1.0% replacement rate set by the American Water Works Association. Since the Company has 603 miles of water mains, he calculated the Company must replace 6.03 miles of pipe annually to keep pace with the pipes' end of useful life. He explained Aqua Virginia focuses on sites that experience repetitive service interruptions. He described how the Company gives greatest priority to projects to maintain customer service and meet regulatory requirements, as well as projects suggested by operational staff.⁷¹

Mr. Barnes listed the following current and upcoming capital investment projects that have been included in the current filing, with spending totaling \$21,321,500:⁷²

- York Terrace Waterline Replacement (\$3.9M): Installing almost three miles of new waterline and relocating approximately 160 meters and service lines to property front yards.
- Class IV Attendance Waiver SCADA Implementation (\$1.65M): Requesting waiver of the three-times-a week attendance requirement for 37 of the Company's Class IV water systems, while implementing SCADA for remote monitoring and continuing one in-person visit per week.
- Reedville Elevated Storage Tank (\$1.55M): Constructing an elevated water storage tank with slightly more capacity than the existing tank.
- Sludge Dewatering Improvements (\$1.39M): Installing new or rehabilitated dewatering equipment and related equipment at the Lake Holiday, Lake Land'Or, and Manakin Farms wastewater systems.
- Sewer Conveyance Rehabilitation (\$1.35M): Implementing cured-in-place pipe rehabilitation to address I&I at the Lake Holiday, Lake Land'Or, and Lake Monticello wastewater systems.
- Lead & Copper Rule Revision Investigations (\$1.16M): Completing inspection and excavation for the presence of lead and copper in service lines or homes.

⁷⁰ Ex. 9 (Barnes Direct) at 3-4.

⁷¹ *Id.* at 4-6.

⁷² *Id.* at 7-15 and Attached Exhibit AJB-1.

- Shawnee Land Waterline Replacement (\$1.05M): Installing approximately one mile of new waterline to replace current piping that regularly leaks and breaks.
- New Wells (\$960T): Constructing three test wells in the northern, eastern, and western operational areas of the Company.
- Lake Monticello Waterline Replacement – Capacity Improvement (\$900T): Reevaluating the design for a project to relieve a hydraulic bottleneck at the Lake Monticello surface water treatment plant, in conjunction with an expansion study.
- Lake Land’Or Wastewater Digester Replacement (\$790T): Replacing the existing digester and associated piping and controls at the wastewater treatment plant.
- Wintergreen/Stoney Creek Chemical Addition (\$650T): Adding a new prefabricated chemical treatment building to the water system.
- PFAS Treatment Design (\$500T): Implementing supplemental treatment designs at 19 systems where Per- and Polyfluoroalkyl Substances (“PFAS”) were identified, with construction expected to begin in 2025.
- Blacksburg CC Lateral Relining (\$500T): Performing sewer lateral lining and installing cleanouts between the sewer main or manhole and the customer’s property line in the Blacksburg wastewater system.
- Lake Monticello Water and Wastewater Studies & Designs (\$459T): Undertaking multiple projects, including evaluating sewer odor control technologies; evaluating gravity line and force main capacity upstream of the wastewater treatment plant; designing and building a new river water intake, with construction to start in 2025; designing a new headworks structure to address clogging and ragging of equipment at the wastewater treatment plant; and evaluating and designing a new elevated water storage tank, with construction expected to start in 2025.
- Above-grounding of existing underground well houses (\$420T): Reconstructing three well houses with prefabricated structures and new piping, instrumentation, and electrical equipment.
- Lake Land’Or Process Blower Work (\$420T): Replacing and relocating wastewater treatment plant process blowers.
- Miscellaneous Studies and Designs (\$410T): Undertaking various engineering studies, including the Captain’s Cove Water System Master Plan, hydraulic system evaluations at Lake Wilderness and Shawnee Land, and the Granite Hall Shores system interconnection (to Merrymount and Peete River Farms).
- Lake Caroline Water Pump Replacements (\$400T): Replacing the water treatment plant pumps with vertical turbine pumps.

- Vehicles (\$350T): Identifying vehicles for replacement.
- Blacksburg Sanitary Sewer Improvements (\$350T): Evaluating the magnitude and location of I&I issues in the Blacksburg Country Club wastewater system.
- Interconnection of Blue Ridge Heights with White Oak Estates (\$280T): Installing pressure-reducing valves in Blue Ridge Heights and demolishing a standpipe storage tank, as part of integrating Blue Ridge Heights with the White Oaks Estates system.
- Lake Holiday Wastewater Expansion Study (\$250T) and Lake Monticello Wastewater Expansion Study (\$250T): Conducting feasibility studies and designing a wastewater treatment plant expansion for each system.
- Lake Monticello Water Expansion Study (\$250T): Conducting feasibility studies and designing a water treatment plant expansion.
- DEQ Groundwater Withdrawal Permit Compliance (\$250T): Comprising permitting activities and renewal fees for systems that require DEQ permits to withdraw groundwater, as many of the permits expire in 2025.
- Crozier Waterline Replacement (\$230T) and Hazel River Waterline Replacement (\$230T): Replacing existing cast-iron or galvanized-iron pipe at the end of its useful life with pipe of a different material (such as PVC).
- Lake Holiday Safety/Facility Improvements (\$215T): Conducting evaluation and design of safety and efficiency improvements including safety railings, walkways, and a prefabricated restroom structure.
- Lake Holiday Chemical Storage (\$205T): Installing prefabricated structures to store water treatment chemicals.

Richard F. Hale, Jr., testified as to Aqua Virginia's rate base, capital structure, and operating expenses, as well as affiliate services. He also sponsored Filing Schedules 1-39 and, co-sponsored Schedule 41 with Company witness Aulbach.⁷³

According to Mr. Hale, for the period April 1, 2022, to March 31, 2023 ("Test Year"), Aqua Virginia's return on rate base was 2.35% for its water systems, and 4.09% for its wastewater systems, and the return on equity ("ROE") was 0.58% for water systems, and 3.97% for wastewater systems. He explained the Filing Schedules that are part of the Application are based on actual financial data for the Company as of March 31, 2023. He noted customer

⁷³ Ex. 7 (Hale Direct) at 3.

revenue growth and rate base are projected through February 4, 2025 (with February 5, 2024, through February 4, 2025, being the "Rate Year").⁷⁴

Mr. Hale summarized Test Year revenues, expenses, and rate base as follows:⁷⁵

Item	Water	Wastewater
Determination of Adjusted Net Income		
Current Operating Revenues	\$15,390,352	\$8,046,339
Operating Expenses	\$13,542,395	\$6,462,342
Net Operating Income	\$1,847,957	\$1,583,997
Adjusted Net Income after subtracting for interest	\$234,893	\$787,816
ROE	0.58%	3.97%
Determination of Rate Base		
Working Capital	\$1,397,777	\$384,884
Net Utility Plant	\$84,795,876	\$42,585,947
Rate Base Deductions	\$7,694,074	\$4,224,744
Total Rate Base	\$78,449,579	\$38,746,087

Mr. Hale described adjustments for costs that can reasonably be predicted to occur during the Rate Year. He also confirmed the Application requests no new regulatory assets.⁷⁶

Mr. Hale next described how another Essential subsidiary, Aqua Services, provides Aqua Virginia with accounting, human resources, engineering, information technology, legal, rate case, and other management support. He maintained that Aqua Services' assistance benefits Aqua Virginia and its customers. He noted the Company filed an application to renew authorization of its affiliate agreement with Aqua Services in Case No. PUR-2023-00124.⁷⁷

Mr. Hale testified that in keeping with Code § 56-235.2 A, the Application proposes to use the Company's March 31, 2023 capital structure, composed of 48.73% long-term debt and 51.27% common equity.⁷⁸

Mr. Hale also testified as to the Company's implementation, at the start of 2022, of system applications and products in data processing ("SAP") software. He averred SAP is a fully integrated system that can support a multi-utility corporate framework and has a proven track record at other utilities.⁷⁹

⁷⁴ *Id.* at 4. The Rate Year is the "twelve months from implementation of interim rates." *Id.* The Commission permitted Aqua Virginia to implement interim rates as of February 5, 2024. See Order for Notice and Hearing at 5, in the 2023 Rate Case.

⁷⁵ Ex. 7 (Hale Direct) at 5-6.

⁷⁶ *Id.* at 6.

⁷⁷ *Id.* at 7-9. See also *Application of Aqua Virginia, Inc., and Essential Utilities, Inc., For Approval of an Affiliate Services Agreement*, Case No. PUR-2023-00124, 2023 S.C.C. Ann. Rep. 496, Order Granting Approval (Sept. 12, 2023) ("2023 Affiliate Approval Order").

⁷⁸ Ex. 7 (Hale Direct) at 9.

⁷⁹ *Id.* at 9-10.

Mr. Hale testified that he believes the Application meets the applicable burden of proof, and he asked that the rates as filed be approved.⁸⁰

Dylan W. D'Ascendis, CRRA, CVA, testified as to the proper capital structure and cost rates Aqua Virginia should be given the opportunity to earn on its jurisdictional rate base. Using his recommended ROE of 10.50% and Aqua Virginia's March 31, 2023 capital structure, he determined a weighted cost of capital of 7.44%, as follows:⁸¹

<u>Type of Capital</u>	<u>Ratio</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	48.73%	4.22%	2.05%
Common Equity	<u>51.27%</u>	10.50%	<u>5.38 %</u>
Total	<u>100.00%</u>		<u>7.44 %</u>

Mr. D'Ascendis studied several models, including the Discounted Cash Flow ("DCF") model, the Risk Premium Model ("RPM"), and the Capital Asset Pricing Model ("CAPM"), applying each model to market data from a proxy group of six water utilities ("Utility Proxy Group") and market data from a group of non-price regulated companies ("Non-Price Regulated Proxy Group"). He provided the following summary of results:⁸²

Discounted Cash Flow Model	8.89%
Risk Premium Model	11.53%
Capital Asset Pricing Model	11.34%
Market Models Applied to Comparable Risk, Non-Price Regulated Companies	<u>11.50%</u>
Indicated Range of Common Equity Cost Rates Before Adjustments for Company-Specific Risk	9.71% - 10.71%
Size Adjustment	0.25%
Flotation Cost Adjustment	0.05%
Indicated Range of Common Equity Cost Rates after Adjustment	<u>10.01% - 11.01%</u>
Recommended Cost of Common Equity	<u>10.50%</u>

Mr. D'Ascendis discussed general principles related to investor returns, citing the U.S. Supreme Court's *Hope* and *Bluefield* decisions. He asserted the Commission should provide Aqua Virginia "the opportunity to earn a return that is: (1) adequate to attract capital at reasonable cost and terms; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks."⁸³ He also opined that Aqua Virginia's return should be established on a stand-alone basis, without consideration of parent or holding company funding.⁸⁴

⁸⁰ *Id.* at 10-11.

⁸¹ Ex. 10 (D'Ascendis Direct) at 2.

⁸² *Id.* at 3-4.

⁸³ *Id.* at 5-6.

⁸⁴ *Id.* at 6.

Mr. D'Ascendis next discussed business and financial risks. He argued that water and wastewater companies face general risks like other utilities (such as size and regulatory environment), as well as more industry-specific risks. He testified these require an ROE that allows the industry to successfully meet challenges. Examples of industry-specific risks include an increased responsibility for environmental stewardship, aging infrastructure, low depreciation rates, and high capital intensity.⁸⁵

Utility Proxy Group

Mr. D'Ascendis discussed the need for the Utility Proxy Group, explaining that because Aqua Virginia has no publicly traded equity securities, groups of companies with risks comparable to Aqua Virginia must serve as proxies for the Company. Using seven screening criteria, he developed a Utility Proxy Group of six U.S. water utilities.⁸⁶

- American States Water Company
- California Water Service Corporation
- Middlesex Water Company
- American Water Works Company, Inc.
- Essential Utilities, Inc.
- SJW Corporation

Looking at the Utility Proxy Group over a five-year historical period (2018-2022), Mr. D'Ascendis determined the average earnings rate on book common equity for the companies was 10.02%.⁸⁷ He also averred that Aqua Virginia's projected capital structure and common equity ratio are consistent with the Utility Proxy Group. He further claimed a long-term debt cost rate of 4.22% is appropriate to use in determining cost of capital for Aqua Virginia since it reflects the projected rate that Aqua Virginia expects to incur.⁸⁸

Mr. D'Ascendis next discussed the individual common equity cost rate models he used. He ultimately determined a DCF-indicated common equity cost rate of 8.89% for the Utility Proxy Group, relying on the two averages of the mean and median (8.67% and 9.07%), recognizing both the inclusion and exclusion of Middlesex Water Company. He averred this recommended DCF cost rate is to "be viewed as extremely conservative."⁸⁹

Mr. D'Ascendis then discussed the RPM, stating he utilized two risk premium methods for his analysis: the predictive risk premium model ("Predictive RPM") and a total market approach RPM.⁹⁰ He calculated 11.83%, the average of his mean and median Predictive RPM results, as his Predictive RPM ROE.⁹¹ In recognition that the Commission prefers to use current, not projected, interest rates, Mr. D'Ascendis also presented his ROE analyses using current interest rates for the Utility Proxy Group. He calculated an average common equity cost rate of 11.85%, a median cost rate of 11.68%, with the average of the mean and median being 11.77%.⁹²

⁸⁵ *Id.* at 8-10.

⁸⁶ *Id.* at 11-13.

⁸⁷ *Id.* at 13-14 and Attached Schedule DWD-2, p. 1.

⁸⁸ *Id.* at 14-15 and Attached Schedule DWD-2.

⁸⁹ *Id.* at 20 and Attached Schedule DWD-3, p. 1.

⁹⁰ *Id.* at 21.

⁹¹ *Id.* at 22-23 and Attached Schedule DWD-4, p. 2.

⁹² *Id.* at 23-24 and Attached Schedule DWD-4, p. 2.

Mr. D'Ascendis next addressed the total market approach RPM analysis. He determined the cost of common equity under the total market RPM analysis is 11.24% (or 11.07%, using current interest rates).⁹³ Averaging the results of his Predictive RPM analysis (11.83%) and his total market approach RPM (11.24%), Mr. D'Ascendis derived an indicated RPM common equity cost rate of 11.53% (or 11.42% using current interest rates).⁹⁴

Mr. D'Ascendis explained his CAPM analysis. He applied both the CAPM and the empirical CAPM ("Empirical CAPM") to the members of the Utility Proxy Group, averaging the results.⁹⁵ He ultimately determined an indicated common equity cost rate using his CAPM/Empirical CAPM methodology to be 11.34%.⁹⁶

Non-Price Regulated Proxy Group

Mr. D'Ascendis discussed how he developed the Non-Price Regulated Proxy Group, composed of 37 domestic, non-utility companies with similar risk profiles to the Utility Proxy Group.⁹⁷ He then applied the DCF Model, RPM, and CAPM in the same manner as he did for the Utility Proxy Group, with two exceptions: he did not use public utility-specific equity risk premiums in his RPM analysis, and he did not apply the Predictive RPM to individual non-price regulated companies.⁹⁸ He calculated the following cost rates of common equity based on the Non-Price Regulated Proxy Group: 10.64% (DCF), 12.36% (RPM) and 11.49% (CAPM). He reported the mean of his calculations is 11.50%, the median is 11.49%, and the average of the mean and median is 11.50% (or 11.45% if current interest rates are used).⁹⁹

Common Equity Cost Rate and Adjustments

Mr. D'Ascendis testified his range of indicated ROEs is from 9.71% to 10.71%, applicable to the Utility Proxy Group.¹⁰⁰ Since he believes Aqua Virginia has more risk than the Utility Proxy Group, however, he recommended both (1) a business risk adjustment, and (2) a flotation cost adjustment, to the common equity cost rate.¹⁰¹

As to the business risk adjustment, Mr. D'Ascendis asserted Aqua Virginia has unique risks because of its small size relative to the Utility Proxy Group.¹⁰² In this regard, he claimed that to do anything other than consider the Company as a stand-alone entity would be "discriminatory, confiscatory, and inaccurate."¹⁰³ He also claimed that considering the Company

⁹³ *Id.* at 32 and Attached Schedule DWD-4, p. 3.

⁹⁴ *Id.* at 32 and Attached Schedule DWD-4, p. 1.

⁹⁵ *Id.* at 35.

⁹⁶ *Id.* at 37 and Attached Schedule DWD-5, p. 1.

⁹⁷ *Id.* at 38-39. These companies are listed *id.* at Attached Schedule DWD-6, p. 3.

⁹⁸ *Id.* at 39.

⁹⁹ *Id.* at 39-40 and Attached Schedule DWD-7, p. 1.

¹⁰⁰ *Id.* at 41.

¹⁰¹ See generally, e.g., *id.* at 41-49.

¹⁰² *Id.* at 41-43.

¹⁰³ *Id.* at 43.

as a stand-alone entity is consistent with Code § 56-235.2, as amended on April 11, 2022.¹⁰⁴ Mr. D'Ascendis calculated that based on the spread between the average size premium for the Utility Proxy Group and Aqua Virginia's estimated market capitalization, a 3.90% upward size adjustment is warranted. He applied a somewhat lower 0.25% size premium to Aqua Virginia's indicated common equity cost rate.¹⁰⁵

As for the second adjustment, Mr. D'Ascendis recommended a flotation cost adjustment to permit the recovery of costs associated with the sale of new issuances of common stock. Citing Commission precedent, Mr. D'Ascendis included only those flotation costs that occurred during the Test Year. He calculated that a flotation cost adjustment of 0.05% is required to reflect the flotation costs attributable to Aqua Virginia.¹⁰⁶

Overall, Mr. D'Ascendis recommended an ROE of 10.50% and concluded that a proper return on investor-supplied capital for Aqua Virginia is 7.44%.¹⁰⁷

Constance E. Heppenstall testified concerning Aqua Virginia's cost of service allocations for its water and sewer operations.¹⁰⁸ She asserted she allocated costs to residential and commercial classes "in accordance with generally accepted principles and procedures" and that the allocation is indicative "of the relative cost responsibilities of each class of customers."¹⁰⁹ Specifically, she used the base-extra capacity method of cost allocation, considering four general categories of cost responsibility:

- Base Costs – Costs that typically vary with the quantity of water used. These costs are allocated to customer classes based on average daily usage.
- Extra Capacity Costs – Costs that are associated with meeting requirements in excess of average. These are allocated to customer classes based on each class's maximum day usage, and maximum hour usage, in excess of average usage.
- Customer Costs – Costs that are incurred to serve customers regardless of usage or demand characteristics. These are allocated to customer classes based on the relative cost of meters and services, and the number of customers.
- Fire Protection Costs – Costs associated with facilities to meet peak demand for fire protection service. Costs are allocated to Public or Private Fire Protection based on total relative demands of hydrants and fire service lines, and Public Fire Protection costs are reallocated to customer classes based on meter equivalents.¹¹⁰

¹⁰⁴ *Id.* See also 2022 Va. Acts chs. 581, 582, which added a paragraph to Code § 56-235.2 that begins, "In any ratemaking proceeding for an investor-owned utility authorized to furnish water or water and sewer service initiated after January 1, 2022, the Commission shall evaluate such utility on a stand-alone basis . . ."

¹⁰⁵ Ex. 10 (D'Ascendis Direct) at 45-46 and Attached Schedule DWD-8, p 1.

¹⁰⁶ *Id.* at 46-49 and Attached Schedule DWD-9.

¹⁰⁷ *Id.* at 49 and Attached Schedule DWD-1. The recommended range of common equity cost rates, after adjustments, is 10.01% - 11.01% for the Utility Proxy Group and 9.97% - 10.97% using current interest rates. *Id.* at Attached Schedule DWD-1, p. 2.

¹⁰⁸ Ex. 11 (Heppenstall Direct) at 3. See also Attached Schedules 40 C-W and 40 C-S.

¹⁰⁹ *Id.* at 3-4.

¹¹⁰ *Id.* at Attached Schedule 40 C-W, pp. 1-2.

Ms. Heppenstall provided examples of types of costs and their allocations.¹¹¹ For water operations, Ms. Heppenstall reported the overall cost of service for pro forma amounts as of March 31, 2023, and the proposed increase in rates, as follows:¹¹²

Classification	Cost of Service	% of Total	Proposed Increase Amount	Proposed Increase %
Residential	\$19,161,939	95.6	\$4,925,375	35.0
Commercial	\$877,022	4.4	\$263,603	34.7
Private Fire	\$12,543	0.1	\$3,123	33.9
Total Sales	\$20,051,503	100.0	\$5,192,102	\$34.9
Other Revenues	\$553,740		\$22,266	
Total	\$20,605,244		\$5,214,368	

Ms. Heppenstall testified that the cost of service study for wastewater services is similar to the water service cost allocation study.¹¹³ Her study defined these categories of sewer costs:

- Collection Costs – Costs related to collecting and transmitting sewage, associated with collection mains and pumping facilities. These are allocated to customer classes based on average daily usage and the number of customers.
- Treatment Costs – Costs related to treatment facilities, including sewage treatment and disposal. These are allocated to customer classes based on average daily usage.
- Customer Costs – Costs related to serving customers without regard to usage or demand characteristics of any customers. These are allocated to customers on the bases of the number of customers and the number of bills.¹¹⁴

For wastewater operations, Ms. Heppenstall reported the overall cost of service for pro forma amounts as of March 31, 2023, and the proposed increase in rates, as follows:¹¹⁵

Classification	Cost of Service	% of Total	Proposed Increase Amount	Proposed Increase %
Residential	\$9,274,637	97.9	\$1,649,278	21.8
Commercial	\$201,603	2.1	\$40,051	17.5
Total Sales	\$9,476,240	100.0	\$1,689,329	
Other Revenues	\$266,220		\$6,528	
Total	\$9,742,460		\$1,695,857	21.1

Gregory R. Herbert with Gannett Fleming addressed the proposed rate structure.¹¹⁶

Water. Mr. Herbert detailed the water systems' rate structure as of the end of the 2020 Rate Case, with three rate groups: W0 (for Wintergreen Valley and Venter Heights only), W1,

¹¹¹ *Id.* at 5-7.

¹¹² *Id.* at Schedule 40 C-W, p. 3.

¹¹³ *Id.* at 8-9.

¹¹⁴ *Id.* at Attached Schedule 40 C-S, pp. 1-2.

¹¹⁵ *Id.* at Schedule 40 C-S, p. 3.

¹¹⁶ Ex. 12 (Herbert Direct) at 2.

and W2.¹¹⁷ He stated the Application's rate design has been proposed to accomplish three objectives: (1) to continue moving toward a consolidated statewide pricing structure; (2) to incorporate the Great Bay water system, which Aqua Virginia acquired in 2019; and (3) to incorporate into the rate design two additional systems, Pine Brook and Brandywine.¹¹⁸

Mr. Herbert testified that the Great Bay systems are proposed to be moved into Rate Group W0, while the Pine Brook and Brandywine systems are proposed to comprise a new Rate Group, W3. He explained the Company also seeks to move Rate Groups W1 and W2 closer together by equalizing the Base Facility Charge ("BFC") and narrowing the gap between Rate Group W1's and Rate Group W2's volumetric rates.¹¹⁹

Mr. Herbert detailed the factors he considered in designing the water rate structure.¹²⁰ He explained that in addition to narrowing the gap between the Rate Group W1 and W2 volumetric rates, he increased Rate Group W0 rates to move toward the rates of Rate Groups W1 and W2. He also consolidated the Great Bay metered rates in Rate Group W0 from eight flat rates into one flat rate and conformed the gallonage allowance for all Great Bay systems to 3,000 gallons, the same gallonage allowance as Rate Group W0.¹²¹ He testified that as proposed, Rate Group W0 customers with meter sizes under one-inch will incur a BFC of \$38.00/month.¹²² For customers with meter sizes of one-inch or greater, the BFC and monthly allowance is increased. For usage above the monthly allowance, the customer will pay \$8.58 per 1,000 gallons no matter the meter size. These charges would apply to Rate Group W0 customers of all classes.¹²³

Mr. Herbert sponsored Filing Schedule 43w, which indicates that the proposed rate increases for Rate Groups W0 (current customers), W1, W2, and W3 are as follows:¹²⁴

Group	Current BFC	Proposed BFC	Current \$/kGal	Proposed \$/kGal	Percentage Increase
W0	\$25.00*	\$38.00*	\$5.96	\$8.58	51%
W1	\$18.31	\$25.44	\$6.24	\$9.35	41%
W2	\$18.31	\$25.44	\$7.80	\$10.47	33%
W3 Pine Brook	\$10.30	\$15.54	\$2.74	\$4.13	43%
W3 Brandywine	\$12.11	\$15.54	\$3.51	\$4.13	18%

* Includes 3,000 gallons of water usage; \$/kGal are charged on amounts used over 3,000 gallons.

Mr. Herbert's Filing Schedule 43w reflects that the proposed rate increases for Great Bay customers vary depending on whether the customer is taking service under one of Great Bay's eight flat rates or one of Great Bay's two metered rates. No change is proposed for the current Great Bay BFC 1 monthly rate of \$38.00. The Great Bay BFC 2 monthly rate of \$33.94 is

¹¹⁷ *Id.* at 2-3.

¹¹⁸ *Id.* at 3.

¹¹⁹ *Id.* at 3-4.

¹²⁰ *Id.* at 4-5.

¹²¹ *Id.* at 6-7.

¹²² *Id.* at 7; Ex. 5 (Application) at Filing Schedule 41, p. 6.

¹²³ Ex. 5 (Application) at Filing Schedule 41, p. 6.

¹²⁴ *Id.* at Filing Schedule 43w. Note that the percentage increase is based on a current bill that includes a WWISC charge. The abbreviation "\$/kGal" refers to dollars per 1,000 gallons.

proposed to increase to \$38.00. Under either rate, the Application proposes to increase the current rate for usage over the monthly allowance from \$5.10 k/Gal to \$8.58 k/Gal. The Application proposes to increase the eight flat rates to \$48.51, a 28% to 71% increase over current rates of \$28.41 to \$38.00.¹²⁵

Wastewater. Mr. Herbert also testified the Company proposes to retain the three current wastewater Rate Groups S0, S1, and S2 since consolidation of rate groups would lead to rate shock for some customers.¹²⁶ He testified that the proposed rate structure narrows the gap between Rate Groups S1 and S2. He designed Rate Group S0 to retain a 3,000 gallon/month allowance and proposed increased rates to nudge this rate closer to Rate Groups S1 and S2.¹²⁷ He also asserted revenues under the proposed wastewater rates more closely align with the cost of service by classification than current rates do.¹²⁸

Mr. Herbert sponsored Filing Schedule 43s, which indicates that the proposed rate increases for Rate Groups S0 (current customers), S1, and S2 are as follows:¹²⁹

Group	Current BFC	Proposed BFC	Current \$/kGal	Proposed \$/kGal	Percentage Increase
S0	\$47.90*	\$60.00*	\$12.16	\$16.41	25%
S1	\$32.36	\$38.50	\$12.66	\$16.29	24%
S2	\$32.36	\$38.50	\$14.89	\$18.40	21%

* Includes 3,000 gallons of sewage/month; \$/kGal are charged on amounts over 3,000 gallons.

There are also 158 flat rate wastewater customers. Mr. Herbert reported their current rate of \$83.71 is proposed to increase 27%, to \$106.62.¹³⁰

RESPONDENT TESTIMONY

Fluvanna County

Fluvanna filed the direct testimony of **Thomas M. Diggs**, a Fluvanna resident and Chairman of the Lake Monticello Owner's Association Community Development Committee. He testified on behalf of the Lake Monticello Owners' Association ("LMOA").¹³¹ He stated Lake Monticello is composed of 4,635 lots, a lake with five beaches and other amenities such as a pool and restaurant.¹³²

Mr. Diggs questioned whether Aqua Virginia provides reasonably adequate services and facilities, explaining that the LMOA Board of Directors ("LMOA Board") and Fluvanna

¹²⁵ *Id.* See also Ex. 12 (Herbert Direct) at 8.

¹²⁶ Ex. 12 (Herbert Direct) at 10-11.

¹²⁷ *Id.* at 13.

¹²⁸ *Id.* at 15.

¹²⁹ Ex. 5 (Application) at Filing Schedule 43s. Note that the percentage increase is based on a current bill that includes a WWISC charge.

¹³⁰ *Id.*

¹³¹ Ex. 26 (Diggs Direct) at Introductory pp. 1-2.

¹³² *Id.*

supervisors regularly receive complaints about water quality, low water pressure, odor, and sewage spills into Lake Monticello. He also expressed the LMOA Board’s concern that Aqua Virginia lacks knowledge about its own infrastructure and services.¹³³

Odor. Mr. Diggs testified residents can smell the odor from the wastewater treatment facility up to one-half mile away and that residents sometimes avoid outdoor activities because of odor from pumping stations. He stated some can smell the odor while boating or while in their homes with windows closed.¹³⁴

Mr. Diggs stated Aqua Virginia paid \$75,000 for a study on the odor issue. He claimed the study did not include the wastewater treatment facility and was based on monitoring over a 10-day period around Thanksgiving 2023. Aqua Virginia provided a two-slide summary of the odor report but did not share the report itself with the LMOA Board, though Mr. Aulbach had previously promised the LMOA Board a copy. Mr. Diggs concluded the “study is manifestly insufficient to address the odors, especially since neither costs [nor] a solution were provided.”¹³⁵

Low water pressure. Mr. Diggs reported this is a consistent issue for 72 homes. He testified Aqua Virginia has responded by stating that each home has the legal minimum for water pressure, or more. He stated Aqua Virginia plans to build a water tower that will provide “a small improvement” for Lake Monticello customers.¹³⁶

Water Quality. Mr. Diggs reported discussions at a recent meeting during which Aqua Virginia employees stated the water quality issue results from system design and a home’s location in relation to a primary supply main. Mr. Diggs stated the LMOA Board recommends Aqua Virginia map the addresses associated with water complaints to see if it is proper to attribute the water quality issues to system design, and provide such information to the Commission.¹³⁷

Sewage Leaks into Lake Monticello. Leaks from the wastewater system, Mr. Diggs testified, raise the water’s E. coli levels to a point beyond which the Virginia Department of Health deems safe. These levels may be sustained for days or weeks. He discussed numerous recent wastewater spills into Lake Monticello, including:¹³⁸

- A pump failure on August 9, 2022, which resulted in the closure of three beaches and Monroe Cove for almost two weeks;
- An overflow from a manhole at the end of Jackson Cove that a resident reported on July 14, 2023, which the LMOA Board believes started several days previously. This incident required closure of one beach and Jackson Cove for about three weeks;
- Sewage leaks on August 7 and 27, 2023, at Polk Cove, each requiring Polk Cove and the main beach to close for approximately a week; and

¹³³ *Id.*

¹³⁴ *Id.* at 3.

¹³⁵ *Id.* at 4.

¹³⁶ *Id.* at 4-5.

¹³⁷ *Id.* at 5 n.18.

¹³⁸ *Id.* at 5-6.

- An observed overflow at Jackson Cove on November 13, 2023, resulting in an advisory for residents to avoid contact with Jackson Cove's water.

Concern about Aqua Virginia's level of knowledge of its infrastructure and services.

According to Mr. Diggs, this concern arises from three incidents, which indicate: (1) Aqua Virginia did not know the LMOA marina is not connected to Aqua Virginia's wastewater system; (2) Aqua Virginia may not know the location of all its infrastructure, such as manholes; and (3) Aqua Virginia may have connected the clubhouse and pool at The Villages of Nahor approximately 15 years ago without a meter.¹³⁹

Justness and Reasonableness of Rate Increase. Mr. Diggs asserted Aqua Virginia's proposed increase is not just or reasonable. He calculated that Lake Monticello is one of Aqua Virginia's larger systems in Virginia and that Lake Monticello customers are subsidizing smaller systems. He averred Aqua Virginia's requested increase is out of line with the recent increase in the cost of goods and services. He also asserted that Aqua Virginia's rates are 89% higher than the average water and sewer bill in Virginia. Additionally, Mr. Diggs questioned Aqua Virginia's use of April 1, 2022, through March 31, 2023, as the Test Year, averring this selection incorporates months with the highest inflation rate since 1981.¹⁴⁰

Mr. Diggs took issue with costs associated with Aqua Virginia's Affiliated Interest Service Agreement, claiming payment details for some categories are missing, the costs of the services appear overpriced when compared to national averages, and the Application lacks evidence Aqua Virginia benefits from this agreement. He asked the Commission to disregard amounts paid to Aqua Services beyond what the Company's costs would be if it used its own employees or used a provider procured through competitive bidding.¹⁴¹

Mr. Diggs questioned the apparent overlap between capital projects Aqua Virginia proposed and those it has funded through its WWISC. He also contended Aqua Virginia should use the cost of financing from the Virginia Drinking Water State Revolving Fund and the Virginia Clean Water State Revolving Fund, and not cost of equity, to support its position that rates are just and reasonable. He claimed Aqua Virginia should not incorporate past, non-recurring capital expenses in its rate base.¹⁴²

ROE. Mr. Diggs next took issue with Aqua Virginia's recommended ROE of 10.5%, disagreeing, among other things, on Mr. D'Ascendis' choice of proxy companies for both his Utility Proxy Group and Non-Price Regulated Proxy Group; application of the *Hope* and *Bluefield* standards; and interpretation of investor assumptions, including Mr. D'Ascendis' view of risk.¹⁴³

Tariff Concerns. Mr. Diggs expressed the LMOA Board's concern that Aqua Virginia is not in compliance with Tariff Rule 6, stating Aqua Virginia will test a customer's water meter

¹³⁹ *Id.* at 7.

¹⁴⁰ *Id.* at 7-10.

¹⁴¹ *Id.* at 10-13.

¹⁴² *Id.* at 14-15.

¹⁴³ *Id.* at 15-21.

annually at no charge if the meter has not been tested in the past 12 months. He explained residents have called Aqua Virginia to question their billed water usage, but Aqua Virginia has not told any resident about the option for meter testing.¹⁴⁴

Mr. Diggs also stated Aqua Virginia does not make customers aware of the option, in Tariff Rule 2(f), to obtain a meter for an irrigation system allowing them to be charged for the water used by that system, but not counting that water usage toward wastewater usage. He also contended the LMOA Board is concerned the \$750 price for installation of an irrigation meter is too high.¹⁴⁵

Mr. Diggs stated the LMOA Board suggests an amendment to Tariff Rule 3 to require Aqua Virginia to notify current and future homeowners when the Company owns and is responsible for the service pipes going to the home (per contracts between Aqua Virginia and the home builder).¹⁴⁶

Mr. Diggs stated the LMOA Board proposes an amendment to Tariff Rule 18. Instead of stating Aqua Virginia does not guarantee any certain water pressure, the LMOA Board requests this rule indicate Aqua Virginia must provide the minimum pressure required by Virginia law.¹⁴⁷

Mr. Diggs stated the LMOA Board views Tariff Rule 19 as not in customers' best interest. This Rule disclaims responsibility for foreign matter in plumbing due to "emergency work or a natural upset on the system."¹⁴⁸

Mr. Diggs next explained the LMOA Board's suggested changes to Rule 20, which concerns ownership and responsibility for grinder pumps. The LMOA Board asks that Rule 20 be changed to require Aqua Virginia to notify current and future homeowners when the homeowners are responsible for the grinder pumps, and that the rule specify Aqua Virginia will own and be responsible for any grinder pump for which it does not provide the notice.¹⁴⁹

Lastly, Mr. Diggs expressed the LMOA Board's concern that Aqua Virginia is not complying with Rule 24, the customer complaint process, by not providing prompt and effective handling of customer complaints. Mr. Diggs requested that Aqua Virginia provide all complainants with the Commission's contact information to lodge complaints there. He also indicated customers are not told when their issues are resolved.¹⁵⁰

The LMOA Board requested the Commission to deny Aqua Virginia's requested rate increase and any rate of return on the cost of common equity.¹⁵¹

¹⁴⁴ *Id.* at 21.

¹⁴⁵ *Id.* at 21-22.

¹⁴⁶ *Id.* at 22.

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* at 22-23.

¹⁵⁰ *Id.* at 23.

¹⁵¹ *Id.*

COMMISSION STAFF TESTIMONY

Staff offered the testimony of four witnesses: **Justin M. Morgan, Mackenzie L. Lenahan, and Cameron T. Hunt**, all with the Commission's Division of Utility Accounting and Finance ("UAF"); and **Thomas P. Handley** with the Division of Public Utility Regulation ("PUR").

Justin Morgan is a Manager with the Division of UAF. He testified about Staff's analysis of the earnings test for the 12 months ended March 31, 2022 ("2022 Earnings Test"), and March 31, 2023 ("2023 Earnings Test"). He also provided Staff's analysis of the Rate Year and Staff's recommended revenue increase. He detailed Staff's adjustments to develop the Rate Year revenues and cost of service.¹⁵²

Mr. Morgan calculated a required increase in base rate revenue of \$5.29 million, based on a 9.5% ROE (the midpoint of Staff witness Hunt's range of 9.0-10.0%).¹⁵³ He reconciled the difference in revenue requirement between Aqua Virginia and Staff as follows:¹⁵⁴

	Water (\$)	Sewer (\$)	Total (\$)
Company Revenue Requirement	5,214,892	1,696,121	6,911,013
ROE	(442,719)	(218,519)	(661,238)
Long-term debt	(18,131)	(8,949)	(27,081)
Net utility plant	(63,021)	(63,183)	(126,203)
Allowance for working capital	(119,898)	(33,014)	(152,912)
Other rate base deductions	1,265	42,806	44,071
Revenue differences	276,684	109,626	386,310
Payroll and benefits	16,231	(628,330)	(612,099)
IT assets	(289,736)	(72,114)	(361,850)
Regulatory expense	41,078	(104,734)	(63,656)
Acquisition adjustment	(24,327)	28,764	4,436
Insurance expense	106,726	(54,553)	52,172
O&M, Pine Brook and Brandywine	(9,059)	--	(9,059)
O&M, Other	35,081	4,043	39,124
Depreciation and amortization	(12,287)	(39,950)	(52,237)
Payroll taxes	(23,985)	(15,589)	(39,574)
Property taxes	(2,727)	(7,678)	(10,405)
Gross receipts taxes	(6,142)	(2,434)	(8,576)
Excess deferred income taxes	(23,603)	(36,995)	(60,598)
Revenue conversion factor difference	5,469	1,779	7,248
Miscellaneous	37,798	(2,772)	35,026
Staff Revenue Requirement	4,699,587	594,325	5,293,912

¹⁵² Ex. 27 (Morgan Direct) at 1.

¹⁵³ *Id.* at 5.

¹⁵⁴ *Id.* at Attached Statement IV (T).

Payroll Expense. Staff's adjustment differs from Aqua Virginia's because: (1) Staff incorporated actual data for the 12 months ending September 30, 2023 for base, overtime, and short-term incentive compensation pay; (2) Staff used a capitalization ratio based on the 12 months ending September 30, 2023; and (3) Staff included payroll associated with vacancies reasonably predicted to be filled during the Rate Year.¹⁵⁵ Mr. Morgan described how Staff used a 29.84% capitalization ratio based on the 12 months ending September 30, 2023, instead of the Company's ratio of 22.29% based on a three-year average. Mr. Morgan indicated Staff's ratio reflects that Aqua Virginia's capital investment has been increasing year by year. Staff's payroll adjustment is \$453,000 lower than that of the Company.¹⁵⁶

Insurance Expense. Mr. Morgan's adjustment incorporated Staff's 29.84% capitalization ratio. Staff also used the most recently available corporate insurance premiums for the going-level expense. Staff's adjustment resulted in combined water and wastewater adjustments that are \$50,492 higher than Aqua Virginia's adjustment.¹⁵⁷

Employee Benefit Expense. Staff used a different Test Year amount as the foundation for its analysis and included a Rate Year level of vacancies in its methodology. Staff determined a decrease of \$139,000 is warranted relative to Aqua Virginia's adjustment.¹⁵⁸

Information Technology ("IT") Assets. Staff's adjustment is \$350,194 lower than the Company's because: (1) Staff used updated Service Company plant balances as of September 30, 2023; and (2) Staff used the weighted long-term debt return, but excluded the equity return, which Aqua Virginia had incorporated in its adjustment. Mr. Morgan maintained excluding the equity return is consistent with Commission precedent.¹⁵⁹

Sales Revenue. Staff's adjustments differ from the Company's in three respects: (1) Staff removed WWISC revenues to present all WWISC-related revenues separate from other ratemaking adjustments; (2) Staff used data as of September 30, 2023, instead of March 31, 2023 (the Company's starting point); and (3) Staff used billed months as a proxy for the Rate Year customer count, not the number of bills (which Aqua Virginia had used). Staff asserted billed month data removes anomalies intrinsic to the number of bills, such as two bills being sent to the same property in a given month when one customer moves out and another moves in.¹⁶⁰ Mr. Morgan stated Staff's adjustments increase availability revenues by \$7,735, and decrease other revenues by \$5,909, relative to the Company's adjustments.¹⁶¹

Cash Working Capital. Mr. Morgan testified Aqua Virginia's jurisdictional per book revenues are approximately \$22.6 million and therefore, pursuant to the Commission's Rate Case Rules, Aqua Virginia must either include a \$0 cash working capital requirement or perform a

¹⁵⁵ *Id.* at 6-7.

¹⁵⁶ *Id.* at 8-9.

¹⁵⁷ *Id.* at 27-28.

¹⁵⁸ *Id.* at 9.

¹⁵⁹ *Id.* at 10-11 (quoting from *Application of Aqua Virginia, Inc., For an increase in rates*, Case No. PUE-2014-00045, 2016 S.C.C. Ann. Rep. 206, 210, Final Order (Jan. 7, 2016)).

¹⁶⁰ *Id.* at 11-12, including n.16.

¹⁶¹ *Id.* at 12-13.

lead/lag study.¹⁶² He asserted Aqua Virginia’s use of a formula as the basis for its proposed cash working capital requirement is a method only available to companies with under \$20 million in jurisdictional per books revenues. Staff recommended inclusion of \$0 in cash working capital since Aqua Virginia did not support its cash working capital proposal with a lead/lag study. Mr. Morgan stated that \$0 was also used for cash working capital in the 2020 Rate Case.¹⁶³

Utility Plant in Service. Though the Company proposed an adjustment of \$24.9 million, Staff recommended only a \$19.8 million adjustment. Mr. Morgan explained Staff’s adjustment is based on updated information through September 2023 and more properly reflects the pace of capital spending. He asserted Aqua Virginia’s adjustment reflected an overstatement of capital spending of \$3.5 million as of February 14, 2024, which Staff excluded.¹⁶⁴

Construction Work in Progress. Staff’s adjustment is \$3.4 million higher than Aqua Virginia’s original forecast because of the Company’s revised estimate of how much capital is expected to go into service in the Rate Year, but lower than Aqua Virginia’s revised forecast in recognition of the Company’s overstatement of the pace of capital spending. Staff also included capitalized depreciation on transportation and power-operated equipment in its Rate Year Construction Work in Progress balances.¹⁶⁵

Accumulated Depreciation. Staff’s adjustment is \$880,000 less than the Company’s, largely due to Staff’s incorporation of the updated Rate Year forecast.¹⁶⁶

Contributions in Aid of Construction. Staff updated Contributions in Aid of Construction to the September 30, 2023 book balance, then included a Rate Year forecast based on the average monthly increase in the Contributions in Aid of Construction balance for the 12 months ending September 2023. This methodology increased Contributions in Aid of Construction by \$848,000, reducing rate base.¹⁶⁷

Plant Held for Future Use. Mr. Morgan explained Aqua Virginia has \$100,000 of land recorded as Plant Held for Future Use, which Aqua Virginia proposed to reclassify as “Plant.” Staff did not reclassify these funds since the property is not yet plant in-service; however, Staff incorporated this \$100,000 into rate base as Plant Held for Future Use.¹⁶⁸

Deferred Income Taxes. Staff incorporated actual data as of September 30, 2023, and included the impacts of differences between Staff’s and Aqua Virginia’s depreciation amounts.¹⁶⁹ Staff also calculated income tax expense using an updated amount of Excess Deferred Income Taxes amortization, consistent with Staff’s updated Accumulated Deferred Income Taxes balances.¹⁷⁰

¹⁶² *Id.* at 13. See also 20 VAC 5-201-90 (Instructions for Schedule 22).
¹⁶³ Ex. 27 (Morgan Direct) at 13-15.
¹⁶⁴ *Id.* at 15-17.
¹⁶⁵ *Id.* at 17.
¹⁶⁶ *Id.* at 17-18.
¹⁶⁷ *Id.* at 18-19.
¹⁶⁸ *Id.* at 19.
¹⁶⁹ *Id.* at 20.
¹⁷⁰ *Id.* at 27.

Depreciation and Property Tax. Staff calculated depreciation expense of \$35,000 less than the Company. Staff based its calculation on: (1) the Company’s updated forecast, scaled back to a Rate Year level of depreciation expense; (2) depreciation rates that are more consistent with most of the known assets in the “Other” Plant category; (3) capitalizing depreciation on transportation equipment and power-operated equipment; (4) recognizing retirements of depreciable plant through September 2023; and (5) excluding the cost of removal from depreciable plant (which should be charged to accumulated depreciation).¹⁷¹ These adjustments in turn caused Staff’s adjustment to property tax expense also to be lower, by \$10,000.¹⁷²

Acquisition Adjustments. This adjustment concerns the premium Aqua Virginia paid for acquiring the 20 Great Bay water systems. Mr. Morgan asserted Aqua Virginia never recorded the premium as an acquisition adjustment as required by Commission Order.¹⁷³ He explained that, among other issues, Aqua Virginia’s adjustments do not meet requirements of the Commission and the Uniform System of Accounts. He stated any acquisition premium also must meet the Commission’s test for inclusion in rate base: (1) the purchase price must result from arms-length bargaining; and (2) the purchase is a prudently made investment for customers’ and the utility’s benefit.¹⁷⁴ He agreed the Great Bay purchase satisfies the test but asserted the customer benefits from the acquisition do not justify the size of acquisition premium (\$243,000, approximately one-half of the \$478,000 paid for the acquisition). He claimed the 61% increase Aqua Virginia seeks for Great Bay customers is driven in part by the acquisition premium.¹⁷⁵

Staff recommended a 50/50 split of the acquisition premium between customers and shareholders, meaning approximately \$122,000 would be included in rate base. Staff argued the split would account for acquisition-related customer benefits and the sizable rate increase they face, and is consistent with the fact that the Company’s infrastructure improvements directly benefitted about 48% of Great Bay customers. Mr. Morgan noted the Commission denied Aqua Virginia recovery of the acquisition premium associated with Wintergreen Valley Utility Company.¹⁷⁶ He further noted Aqua Virginia’s investments in Great Bay subsequent to acquisition are included in rate base, and Aqua Virginia earns a return on these investments.¹⁷⁷

Mr. Morgan also discussed an adjustment to Acquisition Adjustment Amortization Expense. He explained Staff included amortization expense on 50% of the acquisition adjustment for Great Bay. Staff’s adjustment recognizes a Test Year level of amortization

¹⁷¹ *Id.* at 20 and Attachment at unnumbered p. 121-22.

¹⁷² *Id.* at 21.

¹⁷³ *Id.* See also *Joint Petition of Aqua Virginia, Inc., Great Bay Utilities, Inc., Kevin L. Gouldman, and Northern Neck Water, Inc., For approval of a transfer of utility assets*, Case No. PUR-2018-00108, 2018 S.C.C. Ann. Rep. 472, 473, Order Granting Approval (Dec, 17, 2018) (requiring, among other things, that Aqua Virginia “book[] any difference between the purchase price and the net book value of the Systems as a Utility Plant Acquisition Adjustment.”)).

¹⁷⁴ Ex. 27 (Morgan Direct) at 22-23.

¹⁷⁵ *Id.* at 23-24.

¹⁷⁶ *Id.* at 24-25. See also *Application of Aqua Virginia, Inc., For an increase in rates*, Case No. PUR-2017-00082, 2018 S.C.C. Ann. Rep. 244, 246-47, Final Order (Oct. 19, 2018).

¹⁷⁷ Ex. 27 (Morgan Direct) at 25.

expense for comparison against the annualized level. Staff's adjustments were \$31,000 lower for water operations, and \$28,000 higher for wastewater operations, than the Company proposed.¹⁷⁸

Regulatory Expense. Staff's adjustment was \$61,606 lower than the Company's and reflects a three-year average of expenses (2022, 2023, and a projected level for 2024).¹⁷⁹

Earning Test Analysis Results. Staff reviewed the Company's 2022 and 2023 Earnings Tests to see whether Aqua Virginia's regulatory assets have been recovered. Staff found the Company earned as follows:¹⁸⁰

Year	Water	Wastewater
2023	3.97%	8.32%
2022	9.09%	10.88%

Staff calculated that the revenue requirement impact of having an ROE above 9.3% for the wastewater function is \$(286,785). Staff recommended writing off Aqua Virginia's COVID-19 regulatory asset for the wastewater function only, which has a balance of \$28,352, since 10.88% is higher than the 9.30% ROE the Commission approved for Aqua Virginia in its 2020 Rate Case, and since Aqua Virginia over-earned in its wastewater operations in 2022 by an amount well over the amount of the regulatory asset.¹⁸¹ Staff stated no further write-down of regulatory assets is necessary, for either function for 2023 or for the water function for 2022.¹⁸²

WWISC. Staff made adjustments to the WWISC deferral in both the 2023 Earnings Test and in Staff's going-forward analysis, to correct for the Company's inconsistent recording of WWISC-related decreases to expense. Mr. Morgan also stated Staff recommends that going forward, the Company record deferred expenses to match revenues related to WWISC billings, instead of the single-entry recording method Aqua Virginia uses now.¹⁸³ Staff also separated the WWISC revenue requirement, showing the Company's need for a base rate increase before any addition of WWISC investment roll-in.¹⁸⁴ Mr. Morgan reported that Staff calculated a WWISC revenue requirement of \$410,970 for water, and \$191,944 for wastewater.¹⁸⁵

Pine Brook and Brandywine. Pine Brook and Brandywine are two small Virginia water systems located near the North Carolina border. Aqua North Carolina performs operational services for these systems and bills Aqua Virginia, which in turn bills customers on these systems. Staff excluded these systems from the ratemaking process since Aqua Virginia does not have a Commission-approved affiliate agreement or authorization to transfer these system to Aqua Virginia. This adjustment decreases rate year revenues by \$7,005 and decreases O&M

¹⁷⁸ *Id.* at 26.

¹⁷⁹ *Id.* at 26-27.

¹⁸⁰ *Id.* at 28.

¹⁸¹ *Id.* at 28-29.

¹⁸² *Id.* at 40.

¹⁸³ *Id.* at 30-31.

¹⁸⁴ *Id.* at 31-32 and Attached Statement I (T), Supporting Statement I (W) and Supporting Statement I (S).

¹⁸⁵ *Id.* at 32 and Attached Supporting Statement I (W) and Supporting Statement I (S).

expenses by \$1,762. Mr. Morgan testified that including or excluding such small amounts from the Company's revenue requirement would not change the rates to be charged customers.¹⁸⁶

PFAS Cost Tracking. Mr. Morgan reported that the U.S. Environmental Protection Agency has proposed regulations that would add nine PFAS to the list of hazardous chemicals, which could cause water utilities to incur costs in the future and/or provide them standing in class action lawsuits against PFAS polluters.¹⁸⁷ He recommended the Company separately track proceeds from any lawsuits or settlements, and continue tracking costs related to PFAS. He further recommended that with the next rate case application, Aqua Virginia provide a narrative of how it has been impacted by PFAS regulations and quantify the costs and proceeds from lawsuits in both the test period and rate year associated with that application.¹⁸⁸

Shared Services. As directed by the Commission, Aqua Virginia provided an Affiliate Study, which covered the years 2018-2021. Mr. Morgan stated Staff was unable to cross-reference Affiliate Study data with Test Year data, though Staff has no issue with the current Affiliate Study. He reported that Staff has talked with Aqua Virginia about providing updated study data for the earnings test period in the Company's next rate case.¹⁸⁹

Inadequacy of Direct Testimony. Mr. Morgan noted Staff's concern about the paucity of direct testimony discussing ratemaking adjustments. He asserted it is reasonable to expect the Company to provide a level of detail similar to that which it has provided in the past. He explained that testimony describing adjustments forms the starting point for Staff's audit, and more detailed descriptions of ratemaking proposals may reduce the amount of discovery.¹⁹⁰

Summary. Mr. Morgan summarized that Staff's Rate Year analysis reflected a Rate Year ROE of 2.72% and that the Company requires an incremental increase in base revenues of \$5.29 million to have an opportunity to earn Staff's recommended ROE of 9.50%. He stated this revenue increase includes \$600,000 associated with the roll-in of WWISC investment. He urged the Commission to approve Staff's adjustments to the Company's Rate Year analysis.¹⁹¹

Mr. Morgan attached a schedule to his testimony reflecting calculations for the additional revenue requirements at the low point, mid-point, and high point of Staff's recommended ROE. Using Staff's adjusted jurisdictional rate base of \$114,505,500 as a starting point, these are:¹⁹²

ROE	Revenue Requirement		
	Excluding WWISC	With WWISC Roll-in	Total
9.00%	\$4,317,851	\$585,682	\$4,903,534
9.50%	\$4,690,998	\$602,914	\$5,293,912
10.00%	\$5,064,145	\$620,145	\$5,684,290

¹⁸⁶ *Id.* at 33-35.

¹⁸⁷ *Id.* at 35-36.

¹⁸⁸ *Id.* at 36.

¹⁸⁹ *Id.* at 36-37.

¹⁹⁰ *Id.* at 38-40.

¹⁹¹ *Id.* at 40.

¹⁹² *Id.* at Attached Statement III (T).

Mackenzie Lenahan is a Utility Specialist with the Division of UAF. She addressed capital structure and statutory deficiencies related to the Brandywine and Pine Brook systems.¹⁹³

Ms. Lenahan testified that both Staff and the Company consider Aqua Virginia on a stand-alone basis for ratemaking purposes. Ms. Lenahan averred, however, that Aqua Virginia's proposed methodology for calculating a revenue requirement does not follow the 2022 changes to Code § 56-235.2 because Aqua Virginia did not use an actual, end-of-test period capital structure, while Staff did.¹⁹⁴ Staff proposed the following capital structure (\$ in thousands) for ratemaking purposes:¹⁹⁵

Component	Net Amount Outstanding	Weight	Cost Rate	Weighted Cost
Long Term Debt	\$46,519	47.87%	4.246%	2.033%
Common Equity	\$50,661	52.13%	9.5%	4.952%
Total Capitalization	\$97,179	100.00%		6.985%

For comparison, Aqua Virginia's proposed capital structure is (\$ in thousands):¹⁹⁶

Component	Net Amount Outstanding	Weight	Cost Rate	Weighted Cost
Long Term Debt	\$57,131	48.73%	4.217%	2.05%
Common Equity	\$60,115	51.27%	10.50%	5.38%
Total Capitalization	\$117,246	100.00%		7.44%

Ms. Lenahan explained the major differences between these capital structures:¹⁹⁷

- Staff used Aqua Virginia's actual, per books balances for long-term debt (as of March 31, 2023) and common equity, not hypothetical amounts.
- Staff's capital structure used a cost rate based on Aqua Virginia's long-term debt as of March 31, 2023, whereas Aqua Virginia used a cost rate incorporating two pro forma debt issuances that were expected to, but did not, occur by the end of 2023.
- Staff's capital structure incorporates Mr. Hunt's recommended 9.5% ROE.
- Staff's capital structure uses actual stand-alone, per books balances for long-term debt and common equity.

Ms. Lenahan also compared Staff's and Aqua Virginia's proposed ratemaking capital structures and cost of capital to Essential's capital structure. Key differences are.¹⁹⁸

¹⁹³ Ex. 29 (Lenahan Direct) at 1.

¹⁹⁴ *Id.* at 3-4.

¹⁹⁵ *Id.* at 5.

¹⁹⁶ *Id.* at 6.

¹⁹⁷ *Id.* These items are explained in more detail, *id.* at 6-10.

¹⁹⁸ *Id.* at 10-12.

	Common Equity Ratio	Weighted Average Cost of Capital
Staff's Proposal	52.13%	6.985%
Aqua Virginia's Proposal	51.27%	6.93%
Essential's Capital Structure (using Staff's 9.5% ROE)	44.80%	6.510%

Ms. Lenahan also discussed the provision in Code § 56-235.2 that if the Commission were to find Aqua Virginia's actual, end-of-test-period capital structure is unreasonable, it could use a debt-to-equity ratio it finds reasonable. She testified that Staff does not believe Aqua Virginia's stand-alone end-of-test-period capital structure is unreasonable.¹⁹⁹

Ms. Lenahan testified that Staff's recommended revenue requirement, based on Aqua Virginia's actual, end-of-test-period capital structure, is \$5,293,912, and that the revenue requirement would be \$4,582,566 if it were based on a March 31, 2023 Essential ratemaking capital structure, a difference of \$711,346.²⁰⁰

Ms. Lenahan next addressed the earnings test, stating that Code § 56-235.2 requires the Commission to "conduct such review utilizing the same cost of capital and capital structure adopted in the utility's most recent rate case in which such rates were set . . ."²⁰¹ She testified that Staff supports the use of a five-quarter average capital structure and cost of capital as of March 31, 2023, for Essential. This capital structure reflects a 9.3% ROE for earnings test purposes, as authorized in Aqua Virginia's most recent rate case, as follows (\$ in thousands):²⁰²

Component	Net Amount Outstanding	Weight	Cost Rate	Weighted Cost
Short-Term Debt	\$92,285	0.781%	3.12%	0.024%
Long-Term Debt	\$6,352,726	53.783%	3.77%	2.029%
Preferred Stock				
Common Equity	\$5,366,712	45.44%	9.30%	4.225%
Total Capitalization	\$11,811,723	100.004%		6.278%

As for Aqua Virginia's 2022 AIF, Ms. Lenahan stated Staff supports using Essential's five-quarter average capital structure and cost of capital as of March 31, 2022, as follows:²⁰³

Component	Net Amount Outstanding	Weight	Cost Rate	Weighted Cost
Short-Term Debt	\$74,808	0.687%	0.87%	0.006%
Long-Term Debt	\$5,773,772	53.012%	3.61%	1.915%
Preferred Stock				
Common Equity	\$5,042,914	46.301%	9.30%	4.306%
Total Capitalization	\$10,891,494	100.000%		6.227%

¹⁹⁹ *Id.* at 12-13.

²⁰⁰ *Id.* at 13.

²⁰¹ *Id.* at 14 (quoting Code § 56-235.2).

²⁰² *Id.* at 14 and Attached Statement 3.

²⁰³ *Id.* at 15 and Attached Statement 4.

Lastly, Ms. Lenahan addressed Aqua Virginia's Pine Brook and Brandywine water systems, which serve approximately 11 customers each.²⁰⁴ She explained Aqua North Carolina acquired these systems and still performs operational services for the systems, billing Aqua Virginia for this work. She stated Aqua Virginia bills the customers on these two systems even though their assets are not yet on Aqua Virginia's books. Ms. Lenahan testified Aqua Virginia seeks to recover costs associated with these systems through customers' rates. In Staff's view, this is inappropriate absent prior Commission approval under the Affiliates Act (Title 56, Chapter 4), the Utility Transfers Act (Title 56, Chapter 5), and the Utility Facilities Act (Title 56, Chapter 10.1).²⁰⁵ According to Ms. Lenahan, Aqua Virginia has been recording, on its own books, revenues and expenses related to Pine Brook and Brandywine since January 2022. She asserted the Company has been out of legal compliance for over two years and recommended the Commission require Aqua Virginia to obtain necessary approvals before the Company seeks recovery for these systems through rates.²⁰⁶

Cameron T. Hunt is a Utility Analyst with the Division of UAF. He testified as to ROE and responded to the testimony of Company witness D'Ascendis.²⁰⁷

Mr. Hunt recommended an ROE range of 9.0% to 10.0%, with a midpoint of 9.5% for rate-setting purposes. He noted this is a 100-basis-point increase from what Staff recommended in Aqua Virginia's 2020 Rate Case and is reflective of changes in economic conditions.²⁰⁸

Mr. Hunt developed his cost of equity results using three models: the DCF, CAPM, and a utility risk premium model. Since Aqua Virginia is not publicly traded, he developed a proxy group of the same companies that are in Mr. D'Ascendis' Utility Proxy Group.²⁰⁹ Mr. Hunt did not consider a proxy group of non-price regulated companies.²¹⁰

Mr. Hunt compared his cost of equity results and those of Mr. D'Ascendis, as follows:²¹¹

Category	Staff	Company
DCF Analysis	8.42%	8.89%
Risk Premium:		
Staff Study (Ex Ante)	9.70%	N/A
Company Models	N/A	11.53%
CAPM/Empirical CAPM ²¹²	10.50%	11.34%
Application of Market Models to Non-Regulated Companies	N/A	11.50%

²⁰⁴ *Id.* at 15 and Attached Appendix A, pp. 1, 3 (Aqua Virginia Responses to Staff Questions No. 65 and 78).

²⁰⁵ *Id.* at 16.

²⁰⁶ *Id.* at 16-17.

²⁰⁷ Ex. 30 (Hunt Direct) at 3.

²⁰⁸ *Id.* at 4-5.

²⁰⁹ *Id.* at 11-12 and Attached Statements 9 and 10.

²¹⁰ *Id.* at 12 n.9.

²¹¹ *Id.* at 13. *See also* Ex. 10 (D'Ascendis Direct) at 4 (Table 2).

²¹² Mr. Hunt noted Staff did not perform an Empirical CAPM analysis, and the Company's estimate in the table is the average of CAPM and Empirical CAPM. Ex. 30 (Hunt Direct) at 13.

Category	Staff	Company
Size Adjustment	N/A	0.25%
Flotation Cost Adjustment	N/A	0.05%
Recommended Ranges	9.0% - 10.0%	10.01% - 11.01%
Recommended ROEs	9.50%	10.50%

Mr. Hunt discussed the methodological differences between Staff and the Company. According to Mr. Hunt:²¹³

- 1) The Company used unreasonably high risk premiums in its Predictive RPM and adjusted total market approach, which inflates the cost of equity.
- 2) The Company's DCF analysis was founded on forecasted earnings per share growth only, an approach the Commission has rejected, which also inflated the cost of equity.
- 3) The Company relied on both CAPM and Empirical CAPM analyses. Staff believes the latter is redundant and inflates the cost of equity.
- 4) Staff rejected Aqua Virginia's 25-basis point adjustment for business risk.
- 5) Staff claimed Aqua Virginia's Non-Price Regulated Proxy Group has a different risk profile than a regulated company, upwardly biases the cost of equity estimate, and should be ignored. Mr. Hunt argued the Commission has rejected the use of such proxy groups before.

DCF Analysis. Mr. Hunt estimated the DCF growth rate range for each company in the Utility Proxy Group using: earnings per share, dividends per share, and percentage retained to common equity.²¹⁴ He noted the Commission previously rejected sole reliance on earnings per share growth rates and argued the Commission should continue doing so.²¹⁵ His DCF analysis for the Utility Proxy Group resulted in a range of 7.94% to 8.90%, with a midpoint of 8.42%.²¹⁶

Utility Risk Premium Analysis. Mr. Hunt compared interest rates during a study period to present-day rates to derive his current risk premium estimate of 5.12%. He then combined this premium with the October, November, and December 2023 average 30-year U.S. Treasury bond yield of 4.58%, to determine a utility cost of equity estimate of 9.70%.²¹⁷

Mr. Hunt then described his concerns with the Company's utility risk premium analysis, claiming the Predictive RPM model produces inconsistent and volatile results and claiming the Company's total market equity risk premium of 6.44% is upwardly biased.²¹⁸ He testified Aqua Virginia's final cost of equity estimate under this analysis only incorporates results of models that use projected interest rates. Mr. Hunt recommended the Commission reject, as it has done

²¹³ *Id.* at 13-14.

²¹⁴ *Id.* at 15. *See also id.* at Attached Statements 2-5.

²¹⁵ *Id.* at 16-17 (citing *Application of Virginia Electric and Power Company, For the determination of the fair rate of return on common equity pursuant to § 56-585.1:1 C of the Code of Virginia*, Case No. PUR-2019-00050, 2019 S.C.C. Ann. Rep. 400, 402, Final Order (Nov. 21, 2019) and *Application of Appalachian Power Company, For an increase in electric rates*, Case No. PUE-2006-00065, 2007 S.C.C. Ann. Rep. 321, 327, Final Order (May 15, 2007)).

²¹⁶ *Id.* at 5.

²¹⁷ *Id.* at 17. *See also id.* at Attached Appendix B.

²¹⁸ *Id.* at 18-20. *See also id.* at Attached Appendix C, pp. 1-5.

before, the use of projected interest rates and instead rely on a method like Staff's that uses recent actual interest rates.²¹⁹

CAPM Analysis. Mr. Hunt described his CAPM approach. His estimates for the Utility Proxy Group ranged from 9.60% to 11.39%, with an average estimate of 10.50%.²²⁰ Mr. Hunt discredited the Company's CAPM analysis as based on market risk premium measures that are upwardly biased.²²¹ He also rejected Aqua Virginia's Empirical CAPM analysis because it incorporates projected interest rates.²²²

Size Adjustment. Mr. Hunt disagreed that Aqua Virginia needs a size adjustment compared to the Utility Proxy Group average. He explained Aqua Virginia receives capital allocated from Essential and thus already receives the benefit of more attractively priced capital than it could obtain as a stand-alone company. He testified that in the past, the Commission has declined to approve a size adjustment for Aqua Virginia's ROE because Aqua Virginia receives financing from Essential. He observed Aqua Virginia has not demonstrated it has difficulty raising capital at reasonable rates.²²³

Non-Price Regulated Proxy Group. Mr. Hunt recommended the Commission reject the use of this proxy group. He contended the companies in this group have a less-comparable risk profile to Aqua Virginia than the Utility Proxy Group and claimed the Commission has elected not to give weight to an estimate based on a non-utility company group in the past.²²⁴

Independent Estimates. Mr. Hunt explained that he checked Staff's model results by considering independent sources that estimate the market cost of equity. He reported their estimates of the U.S. cost of equity capital are 9.45% and 10.26%.²²⁵ He averred these results validate Staff's determination of 9.0% to 10.0% for Aqua Virginia's cost of equity.²²⁶

Thomas P. Handley addressed: (1) jurisdictional and class cost of service ("CCOS") studies; (2) rate consolidation and rate design; (3) the impact a typical residential customer would experience from Aqua Virginia's proposed rate increase; (4) environmental justice; and (5) public comments and related water quality concerns.²²⁷

Jurisdictional and CCOS Studies. Mr. Handley explained that a CCOS study allocates and assigns costs to functional customer groups consistent with the incurrence of such costs. The study results function as a guide to apportion additional revenue for rate design purposes. He

²¹⁹ *Id.* at 21 (citing *Application of Washington Gas Light Company, For authority to increase existing rates and charges and to revise the terms and conditions applicable to gas service pursuant to § 56-237 of the Code of Virginia*, Case No. PUR-2018-00080, 2019 S.C.C. Ann. Rep. 199, 201 and n.28, Final Order (Dec. 20, 2019)).

²²⁰ *Id.* at 21 and Attached Statement 7. See also *id.* at Attached Appendix B, pp. 6-7.

²²¹ *Id.* at 21-22. See also *id.* at Attached Appendix C.

²²² *Id.* at 23.

²²³ *Id.* at 23-25 (citing *Application of Aqua Virginia, Inc., For an increase in rates*, Case No. PUE-2014-00045, 2016 S.C.C. Ann. Rep. 206, Final Order (Jan.7, 2016)).

²²⁴ *Id.* at 25-27 (citing *Application of Appalachian Power Company, For an increase in electric rates*, Case No. PUE-2006-00065, 2007 S.C.C. Ann. Rep. 321, 327, Final Order (May 15, 2007)).

²²⁵ *Id.* at 28. See also *id.* at Attached Appendix B, pp. 10-11, 62-74.

²²⁶ *Id.* at 28.

²²⁷ Ex. 28 (Handley Direct) at 1-2.

testified that Aqua Virginia filed two CCOS studies, one for water and one for wastewater, using the Base-Extra Capacity Method, consistent with the Company's CCOS studies for the 2020 Rate Case.²²⁸

Mr. Handley noted Aqua Virginia did not provide the rates of return on rate base for each customer rate class as part of the CCOS studies and recommended Aqua Virginia present these in its next rate case. He provided Staff's calculated rates of return for each rate class and provided each class's relative rate of return. His calculations generally showed that the residential class's relative rate of return is a bit under 100% (0.94 to 0.97) while the commercial class's relative rate of return is over 100% (1.57 to 3.08).²²⁹

Rate Consolidation and Rate Design Generally. Mr. Handley testified that in considering water rate design, Staff relied on general ratemaking principles in James Bonbright's *Principles of Utility Rates*, and also relied upon principles of rate continuity, gradualism, and the *2009 Consolidation Order*.²³⁰ He named the two concepts of rate consolidation: "(i) a uniformly applicable set of tariff prices for all water and wastewater customers; and (ii) a single cost of service, or revenue requirement, for water and wastewater service, respectively, that encompasses all systems."²³¹ He described how since the *2009 Consolidation Order*, Aqua Virginia has continued toward consolidated single tariff pricing for its water service.²³²

Pine Brook and Brandywine Rates. Mr. Handley discussed the Company's proposal to add Great Bay customers to group W0, and to create new group W3 for Brandywine and Pine Brook customers (a proposal to which Staff objected). He noted Aqua Virginia proposes to equalize the BFC between groups W1 and W2 and to narrow the spread between these two groups' volumetric rates.²³³

Mr. Handley explained Staff's concern with the Brandywine and Pine Brook systems, that Aqua Virginia has not transferred these systems' assets to its books and has not filed for Commission approvals to obtain title to the assets and begin serving customers. He averred that until Commission approvals have been obtained, the Commission should exclude these systems from the ratemaking process and not raise these customers' rates. He also raised a concern whether customers on these systems realize that Aqua Virginia's rates apply to them. He stated Staff does not recommend the Commission approve rate group W3 in this case.²³⁴

Water Rates and Rate Design. Mr. Handley provided the following summary chart of current and proposed BFC by water group for residential customers with meter sizes under one inch, a group that comprises over 97% of Aqua Virginia's customers:²³⁵

²²⁸ *Id.* at 4-5.

²²⁹ *Id.* at 5-7.

²³⁰ *Id.* at 7-8.

²³¹ *Id.* at 8-9.

²³² *Id.* at 9-10.

²³³ *Id.* at 11.

²³⁴ *Id.* at 12-14.

²³⁵ *Id.* at 13, including n.20.

Water Group	Present BFC	Proposed BFC	\$ Increase	% Increase
W0	\$25.00	\$38.00	\$13.00	52%
Great Bay W0	\$38.00	\$38.00	\$0.00	0%
W1	\$18.31	\$25.44	\$7.13	39%
W2	\$18.31	\$25.44	\$7.13	39%

He also provided the following summary chart of current and proposed volumetric rates, noting that group W0 includes a 3,000-gallon allowance, while there are no usage allowances for groups W1 and W2.²³⁶

Water Group	Present \$/Gal	Proposed \$/Gal	\$ Increase	% Increase
W0	\$5.96	\$8.58	\$2.62	44%
Great Bay W0	\$5.10	\$8.58	\$3.48	68%
W1	\$6.24	\$9.35	\$3.11	50%
W2	\$7.80	\$10.47	\$2.67	34%

Mr. Handley provided a detailed chart of residential bill impacts in an attachment to his testimony. An excerpt of that information is below and reflects Aqua Virginia's proposal to move the Great Bay systems, which have been on multiple flat rates, to the same flat rate.²³⁷

Water Group/System	Overall % Increase	# Customers
W0	50.81%	589
Great Bay W0 non-flat-rate	0 – 11.96%	333
Great Bay W0 flat rate	27.63 – 70.71%	206
W1	41.46%	6,124
W2	33.33%	19,827

Mr. Handley opined that while the volumetric rate increase for Great Bay customers appears significant, "it is consistent with the Commission's goal of moving towards a consolidated rate structure while balancing rate gradualism and continuity."²³⁸ He also explained this is the first rate case since the Commission approved the Great Bay merger and thus this is Aqua Virginia's proposal to incorporate Great Bay customers into its rate system.²³⁹

Mr. Handley concluded Staff does not oppose Aqua Virginia's proposed volumetric rates for groups W0, W1, and W2. He asked that if the Commission approves a revenue requirement different than Aqua Virginia has requested, the Commission also proportionately reduce the BFC and water usage rates to maintain the rate design methodology Aqua Virginia proposed.²⁴⁰

Wastewater Rates and Rate Design. Mr. Handley addressed wastewater rate design, explaining the Company currently has three wastewater groups, S1, S2, and S0. He explained Aqua Virginia does not propose to consolidate rate groups at this time, but its proposal moves

²³⁶ *Id.* at 14.

²³⁷ *Id.* at Attachment TPH-3, p. 1.

²³⁸ *Id.* at 16.

²³⁹ *Id.* at 15.

²⁴⁰ *Id.* at 16.

the groups closer to rate parity. He provided the following summaries of BFC and volumetric rates for the wastewater groups, noting that group S0 includes a 3,000 gallon minimum allowance while the other groups have no minimum usage allowances.²⁴¹

Wastewater Group	Present BFC	Proposed BFC	\$ Increase	% Increase
S0	\$47.90	\$60.00	\$12.10	25%
S1	\$32.36	\$38.50	\$6.14	19%
S2	\$32.36	\$38.50	\$6.14	19%
Flat rate (S1)	\$83.71	\$106.62	\$22.91	27%

Wastewater Group	Present \$/Gal	Proposed \$/Gal	\$ Increase	% Increase
S0	\$12.16	\$16.41	\$4.25	35%
S1	\$12.66	\$16.29	\$3.63	29%
S2	\$14.89	\$18.40	\$3.51	24%

Mr. Handley provided a more detailed chart of residential wastewater bill impacts in an attachment to his testimony. An excerpt of that information is below.²⁴²

Wastewater Group	Overall % Increase	# Customers
S0	25.26%	218
S1	24.40%	941
S2	21.46%	7,270
S1 flat rate	27.37%	158

Mr. Handley explained that the only flat rate wastewater system serves the Blacksburg Country Club, based on a 100% residential flat rate. Since customers of this system obtain water from private wells, Aqua Virginia has no usage date for them. Mr. Handley stated the proposed 27% increase for the S1 flat rate group brings the rate closer to that of the average metered group S1 customer, and Staff does not oppose this rate increase.²⁴³ He asked that if the Commission approves a revenue requirement different than Aqua Virginia has requested, the Commission also proportionately reduce the BFC and wastewater usage rates to maintain the rate design. He stated Staff recommends "no rate design movement between customer classes take place until the rates are fully consolidated."²⁴⁴

Base Facility Charge for Water and Wastewater Rates. Mr. Handley addressed Aqua Virginia's proposal to raise the BFC for water and wastewater to recover 43% and 41%, respectively, of the pro forma revenue requirements. He explained that the fixed charge portion of Aqua Virginia customers' bills was set at 40% through the 2009 Consolidation Order and has remained at that level. He averred Aqua Virginia has provided no compelling support for its request to increase fixed charge, and recommended the Commission keep the BFC at 40%.²⁴⁵

²⁴¹ *Id.* at 16-19.

²⁴² *Id.* at Attachment TPH-3, p. 2.

²⁴³ *Id.* at 19-20.

²⁴⁴ *Id.* at 20.

²⁴⁵ *Id.* at 20-22.

Other Rate Design Matters. Mr. Handley addressed Aqua Virginia's proposal to increase the water service connection fee from \$1,500 to \$2,500 and the wastewater service connection fee from \$3,500 to \$4,500. He stated that after reviewing the Company's documentation, Staff does not oppose these increases. He stated Staff also does not oppose the Company's proposed 33.9% increase for private fire protection rates.²⁴⁶

Environmental Justice. Mr. Handley reviewed the Company's claims that upgrading, repairing, or replacing facilities improves conditions for environmental justice communities that may be served by or proximately located to Company facilities. Mr. Handley mentioned the Company also explained that the siting of its facilities is limited by the communities Aqua Virginia serves, topographical requirements of facilities, and locations of easements and rights-of-way. He noted the Company also claimed its rates and proposals do not implicate the development or enforcement of environmental laws or policies and, to the extent the Company's proposals do implicate such, they treat environmental justice communities fairly by contributing to rate consolidation, promoting equitable concern for all customers in providing service, and ensuring no customer group bears a disproportionate share of negative consequences from upgrades or replacement of outdated infrastructure and facilities.²⁴⁷

Service Quality Concerns. Mr. Handley remarked that as of March 26, 2024, the Commission had received over 1,000 public comments, with a majority coming from customers of the Lake Monticello water and wastewater systems. In response to these comments and the respondent testimony filed by Fluvanna, Mr. Handley stated Staff requested information from Aqua Virginia. He reported Aqua Virginia appears to be compliant with the drinking water standards of the Virginia Department of Health – Office of Drinking Water.²⁴⁸

Mr. Handley referenced sewage spills that impacted Lake Monticello on July 14, August 7, August 27, and November 13, 2023. He also noted a sewage spill on October 19, 2023, impacting a tributary of the Rivanna River. He stated Aqua Virginia reported taking several measures in coordination with the Department of Environmental Quality ("DEQ") in light of these incidents, including: implementing SCADA systems at five lift stations, installing ten "smart" manhole covers, establishing a food grease trap inspection program, and submitting wastewater operations and maintenance information to DEQ.²⁴⁹ Mr. Handley testified that Aqua Virginia has not been fined or penalized for these spills and, to Staff's understanding, DEQ is not requiring the Company to take additional remedial measures. He recommended that if DEQ does require additional action, or if further spills occur, the Commission should require Aqua Virginia to provide an update on these issues in its next base rate case, including: date of spill,

²⁴⁶ *Id.* at 22-24. See also *id.* at Attachment TPH-5 for the Company's justification to increase connection fees.

²⁴⁷ *Id.* at 24-25 and Attachment TPH-6, pp. 1-2.

²⁴⁸ *Id.* at 25-26. During the hearing, Mr. Handley testified that the Commission's Division of PUR has received "very few formal complaints on Aqua over the past few years" and "about a hundred informal complaints over the past three-year period." Tr. at 177-78 (Handley).

²⁴⁹ Ex. 28 (Handley Direct) at 27 and Attachment TPH-8. DEQ sent Aqua Virginia a Notice of Violation dated January 4, 2024. *Id.* at Attachment TPH-7. Mr. Handley reported that, when asked about Aqua Virginia's response to this notice, Aqua Virginia indicated that "[b]y the time [Aqua Virginia] received the January 4, 2024 letter from DEQ, the Company had already completed actions necessary for compliance and remediation for the referenced events." *Id.* at 27 and Attachment TPH-8, p. 2.

cause of spill, corrective action taken, remediation costs, and DEQ's statement of satisfaction and compliance.²⁵⁰

Mr. Handley described several capital projects Aqua Virginia has undertaken since its 2020 Rate Case that could improve Aqua Virginia's service quality. These include installation of SCADA at multiple locations at Lake Monticello and on other systems, a new customer electronic portal, Lake Monticello wastewater system improvements to help Aqua Virginia better monitor flow and levels of sewer lines, and new generators.²⁵¹

Additional Recommendations. Mr. Handley requested the Commission direct that in its next rate case, Aqua Virginia provide details of a long-term plan, including a timeline, to complete rate consolidation.²⁵²

AQUA REBUTTAL TESTIMONY

On April 9, 2024, Aqua Virginia filed the rebuttal testimony of the following witnesses: **John J. Aulbach II, P.E., Richard F. Hale, Jr., Andrew J. Barnes, P.E., and Dylan W. D'Ascendis.**

John J. Aulbach II, P.E., responded to Fluvanna witness Diggs and to some issues Staff raised related to field operator vacancies, cash working capital, the Pine Brook and Brandywine exclusions, the Great Bay acquisition adjustment, and IT Assets.

Response to Staff's Testimony

Field Operator Vacancies. Mr. Aulbach objected to Staff's recommendation of a six-month duration for vacancies during the Rate Year, which Staff had made on the basis that the vacancies would likely be filled only for part of the Rate Year. Mr. Aulbach claimed Staff has not recommended staffing levels below 100% in the Company's previous three rate cases. He also noted two employees started work on March 11, 2024, and a third finished the hiring process on March 25, 2024. He concluded Staff's recommendation is not warranted.²⁵³

Cash Working Capital. Mr. Aulbach rejected Staff's recommendation to include \$0 in cash working capital since Aqua Virginia did not support its cash working capital request with a lead/lag study. He stated that to the extent necessary, the Company requests a waiver per Rate Case Rule 20 VAC 5-210-10. In support of his position, Mr. Aulbach argued the cash working capital rule is outdated, and there is a plan to update this rule for water utilities in the future. He asserted the Company only exceeds the \$20 million limit on a combined water and wastewater basis, and Staff could apply the rule individually to each part of the Company, the same way it conducts earnings tests. He claimed Staff's proposal penalizes Aqua Virginia.²⁵⁴

²⁵⁰ *Id.* at 28.

²⁵¹ *Id.* at 28-30 and Attachment TPH-9.

²⁵² *Id.* at 30.

²⁵³ Ex. 31 (Aulbach Rebuttal) at 3-4.

²⁵⁴ *Id.* at 5-6.

Pine Brook and Brandywine Exclusions. Mr. Aulbach objected to Staff's adjustment that removes the Pine Brook and Brandywine systems from Aqua Virginia's revenue requirement. He claimed the 2023 Rate Case is "an opportunity to document the arrangement regarding these systems that has existed between Aqua Virginia and its affiliate, Aqua North Carolina, and which is authorized by the Company's Affiliate Interest Agreement . . ." approved by the Commission most recently in 2023.²⁵⁵

Among other things, Mr. Aulbach testified that these two systems are approximately three hours distant from Aqua Virginia's resources, are close to the North Carolina border, and were conveyed to Aqua North Carolina in 2001. He claimed that recently the North Carolina Utilities Commission determined it is improper for Aqua North Carolina to include these systems in its rate base since they are not in North Carolina. Mr. Aulbach stated the systems were moved to Aqua Virginia's books as of January 31, 2024. He testified Aqua Virginia and Staff have discussed the filings needed to obtain Commission approval to transfer the systems' ownership to Aqua Virginia.²⁵⁶

Mr. Aulbach testified the Company has provided notice of the Application's proposed rate increases to customers on the Pine Brook and Brandywine systems and to local officials in Carroll County. He argued the most reasonable path is for the Commission to determine rates for Pine Brook and Brandywine in this case, and if the Commission so desires, it may order Aqua Virginia not to implement such rates until it approves the systems' transfer to Aqua Virginia.²⁵⁷

Great Bay Acquisition Adjustment. Mr. Aulbach stated he does not disagree with Staff's recommendation as to the Great Bay acquisition adjustment, but he does not agree with Staff's assertion that the Company's Wintergreen Stoney Creek acquisition is comparable to the Great Bay acquisition. For this position, he cites differences in Great Bay's ownership and regulatory treatment before Aqua Virginia purchased it.²⁵⁸

IT Assets. Mr. Aulbach disagreed with Staff's adjustment to treat IT Assets as an expense instead of an asset, which Mr. Aulbach argued would not allow the Company to receive full compensation of its investment. He noted Aqua Virginia is the only Aqua family subsidiary whose regulatory body treats its share of billing, customer service, and systems operations software as an expense, instead of as an asset that is capitalized and included in rate base. He claimed Staff's position – that Aqua Virginia's affiliate agreement did not provide for allocating Aqua Virginia's share of IT Assets – has been remedied with the Commission's most recent approval of the affiliate agreement.²⁵⁹

²⁵⁵ *Id.* at 6-7. See also 2023 Affiliate Approval Order.

²⁵⁶ Ex. 31 (Aulbach Rebuttal) at 6-9.

²⁵⁷ *Id.* at 6, 8-10.

²⁵⁸ *Id.* at 10.

²⁵⁹ *Id.* at 11-12. See also 2023 Affiliate Approval Order.

Response to Mr. Diggs' Testimony

As a preliminary matter, Mr. Aulbach noted Mr. Diggs stated he testifies on behalf of LMOA, though his testimony was filed by Fluvanna County. Mr. Aulbach asserted that in discovery, Fluvanna stated its participation in this case is on behalf of LMOA; he interpreted this to mean Fluvanna acknowledges Mr. Diggs does not represent other Fluvanna County residents. Mr. Aulbach also provided background on the regular meetings Aqua Virginia has with LMOA's water working group and with Fluvanna to share information on water and wastewater related matters. He also stated Aqua Virginia has donated to charities in the Lake Monticello area.²⁶⁰

Service Issues. Mr. Aulbach testified that in response to LMOA's complaints about sewage odor, the Company hired a consultant to conduct a study. He stated Aqua Virginia shared information with both the working group and LMOA, and discussed with LMOA "the appropriateness of a pilot study to evaluate equipment selection, costs, and effectiveness."²⁶¹ He stated Aqua Virginia will continue informing LMOA about this project. He also confirmed the consultant tested for odor at the wastewater treatment plant, and testified the Company has never received the odor complaint information customers submitted to a link on the LMOA website.²⁶²

As for water pressure issues, Mr. Aulbach responded that Aqua Virginia is compliant with the legal requirement to provide a minimum of 20 pounds per square inch ("psi") at service connections. He noted there is capital in the rate base for a water tower that will improve water pressure and enhance reliability of service during power outages.²⁶³

As for water quality, Mr. Aulbach testified he is aware of complaints, which are under review. Aqua Virginia will follow up with customers directly. He noted the water Aqua Virginia provides is compliant with the law and that Aqua Virginia recently received its 19th award, showing the Company exceeds Virginia Department of Health expectations.²⁶⁴ During the hearing, Mr. Aulbach clarified that two systems received awards: Lake Caroline received its first award, a bronze award, and Lake Monticello received its 19th award, a silver award. He explained these awards are tied to voluntary optimization, which he defined as "obtaining and achieving a higher degree of water quality than what I will say is the minimum standard within the Water Works Regulations."²⁶⁵ He also testified malodorous or discolored water could be caused by piping within a customer's home, which is not the Company's responsibility.²⁶⁶

Sewage Overflows. Mr. Aulbach acknowledged that five sewage overflows have occurred in the last two years. He testified the Company "is doing everything we can to

²⁶⁰ Ex. 31 (Aulbach Rebuttal) at 12-15.

²⁶¹ *Id.* at 15-16.

²⁶² *Id.* at 16. *See also* Ex. 26 (Diggs Direct) at 3 ("On April 20, 2023, the LMOA created a link for Lake Monticello residents to report odors from either the wastewater treatment facility or pump stations. As of January 2, 2024, there have been 332 reports of odor from this link." (Internal citation omitted.)).

²⁶³ Ex. 31 (Aulbach Rebuttal) at 17. Mr. Aulbach's testimony also mentioned an elevated water storage tank. During the hearing, he confirmed references to the water tower and storage tank are references to the same piece of infrastructure. Tr. at 153-54 (Aulbach).

²⁶⁴ Ex. 31 (Aulbach Rebuttal) at 17-18.

²⁶⁵ Tr. at 146-49 (Aulbach).

²⁶⁶ *Id.* at 162-63 (Aulbach).

proactively alleviate these in the future.”²⁶⁷ He stated LMOA is partnering with Aqua Virginia to conduct community education on causes of preventable clogs and blockages. Mr. Aulbach mentioned several actions the Company has taken in light of the sewage overflows, including: purchasing 40 pig booms, temporary containment vessels that limit the impact of overflows and corral clean-up to a smaller footprint; purchasing a hot jetter and trailer-mounted vacuum tank to provide for faster in-house response to overflows and to use in preventive maintenance; educating customers to reduce the placement of non-sewage items (wipes, mop heads, wood, grease, etc.) in sewage facilities; starting a grease trap inspection program; providing labels for grinder pumps that inform the reader to call Aqua Virginia if an alarm is flashing; completing some SCADA work and continuing with additional SCADA deployment; and installing several “smart” manhole covers.²⁶⁸

Response to Other Concerns. Mr. Aulbach also responded to multiple other portions of Mr. Diggs’ testimony. Mr. Aulbach testified that Aqua Virginia is well aware of its infrastructure in the LMOA area. He also apologized for sending a violation letter to LMOA concerning Tariff Rule 25, which he admitted was in error. As for the missing meter at the clubhouse and pool at The Villages at Nahor, Mr. Aulbach characterized this problem as the result of an unauthorized direct connection made by a contractor. Once the issue was identified, Aqua Virginia shut off service until the Company installed a meter. Mr. Aulbach stated that the Company is ineligible for a revolving loan from the Virginia Clean Water State Revolving Fund but is working to see if it may be eligible for financing from the Virginia Drinking Water State Revolving Fund to inventory lead service lines.²⁶⁹ During the hearing, he clarified the Company has filed an application for such financing and is awaiting a response.²⁷⁰

Mr. Aulbach responded to Mr. Diggs’ recommendations for changes to Aqua Virginia’s Tariff. Mr. Aulbach suggested many of the concerns (such as meter testing, irrigation meters, ownership of service line piping, and customer complaint procedures) could be addressed through the Company’s Lake Monticello webpage.²⁷¹

Mr. Aulbach discussed the Draper Arden Associates report and noted Fluvanna did not participate in the study that was the basis for that report. He disputed the conclusion, based on this report, that Aqua Virginia’s rates are 89% higher than the average Virginia rate. He opined that “an extremely small segment of utilities in Virginia” provided data for the report.²⁷² He also asserted LMOA’s analysis is based on the in-town rate for service, whereas the out-of-town rates, which aren’t propped up by municipal subsidies, are more similar to the true cost of service of publicly regulated utilities. He further faulted LMOA’s comparison for not considering connection fees and capital recovery charges, and he averred Fluvanna subsidizes several of its public utilities. Mr. Aulbach testified that “publicly regulated utilities do not have an even playing field with their public counterparts since our expenses are not equally subsidized from the county’s tax base.”²⁷³

²⁶⁷ Ex. 31 (Aulbach Rebuttal) at 18.

²⁶⁸ *Id.* at 18-21.

²⁶⁹ *Id.* at 21-23.

²⁷⁰ Tr. at 156 (Aulbach).

²⁷¹ Ex. 31 (Aulbach Rebuttal) at 24-25.

²⁷² *Id.* at 26.

²⁷³ *Id.* at 26-27.

In response to concerns about property values in Fluvanna, Mr. Aulbach asserted that discovery responses show property values across the county, including within Lake Monticello, have risen in the last five years, and homes in Lake Monticello sell within 19 days (as of February 2024).²⁷⁴

Richard H. Hale, Jr., addressed Staff's testimony concerning Aqua Virginia's revenues, rate base, and operating expenses, as well as Staff's position on rate design and Aqua Virginia's class cost of service study.²⁷⁵ He provided the following summary chart reflecting the major differences between Aqua Virginia and Staff:²⁷⁶

	Water (\$)	Sewer (\$)	Total (\$)
Staff's Revenue Requirement	4,699,587	594,325	5,293,912
Correction to Staff's revenue increase	\$(267,772)	\$(106,095)	\$(373,867)
ROE (move back to 10.50%)	\$520,770	\$259,986	\$780,756
Use a 3-year average for capitalized labor percentage	\$300,714	\$113,222	\$413,936
Restore employee vacancies	\$78,195	\$29,441	\$107,636
Add position for Manager of Rates and Planning	\$75,999	\$28,614	\$104,613
Capitalize IT Assets	\$306,009	\$76,814	\$382,823
Remove Contributions in Aid of Construction	\$45,176	\$33,312	\$78,488
Normalize regulatory expense over two years for base case	\$57,472	\$14,427	\$71,898
Restore working capital	\$106,113	\$29,633	\$135,746
Company Rebuttal Supported Increase	\$5,922,262	\$1,073,679	\$6,995,941
Company Rebuttal Requested Increase	\$5,214,892	\$1,073,679	\$6,288,571

Revenue Issues. Mr. Hale testified that Staff's and the Company's positions are \$1.99 million apart; Aqua Virginia's revenue requirement is \$30,347,704, while Staff's revenue requirement is \$28,356,737. He averred Staff's statement that its revenue requirement is \$1.62 million less than Aqua Virginia's is only accurate because Staff includes all WWISC-related revenues, while Aqua Virginia does not. Mr. Hale also disagreed with Staff's operating revenue calculations. He claimed Staff failed to adjust Other Operating Revenues – late fees. He stated Aqua Virginia agrees with Staff's adjustments to reflect Rate Year sales revenue and with Staff's adjustments to availability revenue.²⁷⁷

²⁷⁴ *Id.* at 27-28.

²⁷⁵ Ex. 33 (Hale Rebuttal) at 1.

²⁷⁶ *Id.* at 2-3.

²⁷⁷ *Id.* at 3-5.

Operating Expense Adjustments

Employee-related Adjustments. Mr. Hale disagreed with Staff's adjustment to vacancies for three facility operators. He asserted that though the Company may have vacancies at times, at other times it may have overlapping employees to provide a smooth transition. He claimed it could be hard for the Company to hire a full complement of employees if the Company's revenue requirement is cut. Similarly, Mr. Hale disagreed with Staff's adjustment to payroll to include a lower headcount. He emphasized the three positions are not for new employees and stated all three positions had been filed as of March 2024, the second month of the Rate Year.²⁷⁸

Mr. Hale also disagreed with Staff's use of a capitalization ratio based on the 12 months ended September 30, 2023. He asserted Staff has typically used a three-year average of labor capitalization percentages in prior Aqua Virginia base rate cases. He referred to the testimony of Staff witness Weatherford in the 2020 Rate Case, wherein that Staff witness stated, "The purpose of utilizing a three-year average is to establish, on average, how much labor will be capitalized on a going-forward basis."²⁷⁹ Mr. Hale disagreed with Staff's justification for the change to one 12-month period, noting, among other things, that 2021 and 2022 spending were less than 2020. In summary, he asserted the Commission should approve the restoration of the full complement of employees, approve the plan for a new regulatory manager position, and use a three-year average capitalized labor percentage.²⁸⁰

Regulatory Expense. Mr. Hale stated Aqua Virginia will accept Staff's proposed three-year normalization of regulatory costs except those associated with base rate cases, since the Company intends to file its next base rate case in two years (2025). Should the Commission not adopt Aqua Virginia's proposed two-year normalization period, Mr. Hale requested the Commission recognize the base rate case costs as a regulatory asset for ratemaking purposes.²⁸¹

Great Bay Acquisition Adjustment. Mr. Hale testified that Aqua Virginia does not oppose Staff's Great Bay acquisition adjustment.²⁸²

Rate Base Adjustments

Plant Held for Future Use. Mr. Hale stated Staff indicated it included \$100,000 of Wintergreen sewer Plant Held for Future Use in rate base. Mr. Hale stated he could not confirm this statement and added that if Staff has not added the \$100,000 to rate base, such an adjustment should be made for the final determination of rate base.²⁸³

Contributions in Aid of Construction. Mr. Hale did not object to Staff's use of projected Contributions in Aid of Construction but asserted a Utility Plant in Service asset should offset the Contributions in Aid of Construction liability, and the Utility Plant in Service depreciation

²⁷⁸ *Id.* at 5-6.

²⁷⁹ *Id.* at 6-7.

²⁸⁰ *Id.* at 7-11.

²⁸¹ *Id.* at 11-12.

²⁸² *Id.* at 12.

²⁸³ *Id.*

should offset the Contributions in Aid of Construction amortization. He proposed to add \$848,000 to Utility Plant in Service, as well as associated depreciation and property tax expense. As an alternative, he offered to remove Staff's Contributions in Aid of Construction and Contributions in Aid of Construction amortization adjustments.²⁸⁴

Cash Working Capital. In accordance with Mr. Aulbach's testimony, Mr. Hale calculated a cash working capital balance at 1/9 of adjusted O&M expenses.²⁸⁵

Areas of Agreement or Non-objection

Mr. Hale stated Aqua Virginia either agrees or does not object to the following: Staff's analysis or allocations in the earnings test; Staff's position and booking recommendations on WWISC deferral entries; and Staff's recommendations to report, in the next rate case, on PFAS cost tracking and shared services. Mr. Hale also committed that in the next base rate case, Aqua Virginia will: provide additional explanation about Schedule 25 adjustments; provide a class cost of service study showing the rates of return on rate base for each rate class based on current and proposed rates; provide a detailed plan to progress to a fully consolidated rate structure; and provide an update on future sewer spill incidents.²⁸⁶

Mr. Hale also did not object to Staff witness Handley's recommendations and accepted the use of 40% (as opposed to 41% or 43%) as the percentage of revenues to be recovered through the BFC. Mr. Hale noted that recovering 40% of revenues through the BFC would result in corresponding increases to volumetric rates. He stated Aqua Virginia also agrees to adjust rates if the Commission approves revenue requirements that differ from what the Company originally requested. While Mr. Hale did not agree with Staff's methodology to arrive at its recommended capital structure, Mr. Hale did agree with the outcome and use of Staff's capital structure.²⁸⁷

Response to Mr. Diggs' Affiliate Concerns

Mr. Hale explained that through the Affiliated Interest Services Agreement, Aqua Services provides Aqua Virginia with certain services and resources. He averred that if Aqua Virginia had to provide these services for itself, its revenue requirement would significantly increase, leading to higher rates. He also testified the Company complied with a Commission directive to provide a study of affiliate charges in the 2023 Rate Case. He asserted Staff reviewed the study and "found no evidence of unreasonable process or allocation methodologies."²⁸⁸

Andrew J. Barnes, P.E., addressed Staff's Utility Plant in Service and Construction Work in Progress adjustments. Mr. Barnes averred that Staff overstated the amount of over-forecasted capital as of February 14, 2024. He also asserted Aqua Virginia's capital projects are

²⁸⁴ *Id.* at 13.

²⁸⁵ *Id.*

²⁸⁶ *Id.* at 13-14, 16.

²⁸⁷ *Id.* at 15-16.

²⁸⁸ *Id.* at 17-19.

on schedule in relation to the end of the Rate Year. Though he did not agree with Staff witness Morgan's conclusions, Mr. Barnes stated Aqua Virginia does not object to Staff's Utility Plant in Service adjustments and therefore accepts the computations of \$131,872,031 for water and \$78,554,264 for wastewater as shown in Staff's Statement II, Rate Base Statement – Adjusted Going Forward Analysis. Similarly, he stated Aqua Virginia does not entirely agree with Staff's Construction Work in Progress related conclusions, but Aqua Virginia does not oppose Staff's adjustments and therefore accepts Staff's Construction Work in Progress computations of \$5,269,123 for water and \$1,577,484 for wastewater, as presented in Staff's Statement II, Rate Base Statement – Adjusted Going Forward Analysis.²⁸⁹

Dylan W. D'Ascendis updated his analytical results and responded to the testimony of other witnesses as to capital structure and ROE.²⁹⁰

Mr. D'Ascendis stated he accepts Ms. Lenahan's recommended capital structure of: 47.87% long-term debt and 52.13% common equity. He also accepted Staff's long-term debt cost rate of 4.246%.²⁹¹

Mr. D'Ascendis updated his analyses as of March 15, 2024. His results are as follows:²⁹²

Category	Projected Interest Rates	Current Interest Rates
DCF Model	8.99%	8.99%
Risk Premium Model	11.53%	11.53%
Capital Asset Pricing Model	11.78%	11.81%
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	11.65%	11.64%
Indicated Range	9.89% - 10.89%	9.90% - 10.90%
Business Risk Adjustment	0.25%	0.25%
Flotation Cost Adjustment	0.07%	0.07%
Recommended Range	10.20% - 11.20%	10.22% - 11.22%
Recommended ROE	10.50%	

Response to Staff Witness Hunt

In response to Mr. Hunt's complaint that Mr. D'Ascendis only considered projected interest rates, Mr. D'Ascendis stated that using current interest rates, his analyses revealed an indicated ROE range of 9.97% to 10.97%. He claimed that there is no meaningful difference between the use of projected or current interest rates.²⁹³

Though Mr. D'Ascendis generally agreed with Mr. Hunt's statements about current capital market conditions, he argued these facts indicate Mr. Hunt's current ROE

²⁸⁹ Ex. 32 (Barnes Rebuttal) at 2-3.

²⁹⁰ Ex. 34 (D'Ascendis Rebuttal) at 3.

²⁹¹ *Id.*

²⁹² *Id.* at 5.

²⁹³ *Id.* at 5-6.

recommendation is too low.²⁹⁴ As to the situation of short-term borrowing rates being higher than long-term rates, Mr. D'Ascendis asserted investors view this situation as a predictor of recession, meaning the market contains an elevated risk level for which investors expect compensation. He also panned Mr. Hunt's claim that Staff's recommended ROE is 100 basis points higher than Staff's recommendation in the 2020 Rate Case and asserted Mr. Hunt's analysis, which uses data from October 6, 2023, is already outdated.²⁹⁵

Discounted Cash Flow Analysis. Mr. D'Ascendis took issue with several aspects of Mr. Hunt's DCF analysis. Among other things, Mr. D'Ascendis asserted it is unclear how much weight Mr. Hunt gave to the three measures he used to estimate expected growth in his DCF model: projected earnings per share, dividends per share, and earnings retention growth rate. Mr. D'Ascendis objected to Mr. Hunt's use of the projected dividends per share growth rate since there is little to no market for such data, whereas earnings per share growth rates are widely accessible to investors.²⁹⁶ Mr. D'Ascendis also faulted Mr. Hunt for using the retention growth rate in his DCF model. He claimed, in particular, that the retention growth rate relies on a faulty assumption that increasing retention ratios are associated with increasing future growth, when this is not necessarily the case.²⁹⁷ Mr. D'Ascendis argued Staff witness Hunt should rely only on earnings per share growth rates in his DCF model. He recalculated Mr. Hunt's DCF model for the Utility Proxy Group using only projected earnings per share growth rates. Mr. D'Ascendis determined that results range from 6.91% to 11.07%, with a mean equity cost rate of 8.81%, a median of 8.68%, and the average of the mean and median being 8.75%.²⁹⁸

Risk Premium Model. Mr. D'Ascendis faulted Staff witness Hunt's RPM as being based on an outdated study applicable to electric utilities, not water utilities, which Mr. D'Ascendis argued have their own unique risks. Mr. D'Ascendis recalculated Mr. Hunt's RPM using an ex ante risk premium analysis of fully litigated ROEs for water utilities, deriving an ex ante result of 9.94% (in place of Mr. Hunt's 9.70%).²⁹⁹

Capital Asset Pricing Model. Mr. D'Ascendis testified Mr. Hunt's application of CAPM understates the common equity cost rate because Mr. Hunt did not consider forward-looking equity risk premiums or perform an Empirical CAPM analysis. Mr. D'Ascendis recalculated Mr. Hunt's CAPM, incorporating a second equity risk premium and an Empirical CAPM analysis. He averaged the CAPM and Empirical CAPM cost rates and determined modified CAPM results for Staff. The Utility Proxy Group's cost rates averaged between 10.04% and 11.99%, with a mean of 10.85%, a median of 10.69%, and a mean/median average of 10.77%.³⁰⁰

Other Areas of Disagreement. Mr. D'Ascendis continued to argue for both a size risk adjustment and an adjustment for flotation costs.³⁰¹ He dismissed Staff witness Hunt's

²⁹⁴ *Id.* at 6-8 (referencing *Application of Virginia-American Water Company, For an increase in rates*, Case No. PUE-2010-00001, 2011 S.C.C. Ann. Rep. 316, 318, Order (July 29, 2011)).

²⁹⁵ *Id.* at 8-9.

²⁹⁶ *Id.* at 10-12.

²⁹⁷ *Id.* at 12-17.

²⁹⁸ *Id.* at 17-25 and Rebuttal Schedule DWD-4.

²⁹⁹ *Id.* at 25-27 and Rebuttal Schedule DWD-5.

³⁰⁰ *Id.* at 27-34 and Rebuttal Schedule DWD-6.

³⁰¹ *Id.* at 34-38.

reasonableness check, claiming it is based on an internal inconsistency in that the study Mr. Hunt relied on is based on a geometric mean return, while his own risk premium is based on an arithmetic mean.³⁰² Mr. D'Ascendis disagreed with the claim that some of his estimates are high, noting his average market risk premia between 9.26% and 9.31% occurred about half the time between 1926 and 2023.³⁰³

Mr. D'Ascendis argued his Predictive RPM results are neither volatile nor inconsistent, having shown consistency over the last five years. He disagreed that the Predictive RPM is a proprietary model, noting there is at least one free downloadable software option. He also stated the Predictive RPM has been peer-reviewed, having appeared several times in academically peer-reviewed journals as well as textbooks.³⁰⁴

Mr. D'Ascendis also disagreed with Mr. Hunt's assertion that the companies in the Non-Price Regulated Proxy Group are of higher risk than those in the Utility Proxy Group. He contended the two groups are comparable in risk based on multiple factors, including their collective average betas and standard errors of regression, Value Line Safety Ranking, five-year stock price volatility, and five-year Coefficient of Variation of net profit. He urged the Commission to consider the results of his Non-Price Regulated Proxy Group when determining Aqua Virginia's ROE.³⁰⁵

Response to Fluvanna Witness Diggs

Mr. D'Ascendis' disagreed with the recommendation for an ROE of 0.00%, claiming it violates the regulatory compact and could harm the Company's ability to procure capital to meet customers' needs. He also contested the idea that Aqua Virginia is highly profitable, noting the Company earns less than its authorized ROE.³⁰⁶

Mr. D'Ascendis also defended his Utility Proxy Group selection. He expounded on his selection criteria and argued limiting the Utility Proxy Group based on size would have resulted in too small of a group and would have inserted subjectivity into the process.³⁰⁷

Mr. D'Ascendis maintained it was proper for him to include Essential within the Utility Proxy Group. He explained the regulatory "stand-alone" principle means a utility that is part of a larger company should be regulated as if it were independent. He calculated Aqua Virginia's rate base and customer base are "immaterial" figures "compared to the entirety of Essential," and concluded it is unlikely any decision in this case would impact Essential's market data.³⁰⁸

³⁰² *Id.* at 38.

³⁰³ *Id.* at 41-42.

³⁰⁴ *Id.* at 45-49.

³⁰⁵ *Id.* at 50-52.

³⁰⁶ *Id.* at 52-55. For the recommendation of a 0.00% ROE, see Ex. 26 (Diggs Direct) at 23 ("The LMOA Board asks the SCC to deny Aqua Virginia's proposed rate increase, including any rate of return on its cost of common equity because this appears to be a case where its requested rate of return - or any rate of return - is just too high.").

³⁰⁷ Ex. 34 (D'Ascendis Rebuttal) at 55-58.

³⁰⁸ *Id.* at 58-59.

Mr. D'Ascendis panned the characterization of water utility stocks as "safe harbor" stocks, determining that during both the COVID-19 recession (January – April 2020) and the recession of December 2007 through June 2009, the stock of the Utility Proxy Group "traded in tandem with market indices."³⁰⁹ Mr. D'Ascendis further averred that since January 1, 2020, the Utility Proxy Group has performed worse and has shown more volatility than the S&P 500.³¹⁰

Finally, Mr. D'Ascendis posited that Aqua Virginia's below-market debt is already considered in the Company capital structure and is reflected in the revenue requirement.³¹¹

STIPULATION

On April 26, 2024, the Company and Staff ("Stipulating Parties") filed, in both the 2022 AIF and the 2023 Rate Case, a Stipulation of Settlement ("Stipulation") along with the Joint Motion. The Joint Motion represented that Consumer Counsel and the Participating Counties, "do not sign but take no position regarding this Stipulation."³¹² During the hearing, Consumer Counsel modified its stance by stating it "reluctantly" did not oppose the Stipulation.³¹³

The Stipulating Parties requested "the Hearing Examiner accept and recommend approval of this Stipulation and that the Commission adopt the Stipulation as a full and fair resolution of the Company's Application and the issues presented in this proceeding."³¹⁴

The Stipulating Parties agreed Aqua Virginia's Application, including schedules and workpapers, and all prefiled testimony of Aqua Virginia, Staff, and Fluvanna will be made part of the record without cross-examination.³¹⁵ The Stipulation reads:³¹⁶

- 1) Revenue Requirement: A rate increase that would produce additional annual jurisdictional revenues of \$5.49 million (\$4.83 million for water and \$0.66 million for wastewater), including the roll-in of Water and Wastewater Infrastructure Service Charge ("WWISC") revenues. Rates will be designed to recover \$28.55 million (\$19.95 million for water and \$8.60 million for wastewater) of total operating revenues beginning February 5, 2024, using the billing rates identified in

³⁰⁹ *Id.* at 60-61.

³¹⁰ *Id.* at 61-62 and Rebuttal Schedule DWD-12.

³¹¹ *Id.* at 63.

³¹² Joint Motion at 2.

³¹³ Tr. at 200 (Browder, for Consumer Counsel) ("[W]e are satisfied that the Stipulation represents a reasonable sort of best-case outcome. . . . [W]e wish there were no increases, but the increases that are reflected there are not much above the Staff's litigat[ed] position. So in view of that, we again . . . sort of reluctantly . . . do not oppose the Stipulation."). Consumer Counsel urged the Commission and Staff to continue paying close attention to the service quality issues raised in the case. *Id.* at 200-01 (Browder, for Consumer Counsel).

³¹⁴ Joint Motion at 3.

³¹⁵ Ex. 35 (Stipulation) at 1-2. During the hearing, Company witnesses Aulbach and Hale and Staff witness Handley took the stand to address certain questions from the Hearing Examiner, and to answer follow-up questions from attorneys in the case related to those questions.

³¹⁶ Ex. 35 (Stipulation) at 2-5.

paragraph (8). This represents a settlement as to a specific revenue number but not as to a specific ROE, specific accounting adjustments, or specific ratemaking methodologies at issue unless otherwise set forth herein.

- 2) Earnings Test: The results of the earnings test for the year ended March 31, 2022, demonstrate that the Company's earned return on equity ("ROE") was 9.09% for the water operation and 10.88% for the wastewaters operation. The Company will write off its remaining wastewater COVID-19 deferral of \$28,352 as of March 31, 2022, and such amount will not be recovered from customers in rates. The results of the earnings test for the year ended March 31, 2023, demonstrate that the Company's earned ROE was 3.97% for the water operation and 8.32% for the wastewater operation. No further action is required as a result of the earnings test for the period ending March 31, 2023.
- 3) Capital Structure: For future cases and earnings tests requiring a capital structure and cost of capital, until such time as Aqua [Virginia] files its next base rate case, the Stipulating Participants agree to a 9.7% ROE and the following actual capital structure and cost of capital:

Component	Net Amount Outstanding (in Thousands)	Weight	Cost Rate	Weighted Cost
Long Term Debt	\$46,519	47.87%	4.246%	2.033%
Common Equity	\$50,661	52.13%	9.70%	5.057%
Total Capitalization	\$97,179	100.0%		7.09%

- 4) Great Bay: Great Bay Utilities, Inc., is merged into Aqua Virginia for bookkeeping and ratemaking purposes. However, Aqua Virginia will only include half of its Great Bay gross acquisition adjustment (\$122,000) in rate base in future proceedings. The remaining \$122,000 will not be recovered from customers.
- 5) WWISC: To the extent Aqua Virginia has an authorized WWISC Plan in the future, Aqua Virginia will record the booking of revenues as incurred and will record deferred expense to match the revenues related into its WWISC deferral.

- 6) Per and Polyfluorinated Substances ("PFAS"): Aqua Virginia will track and defer any proceeds resulting from class action, other lawsuits, and/or any other pre or post litigation settlements and continue to track and defer all costs associated with Per and Polyfluorinated Substances ("PFAS"). In Aqua Virginia's next base rate case, it will provide (1) a written narrative on how PFAS regulations have impacted the Company; and (2) quantify the costs and lawsuit proceeds included in the test period and rate year proposed in that application.
- 7) Revenue Apportionment: The rates established in this proceeding will be calculated using the revenue apportionment identified in Attachment A, and the revenue requirement specified in Paragraph (1). The rates set forth on Attachment A to the Stipulation should be approved by the Commission and implemented by the Company effective February 5, 2024.
- 8) Rate Design: The final rates will be developed as shown in Attachment A. The final base facilities charges will be calculated to recover 40% of pro forma revenues as recommended on page 22 of the direct testimony of Staff witness Thomas P. Handley. Illustrative calculations of the impact on average monthly customer bills by water and wastewater group are shown in Attachment B.
- 9) Brandywine and Pine Brook: The final rates approved by the Commission in this case will not be billed to Brandywine and Pine Brook customers. The Company will file applications for these systems for approval under Chapters 4, 5, and 10.1, with the Commission, by July 1, 2024.
- 10) Class Cost of Service (CCOS) Study: In its next base rate proceeding, the Company will provide the rate of return on rate base for each water and wastewater customer class on a fully adjusted basis, based both on going-level revenues (*i.e.*, prior to any proposed revenue increase) and proposed revenues (*i.e.*, including the proposed revenues), by customer class.
- 11) Quality and/or Customer Service Complaints: Aqua Virginia will provide Staff with a report consisting of all correspondence and any documents pertaining to the resolution of each water quality and/or water/wastewater service complaint from customers. This report will be

provided to the Division of Public Utility Regulation no later than six months after the issuance of the final order in this proceeding.

- 12) DEQ Compliance: Should DEQ require further action by Aqua Virginia in response to sewage spillage events at Lake Monticello, or should additional spillages occur in the future, then Aqua Virginia will provide an update on these matters in its next base rate proceeding. Any such update will include dates of spillage, cause(s) of spillage, corrective action taken, actual and projected costs (if applicable) of remediation, and a final DEQ statement of satisfaction and compliance.
- 13) Rate Consolidation: In its next base rate application, the Company will include a detailed plan on its progression to a fully consolidated rate structure pursuant to the final order in Case No. PUE-2009-00059.
- 14) Activation Fees: The Company will increase its water and wastewater activation fees to \$2,500 and \$4,500, respectively.

The Stipulation stated it represents a compromise, for settlement only, and is not to be considered precedent for any ratemaking or other principle in a future rate case. The Stipulating Parties also represented that their consent and signature to the Stipulation does not indicate they “necessarily agree or disagree with the treatment of any particular item, any procedure followed, or the resolution of any particular issues in this case other than as specified herein, except that the Stipulating Parties agree that the resolution of the issues herein, taken as a whole, and the disposition of all other matters set forth in the Stipulation, are in the public interest.”³¹⁷

The Stipulation stated it is conditioned upon, and subject to, the Commission’s acceptance, “and is non-severable and of no force or effect and may not be used for any other purpose unless accepted in its entirety by the Commission.”³¹⁸

Finally, the Stipulation included the following provision:³¹⁹

Should the Hearing Examiner not recommend acceptance of this Stipulation in whole or in part, or if the Commission does not accept and does not adopt the terms of the Stipulation in their entirety, each of the Stipulating Parties retains the right to terminate and rescind its agreement hereto. In the event of an action by the Hearing Examiner or the Commission to modify the terms of the Stipulation, the Stipulating Parties may, by joint written consent, elect to modify the Stipulation to address the

³¹⁷ *Id.* at 5.

³¹⁸ *Id.*

³¹⁹ *Id.*

issues raised by the Commission or the Hearing Examiner. Should the Stipulation be terminated by any of the Stipulating Parties, it shall be considered void and the Stipulating Parties shall have the right to participate fully in all relevant proceedings in this matter notwithstanding their previous agreement on the terms of the Stipulation.

During the hearing, Staff noted it has no objection to the addition of proposed language to the Company's Tariff stating, with regard to certain systems, that "connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection."³²⁰ An addendum to the Stipulation reflecting agreement on this and other slight changes was incorporated in a late-filed exhibit.³²¹ A copy of the Stipulation with Attachment A, revised Attachment B, and the addendum is attached to this Report.

CODE

The Application was filed pursuant to Title 56, Chapter 10 of the Code. Section 56-234 A of the Code provides the overall standard for rates and service of public utilities regulated under Chapter 10: "It shall be the duty of every public utility to furnish reasonably adequate service and facilities at reasonable and just rates to any person, firm or corporation along its lines desiring same." Additionally, pursuant to Code § 56-234 B, "It shall be the duty of every public utility to charge uniformly therefor all persons, corporations or municipal corporations using such service under like conditions."

More specifically as to rate cases, Code § 56-235 reads:

If upon investigation the rates, tolls, charges, schedules, or joint rates of any public utility operating in this Commonwealth shall be found to be unjust, unreasonable, insufficient or unjustly discriminatory or to be preferential or otherwise in violation of any of the provisions of law, the State Corporation Commission shall have power to fix and order substituted therefor such rate or rates, tolls, charges or schedules as shall be just and reasonable. All rates, tolls, charges or schedules set by the Commission shall be valid only if they are in full conformance with the provisions of this chapter.

³²⁰ Ex. 5 (Application) at Filing Schedule 41, p. 40; Tr. at 187-88 (Cole, for Staff).

³²¹ See Late-filed Ex. 38. Revised Attachment B amends a rate group designation. See Tr. at 184 (Hale). The Stipulation Addendum incorporates changes to Filing Schedule 41 on which Staff and the Company agreed (including language pertaining to pre-paid connection fees, reflecting a WWISC charge of \$0, and updating certain dates to which charges are applicable).

Code § 56-235.2 A instructs:

A. Any rate, toll, charge or schedule of any public utility operating in this Commonwealth shall be considered to be just and reasonable only if: (1) the public utility has demonstrated that such rates, tolls, charges or schedules in the aggregate provide revenues not in excess of the aggregate actual costs incurred by the public utility in serving customers within the jurisdiction of the Commission, including such normalization for nonrecurring costs and annualized adjustments for future costs as the Commission finds reasonably can be predicted to occur during the rate year, and a fair return on the public utility's rate base used to serve those jurisdictional customers, . . . and (2) the public utility has demonstrated that such rates, tolls, charges or schedules contain reasonable classifications of customers. . . . In determining costs of service, the Commission may use the test year method of estimating revenue needs. . . .

This is the first Aqua Virginia application to be filed since the addition of the following language to Code § 56-235.2 A:³²²

In any ratemaking proceeding for an investor-owned utility authorized to furnish water or water and sewer service initiated after January 1, 2022, the Commission shall evaluate such utility on a stand-alone basis and, for purposes of establishing any revenue requirement and rates, utilize such utility's actual end-of-test period capital structure and cost of capital without regard to the cost of capital, capital structure, or investments of any other entities with which such utility may be affiliated, unless the Commission finds based on evidence in the record that the debt to equity ratio of the actual end-of-test period capital structure of such utility is unreasonable, in which case the Commission may utilize a debt to equity ratio that it finds to be reasonable. In all proceedings initiated after January 1, 2022, in which the Commission reviews the rates and associated earnings of an investor-owned utility authorized to furnish water or water and sewer service, the Commission shall conduct such review utilizing the same cost of capital and capital structure adopted in the utility's most recent rate case in which such rates were set, without regard to any later changes in the cost of capital or capital structure.

³²² The language was added by 2022 Va. Acts chs. 581, 582.

Fluvanna County witness Diggs suggested several changes to the Company's rules of service. In this regard, Code § 56-236 A provides:

Unless the Commission determines otherwise, every public utility shall be required to file with the Commission and to keep open to public inspection schedules showing rates and charges, either for itself, or joint rates and charges between itself and any other public utility. Every public utility shall file with, and as a part of, such schedules, copies of all rules and regulations that in any manner affect the rates charged or to be charged.

2022 AIF CASE DISCUSSION

For purposes of reporting the Company's earnings for the test period ended March 31, 2022, the Company filed its 2022 AIF.³²³ Staff thereafter reviewed the Company's filing.³²⁴

In the proposed Stipulation, the Stipulating Parties agreed, for settlement purposes, that:³²⁵

The results of the earnings test for the year ended March 31, 2022, demonstrate that the Company's earned return on equity ("ROE") was 9.09% for the water operation and 10.88% for the wastewater operation. The Company will write off its remaining wastewater COVID-19 deferral of \$28,352 as of March 31, 2022, and such amount will not be recovered from customers in rates.

The only respondent in the 2022 AIF Case was Consumer Counsel. During the hearing, Consumer Counsel represented that it is satisfied with the terms in the Stipulation pertaining to the 2022 AIF.³²⁶

I conclude this agreement represents a reasonable resolution of the 2022 AIF Case and recommend the Commission adopt this provision of the Stipulation.

2023 RATE CASE DISCUSSION

The Stipulation represents an agreement between Aqua Virginia and Staff and was not opposed by Consumer Counsel. The Participating Counties took no position on the Stipulation. The Stipulation is comprehensive and offers a reasonable and just resolution to the issues raised in this case, though I do make additional recommendations below, for the Commission's consideration, concerning a few tariff-related issues, and quality and service complaints. As the

³²³ Ex. 4 (2022 AIF).

³²⁴ Ex. 8 (Lenahan Direct); Ex. 9 (Morgan Direct).

³²⁵ Ex. 11 (Stipulation) at 3, ¶ 2.

³²⁶ Tr. at 194-95 (Bartley, for Consumer Counsel).

prefiled testimony reflects, this case contained many complex issues. Among other things, the Stipulation:

- Approves an increase in water and wastewater rates that is less than Aqua Virginia requested;
- Approves a capital structure with an ROE of 9.7%;
- Incorporates Staff's capital structure (with the modified ROE of 9.7% instead of 9.5%), which capital structure complies with Code § 56-235.2;
- Rolls WWISC water and wastewater charges into base rates;
- Resolves revenue apportionment and rate design issues;
- Proposes that only half of the Company's Great Bay acquisition adjustment will be included in rate base in future proceedings;
- Requires Aqua Virginia to file by July 1, 2024, applications related to the Brandywine and Pine Brook systems;
- Requires Aqua Virginia, in its next base rate case, to provide class cost of service information; and
- Requires the Company, in its next base rate case, to provide detailed information on its progression to a fully consolidated rate structure.

Based on the record of this proceeding, I find that the Stipulation is in the public interest, is supported by the record, and should be adopted. I note that on July 1, 2024, Aqua Virginia filed a petition in Case No. PUR-2024-00124 concerning the Company's acquisition of the Brandywine and Pine Brook systems.

Additional Recommendations

I recommend the Commission accept the Stipulation in its entirety. Herein, I discuss additional recommendations for the Commission's consideration. To the extent these additional recommendations are considered modifications to the Stipulation's terms, "the Stipulating Parties may, by joint written consent, elect to modify the Stipulation to address the issues raised by the Commission or the Hearing Examiner."³²⁷ If the Stipulating Parties agree to the recommendations below, I encourage them to note such agreement in comments to this Report.

Tariff Rule 20. Fluvanna witness Diggs raised an issue concerning grinder pump ownership in Lake Monticello.³²⁸ The crux of the matter is that in this community, Aqua Virginia owns most of the grinder pumps. However, there are instances where individual homeowners own the grinder pumps. This appears to be a legacy situation from contracts certain

³²⁷ Ex. 35 (Stipulation) at 5.

³²⁸ Ex. 26 (Diggs Direct) at 22-23. Mr. Diggs stated, "The LMOA Board is aware there are Lake Monticello residents whose home builders had contracts that specified that the homeowners owned their grinder pumps." *Id.* at 22. For clarity, I note Aqua Virginia stated the Lake Monticello system "serves customers inside and outside of the lake area and not all are members of the Lake Monticello Owners Association." Ex. 36 (Responses to Hearing Examiner's Questions) at 4. The Company explained, "The Lake Monticello system is more of a regional system and ceased being a service provider to only the lake residents when the LMOA sold the assets to Aqua Source. However, the systems still carry that local geographical reference." *Id.*

home builders made. When a home is sold, the new homeowner is not always aware that by purchasing the home, the new homeowner now owns a grinder pump.³²⁹

Tariff Rule 20 specifies, with reference to the Lake Monticello wastewater system, "Aqua [Virginia] maintains and replaces grinder pumps as needed."³³⁰ Evidence in this case is that this statement is potentially confusing in light of the fact that Aqua Virginia does not own all the grinder pumps at Lake Monticello and therefore may not have responsibility to maintain and replace the grinder pumps the Company does not own. Among other things, Fluvanna witness Diggs requested that this rule "be modified to include Aqua Virginia's responsibilities to notify homeowners who are the exception to the rule."³³¹ Company witness Aulbach responded that the Company has been discussing an information packet for new homeowners and new connections, which "could include customer service procedures, grinder pump dos and don'ts [to] directly educate LMOA customers."³³²

I conclude that Tariff Rule 20 may require modification to properly reflect grinder pump ownership at Lake Monticello. However, more information would be useful to determine how this rule should be modified. I find the Commission should require Staff to investigate Tariff Rule 20 and provide any recommendations to modify this provision as part of Staff's testimony in the next rate case. I further believe that an information packet with grinder pump dos and don'ts would help LMOA customers be better informed. I encourage the Company to provide this information in any packets to new homeowners and new connections. Grinder pump dos and don'ts also may be helpful information to include on the Company's Lake Monticello webpage.

Tariff Rule 24. Fluvanna witness Diggs testified that the LMOA Board is concerned customers complaining to Aqua Virginia are not being provided the Commission's phone number and are not told they may contact the Commission if they are not satisfied with the resolution of their complaint. He asserted, "Every customer who calls with a complaint should be provided with this information at some point during the call."³³³ Company witness Aulbach responded by offering to include customer complaint information on its Lake Monticello webpage.³³⁴

The Code requires public utilities to establish customer complaint procedures that must be approved by the Commission and distributed to residential customers.³³⁵ The Company's current customer complaint procedure contained in its Tariff is as follows (emphasis added):

RULE NO. 24 – CUSTOMER COMPLAINT PROCEDURE

- (a) Customer service representatives are available to answer questions weekdays between 7:30 a.m. and 5 p.m. at

³²⁹ Ex. 26 (Diggs Direct) at 22-23.

³³⁰ Ex. 5 (Application) Filing Schedule 41, Rule 20 (a), p. 24.

³³¹ Ex. 26 (Diggs Direct) at 23.

³³² Ex. 31 (Aulbach Rebuttal) at 25.

³³³ Ex. 26 (Diggs Direct) at 23.

³³⁴ Ex. 31 (Aulbach Rebuttal) at 25.

³³⁵ Code § 56-247.1 A 3.

877.WTR.AQUA or 877.987.2782. For emergencies, after hours and holidays customers can reach the Company using the same number.

- (b) The Company will maintain a record of the types of complaints received in its Customer Information System (CIS). When an inquiry, service request, or complaint is received in verbal form the Company shall record the contact in CIS and retain all information for a minimum of two years.
- (c) If the customer is not satisfied and wishes to pursue the complaint further, *they shall be advised* that they may contact the State Corporation Commission via telephone (1-800-552-7945).

The Company's affiliate, Aqua Services, provides support services to Aqua Virginia, including customer service.³³⁶ Given that this case record reflects there is concern this tariff provision is not being implemented as written and approved by the Commission, I conclude Aqua Virginia should be required to remind Aqua Services of this provision in the Company's approved Tariff. Further, I encourage the Company to post the customer complaint procedures on its Lake Monticello webpage, as it has offered to do.

Quality and Service Issues. From a quality and service perspective, this case presents the Commission with a puzzle. On the one hand, the Company appears to be doing many things right. Of the Company's 191 water and 9 wastewater systems in Virginia,³³⁷ there appear to be at least 160 systems for which the Commission received no customer complaints in this docket.³³⁸ Aqua Virginia has won awards for voluntarily exceeding Virginia Department of Health water filtration requirements with respect to the Lake Monticello and Lake Caroline water systems.³³⁹ The Company also provided a list of improvements it has made particularly to the Lake Monticello system since it purchased the system in 2003, reflecting it is actively addressing the needs of this system.³⁴⁰ Additionally, Aqua Virginia has taken remedial action related to the sewage spills at Lake Monticello, and appears to have satisfied DEQ in this regard.³⁴¹

³³⁶ Ex. 6 (Aulbach Direct) at 5.

³³⁷ See, e.g., *id.*

³³⁸ I derived this figure by adding all systems no commenter named specifically and systems not matching any commenter's zip code. For example, if a customer did not name a particular system but the customer's zip code matched a system, I counted that complaint as pertaining to the system in that zip code. If I received multiple complaints with a zip code for which there were multiple systems, I assumed there was one complaint per system. For example, if there were two complaints from customers in a zip code with six systems, I assumed each complaint related to a separate system, leaving four systems with no complaints. See also Ex. 1 (Company Systems by Zip Codes).

³³⁹ See, e.g., Ex. 8 (Cooke Direct) at 13; Tr. at 146-49 (Aulbach).

³⁴⁰ See, e.g., Ex. 36 (Responses to Hearing Examiner's Questions) at 2-3.

³⁴¹ See, e.g., Ex. 28 (Handley Direct) at 27-28.

On the other hand, the Commission received approximately 2,800 comments from customers served from a handful of systems,³⁴² as well as testimony from 14 public witnesses.³⁴³ Many of the comments, and much of the testimony, objected to the amount of the proposed increase; many comments, and some testimony, addressed service and quality issues; and some comments and testimony addressed both. In addition to more general rate complaints,³⁴⁴ commenters have expressed frustration with how they perceive the cost of service from Aqua Virginia limits their lives: they don't invite visitors over for fear that the visitors' water usage will increase their bills;³⁴⁵ they take short showers, or don't shower every day, to avoid unnecessary water usage;³⁴⁶ they don't flush the toilet every time it is used,³⁴⁷ and they don't water lawns, wash cars, or water their gardens.³⁴⁸

Commenters claimed, among other things, that: their water is discolored and undrinkable³⁴⁹ and stains laundry;³⁵⁰ water pressure is poor;³⁵¹ there is dirt and grime buildup in sinks, toilets, and shower heads;³⁵² their neighborhood wastewater treatment plant stinks noticeably and sometimes curtails enjoyment of the outdoors;³⁵³ and the sewage spills caused their community lake, which they pay to use, to be closed multiple times in 2023.³⁵⁴ Commenters indicate they have made additional financial outlays such as purchasing bottled

³⁴² For context, I note that some customers provided more than one comment; the approximately 2,800 comments were received from fewer than 2,800 individuals. Approximately 96% of comments were from three zip codes: 22963 (1,730 comments), location of the Lake Monticello, Palmyra, and Stagecoach Hills systems; 22546 (736 comments), location of the Campbell's Creek, Elsinore, Lake Caroline, and Lake Land'Or systems; and 22958 (175 comments), location of the Wintergreen system. Many commenters did not provide the name of the specific system providing their service. Of the comments received from zip codes 22963, 22546, and 22958, common terms that appeared in the comments included "pressure," "quality," and "water quality." Comments from zip code 22963 also mentioned "smell," "foul," "stink," and "odor," approximately 411 times.

³⁴³ See generally, Tr. at 11-69.

³⁴⁴ See, e.g., Comments of Suzanne Leahy (Sept. 18, 2023) ("I am concerned about the high rate I pay for water in my Palmyra home. I am a single person who works all day. My bills have rarely been below \$80, some have been as high as \$150. The suggested 33% rate hike is simply unmanageable.").

³⁴⁵ Comments of Carly Fulcher (Mar. 15, 2024); Comments of Iscella Wittich (Apr. 23, 2024).

³⁴⁶ See, e.g., Comments of Kim Cates (Mar. 18, 2024); Comments of Lindsey Weightman (Apr. 16, 2024); Comments of Don and Barbara Fickes (Apr. 18, 2024).

³⁴⁷ See, e.g., Comments of Ashley Gentry (Apr. 22, 2024); Comments of James Kemp (Apr. 23, 2024).

³⁴⁸ See, e.g., Comments of Ravonda Moss (Apr. 22, 2024); Comments of Amie Belanger (Apr. 16, 2024); Tr. at 26-27 (Tillman) and 61-62 (Oakes).

³⁴⁹ See, e.g., Comments of Alan and Jill Fischer (Dec. 19, 2023); Comments of Theresa Smondrowski (Apr. 1, 2024); Comments of Kim Spano (Apr. 23, 2024).

³⁵⁰ See, e.g., Comments of Suzanne Cox (Apr. 1, 2024); Comments of Shirlee Barrier (Apr. 16, 2024); Comments of Christine Tucker (Apr. 23, 2024).

³⁵¹ See, e.g., Comments of Karen Padilla (Sept. 19, 2023); Comments of Gwen Medic (Oct. 13, 2023); Comments of Rick McIver (Mar. 15, 2024).

³⁵² See, e.g., Comments of Leo Dyce (Oct. 10, 2023); Comments of Bill Davis (Nov. 17, 2023); Comments of Kim Gilbert (Dec. 4, 2023).

³⁵³ See, e.g., Comments of Sandy Secrest (Sept. 18, 2023); Comments of Elizabeth Spadaro (Nov. 14, 2023); Comments of Derek Wilson (Nov. 28, 2023); Comments of William Whyte (Apr. 15, 2024). These comments appear to be supported by an odor report, which confirmed "several locations within [the Lake Monticello] collection system have been identified for the . . . highest need for treatment to try to . . . control the odors." Tr. at 154-55 (Aulbach).

³⁵⁴ See, e.g., Comments of Kristen Panye (Nov. 21, 2023); Comments of Trisha Callahan (Dec. 5, 2023); Comments of Millie Fife (Dec. 20, 2023); Comments of Catherine Bowers (Apr. 23, 2024).

water,³⁵⁵ using filters,³⁵⁶ and calling in plumbers to try to resolve, or work around, water quality and/or usage issues.³⁵⁷ Some even feel the water is the reason for their poor health.³⁵⁸

The overall sense of the comments is customers' perception that they are paying a lot of money for a subpar product. They are also spending a lot of time, energy, and additional funds strategizing how not to use the water and/or resolving issues that occur from using the water. The commenters exude feelings of helplessness and a sense of being trapped by an issue that affects their lives daily.³⁵⁹

Commenting customers' sense of defeatism was echoed in the public witness testimony of Jeffrey Black, member of the Board of Supervisors of Caroline County. Supervisor Black testified that this is the fourth time he has testified in an Aqua Virginia rate case, that "[p]eople do not feel like they are being heard at all," and that "it is very, very frustrating, extremely frustrating, that we go through this every two or three years."³⁶⁰ He further indicated that complaints against Aqua Virginia are "the number one complaint" he receives from constituents.³⁶¹

Consumer Counsel also recognized that "the Stipulation represents a reasonable sort of best-case outcome," but urged the Commission and Staff to closely monitor the service quality issues that were raised in the case.³⁶²

I acknowledge no decision in this rate case can fully or satisfactorily resolve the service and quality issues raised, for several reasons. First, Aqua Virginia is not regulated solely by the Commission. At a minimum, the Company is also regulated by the Virginia Department of Health and DEQ.³⁶³ Accordingly, some of the complaints may pertain to areas within the jurisdiction of those Executive Branch agencies. Second, this is a rate case. It was not initiated as a complaint case or a service quality investigation, and there is not sufficient evidence in the record of this rate case to make findings as to responsibility for service quality issues, even those

³⁵⁵ See, e.g., Comments of Aaron Garcia (Sept. 15, 2023); Comments of DC Millwater (Nov. 17, 2023); Comments of Carol Nattkemper (Mar. 18, 2024); Tr. at 29-30 (Richard).

³⁵⁶ See, e.g., Comments of Charles Nicely (Mar. 11, 2024); Comments of Lauren Basilio (Apr. 17, 2024); Comments of Christine Tucker (Apr. 23, 2024).

³⁵⁷ See, e.g., Comments of Terri Gauvin (Mar. 8, 2024); Comments of Kurt Gellner (Mar. 24, 2024); Comments of Mary Parks-Ackerman (Mar. 11, 2024); Comments of Philip Hessler (Mar. 11, 2024).

³⁵⁸ See, e.g., Comments of Brittany Callahan-Trent (Apr. 23, 2024) (stating water makes the skin dry and itchy); Comments of Kelly Rothenberger (Jan. 5, 2024) (stating her grandchildren get rashes); Comments of Jeanne Smith (Mar. 18, 2024) (stating she had gastrointestinal issues until she installed a whole house water filter and reverse osmosis system).

³⁵⁹ See, e.g., Comments of Rick Miller (Dec. 18, 2023) ("This is terrible, and I am stuck with a less than great water supply at an astonishing monthly cost."); Comments of Patricia Soule (Jan. 5, 2024) ("Aqua Virginia has Lake Monticello residents over a barrel . . ."); Comments of Carol Kennedy (Apr. 24, 2024) ("They have a monopoly in this area and we would leave them if we could, but we are trapped.").

³⁶⁰ Tr. at 54-59 (Black).

³⁶¹ *Id.* at 56 (Black).

³⁶² *Id.* at 200-01 (Browder, for Consumer Counsel).

³⁶³ See generally, e.g., Chapter 6 (Environmental Health Services) of Title 32.1 of the Code and Chapter 3.1 (State Water Control Law) of Title 62.1 of the Code. As an example in this docket, Staff witness Handley testified that he reviewed data from the Virginia Department of Health – Office of Drinking Water and considered information from DEQ concerning the sewage spills from the Lake Monticello system. Ex. 28 (Handley Direct) at 26-28.

that may be within the Commission's jurisdiction.³⁶⁴ Nonetheless, based on the evidentiary record in this case and the comments submitted, I offer the following recommendations to shed further light on the realities of the Aqua Virginia systems and where assistance, if needed, may be had.

- Multi-Case Comparison of Quality and Service Complaints.** The Company does not currently compare service and quality complaints received in one rate case to those received in prior cases. Company witness Aulbach explained that he has personnel "take these [complaints] and look back at our actual customer records."³⁶⁵ The Tariff requires verbal complaints to be kept for a minimum of two years.³⁶⁶ This time period is not equal to the gap between recent rate cases, which has been approximately three years.³⁶⁷ Moreover, some customers may complain during a rate case, either through written comments or public witness testimony, about a service or quality problem and not separately contact the Company about the issue. Therefore, in regard to service or quality complaints (received either through written comments or through public witness testimony), I suggest the Commission require Aqua Virginia to compare the list of complainant addresses in this case with the addresses of complainants listed in the Company's Customer Comment Reports in Case No. PUR-2017-00082 and the 2020 Rate Case and report to Staff on such comparison.³⁶⁸ This report should accompany the customer complaint report the Company will provide Staff pursuant to Stipulation Paragraph (11). This recommendation is intended to help determine whether what may appear to be isolated or "one-off" service or quality issues, if evaluated in only one rate case or over the minimum two-year period for which the Company must keep some complaints, might instead point to ongoing service or quality issues in certain areas of the Company's systems, so that action plans to address such issues can be developed.
- Sharing of Quality and Service Reports.** Since at least some customers' complaints may pertain to issues within the jurisdiction of the Virginia Department of Health or DEQ, I recommend the Commission require the Company to provide these two Executive Branch agencies with copies of the customer complaint report to be developed pursuant to Stipulation Paragraph (11) and the above-recommended multi-case comparison of quality and service complaints. The copies should be provided to these agencies at the same time the Company provides the reports to Staff. These reports may make known to these agencies issues of which they were previously

³⁶⁴ As an example, there was testimony that at least some of the water quality issues could be sourced to piping within customers' homes, not to the Company's pipes. Tr. at 161-63 (Aulbach).

³⁶⁵ *Id.* at 152 (Aulbach).

³⁶⁶ Ex. 5 (Application) Filing Schedule 41, Rule No. 24 (b), pp. 27-28.

³⁶⁷ The Company's 2017 general rate case filing, Case No. PUR-2017-00082, was complete as of August 14, 2017. The 2020 Rate Case was complete as of July 31, 2020. The present rate case, Case No. PUR-2023-00073, was complete as of August 9, 2023.

³⁶⁸ The Company provided a Customer Comment Report, including addresses of complainants, as part of its Comments of Aqua Virginia, Inc., on Report of Alexander F. Skirpan, Jr., Chief Hearing Examiner in the 2020 Rate Case. The Company provided a Customer Comment Report, including addresses of complainants, as part of its Brief of Aqua Virginia, Inc., filed after the hearing in Case No. PUR-2017-00082. It is possible the Customer Comment Report in the 2017 Rate Case may incorporate only those who testified as public witnesses and not those who submitted written public comments.

unaware, and may pave the way for future Company-agency collaboration, where appropriate and as those agencies see fit, to resolve issues within those agencies' jurisdiction.

- **Staff Review and Feedback on the Quality and Service Reports.** Company witness Aulbach described the type of follow-up that occurs based on customer complaints in rate cases, including checking operational reports, taking chlorine readings at individual premises, checking on the Company's water treatment process, and investigating whether a main break or flushing incident caused problems.³⁶⁹ As to the customer complaint report, Stipulation Paragraph (11) states Aqua Virginia will provide "all correspondence and any documents pertaining to resolution of each water quality and/or water/wastewater service complaint."³⁷⁰ I recommend the Commission direct Staff to thoroughly review both this customer complaint report and the above-recommended multi-case comparison of quality and service complaints. I further recommend that in the Company's next rate case anticipated to be filed in 2025,³⁷¹ the Staff provide testimony on the completeness of this information and Staff's satisfaction (or dissatisfaction) with the Company's investigations. It is unclear whether Staff performed any evaluation of Customer Comment Reports the Company submitted in previous rate cases. This recommendation is intended to ensure such evaluation does occur.

I end this report with a feeling of dissatisfaction that I could not do more for Aqua Virginia and its customers. I recognize there can be a disconnect between what happens on paper in a rate case and customers' experience of that rate case. For example, implementing the rate change ultimately decided in this one rate case will have caused customers to experience three rate changes in actuality: one change in December 2023 when the WWISC was removed from their bills, one change when interim rates went into effect in February 2024, and likely a third change when the final rates are implemented, assuming the Commission approves a rate change for Aqua Virginia that differs from interim rates.³⁷² I also note that any customer may complain, informally or formally, to the Commission at any time using the processes set forth in the Commission's Rules of Practice,³⁷³ and need not wait for a rate case to raise a concern. I further recognize the steps the Company has taken to improve communications with Lake Monticello customers, including use of a dedicated webpage. I urge the Company to keep this webpage up-to-date.

³⁶⁹ Tr. at 150-52 (Aulbach).

³⁷⁰ Ex. 35 (Stipulation) at 4, ¶ 11.

³⁷¹ Ex. 31 (Aulbach Rebuttal) at 9.

³⁷² See Tr. at 184-86 (Hale).

³⁷³ These are easily located on the Commission's website, www.scc.virginia.gov, by accessing the website and hovering over the word "Cases" in the blue banner at the top of the webpage, and clicking "Rules of Practice and Procedure" in the list appearing there.

FINDINGS AND RECOMMENDATIONS

Based on the Stipulation and the other evidence received in this case, **I FIND** that:

1. The Stipulation is in the public interest, is supported by the record, and should be adopted in resolution of both Aqua Virginia’s 2022 AIF Case and 2023 Rate Case. Among other things, the Stipulation provides Aqua Virginia a rate increase that would produce additional annual jurisdictional revenues of \$5.49 million, including \$4.83 million for water and \$0.66 million for wastewater, and rolls-in Water and Wastewater Infrastructure Service Charge revenues.

2. In additional resolution of the 2023 Rate Case:

- a. The Commission should require Staff to investigate the accuracy of Tariff Rule 20 and provide any recommendations for modification as part of Staff’s testimony in the Company’s next rate case;
- b. The Commission should require Aqua Virginia to remind Aqua Services of the provisions of Tariff Rule 24;
- c. The Commission should require Aqua Virginia to compare the list of complainant addresses in this case with the addresses of complainants listed in the Company’s Customer Comment Reports in Case Nos. PUR-2017-00082 and PUR-2020-00106, and report to Staff on such comparison when it provides the customer complaint report pursuant to Stipulation Paragraph (11);
- d. The Commission should require Aqua Virginia to provide the Virginia Department of Health and Virginia Department of Environmental Quality with copies of the customer complaint report to be developed pursuant to Stipulation Paragraph (11) and the multi-case comparison of quality and service complaints. The copies should be provided to these agencies at the same time the Company provides the reports to Staff; and
- e. The Commission should direct Staff: (i) to thoroughly review the customer complaint report that Aqua Virginia provides pursuant to Stipulation Paragraph (11) and the multi-case comparison of quality and service complaints; and (ii) in the Company’s next rate case, provide testimony on the completeness of this information and Staff’s satisfaction (or dissatisfaction) with the Company’s investigation of the service and quality complaints received in this rate case.

Accordingly, **I RECOMMEND** the Commission enter an Order that:

- 1. **ADOPTS** the findings in this Report, including the Stipulation and the additional recommendations set forth herein;
- 2. **GRANTS** Aqua Virginia an increase in rates as set forth in the Stipulation; and

3. **DISMISSES** these cases from the Commission's docket of active cases.

COMMENTS

The parties are advised that, pursuant to Rule 5 VAC 5-20-120 C of the Commission's Rules of Practice and Code § 12.1-31, any comments to this Report must be filed on or before August 15, 2024. To promote administrative efficiency, the parties are encouraged to file electronically in accordance with 5 VAC 5-20-140 of the Rules of Practice. If not filed electronically, an original and fifteen (15) copies of the comments must be submitted in writing to the Clerk of the Commission c/o Document Control Center, P.O. Box 2118, Richmond, Virginia 23218. Any party filing such comments shall attach a certificate to the foot of such document certifying that copies have been served by electronic mail to all counsel of record and any such party not represented by counsel.

Respectfully submitted,



M. Renae Carter
Senior Hearing Examiner

REPORT ATTACHMENT

**COMMONWEALTH OF VIRGINIA
STATE CORPORATION COMMISSION**

APPLICATION OF)	
)	
AQUA VIRGINIA, INC.)	Case No. PUR-2023-00073
)	Case No. PUR-2022-00118
For an Increase in Rates)	

STIPULATION OF SETTLEMENT

This Stipulation states the agreement between applicant, Aqua Virginia, Inc. (“Aqua Virginia” or “Company”) and the staff of the State Corporation Commission (“Staff”) (the “Stipulating Parties”) regarding the Company’s application for an increase in rates (“Application”).

The Company and Staff presented the Stipulation to Respondents, the Office of the Attorney General, Division of Consumer Counsel (“Consumer Counsel”), the Board of Supervisors of Culpeper County, Virginia (“Culpeper”), Botetourt County, Virginia (“Botetourt”), Caroline County, Virginia (“Caroline”), Accomack County, Virginia (“Accomack”), and Fluvanna County, Virginia (“Fluvanna”), who do not sign but take no position regarding this Stipulation.

The Stipulating Parties, by counsel, stipulate and agree that:

Aqua Virginia’s Application, accompanying schedules, workpapers and the Company’s direct and rebuttal testimony and exhibits, as identified below, shall be made a part of the record without cross-examination:

<u>Application/Testimony</u>	<u>Filing Date</u>
Petition for Waiver	June 9, 2023
Letter Clarifying Petition for Waiver	June 13, 2023
Order on Waiver	June 15, 2023
Application for an Increase in Rates	July 27, 2023

Direct Testimony of John J. Aulbach, II, P.E.	July 27, 2023
Direct Testimony of Matthew D. Cooke, Sr.	July 27, 2023
Direct Testimony of Andrew J. Barnes, P.E.	July 27, 2023
Direct Testimony of Richard F. Hale, Jr.	July 27, 2023
Direct Testimony of Dylan W. D'Ascendis	July 27, 2023
Direct Testimony of Constance E. Heppenstall	July 27, 2023
Direct Testimony of Gregory R. Herbert	July 27, 2023
Letter Enclosing Revised Schedules 30, 35, 36	August 9, 2023
Rebuttal Testimony of John J. Aulbach, II, P.E.	April 9, 2024
Rebuttal Testimony of Richard F. Hale, Jr.	April 9, 2024
Rebuttal Testimony of Andrew J. Barnes, P.E.	April 9, 2024
Rebuttal Testimony of Dylan W. D'Ascendis	April 9, 2024

The Staff's pre-filed direct testimony and accompanying schedules and exhibits, as identified below, shall be made a part of the record without cross-examination:

<u>Testimony</u>	<u>Filing Date</u>
Pre-filed Staff Testimony of Cameron T. Hunt	March 26, 2024
Pre-filed Staff Testimony of Mackenzie L. Lenahan	March 26, 2024
Pre-filed Staff Testimony of Thomas P. Handley	March 26, 2024
Pre-filed Staff Testimony of Justin M. Morgan	March 26, 2024

The direct testimony of Fluvanna County's witness, Thomas M. Diggs, along with accompanying exhibits, shall be made a part of the record without cross-examination.

The Stipulating Parties further stipulate and agree that the Hearing Examiner should recommend, and the Commission should approve, the following:

- (I) Revenue Requirement: A rate increase that would produce additional annual jurisdictional revenues of \$5.49 million (\$4.83 million for water and \$0.66 million for wastewater), including the roll-in of Water and Wastewater Infrastructure Service Charge ("WWISC") revenues. Rates will be designed to recover \$28.55 million (\$19.95 million for water and \$8.60 million for wastewater) of total operating revenues beginning February 5, 2024, using the billing rates identified in paragraph (8). This

represents a settlement as to a specific revenue number but not as to a specific ROE, specific accounting adjustments, or specific ratemaking methodologies at issue unless otherwise set forth herein.

- (2) Earnings Test: The results of the earnings test for the year ended March 31, 2022, demonstrate that the Company's earned return on equity ("ROE") was 9.09% for the water operation and 10.88% for the wastewaters operation. The Company will write off its remaining wastewater COVID-19 deferral of \$28,352 as of March 31, 2022, and such amount will not be recovered from customers in rates. The results of the earnings test for the year ended March 31, 2023, demonstrate that the Company's earned ROE was 3.97% for the water operation and 8.32% for the wastewater operation. No further action is required as a result of the earnings test for the period ending March 31, 2023.
- (3) Capital Structure: For future cases and earnings tests requiring a capital structure and cost of capital, until such time as Aqua files its next base rate case, the Stipulating Participants agree to a 9.7% ROE and the following actual capital structure and cost of capital:

Component	Net Amount Outstanding (in Thousands)	Weight	Cost Rate	Weighted Cost
Long Term Debt	\$ 46,519	47.87%	4.246%	2.033%
Common Equity	\$ 50,661	52.13%	9.70%	5.057%
Total Capitalization	\$ 97,179	100.0%		7.09%

- (4) Great Bay: Great Bay Utilities, Inc. is merged into Aqua Virginia for bookkeeping and ratemaking purposes. However, Aqua Virginia will only include half of its Great Bay gross acquisition adjustment (\$122,000) in rate base in future proceedings. The remaining \$122,000 will not be recovered from customers.
- (5) WWISC: To the extent Aqua Virginia has an authorized WWISC Plan in the future, Aqua Virginia will record the booking of revenues as incurred and will record deferred expense to match the revenues related into its WWISC deferral.

- (6) Per and Polyfluorinated Substances ("PFAS"): Aqua Virginia will track and defer any proceeds resulting from class action, other lawsuits, and/or any other pre or post litigation settlements and continue to track and defer all costs associated with Per and Polyfluorinated Substances ("PFAS"). In Aqua Virginia's next base rate case, it will provide (1) a written narrative on how PFAS regulations have impacted the Company; and (2) quantify the costs and lawsuit proceeds included in the test period and rate year proposed in that application.
- (7) Revenue Apportionment: The rates established in this proceeding will be calculated using the revenue apportionment identified in Attachment A, and the revenue requirement specified in Paragraph (1). The rates set forth on Attachment A to the Stipulation should be approved by the Commission and implemented by the Company effective February 5, 2024.
- (8) Rate Design: The final rates will be developed as shown in Attachment A. The final base facilities charges will be calculated to recover 40% of pro forma revenues as recommended on page 22 of the direct testimony of Staff witness Thomas P. Handley. Illustrative calculations of the impact on average monthly customer bills by water and wastewater group are shown in Attachment B.
- (9) Brandywine & Pine Brook: The final rates approved by the Commission in this case will not be billed to Brandywine and Pine Brook customers. The Company will file applications for these systems for approval under Chapters 4, 5, and 10.1, with the Commission, by July 1, 2024.
- (10) Class Cost of Service (CCOS) Study: In its next base rate proceeding, the Company will provide the rate of return on rate base for each water and wastewater customer class on a fully adjusted basis, based both on going-level revenues (*i.e.*, prior to any proposed revenue increase) and proposed revenues (*i.e.*, including the proposed revenues), by customer class.
- (11) Quality and/or Customer Service Complaints: Aqua Virginia will provide Staff with a report consisting of all correspondence and any documents pertaining to the resolution of each water quality and/or water/wastewater service complaint from customers. This report will be provided to the Division of Public Utility Regulation no later than six months after the issuance of the final order in this proceeding.
- (12) DEQ Compliance: Should DEQ require further action by Aqua Virginia in response to sewage spillage events at Lake Monticello, or should additional spillages occur in the future, then Aqua Virginia will provide an update on these matters in its next base rate proceeding. Any such update will include dates of spillage, cause(s) of spillage, corrective action taken, actual and projected costs (if applicable) of remediation, and a final DEQ statement of satisfaction and compliance.

- (13) Rate Consolidation: In its next base rate application, the Company will include a detailed plan on its progression to a fully consolidated rate structure pursuant to the final order in Case No. PUE-2009-00059.
- (14) Activation Fees: The Company will increase its water and wastewater activation fees to \$2,500 and \$4,500, respectively.

This Stipulation represents a compromise for the purposes of settlement in this case only and shall not be regarded as a precedent with respect to any ratemaking or other principle in any future rate case. The Stipulating Parties, by consenting to and signing this Stipulation, do not necessarily agree or disagree with the treatment of any particular item, any procedure followed, or the resolution of any particular issue in this case other than as specified herein, except that the Stipulating Parties agree that the resolution of the issues herein, taken as a whole, and the disposition of all other matters set forth in the Stipulation, are in the public interest. This Stipulation is conditioned upon and subject to acceptance by the Commission and is non-severable and of no force or effect and may not be used for any other purpose unless accepted in its entirety by the Commission, except that this paragraph shall remain in effect in any event.

Should the Hearing Examiner not recommend acceptance of this Stipulation in whole or in part, or if the Commission does not accept and does not adopt the terms of the Stipulation in their entirety, each of the Stipulating Parties retains the right to terminate and rescind its agreement hereto. In the event of an action by the Hearing Examiner or the Commission to modify the terms of the Stipulation, the Stipulating Parties may, by joint written consent, elect to modify the Stipulation to address the issues raised by the Commission or the Hearing Examiner. Should the Stipulation be terminated by any of the Stipulating Parties, it shall be considered void and the Stipulating Parties shall have the right to participate fully in all relevant proceedings in this matter notwithstanding their previous agreement on the terms of the Stipulation.

Respectfully submitted this *26th* day of April, 2024.

AQUA VIRGINIA, INC.

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Counsel

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STAFF OF THE STATE CORPORATION
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By /s/ Kati K. Dean

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*Counsel for the Staff of the
State Corporation Commission*

Report Attachment Page 8

Aqua Virginia, Inc.
 Summary of Present and Proposed Rates
 Water Operations

Exhibit No.: SUp
 Witness: GRH
 Schedule 41w

Residential & Non-Residential Meter Size:	Water Group D - (W0)			Water Group 1 - (W1)			Water Group 2 - (W2)		
	Present Rates	Proposed Allowance	Change	Present Rates	Proposed Allowance	Change	Present Rates	Proposed Allowance	Change
< 1"	\$ 25.00	3,000	35.3%	\$ 18.31	22,82	24.6%	\$ 18.31	22,82	24.6%
1"	60.23	7,500	35.3%	41.61	51,86	24.6%	41.61	51,86	24.6%
1-1/2"	120.45	15,000	35.3%	83.22	103,72	24.6%	83.22	103,72	24.6%
2"	192.73	24,000	35.3%	133.16	165,96	24.6%	133.16	165,96	24.6%
3"	385.45	48,000	35.3%	266.31	331,91	24.6%	266.31	331,91	24.6%
4"	602.27	75,000	35.3%	416.11	518,60	24.6%	416.11	518,60	24.6%
6"	1,204.55	150,000	35.3%	832.22	1,037,21	24.6%	832.22	1,037,21	24.6%
		(gals.)							
		(gals.)							
Residential & Non-Residential Consumption Charges:	\$ 5,960	\$ 13,220	121.8%	\$ 6,240	\$ 9,440	51.3%	\$ 7,800	\$ 10,590	35.8%
All Usage Irrigation				3,740	5,600	51.3%			
Flat Rate Customer Charges	\$ 45.00	\$ 48.50	7.8%	\$ 45.00	\$ 59.14	31.4%	\$ 45.00	\$ 59.14	31.4%
Residential	104.00	48.50	-53.4%	104.00	114.34	9.9%	104.00	114.34	9.9%
Non-Residential									

Acquisition:	Great Bay Water > (W0 Proposed)		
	Present Rates	Proposed Allowance	Change
Service Area Residential & Non-Residential	\$ 38.00	4,000	-11.0%
Great Bay BFC-1	< 1*	33.94	0.4%
Great Bay BFC-2	< 1*	4,000	-0.4%
		Base Facilities Charge	
	\$ 5.100	13,220	159.2%
	7.100	13,220	86.2%
		Commercial	
	36.00	46.10	27.3%
	37.68	46.10	22.3%
	37.45	46.10	23.1%
	36.16	46.10	27.5%
	34.96	46.10	31.9%
	34.33	46.10	34.3%
	30.75	46.10	49.9%
	28.41	46.10	62.3%
	15.00		-100.0%

Flat Rate Customer Charges (GB)	Residential			Commercial		
	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change
GB Flat Rate 1	36.00	46.10	27.3%	46.10	46.10	0.0%
GB Flat Rate 2	37.68	46.10	22.3%	46.10	46.10	0.0%
GB Flat Rate 3	37.45	46.10	23.1%	46.10	46.10	0.0%
GB Flat Rate 4	36.16	46.10	27.5%	46.10	46.10	0.0%
GB Flat Rate 5	34.96	46.10	31.9%	46.10	46.10	0.0%
GB Flat Rate 6	34.33	46.10	34.3%	46.10	46.10	0.0%
GB Flat Rate 7	30.75	46.10	49.9%	46.10	46.10	0.0%
GB Flat Rate 8	28.41	46.10	62.3%	46.10	46.10	0.0%
NN Flat Rate - Pool	15.00		-100.0%			

Report Attachment Page 9

Exhibit No.: Stip
Witness: GRH
Schedule 41w

Aqua Virginia, Inc.
Summary of Present and Proposed Rates
Water Operations

	Present Rates	Proposed Rates	Change
Availability Lot			
AVA - SkyLd (W1)	\$ 1.50	\$ 1.50	0.0%
AVA - SkyLd (W2)	10.00	10.00	0.0%
AVA - Lindo (W2)	3.75	3.75	0.0%
AVA - Lindo (W1)	10.00	10.00	0.0%
Captains Cove (W2)	6.84	6.84	0.0%
Lake Caroline (W1)	13.70	13.70	0.0%
Whitegreen Valley (W0)	7.50	7.50	0.0%

All Water Rate Groups

	Present Rates	Proposed Rates	Change
Fire Protection - (W0, W1, W2)			
Connection Size:			
1"	\$ 8.89	\$ 11.29	27.0%
1-1/2"	17.78	22.58	27.0%
2"	28.45	36.13	27.0%
3"	56.90	72.26	27.0%
4"	88.90	112.90	27.0%
6"	177.81	225.82	27.0%

Report Attachment Page 10

Aqua VA - WATER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42w

Line No.	(1) Group Name	(2) Note	(3) Meter Sz	(4) Prsnt BFC Rate	(5) # TY Units	(6) TY Rev	(7) (Includes growth) ProForma Prsnt		(8) PF Rev at Prsnt Rls	(9) ProForma Prpsd Units	(10) Prpsd Grp	(11) Proposed BFC Rate	(12) PF Rev at Proposed
							Billed Mons	Billed Mons					
1	Billed-Months												
2	Residential												
3	AVA Water Group 0	Res	<1	\$ 25.00	6,909	172,728	7,044	176,100	7,044	W0	\$ 33.82	238,228	
4	AVA Water Group 0	Res	1	60.23	12	723	12	723	12	W0	81.48	978	
5	AVA Water Group 0	Res	FR.r	45.00									
6	AVA Water Groups 1	Res	<1	18.31	71,147	1,302,709	71,796	1,314,585	71,796	W1	22.82	1,638,385	
7	AVA Water Groups 1	Res	1	41.61	48	1,997	48	1,997	48	W1	51.86	2,489	
8	AVA Water Groups 1	Res	2	133.16	12	1,598	12	1,598	12	W1	165.96	1,992	
9	AVA Water Groups 1	Res	FR.r	45.00	124	5,592	132	5,940	132	W1	59.14	7,806	
10	AVA Water Groups 2	Res	<1	18.31	229,663	4,205,123	232,704	4,260,810	232,704	W2	22.82	5,310,305	
11	AVA Water Groups 2	Res	1	41.61	217	9,016	216	8,988	216	W2	51.86	11,202	
12	AVA Water Groups 2	Res	1.5	83.22	36	2,996	36	2,996	36	W2	103.72	3,734	
13	AVA Water Groups 2	Res	FR.r	45.00	379	17,040	372	16,740	372	W2	59.14	22,000	
14	Acquisitions:												
15	Great Bay - BFC 1	Res	<1.1	38.00	1,920	72,978	3,324	126,312	3,324	W0	33.82	112,418	
16	Great Bay - BFC 2	Res	<1.2	33.94	49	1,663	684	23,215	684	W0	33.82	23,133	
17	Great Bay - FR1	Res	FR-G1	38.00	1,960	74,466	888	33,744	888	W0	46.10	40,937	
18	Great Bay - FR2	Res	FR-G2	37.68	1,338	50,426	960	36,173	960	W0	46.10	44,256	
19	Great Bay - FR3	Res	FR-G3	37.45	357	13,349	348	13,031	348	W0	46.10	16,043	
20	Great Bay - FR4	Res	FR-G4	36.16	324	11,712	(24)	(868)	(24)	W0	46.10	(1,106)	
21	Great Bay - FR5	Res	FR-G5	34.96	192	6,712	48	1,678	48	W0	46.10	2,213	
22	Great Bay - FR6	Res	FR-G6	34.33	158	5,415	48	1,648	48	W0	46.10	2,213	
23	Great Bay - FR7	Res	FR-G7	30.75	96	2,952	96	2,952	96	W0	46.10	4,426	
24	Great Bay - FR8	Res	FR-G8	28.41	132	3,749	132	3,749	132	W0	46.10	6,085	
25	Great Bay - Pool	Res	FR.rp	15.00	36	540	-	-	-	W0	-	-	
26	Subtotal Res				315,108	5,963,484	318,876	6,032,111	318,876			7,487,735	



Report Attachment Page 11

Aqua VA - WATER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42w

	Com	<1	25.00	36 \$	900	12 \$	300	12	W0	\$	33.82 \$	406
27 Commercial	Com	<1	25.00	36 \$	900	12 \$	300	12	W0	\$	33.82 \$	406
28 AVA Water Group 0	Com	2	192.73	24	4,626	24	4,626	24	W0		260.73	6,258
29 AVA Water Group 0	Com	FR.c	104.00									
30 AVA Water Group 0	Com	<1	18.31	1,095	20,056	1,092	19,995	1,092	W1	\$	22.82 \$	24,919
31 AVA Water Groups 1	Com	1	41.61	300	12,471	300	12,483	300	W1		51.86	15,558
32 AVA Water Groups 1	Com	1.5	83.22	60	4,993	60	4,993	60	W1		103.72	6,223
33 AVA Water Groups 1	Com	2	133.16	132	17,577	132	17,577	132	W1		165.96	21,907
34 AVA Water Groups 1	Com	3	266.31	13	3,462	12	3,196	12	W1		331.91	3,983
35 AVA Water Groups 1	Com	FR.c	104.00									
36 AVA Water Groups 1	Com	<1	18.31	4,483	82,093	4,548	83,274	4,548	W2	\$	22.82 \$	103,785
37 AVA Water Groups 2	Com	1	41.61	553	23,020	564	23,468	564	W2		51.86	29,249
38 AVA Water Groups 2	Com	1.5	83.22	244	20,303	240	19,973	240	W2		103.72	24,893
39 AVA Water Groups 2	Com	2	133.16	190	25,318	192	25,567	192	W2		165.96	31,864
40 AVA Water Groups 2	Com	3	266.31	22	5,859	24	6,391	24	W2		331.91	7,966
41 AVA Water Groups 2	Com	4	416.11	12	4,993	12	4,993	12	W2		518.60	6,223
42 AVA Water Groups 2	Com	FR.c	104.00	12	1,248	12	1,248	12	W2		114.34	1,372
43 AVA Water Groups 2	Com											
44 Acquisitions:												
45 Great Bay - BFC 1	Com	<1.1	38.00	-	-	24	912	24	W0	\$	33.82 \$	812
46 Great Bay - FR1	Com	FR-G1	38.00	24	912	24	912	24	W0		46.10	1,106
47 Great Bay - FR2	Com	FR-G2	37.68	60	2,261	60	2,261	60	W0		46.10	2,766
48 Great Bay - FR8	Com	FR-G8	28.41	36	1,023	36	1,023	36	W0		46.10	1,660
49 Great Bay - Pool	Com	FR.cp	15.00	24	360	-	-	-	W0		-	-
50 Subtotal Com				7,321	231,474	7,368	233,191	7,368				290,950
51 Subtotal Base BDs & Charges				322,429 \$	6,194,958	326,244 \$	6,265,301	326,244				7,778,685
52												

(FR=Flat rate)

Report Attachment Page 12

Aqua VA - WATER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30,2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42w

(Includes growth)

Line No.	(1) Group Name	(2) Class	(3) Block*	(4) Prsnt Usage Rate	(5) # TY Units	(6) TY Rev	(7) ProForma Prsnt Units	(8) PF Rev at Prsnt Rts	(9) ProForma Prsnt Units	(10) Prpsd Grp	(11) Proposed Usrg Rate	(12) PF Rev at Proposed
					kGals		kGals		kGals			
1	Usage											
2	Residential											
3	AVA Water Group 0	Res	Allw	\$ -	15,176	\$ -	15,417	-	15,417	W0	\$ -	\$ -
4	AVA Water Group 0	Res	BIK1	5.96	8,426	50,219	8,559	51,012	8,559	W0	13.22	113,150
5	AVA Water Group 1	Res	BIK1	6.24	277,080	1,728,977	279,611	1,744,773	279,611	W1	9.44	2,639,528
6	AVA Water Group 2	Res	BIK1	7.80	761,192	5,937,296	771,273	6,015,929	771,273	W2	10.59	8,167,781
7	Other:											
8	Acquisitions:											
9	Great Bay	Res	Allw	-	2,730	-	7,099	-	7,099	W0	-	-
10	Great Bay	Res	BIK1	5.10	483	2,464	639	3,259	639	W0	13.22	8,448
11	Great Bay	Res	BIK2	7.10	878	6,234	1,386	9,841	1,386	W0	13.22	18,323
12	Subtotal Res				1,065,964	7,725,190	1,083,984	7,824,813	1,083,984			10,947,229
13	Commercial											
14	AVA Water Group 0	Com	Allw	\$ -	352	\$ -	308	-	308	W0	\$ -	\$ -
15	AVA Water Group 0	Com	BIK1	5.96	291	1,733	251	1,496	251	W0	13.22	3,318
16	AVA Water Group 1	Com	BIK1	6.24	22,635	141,240	22,459	140,144	22,459	W1	9.44	212,013
17	AVA Water Group 1	Com	Irr	3.74	842	3,148	842	3,149	842	W1	5.66	4,766
18	AVA Water Group 2	Com	BIK1	7.80	48,253	376,370	48,650	379,470	48,650	W2	10.59	515,204
19	Great Bay	Com	Allw	-	8	-	8	-	8	W0	-	-
20	Great Bay	Com	BIK1	5.10	8	-	41	-	41	W0	13.22	106
21	Great Bay	Com	BIK2	7.10	49	-	348	-	348	W0	13.22	648
22	Subtotal Com				72,371	522,491	72,575	524,648	72,575			736,054
23	Subtotal Usage				1,138,336	8,247,680	1,156,559	8,349,461	1,156,559			11,683,283
24												
25	Subtotal Service (Base & Usage)					14,442,638		14,614,763				19,461,968

* Block notes: Block 2 for AVA-W1 is at a reduced irrigation rate >60 kGals for Powhatan park.



Report Attachment Page 13

Aqua VA - WATER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42w

(Includes growth)

Line No.	(1) Group Name	(2) Class	(3) Size / Frqncy	(4) Prsnt Mon Rate	(5) # TY Units	(6) TY Rev	(7) ProForma Units	(8) PF Rev at Prsnt Rts	(9) ProForma Units	(10) Prpsd Grp	(11) Proposed Mon Rate	(12) PF Rev at Proposed
1	Private Fire Protection											
1	AVA Water Groups	Fir	F3	56.90	12 \$	683	12 \$	683	12		\$ 72.26	\$ 867
2	AVA Water Groups	Fir	F6	177.81	48	8,535	48	8,535	48		225.82	10,839
3	Subtotal Fire				60	9,218	60	9,218	60			11,706
4												
5	Subtotal Svc & Fire					14,451,856		14,623,980				19,473,675
6												
7	Availability Lot											
8	AVA -Shwld	Avl	Sm	\$ 1.50	6,852 \$	10,278	6,738 \$	10,107	6,738		\$ 1.50	\$ 10,107
9	AVA -LndOr	Avl	Qt	10.00	2,104	21,035	1,956	19,560	1,956		10.00	19,560
10	AVA -LMcIo	Avl	Yr	3.75	3,705	13,893	3,768	14,130	3,768		3.75	14,130
11	AVA -LHIdy	Avl	Mt	10.00	2,651	26,513	2,388	23,880	2,388		10.00	23,880
12	Captains Cove	Avl	Qt	6.84	25,918	177,277	25,137	171,937	25,137		6.84	171,937
13	Lake Caroline	Avl	Qt	13.70	4,931	67,554	4,680	64,116	4,680		13.70	64,116
14	Wintergreen Valley	Avl	QT	7.50	2,020	15,150	1,896	14,220	1,896		7.50	14,220
15	Subtotal Availability				48,180	331,699	46,563	317,950	46,563			317,950
16												
17	Subtotal Svc, Fire, Avail					14,783,555		14,941,930				19,791,625
18	WWISC Eligible Usage & Charges at \$/kGal						1,156,559					
19	Subtotal w/ WWISC					14,783,555		14,941,930				19,791,625
20												
21	Other (Bulk sales)					28,946		28,946				28,946
22	Misc	5130&4115100				350		350				350
23	RECNC	4115105				21,500		21,500				21,500
24	PENL	4115115				64,996		65,915				85,222
25	RTNF	4115120				19,840		19,840				19,840
26	NEW	4115125				65,467		65,467				65,467
27	Antennae					15,000		15,000				15,000
28	Subtotal Other, Misc					216,099		217,018				236,325
29	Total before Abatements					14,999,654		15,158,949				20,027,950
30	Less Abatements					(58,192)		(59,120)				(78,109)
31	Total Calc'd Revenue					14,941,463		15,099,829				19,949,841
32										incrs ->	4,850,013	32.1%

Report Attachment Page 14

Aqua Virginia, Inc.
 Summary of Present and Proposed Rates
 Wastewater Operations

Exhibit No.: SIP
 Witness: GRH
 Schedule 41s

	Sewer Group 0 - (S0)			Sewer Group 1 - (S1)			Sewer Group 2 - (S2)		
	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change
Residential									
Any Meter Size	1.2 \$ 47.90	3,000 \$ 47.80	3,000 0.0%	\$ 32.36	\$ 31.00	-4.2%	\$ 32.36	\$ 31.00	-4.2%
Non-Residential									
Meter Size:									
< 1"	1.2 \$ 47.90	3,000 \$ 47.90	3,000 0.0%	\$ 32.36	\$ 31.00	-4.2%	\$ 32.36	\$ 31.00	-4.2%
1"	2.5 119.75	7,500 119.75	7,500 0.0%	73.55	70.46	-4.2%	73.55	70.46	-4.2%
1-1/2"	5 239.50	15,000 239.50	15,000 0.0%	147.09	140.91	-4.2%	147.09	140.91	-4.2%
2"	8 363.20	24,000 363.20	24,000 0.0%	225.34	225.45	0.0%	225.34	225.45	0.0%
3"	16 765.40	48,000 766.40	48,000 0.0%	470.69	450.91	-4.2%	470.69	450.91	-4.2%
4"	25 1,197.50	75,000 1,197.50	75,000 0.0%	735.45	704.54	-4.2%	735.45	704.54	-4.2%
6"	50 2,395.00	150,000 2,395.00	150,000 0.0%	1,470.90	1,409.08	-4.2%	1,470.90	1,409.08	-4.2%

	Sewer Group 0 - (S0)			Sewer Group 1 - (S1)			Sewer Group 2 - (S2)		
	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change
Flat Rate Customer Charges									
Residential	\$ 83.71	\$ 91.77	9.6%	\$ 83.71	\$ 91.77	9.6%	\$ 83.71	\$ 91.77	9.6%
Non-Residential	277.01	277.01	0.0%	277.01	277.01	0.0%	277.01	277.01	0.0%
Residential - Monthly Residential Usage Charges are limited to 6,000 Gallons									
All Usage	\$ 12,1600	\$ 17,3880	42.9%	\$ 12,6600	\$ 15,5700	23.0%	\$ 14,8900	\$ 17,5600	17.9%
Non-Residential									
All Usage	\$ 14,5900	\$ 20,6500	42.9%	\$ 15,1900	\$ 17,4400	14.8%	\$ 17,8700	\$ 19,6700	10.1%

	Sewer Group 0 - (S0)			Sewer Group 1 - (S1)			Sewer Group 2 - (S2)		
	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change	Present Rates	Proposed Rates	Change
Availability Lots									
Captains Cove	\$ 23.11	\$ 23.11	0.0%	\$ 23.11	\$ 23.11	0.0%	\$ 23.11	\$ 23.11	0.0%
Lake Holiday	10.00	10.00	0.0%	10.00	10.00	0.0%	10.00	10.00	0.0%
Lake Land 'Or	3.75	3.75	0.0%	3.75	3.75	0.0%	3.75	3.75	0.0%
Lake Monticello	7.50	7.50	0.0%	7.50	7.50	0.0%	7.50	7.50	0.0%
Wintergreen									

Report Attachment Page 15

Aqua VA - SEWER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42s

Line No.	(1) Group Name	(2) Class	(3) Meter Sz	(4) Prnt BFC Rate	(5) # TY Units	(6) TY Rev	(7) Pro Forma Prnt		(8) Pro Forma Prnt Rts	(9) Units	(10) Prpsd Grp	(11) Proposed BFC Rate	(12) PF Rev at Proposed
							Units	Mons					
1	Billed-Months												
2	Residential												
3	AVA Sewer Group 0	Res	Any	\$ 47.90	2,339	\$ 112,024	2,484	\$ 118,984	2,484	S0	\$ 47.90	\$ 118,984	
4	AVA Sewer Group 1	Res	Any	32.36	10,046	325,092	10,848	351,041	10,848	S1	31.00	336,288	
5	AVA Sewer Group 1	Res	FR,r	83.71	1,865	156,122	1,860	155,701	1,860	S1	91.77	170,692	
6	AVA Sewer Group 2	Res	Any	32.36	71,501	2,313,759	72,036	2,331,085	72,036	S2	31.00	2,233,116	
7	AVA Sewer Group 2 (Grinder Pumps)	Res	<1.Gr	32.36	12,788	413,807	12,816	414,726	12,816	S2	31.00	397,296	
8	AVA Sewer Group 2	Res	FR,r	83.71	24	2,006	24	2,009	24	S2	91.77	2,202	
9	Subtotal Res				98,562	3,322,810	100,068	3,373,545	100,068			3,258,578	
10	Commercial												
11	AVA Sewer Group 0	Com	<1	\$ 47.90	48	\$ 2,299	48	\$ 2,299	48	S0	47.90	\$ 2,299	
12	AVA Sewer Group 1	Com	1.5	383.20	12	4,598	12	4,598	12	S0	383.20	4,598	
13	AVA Sewer Group 1	Com	2	147.09	29	4,261	24	3,530	24	S1	140.91	3,382	
14	AVA Sewer Group 1	Com	2	235.34	12	2,801	12	2,824	12	S1	225.45	2,705	
15	AVA Sewer Group 2	Com	FR,c	277.01	12	3,324	12	3,324	12	S1	277.01	3,324	
16	AVA Sewer Group 2 (Grinder Pumps)	Com	<1.Gr	32.36	812	26,281	816	26,406	816	S2	31.00	25,296	
17	AVA Sewer Group 2	Com	1	73.55	144	10,591	144	10,591	144	S2	70.46	10,146	
18	AVA Sewer Group 2	Com	1.5	147.09	60	8,825	60	8,825	60	S2	140.91	8,455	
19	AVA Sewer Group 2	Com	2	235.34	12	2,824	12	2,824	12	S2	225.45	2,705	
20	AVA Sewer Group 2 (Grinder Pumps)	Com	2.Gr	235.34	12	2,824	12	2,824	12	S2	225.45	2,705	
21	Subtotal Com				1,177	74,665	1,176	74,083	1,176			71,400	
22	Subtotal BFC				99,739	3,397,475	101,244	3,447,628	101,244			3,329,978	

(FR=Flat rate)

24074013

Report Attachment Page 16

Aqua VA - SEWER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42s

Line No.	(1) Group Name	(2) Class	(3) Block	(4) Prsnt Usage Rate	(5) # TY Units	(6) TY Rev	(7) ProForma Units	(8) PF Rev at Prsnt Rts	(9) ProForma Units	(10) Prpsd G/P	(11) Proposed Usq Rate	(12) PF Rev at Proposed
					kGals		kGals		kGals			
1	Usage											
2	Residential											
3	AVA Sewer Group 0	Res	Allow		4,828	\$ 4,828	12.7%	\$ 4,828	4,828	S0	-	-
4	AVA Sewer Group 0	Res	Blk1	12.16	1,575	19,151	1,651	20,070	1,651	S0	17.38	28,686
5	AVA Sewer Group 0	Res	>Cap							S0		
6	AVA Sewer Group 1	Res	Blk1	12.66	28,384	359,341	30,188	382,175	30,188	S1	\$ 15.57	\$ 470,021
7	AVA Sewer Group 1	Res	>Cap		6,916		7,355		7,355	S1		
8	AVA Sewer Group 2	Res	Blk1	14.89	245,325	3,652,891	246,279	3,667,096	246,279	S2	17.56	4,324,661
9	AVA Sewer Group 2	Res	>Cap		26,152		26,253		26,253	S2		
10	Subtotal Res				313,180	4,031,383	316,553	4,069,341	316,553			4,823,368
11	Commercial											
12	AVA Sewer Group 0	Com	Allow		335		335		335	S0		
13	AVA Sewer Group 0	Com	Blk1	14.59	840	12,261	840	12,261	840	S0	20.85	17,522
14	AVA Sewer Group 1	Com	Blk1	15.19	2,065	31,360	2,065	31,360	2,065	S1	17.44	36,005
15	AVA Sewer Group 2	Com	Blk1	17.87	6,440	115,085	6,440	115,085	6,440	S2	19.67	126,677
16	Subtotal Com				9,680	158,706	9,680	158,706	9,680			180,204
17	Subtotal Usage				322,860	4,190,089	326,233	4,228,047	326,233			5,003,572
18	WWISC Eligible Usage & Charges at \$/kGal						292,626					
19	Subtotal Service (BFC & Usage)					7,587,564		7,675,675			657,874	8,333,549
20												
21												8.6%

ST0074072

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Aqua VA - SEWER - Rate Groups and Systems
 PRESENT AND PROPOSED REVENUES
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 42s

Line No.	(1) Group Name	(2) Class	(3) Frqncy	(4) Prsnt Mon Rate	(5) # TY Units	(6) TY Rev	(7) ProForma Prsnt Units	(8) PF Rev at Prsnt Rts	(9) ProForma Prpsd Units	(10) Prpsd Grp	(11) Proposed Mon Rate	(12) PF Rev at Proposed
1	Availability Lot											
2	AVA-S2-LHdy	Avl	Mt	\$ 10.00	Billed Mons 2,630	\$ 26,297	Billed Mons 2,388	\$ 23,880	2,388		\$ 10.00	\$ 23,880
3	AVA-S2-LMclo	Avl	Yr	\$ 3.75	3,681	13,806	3,465	12,994	3,465		3.75	12,994
4	AVA-S2-LndOr	Avl	Qt	\$ 10.00	273	2,733	229	2,290	229		10.00	2,290
5	Captains Cove	Avl	Mt	\$ 23.11	12	277	12	277	12		23.11	277
6	Captains Cove	Avl	Qt	\$ 23.11	8,227	190,123	7,463	172,470	7,463		23.11	172,470
7	Wintergreen Valley	Avl	Qt	\$ 7.50	1,007	7,549	936	7,020	936		7.50	7,020
8	Subtotal Availability				15,830	240,785	14,493	218,931	14,493			218,931
9												
10	Subtotal Service & Availability					7,828,349		7,894,606				8,552,480
11												
12	Other Revenue					15,679		15,679				15,679
13	Misc. Charges											
14	PENL					29,818		30,164				32,610
15	Total before Abatements					\$ 7,873,846		\$ 7,940,449				\$ 8,600,770
16	Less Abatements					(1,531)	0.019%	(1,509)				(1,634)
17	Total Calc'd Revenue					\$ 7,872,315		\$ 7,938,940				\$ 8,599,136
18										incls->	660,195	\$ 8,599,136
												8.3%

REVISED ATTACHMENT B

Aqua VA - Regulated Rate Groups and Systems
 SAMPLE BILLING
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PUR-2023-00073
 Residential <1*

Exhibit No.: Slip
 Witness: GRH
 Schedule 43w

WWSIC \$/kGal
 0.0000

Line No.	(1) Rate Group or System	(2) Type	(3) Pro Forma Avg Usage (gals)	(4) Present Allowance (gals)	(5) Proposed Allowance (gals)	(6) Present Base \$	(7) Flat Rate? Rate \$	(8) Present Usage /kGal	(9) Proposed Rate Grp	(10) Proposed Base \$	(11) Flat Rate? Rate \$	(12) Proposed Usage /kGal	(13) Mon Bill @ Pres Rates \$	(14) Mon Bill @ Prop Rates \$	(15) Mon Bill Increase \$	(16) Percent Increase	(17) - Num Cusis (rounded)
1	WATER																
2	AVA Water Group 0	Water	3,395	3,000	3,000	\$ 25.00	-	\$ 5.96	W0	\$ 33.82	-	\$ 13.22	\$ 27.35	\$ 39.04	\$ 11.69	43%	591
3	AVA Water Group 1	Water	3,886	-	-	18.31	-	6.24	W1	22.82	-	9.44	42.56	59.50	16.95	40%	6,121
4	AVA Water Group 2	Water	3,305	-	-	18.31	-	7.80	W2	22.82	-	10.59	44.10	57.83	13.73	31%	19,878
5	AVA Water Groups 0, 1 & 2	Water	3,886	-	-	45.00	FR	-	all	59.14	FR	na	45.00	59.14	14.14	31%	43
6	Acquisitions:																
7	Great Bay BFC 1	Water	2,276	4,000	3,000	38.00	-	5.10	W0	33.82	-	13.22	\$ 38.00	\$ 33.82	\$ (4.18)	-11%	277
8	Great Bay BFC 2	Water	2,276	4,000	3,000	33.94	-	5.10	W0	33.82	-	13.22	33.94	33.82	(0.12)	0%	57
9	FR-GB1	Water	2,276	-	-	38.00	FR	-	W0	46.10	FR	na	38.00	46.10	8.10	21%	74
10	FR-GB2	Water	2,276	-	-	37.88	FR	-	W0	46.10	FR	na	37.88	46.10	8.42	22%	80
11	FR-GB3	Water	2,276	-	-	37.45	FR	-	W0	46.10	FR	na	37.45	46.10	8.66	23%	29
12	FR-GB4	Water	2,276	-	-	36.16	FR	-	W0	46.10	FR	na	36.16	46.10	9.94	27%	(2)
13	FR-GB5	Water	2,276	-	-	34.96	FR	-	W0	46.10	FR	na	34.96	46.10	11.14	32%	4
14	FR-GB6	Water	2,276	-	-	34.33	FR	-	W0	46.10	FR	na	34.33	46.10	11.77	34%	4
15	FR-GB7	Water	2,276	-	-	30.75	FR	-	W0	46.10	FR	na	30.75	46.10	15.35	50%	8
16	FR-GB8	Water	2,276	-	-	28.41	FR	-	W0	46.10	FR	na	28.41	46.10	17.70	62%	11
17	GB-Pool	Water	2,276	-	3,000	15.00	FR	-	W0	33.82	-	13.22	15.00	33.82	18.82	125%	3

REVISED ATTACHMENT B

Aqua VA - Regulated Rate Groups and Systems
 SAMPLE BILLING
 USING THE COMPANY'S FILED USAGE AND
 THE STIPULATED REVENUE REQUIREMENT
 CASE NO. PLUR-2023-00073

Exhibit No.: Stip
 Comparison to as Filed
 Witness: GRH
 Schedule 43w

WWWSC S/(kGal
 0.0000

Line No.	(1) Rate Group or System	(2) Type	(3) Pro Forma Avg Usage (gals)	(4) Present Allowance (gals)	(5) Proposed Allowance (gals)	(6) Present Base \$	(7) Flat Rate?	(8) Present Usage (kGal)	(9) Proposed Rate	(10) Proposed Base \$	(11) Flat Rate?	(12) Proposed Usage (kGal)	(13) Mon Bill @ Pres Rates \$	(14) Mon Bill @ Prop Rates \$	(15) Mon Bill Increase \$	(16) Percent Increase	(17) ~ Num Quis (rounded)	
1	WATER																	
2	AVA Water Group 0	Water	3,355	3,000	3,000	\$ 25.00		\$ 5.96	W0	\$ 33.82	-	\$ 13.22	\$ 27.12	\$ 38.52	\$ 11.40	42%	591	
3	AVA Water Group 1	Water	3,848	-	-	18.31		6.24	W1	22.82	-	8.44	42.32	59.14	16.82	40%	6,121	
4	AVA Water Group 2	Water	3,306	-	-	18.31		7.80	W2	22.82	-	10.59	44.10	57.83	13.73	31%	19,878	
5	AVA Water Groups 0, 1 & 2	Water	3,848	-	-	45.00	FR		all	59.14	FR	na	45.00	58.14	14.14	31%	43	
6	Acquisitions:																	
7	Great Bay BFC 1	Water	2,220	4,000	3,000	38.00		5.10	W0	33.82	-	13.22	\$ 38.00	\$ 33.82	\$ (4.18)	-11%	277	
8	Great Bay BFC 2	Water	2,220	4,000	3,000	33.94		5.10	W0	33.82	-	13.22	33.94	33.82	(0.12)	0%	57	
9	FR-GB1	Water	2,220	-	-	38.00	FR		W0	46.10	FR	na	38.00	46.10	8.10	21%	74	
10	FR-GB2	Water	2,220	-	-	37.68	FR		W0	46.10	FR	na	37.68	46.10	8.42	22%	80	
11	FR-GB3	Water	2,220	-	-	37.45	FR		W0	46.10	FR	na	37.45	46.10	8.66	23%	29	
12	FR-GB4	Water	2,220	-	-	36.16	FR		W0	46.10	FR	na	36.16	46.10	9.94	27%	(2)	
13	FR-GB5	Water	2,220	-	-	34.98	FR		W0	46.10	FR	na	34.98	46.10	11.14	32%	4	
14	FR-GB6	Water	2,220	-	-	34.33	FR		W0	46.10	FR	na	34.33	46.10	11.77	34%	4	
15	FR-GB7	Water	2,220	-	-	30.75	FR		W0	46.10	FR	na	30.75	46.10	15.35	50%	8	
16	FR-GB8	Water	2,220	-	-	28.41	FR		W0	46.10	FR	na	28.41	46.10	17.70	62%	11	
17	GB-Pool	Water	2,220	-	3,000	15.00	FR		W0	33.82		13.22	15.00	33.82	18.82	125%	3	

REVISED ATTACHMENT B

Aqua VA - Regulated Rate Groups and Systems
 SAMPLE BILLING
 FOR THE TEST YEAR ENDED Sep 30, 2023
 CASE NO. PWR-2023-00073
 Residential <1*

Exhibit No.: Stip
 Witness: GRH
 Schedule 43s

Line No.	Rate Group or System	(2) Type	(3) PF Prnt Avg Usage (gals)	(4) Prnt Allow Cap KGals	(5) Prnt Cap KGals	(6) Present Base \$	(7) Flat Rate? FR	(8) Present Usage \$	(9) Proposed Rate Grp \$/S1	(10) PF Prnt Avg Usage (gals)	(11) Prnt Allow Cap KGals	(12) Prnt Cap KGals	(13) Proposed Base \$	(14) Flat Rate? FR	(15) Proposed Usage \$	WWWSC \$/rGal		(19) Mon Bill Increase \$	(20) Percent Increase	- Num Subs (rounded)	
																(16) Mon Bill @ Pres Rates w/ WWWSC	(17) Mon Bill @ Prop Rates				
1	SEWER																				
2	AVA Sewer Group 0	SW	2,586	3	na	\$ 47.90		\$ 12.16	S0	2,586	3	na	\$ 47.90		\$ 17.38	\$ 47.90	\$ 47.90	-	0%	212	
3	AVA Sewer Group 1	SW	3,461	-	6	32.38		12.66	S1	3,461	-	6	31.00		15.57	76.17	84.88	8.71	11%	905	
4	AVA Sewer Group 2	SW	3,258	-	6	32.38		14.89	S2	3,258	-	6	31.00		17.56	80.87	88.20	7.34	9%	7,162	
5	Flat Rate Customers	SW	-	-	-	83.71	FR	-	S1	-	-	-	91.77	FR	-	83.71	91.77	8.06	10%	158	

*Metered Sewer systems have a Proposed Cap on Residential usage.

240740013

REVISED ATTACHMENT B

Aqua VA - Regulated Rate Groups and Systems
 SAMPLE BILLING
 USING THE COMPANY'S FILED USAGE AND
 THE STIPULATED REVENUE REQUIREMENT
 CASE NO. PUR-2023-00073

Exhibit No.: Stip
 Witness: GRH
 Schedule 43s

Line No.	Rate Group or System	Type	Residential <1"		(3) PF Avail Usage (gals)	(4) Prnt Allow KGals	(5) Prnt Cap KGals	(6) Present Base \$	(7) Flat Rate \$	(8) Present Usage \$	(9) Proposed Rate Cap Rate \$	(10) Proposed Avg Usage (gals)	(11) Proposed Allow KGals	(12) Proposed Cap KGals	(13) Proposed Base \$	(14) Flat Rate \$	(15) Proposed Usage \$	WWISC \$/KGal		(19) Mon Bill Increase \$	(20) Percent Increase	- Num Custs (rounded)
			(16) Mon Bill @ Prnt Rates w/ WWISC	(17) Mon Bill @ Prop Rates																		
1	SEWER																	47.90	47.90	-	0%	212
2	AVA Sewer Group 0	SW		3	2,470	3	47.90		12.16	50	2,470	3	3	47.90		17.38		78.23	88.64	9.41	12%	905
3	AVA Sewer Group 1	SW		6	3,702	6	32.36		12.66	51	3,702	6	6	31.00		15.57		80.12	87.33	7.20	9%	7,162
4	AVA Sewer Group 2	SW		6	3,208	6	32.36		14.89	52	3,208	6	6	31.00		17.58		83.71	91.77	8.06	10%	158
5	Flat Rate Customers	SW		-	-	-	83.71	FR	-	51	-	-	-	91.77	FR	-						

*Metered Sewer systems have a Proposed Cap on Residential usage.

ADDENDUM TO STIPULATION



Aqua Virginia, Inc.

Tariff

PUR-2020-00106 PUR-2023-00073

Filed: July ~~30, 2020~~ 27, 2023

Effective: TBA

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6-22-2024 TBA

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Filed July 30, 2020 ----- 27, 2023 Effective
 6-22-2024 IBA

**V. APPENDIX A
CONNECTION FEES, AVAILABILITY FEES, AND OTHER SYSTEM SPECIFIC RULES**

CHESAPEAKE COVE

Connection Fees

Chesapeake Cove connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

HIGHBANK

Connection Fees

Highbank connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

MILBURN

Connection Fees

Milburn connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

SHIRLAND SHORES

Connection Fees

Shirland Shores connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

SLOOPE POINT

Connection Fees

Sloope Point connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

WESTERN BRANCH PRESERVE

Connection Fees

Western Branch connection fees that were pre-paid prior to the acquisition require proof of payment upon application for water connection

CAPTAIN'S COVE SYSTEM

Availability Fees:

1. A water availability fee of \$6.84 per month, or \$20.52 quarterly, applies to all owners of lots serviced by water with no connection yet established.
2. A wastewater availability fee of \$23.11 per month, or \$69.33 quarterly, applies to all owners of lots serviced by wastewater with no connection yet established.

LAKE CAROLINE

Availability Fees – Owners with lots that have water service available, but no connection, shall be charged a water availability fee as set forth below

Residential - \$13.70 per month or \$41.10 per quarter

VI. Appendix B
Water and Wastewater Infrastructure Service Charge Rider Component

In addition to the net charges provided for in this Tariff, a Water & Wastewater Infrastructure Service Charge ("WWISC") of ~~\$0.1347~~~~\$0.2868~~ \$0 for each 1,000 gallons of water used and ~~\$0.5347~~~~\$0.0533~~ \$0 for each 1,000 gallons of wastewater billed will be applied to all bills rendered with an ending read date equal to or greater than the effective date of the tariff. In accordance with the Company's infrastructure replacement plan, customers shall be subject to a WWISC rider.

The service charges will be recomputed annually as approved by the Commission in its Final Order issued in Case No. PUR-2017- 00082.

1. GENERAL DESCRIPTION

Purpose:

To recover the fixed costs (depreciation, property taxes, and pre-tax return) of eligible infrastructure: A water utility project or wastewater utility project that: (i) maintains and enhances safety, reliability, and efficiency; or (ii) reduces or has the potential to reduce unaccounted-for water; or mitigates negative environmental impacts. Eligible infrastructure shall not include the investment in water or wastewater infrastructure included in the utility's rate base in its most recent rate case or include projects that increase revenues by directly connecting the infrastructure to new customers

Definitions:

"Investment" means costs incurred on eligible infrastructure projects net of retirements including planning, development, and construction costs and costs of infrastructure associated therewith.

"In-kind replacement" means replacement with new materials or equipment designed, constructed, and sized to meet current industry standards and federal, state, or local regulation.

"Water utility" means an investor-owned public service company engaged in the business of furnishing water service to the public.

"Wastewater utility" means an investor-owned public service company engaged in the business of furnishing wastewater service to the public

"WWISC plan" means an infrastructure replacement plan filed in Case No. PUR-2017-00082 or subsequent proceedings and approved by the Commission that identifies proposed types of eligible infrastructure projects and a WWISC rider.

Filed July 30, 2020
 6-22-2024 IBA

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VI. Appendix B (continued)
Water and Wastewater Infrastructure Service Charge Rider Component

"WWISC rider" means a recovery mechanism that will allow for recovery of the eligible infrastructure costs through a separate mechanism from the customer rates established in a rate case.

Eligible infrastructure includes the following:

A Water Utility Project providing in-kind replacement of transmission and distribution system mains that were not previously planned capital expenditures.

A Wastewater Utility Project providing in-kind replacement and rehabilitation of infrastructure necessary to reduce inflow and infiltration to the collection system.

2. APPLICATION

- A. Each WWISC Rider (water and wastewater) shall be computed annually and comprised of a "Current Service Charge" as determined in 3.A below and a "Reconciliation Charge/Credit" as determined in 3.B below.
- B. The WWISC Riders shall be applied in addition to the total water and wastewater charges (service charge plus usage charge).

3. COMPUTATION

- A. Current Service Charge:
 The ~~initial~~ Current Service Charge, effective April 6, 2020 ~~November 12, 2022~~ February 5, 2024, shall be calculated to recover the fixed costs of eligible infrastructure investment that have not been previously reflected in the Company's rate base and investments to be placed in service between March 4, 2019 ~~May 1, 2022~~ and December 31, 2020 ~~October 31, 2023~~ January 31, 2024. Thereafter the WWISC will be updated on an annual basis to reflect eligible infrastructure to be placed in service during the annual rate period. Eligible changes in the WWISC rate will occur as follows:

Filing Date	Effective Date of Service Charge	Date to which WWISC Eligible Plant Additions Reflected
12/6/2019	4/6/2020	December 31, 2020
9/3/2021	1/3/2022	February 28, 2023
7/15/2022	11/12/2022	October 31, 2023 January 31, 2024

Commented [AJ1]: Need to make sure to review this, deconflict dates and info that will be contained in the chart within Rick's testimony

Filed July 30, 2020
 6:22 2024TBA

27, 2023 Effective

VI. Appendix B (continued)
Water and Wastewater Infrastructure Service Charge Rider Component

The Current Service Charge shall be computed and filed annually by dividing the respective revenue requirement allocated by rate schedule (as defined herein) by the estimated total water sales by rate schedule for the applicable period.

The Company will calculate the WWISC Rider for each year as follows:

- 1) The Company will determine the eligible infrastructure replacement costs by rate schedule as defined below for the annual period the WWISC rider will apply.
- 2) The Company will estimate the annual water and wastewater sales by rate schedule for that annual period.
- 3) The Company will divide the eligible infrastructure replacement costs by the estimated water and wastewater sales to arrive at the WWISC Rider that shall be allocated in conformance with the revenue allocation approved by the Commission in Case Nos. PUR-2017-00082 and PUR-2022-00113 by rate schedule.

Eligible infrastructure costs to be included in the WWISC Rider include:

- 1) Return on Investment - The Company's rate of return on rate base approved by the State Corporation Commission in the utility's most recent rate case (PUR-2017-00082-00106) shall be used in WWISC Riders. Thereafter, if the beginning of the rate year is more than five years beyond the date on which the cost of equity became effective (i.e. with interim base rates) the commission may require the utility to file an updated weighted average cost of capital, or the utility may propose an updated weighted average cost of capital. The utility may recover the external costs associated with establishing its updated weighted average cost of capital through the WWISC rider. Such external costs shall include legal costs and consultant costs;
- 2) Revenue Conversion Factor - including income taxes and an allowance for bad debt expense, shall be applied to the required operating income resulting from the eligible infrastructure replacement costs;
- 3) Depreciation - In calculating depreciation the Company shall use its current depreciation rates;
- 4) Property Taxes - The property tax rate is based on the property tax rate reflected in the Company's latest base rates. (PUR-2017-00082-00106);
- 5) Carrying Costs - Carrying costs on the over-or-under recovery of the "Eligible infrastructure replacement costs" will be calculated at the end of a twelve-month period. The calculation will determine the over-or-under recovered amount at the end of each month. Carrying costs will be based on a series of two-month averages of over-or-under-recoveries for the year being reconciled multiplied by the cost of capital (including the revenue conversion factor) as described in numbers 1 and 2 above.

Filed July 30, 2020
 6-22-2024TBA

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Water and Wastewater Infrastructure Service Charge Rider Component

B. Reconciliation Credit/Charge:

A Reconciliation Credit/Charge shall be computed at the conclusion of each annual period of the WWISC Rider based on the cumulative over-or under-recovery balance as of the end of the annual period being reconciled. The cumulative recovery balance shall be included in the WWISC Rider Reconciliation Credit/Charge in the following annual period.

4. FILING

The Company shall file annually, in a docketed proceeding with the Commission a copy of the computation of the WWISC Rider Current Service Charge and/or Reconciliation Credit/Charge at least one hundred twenty (120) days prior to application on customers' bills. The Company shall file all reasonably necessary schedules to permit the Commission Staff to verify all Current Service Charge and Reconciliation Credit/Charge. The Company will also file a list of all water or wastewater infrastructure projects completed during the applicable period for any Reconciliation Credit/Charge and anticipated in the upcoming period used in calculating the Current Service Charge.

The Company will provide the Commission detailed accounting information with the annual WWISC filings to include: a detailed project listing, reporting on the accounting for the WWISC, verification of WWISC recoveries by month, a reconciliation of the end-of-period book deferral with the WWISC over-or under-recovery balance, current and deferred income tax impacts, and reporting requirements in the event actual investment is materially more or less than authorized. The company will allow Commission Staff access to any internal analysis the Company performs in the evaluation of contractor bids for WWISC projects.

5. OTHER

The company will apply the following in its application of the WWISC Rider:

CAP: The WWISC Current Service Charge, as well as the WWISC Rider, will be based on a total allowed capital of ~~\$1.76556485 \$0 million~~ for water and ~~\$1.0951499 \$0 million~~ for wastewater as established in the most recent base rate case infiltration and inflow reduction projects.

Commented [AJJ2]: Does this read ok??

Audit/Reconciliation: The WWISC will be subject to audit at intervals determined by the Commission. It will also be subject to annual reconciliation based on a reconciliation period consisting of the twelve months ending for each Rate Year. The WWISC Reconciliation Credit/Charge will be recouped or refunded, as appropriate, over the remaining portion of the rate year once Commission Staff has completed its review of the Company's reconciliation of the preceding WWISC. If WWISC revenues exceed WWISC-eligible costs, such over-collections

will be refunded including a carrying cost. If WWISC eligible costs exceed WWISC revenues, such under-collections will be charged. The true-up of prior year collections will be applied to the customer's bill as a Reconciliation Credit/Charge.

VI. Appendix B (continued)

Water and Wastewater Infrastructure Service Charge Rider Component

New Base Rates: The WWISC Current Service Charge will be reset at zero upon application of new base rates to customer billings that provide for prospective recovery of the annual costs that had theretofore been recovered under the WWISC. Thereafter, only the fixed costs of new eligible plant replacements that have not previously been reflected in the Company's rate base would be reflected in the annual WWISC Rider.

Earnings Test: WWISC collections shall be subject to review within annual earnings tests filed by the Company. To the extent annual WWISC collections result in annual earnings above the authorized return on equity, the lessor of (a) WWISC collections or (b) the revenue requirement effect of excess earnings shall be returned to ratepayers in the following WWISC Reconciliation Credit/Charge

Customer Notice: Customers shall be notified of changes in the WWISC by including appropriate information with the first bill they receive following any change to the WWISC Rider Current Service Charge and/or Reconciliation Credit/Charge.

Filed July 30, 2023
6-22-2024-TBA

27, 2023 Effective