

January 21, 2020

Via Federal Express and Email

Honorable Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, Suite 314
P.O. Box 350
Trenton, NJ 08625-0350

**Re: PETITION OF AQUA NEW JERSEY, INC. FOR APPROVAL OF AN
INCREASE IN RATES FOR WASTEWATER SERVICE AND OTHER
TARIFF CHANGES**

BPU Docket. No. WR2001_____

Dear Secretary Camacho-Welch,

Enclosed for filing please find an original and ten (10) copies of a Petition submitted on behalf of Aqua New Jersey, Inc. ("Petitioner") initiating the above-referenced matter. Additionally, I have enclosed an extra copy of this filing. Kindly stamp this copy "filed" and return it to me in the enclosed self-addressed, stamped envelope.

Thank you for your attention to this matter.

Respectfully submitted,


Colleen A. Foley

Enclosures

cc: Per attached Service List

Stephen B. Genzer - Newark Managing Partner

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DELAWARE FLORIDA ILLINOIS MARYLAND MASSACHUSETTS MINNESOTA NEW JERSEY NEW YORK PENNSYLVANIA WASHINGTON, DC

A DELAWARE LIMITED LIABILITY PARTNERSHIP

SERVICE LIST

In the Matter of the Petition of Aqua New Jersey, Inc. for
Approval of an Increase in Rates for Wastewater Service
and Other Tariff Changes
BPU Docket No. WR2001_____

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AQUA NEW JERSEY, INC.
SEWER RATE CASE

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Company's Direct Testimony

Adam Burger	PT-1
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William C. Packer	PT-3
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**STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES**

**PETITION OF AQUA NEW JERSEY, INC.
FOR APPROVAL OF AN INCREASE IN
RATES FOR WASTEWATER SERVICE
AND OTHER TARIFF CHANGES**

BPU DKT. NO. WR2001_____

TO THE HONORABLE NEW JERSEY BOARD OF PUBLIC UTILITIES:

Petitioner, Aqua New Jersey, Inc. (hereinafter "Petitioner," "Aqua" or the "Company"), respectfully submits this Petition pursuant to N.J.S.A. 48:2-21, N.J.S.A. 48:2-18, N.J.A.C. 14:1-5.7, N.J.A.C. 14:1-5.12 and N.J.A.C. 14:9-7.1 et seq., and any other statutes and regulations deemed applicable, and shows that:

1. Petitioner is a public utility corporation of the State of New Jersey subject to the jurisdiction of the New Jersey Board of Public Utilities (the "Board"). Aqua provides wastewater services to customers in eight municipalities located throughout the State of New Jersey. Petitioner's principal business office is located at 10 Black Forest Road, Hamilton, New Jersey 08691.¹

2. Aqua provides wastewater services to approximately 6,281 customers through its Wastewater Division, which centrally operates several wastewater systems. By this Petition, the Company seeks the following relief applicable to its wastewater operations:

¹ The Company also provides water service to approximately 54,000 New Jersey customers. The Company's water operations and rates are not the subject of this proceeding.

- a. To increase base rates for the purpose of producing additional wastewater revenues of approximately \$1,089,968 or approximately 22.2% above the annual level of revenues for the test year ending April 30, 2020;²
- b. To change depreciation rates for certain categories of Company property;
- c. To authorize acquisition adjustments and the recovery of certain costs associated with the Company's acquisition of individual wastewater systems;
- d. To implement a system-wide Purchased Wastewater Treatment Adjustment Clause ("PSTAC"); and
- e. To make certain identified tariff changes.

Background

3. The Company provides wastewater service through the operation of several wastewater systems located throughout the State of New Jersey. The Company has generally organized its water and wastewater business by the following Divisions: the Northern Division (based in Phillipsburg), the Central Division (based in Hamilton), the Eastern Division (based in Berkeley), and the Southern Division (based in Blackwood). The Company's wastewater facilities are located in its Northern, Central and Southern Divisions.

4. As will be discussed in greater detail in this Petition and accompanying Direct Testimony, Aqua's general approach to developing its wastewater business has been to acquire systems that were designed to provide service to a specific housing development or limited area, and were facing challenges such as significant needed capital investment or limited professional oversight. These systems included a mix of regulated utility systems and unregulated developer

² Please note this case has been filed with five months of actual data and seven months of projected data. The Company will update the test year results to actual results as the case progresses.

systems. As such, at the time they were acquired by Aqua several of these systems were not economically viable or professionally managed, and several required substantial investment and significant professional oversight to insure customers received safe, adequate and proper utility service.

5. To date, Aqua has only completed one base rate case for its wastewater operations. That proceeding involved wastewater systems located in Woolwich Township (serving approximately 2,591 residential customers) and North Hanover Township (serving approximately 111 customers in California Village Mobile Home Park and approximately 90 customers in Hanover Village Mobile Home Park), and resulted in the charges set out in Rate Schedule No. 1, General Sewer Service. Rate Schedule No. 1 was reviewed and approved by the Board in early 2014, and authorized the Company to treat these systems as a single operating unit for ratemaking purposes.³

6. All of the Company's other systems have rate structures that were approved by the Board at the time Aqua acquired the individual facilities. Set out below are brief descriptions of each of these wastewater systems:

- Spartan Village: Aqua's Spartan Village wastewater system serves a mobile home community consisting of approximately 222 residential customers located in portions of the Borough of Wrightstown and North Hanover Township. The owner of the mobile home community operated the water and wastewater systems and included those utility services in the

³ See *I/M/O The Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Wastewater Service Provided by Systems Located in Woolwich and North Hanover Townships and Other Tariff Changes*, BPU Dkt. No. WR13070686, Order Adopting Initial Decision/Stipulation (dated February 19, 2014).

cost of monthly lot rentals. Aqua acquired the Spartan Village wastewater system in 2014.⁴ As a part of that acquisition, the Board authorized the Company to charge Spartan Village wastewater customers pursuant to Rate Schedule No. 1.

- Bear Brook: Aqua's Bear Brook wastewater system serves a development consisting of approximately 87 single family homes and condominiums, a golf course, and a clubhouse located in Fredon Township. The developers of Bear Brook initially sought to sell the water and wastewater systems to AquaSource Utility, but that transaction was not completed. The Board, however, did set initial rates for wastewater service in BPU Dkt. No. WE99120915 (Order dated December 21, 2000). In 2003, Aqua agreed to purchase the Bear Brook water and wastewater systems. The Board approved that acquisition in BPU Docket No. WE03090731 (Order dated July 8, 2004), along with the Company's proposal to continue to charge wastewater customers the same rates previously set in BPU Dkt. No. WE99120915. Those rates are set out in Rate Schedule No. 2, and have not changed in nearly two decades.

- Stanton Ridge: Aqua's Stanton Ridge wastewater system serves a development consisting of approximately 151 homes, a golf course, and a clubhouse located in the Township of Readington. Aqua acquired the Stanton Ridge wastewater system in 2007 from the Stanton Ridge Homeowners Association, Inc.⁵ As a part of that acquisition, Aqua maintained the rates then in effect, and codified those rates in Rate Schedule No. 3. Thus, the rate structure of the

⁴ See *I/M/O the Petition of Aqua New Jersey, Inc. for Approval of Municipal Consents to Provide Water and Wastewater Service to Areas of the Township of North Hanover and the Borough of Wrightstown, and Other Required Approvals*, BPU Dkt. No. WE13121186, Order (dated July 23, 2014). Aqua also provides water service to Spartan Village.

⁵ See *I/M/O the Petition of Aqua New Jersey, Inc. for Approval of a Municipal Consent to Provide Wastewater Service to Portions of the Township of Readington and to Acquire the Wastewater System Located Within the Stanton Ridge Community and Other Required Approvals*, BPU Dkt. No. WE07030224, Order (dated December 21, 2007).

Stanton Ridge system has never been the subject of a base rate case or review by the Board, and rates have remained at the same level for well over a decade.

- Maxim: Aqua’s Maxim wastewater system serves approximately 2,588 mostly residential customers located in Howell Township. It was acquired from AquaSource Utility in 2003.⁶ AquaSource previously completed a base rate case for the system in 1998 (BPU Dkt. No. WR97010052), including establishing a PSTAC. The rates charged to customers of Maxim for wastewater service are set out in Rate Schedule No. 4. While Aqua has routinely made PSTAC filings, it has not conducted a base rate case for the Maxim system. Thus, the base rates for Maxim customers have not changed in over two decades.

- Wallkill: Aqua’s Wallkill wastewater system provides service to approximately 411 customers located in an apartment complex in Hardyston Township. The system originally operated as the Wallkill Sewer Company (“Wallkill Sewer”), a public utility incorporated in 1977. Wallkill’s base rates were last reviewed by the Board in 2003 (using a 2001 calendar year test year),⁷ and resulted in the setting of base rates and a PSTAC charge.⁸ Wallkill Sewer was acquired by Aqua in 2010, with Aqua adopting the rates approved by the Board in 2003.⁹ The rates charged to customers of the Wallkill wastewater system are set out in Rate Schedule No. 5.

⁶ See *I/M/O the Joint Petition for Approval of the Acquisition by Consumers New Jersey Water Company of a Controlling Interest in Maxim Sewerage Corporation and the Resulting Merger of Maxim Sewerage Corporation into Consumers New Jersey Water Company, as Part of the Stock Purchase of AquaSource Utility, Inc. by Philadelphia Suburban Corporation, BPU Dkt. No. WM02110808, Order, (dated 2003).*

⁷ See *I/M/O the Petition of the Wallkill Sewer Company for Approval of an Increase in Rates for Sewer Service and the Establishment of a Purchased Sewer Treatment Adjustment Clause, BPU Dkt. Nos. WR02030193 and WR02030194, Order Adopting Initial Decision/Settlement (dated August 7, 2003).*

⁸ See BPU Dkt. Nos. WR02030193 and WP02030194 (dated August 7, 2003).

⁹ See *I/M/O the Acquisition of the Wallkill Sewer company by Aqua New Jersey, Inc. and Other Related Approvals, BPU Dkt. No. WM10020117, Order (dated October 5, 2010).*

Since its acquisition of the Wallkill system, Aqua has left base rates unchanged but has regularly filed a PSTAC, as required. Thus, base rates for Wallkill have not changed in over sixteen years.

- Oakwood Village: Aqua's Oakwood Village wastewater system provides service to 35 customers, including 34 single-family homes and an apartment complex consisting of 1,224 rental apartments, located in the Township of Mount Olive. In late December 2016, Aqua purchased the Oakwood system.¹⁰ Tariff rates for the Oakwood system were previously approved by the Board in 2002, and have remained unchanged since that time.¹¹ Aqua adopted the existing Oakwood rates, and also agreed to complete a program of significant capital investment to insure the Oakwood system complied with applicable environmental requirements. To date, Aqua has invested \$2.7 million in the Oakwood system and has developed plans to install an influent screen in 2020. Since the capital repairs have been completed, the plant has been in compliance with all NJDEP permit analytical requirements.

7. Taken together, Aqua's wastewater systems generate annual revenues of approximately \$4.8 million, including receipts of approximately \$1 million through PSTAC rates.¹² Additional background information regarding the acquisition and operation of these systems can be found in the testimonies of the Company's witnesses, Julie A. Black (PT-2) and Adam Burger (PT-1).

¹⁰ See *I/M/O the Joint Application of Aqua New Jersey, Inc. and Oakwood Village Sewerage Associates, L.L.C. for Approval of the Acquisition of the Assets of a Public Utility and Other Related Approvals*, BPU DKT. No. WM16080739, Order of Approval (dated December 12, 2016).

¹¹ See *I/M/O the Application of Oakwood Village Sewerage Associates, L.L.C. for Approval of (A) Service Area, (B) Issuance of Equity Interests, and (C) Initial Tariff*, BPU Docket No. WE00120986, Order (dated December 19, 2002).

¹² The Company would note that purchased treatment costs for customers served under Rate Schedule No. 1 are included in base rates. As noted on Exhibit P-20, Sheet 3, the Company's total purchased sewerage treatment costs are \$2,120,108 for the Test Year Period.

Proposed Rate Increase

8. The primary purpose of this Petition is to seek a rate increase, largely driven by continuing increases in the Company's operating expenses and needed capital investments. As will be discussed in greater detail in the testimony supporting this Petition, increased expenses, coupled with significant capital expenditures, have significantly reduced the Company's earnings. Consequently, Petitioner's present rates for wastewater service are inadequate to meet those increased expenses, support the required capital improvements, and provide the Company with a reasonable return on its investment in utility plant. The Company would also note that it has not increased rates for many of these systems since they were acquired.

9. The Company proposes to increase rates for the purpose of producing additional revenues of approximately \$1,089,968 or approximately 22.2% above the annual level of revenues for the test year ending April 30, 2020. Specifically, the Company proposes to combine several rate schedules into a single fixed monthly tariff rate,¹³ with only the Wallkill system maintaining an individual rate. In addition, Aqua proposes to recover all purchased wastewater treatment costs through a uniform PSTAC to be charged to all wastewater customers. The additional revenues requested herein are required to enable the Company to maintain a satisfactory credit position, preserve its financial integrity, permit proper maintenance and improvement of the utility plant required to furnish safe, adequate and proper wastewater service to its customers, encourage continued good management and provide an incentive for efficiency,

¹³ Currently, Stanton Ridge and Oakwood Village customers are charged on a quarterly basis pursuant to tariffs that were approved by the Board when those systems were acquired by Aqua. Under the Company's proposal they would be charged the new fixed tariff rate on a monthly basis. To the extent that the Company's proposal to charge these customers on a monthly basis requires separate Board approval, the Company requests that the Board approve this change in billing frequency.

prevent confiscation or diminution of its property, and to earn a reasonable return upon the fair value of its property used and useful in the public service.

Depreciation Rates

10. As described in greater detail in the Direct Testimony of Company Witness William C. Packer, the Company seeks to alter the depreciation rates applicable to certain specific categories of property. To support its request, the Company has provided a depreciation report (marked as Exhibit P-27) that was performed for wastewater facilities in Pennsylvania in connection with sister company Aqua Pennsylvania, Inc.'s wastewater rate case in 2019 (the "Pennsylvania Depreciation Report"). The depreciation rates established in the Pennsylvania Depreciation Report were not contested by any party in the Pennsylvania wastewater rate case, and were used by Aqua Pennsylvania, Inc. to set sewer rates in that case. Given the size of Aqua's New Jersey wastewater operations, the Company concluded it was not in the best interests of New Jersey customers to commission a depreciation study for New Jersey assets alone. Instead, Aqua believes the Pennsylvania Depreciation Report accurately calculates the useful lives of wastewater property in this region and represents a reasonable, cost-effective approach to updating depreciation rates for New Jersey wastewater property.

Cost Recovery Related to Acquisitions

11. The Company has deferred consideration of acquisition adjustments related to the acquisition of the Bear Brook, California Village,¹⁴ Stanton Ridge, Spartan Village, Maxim, Wallkill and Oakwood Village systems. In each case, the Board has approved the acquisition of the wastewater system but deferred to a later proceeding a determination as to the accounting

¹⁴ In BPU Docket No. WR13070686, the Company previously sought approval of an acquisition adjustment related to California Village. The parties to that proceeding could not reach agreement on that request, and the Company was advised it could renew its request in a future docket.

adjustments that will be made on the Company's books to reflect each transaction. In this proceeding, the Company seeks to reflect acquisition adjustments as well as the organizational costs associated with each acquisition. Prior to their acquisition by Aqua, these systems faced a variety of significant operational and managerial challenges, and some were no longer economically viable. In several cases, routine maintenance had been neglected or deferred, and needed capital investments had been ignored. By acquiring these systems and making needed capital, technical and managerial investments, Aqua is insuring that the customers of these systems receive safe, adequate and proper utility service. Therefore, for these reasons and those detailed in the direct testimonies supporting this application, Aqua believes it is appropriate to reflect on its books the full cost of each acquisition. This issue is discussed in additional detail in the testimony of Mr. Packer (PT-3).

Purchased Wastewater Treatment Adjustment Clauses

12. The Company seeks to establish a uniform PSTAC to include all of its purchased wastewater treatment costs and to be charged to all wastewater customers. Pursuant to the Board's PSTAC regulations, N.J.A.C. 14:9-7.1 et seq., a utility is eligible for a PSTAC when its purchased wastewater treatment costs exceed 10 percent of its total operating and maintenance ("O&M") expenses. Aqua obtains wastewater treatment services from three separate utility authorities, and passes those charges through to its customers. Specifically, the Company purchases wastewater treatment and disposal services from the following entities:

a. The Logan Township Municipal Utilities Authority ("LTMUA") charges Aqua a rate of \$31.67 per customer per month. Aqua includes that cost in the fixed monthly rate charged to customers served by the Woolwich, California Village, Hanover Village and Spartan

Village systems (Rate Schedule No. 1). Rate Schedule No. 1 customers do not pay a separate PSTAC.

b. Effective January 1, 2020, the Ocean County Utilities Authority (“OCUA”) charges Aqua a bulk rate of \$4,039 per million gallons. Aqua recovers that cost through a flat PSTAC charged to customers of the Maxim system (Rate Schedule No. 4).¹⁵

c. The Sussex County Municipal Utilities Authority (“SCMUA”) charges Aqua based on a contract formula. Aqua recovers those costs through a volumetric PSTAC charged to customers of the Wallkill system (Rate Schedule No. 5).¹⁶

d. As summarized in Exhibit P-20, Sheet 1, Aqua estimates purchased wastewater treatment costs will be nearly \$2.3 million with total O&M expenses of approximately \$3.8 million for the Pro Forma Period—far in excess of the 10 percent threshold needed for a PSTAC. Aqua reserves its right to supplement this filing, to the extent required pursuant to N.J.A.C. 14:9-7.1 et seq., so that it may implement a uniform PSTAC rate to be charged to all wastewater customers to recover all purchased wastewater treatment costs.

Proposed Tariff Changes

13. Attached as Exhibit P-5 is a proposed revised tariff. In this revision, the Company has conducted a comprehensive review of its tariff to insure that it is fully compliant with existing Board regulations. In addition, the Company has made changes to some sections of

¹⁵ See *I/M/O the Petition of Aqua New Jersey, Inc., Maxim Wastewater Division, for Approval of a 2018 Purchased Wastewater Treatment Adjustment Clause True-Up and Other Required Approvals*, BPU Docket No. WR19080925, Order (dated December 20, 2019).

¹⁶ See *I/M/O the Petition of Aqua New Jersey, Inc., Wallkill Sewer Division, for Approval of a 2018 Purchased Wastewater Treatment Adjustment Clause True-Up and Other Required Approvals*, BPU Docket No. WR19080920, Order (dated December 20, 2019).

its tariff to make the language clearer to its customers. Aside from the consolidation of rate schedules, Petitioner's changes are largely non-substantive save for two:

a. The Company is proposing a new Restoration Charge that will replace the currently subjective restoration charge language with a flat \$100 fee for restoration of service following discontinuance of service (Revised Tariff, Section 3.5); and

b. The Company is proposing to implement a Bad Check Charge, for customer payments submitted by negotiable instruments, such as a personal check, that are dishonored or uncollectible for any reason, equal to the costs charged by the financial institution as a result of the dishonor (Revised Tariff, Section 3.4).

14. Petitioner hereby notifies the Board that, for the reasons stated above, it seeks approval to increase its rates for wastewater service, as provided in the proposed tariffs in Exhibit P-5 for service rendered on and after February 21, 2020, which date is at least thirty (30) days after the filing of this Petition. The Petitioner also notifies the Board that it intends to implement the proposed rates on October 21, 2020, on an interim basis pursuant to law, if the Board has suspended the effective date of the new rates pursuant to N.J.S.A. 48:2-21 but has not finally determined a just and reasonable tariff schedule prior to that date.

15. Annexed hereto and made a part hereof as if fully set forth herein are the following exhibits:

Exhibit P-2 – Verification of William C. Packer

Exhibit P-3 – Certification of Service.

Exhibit P-4 - Present Tariffs.

Exhibit P-5 - Proposed Tariffs.

Exhibit P-6 - Proposed Form of Notice.

Exhibit P-7 - Balance Sheet - Assets.

Exhibit P-8 - Balance Sheet - Liabilities.

Exhibit P-9 - Income Statement.

Exhibit P-10 - Detail of O&M Expenses.

Exhibit P-11 - Most Recent Balance Sheet.

Exhibit P-12 - Most Recent Income Statement.

Exhibit P-13 - Income Statement under Present and Proposed Rates.

Exhibit P-14 - Calculation of Cost of Capital and Rate of Return.

Exhibit P-15 - Rate Increase Calculation.

Exhibit P-17 - Operating Revenues - Metered Sales, Summary and Detail.¹⁷

Exhibit P-20 - Summary of Operations and Maintenance Expenses.

Exhibit P-21 - Summary of Taxes Other Than Income.

Exhibit P-22 - Federal Income Tax.

Exhibit P-23 - Amortization Adjustments.

Exhibit P-25 - Interest Expense.

Exhibit P-26 - Rate Base Summary.

Exhibit P-27 - Pennsylvania Depreciation Report (Analysis).

Testimonies:

PT-1 Adam Burger

PT-2 Julie A. Black

PT-3 William C. Packer

¹⁷ Please note that the following Exhibit numbers will not be used in this filing: P-16, P-18, P-19, and P-24.

PT-4 Daniel T. Franceski

PT-5 Dawn M. Peslak

16. The Company intends to supplement this Petition as needed and will furnish such other and additional information and testimony as may be required by the Board or by the processing of this application.

17. In addition to the Secretary of the Board, notices of this filing and all annexed exhibits are being served upon the State of New Jersey, Division of Rate Counsel and the Office of the Attorney General. Notice of the filing and a statement of its effect will be furnished to Petitioner's customers pursuant to the rules of the Board after the Parties have concurred on its substance. Proof of service of the notices referred to herein will be filed with the Board in accordance with the Board's regulations. Copies of an approved form of Notice and the proposed tariffs will be served upon the respective municipalities and County Clerks pursuant to the Board's regulations.

18. Correspondence in this matter should be addressed to the following:

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WHEREFORE, Petitioner, Aqua New Jersey, Inc., respectfully requests that the proposed increase in rates be approved pursuant to N.J.S.A. 48:2-21, and that the additional relief requested be granted pursuant to N.J.S.A. 48:2-18, N.J.A.C. 14:1-5.7, N.J.A.C. 14:1-5.12 and N.J.A.C. 14:9-7.1 et seq., and that such other relief as described herein be granted by the Board.

Respectfully submitted,

By: Colleen A. Foley
Colleen A. Foley
Saul Ewing Arnstein & Lehr LLP
Attorneys for Aqua New Jersey, Inc.

Dated: January 21, 2020

STATE OF NEW JERSEY
BOARD OF PUBLIC UTILITIES

PETITION OF AQUA NEW JERSEY, INC.
FOR APPROVAL OF AN INCREASE IN
RATES FOR WASTEWATER SERVICE
AND OTHER TARIFF CHANGES

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BPU DKT. NO. WR2001_____

CERTIFICATION OF SERVICE

Colleen A. Foley, an Attorney-at-Law of the State of New Jersey, hereby certifies as follows:

1. I am a Partner at the law firm of Saul Ewing Arnstein & Lehr LLP, attorneys for Petitioner, Aqua New Jersey, Inc., and in that capacity I make the within Certification.
2. On this date, I caused to be filed by hand delivery to the Secretary of the Board of Public Utilities, 44 South Clinton Avenue, Suite 314, Trenton, NJ 08625-0350, an original and ten (10) copies of the attached Petition and all annexed exhibits.
3. On this date, I also caused to be served by hand delivery to Stefanie A. Brand, Director, New Jersey Division of Rate Counsel, 140 East Front Street, 4th Floor, Trenton, NJ 08625, two (2) copies of the Petition and all annexed exhibits.
4. On this date, I also caused to be served by hand delivery to Pamela Owen, Deputy Attorney General, Department of Law & Public Safety, Division of Law, Hughes Justice Complex, 25 Market Street, Trenton, NJ 08625, two copies of the Petition and all annexed exhibits.

I certify that the foregoing statements made by me are true. I understand that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Saul Ewing Arnstein & Lehr LLP
Attorneys for Petitioner
Aqua New Jersey, Inc.

By: Colleen A. Foley
Colleen A. Foley

DATED: January 21, 2020

AQUA NEW JERSEY, INC.
B.P.U. NO. 17 - SEWER

SECOND REVISED TITLE PAGE
CANCELING FIRST TITLE PAGE



AQUA NEW JERSEY, INC.
TARIFF
FOR
SEWER SERVICE
APPLICABLE IN
PORTIONS OF
BURLINGTON, GLOUCESTER,
HUNTERDON, MONMOUTH, MORRIS
AND SUSSEX COUNTIES,
NEW JERSEY

Issued: January 11, 2017

Effective Date: December 30, 2016

By: John Hildabrant, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated
December 12, 2016, in Docket No. WM16080739.

AQUA NEW JERSEY, INC.
B.P.U. NO. 17 - SEWER

SECOND REVISED SHEET NO. 1
CANCELLING FIRST SHEET NO. 1

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Issued: January 11, 2017

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By: John Hildabrant, President
10 Black Forest Road
Hamilton, NJ 08691

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AQUA NEW JERSEY, INC.
B.P.U. NO. 17 - SEWER

THIRD REVISED SHEET NO. 2
CANCELLING SECOND SHEET NO. 2

TERRITORY SERVED

The territory served comprises portions of:
North Hanover Township, Burlington County;
Borough of Wrightstown, Burlington County;
Woolwich Township, Gloucester County
Readington Township, Hunterdon County;
Howell Township, Monmouth County;
Mount Olive Township, Morris County; and
Fredon Township and Hardyston Township, Sussex County

Issued: January 11, 2017

Effective Date: December 30, 2016

By: John Hildabrant, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated
December 12, 2016, in Docket No. WM16080739.

STANDARD TERMS AND CONDITIONS

RULES AND REGULATIONS APPLICABLE TO SEWER SERVICE

1. General Rules:

Aqua New Jersey, Inc. hereby adopts the Regulations for Sewer Utilities promulgated by the Board of Public Utilities of the State of New Jersey, which Regulations are incorporated herein by reference thereto.

2. Definitions:

"Company" as herein used shall be Aqua New Jersey, Inc., the party rendering sewer service.

"Customer" as herein used shall be the party contracting for service to a property, or the party receiving and paying for the service, whichever is appropriate.

"Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from drainage pipes inside the walls of the building terminating five (5) feet outside the face of the building wall from whence it becomes known as the building sewer.

"Building Sewer" shall mean the extension from the building drain to service line and/or other point of connection to the Company system.

"Biochemical Oxygen Demand", denoted hereinafter as "B.O.D.", shall mean the quantity of oxygen utilized (demanded) in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days when incubated at 20°C.

"Suspended Solids" shall mean solids that either float on the surface of or are carried in suspension in water, sewage or industrial wastes, and which are removable by laboratory filtering.

Issued: February 19, 2014

Effective Date: March 1, 2014

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

"pH" shall mean the logarithm to the base ten of the reciprocal of the weight of hydrogen ions in moles per liter of solution.

"Garbage" shall mean solid wastes from domestic and commercial preparation, cooking, dispensing or marketing of food or food products and from the handling, storage and sale of produce.

"Properly Shredded Garbage" shall mean garbage that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in the sewerage system with no particle greater than one-half inch (1/2") in any dimension.

"Slug" shall mean the discharge of water, sewerage, or industrial waste which in concentration of any constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four hour flow or concentration under normal operating conditions.

3. Discontinuance of Service:

By Customer: All agreements covering sewer service for residential customers shall continue in full service and effect unless and until Aqua New Jersey, Inc. receives notice from the customer of record to discontinue service. Aqua New Jersey, Inc. will discontinue service within two (2) days of the receipt of customer's request.

By Aqua New Jersey, Inc.: Aqua New Jersey, Inc., upon reasonable notice, when it can be reasonably given, may suspend or curtail or discontinue service for the following reasons: (1) for the purpose of making permanent or temporary repairs, changes or improvements in any part of its system; (2) for compliance in good faith with any governmental order or directive regardless of whether such order or directive subsequently may be held to be invalid; (3) for any of the following acts or omissions on the part of the customer:

- (a) non-payment of a valid bill due for service furnished at a present or previous location, in accordance with N.J.A.C. 14:3-3A.2. However, non-payment for business service shall not be a reason for discontinuance of residence service except in cases of diversion of service pursuant to N.J.A.C. 14:3-7.8;
- (b) refusal to contract for service where such contract is required;

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By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

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(c) connecting and operating in such manner as to produce disturbing effects on the service of Aqua New Jersey, Inc. or other customers; (d) failure of the customer to comply with any of these Standard Terms and Conditions; (e) where the condition of the customer's installation presents a hazard to life or property; or (f) failure of customer to repair any faulty facility of the customer; (g) tampering with any facility of the utility; (h) fraudulent representation in relation to the use of service; (i) customer moving from the premises, unless the customer requests that service be continued; (j) providing a utility's service to others without approval of the utility;

(4) for nonpayment of a deposit, in accordance with N.J.A.C. 14:3-3A.9, or (5) for refusal of reasonable access to customer's premises in accordance with N.J.A.C. 14:3 - 3.6 for necessary purposes in connection with rendering of service, including meter installation, reading or testing, or the maintenance or removal of the property of Aqua New Jersey, Inc.

When a customer is disconnected for any of the above reasons, the customer prior to reconnection will be required to correct the conditions under which service was discontinued and to pay a reconnection charge representative of the Company's cost of disconnecting and restoring service.

A notice of discontinuance sent to the customer shall be postmarked no earlier than 15 days after the postmark date of the outstanding bill. The notice of discontinuance for nonpayment shall provide the customer with at least 10 days written notice of the Company's intention to discontinue service, in accordance with N.J.A.C. 14:3-3A.3.

Aqua New Jersey, Inc. may not discontinue service because of non-payment of bills in cases where a charge is in dispute, provided that the undisputed charges are paid and the customer has made a request to the Board for an investigation of the disputed charge. In such cases, Aqua New Jersey, Inc. shall notify the customer that unless steps are taken to invoke formal or informal Board action within 5 business days, service will be discontinued for non-payment in accordance with N.J.A.C. 14:3 - 3A.

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By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

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A public utility shall not discontinue residential service involuntarily except between the hours of 8:00 AM and 4:00 PM, Monday through Thursday, unless there is a safety-related emergency. There shall be no involuntary discontinuance of service Fridays, Saturdays and Sundays or on the day before a New Jersey State holiday or on a New Jersey State holiday absent such emergency.

If the customer meets the conditions for a medical emergency set out in N.J.A.C. 14:3-3A.2(i), the Company shall not discontinue service except in accordance with N.J.A.C. 14:3-3A.2(i).

Aqua New Jersey, Inc. shall make every reasonable effort to determine when a landlord-tenant relationship exists at residential premises being served. If such a relationship is known to exist, and if the tenants are not the customers of record but are end-users as defined at N.J.A.C 14:3 - 1.1, service cannot be shut-off unless Aqua New Jersey Water, Inc. has, notwithstanding the time periods in N.J.A.C 14:3 - 3A.5, given a 15-day written notice to the owner of the premises or to the customer of record to whom the last preceding bill was rendered. The Company shall use its best efforts to determine the names and addresses of each tenant to provide copies of the discontinuance notice to all tenants. In addition, the Company shall provide tenants with a 15-day written notice, which shall be hand-delivered, mailed or posted in a conspicuous area of the premises and in the common areas of the multiple family premises.

The Company shall offer the tenants continued service to be billed to the tenants, unless Aqua New Jersey, Inc. demonstrates that such billing is not feasible. The continuation of service to a tenant shall not be conditioned upon payment by the tenant of any outstanding bills due upon the account of any other person. Aqua New Jersey, Inc. shall not be held to the requirements of this Tariff Section if the existence of a landlord-tenant relationship could not be reasonably ascertained.

4. Application for Service Connection:

Application by a residential customer for the establishment of service may be made at the utility's office in person, by mail or

Issued: February 19, 2014

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By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

telephone. The utility will provide a written application to the customer for signature, which is required.

5. Special Requirements Relating to Sewer Service:

Separate and independent service lines shall be installed for each customer. All building drains and building sewers shall be the responsibility of the customer and shall be installed and maintained by the customer.

No customer shall discharge or cause to be discharged into the Company's system any storm water, surface water, ground water, roof runoff, sub-surface drainage, foundation or basement sump drainage, uncontaminated cooling water or unpolluted industrial process water.

No customer shall discharge or cause to be discharged into the Company's system the following described substances, materials, waters, or wastes without the prior written approval of the Company. Such wastes can harm either the sewerage system or treatment process and/or equipment, have an adverse effect upon the receiving stream for the treated sewage, or can otherwise endanger life, limb or property or create a nuisance. In forming the opinions as to whether or not to permit the discharge, the Company will consider the effect upon receiving sewers, as well as the conditions placed upon the Company by its service agreements with sewage treatment service providers including, but not limited to, the Logan Township Municipal Utilities Authority (LTMUA).

The customer shall be responsible for maintaining and repairing the "building drain" and "building sewer".

6. Limitations on Wastewater Discharges:

The Company reserves the right upon review to:

- a. Reject the wastes.
- b. Require pretreatment to an acceptable condition for discharge.
- c. Require flow equalization.

Issued: February 19, 2014

Effective Date: March 1, 2014

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

In the event pretreatment facilities or flow equalization is required, the design and construction of such facilities shall be subject to approval of the Company and operation of said facilities shall be subject to inspection by the Company. Monitoring and/or sampling equipment shall be installed and operated by the customer as deemed necessary by the Company to ascertain proper operation of the pretreatment facilities.

The wastes requiring written approval are:

- a. Any liquid or vapor having a temperature in excess of 150°F.
- b. Any waters or waste waters containing phenols.
- c. Any waters or wastes having a pH in excess of 9.5.
- d. Any water containing unusual concentrations of inert suspended solids, such as, but not limited to, diatomaceous earth, lime and lime slurries or of dissolved solids such as but not limited to sodium chloride or sodium sulfate.
- e. Any water or waste water containing excessive discoloration.
- f. Waste water having unusual "B.O.D." concentration, suspended solids concentration or high chlorine demand in such quantities as to constitute a significant load on the treatment plant.
- g. Unusual volume of flow or concentrations of wastes constituting "slugs" as hereinbefore defined.
- h. Water or wastes containing substances not amenable to biological treatment processes as provided by the Company's wastewater treatment service providers, including, but not limited to, LTMUA and OCMUA.

No customers shall discharge or cause to be discharged any of the following described waters or wastes to the sewers:

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By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

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1. Any gasoline, benzene, naphtha, paints, lacquers, fuel oil or other flammable or explosive liquid, solid or gas which by reason of its nature or quality may cause fire or explosion or which, in any way, may be injurious to personnel or the sewer system.
2. Any water or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity either singly or by interaction with other wastes to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant.
3. Any waters or wastes having a pH of lower than 5.5 or having any other corrosive property capable of causing damage or hazard to the sewerage system and/or personnel of the Company.
4. Plating mill waste water or other industrial process water containing spent pickle liquor concentrated plating solutions, chromium, zinc and similar toxic heavy metals, cyanides and cleaning solvents.
5. Any radioactive material.
6. Any water or wastes containing fats, wax, grease, tar, oils or any other substances, whether emulsified or not which may solidify or become viscous at temperatures between 32° and 150°F or which would impair, impede, affect, interfere with, or endanger personnel or the sewer system.
7. Any garbage not properly shredded.
8. Any solids of such size or characteristic capable of causing obstruction to the flow in sewers, such as, but not limited to, ashes, cinders, sand, mud, straw, metal

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By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

AQUA NEW JERSEY, INC.
B.P.U. NO. 17 - SEWER

shavings, glass, rags, feathers, tar, plastic, wood, paunch
manure, hair fleshings, offal, entrails, etc.

Any industrial customer discharging industrial wastes shall provide and maintain a control manhole suitable to facilitate observation, sampling and measurement of the wastes. The Company (and its wastewater treatment service providers, including, but not limited to, the LTMUA and the OCMUA) shall have the right to inspect, sample, measure and analyze waste water as they deem necessary.

Issued: February 19, 2014

Effective Date: March 1, 2014

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

AQUA NEW JERSEY, INC.
 B.P.U. NO. 17 - SEWER

SECOND REVISED SHEET NO. 4
 CANCELLING FIRST SHEET NO. 4

RATE SCHEDULE NO. 1
GENERAL SEWER SERVICE

APPLICABILITY:

Applicable for general residential, commercial, industrial and municipal sewer service in Woolwich Township, County of Gloucester and North Hanover Township and Borough of Wrightstown, County of Burlington.

CHARACTER OF SERVICE:

Continuous.

RATE:

The rate is a fixed amount per month based on the size of the water meter serving the customer.

<u>Size of Meter</u>	<u>Fixed Sewer Charge</u>	
	<u>Amount Per Month</u>	
	<u>Effective 3/1/2014</u>	<u>Effective 3/1/2015</u>
5/8" or 5/8" x 3/4"	\$ 51.98	\$ 61.40
3/4"	77.97	92.10
1"	129.95	153.50
1 1/2"	259.90	307.00
2"	415.84	491.20
3"	779.70	921.00
4"	1,299.50	1,535.00
6"	2,599.00	3,070.00
8"	4,158.40	4,912.00

TERMS OF PAYMENT:

BILLS ARE DUE FIFTEEN (15) DAYS AFTER THE BILL IS SENT. Bills for sewer service will be rendered monthly in arrears. The Company reserves the right to bill sewer service separately or in conjunction with the water service billing. If done in conjunction with the water billing, the sewer charges will be clearly and separately marked. The Company will apply all partial payments first to the sewer service and then to the water service unless otherwise specified by the customer.

Issued: September 24, 2015

Effective Date: October 3, 2015

By: Nicholas V. Asselta, President
 10 Black Forest Road
 Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated September 14, 2014, in Docket No. WE13121186.

AQUA NEW JERSEY, INC. - BEAR BROOK
B.P.U. NO. 17 - SEWER

RATE SCHEDULE NO. 2
GENERAL SEWER SERVICE

APPLICABILITY:

Applicable for residential and bulk user sewer service customers in the Bear Brook development located in Fredon Township, County of Sussex, New Jersey.

CHARACTER OF SERVICE:

Continuous.

RATE:

Monthly Billing - Flat Rate

Residential customers: \$75.00 per month

Bulk user customer: \$1,668.00 per month

TERMS OF PAYMENT:

Bills shall be rendered on the 15th of each month and shall reflect the current month's usage. All bills will be prorated for the establishment and termination of service.

Issued: February 19, 2014

Effective Date: March 1, 2014

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated February 19, 2014, in Docket No. WR13070686.

RATE SCHEDULE NO. 3
GENERAL SEWER SERVICE

APPLICABILITY:

Applicable for general residential and commercial sewer service in the Stanton Ridge development, located in the Township of Readington, County of Hunterdon, New Jersey.

CHARACTER OF SERVICE:

Continuous.

RATE:

The rate is a fixed amount per annum of \$980.00 per One (1) Equivalent Dwelling Unit ("EDU"), billed on a quarterly basis.

	<u>Fixed Wastewater Charge</u>	
	<u>Quarterly Rate</u>	<u>Annual Rate</u>
1 EDU	\$245.00	\$980.00

Each residence is equal to one (1) EDU, and so shall pay an annual rate of \$980.00, billed in equal installments on a quarterly basis.

The Stanton Ridge Clubhouse is equal to five (5) EDUs, and so shall pay an annual rate of \$4,900, billed in equal installments on a quarterly basis.

TERMS OF PAYMENT:

Bills are due fifteen (15) days after the bill is sent. Bills for wastewater service will be rendered quarterly.

Issued: December 19, 2007

Effective Date: January 1, 2008

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 19, 2007, in Docket No. WE07030224.

AQUA NEW JERSEY, INC. - MAXIM
B.P.U. NO. 17 - SEWER

RATE SCHEDULE NO. 4
BILLS TO BE RENDERED MONTHLY

APPLICABILITY:

Applicable for sewer service rendered in portions of Howell Township, County of Monmouth, New Jersey.

<u>Type of Property:</u>	<u>Annual Base Service Charge</u>	<u>Monthly Base Service Charge</u>
Single Family Dwelling	\$304.00	\$25.33
Two Family Dwelling	608.00	50.66
Apartment Dwelling (1 st Apt.)	304.00	25.33
Each Additional Apartment	304.00	25.33
Town House Dwelling Unit	304.00	25.33

Air Conditioning Units using water for cooling agent (See Paragraph 11.3, Special Provisions) SPECIAL PROVISIONS

Subscriber with sewerage in excess of B.O.D and T.S.S limits imposed by Ocean County Utilities Authority (See Paragraphs 11.1 and 11.2, Special Provisions) SPECIAL PROVISIONS

Business, Commercial, Industrial, Religious, and School Use:

<u>Service Size (Inches)</u>	<u>Annual Base Service Charge</u>	<u>Monthly Base Service Charge</u>
5/8"	\$203.00	16.92
3/4"	304.00	25.33
1"	507.00	42.25
1 1/2"	1,015.00	84.58
2"	1,624.00	135.33
3"	3,045.00	253.75
4"	5,075.00	422.92

When water meter readings are available, the customer shall be billed at \$3.05 per thousand gallons, or the minimum monthly service charge, whichever is greater. If the water is privately supplied, Aqua New Jersey, Inc. shall be permitted to install a meter at the source of supply.

Purchased Sewerage Treatment Adjustment Clause (PSTAC)

Rates are found on Original Sheet No. 4D

Issued: December 2, 2013

Effective Date: January 1, 2014

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 2, 2013, in Docket No. WR13080757.

PURCHASED SEWERAGE TREATMENT ADJUSTMENT CLAUSE

APPLICABILITY:

In addition to the Base Service Charge set forth in Rate Schedule No. 4, the following Purchased Sewerage Treatment Adjustment Clause rates, in accordance with N.J.A.C. 14:9-8.1 et seq., are applicable to the use of sewer service for Customers served by the Company in portions of Howell Township.

RATE:

	<u>Fixed Service Charge</u> <u>Amount Per Month</u>
<u>Residential</u>	
Single Family Dwelling	\$ 31.83
Apartment Dwelling (Each Apt.)	31.83

Business, Commercial, Industrial, Religious and School Use:

*Minimum charges for sewer service shall be based on water meter size.

<u>Size of Water Meter</u> <u>(Inches)</u>	<u>Fixed Service Charge</u> <u>Amount Per Month</u>
3/4"	\$ 31.83
1"	53.08
1 1/2"	109.26
2"	169.40
3"	327.90
4"	530.06

Usage Charge Rate/1000 gallons

General Metered Consumption	\$ 4.014
-----------------------------	----------

*When water meter readings are available, the Customer shall be billed at a rate of \$4.03 per thousand gallons, or the minimum PSTAC charge, whichever is greater. If the water is privately supplied, Aqua New Jersey, Inc. shall be permitted to install a meter at the source of supply.

*The above charges are based upon the Board of Public Utilities' ("Board") estimate of Aqua New Jersey, Inc.'s 12-month average cost of purchased sewerage treatment by the Company's Maxim Sewer Division. The estimated 12-month average cost shall be periodically redetermined by the Board in accordance with true-up procedures set forth in N.J.A.C. 14:9-8.1 et seq.

Issued: December 30, 2019

Effective Date: January 1, 2020

By: Adam Burger, Interim President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 20, 2019, in Docket No. WR19080925.

AQUA NEW JERSEY, INC. - MAXIM
B.P.U. NO. 17 - SEWER

FIRST REVISED SHEET NO. 4D.1
CANCELLING ORIGINAL SHEET NO. 4D.1

TERMS OF PAYMENT:

PAYMENT FOR ALL BILLS RENDERED IS DUE FIFTEEN (15) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for sewer service will be rendered at the close of each billing period.

Issued: December 30, 2019

Effective Date: January 1, 2020

By: Adam Burger, Interim President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 20, 2019, in Docket No. WR19080925.

AQUA NEW JERSEY, INC. - WALLKILL
B.P.U. NO. 17 - SEWER

RATE SCHEDULE NO. 5
BILLS TO BE RENDERED MONTHLY

APPLICABILITY:

Applicable to sewer service provided to residential and non-residential users served by the Company in Hardyston Township, County of Sussex, New Jersey.

CHARACTER OF SERVICE:

Continuous.

RATE:

Fixed Charges

<u>Size of Water Meter</u>	<u>Rate Per Quarter</u>
5/8"	\$ 40.56
3/4"	\$ 60.84
1"	\$ 101.40

TERMS OF PAYMENT:

Net cash within 15 days of receipt of the bill. Bills for all residential and non-residential sewer service are rendered at least once in each calendar quarter.

Issued:

Effective Date:

By: Nicholas V. Asselta, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated _____, in Docket No. WR0310086.

AQUA NEW JERSEY, INC. - WALLKILL
B.P.U. NO. 17 - SEWER

FIFTH REVISED SHEET NO. 4F
CANCELLING FOURTH REVISED SHEET NO. 4F

RATE SCHEDULE NO. 5A
PURCHASED SEWERAGE TREATMENT ADJUSTMENT CLAUSE

APPLICABILITY:

In addition to the Base Service Charge set forth in Rate Schedule No. 5, the following Purchased Sewerage Treatment Adjustment Clause rates, in accordance with N.J.A.C. 14:9-8.1 et seq., are applicable to the use of sewer service for Customers served by the Company in Hardyston Township.

RATE:

Usage Charge Rate/1000 gallons

General Metered Consumption \$5.42

*The above charges are based upon the Board of Public Utilities' ("Board") estimate of Aqua New Jersey, Inc.'s 12-month average cost of purchased sewerage treatment by the Company's Wallkill Sewer Division. The estimated 12-month average cost shall be periodically re-determined by the Board in accordance with true-up procedures set forth in N.J.A.C. 14:9-7.1 et seq.

TERMS OF PAYMENT:

Pursuant to N.J.A.C. 14:3-3a.3, PAYMENT FOR ALL BILLS RENDERED IS DUE FIFTEEN (15) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for sewer service will be rendered at the close of each quarterly billing period.

Issued: December 30, 2019

Effective Date: January 1, 2020

By: Adam Burger, Interim President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 20, 2019, in Docket No. WR19080920.

AQUA NEW JERSEY, INC. - OAKWOOD VILLAGE
B.P.U. NO. 17 - SEWER

ORIGINAL SHEET NO. 4G

RATE SCHEDULE NO. 6
BILLS TO BE RENDERED MONTHLY

APPLICABILITY:

Applicable to sewer service provided to residential and non-residential users served by the Company in Mount Olive Township, County of Morris, New Jersey.

CHARACTER OF SERVICE:

Continuous.

RATE:

Fixed Charges

<u>Type of Property</u>	<u>Rate Per Quarter</u>
Single Family Dwelling	\$ 206.25
Apartment Dwelling	\$ 59,191.25

TERMS OF PAYMENT:

Net cash within 15 days from the postmark date of the bill. Bills for all residential and non-residential sewer service are rendered at least once in each calendar quarter.

Issued: January 19, 2017

Effective Date: December 30, 2016

By: John Hildabrant, President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and Order of Board of Public Utilities dated December 12, 2016, in Docket No. WM16080739.

AQUA NEW JERSEY, INC.
B.P.U. NO. 18 - SEWER

ORIGINAL TITLE PAGE

**AQUA NEW JERSEY, INC.
TARIFF
FOR
SEWER SERVICE
APPLICABLE IN
PORTIONS OF
BURLINGTON, GLOUCESTER,
HUNTERDON, MONMOUTH, MORRIS
AND SUSSEX COUNTIES,
NEW JERSEY**

Issued: _____ Effective Date: _____, 2020

By: Adam Burger, Interim President
10 Black Forest Road
Hamilton, NJ 08691

Filed pursuant to decision and order of the Board of Public Utilities dated _____, in Docket
No. WR2001_____.

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TERRITORY SERVED

The territory served is comprised of portions of:

Burlington County
North Hanover Township
Borough of Wrightstown

Gloucester County
Woolwich Township

Hunterdon County
Readington Township

Monmouth County
Howell Township

Morris County
Mount Olive Township

Sussex County
Fredon Township
Hardyston Township

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TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS:

The following words and phrases, when used in this tariff, shall have the meanings assigned below unless the context clearly indicates otherwise:

- 1.1 **Applicant:** A person, association, partnership, corporation, municipality, authority, state or federal governmental agency or other entity who applies to become a customer of the Company.
- 1.2 **Aqua or Company:** Aqua New Jersey, Inc., the party rendering water service.
- 1.3 **Biochemical Oxygen Demand (“B.O.D.”):** The quantity of oxygen utilized (demanded) in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days when incubated at twenty (20) degrees Centigrade. The standard laboratory procedure shall be that found in the latest approved edition of “Standard Methods for the Examination of Water and Sewage” published by the American Public Health Association, the American Water Works Association, and/or the Water Pollution Control Federation.
- 1.4 **BPU or Board:** The New Jersey Board of Public Utilities.
- 1.5 **Building Drain:** That part of the lowest horizontal piping of a drainage system which receives the discharge from drainage pipes inside the walls of the building terminating five (5) feet outside the face of the building wall from whence it becomes known as the building sewer.
- 1.6 **Building Sewer:** The extension from the building drain to service line and/or other point of connection to the Company’s system. This is the privately-owned part of the lateral and is the customer’s responsibility.
- 1.7 **Combined Sewer:** A sewage collection system which conveys both sanitary sewage and storm water flow.
- 1.8 **Company Service Line:** Company owned wastewater service line from the sewer main of the Company which connects to the Customer Service Line at the edge of the right-of-way or actual property line.
- 1.9 **Customer:** A person or entity who is an owner, occupant or who contracts with the Company for or who takes or receives wastewater collection, treatment and/or disposal service.

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1. DEFINITIONS (CONTINUED):

- 1.10 **Diversion:** An unauthorized connection to pipes by which utility service registers on the Tenant-Customer’s meter although such service is being used by other than the Tenant-Customer of record without his or her knowledge or cooperation. The unauthorized connection must not be apparent from the premises. (N.J.A.C. 14:3-7.8).
- 1.11 **Domestic Wastewater:** The liquid waste or liquid borne waste: (1) resulting from the non-commercial preparation, cooking and handling of food; (2) consisting of human excrement; or (3) consisting of wastewater, non-commercial laundering water, domestic housekeeping wastewater, and similar types of wastes from sanitary uses, whether generated in residences or sanitary facilities in commercial or industrial facilities, but does not include any storm water or ground water introduced from facilities such as roof leaders, sump pumps, floor drains or industrial wastewater.
- 1.12 **Dwelling Unit:** A structure or dwelling intended to be occupied as a whole by one family.
- 1.13 **Equivalent Dwelling Units (“EDU”):** An EDU represents the annual volume of wastewater contributed to the sewer system by a typical dwelling unit, which is approximately 225 gallons per day (or 6,750 gallons per month). A single-family residence is equivalent to 1.00 EDU. The number of EDUs assigned for non-residential customers are determined by meter size and other customer characteristics, as applicable.
- 1.14 **Deferred Payment Agreement (“DPA”):** A payment agreement which may be offered by the Company to a Customer upon request, as appropriate and in accordance with the Board’s regulations.
- 1.15 **Garbage:** Solid wastes from domestic and commercial preparation, cooking, dispensing or marketing of food or food products and from the handling, storage and sale of produce.
- 1.16 **Garbage Properly Shredded:** The term “Properly Shredded Garbage”, as used herein, shall mean the wastes from the preparation, cooking, and dispensing of food that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch in dimension.

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TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

- 1.17 **Grinder pump:** Any mechanical or powered device, owned by the Customer, used to grind, macerate or fluidize garbage so that it can be discharged into the Sanitary Sewer.
- 1.18 **Industrial/Commercial Wastes:** Any liquid, gaseous or water borne wastes from industrial processes or commercial establishments, as distinct from domestic wastewater.
- 1.19 **Industrial/Commercial Waste Permit:** A wastewater permit issued as required by the Company to an Industrial/Commercial user which discharges Industrial/Commercial Waste.
- 1.20 **Industrial/Commercial Waste Pretreatment Program:** A program established by the Company that requires industrial and commercial dischargers to monitor, test, treat and control as necessary pollutants in their wastewater prior to discharge into the Sanitary or Combined Sewer.
- 1.21 **Line extension (for line extension purposes):** An addition to the Company’s main line which is necessary to serve the premises of a Customer.
- 1.22 **Main:** The Company’s pipe, excluding service connections, located in a public highway, street, alley or private right-of-way which pipe is used in transporting wastewater.
- 1.23 **Meter:** Any device supplied by the Company or other for the purpose of measuring water consumption or wastewater discharge.
- 1.24 **NJ DEP:** The New Jersey Department of Environmental Protection.
- 1.25 **Nonresidential Service:** Wastewater service supplied to a commercial or industrial building, including a hotel or motel, or to a master-metered trailer park or multi-tenant apartment building, or to any customer who purchases wastewater service from the Company for the purpose of resale.

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TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

- 1.26 **pH:** The logarithm to the base ten of the reciprocal of the weight of hydrogen ions in moles per liter of solution.
- 1.27 **Pretreatment:** The application of physical, chemical and/or biological processes to reduce the amount pollutants in, or alter the nature of the polluting properties of, an industrial/commercial process wastewater prior to discharging such wastewater into the Sanitary or Combined Sewer.
- 1.28 **Residential Applicant:** A natural person at least 18 years of age not currently receiving service who applies for residential service provided by the Company or any adult occupant whose name appears on the mortgage, deed or lease of the property for which the residential utility service is requested. A Residential Applicant does not include a person who, within 30 days after service termination or discontinuance of service, seeks to have another service reconnected at the same location or transferred to another location within the Company's service territory.
- 1.29 **Residential Customer:** A natural person at least 18 years of age in whose name a residential service account is listed and who is primarily responsible for payment of bills rendered for the service or any adult occupant whose name appears on the mortgage, deed or lease of the property for which the residential utility service is requested. A Residential Customer includes a person who, within 30 days after service termination or discontinuance of service, seeks to have service reconnected at the same location or transferred to another location within the Company's service territory.
- 1.30 **Residential Service:** Wastewater service supplied to an individual single-family residential dwelling unit.
- 1.31 **Regulatory Agency:** Agencies, including but not limited to the BPU, the NJDEP, and the U.S. Environmental Protection Agency ("EPA"), which have authority over the operations of and/or discharges into and/or from the Company's treatment facilities
- 1.32 **Sanitary Sewer:** A sewer which primarily carries sanitary wastewater, together with such storm, surface and ground water as may be present.

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TERMS AND CONDITIONS OF SERVICE

1. DEFINITIONS (CONTINUED):

- 1.33 **Storm Sewer:** A sewer which carries surface, ground water, or storm water from the buildings, ground, streets, or other areas.
- 1.34 **Storm Water Flow:** Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.
- 1.35 **Suspended Solids:** Solids that either float on the surface of, or are in suspension in water, wastewater, or other liquids, and which are largely removable by filtration.
- 1.36 **Slug:** The discharge of water, sewerage, or industrial waste which in concentration of any constituent or in quantity of flow exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four hour flow or concentration under normal operating conditions.
- 1.37 **Tariff:** All of the service rates, rules and regulations issued by the Company, together with any supplements or revisions thereto, officially approved by the Commission and contained in this document.
- 1.38 **Tenant-Customer:** A Residential Customer of record at the time of the complaint who rents a dwelling unit in a multifamily building or owns a condominium. (N.J.A.C. 14:3-7.8).
- 1.39 **Toxic Substances:** Any substances where gaseous, liquid or solid waste which, when discharged to a public sewer in sufficient quantities, will be detrimental to any biological wastewater treatment process, constitute a hazard to human beings or animals, inhibit aquatic life, or create a hazard to recreation in receiving waters of the effluent from a wastewater treatment plant, or as defined pursuant to PL 92500 (Federal Water Pollution Control Act Amendments of 1972) or its amendments.
- 1.40 **Unauthorized Use of Service:** Unreasonable interference or diversion of service, including meter tampering (any act which affects the proper registration of service through a meter), by-passing unmetered service that flows through a device connected between a main or service line and customer-owned facilities, unauthorized service restoration, unauthorized stormwater/groundwater connection to Sanitary or Combined Sewer, or the otherwise taking or receiving of wastewater service without the knowledge or approval of the Company.

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TERMS AND CONDITIONS OF SERVICE**1. DEFINITIONS (CONTINUED):**

- 1.41 **Wastes:** Any liquid, gaseous, or solid substances or combination thereof which are discarded, leached, or spilled substances or combination thereof including sanitary wastewater but excluding storm-water.
- 1.42 **Wastewater:** The liquid and water-carried wastes from dwellings, commercial facilities, industrial facilities and institutions, together with any groundwater, surface water, and storm water that may be present, whether treated or untreated, in the Company's sewer system.

2. GENERAL INFORMATION:

- 2.1 Aqua is regulated by the Board. The Company's provision of service is governed by New Jersey statutes and the pertinent rules and regulations promulgated by the Board, which statutes and rules and regulations are hereby adopted and incorporated by reference, as well as the terms of this tariff. If there is an inconsistency between the Company's tariff and the Board's regulations, the Board's regulations supersede the tariff provision absent specific approval to the contrary by the Board. However, if the tariff provides for more favorable treatment of a customer than the Board's regulations, the tariff shall control. (N.J.A.C. 14:3-1.3(i)).
- 2.2 The current Board-approved "Customer Bill of Rights" can be found on the Board's website at <http://www.bpu.state.nj.us/bpu/assistance/rights/>.
- 2.3 A copy of this Board-approved tariff can be found on the Company's website, www.aquaamerica.com, and is also available for public inspection both at the Company's offices and at the Board, 44 S. Clinton Avenue, Trenton, New Jersey 08625. (N.J.A.C. 14:3-1.3(h)). If after you review this tariff and discuss it with appropriate Company employees, you still have questions regarding this tariff or your service, you may contact the Board's Division of Customer Assistance in-person, by phone, toll free, at (800) 624-0241, or by mail. If you choose to write to the Board, please be sure to include your name, address and phone number (including the area code), and, if you are a Customer, please also include your account number.

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TERMS AND CONDITIONS OF SERVICE**3. BILLING, FEES AND CHARGES:**

- 3.1 The Company will not place the name of a second individual on the account of a Residential Customer unless specifically requested by said second individual. (N.J.A.C. 14:3-3.2(b)).
- 3.2 The Company shall not assess a late payment charge on a Residential Customer, or on a State, county or municipal government entity. Any late payment charges, as appropriate, will not be applied before 25 days have elapsed from the date the bill is rendered. (N.J.A.C. 14:3-7.1(e)).
- 3.3 Tenant-Customers shall not be required to pay for charges associated with a Diversion where, after investigation, Aqua has determined a Diversion of service has occurred. (N.J.A.C. 14:3-7.8(b)).
- 3.4 Bad Checks Charge. Where the Customer submits a negotiable instrument to the Company in payment of a bill, charge, or deposit due and such instrument is subsequently dishonored or uncollectible for any reason, the Customer may be required to pay a Bad Check Charge equal to the costs incurred by the Company from the financial institution.
- 3.5 Restoration Charge. Prior to restoration of service following discontinuance of service at the Company's direction, including but not limited to discontinuance for non-payment, a Customer may be required to pay a Restoration Charge in the amount of \$100.00.

4. DEPOSITS:

- 4.1 While the Company does not typically request a deposit from a Customer upon initiation of new service, it reserves the right to do so consistent with the Board's regulations.
- 4.2 The Company may require that a Customer pay a deposit if the Customer fails to pay a bill within fifteen (15) days after the due date, or after service has been discontinued for non-payment. (N.J.A.C. 14:3-3.4).
- 4.3 Deposits shall be calculated in accordance with the Board's regulations. (N.J.A.C. 14:3-3.4(b)).

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TERMS AND CONDITIONS OF SERVICE

5. DISCONTINUANCE OF SERVICE:

5.1 **Customer Request:** Within 48 hours of notice to the Company by the Customer of a request to discontinue service, the Company shall discontinue service or obtain a meter reading for purposes of calculating the final bill. Where such notice is not provided by the Customer to the Company, the Customer shall be liable for service until the final meter reading is taken. A notice to discontinue service provided by the Customer shall not relieve the Customer from any minimum or guaranteed payment under any contract or rate. (N.J.A.C. 14:3-3A.1(b)).

5.2 **At the Company’s Direction (For Reasons Other Than Nonpayment):** The Company may curtail, suspend or discontinue service, upon reasonable notice, to the extent reasonably possible, for the following reasons (N.J.A.C. 14:3-3A.1(a)):

5.2.1 In order to make permanent or temporary repairs, changes or improvements in any part of the Company’s system;

5.2.2 For compliance in good faith with any governmental order or directive, regardless of whether such order or directive subsequently may be held to be invalid; or

5.2.3 For any of the following acts or omissions on the part of the Customer:

- Refusal of reasonable access to the Customer’s premises;
- Tampering with any facility of the Company;
- Fraudulent representation in relation to use of service;
- Providing the Company’s service to others without approval of the Company;
- Refusal to contract for service where such contract is required;
- Connecting and operating in such a manner as to interfere with the service of the Company or other Customers;
- Failure to comply with any reasonable standard terms and conditions contained in the Company’s tariff;
- Where the condition of the Customer’s installation presents a hazard to life or property; or
- Failure to repair any faulty facility of the Customer.

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TERMS AND CONDITIONS OF SERVICE**5. DISCONTINUANCE OF SERVICE (CONTINUED):**

- 5.3 At the Company's Direction (For Nonpayment):** The Company has the right to curtail, suspend or discontinue service for nonpayment of sewer charges or for nonpayment of a deposit, upon due notice given, where the Residential Customer's arrearage is (i) more than \$100.00, or (ii) more than three (3) months in arrears. (N.J.A.C. 14:3-3A.2(a)).
- 5.3.1 Customers shall be provided with at least fifteen (15) days from the postmark date of the outstanding bill to pay the sewer bill, or any deposit amount requested by the Company. (N.J.A.C. 14:3-3A.3).
- 5.3.2 Where payment is not received within fifteen (15) days, the Company shall provide the Residential Customer with at least ten (10) days' notice prior to discontinuance of service.
- 5.3.3 The Company shall make good faith efforts to contact all Residential Customers by phone prior to discontinuance of service, in addition to notice by first class mail.
- 5.3.4 The Company shall send the notice of discontinuance of service to the Residential Customer and also to any third party previously designated by the Residential Customer upon request to the Company. (N.J.A.C. 14:3-3A.4).
- 5.3.5 The Company shall not discontinue service to any Residential Customer for up to 60 days if a medical emergency exists within the residential premises, which would be aggravated by a discontinuance of service, provided that the Residential Customer has: (i) provided reasonable proof of inability to pay; and (ii) submitted the requisite Medical Certificate to the Company, as well as any requisite re-certification after 30 days have elapsed. At the end of such period of emergency, the Residential Customer shall remain liable for payment of all services rendered. (N.J.A.C. 14:3-3A.2(i)). The Medical Certificate can be found on the Company's website at <https://www.aquaamerica.com/customer-service-center/forms.aspx>.

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5. DISCONTINUANCE OF SERVICE (CONTINUED):

5.3.6 A Customer is responsible for payment of all undisputed charges. If a Customer disputes a charge, and after notice to the Company the dispute is unable to be resolved, the Customer has the right to make a request to the Board for an investigation of the disputed charge within five (5) business days after notice to the Company of the dispute. If such a request is not made within five (5) business days, the Customer’s service may be discontinued for nonpayment in accordance with the Board’s regulations. (N.J.A.C. 14:3-7.6).

5.4 The Company shall not discontinue service to Residential Customers involuntarily except between the hours of 8:00 a.m. and 4:00 p.m., Monday through Thursday, unless there is a safety-related emergency. There shall be no involuntary termination of service on Fridays, Saturdays, and Sundays or on the day before a New Jersey State holiday or on a New Jersey state holiday absent such emergency. (N.J.A.C. 14:3-3A.1(c))

5.5 The Company shall make every reasonable effort to determine if a landlord/tenant situation exists at the residential premises being served and to provide notice to tenants prior to discontinuance of service. Where feasible, the Company shall offer affected tenants continued service to be billed in the tenant’s name. (N.J.A.C. 14:3-3A.6).

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6. DEFERRED PAYMENT AGREEMENTS:

- 6.1 Aqua will use good faith efforts to offer any Customer who is unable to pay an outstanding bill and/or deposit an opportunity to enter into at least one DPA per year. Customers who enter into a DPA for past due charges, however, are not relieved of the obligation to pay current bills on time. In the event that a Customer defaults on the terms of the DPA, Aqua may discontinue service upon due notice. (N.J.A.C. 14:3-7.7)
- 6.2 **Residential Customers.** Where a Residential Customer receives more than one service from Aqua (for example, water and sewer) and is in arrears as to both of those services, a separate DPA shall be offered for each service. In such situations, the Residential Customer may elect to enter into a DPA for one service and to discontinue the other service until satisfactory payment arrangements can be made so as not to add to the arrearage balance. The Company will renegotiate or amend the terms of an existing DPA upon satisfactory evidence provided by the Residential Customer that his or her financial circumstances have changed significantly due to factors beyond his or her control. Where a Residential Customer has DPAs for two services, default on one such DPA constitutes grounds for discontinuance of only that service. (N.J.A.C. 14:3-7.7).
- 6.3 **Non-Residential Customers.** DPAs will not be offered for a term of longer than three (3) months. (N.J.A.C. 14:3-7.7).

7. SPECIAL REQUIREMENTS RELATING TO SEWER SERVICE:

- 7.1 Separate and independent service lines shall be installed for each Customer. All building drains and building sewers shall be the responsibility of the Customer and shall be installed and maintained by the Customer.
- 7.2 No Customer shall discharge or cause to be discharged into the Company's system any storm water, surface water, ground water, roof runoff, sub-surface drainage, foundation or basement sump drainage, uncontaminated cooling water or unpolluted industrial process water.

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TERMS AND CONDITIONS OF SERVICE

7. SPECIAL REQUIREMENTS RELATING TO SEWER SERVICE (CONTINUED):

- 7.3 No Customer shall discharge or cause to be discharged into the Company’s system the substances, materials, waters, or wastes described in Section 9.1 of this tariff without the prior written approval of the Company. Such wastes can harm either the sewerage system or treatment process and/or equipment, have an adverse effect upon the receiving stream for the treated sewage, or can otherwise endanger life, limb or property or create a nuisance. In forming the opinions as to whether or not to permit the discharge, the Company will consider the effect upon receiving sewers, as well as the conditions placed upon the Company by its service agreements with sewage treatment service providers including, but not limited to, the Logan Township Municipal Utilities Authority (LTMUA), the Ocean County Utilities Authority (“OCUA”), and the Sussex County Municipal Utilities Authority (“SCMUA”).
- 7.4 The Customer shall be responsible for maintaining and repairing the “building drain” and “building sewer.”

8. LIMITATIONS ON WASTEWATER DISCHARGES:

- 8.1 No Customer shall discharge the following wastes into the Company’s system without the advance written approval of Aqua:
 - 8.1.1 Any liquid or vapor having a temperature in excess of 150°F.
 - 8.1.2 Any waters or waste waters containing phenols.
 - 8.1.3 Any waters or wastes having a pH in excess of 9.5.
 - 8.1.4 Any water containing unusual concentrations of inert suspended solids, such as, but not limited to, diatomaceous earth, lime and lime slurries or of dissolved solids such as but not limited to sodium chloride or sodium sulfate.
 - 8.1.5 Any water or waste water containing excessive discoloration.
 - 8.1.6 Waste water having unusual “B.O.D.” concentration, suspended solids concentration or high chlorine demand in such quantities as to constitute a significant load on the treatment plant.
 - 8.1.7 Unusual volume of flow or concentrations of wastes constituting Slugs.

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TERMS AND CONDITIONS OF SERVICE

8. LIMITATIONS ON WASTEWATER DISCHARGES (CONTINUED):

8.1.8 Water or wastes containing substances not amenable to biological treatment processes as provided by the Company's wastewater treatment service providers, including, but not limited to, LTMUA, OCUA and SCMUA.

8.2 The Company reserves the right upon review to:

8.2.1 Reject the wastes.

8.2.2 Require pretreatment to an acceptable condition for discharge.

8.2.3 Require flow equalization.

8.3 In the event pretreatment facilities or flow equalization is required, the design and construction of such facilities shall be subject to approval of the Company and operation of said facilities shall be subject to inspection by the Company. Monitoring and/or sampling equipment shall be installed and operated by the Customer as deemed necessary by the Company to ascertain proper operation of the pretreatment facilities.

8.4 No Customer shall discharge or cause to be discharged any of the following described waters or wastes to the sewers:

8.4.1 Any gasoline, benzene, naptha, paints, lacquers, fuel oil or other flammable or explosive liquid, solid or gas which by reason of its nature or quality may cause fire or explosion or which, in any way, may be injurious to personnel or the sewer system.

8.4.2 Any water or wastes containing toxic or poisonous solids, liquids, or gases in sufficient quantity either singly or by interaction with other wastes to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, create a public nuisance, or create any hazard in the receiving waters of the sewage treatment plant.

8.4.3 Any waters or wastes having a pH of lower than 5.5 or having any other corrosive property capable of causing damage or hazard to the sewerage system and/or personnel of the Company.

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8. LIMITATIONS ON WASTEWATER DISCHARGES (CONTINUED):

8.4.4 Plating mill waste water or other industrial process water containing spent pickle liquor concentrated plating solutions, chromium, zinc and similar toxic heavy metals, cyanides and cleaning solvents.

8.4.5 Any radioactive material.

8.4.6 Any water or wastes containing fats, wax, grease, tar, oils or any other substances, whether emulsified or not which may solidify or become viscous at temperatures between 32° and 150°F or which would impair, impede, affect, interfere with, or endanger personnel or the sewer system.

8.4.7 Any garbage not properly shredded.

8.4.8 Any solids of such size or characteristic capable of causing obstruction to the flow in sewers, such as, but not limited to, ashes, cinders, sand, mud, straw, metal shavings, glass, rags, feathers, tar, plastic, wood, paunch manure, hair fleshings, offal, entrails, etc.

8.5 Any industrial customer discharging industrial wastes shall provide and maintain a control manhole suitable to facilitate observation, sampling and measurement of the wastes. The Company (and its wastewater treatment service providers, including, but not limited to, LTMUA, OCUA and SCMUA) shall have the right to inspect, sample, measure and analyze waste water as they deem necessary.

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RATE SCHEDULE NO. 1
GENERAL SEWER SERVICE

APPLICABILITY:

Applicable to the use of wastewater service for all Customers served by the Company.

CHARACTER OF SERVICE:

Continuous, except as limited by the Company’s “Standard Terms and Conditions.”

RATE:

All wastewater service customers shall pay a fixed charge as indicated below, based on the number of Equivalent Dwelling Units (EDU) assigned to the customer.

FIXED MONTHLY CHARGE FOR ALL WASTEWATER CUSTOMERS

Customer Type	No. of EDUs	Wallkill	Other than Wallkill
Residential, Single Family	1.0	\$ 21.01	\$ 44.41
Non-Residential and Multi-Family			
Water Meter Size – 5/8"	1.0	21.01	44.41
Water Meter Size – 3/4"	1.2	25.21	53.29
Water Meter Size – 1"	2.4	50.42	106.58
Water Meter Size – 1.5"	5.0	105.05	222.05
Water Meter Size – 2"	7.4	155.47	328.63
Water Meter Size – 3"	15.0	315.15	666.15
Water Meter Size – 4"	20.0	420.20	888.20
Water Meter Size – 6"	50.0	1,050.50	2,220.50
Water Meter Size – 8"	80.0	1,680.80	3,552.80
Oakwood Village Apartment Complex	612.0	-	27,178.92
Stanton Ridge Clubhouse	22.4	-	994.78
Bear Brook Clubhouse	5.7	-	253.14
Maxim Laundromat	24.4	-	1,083.60

TERMS OF PAYMENT:

PAYMENT FOR ALL BILLS RENDERED IS DUE FIFTEEN (15) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for sewer service will be rendered at the close of each monthly billing period.

Issued: _____ Effective Date: _____, 2020

By: Adam Burger, Interim President
 10 Black Forest Road
 Hamilton, NJ 08691

Filed pursuant to decision and order of the Board of Public Utilities dated _____, in Docket No. WR2001_____.

**RATE SCHEDULE NO. 2
PURCHASED SEWERAGE TREATMENT ADJUSTMENT CLAUSE**

APPLICABILITY:

In addition to the General Sewer Service Charge set forth in Rate Schedule No. 1, the following Purchased Sewerage Treatment Adjustment Clause rates, in accordance with N.J.A.C. 14:9-8.1 et seq., are applicable to the use of sewer service for all Customers served by the Company.

RATE:

All wastewater service customers shall pay a fixed charge as indicated below, based on the number of Equivalent Dwelling Units (EDU) assigned to the customer.

FIXED MONTHLY CHARGE FOR ALL WASTEWATER CUSTOMERS

Customer Type	No. of EDUs	PSTAC Rate
Residential, Single Family	1.0	\$ 26.23
Non-Residential and Multi-Family		
Water Meter Size – 5/8"	1.0	26.23
Water Meter Size – 3/4"	1.2	31.48
Water Meter Size – 1"	2.4	62.95
Water Meter Size – 1.5"	5.0	131.15
Water Meter Size – 2"	7.4	194.10
Water Meter Size – 3"	15.0	393.45
Water Meter Size – 4"	20.0	524.60
Water Meter Size – 6"	50.0	1,311.50
Water Meter Size – 8"	80.0	2,098.40
Oakwood Village Apartment Complex	612.0	16,052.76
Stanton Ridge Clubhouse	22.4	587.55
Bear Brook Clubhouse	5.7	149.51
Maxim Laundromat	24.4	640.01

*The above charges are based upon the Board of Public Utilities' ("Board") estimate of Aqua New Jersey, Inc.'s 12-month average cost of purchased sewerage treatment from the Logan Township Municipal Utilities Authority, Ocean County Utilities Authority, and Sussex County Municipal Utilities Authority. The estimated 12-month average cost shall be periodically re-determined by the Board in accordance with true-up procedures set forth in N.J.A.C. 14:9-8.1 et seq.

TERMS OF PAYMENT:

PAYMENT FOR ALL BILLS RENDERED IS DUE FIFTEEN (15) DAYS AFTER THE ORIGINAL POSTMARK DATE OF THE BILL. Bills for sewer service will be rendered at the close of each monthly billing period.

Issued: _____ Effective Date: _____, 2020

By: Adam Burger, Interim President
 10 Black Forest Road
 Hamilton, NJ 08691

Filed pursuant to decision and order of the Board of Public Utilities dated _____, in Docket No. WR2001_____.

RATE SCHEDULE NO. 2
PURCHASED SEWERAGE TREATMENT ADJUSTMENT CLAUSE

Continued,

SPECIAL PROVISIONS:

No additional charge shall be established for recirculating water or air-cooled air conditioning units.

Rates apply to normal sewerage as defined by the NJDEP and the Ocean County Utilities Authority (“OCUA”). Aqua reserves the right to require pretreatment prior to discharge into the sewer system if the sewerage contains harmful substances such as gasoline, P.C.B.s, oil, explosive liquids, grease, phenols, acids, alkalines, lint, excessive detergents or any other toxic or hazardous substances as defined by NJDEP and/or OCUA. This paragraph includes but is not limited to laundromats or dry cleaners where the owner will be required to provide a screen or filter to remove excessive lint before discharge into the sewer system.

As of January 1, 1997, OCUA has imposed these local limits for industrial and non-domestic waste water discharged to its northern plant: 300 ppm B.O.D.; 300 ppm T.T.S. Any charges imposed by OCUA for treating these or any other special substances shall be passed through to the specific customer.

Issued:
By: Adam Burger, Interim President
10 Black Forest Road
Hamilton, NJ 08691

Effective Date: _____, 2020

Filed pursuant to decision and order of the Board of Public Utilities dated _____, in Docket No. WR2001_____.

NOTICE OF FILING OF PETITION OF AQUA NEW JERSEY, INC.
FOR APPROVAL OF AN INCREASE IN RATES FOR WASTEWATER SERVICE
AND OTHER TARIFF CHANGES

BPU Docket No. WR2001_____

OAL Docket No. _____

PLEASE TAKE NOTICE that on January __, 2020, Aqua New Jersey, Inc. (“Aqua” or the “Company”), pursuant to N.J.S.A. 48:2-21, N.J.S.A. 48:2-18, N.J.A.C. 14:1-5.7, N.J.A.C. 14:1-5.12 and N.J.A.C. 14:9-7.1 et seq., and other relevant statutes and regulations, filed a Petition with the Board of Public Utilities (the “Board”) of the State of New Jersey for approval of an increase in Aqua’s charges for wastewater service. The Company believes that the increase is necessary for it to continue to provide safe, adequate and proper service to its customers and to prevent the impairment of its financial integrity. Specifically, the Company is requesting an increase in base rate revenues of \$1,089,968, or approximately 22.2% above the adjusted annual level of revenues for the test year period ending April 30, 2020.

The Company’s Petition requests an increase in the rates charged to certain wastewater customers as set out in detail below. In addition, the Company is requesting the establishment of a uniform Purchased Sewerage Treatment Adjustment Clause (“PSTAC”) to be applied on a monthly basis to all customers. The proposed rates are contained in the tariff sheets and Petition filed with the Board. The present and proposed rates for each wastewater system are as follows:

COMPARISON OF PRESENT AND PROPOSED WASTEWATER RATES

Current Rate Schedule No. 1

Serving Customers in

Woolwich Township, California Village, North Hanover Village & Spartan Village

The Rate Schedule No. 1 rate is a fixed monthly charge based on the size of the water meter serving the customer. The Company has proposed to increase those fixed monthly charges and to implement a fixed monthly PSTAC rate (pursuant to Proposed Rate Schedule No. 2) as follows:

Fixed & PSTAC Monthly Charges

Category / Size of Meter	Present Total Rate	Proposed Fixed Rate	Proposed PSTAC Rate	Proposed Total Rate	\$ Increase / (Decrease)
Residential, Single Family	\$ 61.40	\$ 44.41	\$ 26.23	\$ 70.64	\$ 9.24
Non-Residential and Multi-Family					
5/8"	61.40	44.41	26.23	70.64	9.24
3/4"	92.10	53.29	31.48	84.77	(7.33)
1"	153.50	106.58	62.95	169.53	16.03
1.5"	307.00	222.05	131.15	353.20	46.20
2"	491.20	328.63	194.10	522.73	31.53
3"	921.00	666.15	393.45	1,059.60	138.60
4"	1,535.00	888.20	524.60	1,412.80	(122.20)
6"	3,070.00	2,220.50	1,311.50	3,532.00	462.00
8"	4,912.00	3,552.80	2,098.40	5,651.20	739.20

A RATE SCHEDULE NO. 1 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8” METER WILL SEE HIS/HER MONTHLY BILL INCREASE FROM \$61.40 TO \$70.64, AN INCREASE OF \$9.24 (OR 15%) PER MONTH.

Current Rate Schedule No. 2
Serving Customers in
Bear Brook (Fredon Township)

The Rate Schedule No. 2 rate is a monthly flat rate. The Company has proposed to eliminate this rate class and serve these customers pursuant to Proposed Rate Schedule Nos. 1 and 2, which charges will be billed on a monthly basis. The new monthly charges will include fixed charges based on the size of the water meter serving the customer and a new fixed PSTAC rate, and have been proposed as follows:

Fixed & PSTAC Monthly Charges

Category / Size of Meter	Present Total Rates	Proposed Fixed Rates	Proposed PSTAC Rates	Proposed Total Rates	\$ Increase / (Decrease)
Residential, Single Family	\$ 75.00	\$ 44.41	\$ 26.23	\$ 70.64	\$ (4.36)
Non-Residential and Multi-Family					
Bear Brook Clubhouse	1,668.00	994.78	587.55	1,582.33	(85.67)

A RATE SCHEDULE NO. 2 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8” METER WILL SEE HIS/HER MONTHLY BILL DECREASE FROM \$75.00 TO \$70.64, A DECREASE OF \$4.36 (OR 6%) PER MONTH.

Current Rate Schedule No. 3
Serving Customers in
Stanton Ridge (Township of Readington)

The Rate Schedule No. 3 rate is a fixed quarterly charge per Equivalent Dwelling Unit (“EDU”). Each residence in the Stanton Ridge development is equal to one EDU. The Company has proposed to eliminate this rate class and serve these customers pursuant to Proposed Rate Schedule Nos. 1 and 2, which charges will be billed on a monthly basis. The new monthly charges will include fixed charges based on the size of the water meter serving the customer and a new fixed PSTAC rate, and have been proposed as follows:

Fixed & PSTAC Monthly Charges

Category / Size of Meter	Present Total Rates	Proposed Fixed Rates	Proposed PSTAC Rates	Proposed Total Rates	\$ Increase / (Decrease)
Residential, Single Family	\$ 81.67	\$ 44.41	\$ 26.23	\$ 70.64	\$ (11.03)
Non-Residential and Multi-Family					
Stanton Ridge Clubhouse	408.33	253.14	149.51	402.65	(5.68)

A RATE SCHEDULE NO. 3 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8” METER WILL SEE HIS/HER MONTHLY BILL DECREASE FROM APPROXIMATELY \$81.67 TO \$70.64, A DECREASE OF \$11.03 (OR 14%) PER MONTH.

Current Rate Schedule No. 4
Serving Customers in
Maxim (Howell Township)

Rate Schedule No. 4 includes a fixed monthly service charge and a fixed monthly PSTAC rate. The Company has proposed to eliminate this rate class and serve these customers pursuant to Proposed Rate Schedule Nos. 1 and 2, which charges will be billed on a monthly basis. The new monthly charges will include fixed charges based on the size of the water meter serving the customer and a new uniform monthly PSTAC rate to be charged to all customers, and have been proposed as follows:

Fixed & PSTAC Monthly Charges

Present PSTAC Rate Per 1,000 Gallons: \$4.014
Present Total Rate Per 1,000 Gallons: \$7.064

Category / Size of Meter	Present Fixed Rate	Average Billed Usage (Gals)	Present Usage Charge	Present Total Bill	Proposed Fixed Rate	Proposed PSTAC Rate	Proposed Total Rate	\$ Increase
Residential, Single Family	\$ 57.16	-	\$ -	\$ 57.16	\$ 44.41	\$ 26.23	\$ 70.64	\$ 13.48
Non-Residential and Multi-Family								
3/4"	57.16	2,289	16.17	73.33	53.29	31.48	84.77	11.44
1"	95.33	-	-	95.33	106.58	62.95	169.53	74.20
2"	304.73	1,258	8.89	313.62	328.63	194.10	522.73	209.11
4"	952.98	-	-	952.98	888.20	524.60	1,412.80	459.82
Maxim Laundromat	304.73	172,744	1,220.26	1,524.99	1,083.60	640.01	1,723.61	198.62

A RATE SCHEDULE NO. 4 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8” METER WILL SEE HIS/HER MONTHLY BILL INCREASE FROM APPROXIMATELY \$57.16 TO \$70.64, AN INCREASE OF \$13.48 (OR 24%) PER MONTH.

Current Rate Schedule No. 5
Serving Customers in
Wallkill (Hardyston Township)

Rate Schedule No. 5 includes a fixed quarterly service charge based on the size of the water meter serving the customer, and a PSTAC rate (Rate Schedule No. 5 PSTAC) based on the volume of water used by the customer. The Company has proposed to revise the fixed quarterly charge and the PSTAC charge and to charge these proposed rates on a monthly basis. The Company has also proposed the elimination of the Rate Schedule No. 5 PSTAC to be replaced

by the uniform monthly PSTAC rate to be charged to all customers under Proposed Rate Schedule No. 2. The new monthly proposed rates are as follows:

Fixed & PSTAC Monthly Charges

Present PSTAC Rate Per 1,000 Gallons: \$5.420

Category / Size of Meter	Present Fixed Rate	Average Usage (Gals)	Present Usage Charge	Present Total Bill	Proposed Fixed Rates	Proposed PSTAC Rates	Proposed Total Rate	\$ Increase / (Decrease)
Residential, Single Family	\$ 13.52	3,601	\$ 19.52	\$ 33.04	\$ 21.01	\$ 26.23	\$ 47.24	\$ 14.20
Non-Residential and Multi-Family								
5/8"	13.52	4,348	23.56	37.08	21.01	26.23	47.24	10.16
3/4"	20.28	15,433	83.65	103.93	25.21	31.48	56.69	(47.24)
1"	33.80	23,910	129.59	163.39	50.42	62.95	113.37	(50.02)
2"	33.80	88,758	481.07	514.87	155.47	194.10	349.57	(165.30)

A RATE SCHEDULE NO. 5 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8" METER AND APPROXIMATELY 3,600 GALLONS PER MONTH OF USAGE WILL SEE HIS/HER MONTHLY BILL INCREASE FROM APPROXIMATELY \$33.03 TO \$47.24, AN INCREASE OF \$33.72 (OR 43%) PER MONTH.

Current Rate Schedule No. 6
Serving Customers in
Oakwood Village (Mount Olive Township)

The Rate Schedule No. 6 rate is a fixed amount per single family dwelling that is billed on a quarterly basis. The Company has proposed to eliminate this rate class and serve these customers pursuant to Proposed Rate Schedule Nos. 1 and 2, which charges will be billed on a monthly basis. The new monthly charges will include fixed charges based on the size of the water meter serving the customer and a new fixed PSTAC rate, and have been proposed as follows:

Fixed & PSTAC Monthly Charges

Category / Size of Meter	Present Total Rates	Proposed Fixed Rates	Proposed PSTAC Rates	Proposed Total Rates	\$ Increase / (Decrease)
Residential, Single Family	\$ 68.75	\$ 44.41	\$ 26.23	\$ 70.64	\$ 1.89
Non-Residential and Multi-Family					
Oakwood Village Apartment Complex	19,730.42	27,178.92	16,052.76	43,231.68	23,501.26

A RATE SCHEDULE NO. 6 RESIDENTIAL SEWER SERVICE CUSTOMER WITH A 5/8" METER WILL SEE HIS/HER MONTHLY BILL INCREASE FROM APPROXIMATELY \$68.75 TO \$70.64, AN INCREASE OF \$1.89 (OR 3%) PER MONTH.

Any relief determined by the Board to be just and reasonable may be allocated by the Board to any class or classes of customers of the Company in such manner and, in such amounts or percentages, as the Board may deem appropriate. The Board may choose to impose a greater portion of the increase on any present or future class or classes, group or groups of customers, may exclude from any increase any of the foregoing, or may vary the amount of percentage increase applicable to any of the foregoing.

PLEASE TAKE FURTHER NOTICE that the Company intends to implement, subject to any refunds that may be ordered by the Board, the proposed tariffs for service on and after October 21, 2020 if the Board has not finally determined a just and reasonable tariff schedule prior to that date.

PLEASE TAKE FURTHER NOTICE that public comment hearings on the Company's Petition have been scheduled for:

[placeholder for hearing info]

An Administrative Law Judge from the Office of Administrative Law will preside over the public hearings. Members of the public are invited to attend and express their views on the proposed rate increase. Such comments will be made a part of the final record in the proceeding. Whether or not you attend the public hearing, written comments may be submitted to the Hon. _____, Office of Administrative Law, P. O. Box 049, Trenton, New Jersey 08625-0049; or the Hon. Aida Camacho-Welch, Secretary, Board of Public Utilities, 44 South Clinton Street, 3rd Floor, Suite 314, Trenton, New Jersey 08625-0350. Please include Docket Number WR2001_____ in your comment letter.

The complete schedules for the proposed rates are part of the Petition filed with the Board, which was served upon the Director of the Division of Rate Counsel. Notice of the filing of the Petition was also served on the Clerks of Municipalities in the service areas of the Company. Further information and copies of the Petition (including all exhibits and testimony) may be obtained at the Board's offices located at 44 South Clinton Avenue, 3rd Floor, Suite 314, Trenton, New Jersey 08625, at the Company's offices located at 10 Black Forest Road, Hamilton, New Jersey 08691, and on the Company's website at www.aquaamerica.com.

AQUA NEW JERSEY, INC.
10 Black Forest Road

AQUA NEW JERSEY, INC.
SEWER SYSTEMS
BALANCE SHEET

<u>ASSETS:</u>	Twelve Months Ended December 31st			
	2018	2017	2016	2015
Property, Plant & Equipment at cost:				
Sewer Utility Plant In Service	\$ 23,705,435	\$ 21,389,227	\$ 19,975,426	\$ 18,456,213
Less: Accumulated Depreciation	(6,161,038)	(5,844,413)	(4,636,902)	(4,424,751)
	17,544,397	15,544,814	15,338,524	14,031,462
Construction Work In Progress	23,602	154,749	(26,199)	27,025
Utility Plant Adjustment	(957,737)	(1,038,587)	(1,097,837)	(1,174,718)
Net Utility Plant	16,610,262	14,660,976	14,214,488	12,883,769
Current Assets:				
Cash and Temporary Investments	-	-	-	-
Accounts Receivable - Affiliates	(501,630)	(489,040)	(535,783)	(564,234)
Accounts Receivable	504,497	533,923	418,274	408,327
Unbilled Revenue	119,775	102,828	131,664	126,164
Materials & Supplies	0	0	0	0
Prepayments	41,448	42,911	28,864	21,897
Other	0	0	0	0
Total Current Assets	164,089	190,622	43,018	(7,846)
Deferred Charges & Other Assets:				
Regulatory Assets (inclgd Unamort RC expns)	95,261	127,562	72,039	67,486
Other	2,808,678	2,814,654	2,809,390	2,814,654
Total Deferred Charges & Other Assets	2,903,939	2,942,216	2,881,429	2,882,140
Total Assets	\$ 19,678,290	\$ 17,793,814	\$ 17,138,935	\$ 15,758,064

AQUA NEW JERSEY, INC.
SEWER SYSTEMS
BALANCE SHEET

SHAREHOLDERS INVESTMENT
AND LIABILITIES:

Twelve Months Ended December 31st

	2018	2017	2016	2015
Capitalization:				
Shareholders Equity	\$ -	\$ -	\$ -	\$ -
Premium on Common Shares	0	0	0	0
Capital Investment by Parent	0	0	0	0
Reinvested Earnings	9,721,525	7,891,328	7,288,163	5,901,847
Total Equity	9,721,525	7,891,328	7,288,163	5,901,847
Mortgage Bonds & Unamort Issue Cost	0	0	0	0
Total Capitalization	9,721,525	7,891,328	7,288,163	5,901,847
Current Liabilities:				
Current Portion of Long Term Debt	0	0	0	0
Accounts Payable	132	184	132	11
Accrued Interest	0	0	0	0
Other Accrued Expenses	(16,343)	(16,343)	63,205	62,503
Total Current Liabilities	(16,211)	(16,159)	63,337	62,514
Deferred Credits:				
Customer Advances for Construction	6,914,677	6,949,550	6,954,622	6,989,616
Deferred Federal Income Taxes	15,495	15,495	15,495	15,495
Other	29,540	165,009	28,727	0
Total Deferred Credits	6,959,712	7,130,053	6,998,844	7,005,111
Contributions in Aid of Construction	3,013,264	2,788,591	2,788,591	2,788,591
Total Shareholders' Investment and Liabilities	\$ 19,678,290	\$ 17,793,814	\$ 17,138,935	\$ 15,758,064

AQUA NEW JERSEY, INC.
SEWER RATE CASE
INCOME STATEMENT

<u>ACCOUNT:</u>	Audited Twelve Months Ended December 31st			
	2018	2017	2016	2015
 <u>OPERATING REVENUES:</u>				
Sewer Revenues	\$ 4,651,662	\$ 4,589,742	\$ 4,314,333	\$ 4,168,572
Total Operating Revenues	4,651,662	4,589,742	4,314,333	4,168,572
 <u>OPERATING EXPENSES:</u>				
Operating & Maintenance Expenses	3,328,281	3,445,856	3,031,957	3,039,020
Depreciation Expense	316,716	265,074	236,510	230,958
Amortization Expense	(80,850)	(58,756)	(19,822)	(30,248)
Taxes Other Than Income	415,029	414,690	349,285	298,824
Income Taxes	-	-	-	-
Total Operating Expenses	3,979,177	4,066,864	3,597,930	3,538,554
Utility Operating Income	672,485	522,877	716,403	630,018
OTHER INCOME, net	0	0	0	0
Income Before Interest Charges	672,485	522,877	716,403	630,018
 <u>INTEREST CHARGES:</u>				
Interest on Long Term Debt	-	-	-	-
Other Interest Expense	-	-	-	-
Interest Charged to Construction	(32,702)	(7,058)	(412)	(1,419)
Total Interest Charges	(32,702)	(7,058)	(412)	(1,419)
Minority Interest	-	-	-	-
NET INCOME	\$ 705,187	\$ 529,935	\$ 716,815	\$ 631,437

AQUA NEW JERSEY, INC.
SEWER SYSTEMS
DETAIL OF OPERATING EXPENSES

<u>ACCOUNT</u>	<u>Audited Twelve Months Ended December 31st</u>			
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
<u>OPERATING EXPENSES:</u>				
Collection	\$ 386,148	\$ 389,206	\$ 196,936	\$ 196,224
Pumping	81,186	68,937	70,404	43,829
Treatment & Disposal	2,011,673	2,040,252	2,040,243	2,082,246
Customer Accounts	139,195	122,658	134,584	142,366
Administrative and General	446,242	405,947	416,904	399,534
Total Operating Expenses	<u>3,064,444</u>	<u>3,027,000</u>	<u>2,859,071</u>	<u>2,864,199</u>
<u>MAINTENANCE EXPENSES:</u>				
Pumping	49,547	127,041	80,305	54,596
Treatment & Disposal	20,251	24,886	19,808	41,278
Transmission & Distribution	194,039	266,930	72,773	78,947
Total Maintenance Expenses	<u>263,837</u>	<u>418,857</u>	<u>172,886</u>	<u>174,821</u>
TOTAL O & M EXPENSES	<u>\$ 3,328,281</u>	<u>\$ 3,445,856</u>	<u>\$ 3,031,957</u>	<u>\$ 3,039,020</u>

Aqua New Jersey, Inc.
Balance Sheet
(as of December 31, 2019)

Exhibit P-11

NJ - Sewer

300000.0000 - PPE-Utility Plant in Service	24,280,852
Utility Property Plant and Equipment	24,280,852
114000.0000 - U Plant Acq Adj	(1,948,285)
115000.0000 - Accum Amort Util Plant Acq Adj	1,071,397
Net Utility Plant Adjustment	(876,888)
Utility Plant	23,403,964
108000.0000 - AD-General	(8,067,910)
Allowance for Depreciation	(8,067,910)
Net Utility Plant	15,336,054
105010.0000 - CWIP	(163,842)
105015.0000 - CWIP Contributed Property	95,700
105016.0000 - CWIP-Advances	5,527,440
105020.0000 - CWIP-Capital-Payroll-Rg	99,448
105029.0000 - CWIP-Capital-Payroll-OT	8,340
105030.0000 - CWIP-ACCOUNTS PAYABLE	6,615,409
105040.0000 - CWIP-INVENTORY	2,137
105060.0000 - CWIP-GENERAL OVERHEAD	32,239
105070.0000 - CWIP-PAYROLL OVERHEAD	121,139
105080.0000 - CWIP-AFUDC	560
105081.0000 - CWIP-AFUDC Debt	10,957
105085.0000 - CWIP-AFUDC Equity	23,896
105090.0000 - CWIP-CLOSING	(11,918,938)
CWIP	454,482
Net Plant	15,790,536
141000.0000 - Customer Accounts Receivable	504,925
Account Recievable Trade	504,925
143000.0000 - RESERVE-UNCOLLECTABLE ACCTS	(23,096)
Allowance for Bad Debt	(23,096)
922501.0000 - IntraZone Acct Co 25 Zone 1	(546,930)
Accounts Rec Affiliates	(546,930)
173000.0000 - Unbilled-METERED	125,463
Unbilled Revenue	125,463
162010.0000 - OTHER PPD-GROSS RECEIPTS	58,447
162020.0000 - OTHER PPD-FRANCHISE	28,268
162030.0000 - OTHER PPD-EXCISE	18,085
162140.0000 - OTHER PPD-PUC ASSESSMENT	20,182
Prepayments	124,982
Total Current Assets	185,344
186103.0000 - Deferred Rate Case Exp-3	11,961
Rate Case Expense	11,961
186355.0000 Reg Asset - AFUDC Gross up (WIP)	524
186366.0000 - Reg Asset -AFUDC Gross up (InSvc)	12,313
186367.0000 - Reg Asset -AFUDC Gross up (AD)	(648)
186700.0000 - Reg Asset - Meritage	221,400
186900.0000 - Reg Asset - Defer Purch Wastewater	7,924
Regulatory Assets	241,513

Aqua New Jersey, Inc.
Balance Sheet
(as of December 31, 2019)

Exhibit P-11

NJ - Sewer

184020.0000 - RWIP-ACCOUNTS PAYABLE	14,629
184030.0000 - RWIP-INVENTORY	3,010
184099.0000 - RWIP-CLOSING	(17,639)
116000.0000 - Good Will-Water	2,808,678
GOODWILL	2,808,678
Other Non-Current Assets	2,808,678
Total Non-Current Assets	3,062,152
Total Assets	19,038,032
215000.0000 - Unappropriated Retained Earning	(10,593,794)
Balance on January 1	(10,593,794)
215100.0000 - Undistrib Retained Earnings	
215101.0000 - Undistrib. Retained Earnings (Manual)	(413,423)
Income Current Year	(413,423)
Reinvested Earnings	(11,007,217)
Total Capitalization	(11,007,217)
231006.0000 - A/P-Refunds to Customers	(132)
Operating Acc/Pay Trade	(132)
236124.0000 - Accrued Tax-Fed-Other	16,343
Accrued Taxes - Federal	16,343
Total Current Liabilities	16,211
253112.0000 - Reg Liab-Misc Op Reserve QIPS	(4,694)
Regulatory Liabilities	(4,694)
252050.0000 - CAC-WIP Non Cash	(7,027,328)
252080.0000 - CAC-WIP Cash	87,555
252099.0000 - CAC-WIP Closing	6,934,466
252106.0000 - CAC-Non Unitized	(6,934,466)
Cust Advances for Const	(6,939,773)
283050.0000 - Federal Deferred Tax-Other	(15,495)
Long Term Deferred FIT	(15,495)
Total Def Cr & Non-Current Liab	(6,959,962)
271050.0000 - CIAC-WIP NON CASH	(250,103)
271080.0000 - CIAC-WIP CASH	(84,210)
271099.0000 - CIAC-WIP CLOSING	283,882
271101.0000 - CIAC-UNITIZED	(3,072,473)
272000.0000 - Accum Amort of CIAC	2,035,840
Contrib in Aid of Const	(1,087,064)
Total Liabilities and Capital	(19,038,032)

Aqua New Jersey, Inc.
Income Statement
(as of December 31, 2019)

Exhibit P-12

NJ - Sewer

521100.0000 - SW-Flat Rate Rev-Residential	4,004,548
521200.0000 - SW-Flat Rate Rev-Commercial	360,677
521400.0000 - SW-Flat Rate Rev-Pub Authorit	77,200
522100.0000 - SW-Measured Rev-Residential	139,403
522200.0000 - SW-Measured Rev-Commercial	124,586
Operating Revenue Sewer	4,706,413
Operating Revenue	4,706,413
Revenue	4,706,413
601510.0000 - WT-T&D Oper LBR-Emp-Sys-GEN-Rg	287
701110.0000 - SW-Collect Oper-LBR-Employ-Rg	75,375
701210.0000 - SW-Collect Maint-LBR-Employ-Rg	11,694
701310.0000 - SW-Pump Oper-LBR-Employ-Rg	7,488
701510.0000 - SW-T&D Oper-LBR-Employ-Rg	23,347
701610.0000 - SW-T&D Maint-LBR-Employ-Rg	5,974
701810.0000 - SW-A&G-LBR-Employ-Rg	67,838
OM LABOR RG	192,004
601619.0000 - WT-T&D Maint LBR-Emp-Sy-GEN-OT	269
701119.0000 - SW-Collect Oper-LBR-Employ-OT	15,650
701319.0000 - SW-Pump Oper-LBR-Employ-OT	245
701419.0000 - SW-Pump Maint-LBR-Employ-OT	482
701519.0000 - SW-T&D Oper-LBR-Employ-OT	9,055
701619.0000 - SW-T&D Maint-LBR-Employ-OT	899
OM LABOR OT	26,601
OM LABOR	218,605
704810.0000 - SW-A&G Emp-HEALTH PLANS	44,942
OM Employee Benefits - Health Plans	44,942
704813.0000 - SW-A&G Emp-DENTAL PLAN	3,059
OM Employee Benefits - Dental Plans	3,059
704837.0000 - SW-A&G Emp-CONTRIB THRIFT PL	14,900
704838.0000 - SW- Aqua Year End Contribution	7,800
OM Employee Benefits - Contrib Thrift Plan	22,700
704840.0000 - SW-A&G Emp-GROUP LIFE INS	938
OM Employee Benefits - Group Life Insurance	938
704842.0000 - SW-A&G Emp-LTD INSURANCE	1,309
OM Employee Benefits - LTD Insurance	1,309
OM Employee Benefits	72,948
710500.0000 - SW-Purchased WW-T&D-OPER	2,034,768
OM Purchased WW	2,034,768
711500.0000 - SW-Sludge Removal-T&D-OPER	22,069
711600.0000 - SW-Sludge Removal-T&D-MAINT	79,720
OM SLUDGE	101,789
715100.0000 - SW-Purchased PWR-Collect Oper	161,734
715300.0000 - SW-Purchased PWR-Pump Oper	13,294
715500.0000 - SW-Purchased PWR-T&D Oper	83
716100.0000 - SW-Fuel PWR Prod-Collect Oper	7,984

Aqua New Jersey, Inc.
Income Statement
(as of December 31, 2019)

Exhibit P-12

NJ - Sewer

716300.0000 - SW-Fuel PWR Prod-Pump Oper	1,573
OM Purchased Power	184,668
718100.0000 - SW-Chem-Coll Oper-GENERAL	1,328
718111.0000 - SW-Chem-Reclaim WT TRT-Oper	6,059
OM CHEMICALS	7,387
720100.0000 - SW-Mat&Sup-Collect Oper	757
720200.0000 - SW-Mat&Sup-Collect Maint	7,026
720400.0000 - SW-Mat&Sup-Pump Maint	1,065
720500.0000 - SW-Mat&Sup-T&D Oper	7,887
720512.0000 - SW-Mat&Sup-T&D Op-Maint Supply	1,519
720600.0000 - SW-Mat&Sup-T&D Maint	204
OM SUPPLIES	18,457
732800.0000 - SW-Cont Serv-Acct-A&G	13,200
OM OS Accounting	13,200
735300.0000 - SW-Cont Serv-Test-Pump Oper	33,305
OM OS Lab Testing	33,305
736730.0000 - ACO-Sewer Allocation	76,721
OM OS Other - ACO Allocation	76,721
736710.0000 - SW-SFI Processing Fee	12,560
736720.0000 - SW-SFI Billing Postage	19,561
736740.0000 - Sewer-Cont Svc-ACO Lockbox Fees	11,359
OM OS Other - ACO Direct	43,480
736100.0000 - SW-Cont Serv-Oth-Collect Oper	157,168
OM OS - Operations	157,168
736200.0000 - SW-Cont Serv-Oth-Collect Maint	45,798
736400.0000 - SW-Cont Serv-Oth-Pump Maint	8,687
736600.0000 - SW-Cont Serv-Oth-T&D Maint	128,192
736610.0000 - SW-Cont Serv-Oth-Build&Grounds	18,468
OM OS - Maintenance	201,145
736800.0000 - SW-Cont Serv-Oth-A&G	876
OM OS - Other	876
OM OS Other (wo ACO)	359,189
OM OS Other	479,390
734900.0000 - SW - Corp Mgmt Fees only	240,690
OM Management Fees - Corp	240,690
734800.0000 - SW-Cont Serv-Mgt Fee-A&G	7,057
OM Management Fees - State	7,057
OM Management Fees	247,747
750515.0000 - SW-Trans-T&D OP-Lease	203
OM Transportation-Leases	203
750532.0000 - SW-Trans-T&D OP-Gasoline	11,672
OM Transportation-Fuel	11,672
750500.0000 - SW-Trans-T&D Oper	1,384
OM Transportation-Other	1,384
OM Transportation	13,259
775500.0000 - SW-Misc-T&D Oper	2,765
OM Other-Operations	2,765

Aqua New Jersey, Inc.
Income Statement
(as of December 31, 2019)

Exhibit P-12

NJ - Sewer

775200.0000 - SW-Misc-Coll Maint	2,733
OM Other-Maintenance	2,733
775808.0000 - SW-Misc-A&G-COMM EXP	9,732
OM Other-Communications	9,732
775834.0000 - SW-Misc-A&G-MEALS 100% DED	15
OM Other-Travel	15
775827.0000 - SW-Misc-A&G-FINES&PENALTIES	68,000
OM Other-Fines & Penalties	68,000
775828.0000 - SW-Misc-A&G-LIC&PER	130
OM Other-License & Permits	130
775800.0000 - SW-Misc-A&G	806
OM Other-Miscellaneous	806
776210.0000 - SW-Cap OH Credit-Labor	(4,013)
OM Other - Cap OH Credit-Labor	(4,013)
776220.0000 - SW-Cap OH Credit-Benefits	(4,997)
OM Other - Cap OH Credit-Benefits	(4,997)
776230.0000 - SW-Cap OH Credit-PR Taxes	(1,971)
OM Other - Cap OH Credit-PR Taxes	(1,971)
776240.0000 - SW-Cap OH Credit-Other	(8,754)
776200.0000 - SW-Capital Overhead Credit	-
OM Other - Cap OH Credit-Other	(8,754)
OM Other-Capital Overhead	(19,735)
OM OTHER	64,445
756800.0000 - SW-Ins-Vehicle-A&G	16,320
757800.0000 - SW-Ins-Gen Liab-A&G	23,652
758800.0000 - SW-Ins-Work Comp-A&G	7,284
759800.0000 - SW-Ins-Other-A&G	9,360
OM Insurance	56,616
770700.0000 - SW-Bad Debt Exp-Cust Accts	19,042
770710.0000 - SW-Recovery of Bad Debt	(2,432)
OM Bad Debt	16,610
Operating Expenses	3,563,194
403200.0000 - Deprec Exp-Utility Plant-SWR	571,972
407321.0000 - Amort-CIAC-SWR	(185,922)
Depreciation (Net)	386,049
406000.0000 - Amort-Util Plant Acq Adj	(80,850)
766800.0000 - SW-Reg Com-Amort Rate Case-A&G	8,200
Amortization (Net)	(72,650)
408101.0000 - Assessment-PUC	49,283
408102.0000 - Assessment-Consumer Advocate	2,701
408110.0000 - Property Taxes	6,739
408121.0000 - Payroll Taxes-FICA	20,692
408122.0000 - Payroll Taxes-FUTA	160
408123.0000 - Payroll Taxes-SUTA	956
408203.0000 - Other Taxes-Excise Tax	36,169
408205.0000 - Other Taxes-Franchise Tax	97,841
408206.0000 - Other Taxes-Gross Receipts Tax	191,509

Aqua New Jersey, Inc.
Income Statement
(as of December 31, 2019)

Exhibit P-12

NJ - Sewer

Taxes Other than Income	406,050
Utility Costs & Expenses	4,282,643
Operating Income	423,770
420001.0000 - Allow Funds used during Const-Debt	(448)
420002.0000 - Allow Funds Used During Const-Equity	(1,552)
Interest Chrg to Construction	(2,000)
Interest Expense	(2,000)
Other (Income) Expense	(2,000)
Income Before Taxes	425,770
Net Income	425,770

AQUA NEW JERSEY, INC.
SEWER RATE CASE
INCOME STATEMENT UNDER PRESENT AND PROPOSED RATES

DESCRIPTION	5 + 7		Proforma at		Proforma at	
	Test Year Ending Apr 2020	Adjustment	Present Rates	Adjustment	Proposed Rates	
Operating Revenues:						
Non-Metered Sales	\$ 4,599,079	\$ 29,160	\$ 4,628,238	\$ 1,372,929	\$ 6,001,167	
Metered Sales	172,993	109,967	282,960	(282,960)	0	
Miscellaneous	0	0	0	0	0	
Total Oper. Revenues	<u>\$ 4,772,072</u>	<u>\$ 139,127</u>	<u>\$ 4,911,199</u>	<u>\$ 1,089,968</u>	<u>\$ 6,001,167</u>	
Operating Expenses:						
O & M Expenses	\$ 3,602,109	\$ 209,955	\$ 3,812,064	\$ 4,712	\$ 3,816,777	
Depreciation	411,131	15,087	426,218	0	426,218	
Amortizations	(80,511)	211,094	130,582	0	130,582	
Taxes Other than Income	377,927	(699)	377,228	141,623	518,852	
Income Taxes	51,217	(71,906)	(20,689)	198,163	177,474	
					0	
Total Oper. Expenses	<u>\$ 4,361,873</u>	<u>\$ 363,530</u>	<u>\$ 4,725,403</u>	<u>\$ 344,499</u>	<u>\$ 5,069,902</u>	
Utility Operating Income	<u>\$ 410,199</u>	<u>\$ (224,403)</u>	<u>\$ 185,795</u>	<u>\$ 745,470</u>	<u>\$ 931,265</u>	
Interest Charges:						
Long Term Debt	\$ 217,526	\$ 46,100	\$ 263,626		\$ 263,626	
Total Interest Exp.	<u>\$ 217,526</u>	<u>\$ 46,100</u>	<u>\$ 263,626</u>	<u>\$ 0</u>	<u>\$ 263,626</u>	
NET INCOME	<u>\$ 192,673</u>	<u>\$ (270,504)</u>	<u>\$ (77,831)</u>	<u>\$ 745,470</u>	<u>\$ 667,639</u>	
Rate Base	9,945,980		12,053,826		12,053,826	
ROE					10.45%	
Rate of Return	<u>4.12%</u>		<u>1.54%</u>		<u>7.73%</u>	

AQUA NEW JERSEY, INC.

CALCULATION OF COST OF CAPITAL AND RATE OF RETURN
 AS OF APRIL 30, 2020

	5 + 7 (A)	(B)	(A*B)
Outstanding Amount	Ratio to Captlzn	Effective Cost%	Weighted Cost
First Mortgage Bonds:			
SERIES "L" , 1.46%	-	0.00%	2.1456%
SERIES "P" , 3.74%	370,000	0.18%	4.8446%
SERIES "Q" , 0.00%	241,320	0.12%	0.7373%
SERIES "R" , 5.14%	-	0.00%	5.4038%
SERIES "S" , 6.23%	6,000,000	2.99%	6.6970%
SERIES "T" , 5.80%	3,800,000	1.89%	6.8160%
SERIES "U" , 4.51%	478,000	0.24%	5.1832%
SERIES "V" , 0.00%	284,351	0.14%	0.2744%
SERIES "W" , 3.80%	161,000	0.08%	5.4610%
SERIES "X" , 0.00%	134,543	0.07%	0.9476%
SERIES "Y" , 3.81%	123,000	0.06%	5.9023%
SERIES "Z" , 0.00%	107,796	0.05%	1.1531%
SERIES "AA" , 3.28%	249,188	0.12%	4.3868%
SERIES "BB" , 0.00%	103,928	0.05%	1.5655%
SERIES "CC" , 4.73%	540,000	0.27%	5.4434%
SERIES "DD" , 0.00%	463,455	0.23%	0.3323%
Pushdown Debt , 5.40%	2,970,000	1.48%	5.5229%
Pushdown Debt , 5.22%	6,739,590	3.36%	5.2752%
Pushdown Debt , 3.57%	29,175,410	14.54%	3.8368%
Pushdown Debt , 5.85%	66,615	0.03%	6.0484%
Pushdown Debt , 4.62%	8,480,000	4.23%	4.9163%
Pushdown Debt , 4.83%	5,904,470	2.94%	5.0887%
Pushdown Debt , 3.59%	7,548,915	3.76%	3.8116%
Pushdown Debt , 4.75%	20,340,000	10.14%	4.7740%
Total Bonds	94,281,580	47.00%	4.6534%
Other Debt			
Common Equity:			
Capital Stock			
Paid In Capital			
Retained Earnings	106,318,420		
Total Equity	106,318,420	53.00%	10.45%
Capitalization	\$ 200,600,000	100%	
Rate Of Return			7.73%

* Refinanced with Pushdown debt

CALCULATION OF EFFECTIVE COST OF FIRST MORTGAGE BOND ISSUES

SERIES	(A) Face Amount	(B) Issuance Expense	(C) (A-B) Net Proceeds	(D) Annual Int Expense	(E) Issuance Amort/Yr	(F) (D+E) Annual Expense	(G) (F/C) Effective Cost
SERIES "L" , 1.46%	3,473,961	333,320	3,140,641	50,720	16,666	67,386	2.1456%
SERIES "P" , 3.74%	1,300,000	145,860	1,154,140	48,620	7,293	55,913	4.8446%
SERIES "Q" , 0.00%	1,135,000	145,860	989,140	0	7,293	7,293	0.7373%
SERIES "R" , 5.14%	5,000,000	109,290	4,890,710	257,000	7,286	264,286	5.4038%
SERIES "S" , 6.23%	6,000,000	279,330	5,720,670	373,800	9,311	383,111	6.6970%
SERIES "T" , 5.80%	3,800,000	380,400	3,419,600	220,400	12,680	233,080	6.8160%
SERIES "U" , 4.51%	985,000	65,120	919,880	44,424	3,256	47,680	5.1832%
SERIES "V" , 0.00%	971,000	50,520	920,480	0	2,526	2,526	0.2744%
SERIES "W" , 3.80%	295,000	46,840	248,160	11,210	2,342	13,552	5.4610%
SERIES "X" , 0.00%	294,000	46,840	247,160	0	2,342	2,342	0.9476%
SERIES "Y" , 3.81%	230,000	44,140	185,860	8,763	2,207	10,970	5.9023%
SERIES "Z" , 0.00%	235,542	44,140	191,402	0	2,207	2,207	1.1531%
SERIES "AA" , 3.28%	430,000	50,700	379,300	14,104	2,535	16,639	4.3868%
SERIES "BB" , 0.00%	212,631	50,700	161,931	0	2,535	2,535	1.5655%
SERIES "CC" , 4.73%	780,000	53,280	726,720	36,894	2,664	39,558	5.4434%
SERIES "DD" , 0.00%	855,017	53,280	801,737	0	2,664	2,664	0.3323%
Pushdown Debt , 5.40%	2,970,000	28,828	2,941,172	160,380	2,059	162,439	5.5229%
Pushdown Debt , 5.22%	6,739,590	34,324	6,705,266	351,807	1,907	353,713	5.2752%
Pushdown Debt , 3.57%	29,175,410	741,076	28,434,334	1,041,562	49,405	1,090,967	3.8368%
Pushdown Debt , 5.85%	66,615	1,409	65,206	3,897	47	3,944	6.0484%
Pushdown Debt , 4.62%	8,480,000	179,359	8,300,641	391,776	16,305	408,081	4.9163%
Pushdown Debt , 4.83%	5,904,470	124,884	5,779,586	285,186	8,920	294,106	5.0887%
Pushdown Debt , 3.59%	7,548,915	159,666	7,389,249	271,006	10,644	281,650	3.8116%
Pushdown Debt , 4.75%	20,340,000	50,000	20,290,000	966,150	2,500	968,650	4.7740%

AQUA NEW JERSEY, INC.
SEWER RATE CASE
REVENUE INCREASE CALCULATION
PRO FORMA - PROPOSED RATES

Pro Forma Rate Base (P-26)		\$ 12,053,826
Recommmended Rate of Return (P-14)	X	7.7300%
Operating Income, Pro Forma Proposed Rates	=	<u>\$ 931,761</u>
Operating Income, Pro Forma Present Rates		\$ 185,795
Operating Income Deficit	=	<u>\$ 745,966</u>
Conversion Factor (from Below)	X	1.4611940
TOTAL REVENUE INCREASE	=	<u>\$ 1,090,000</u>

<u>Conversion Factor Derivation</u>	<u>Factor For Rev</u>	<u>Pro Forma at Proposed Rates Adjustment</u>
A = GRAFT Rate	12.74815%	\$ 138,955
B = BPU & RPA Assessment	0.24521%	2,673
C = Bad Debt Rate	0.37730%	4,113
Revenue Increase less Deductable Taxes		<u>944,260</u>
D = FIT Rate	21.0000%	198,295
Conversion Factor =	1.4611940	
$\frac{1}{(1-A-B-C) (1-D)}$		

AQUA NEW JERSEY, INC.
SEWER RATE CASE
OPERATING REVENUES UNDER PRESENT AND PROPOSED RATES
BASED UPON THE BASE YEAR ENDED SEP 30, 2019
AND THE TEST YEAR ENDED APRIL 30, 2020
5 + 7

	<u>Under Present Rates</u>			<u>Under Proposed Rates</u>		<u>Percent Increase</u>
	<u>Test Year</u>	<u>Adjustments</u>	<u>Pro Forma Amount</u>	<u>Adjustments</u>	<u>Pro Forma Amount</u>	
Residential						
Flat Rate Rev-Residential	\$ 4,075,730	\$ 99,627	\$ 4,175,358	\$ 924,792	\$ 5,100,149	
Measured Rev-Residential	58,355	87,539	145,894	(145,894)	-	
Sub Total	<u>4,134,085</u>	<u>187,166</u>	<u>4,321,251</u>	<u>778,898</u>	<u>5,100,149</u>	<u>18.0%</u>
Commercial						
Flat Rate Rev-Commercial	\$ 490,683	\$ (96,747)	\$ 393,937	\$ 439,266	\$ 833,203	
Measured Rev-Commercial	114,639	22,428	137,067	(137,067)	-	
Sub Total	<u>605,322</u>	<u>(74,319)</u>	<u>531,003</u>	<u>302,200</u>	<u>833,203</u>	<u>56.9%</u>
Industrial	\$ -	\$ -	\$ -	\$ -		
Public Authority						
Flat Rate Rev-Pub Authorit	\$ 32,665	\$ 26,279	\$ 58,944	\$ 8,870	\$ 67,814	15.1%
Other	0	0		0	0	na
Rounding Difference			0	32	32	
Total Sales Revenue	<u>\$ 4,772,072</u>	<u>\$ 139,127</u>	<u>\$ 4,911,199</u>	<u>\$ 1,090,000</u>	<u>\$ 6,001,199</u>	<u>22.2%</u>
Misc. Charges	0	0	0	0	0	na
Total Operating Revenue	<u>\$ 4,772,072</u>	<u>\$ 139,127</u>	<u>\$ 4,911,199</u>	<u>\$ 1,090,000</u>	<u>\$ 6,001,199</u>	<u>22.2%</u>

Adj Notes: Large percent increase in Com Rev is primarily due to increasing the EDU factor of 1,224 apartments.

AQUA NEW JERSEY, INC.
SEWER RATE CASE
OPERATING REVENUES UNDER PRESENT RATES
BASED UPON THE BASE YEAR ENDED SEP 30, 2019
AND THE TEST YEAR ENDED APRIL 30, 2020

Class->	Meter Size	Res Units	Com Units	5 + 7 Pub Units	Total Units	Present Rate	Res Rev	Com Rev	Pub Rev	PF Rev at Prsnt Rates	Eqv Custs
Bills & Base Revenue											
Measured											
	5/8"	4,416	168	-	4,584	various	\$ 59,704	\$ 2,271	\$ -	61,976	382
	3/4"	-	336	-	336	various	-	17,436	-	17,436	28
	1"	-	264	-	264	various	-	9,662	-	9,662	22
	2"	-	108	-	108	various	-	29,660	-	29,660	9
	4"	-	12	-	12	various	-	11,436	-	11,436	1
Flat Rate											
	5/8"	-	36	-	36	various	-	2,210	-	2,210	3
	3/4"	-	12	-	12	various	-	1,105	-	1,105	1
	1"	-	120	-	120	various	-	18,420	-	18,420	10
	1.5"	-	12	-	12	various	-	3,684	-	3,684	1
	2"	-	180	-	180	various	-	88,416	-	88,416	15
	3"	-	-	-	-	various	-	-	-	-	-
	4"	-	12	-	12	various	-	18,420	-	18,420	1
	8"	-	-	12	12	various	-	-	58,944	58,944	1
	Residences	69,246	-	-	69,246	various	4,175,358	-	-	4,175,358	5,771
	Aprtmnt OkwdV	-	12	-	12	various	-	236,765	-	236,765	1
	Club BrBrk	-	12	-	12	various	-	20,016	-	20,016	1
	Club StnRg	-	12	-	12	various	-	4,900	-	4,900	1
	Total Bills	73,662	1,296	12	74,970		4,235,062	464,400	58,944	\$ 4,758,406	6,248
<i>EDUs</i>		<i>73,662</i>	<i>11,896</i>	<i>960</i>	<i>86,518</i>						
											<i>Note: Aprtmnt Cust has 1,224 units</i>
Usage kGals & Revenue											
	Allowance	-	2,885	-	2,885		\$ -	\$ -	\$ -	-	
	Charged	15,902	11,421	-	27,323	various	86,189	66,603	-	152,792	
	Total Usage	15,902	14,306	-	30,208		86,189	66,603	-	\$ 152,792	
Total Sales Rev							\$4,321,251	\$ 531,003	\$ 58,944	\$ 4,911,199	-
Miscellaneous										0	
Total Oper. Rev							\$ 4,911,199				

AQUA NEW JERSEY, INC.
SEWER RATE CASE
OPERATING REVENUES UNDER PROPOSED RATES
BASED UPON THE BASE YEAR ENDED SEP 30, 2019
AND THE TEST YEAR ENDED APRIL 30, 2020

Class->	Meter Size	Res Units	Com Units	5 + 7	Total Units	Prposed Rate	Res Rev	Com Rev	Pub Rev	PF Rev at Prpsd Rates	Prposed Base Rt	Prposed PSTAC Rt
				Pub Units								
Bills & Base Revenue												
Other than Walkkill												
	Res, Sngl Fmly	69,246	-	-	69,246	\$ 70.64	\$4,891,537	\$ -	\$ -	\$ 4,891,537	\$ 44.41	\$ 26.23
	5/8"	-	36	-	36	70.64	-	2,543	-	2,543	44.41	26.23
	3/4"	-	300	-	300	84.77	-	25,431	-	25,431	53.29	31.48
	1"	-	132	-	132	169.53	-	22,378	-	22,378	106.58	62.95
	1.5"	-	12	-	12	353.20	-	4,238	-	4,238	222.05	131.15
	2"	-	264	-	264	522.73	-	138,001	-	138,001	328.63	194.10
	3"	-	-	-	-	1,059.60	-	-	-	-	666.15	393.45
	4"	-	24	-	24	1,412.80	-	33,907	-	33,907	888.20	524.60
	8"	-	-	12	12	5,651.20	-	-	67,814	67,814	3,552.80	2,098.40
	Aptmnt OkwdV	-	12	-	12	43,231.68	-	518,780	-	518,780	27,178.92	16,052.76
	Club BrBrk	-	12	-	12	1,582.33	-	18,988	-	18,988	994.78	587.55
	Club StnRg	-	12	-	12	402.65	-	4,832	-	4,832	253.14	149.51
	Lndry Mxm	-	12	-	12	1,723.61	-	20,683	-	20,683	1,083.60	640.01
Walkkill												
	Res, Sngl Fmly	4,416	-	-	4,416	47.24	208,612	-	-	208,612	21.01	26.23
	5/8"	-	168	-	168	47.24	-	7,936	-	7,936	21.01	26.23
	3/4"	-	48	-	48	56.69	-	2,721	-	2,721	25.21	31.48
	1"	-	252	-	252	113.37	-	28,569	-	28,569	50.42	62.95
	2"	-	12	-	12	349.57	-	4,195	-	4,195	155.47	194.10
	Total Bills	73,662	1,296	12	74,970		5,100,149	833,203	67,814	\$ 6,001,167		
<i>EDUs</i>		73,662	12,100	960	86,722							
Usage kGals & Revenue												
	Allowance	-	-	-	-		\$ -	\$ -	\$ -	-		
	Charged	-	-	-	-		-	-	-	-		
	Total Usage	-	-	-	-		-	-	-	\$ 0		
<u>Total Sales Rev</u>							<u>\$5,100,149</u>	<u>\$ 833,203</u>	<u>\$ 67,814</u>	<u>\$ 6,001,167</u>		
Miscellaneous										0		
<u>Total Oper. Rev</u>										<u>\$ 6,001,167</u>		

AQUA NEW JERSEY, INC.
SEWER RATE CASE
SUMMARY OF OPERATIONS & MAINTENANCE EXPENSES
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

Exh P-20 Sheet #	Description	Test Year	Adjustment	Pro Forma Present Rates
2	Labor	235,340	\$ (3,974)	\$ 231,366
2	Employee Benefits	62,256	2,942	65,198
3	Purchased WW	2,120,108	154,966	2,275,074
3	Sludge Removal	116,308	(19,632)	96,676
4	Purchased Power	194,575	7,959	202,534
5	Chemicals	5,850	1,902	7,752
6	Supplies	19,213	(325)	18,888
7	OS Engineer	-	-	-
7	OS Accounting	11,706	(2,178)	9,528
7	OS Legal	-	-	-
7	OS Lab Testing	30,759	11,762	42,521
7	OS Other	475,521	67,948	543,469
7	Management Fees	216,139	(48,153)	167,986
8	Leases	-	-	-
8	Transportation	13,810	379	14,189
8	Insurance	55,452	(2,328)	53,124
8	Other	15,900	8,640	24,540
9	Bad Debt	19,780	2,630	22,410
10	Rate Case Expns Amort	9,393	27,417	36,809
	TOTAL	<u>\$ 3,602,109</u>	<u>\$ 209,955</u>	<u>\$ 3,812,064</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
LABOR AND BENEFIT ADJUSTMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

Labor

Test Year Amount	\$ 235,340
Projected Amnt in 2nd Half 2020 after increases including 3% Annual increases within 2Q and filling empty positions.	115,683
X 2 = Pro Forma Present Rates	231,366
Adjustment	<u>\$ (3,974)</u>

Employee Benefits

Test Year Amount	\$ 62,256
Pro Forma Present Rates Total	65,198
Exclusions	----- -
Subtotal to Exclude	----- -
Pro Forma Present Rates Net	65,198
Adjustment	<u>\$ 2,942</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
PURCHASED WW and SLUDGE REMOVAL
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

5 + 7

Purchased WW

Test Year Amount		
Maxim WW	\$	911,480
Walkill WW		127,933
Woolwich WW		1,080,694
		<u>2,120,108</u>
Pro Forma Present Rates		
Maxim WW		1,021,344
Walkill WW		141,336
Woolwich WW		1,112,394
		<u>2,275,074</u>
Adjustment	\$	<u>154,966</u>

Sludge Removal

Test Year Amount	\$	116,308
Pro Forma Present Rates		96,676
Adjustment	\$	<u>(19,632)</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
PURCHASED POWER
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

Purchased Power

Test Year Amount	\$ 194,575
Pro Forma Present Rates	202,534
Adjustment	<u>\$ 7,959</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
CHEMICALS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

Chemicals

Test Year Amount	\$	5,850
Pro Forma Present Rates		7,752
Adjustment	<u>\$</u>	<u>1,902</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
SUPPLIES
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

Supplies

Test Year Amount	\$	19,213
Pro Forma Present Rates		18,888
Adjustment	\$	<u>(325)</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
OUTSIDE SERVICES
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

OS Engineer

Test Year Amount	\$ -
Pro Forma Present Rates	0
Adjustment	<u>\$ -</u>

OS Accounting

Test Year Amount	\$ 11,706
Pro Forma Present Rates	9,528
Adjustment	<u>\$ (2,178)</u>

OS Legal

Test Year Amount	\$ -
Pro Forma Present Rates	0
Adjustment	<u>\$ -</u>

Management Fees

Test Year Amount	\$ 216,139
Pro Forma Present Rates	167,986
Adjustment	<u>\$ (48,153)</u>

OS Lab Testing

Test Year Amount	\$ 30,759
Pro Forma Present Rates	42,521
Adjustment	<u>\$ 11,762</u>

OS Other

Test Year Amount	\$ 475,521
Pro Forma Present Rates	543,469
Adjustment	<u>\$ 67,948</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
LEASES, TRANSPORTATION, INSURANCE, OTHER
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

5 + 7

Leases

Test Year Amount	\$	-
Pro Forma Present Rates		0
Adjustment	<u>\$</u>	<u>-</u>

Transportation

Test Year Amount	\$	13,810
Pro Forma Present Rates		14,189
Adjustment	<u>\$</u>	<u>379</u>

Insurance

Test Year Amount	\$	55,452
Pro Forma Present Rates		53,124
Adjustment	<u>\$</u>	<u>(2,328)</u>

Other

Test Year Amount	\$	15,900
Pro Forma Present Rates		24,540
Adjustment	<u>\$</u>	<u>8,640</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
BAD DEBT
3 YEAR AVERAGE, TEST YEAR ENDING APRIL 30, 2019
AND PRO FORMA PRESENT RATES
5 + 7

	<u>Bad Debts</u>	<u>Sales+Misc Revenue</u>	<u>Bad Debts/ Sales+Misc Revenues</u>
Year 2016	19,147	4,314,333	0.4438%
Year 2017	11,206	4,589,742	0.2442%
Year 2018	20,793	4,651,662	0.4470%
	<u>\$ 51,146</u>	<u>\$ 13,555,737</u>	<u>0.3773%</u>

Pro Forma Present Rates Sales+Misc Rev	\$ 4,911,199
Bad Debt Percentage (3-yr avg)	0.37730%
Pro Forma BdDbt Prsnt Rates @ 3-yr avg	<u>\$ 18,530</u>
Test Year BdDbt	15,900
Adjustment, TY to PF Prsnt Rts	<u>2,630</u>
Pro Forma Proposed Rates Sales+Misc Rev	\$ 6,001,167
Pro Forma BdDbt Prsnt Rates @ 3-yr avg	<u>\$ 23,242</u>
Adjustment, PF Prsnt to PF Prpsd Rts	<u>4,712</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
RATE CASE EXPENSE
CURRENT CASE PROJECTION

Test Year Amount (Current case)	\$	-
Current Rate Case Costs		
Administrative	\$	1,500
Billing Analysis, Design, MFR		36,000
Cost of Capital		-
Court Reporter / Transcripts / Public Notices		1,500
Misc.		500
Legal-Saul Ewing		125,000
Total Cost	<u>\$</u>	<u>164,500</u>
Amount recoverable at	50%	82,250
Amortization Period	3	Years
Pro Forma Present Rates Annually	<u>\$</u>	<u>27,417</u>
Adjustment	<u>\$</u>	<u>27,417</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
SUMMARY OF TAXES OTHER THAN INCOME
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

	<u>Test Year</u>		<u>Adjustment</u>		<u>Pro Forma at Present Rates</u>		<u>Pro Forma at Proposed Rates</u>
Regulatory Assessment	\$ 11,701	\$	341	\$	12,043	\$	14,715
Property	6,839		0		6,839		6,839
Payroll Taxes	21,310		979		22,289		22,289
Excise Taxes	338,076		(2,019)		336,057		475,008
	<u>\$ 377,927</u>	\$	<u>(699)</u>	\$	<u>377,228</u>	\$	<u>518,852</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
REGULATORY ASSESSMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

	Test Year	Adjustment	Pro Forma at Present Rates	Adjustment	Pro Forma at Proposed Rates
Gross Revenues	\$ 4,772,072		\$ 4,911,199		\$ 6,001,167
BPU Assessment					
Actual 2018 Rate	0.192360596%		0.192360596%		0.192360596%
Assessment Amount	\$ 9,180	\$ 268	\$ 9,447	\$ 2,097	\$ 11,544
Rate Counsel Assessment					
Actual 2018 Rate	0.052845242%		0.052845242%		0.052845242%
Assessment Amount	\$ 2,522	\$ 74	\$ 2,595	\$ 576	\$ 3,171
Total Regulatory Assessments	\$ 11,701	\$ 341	\$ 12,043	\$ 2,673	\$ 14,715

AQUA NEW JERSEY, INC.
SEWER RATE CASE
PAYROLL TAX ADJUSTMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

	<u>Tax Amount</u>	<u>Labor Expense</u>
<u>Taxes Adjustment</u>		
Test Year Amounts		\$ 235,340
FICA	\$ 21,026	
FUTA	19	
SUTA	266	
	<u>\$ 21,310</u>	
Pro Forma Present Rates		231,366
Increase factor		0.9831
Pro Forma Amount	20,950	
Adjustment	<u>\$ (360)</u>	
<u>Capital Credit Adjustment</u>		
Test Year Amount	(1,776)	
Pro Forma Present Rates	(437)	
Adjustment	<u>\$ 1,339</u>	
Total		
Total Adjustments	<u>\$ 979</u>	

AQUA NEW JERSEY, INC.
SEWER RATE CASE
EXCISE TAXES
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

	<u>Test Year</u>	<u>Pro Forma at Present Rates</u>	<u>Pro Forma at Proposed Rates</u>
Gross Revenues	\$ 4,772,072	\$ 4,911,199	\$ 6,001,167
Less Purchased WW Treatment Cost	(2,120,108)	(2,275,074)	(2,275,074)
Gross Receipts (as per Tax Form)	<u>\$ 2,651,964</u>	<u>\$ 2,636,125</u>	<u>\$ 3,726,093</u>
GROSS RECEIPTS TAXES			
Acct 408206			
State Tax Rate	0.9375%	0.9375%	0.9375%
State Tax	<u>\$ 24,862</u>	<u>\$ 24,714</u>	<u>\$ 34,932</u>
Municipal Tax Rate	7.50%	7.50%	7.50%
Municipal Tax	<u>\$ 198,897</u>	<u>\$ 197,709</u>	<u>\$ 279,457</u>
Total GR Taxes	<u><u>\$ 223,759</u></u>	<u><u>\$ 222,423</u></u>	<u><u>\$ 314,389</u></u>
FRANCHISE TAXES			
Acct 408205			
Public Miles of facilities	54.2215	54.2215	54.2215
Total Miles of facilities	70.7540	70.7540	70.7540
Public Component Multiplier	0.76633829889	0.76633829889	0.76633829889
Taxable Receipts for Franchise Taxes	\$ 2,032,302	\$ 2,020,163	\$ 2,855,448
State Tax Rate	0.6250%	0.6250%	0.6250%
State Tax	<u>\$ 12,702</u>	<u>\$ 12,626</u>	<u>\$ 17,847</u>
Municipal Tax Rate	5.00%	5.00%	5.00%
Municipal Tax	<u>\$ 101,615</u>	<u>\$ 101,008</u>	<u>\$ 142,772</u>
Total Franchise Taxes	<u><u>\$ 114,317</u></u>	<u><u>\$ 113,634</u></u>	<u><u>\$ 160,619</u></u>
Total Excise Taxes	<u><u>\$ 338,076</u></u>	<u><u>\$ 336,057</u></u>	<u><u>\$ 475,008</u></u>
Effective Combined Tax Rate on Rev less Purchased WW Trtmnt		12.75%	12.75%

AQUA NEW JERSEY, INC.
SEWER RATE CASE
MISC-PERMIT ADJUSTMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
5 + 7

	<u>TY Amnt</u>
Other Taxes-Water	\$ -
Other Taxes-Allocation Fees	0
Other Taxes-Misc	0
Permits	41,574
	<u>\$ 41,574</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
FEDERAL INCOME TAX
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

Item	Rate	5 + 7 Test Year Endng Apr 2019	Pro Forma at Present Rates	Pro Forma at Proposed Rates
Operating Revenue		\$ 4,772,072	\$ 4,911,199	\$ 6,001,167
Operating Revenue Deductions				
Operating Expenses		3,602,109	3,812,064	3,816,777
Interest on Customer Deposits		-	-	-
Depreciation & Amort		330,620	556,800	556,800
Taxes Other than Income Taxes		377,927	377,228	518,852
Interest Expense		217,526	263,626	263,626
Total Operating Revenue Deductions		<u>4,528,182</u>	<u>5,009,718</u>	<u>5,156,054</u>
Taxable Income (L1-L7)		243,890	(98,520)	845,112
State Income Tax @	0.00%	<u>-</u>	<u>-</u>	<u>-</u>
Federal Taxable Income		243,890	(98,520)	845,112
Federal Income Tax @	21.00%	<u>51,217</u>	<u>(20,689)</u>	<u>177,474</u>
Total Income Taxes		<u><u>51,217</u></u>	<u><u>(20,689)</u></u>	<u><u>177,474</u></u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
AMORTIZATION ADJUSTMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

<u>Calculation of Amortization of Acquisition Adjustment</u>		Account
Amort-Util Plant Acq Adj		406000
Test Year Amount	\$ (80,511)	
Actual Cost (Gross UPAA)	\$ 860,393	
less Fully Amortized UPAA	-	
Net UPAA	<u>\$ 860,393</u>	
Amortization Period (months)	180	
Monthly Amortization Expense	<u>10,882</u>	
PF Annual Amortization Expense	<u>\$ 130,582</u>	
Adjustment	<u>\$ 211,094</u>	

AQUA NEW JERSEY, INC.
SEWER RATE CASE
INTEREST EXPENSE
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

Interest Synchronization:

Test Year Rate Base Per Exhibit P-26	\$ 9,945,980
Times Weighted Cost Of Debt Per Exhibit P-14	2.1871%
Interest Synchronization Amount	<u>\$ 217,526</u>
Pro Forma Rate Base Per Exhibit P-26	\$ 12,053,826
Times Weighted Cost Of Debt Per Exhibit P-14	2.1871%
Interest Synchronization Amount	<u>\$ 263,626</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
RATE BASE AND RATE OF RETURN
UNDER PRESENT AND PROPOSED RATES
 5 + 7

Exh P-26 Sheet #	Description	Base Year 09/30/19	Adjustment	Test Year 04/30/20
2-3	Utility Plant in Service	\$ 23,984,753	\$ 2,133,216	\$ 26,117,969
6	Prepayments	117,107	-	117,107
7	Unamortized Acquisition Adj.	1,911,578	47,162	1,958,740
	Subtotal	<u>\$ 26,013,438</u>	<u>\$ 2,180,378</u>	<u>\$ 28,193,816</u>
8	Reserve for Depreciation	\$ 7,962,841	\$ 241,521	\$ 8,204,362
9	Customer Advances	6,978,748	(75,000)	6,903,748
9	Contributed Property	3,097,473	-	3,097,473
9	Accum Amort CAC/CIAC	(1,988,757)	(93,988.9)	(2,082,745)
10	Deferred FIT	17,152	-	17,152
	Subtotal	<u>\$ 16,067,458</u>	<u>\$ 72,532</u>	<u>\$ 16,139,990</u>
	Rate Base	\$ 9,945,980	\$ 2,107,845	\$ 12,053,826
	Operating Income	\$ 410,199	\$ (224,403)	\$ 185,795
	Rate of Return	<u>4.12%</u>		<u>1.54%</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
SCHEDULE OF UTILITY PLANT IN SERVICE

TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES

5 + 7

Acct #	Description	Actual Plant Balance 09/30/19	10/01/19 04/30/20 Net Additions	Test Year Plant Balance 04/30/20	Post- Test Year Additions	Pro Forma Plant Balance 04/30/20	Depr. Rate	Pro Forma Depr. Expense
Intangible Plant								
351.1	Organization	\$ 310,946	\$ 0	\$ 310,946	\$ 0	\$ 310,946	0.00%	\$ 0
352.1	Franchise	92,924	-	92,924	-	92,924	0.00%	-
Collection Plant								
353.2	Land & Rights	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		\$ 0
354.2	Structures	12,427	-	12,427	-	12,427	1.99%	247
360.2	Force Mains	926,200	-	926,200	-	926,200	1.56%	14,449
361.2	Collection Mains - Gravity	15,076,511	114,000	15,190,511	-	15,190,511	1.62%	246,086
362.2	Special Collection Structures	80,033	-	80,033	-	80,033	2.95%	2,361
363.2	Services	651,840	-	651,840	-	651,840	1.35%	8,800
364.2	Flow Measuring Devices	10,140	400,000	410,140	550,000	960,140	4.79%	45,991
System Pumping Plant								
353.3	Land & Rights	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0		\$ 0
354.3	Structures	400,553	-	400,553	-	400,553	1.94%	7,771
355.3	Power Generation Equip Pumping	101,988	-	101,988	-	101,988	4.93%	5,028
371.3	Pumping Equip	888,923	110,200	999,123	38,466	1,037,589	4.80%	49,804
Treatment & Disposal Plant								
353.4	Land & Rights	\$ 189,491	\$ 0	\$ 189,491	\$ 0	\$ 189,491	0.00%	\$ 0
354.4	Structures	464,716	247,000	711,716	180,500	892,216	2.47%	22,038
355.4	Power Generation Equip TD	27,550	-	27,550	-	27,550	4.96%	1,366
380.4	Treatment & Disposal Equip	4,486,920	28,500	4,515,420	464,550	4,979,970	3.57%	177,785
General Plant								
354.7	Structures	\$ 263,591	\$ 0	\$ 263,591	\$ 0	\$ 263,591	1.90%	\$ 5,008
393.7	Tool Shop & Garage	-	-	-	-	-		-
397.7	Misc Eqpt	-	-	-	-	-		-
Total Utility Plant in Service		<u>\$ 23,984,753</u>	<u>\$ 899,700</u>	<u>\$ 24,884,453</u>	<u>\$ 1,233,516</u>	<u>\$ 26,117,969</u>	<u>2.25%</u>	<u>\$ 586,734</u>
Contributions in Aid of Construction & Customer Advances								
361.2	Customer Advances (CAC)	\$ (6,978,748)	75,000	\$ (6,903,748)	\$ 0	\$ (6,903,748)	1.62%	\$ (111,841)
360.2	CIAC	(2,399,891)	-	(2,399,891)	-	(2,399,891)	1.56%	(37,438)
361.2	CIAC	(674,076)	-	(674,076)	-	(674,076)	1.62%	(10,920)
363.2	CIAC	(23,506)	-	(23,506)	-	(23,506)	1.35%	(317)
Subtotal CIAC		<u>\$ (3,097,473)</u>	<u>\$ -</u>	<u>\$ (3,097,473)</u>	<u>\$ -</u>	<u>\$ (3,097,473)</u>	<u>1.57%</u>	<u>\$ (48,676)</u>
Total CAC & CIAC		<u>\$ (10,076,221)</u>	<u>\$ 75,000</u>	<u>\$ (10,001,221)</u>	<u>\$ -</u>	<u>\$ (10,001,221)</u>	<u>1.60%</u>	<u>\$ (160,516)</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
SCHEDULE OF UTILITY PLANT IN SERVICE
PLANT ADDITIONS & RETIREMENTS
TEST YEAR ENDED APR 30, 2020 AND PRO FORMA PRESENT RATES
 5 + 7

Account#	Description	Test Year Additions to			Post Test Year Additions to		
		Gross Additions	04/30/20 Period Retirements	Net Additions	Gross Additions	10/30/20 Period Retirements	Net Additions
Intangible Plant							
351.1	Organization	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
352.1	Franchise	-	-	-	-	-	-
Collection Plant							
353.2	Land & Rights	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
354.2	Structures	-	-	-	-	-	-
360.2	Force Mains	-	-	-	-	-	-
361.2	Collection Mains - Gravity	120,000	6,000	114,000	-	-	-
362.2	Special Collection Structures	-	-	-	-	-	-
363.2	Services	-	-	-	-	-	-
364.2	Flow Measuring Devices	400,000	-	400,000	550,000	-	550,000
System Pumping Plant							
353.3	Land & Rights	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
354.3	Structures	-	-	-	-	-	-
355.3	Power Generation Equip Pumping	-	-	-	-	-	-
371.3	Pumping Equip	116,000	5,800	110,200	40,490	2,025	38,466
Treatment & Disposal Plant							
353.4	Land & Rights	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
354.4	Structures	260,000	13,000	247,000	190,000	9,500	180,500
355.4	Power Generation Equip TD	-	-	-	-	-	-
380.4	Treatment & Disposal Equip	30,000	1,500	28,500	489,000	24,450	464,550
General Plant							
354.7	Structures	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
393.7	Tool Shop & Garage	-	-	-	-	-	-
397.7	Misc Eqpt	-	-	-	-	-	-
Total Utility Plant in Service		<u>\$ 926,000</u>	<u>\$ 26,300</u>	<u>\$ 899,700</u>	<u>\$ 1,269,490</u>	<u>\$ 35,975</u>	<u>\$ 1,233,516</u>
Contributions in Aid of Construction & Customer Advances							
361.2	Customer Advances (CAC)	\$ 75,000	\$ 0	\$ 75,000	\$ 0	\$ 0	\$ 0
360.2	CIAC	-	-	-	-	-	-
361.2	CIAC	-	-	-	-	-	-
363.2	CIAC	-	-	-	-	-	-
Subtotal CIAC		-	-	-	-	-	-
Total CAC & CIAC		<u>\$ 75,000</u>	<u>\$ -</u>	<u>\$ 75,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
MATERIALS AND SUPPLIES
RATE BASE COMPONENT
BASE YEAR ENDED SEP 30, 2019

5 + 7

Year	Month	Amount
2018	September	\$ -
2018	October	\$ -
2018	November	\$ -
2018	December	\$ -
2019	January	\$ -
2019	February	\$ -
2019	March	\$ -
2019	April	\$ -
2019	May	\$ -
2019	June	\$ -
2019	July	\$ -
2019	August	\$ -
2019	September	\$ -
		<u>TO</u> <u>\$ -</u>
Historical 13 Month Actual Average Balance		<u><u>\$ -</u></u>
Test Year Balance		<u><u>\$ -</u></u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
PREPAYMENTS
RATE BASE COMPONENT
5 + 7

Year	Month	Amount
2018	September	\$ 63,973
2018	October	240,183
2018	November	153,553
2018	December	41,448
2019	January	(11,534)
2019	February	179,701
2019	March	31,097
2019	April	209,901
2019	May	117,766
2019	June	60,696
2019	July	239,433
2019	August	143,861
2019	September	52,314
	TOTAL	<u>\$ 1,522,393</u>
	Historical 13 Month Actual Average Balance	<u>\$ 117,107</u>
	Test Year Balance	<u>\$ 117,107</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
UNAMORTIZED ACQUISITION ADJUSTMENT
RATE BASE COMPONENT
 5 + 7

System	Total Acq. Adj.	Amortization Months	Monthly Amortizations	Accum. Amort. of UPAA at 9/30/19	Net UPAA at 9/30/19	Net UPAA at 4/30/20	PF Amort Months	PF Amort Epsns / Mon
Bear Brook	\$ (1,263,829)	286	\$ (4,425)	\$ 781,537	\$ (482,292)	\$ (451,319)	180	\$ (2,507)
Calif. Village	47,736		-	-	47,736	47,736	180	265
Maxim	2,783,269		-	-	2,783,269	2,783,269	180	15,463
Oakwood Village	(20,571)	180	(114)	2,743	(17,829)	(17,028)	180	(95)
Spartan Village	(50,645)	180	(281)	15,193	(35,452)	(33,482)	180	(186)
Stanton Ridge	(660,976)	345	(1,917)	251,711	(409,264)	(395,844)	180	(2,199)
Walkkill	25,409		-	-	25,409	25,409	180	141
Total	\$ 860,393		\$ (6,737)	\$ 1,051,184	\$ 1,911,578	\$ 1,958,740		\$ 10,882

AQUA NEW JERSEY, INC.
SEWER RATE CASE
RATE BASE COMPONENT
RESERVE FOR DEPRECIATION

5 + 7

Reserve For Depreciation	<u>TOTAL</u>
Actual Balance at 9/30/2019	\$7,962,841
Depreciation 10/1/2019 - 04/30/2020	\$ 303,796
Retirements / Removal / Salvage 10/1/2019 - 4/30/2012	\$ (62,275)
Test Year Reserve For Depreciation Balance	<u>\$8,204,362</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
RATE BASE COMPONENT
CUSTOMER ADVANCES AND CONTRIBUTED PROPERTY

5 + 7

Customer Advances:	<u>TOTAL</u>
Actual Balance 9/30/2019	\$ 6,978,748
Refunds 10/01/19 - 04/30/20	(75,000)
Transfers 10/01/19 - 04/30/20	-
Test Year Customer Advances	<u>\$ 6,903,748</u>

Contributed Property:	
Actual Balance 9/30/2019	\$ 3,097,473
Net Adds 10/01/19 - 04/30/20	-
Transfers 10/01/19 - 04/30/20	-
Test Year Contributed Property	<u>3,097,473</u>

Accumulated Amortization	
Accum. Amort. CIAC	\$ 1,988,757
Add'l Amort for 7 Mons	93,989
Test Year Accum. Amort.	<u>\$ 2,082,745</u>

AQUA NEW JERSEY, INC.
SEWER RATE CASE
DEFERRED FEDERAL TAXES

5 + 7

Deferred Federal Taxes

Balance at 9/30/2019	\$ 15,495
Activity 10/1/2019 - 4/30/2020	1,657
Test Year Deferred FIT 4/30/2020	<u>\$ 17,152</u>

AQUA PENNSYLVANIA, INC.

Bryn Mawr, Pennsylvania

2020 DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO WASTEWATER PLANT
AS OF MARCH 31, 2020

GANNETT FLEMING VALUATION AND RATE CONSULTANTS, LLC

Harrisburg, Pennsylvania



*Excellence Delivered **As Promised***

August 10, 2018

Aqua Pennsylvania, Inc.
762 Lancaster Avenue
Bryn Mawr, PA 19010

Attention: William C. Packer
Vice President and Controller

Ladies and Gentlemen:

Pursuant to your request, we have determined the annual depreciation accruals applicable to wastewater plant as of March 31, 2020. The results of our study at March 31, 2019 are presented in our report titled "2019 Depreciation Study - Calculated Annual Depreciation Accruals Related to Wastewater Plant as of March 31, 2019". The same methods, procedures and estimates are used in both studies.

Summaries of the original cost, annual accruals, book depreciation reserve and amortization of net salvage are presented in Tables 1 through 4, beginning on page I-2 of the attached report.

Respectfully submitted,

GANNETT FLEMING VALUATION
AND RATE CONSULTANTS, LLC

A handwritten signature in blue ink that reads "John J. Spanos".

JOHN J. SPANOS
Sr. Vice President

JJS:mle

062819.100

Gannett Fleming Valuation and Rate Consultants, LLC

P.O. Box 67100 • Harrisburg, PA 17106-7100 | 207 Senate Avenue • Camp Hill, PA 17011
t: 717.763.7211 • f: 717.763.4590

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PART I. RESULTS OF STUDY

AQUA PENNSYLVANIA, INC.
DEPRECIATION STUDY
PART I. RESULTS OF STUDY

SUMMARY OF RESULTS

Tables 1 through 4 presented on pages I-2 through I-9 summarize the results of the depreciation study as of March 31, 2020. Table 1 sets forth, by depreciable group, the estimated survivor curve, original cost, book depreciation reserve as of March 31, 2020, future book accruals, calculated annual accrual amount and rate, and composite remaining life for plant in service. Table 2 presents the bringforward of the book reserve to March 31, 2020. Table 3 sets forth the calculation of the depreciation accruals for the twelve months ended March 31, 2020. Table 4 presents the annual amortization of experienced and estimated net salvage based on the period 2015 through 2019.

DESCRIPTION OF DETAILED TABULATIONS

The supporting data for the depreciation calculations are presented in account sequence in the section beginning on page II-2. The original cost, calculated accrued depreciation, allocated book reserve, future accruals, remaining life and annual accrual are shown for each vintage of each account or subaccount. The amounts of regular retirements, gross salvage and cost of removal are set forth by account for the years 2015 through 2019, beginning on pages III-1 through III-4.

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2020

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2020 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
INTANGIBLE PLANT							
351.00 ORGANIZATION	NONDEPR.	1,559,913.03					
TOTAL INTANGIBLE PLANT		1,559,913.03					
NONDEPRECIABLE PLANT							
353.20 LAND AND LAND RIGHTS - COLLECTION	NONDEPR.	42,731.40					
353.30 LAND AND LAND RIGHTS - PUMPING	NONDEPR.	573,591.78					
353.40 LAND AND LAND RIGHTS - TREATMENT AND DISPOSAL	NONDEPR.	690,952.37					
TOTAL NONDEPRECIABLE PLANT		1,307,275.55					
DEPRECIABLE PLANT							
354.00 STRUCTURES AND IMPROVEMENTS							
COLLECTION	55-S0.5	6,560,313.37	2,074,082	4,486,231	130,477	34.4	1.99
PUMPING	60-S1	6,582,190.25	1,363,080	5,219,111	127,783	40.8	1.94
TREATMENT AND DISPOSAL	50-R2	30,227,789.22	8,013,188	22,214,601	745,415	29.8	2.47
RECLAIMED WATER TREATMENT	60-R2.5	36,713.07	11,896	24,817	620	40.0	1.69
GENERAL	50-R3	572,259.67	282,239	290,021	10,876	26.7	1.90
TOTAL ACCOUNT 354		43,979,265.58	11,744,485	32,234,781	1,015,171		
355.00 POWER GENERATING EQUIPMENT							
COLLECTION	25-R2.5	92,159.43	31,043	61,117	4,600	13.3	4.99
PUMPING	25-R2.5	882,555.33	203,430	679,126	43,545	15.6	4.93
TREATMENT AND DISPOSAL	25-R2.5	2,530,105.01	419,072	2,111,033	125,417	16.8	4.96
TOTAL ACCOUNT 355		3,504,819.77	653,544	2,851,276	173,562		
360.00 COLLECTION MAINS - FORCE	75-R2.5	26,142,344.69	6,179,651	19,962,693	408,900	48.8	1.56
361.00 COLLECTION MAINS - GRAVITY	75-R2.5	40,839,043.72	6,380,860	34,458,184	661,284	52.1	1.62
362.00 SPECIAL COLLECTING STRUCTURES	40-R3	170,155.95	12,389	157,767	5,019	31.4	2.95
363.00 SERVICES	70-R4	10,365,846.76	3,620,713	6,745,134	139,912	48.2	1.35
364.00 METERS	25-S2.5	440,359.03	104,530	335,829	21,091	15.9	4.79
370.00 RECEIVING WELLS	40-S2.5	550,755.12	247,313	303,442	16,054	18.9	2.91
371.00 PUMPING EQUIPMENT							
PUMPING	25-L0.5	14,369,031.32	5,115,504	9,253,528	690,420	13.4	4.80
RECLAIMED WATER TREATMENT	25-L0.5	248,116.59	155,762	92,355	8,087	11.4	3.26
TOTAL ACCOUNT 371		14,617,147.91	5,271,265	9,345,883	698,507		
380.00 TREATMENT AND DISPOSAL EQUIPMENT	40-S0	60,102,275.68	9,021,489	51,080,787	2,143,469	23.8	3.57
381.00 PLANT SEWERS							
TREATMENT AND DISPOSAL	40-R1.5	122,375.79	30,046	92,330	3,833	24.1	3.13
RECLAIMED WATER TREATMENT	40-R1.5	6,264.17	1,305	4,959	201	24.7	3.21
TOTAL ACCOUNT 381		128,639.96	31,351	97,289	4,034		

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2020

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2020 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
382.00	OUTFALL LINES	153,708.17	28,626	125,082	4,728	26.5	3.08
389.00	OTHER PLANT AND MISCELLANEOUS EQUIPMENT						
	COLLECTION	661,407.77	323,350	338,058	43,770	7.7	6.62
	PUMPING	67,370.96	27,891	39,480	3,937	10.0	5.84
	TREATMENT AND DISPOSAL	32,049.19	25,972	6,077	480	12.7	1.50
	TOTAL ACCOUNT 389	760,827.92	377,213	383,615	48,187		
390.00	OFFICE FURNITURE AND EQUIPMENT						
	FURNITURE	10,195.46	6,948	3,248	256	12.7	2.51
	OFFICE EQUIPMENT	887,950.04	246,155	641,795	102,454	6.3	11.54
	COMPUTER HARDWARE	951,908.59	586,104	365,804	133,720	2.7	14.05
	COMPUTER SOFTWARE	60,129.40	33,595	26,534	3,541	7.5	5.89
	TOTAL ACCOUNT 390	1,910,183.49	872,802	1,037,381	239,971		
391.00	TRANSPORTATION EQUIPMENT	540,016.22	265,290	274,726	26,546	10.3	4.92
392.00	STORES EQUIPMENT	10,955.41	7,637	3,318	421	7.9	3.84
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	351,573.29	74,805	276,768	20,312	13.6	5.78
394.00	LABORATORY EQUIPMENT	710,926.96	251,514	459,413	25,314	18.1	3.56
395.00	POWER OPERATED EQUIPMENT	184,201.17	129,039	55,163	7,146	7.7	3.88
	COMMUNICATION EQUIPMENT						
396.00	GENERAL	1,124,404.72	185,278	939,127	79,008	11.9	7.03
396.70	SCADA	528,324.63	89,248	439,077	56,118	7.8	10.62
	TOTAL ACCOUNT 396	1,652,729.35	274,525	1,378,204	135,126		
397.00	MISCELLANEOUS EQUIPMENT	39,059.93	13,113	25,947	1,392	18.6	3.56
398.00	OTHER TANGIBLE PLANT	231,100.00	7,236	223,864	9,428	23.7	4.08
	TOTAL DEPRECIABLE PLANT	207,385,936.08	45,569,391	161,816,546	5,805,574		
	TOTAL WASTEWATER PLANT IN SERVICE	210,253,124.66	45,569,391	161,816,546	5,805,574		
	CUSTOMERS' ADVANCES FOR CONSTRUCTION						
361.00	COLLECTION MAINS - GRAVITY	126,000.00	4,826	121,174	2,380	50.9	1.89
	TOTAL CUSTOMERS' ADVANCES FOR CONSTRUCTION	126,000.00	4,826	121,174	2,380		

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 1. SUMMARY OF ESTIMATED SURVIVOR CURVES, ORIGINAL COST, BOOK RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO WASTEWATER PLANT AS OF MARCH 31, 2020

DEPRECIABLE GROUP (1)	SURVIVOR CURVE (2)	ORIGINAL COST AS OF MARCH 31, 2020 (3)	BOOK RESERVE (4)	FUTURE ACCRUALS (5)	ANNUAL ACCRUAL AMOUNT (6)	COMPOSITE REMAINING LIFE (7)	ANNUAL ACCRUAL RATE, PERCENT (8)
CONTRIBUTIONS IN AID OF CONSTRUCTION							
DEPRECIABLE PLANT							
354.00	STRUCTURES AND IMPROVEMENTS						
	COLLECTION						
	PUMPING	1,277,000.00	458,324	818,676	23,702	34.5	1.86
	TREATMENT AND DISPOSAL	1,084,876.22	165,515	919,361	21,460	42.8	1.98
	GENERAL	6,537,155.71	2,159,926	4,377,229	157,105	27.9	2.40
	50-R3	14,636.81	9,219	5,417	337	16.1	2.30
	TOTAL ACCOUNT 354	8,913,668.74	2,792,985	6,120,683	202,604		
360.00	COLLECTION MAINS - FORCE	9,872,459.72	1,612,039	8,260,421	157,469	52.5	1.60
361.00	COLLECTION MAINS - GRAVITY	4,083,815.05	900,539	3,183,276	63,999	49.7	1.57
363.00	SERVICES	1,488,413.86	553,338	935,076	17,873	52.3	1.20
371.30	PUMPING EQUIPMENT - PUMPING	464,547.60	96,912	367,636	26,776	13.7	5.76
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1,553,793.25	834,803	718,990	34,235	21.0	2.20
381.40	PLANT SEWERS - TREATMENT AND DISPOSAL	1,536.55	1,282	255	28	9.1	1.82
382.00	OUTFALL LINES	1,536.55	1,306	231	36	6.4	2.34
389.20	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - COLLECTION	13,030.75	6,310	6,720	693	9.7	5.32
390.10	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	274.98	260	15	0	-	-
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	4,449.14	4,504	(55)	0	-	-
394.00	LABORATORY EQUIPMENT	1,362.82	1,383	(20)	0	-	-
	TOTAL DEPRECIABLE PLANT	26,398,889.01	6,805,661	19,593,228	503,713		
	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION	26,398,889.01	6,805,661	19,593,228	503,713		
	AMORTIZATION OF NET SALVAGE				49,677		
	TOTAL WASTEWATER PLANT	183,728,235.65	38,758,904	142,102,144	5,349,158		

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 2. BRINGFORWARD TO MARCH 31, 2020 OF THE BOOK RESERVE AS OF MARCH 31, 2019

ACCOUNT (1)	BOOK RESERVE AT BEGINNING OF YEAR (2)	+	ANNUAL ACCRUAL (3)	+	AMORTIZATION OF NET SALVAGE (4)	-	PROJECTED RETIREMENTS (5)	+	PROJECTED GROSS SALVAGE (6)	-	PROJECTED COST OF REMOVAL (7)	=	ADJUSTMENTS (8)	=	BOOK RESERVE AT END OF YEAR (9)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (10)
354.20	1,993,739		118,867		0		38,524		0		0		0		2,074,082	31.62
354.30	1,281,841		119,891		0		38,652		0		0		0		1,363,080	20.71
354.40	7,484,624		706,246		4,731		177,505		0		4,907		0		8,013,188	26.51
354.50	11,268		628		0		0		0		0		0		11,896	32.40
354.70	271,252		10,987		0		0		0		0		0		282,239	49.32
355.20	26,306		4,737		0		0		0		0		0		31,043	33.68
355.30	159,727		43,703		0		0		0		0		0		203,430	23.05
355.40	294,271		124,802		0		0		0		0		0		419,072	16.56
360.00	5,743,148		415,239		28,506		3,528		0		3,714		0		6,179,651	23.64
361.00	5,898,082		645,829		0		163,051		0		0		0		6,380,860	15.62
362.00	7,343		5,046		0		0		0		0		0		12,389	7.28
363.00	3,482,179		139,231		1,394		1,018		0		1,073		0		3,620,713	34.93
364.00	83,304		21,317		0		91		0		0		0		23,74	23.74
370.00	231,011		16,302		0		0		0		0		0		104,530	44.90
371.30	4,515,600		669,190		0		69,287		0		0		0		5,115,504	35.60
371.50	147,053		8,709		0		0		0		0		0		155,762	62.78
380.00	7,793,650		1,926,787		10,098		691,882		0		17,163		0		9,021,489	15.01
381.40	26,093		3,953		0		0		0		0		0		30,046	24.55
381.50	1,099		206		0		0		0		0		0		1,305	20.84
382.00	25,247		4,729		0		1,350		0		0		0		28,626	18.62
389.20	276,985		46,365		0		0		0		0		0		323,350	48.89
389.30	23,842		4,049		0		0		0		0		0		27,891	41.40
389.40	25,482		490		0		0		0		0		0		25,972	81.04
390.71	6,693		255		0		0		0		0		0		6,948	68.15
390.73	147,826		98,351		0		22		0		0		0		246,155	27.72
390.75	443,253		142,874		0		24		0		0		0		586,104	61.57
390.76	30,059		3,536		0		0		0		0		0		33,595	55.87
391.00	242,132		23,158		0		0		0		0		0		265,290	49.13
392.00	7,215		422		0		0		0		0		0		7,637	69.71
393.00	46,284		28,521		0		0		0		0		0		74,805	21.28
394.00	227,819		24,708		0		1,013		0		0		0		251,514	35.38
395.00	121,284		7,755		0		0		0		0		0		129,039	70.05
396.00	111,341		73,936		0		0		0		0		0		185,278	16.48
396.70	36,866		52,381		0		0		0		0		0		89,248	16.89
397.00	11,722		1,391		0		0		0		0		0		13,113	33.57
398.00	0		7,236		0		0		0		0		0		7,236	3.13
SUBTOTAL	41,235,639		5,501,825		44,729		1,185,946		0		26,856		0		45,569,391	

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 2. BRINGFORWARD TO MARCH 31, 2020 OF THE BOOK RESERVE AS OF MARCH 31, 2019

ACCOUNT (1)	BOOK RESERVE AT BEGINNING OF YEAR (2)	+	ANNUAL ACCRUAL (3)	+	AMORTIZATION OF NET SALVAGE (4)	-	PROJECTED RETIREMENTS (5)	+	PROJECTED GROSS SALVAGE (6)	-	PROJECTED COST OF REMOVAL (7)	+	ADJUSTMENTS (8)	=	BOOK RESERVE AT END OF YEAR (9)	BOOK RESERVE AS A PERCENT OF ORIGINAL COST (10)
LESS: ADVANCES																
361.00	2,419		2,407		0		0		0		0		0		4,826	3.83
SUBTOTAL	2,419		2,407		0		0		0		0		0		4,826	
LESS: CONTRIBUTIONS																
354.20	434,189		24,135		0		0		0		0		0		458,324	35.89
354.30	143,926		21,589		0		0		0		0		0		165,515	15.26
354.40	1,999,766		160,160		0		0		0		0		0		2,159,926	33.04
354.70	8,877		343		0		0		0		0		0		9,219	62.99
360.00	1,451,118		160,921		0		0		0		0		0		1,612,039	16.33
361.00	835,606		64,933		0		0		0		0		0		900,539	22.05
363.00	535,477		17,861		0		0		0		0		0		553,338	37.18
371.30	67,831		29,081		0		0		0		0		0		96,912	20.86
380.00	799,221		35,582		0		0		0		0		0		834,803	53.73
381.40	1,252		30		0		0		0		0		0		1,282	83.42
382.00	1,265		41		0		0		0		0		0		1,306	84.99
389.20	5,603		708		0		0		0		0		0		6,310	48.43
390.71	260		0		0		0		0		0		0		260	94.64
393.00	4,504		0		0		0		0		0		0		4,504	101.23
394.00	1,383		0		0		0		0		0		0		1,383	101.47
SUBTOTAL	6,290,278		515,383		0		0		0		0		0		6,805,661	
TOTAL	34,942,942		4,984,036		44,729		1,185,946		0		26,856		0		38,758,904	

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

DEPRECIABLE GROUP		ORIGINAL COST AS OF MARCH 31, 2019	ORIGINAL COST AS OF MARCH 31, 2020	ANNUAL ACCRUAL RATE, PERCENT	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	*(5)
INTANGIBLE PLANT					
351.00	ORGANIZATION	1,559,913.03	1,559,913.03		
TOTAL INTANGIBLE PLANT		1,559,913.03	1,559,913.03		
NONDEPRECIABLE PLANT					
353.20	LAND AND LAND RIGHTS - COLLECTION	42,731.40	42,731.40		
353.30	LAND AND LAND RIGHTS - PUMPING	573,591.78	573,591.78		
353.40	LAND AND LAND RIGHTS - TREATMENT AND DISPOSAL	690,952.37	690,952.37		
TOTAL NONDEPRECIABLE PLANT		1,307,275.55	1,307,275.55		
DEPRECIABLE PLANT					
354.00	STRUCTURES AND IMPROVEMENTS				
	COLLECTION	5,665,242.62	6,560,313.37	1.90	118,867
	PUMPING	5,684,134.69	6,582,190.25	1.91	119,891
	TREATMENT AND DISPOSAL	26,103,594.50	30,227,789.22	2.45	706,246
	RECLAIMED WATER TREATMENT	36,713.07	36,713.07	1.71	628
	GENERAL	572,259.67	572,259.67	1.92	10,987
	TOTAL ACCOUNT 354	38,061,944.55	43,979,265.58		956,620
355.00	POWER GENERATING EQUIPMENT				
	COLLECTION	92,159.43	92,159.43	5.14	4,737
	PUMPING	783,235.88	882,555.33	5.17	43,703
	TREATMENT AND DISPOSAL	2,245,376.53	2,530,105.01	5.15	124,802
	TOTAL ACCOUNT 355	3,120,771.84	3,504,819.77		173,241
360.00	COLLECTION MAINS - FORCE	26,067,475.71	26,142,344.69	1.59	415,239
361.00	COLLECTION MAINS - GRAVITY	37,378,828.39	40,839,043.72	1.63	645,829
362.00	SPECIAL COLLECTING STRUCTURES	164,902.64	170,155.95	3.00	5,046
363.00	SERVICES	10,218,687.70	10,365,846.76	1.35	139,231
364.00	METERS	426,184.31	440,359.03	4.90	21,317
370.30	RECEIVING WELLS	550,755.12	550,755.12	2.96	16,302
371.00	PUMPING EQUIPMENT				
	PUMPING	12,763,286.15	14,369,031.32	4.85	669,190
	RECLAIMED WATER TREATMENT	248,116.59	248,116.59	3.51	8,709
	TOTAL ACCOUNT 371	13,011,402.74	14,617,147.91		677,899
380.00	TREATMENT AND DISPOSAL EQUIPMENT	44,987,831.98	60,102,275.68	3.50	1,926,787
381.00	PLANT SEWERS				
	TREATMENT AND DISPOSAL	122,375.79	122,375.79	3.23	3,953
	RECLAIMED WATER TREATMENT	6,264.17	6,264.17	3.29	206
	TOTAL ACCOUNT 381	128,639.96	128,639.96		4,159
382.00	OUTFALL LINES	125,058.17	153,708.17	3.15	4,729
389.00	OTHER PLANT AND MISCELLANEOUS EQUIPMENT				
	COLLECTION	661,407.77	661,407.77	7.01	46,365
	PUMPING	67,370.96	67,370.96	6.01	4,049
	TREATMENT AND DISPOSAL	32,049.19	32,049.19	1.53	490
	TOTAL ACCOUNT 389	760,827.92	760,827.92		50,904
390.00	OFFICE FURNITURE AND EQUIPMENT				
	FURNITURE	10,195.46	10,195.46	2.50	255
	OFFICE EQUIPMENT	733,602.12	887,950.04	11.80	98,351
	COMPUTER HARDWARE	786,443.06	951,908.59	15.99	142,874
	COMPUTER SOFTWARE	60,129.40	60,129.40	5.88	3,536
	TOTAL ACCOUNT 390	1,590,370.04	1,910,183.49		245,016
391.00	TRANSPORTATION EQUIPMENT	474,460.25	540,016.22	4.39	23,158
392.00	STORES EQUIPMENT	10,955.41	10,955.41	3.85	422
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	300,323.29	351,573.29	8.52	28,521
394.00	LABORATORY EQUIPMENT	682,153.55	710,926.96	3.52	24,708

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 3. CALCULATION OF DEPRECIATION ACCRUALS FOR THE TWELVE MONTHS ENDED MARCH 31, 2020

DEPRECIABLE GROUP		ORIGINAL COST AS OF MARCH 31, 2019	ORIGINAL COST AS OF MARCH 31, 2020	ANNUAL ACCRUAL RATE, PERCENT	ANNUAL ACCRUAL AMOUNT
(1)		(2)	(3)	(4)	*(5)
395.00	POWER OPERATED EQUIPMENT	184,201.17	184,201.17	4.21	7,755
	COMMUNICATION EQUIPMENT				
396.00	GENERAL	896,213.09	1,124,404.72	7.07	73,936
396.70	SCADA	421,104.11	528,324.63	10.66	52,381
	TOTAL ACCOUNT 396	1,317,317.20	1,652,729.35		126,318
397.00	MISCELLANEOUS EQUIPMENT	39,059.93	39,059.93	3.56	1,391
398.00	OTHER TANGIBLE PLANT	71,100.00	231,100.00	4.09	7,236
	TOTAL DEPRECIABLE PLANT	179,673,251.87	207,385,936.08		5,501,825
	TOTAL WASTEWATER PLANT IN SERVICE	182,540,440.45	210,253,124.66		5,501,825
	CUSTOMERS' ADVANCES FOR CONSTRUCTION				
361.00	COLLECTION MAINS - GRAVITY	126,000.00	126,000.00	1.91	2,407
	TOTAL CUSTOMERS' ADVANCES FOR CONSTRUCTION	126,000.00	126,000.00		2,407
	CONTRIBUTIONS IN AID OF CONSTRUCTION				
	DEPRECIABLE PLANT				
354.00	STRUCTURES AND IMPROVEMENTS				
	COLLECTION	1,277,000.00	1,277,000.00	1.89	24,135
	PUMPING	1,084,876.22	1,084,876.22	1.99	21,589
	TREATMENT AND DISPOSAL	6,537,155.71	6,537,155.71	2.45	160,160
	GENERAL	14,636.81	14,636.81	2.34	343
	TOTAL ACCOUNT 354	8,913,668.74	8,913,668.74		206,227
360.00	COLLECTION MAINS - FORCE	9,872,459.72	9,872,459.72	1.63	160,921
361.00	COLLECTION MAINS - GRAVITY	4,083,815.05	4,083,815.05	1.59	64,933
363.00	SERVICES	1,488,413.86	1,488,413.86	1.20	17,861
371.30	PUMPING EQUIPMENT - PUMPING	464,547.60	464,547.60	6.26	29,081
380.00	TREATMENT AND DISPOSAL EQUIPMENT	1,553,793.25	1,553,793.25	2.29	35,582
381.40	PLANT SEWERS - TREATMENT AND DISPOSAL	1,536.55	1,536.55	1.95	30
382.00	OUTFALL LINES	1,536.55	1,536.55	2.67	41
389.20	OTHER PLANT AND MISCELLANEOUS EQUIPMENT - COLLECTION	13,030.75	13,030.75	5.43	708
390.10	OFFICE FURNITURE AND EQUIPMENT - FURNITURE	274.98	274.98	-	0
393.00	TOOLS, SHOP AND GARAGE EQUIPMENT	4,449.14	4,449.14	-	0
394.00	LABORATORY EQUIPMENT	1,362.82	1,362.82	-	0
	TOTAL DEPRECIABLE PLANT	26,398,889.01	26,398,889.01		515,383
	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION	26,398,889.01	26,398,889.01		515,383
	TOTAL WASTEWATER PLANT	156,015,551.44	183,728,235.65		4,984,036

* 12 - month total based on monthly averages.

AQUA PENNSYLVANIA, INC.
WASTEWATER ASSETS

TABLE 4. AMORTIZATION OF EXPERIENCED AND ESTIMATED NET SALVAGE

ACCOUNT (1)	2015		2016		2017		2018		2019		NET SALVAGE (12)*	SALVAGE ACCRUAL (13)=(12)/5
	GROSS SALVAGE (2)	COST OF REMOVAL (3)	GROSS SALVAGE (4)	COST OF REMOVAL (5)	GROSS SALVAGE (6)	COST OF REMOVAL (7)	GROSS SALVAGE (8)	COST OF REMOVAL (9)	GROSS SALVAGE (10)	COST OF REMOVAL (11)		
354.40	-	-	-	-	-	-	-	22,138.66	-	6,057.56	(28,196.22)	(5,639)
360.00	-	-	-	-	-	-	141,351.15	141,351.15	-	4,720.29	(146,071.44)	(29,214)
363.00	-	-	-	-	94.70	94.70	6,607.05	6,607.05	-	1,072.55	(7,774.30)	(1,555)
380.00	-	-	-	-	23,840.11	23,840.11	21,365.76	21,365.76	-	21,140.46	(66,346.32)	(13,269)
TOTAL	0.00	0.00	0.00	0.00	23,934.81	23,934.81	191,462.62	191,462.62	0.00	32,990.86	(248,388.29)	(49,677)

* COLUMN (12) EQUALS THE SUMMATION OF COLUMNS (2) THROUGH (11).

PART II. DETAILED DEPRECIATION CALCULATIONS

CUMULATIVE DEPRECIATED ORIGINAL COST

AQUA PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
1905	191,361	191,361				0.0
1943	46,022	38,554		7,468	7,468	0.0
1945	16,485	13,484		3,001	10,469	0.0
1950	666,337	500,095		166,242	176,711	0.1
1955	56,736	41,975		14,761	191,472	0.1
1959	15,236	11,273		3,963	195,435	0.1
1960	45,105	32,774		12,331	207,766	0.2
1962	21,145	13,897		7,248	215,014	0.2
1965	150,706	92,576		58,130	273,144	0.2
1970	170,827	134,556		36,271	309,414	0.2
1971	286,858	157,530		129,328	438,743	0.3
1972	969,796	655,398		314,398	753,141	0.5
1973	670,467	381,339		289,128	1,042,268	0.7
1974	224,421	167,567		56,854	1,099,123	0.8
1975	309,995	205,136		104,859	1,203,982	0.9
1976	395,776	238,389		157,387	1,361,369	1.0
1977	147,611	96,111		51,500	1,412,869	1.0
1978	221,029	145,153		75,876	1,488,745	1.1
1979	188,140	119,938		68,202	1,556,947	1.1
1980	1,537,609	820,405		717,204	2,274,151	1.6
1981	1,355,185	663,527		691,658	2,965,809	2.1
1982	874,863	430,034		444,829	3,410,637	2.4
1983	985,571	503,640		481,931	3,892,568	2.7
1984	814,093	442,738		371,355	4,263,924	3.0
1985	929,888	453,959		475,929	4,739,853	3.3
1986	1,944,204	1,054,440		889,764	5,629,616	4.0
1987	2,123,844	1,168,314		955,530	6,585,146	4.6
1988	680,923	372,947		307,976	6,893,122	4.9
1989	224,935	112,585		112,350	7,005,472	4.9
1990	638,598	249,782		388,816	7,394,288	5.2
1991	618,068	328,208		289,860	7,684,148	5.4
1992	464,547	250,051		214,496	7,898,644	5.6
1993	285,999	120,950		165,049	8,063,693	5.7
1994	481,486	231,076		250,410	8,314,103	5.9
1995	4,294,806	1,723,067		2,571,739	10,885,842	7.7
1996	113,672	50,517		63,155	10,948,997	7.7
1997	275,360	106,383		168,977	11,117,973	7.8
1998	2,204,513	666,247		1,538,266	12,656,239	8.9
1999	5,923,083	2,567,993		3,355,090	16,011,330	11.3
2000	1,473,093	467,517		1,005,576	17,016,905	12.0
2001	2,927,994	1,064,093		1,863,901	18,880,806	13.3
2002	3,975,441	1,471,366		2,504,075	21,384,882	15.1
2003	4,094,134	1,507,183		2,586,951	23,971,832	16.9
2004	3,171,587	702,630		2,468,957	26,440,790	18.6
2005	13,677,693	4,342,048		9,335,645	35,776,434	25.2
2006	1,446,942	533,350		913,592	36,690,026	25.8

AQUA PENNSYLVANIA, INC.

CUMULATIVE DEPRECIATED ORIGINAL COST BY YEAR INSTALLED
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR INST (1)	ORIGINAL COST (2)	ACCRUED DEPRECIATION (3)	AMOUNT		DEPRECIATED ORIGINAL COST CUMULATIVE AMOUNT (5)	PCT OF COL 4 TOTAL (6)
			(2)	(3)		
2007	3,280,098	974,567	2,305,531		38,995,557	27.4
2008	4,666,884	1,113,409	3,553,475		42,549,032	29.9
2009	7,731,362	2,073,525	5,657,837		48,206,869	33.9
2010	2,053,138	702,301	1,350,837		49,557,706	34.9
2011	155,300	(48,916)	204,216		49,761,921	35.0
2012	49,059	75,352	(26,293)		49,735,628	35.0
2013	2,823,786	668,147	2,155,639		51,891,267	36.5
2014	3,417,155	759,882	2,657,273		54,548,541	38.4
2015	7,781,375	1,063,518	6,717,857		61,266,397	43.1
2016	7,371,595	941,866	6,429,729		67,696,126	47.6
2017	9,643,817	1,002,004	8,641,813		76,337,939	53.7
2018	34,231,088	2,387,460	31,843,628		108,181,567	76.1
2019	35,318,949	1,403,610	33,915,339		142,096,906	100.0
2020	5,260	24	5,236		142,102,142	100.0
SUBTOTAL	180,861,047	38,758,904	142,102,142			
NONDEPRECIABLE	2,867,189		2,867,189			
TOTAL	183,728,236	38,758,904	144,969,331			

UTILITY PLANT IN SERVICE

AQUA PENNSYLVANIA, INC.

ACCOUNT 354.2 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0.5						
NET SALVAGE PERCENT.. 0						
1960	4,176.85	3,294	4,177			
1983	9,857.97	5,978	8,516	1,342	23.85	56
1988	86,104.28	47,840	68,147	17,957	25.39	707
1992	29,500.13	14,980	21,339	8,161	26.90	303
1995	43,693.47	20,440	29,116	14,577	28.16	518
1997	26,478.00	11,687	16,648	9,830	28.79	341
1998	62,235.70	26,531	37,793	24,443	29.27	835
1999	448.94	184	262	187	29.76	6
2000	157,449.01	62,507	89,040	68,409	30.00	2,280
2001	955,712.27	363,744	518,144	437,568	30.51	14,342
2002	12,512.86	4,575	6,517	5,996	30.80	195
2005	15,001.94	4,735	6,745	8,257	31.98	258
2007	1,360,880.30	379,958	541,240	819,640	32.91	24,905
2009	933,153.63	225,730	321,547	611,607	33.69	18,154
2010	866,346.27	192,589	274,338	592,008	34.11	17,356
2011	13,743.63	2,778	3,957	9,787	34.54	283
2014	1,503.43	208	296	1,207	35.74	34
2016	219,180.03	20,384	29,037	190,143	36.57	5,199
2017	99,774.74	6,914	9,849	89,926	36.93	2,435
2018	511,663.16	27,732	39,503	472,160	37.09	12,730
2019	1,150,896.76	33,606	47,871	1,103,026	37.34	29,540
	6,560,313.37	1,456,394	2,074,082	4,486,231		130,477
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						34.4 1.99

AQUA PENNSYLVANIA, INC.

ACCOUNT 354.3 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-S1						
NET SALVAGE PERCENT.. 0						
1970	993.73	702	816	178	20.68	9
1972	33,655.82	23,303	27,075	6,581	21.21	310
1973	61,439.50	41,939	48,728	12,712	21.74	585
1975	5,272.21	3,516	4,085	1,187	22.36	53
1978	5,180.89	3,310	3,846	1,335	23.61	57
1980	37,104.27	23,008	26,732	10,372	24.35	426
1981	85,381.06	51,946	60,355	25,026	24.94	1,003
1982	15,283.22	9,173	10,658	4,625	25.14	184
1983	50,318.67	29,587	34,376	15,943	25.75	619
1984	4,192.04	2,428	2,821	1,371	25.98	53
1985	17,521.09	9,924	11,530	5,991	26.60	225
1990	10,693.26	5,440	6,321	4,372	28.73	152
1995	163,336.18	72,766	84,545	78,791	30.81	2,557
1998	6,770.52	2,724	3,165	3,606	32.30	112
1999	44,091.36	17,019	19,774	24,317	33.01	737
2003	204,143.61	66,000	76,684	127,460	35.06	3,635
2004	308,850.78	94,848	110,201	198,650	35.53	5,591
2005	28,373.26	8,203	9,531	18,842	36.27	519
2006	319,057.54	86,847	100,905	218,153	36.76	5,935
2007	503,239.97	127,672	148,338	354,902	37.50	9,464
2008	472,109.66	111,512	129,563	342,547	38.00	9,014
2009	589,787.13	128,102	148,838	440,949	38.75	11,379
2010	88,181.90	17,539	20,378	67,804	39.27	1,727
2013	871,139.69	122,308	142,106	729,034	41.33	17,639
2014	11,964.57	1,438	1,671	10,294	42.10	245
2016	225,631.41	17,847	20,736	204,895	43.64	4,695
2017	748,058.12	43,387	50,410	697,648	44.64	15,628
2018	515,627.74	23,203	26,959	488,669	45.05	10,847
2019	1,154,791.05	27,484	31,933	1,122,858	46.05	24,383
	6,582,190.25	1,173,175	1,363,080	5,219,111		127,783

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 40.8 1.94

AQUA PENNSYLVANIA, INC.

ACCOUNT 354.4 STRUCTURES AND IMPROVEMENTS - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
NET SALVAGE PERCENT.. 0						
1950	323,816.67	298,138	260,308	63,509	6.01	10,567
1970	3,576.70	2,847	2,486	1,091	12.75	86
1972	400,249.78	311,514	271,987	128,263	13.60	9,431
1973	25,678.58	19,808	17,295	8,384	13.85	605
1980	45,447.38	31,795	27,761	17,686	17.07	1,036
1981	35,816.06	24,566	21,449	14,367	17.75	809
1983	53,738.99	35,747	31,211	22,528	18.50	1,218
1985	60,112.53	38,436	33,559	26,554	19.60	1,355
1986	2,072,772.54	1,294,239	1,130,017	942,756	20.30	46,441
1987	2,209,745.73	1,353,248	1,181,538	1,028,208	20.73	49,600
1988	208,619.16	125,192	109,307	99,312	21.16	4,693
1989	90,404.01	52,814	46,113	44,291	21.88	2,024
1990	2,732.83	1,561	1,363	1,370	22.33	61
1992	148,136.64	80,157	69,986	78,151	23.53	3,321
1994	325,914.74	166,999	145,809	180,106	24.50	7,351
1995	773,232.76	384,683	335,872	437,361	25.00	17,494
1998	4,953.98	2,219	1,937	3,017	26.80	113
1999	2,124,861.09	917,090	800,723	1,324,138	27.33	48,450
2000	23,600.86	9,790	8,548	15,053	27.87	540
2001	308,313.70	122,555	107,004	201,310	28.42	7,083
2002	3,558,836.91	1,351,646	1,180,139	2,378,698	28.98	82,081
2003	873,971.46	316,203	276,081	597,890	29.55	20,233
2004	35,270.49	12,112	10,575	24,695	30.12	820
2005	490,375.04	159,127	138,936	351,439	30.70	11,448
2006	694,469.86	212,924	185,907	508,563	31.09	16,358
2007	532,001.99	152,631	133,264	398,738	31.69	12,582
2008	450,366.22	120,113	104,872	345,494	32.30	10,696
2009	2,780,910.54	687,441	600,213	2,180,698	32.73	66,627
2010	293,052.04	66,581	58,133	234,919	33.17	7,082
2011	1,297,334.54	267,900	233,907	1,063,428	33.62	31,631
2012	131,879.07	24,424	21,325	110,554	34.09	3,243
2013	177,355.57	28,980	25,303	152,053	34.57	4,398
2014	215,520.40	30,475	26,608	188,912	34.90	5,413
2015	658,412.73	78,483	68,524	589,889	35.09	16,811
2016	614,595.22	59,001	51,514	563,081	35.31	15,947
2017	265,602.66	19,203	16,766	248,837	35.27	7,055
2018	2,614,240.01	149,012	130,105	2,484,135	35.19	70,592
2019	5,301,869.74	168,069	146,743	5,155,127	34.34	150,120
	30,227,789.22	9,177,723	8,013,188	22,214,601		745,415

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 29.8 2.47

AQUA PENNSYLVANIA, INC.

ACCOUNT 354.5 STRUCTURES AND IMPROVEMENTS - RECLAIMED WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-R2.5						
NET SALVAGE PERCENT.. 0						
2006	28,782.49	7,400	9,551	19,231	39.73	484
2007	5,043.10	1,209	1,560	3,483	40.44	86
2008	2,260.21	502	648	1,612	41.16	39
2011	627.27	106	137	491	43.06	11
	36,713.07	9,217	11,896	24,817		620
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					40.0	1.69

AQUA PENNSYLVANIA, INC.

ACCOUNT 354.7 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1982	5,500.00	3,882	4,258	1,242	15.73	79
1983	13,000.00	9,030	9,905	3,095	16.16	192
1988	78,197.28	48,662	53,380	24,817	19.27	1,288
1993	41,018.43	22,166	24,315	16,703	22.75	734
1999	385,665.13	168,073	184,367	201,298	26.87	7,492
2000	6,796.19	2,832	3,106	3,690	27.64	134
2017	42,082.64	2,651	2,908	39,175	40.92	957
	572,259.67	257,296	282,239	290,021		10,876
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.7 1.90

AQUA PENNSYLVANIA, INC.

ACCOUNT 355.2 POWER GENERATING EQUIPMENT - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2.5						
NET SALVAGE PERCENT.. 0						
2006	18,722.97	10,221	7,713	11,010	11.44	962
2008	24,523.88	11,786	8,894	15,630	12.70	1,231
2009	526.24	235	177	349	13.35	26
2010	41,157.73	16,895	12,751	28,407	14.00	2,029
2013	3,384.57	1,008	761	2,624	15.93	165
2014	3,844.04	990	747	3,098	16.57	187
	92,159.43	41,135	31,043	61,117		4,600
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					13.3	4.99

AQUA PENNSYLVANIA, INC.

ACCOUNT 355.3 POWER GENERATING EQUIPMENT - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2.5						
NET SALVAGE PERCENT.. 0						
1999	212,232.58	156,331	132,625	79,608	7.42	10,729
2006	29,092.96	15,882	13,474	15,619	11.44	1,365
2008	8,914.73	4,284	3,634	5,281	12.70	416
2009	4,934.23	2,201	1,867	3,067	13.35	230
2014	3,290.45	848	719	2,571	16.57	155
2015	11,198.17	2,420	2,053	9,145	17.23	531
2018	508,723.78	51,992	44,109	464,615	18.67	24,886
2019	104,168.43	5,833	4,949	99,220	18.96	5,233
	882,555.33	239,791	203,430	679,126		43,545
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						15.6 4.93

AQUA PENNSYLVANIA, INC.

ACCOUNT 355.4 POWER GENERATING EQUIPMENT - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-R2.5						
NET SALVAGE PERCENT.. 0						
1999	112,962.54	83,208	66,060	46,903	7.42	6,321
2000	7,755.94	5,530	4,390	3,366	7.95	423
2002	71,017.28	47,021	37,331	33,686	9.06	3,718
2003	7,973.85	5,062	4,019	3,955	9.64	410
2007	6,933.82	3,563	2,829	4,105	12.06	340
2008	213,883.86	102,793	81,609	132,275	12.70	10,415
2010	155,107.03	63,671	50,549	104,558	14.00	7,468
2011	61,134.92	22,895	18,177	42,958	14.61	2,940
2012	3,397.32	1,143	907	2,490	15.29	163
2013	5,376.82	1,601	1,271	4,106	15.93	258
2014	8,153.55	2,100	1,667	6,487	16.57	391
2015	40,943.65	8,848	7,025	33,919	17.23	1,969
2016	89,527.21	15,542	12,339	77,188	17.85	4,324
2017	8,654.01	1,126	894	7,760	18.39	422
2018	1,438,653.71	147,030	116,729	1,321,925	18.67	70,805
2019	298,629.50	16,723	13,276	285,353	18.96	15,050
	2,530,105.01	527,856	419,072	2,111,033		125,417
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						16.8 4.96

AQUA PENNSYLVANIA, INC.

ACCOUNT 360 COLLECTION MAINS - FORCE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1943	30,208.98	25,040	22,741	7,468	15.84	471
1950	20,754.43	16,359	14,857	5,897	18.74	315
1955	12,621.03	9,562	8,684	3,937	20.72	190
1959	10,928.38	7,900	7,175	3,753	23.29	161
1960	20,355.28	14,595	13,255	7,100	23.58	301
1962	19,459.20	13,598	12,350	7,109	24.89	286
1965	70,031.10	47,159	42,829	27,202	26.55	1,025
1970	19,062.88	12,044	10,938	8,125	28.99	280
1972	834,977.63	510,338	463,482	371,496	30.38	12,228
1973	652,689.69	393,637	357,496	295,194	30.77	9,594
1974	5,521.25	3,259	2,960	2,561	31.77	81
1976	240,485.52	137,822	125,168	115,318	32.59	3,538
1977	61,095.12	34,213	31,072	30,023	33.59	894
1980	925,211.89	489,160	444,249	480,963	35.44	13,571
1981	1,592,617.81	826,887	750,968	841,650	35.88	23,457
1982	393,324.60	200,438	182,035	211,290	36.33	5,816
1983	124,305.29	61,668	56,006	68,299	37.33	1,830
1984	277,418.51	134,881	122,497	154,922	37.78	4,101
1985	365,452.67	173,992	158,017	207,436	38.24	5,425
1986	29,413.16	13,601	12,352	17,061	39.24	435
1987	59,251.37	26,782	24,323	34,928	39.71	880
1988	122,610.04	54,108	49,140	73,470	40.19	1,828
1990	246,609.38	102,713	93,283	153,326	41.68	3,679
1991	65,726.67	26,646	24,200	41,527	42.17	985
1993	92,990.81	35,318	32,075	60,916	43.68	1,395
1995	1,471,222.03	524,344	476,203	995,019	44.69	22,265
1996	62,499.77	21,375	19,413	43,087	45.69	943
1997	110,152.28	36,339	33,003	77,149	46.21	1,670
1998	740,350.86	235,135	213,547	526,804	46.74	11,271
1999	146,644.04	44,433	40,353	106,291	47.74	2,226
2000	193,160.16	56,074	50,926	142,234	48.28	2,946
2001	1,270,764.15	352,637	320,260	950,504	48.82	19,470
2002	4,906.89	1,298	1,179	3,728	49.36	76
2003	113,793.41	28,585	25,961	87,832	49.92	1,759
2004	946,074.25	223,463	202,946	743,128	50.92	14,594
2005	4,588,053.57	1,021,760	927,949	3,660,105	51.48	71,098
2006	83,319.44	17,414	15,815	67,504	52.04	1,297
2007	267,447.42	52,179	47,388	220,059	52.61	4,183
2008	1,600,291.13	289,653	263,059	1,337,232	53.18	25,145
2009	866,837.89	144,415	131,156	735,682	53.77	13,682
2010	116,596.81	17,734	16,106	100,491	54.35	1,849
2011	14,775.61	2,030	1,844	12,932	54.94	235
2012	131,613.03	16,109	14,630	116,983	55.54	2,106

AQUA PENNSYLVANIA, INC.

ACCOUNT 360 COLLECTION MAINS - FORCE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
2013	92,622.08	10,003	9,085	83,537	55.75	1,498
2014	141,178.13	13,073	11,873	129,305	56.36	2,294
2015	513,416.87	39,738	36,089	477,328	56.60	8,433
2016	121,806.21	7,540	6,848	114,958	56.85	2,022
2017	5,450,832.31	250,193	227,221	5,223,611	57.13	91,434
2018	701,216.83	25,174	22,863	678,354	57.05	11,891
2019	99,646.83	1,963	1,782	97,864	56.02	1,747
	26,142,344.69	6,804,381	6,179,651	19,962,693		408,900
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						48.8 1.56

AQUA PENNSYLVANIA, INC.

ACCOUNT 361 COLLECTION MAINS - GRAVITY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1945	10,996.64	9,041	7,995	3,002	16.16	186
1950	319,609.80	251,916	222,774	96,836	18.74	5,167
1955	32,494.08	24,618	21,770	10,724	20.72	518
1960	13,129.82	9,414	8,325	4,805	23.58	204
1965	74,750.69	50,337	44,514	30,237	26.55	1,139
1970	59,044.17	37,304	32,989	26,055	28.99	899
1971	285,021.94	176,457	156,044	128,978	29.99	4,301
1972	102,615.45	62,719	55,464	47,151	30.38	1,552
1973	47,556.02	28,681	25,363	22,193	30.77	721
1975	119,064.78	69,272	61,258	57,807	32.17	1,797
1976	4,946.83	2,835	2,507	2,440	32.59	75
1977	369.62	207	183	187	33.59	6
1978	72,509.25	39,960	35,337	37,172	34.01	1,093
1979	49,726.39	26,952	23,834	25,892	34.44	752
1980	306,630.10	162,115	143,361	163,269	35.44	4,607
1981	37,751.51	19,601	17,334	20,418	35.88	569
1982	450,090.35	229,366	202,832	247,258	36.33	6,806
1983	519,803.33	257,874	228,043	291,760	37.33	7,816
1985	242,032.99	115,232	101,902	140,131	38.24	3,665
1986	279,262.16	129,131	114,193	165,069	39.24	4,207
1987	102,135.57	46,165	40,825	61,311	39.71	1,544
1988	100,847.36	44,504	39,356	61,491	40.19	1,530
1989	98,928.65	42,282	37,391	61,538	41.19	1,494
1990	345,124.61	143,744	127,115	218,010	41.68	5,231
1991	94,805.12	38,434	33,988	60,817	42.17	1,442
1992	12,920.09	5,091	4,502	8,418	42.68	197
1993	86,333.55	32,789	28,996	57,338	43.68	1,313
1995	839,759.54	299,290	264,667	575,093	44.69	12,868
1998	1,212,014.22	384,936	340,406	871,608	46.74	18,648
1999	4,316,495.29	1,307,898	1,156,597	3,159,898	47.74	66,190
2000	936,587.73	271,891	240,438	696,150	48.28	14,419
2001	633,521.66	175,802	155,465	478,057	48.82	9,792
2003	976,513.62	245,300	216,923	759,591	49.92	15,216
2004	2,577,104.69	608,712	538,294	2,038,811	50.92	40,039
2005	1,159,741.83	258,275	228,397	931,345	51.48	18,091
2006	40,527.43	8,470	7,490	33,037	52.04	635
2007	880,572.93	171,800	151,926	728,647	52.61	13,850
2008	760,684.65	137,684	121,756	638,929	53.18	12,014
2009	807,010.25	134,448	118,895	688,115	53.77	12,797
2010	1,138,420.62	173,154	153,123	985,298	54.35	18,129
2011	111,318.39	15,295	13,526	97,792	54.94	1,780
2012	114,623.07	14,030	12,407	102,216	55.54	1,840
2013	704,323.99	76,067	67,267	637,057	55.75	11,427

AQUA PENNSYLVANIA, INC.

ACCOUNT 361 COLLECTION MAINS - GRAVITY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
2014	1,218,879.42	112,868	99,811	1,119,068	56.36	19,856
2015	2,617,943.58	202,629	179,188	2,438,756	56.60	43,088
2016	1,218,323.70	75,414	66,690	1,151,634	56.85	20,257
2017	2,550,702.33	117,077	103,533	2,447,169	57.13	42,835
2018	7,964,871.07	285,939	252,861	7,712,010	57.05	135,180
2019	4,190,602.84	82,555	73,005	4,117,598	56.02	73,502
	40,839,043.72	7,215,575	6,380,860	34,458,184		661,284
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						52.1 1.62

AQUA PENNSYLVANIA, INC.

ACCOUNT 362 SPECIAL COLLECTING STRUCTURES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R3						
NET SALVAGE PERCENT.. 0						
1995	11,400.44	6,941	5,219	6,181	15.90	389
2018	153,502.20	9,364	7,041	146,461	32.72	4,476
2019	5,253.31	171	129	5,125	33.36	154
	170,155.95	16,476	12,389	157,767		5,019
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					31.4	2.95

AQUA PENNSYLVANIA, INC.

ACCOUNT 363 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1943	15,812.71	14,442	15,813			
1945	5,488.85	4,965	5,489			
1950	2,155.93	1,895	2,156			
1955	11,621.00	9,783	11,521	100	12.17	8
1959	4,307.30	3,480	4,098	209	14.44	14
1960	7,442.69	5,959	7,017	426	14.88	29
1962	1,686.07	1,314	1,547	139	16.33	9
1965	5,924.07	4,444	5,233	691	18.24	38
1970	7,461.59	5,197	6,120	1,342	21.68	62
1971	1,836.26	1,262	1,486	350	22.17	16
1972	51,393.65	34,603	40,749	10,645	23.17	459
1973	5,852.82	3,885	4,575	1,278	23.68	54
1974	122,414.01	79,520	93,645	28,769	24.68	1,166
1975	185,668.80	118,809	139,912	45,757	25.18	1,817
1976	150,521.81	94,166	110,892	39,630	26.18	1,514
1977	72,565.16	44,671	52,606	19,959	26.69	748
1978	99,358.79	59,735	70,345	29,014	27.69	1,048
1979	130,807.03	77,294	91,023	39,784	28.21	1,410
1980	277,900.50	160,182	188,634	89,266	29.21	3,056
1981	118,056.75	66,797	78,662	39,395	29.74	1,325
1982	115,415.52	63,617	74,917	40,499	30.74	1,317
1983	227,580.38	122,120	143,811	83,769	31.74	2,639
1984	585,535.92	307,699	362,354	223,182	32.28	6,914
1985	199,727.72	102,021	120,142	79,586	33.28	2,391
1986	81,152.83	40,260	47,411	33,742	34.28	984
1987	128,691.52	62,377	73,457	55,235	34.82	1,586
1988	28,177.81	13,241	15,593	12,585	35.82	351
1989	1,320.68	601	708	613	36.82	17
1990	17,350.46	7,691	9,057	8,293	37.36	222
1991	22,312.25	9,559	11,257	11,055	38.36	288
1992	5,571.63	2,304	2,713	2,859	39.36	73
1993	6,521.72	2,600	3,062	3,460	40.36	86
1994	5,906.52	2,281	2,686	3,221	40.92	79
1995	100,183.50	37,188	43,793	56,390	41.92	1,345
1996	14,271.61	5,084	5,987	8,285	42.92	193
1997	128,555.72	43,863	51,654	76,902	43.92	1,751
1998	168,797.74	55,062	64,842	103,956	44.92	2,314
1999	1,083,999.42	337,341	397,261	686,738	45.92	14,955
2000	104,182.65	31,067	36,585	67,598	46.48	1,454
2001	370,608.08	104,919	123,555	247,053	47.48	5,203
2002	5,189.43	1,391	1,638	3,551	48.48	73
2003	48,759.99	12,331	14,521	34,239	49.48	692
2004	327,719.15	77,932	91,775	235,944	50.48	4,674

AQUA PENNSYLVANIA, INC.

ACCOUNT 363 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
2005	2,602,923.15	579,671	682,635	1,920,288	51.48	37,302
2006	154,284.96	32,030	37,719	116,566	52.48	2,221
2007	178,235.28	34,310	40,404	137,831	53.48	2,577
2008	187,447.14	33,253	39,160	148,287	54.48	2,722
2009	132,368.95	21,483	25,299	107,070	55.48	1,930
2010	299,156.56	44,036	51,858	247,299	56.48	4,379
2011	10,815.79	1,439	1,695	9,121	57.04	160
2012	8,160.14	961	1,132	7,028	58.04	121
2013	88,267.52	9,056	10,664	77,604	59.04	1,314
2014	194,034.77	16,959	19,971	174,064	60.04	2,899
2015	370,924.68	26,781	31,538	339,387	61.04	5,560
2016	230,406.94	13,133	15,466	214,941	62.04	3,465
2017	337,024.01	14,088	16,590	320,434	63.04	5,083
2018	333,361.71	10,768	12,681	320,681	63.66	5,037
2019	178,227.12	3,048	3,589	174,638	64.66	2,701
2020	4,400.00	8	10	4,390	65.66	67
	10,365,846.76	3,075,976	3,620,713	6,745,134		139,912
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						48.2 1.35

AQUA PENNSYLVANIA, INC.

ACCOUNT 364 METERS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2.5						
NET SALVAGE PERCENT.. 0						
1973	662.04	656	537	125	0.42	125
1995	1,525.05	1,261	1,032	493	5.19	95
1999	7,822.94	5,909	4,836	2,987	6.72	444
2000	3,813.51	2,802	2,293	1,521	7.13	213
2003	61,843.27	40,817	33,405	28,438	8.63	3,295
2004	2,980.11	1,877	1,536	1,444	9.25	156
2007	10,161.78	5,416	4,432	5,730	11.17	513
2008	49,656.36	24,679	20,197	29,459	11.89	2,478
2009	23,324.73	10,706	8,762	14,563	12.67	1,149
2010	14,204.86	5,969	4,885	9,320	13.45	693
2013	1,185.83	351	287	899	16.08	56
2014	6,695.63	1,690	1,383	5,313	17.03	312
2015	12,670.45	2,648	2,167	10,503	17.98	584
2017	24,812.00	3,010	2,464	22,348	19.93	1,121
2018	204,735.19	19,225	15,734	189,001	20.50	9,220
2019	14,265.28	709	580	13,685	21.50	637
	440,359.03	127,725	104,530	335,829		21,091

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 15.9 4.79

AQUA PENNSYLVANIA, INC.

ACCOUNT 370 RECEIVING WELLS

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S2.5						
NET SALVAGE PERCENT.. 0						
1999	460,429.30	248,402	221,921	238,508	17.71	13,467
2005	51,223.90	20,397	18,222	33,002	22.29	1,481
2006	15,720.85	5,858	5,234	10,487	23.15	453
2009	3,381.07	996	890	2,491	25.74	97
2018	20,000.00	1,172	1,046	18,954	34.11	556
	550,755.12	276,825	247,313	303,442		16,054
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					18.9	2.91

AQUA PENNSYLVANIA, INC.

ACCOUNT 371.3 PUMPING EQUIPMENT - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L0.5						
NET SALVAGE PERCENT.. 0						
1905	191,361.06	191,361	191,361			
1970	75,413.91	66,409	71,343	4,071	6.75	603
1975	154.63	133	143	12	7.33	2
1978	22,945.51	19,352	20,790	2,156	7.75	278
1986	6,330.06	4,978	5,348	982	9.17	107
1987	133,370.18	103,522	111,214	22,156	9.44	2,347
1988	15,875.07	12,198	13,104	2,771	9.57	290
1996	27,926.80	19,102	20,521	7,406	10.97	675
1999	1,204,313.30	777,143	834,887	369,426	11.41	32,377
2000	9,096.49	5,731	6,157	2,939	11.60	253
2002	17,223.84	10,303	11,069	6,155	11.92	516
2003	3,534.83	2,054	2,207	1,328	12.07	110
2005	2,512,439.32	1,367,521	1,469,130	1,043,309	12.35	84,478
2006	52,037.48	27,262	29,288	22,749	12.50	1,820
2007	51,667.23	25,958	27,887	23,780	12.63	1,883
2008	154,548.35	74,090	79,595	74,953	12.76	5,874
2009	1,146,203.38	521,179	559,904	586,299	12.89	45,485
2010	174,482.11	74,504	80,040	94,442	13.08	7,220
2011	378,265.32	150,587	161,776	216,489	13.23	16,363
2012	39,894.23	14,657	15,746	24,148	13.35	1,809
2013	266,191.82	88,589	95,171	171,021	13.53	12,640
2014	560,263.40	165,894	178,220	382,043	13.67	27,948
2015	668,830.85	171,221	183,943	484,888	13.80	35,137
2016	672,674.70	142,742	153,348	519,327	13.92	37,308
2017	1,891,364.84	311,508	334,654	1,556,711	13.94	111,672
2018	2,058,504.85	272,546	292,796	1,765,709	13.93	126,756
2019	2,034,117.76	154,390	165,862	1,868,256	13.69	136,469
	14,369,031.32	4,774,934	5,115,504	9,253,528		690,420

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 13.4 4.80

AQUA PENNSYLVANIA, INC.

ACCOUNT 371.5 PUMPING EQUIPMENT - RECLAIMED WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L0.5						
NET SALVAGE PERCENT.. 0						
1970	294.53	259	254	41	6.75	6
1972	377.53	330	323	55	6.90	8
1975	609.55	524	513	97	7.33	13
1978	755.44	637	623	132	7.75	17
1981	963.48	791	774	189	8.42	22
1989	14,722.40	11,182	10,945	3,777	9.74	388
1990	5,822.32	4,365	4,272	1,550	9.93	156
1995	74,998.23	52,349	51,239	23,759	10.71	2,218
1999	3,640.00	2,349	2,299	1,341	11.41	118
2001	124,770.96	76,734	75,107	49,664	11.74	4,230
2005	7,864.53	4,281	4,190	3,675	12.35	298
2006	203.29	107	105	98	12.50	8
2008	3,174.00	1,522	1,490	1,684	12.76	132
2010	3,974.16	1,697	1,661	2,313	13.08	177
2011	4,416.76	1,758	1,720	2,697	13.23	204
2017	1,529.41	252	247	1,283	13.94	92
	248,116.59	159,137	155,762	92,355		8,087

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 11.4 3.26

AQUA PENNSYLVANIA, INC.

ACCOUNT 380 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
1970	37,695.87	30,945	28,769	8,927	10.85	823
1972	402,742.49	325,013	302,159	100,583	11.42	8,808
1973	167,904.84	134,223	124,785	43,120	11.73	3,676
1974	96,627.54	76,481	71,103	25,525	12.05	2,118
1977	34,405.54	26,327	24,476	9,930	13.12	757
1978	20,398.48	15,415	14,331	6,067	13.50	449
1979	8,230.17	6,137	5,705	2,525	13.90	182
1980	389,397.45	286,363	266,227	123,170	14.30	8,613
1981	3,661.86	2,668	2,480	1,182	14.44	82
1982	37,248.10	26,714	24,836	12,412	14.88	834
1985	45,040.76	30,988	28,809	16,232	15.76	1,030
1986	127,907.00	86,337	80,266	47,641	16.25	2,932
1987	3,784.51	2,516	2,339	1,446	16.51	88
1988	39,725.86	25,981	24,154	15,572	16.80	927
1989	5,297.20	3,405	3,166	2,131	17.10	125
1990	4,579.88	2,889	2,686	1,894	17.42	109
1991	452,607.20	279,757	260,085	192,522	17.76	10,840
1992	267,190.18	161,650	150,283	116,907	18.12	6,452
1993	59,134.39	34,960	32,502	26,632	18.50	1,440
1994	145,409.67	84,250	78,326	67,084	18.69	3,589
1995	807,933.53	455,917	423,859	384,075	19.11	20,098
1996	8,973.63	4,944	4,596	4,378	19.35	226
1997	10,173.65	5,462	5,078	5,096	19.62	260
1998	9,389.91	4,902	4,557	4,833	19.92	243
1999	1,191,919.42	603,469	561,035	630,884	20.23	31,186
2001	7,374.19	3,484	3,239	4,135	20.93	198
2002	1,169,695.40	533,615	496,093	673,602	21.16	31,834
2003	2,707,632.18	1,188,109	1,104,565	1,603,067	21.42	74,840
2004	11,821.98	4,971	4,621	7,201	21.70	332
2005	2,205,982.18	885,040	822,807	1,383,175	22.01	62,843
2006	62,196.54	23,772	22,100	40,097	22.22	1,805
2007	74,201.88	26,869	24,980	49,222	22.46	2,192
2008	699,251.23	238,305	221,548	477,703	22.73	21,016
2009	324,659.91	103,307	96,043	228,617	23.03	9,927
2010	250,826.69	74,094	68,884	181,943	23.25	7,826
2011	564,258.58	153,027	142,267	421,992	23.51	17,949
2012	145,321.05	35,807	33,289	112,032	23.70	4,727
2013	210,044.28	46,210	42,961	167,083	23.93	6,982
2014	649,500.16	125,094	116,298	533,202	24.10	22,125
2015	2,607,947.24	427,443	397,387	2,210,560	24.23	91,232
2016	3,609,803.45	480,465	446,680	3,163,123	24.42	129,530

AQUA PENNSYLVANIA, INC.

ACCOUNT 380 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
2017	5,103,735.00	514,967	478,756	4,624,979	24.50	188,775
2018	15,805,801.86	1,262,884	1,174,083	14,631,719	24.47	597,945
2019	19,514,842.75	858,653	798,276	18,716,567	24.45	765,504
	60,102,275.68	9,703,829	9,021,489	51,080,787		2,143,469
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.8 3.57

AQUA PENNSYLVANIA, INC.

ACCOUNT 381.4 PLANT SEWERS - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R1.5						
NET SALVAGE PERCENT.. 0						
1973	5,163.10	4,320	3,418	1,745	9.12	191
2006	27,208.44	10,026	7,934	19,274	23.56	818
2007	24,236.77	8,405	6,651	17,586	24.01	732
2008	8,178.49	2,662	2,106	6,072	24.35	249
2009	11,218.89	3,389	2,682	8,537	24.84	344
2013	31,735.34	6,534	5,170	26,565	26.04	1,020
2014	14,634.76	2,634	2,085	12,550	26.20	479
	122,375.79	37,970	30,046	92,330		3,833
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						24.1 3.13

AQUA PENNSYLVANIA, INC.

ACCOUNT 381.5 PLANT SEWERS - RECLAIMED WATER TREATMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R1.5						
NET SALVAGE PERCENT.. 0						
2008	4,015.94	1,307	882	3,134	24.35	129
2010	2,248.23	627	423	1,825	25.22	72
	6,264.17	1,934	1,305	4,959		201

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 24.7 3.21

AQUA PENNSYLVANIA, INC.

ACCOUNT 382 OUTFALL LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R2.5						
NET SALVAGE PERCENT.. 0						
1972	7,131.64	6,300	5,630	1,502	6.30	238
1973	3,899.99	3,428	3,063	837	6.44	130
2003	35,205.58	15,392	13,755	21,451	21.56	995
2011	7,566.04	1,860	1,662	5,904	26.84	220
2018	49,925.42	3,265	2,918	47,007	30.34	1,549
2019	49,979.50	1,789	1,598	48,381	30.32	1,596
	153,708.17	32,034	28,626	125,082		4,728
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						26.5 3.08

AQUA PENNSYLVANIA, INC.

ACCOUNT 389.2 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L3						
NET SALVAGE PERCENT.. 0						
2006	329,059.46	222,609	181,438	147,621	6.58	22,435
2007	9,438.16	6,077	4,953	4,485	7.05	636
2010	321,391.15	167,316	136,372	185,019	8.98	20,603
2011	1,519.00	720	587	932	9.70	96
	661,407.77	396,722	323,350	338,058		43,770
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 7.7						6.62

AQUA PENNSYLVANIA, INC.

ACCOUNT 389.3 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L3						
NET SALVAGE PERCENT.. 0						
2006	12,721.54	8,606	7,831	4,891	6.58	743
2007	3,383.22	2,178	1,982	1,401	7.05	199
2008	1,019.00	618	562	457	7.63	60
2009	1,352.64	765	696	657	8.26	80
2010	406.00	211	192	214	8.98	24
2011	1,400.22	664	604	796	9.70	82
2013	47,088.34	17,611	16,024	31,064	11.30	2,749
	67,370.96	30,653	27,891	39,480		3,937
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 10.0						5.84

AQUA PENNSYLVANIA, INC.

ACCOUNT 389.4 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-S2.5						
NET SALVAGE PERCENT.. 0						
2008	1,057.47	526	926	131	11.89	11
2009	30,991.72	14,225	25,046	5,945	12.67	469
	32,049.19	14,751	25,972	6,077		480
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					12.7	1.50

AQUA PENNSYLVANIA, INC.

ACCOUNT 390.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2006	2,385.62	1,640	2,333	53	6.25	8
2007	1,881.61	1,200	1,708	174	7.25	24
2010	2,209.99	1,077	1,532	678	10.25	66
2014	2,692.49	774	1,102	1,590	14.25	112
2016	1,025.75	192	273	753	16.25	46
	10,195.46	4,883	6,948	3,248		256

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 12.7 2.51

AQUA PENNSYLVANIA, INC.

ACCOUNT 390.2 OFFICE FURNITURE AND EQUIPMENT - OFFICE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2013	39,101.31	26,393	20,681	18,420	3.25	5,668
2014	232,858.53	133,894	104,915	127,944	4.25	30,104
2015	114,001.23	54,151	42,431	71,570	5.25	13,632
2016	67,476.93	25,304	19,827	47,650	6.25	7,624
2017	38,326.49	10,540	8,259	30,067	7.25	4,147
2018	193,358.32	41,089	32,196	161,162	7.88	20,452
2019	202,412.18	22,771	17,842	184,570	8.88	20,785
2020	415.05	5	4	411	9.88	42
	887,950.04	314,147	246,155	641,795		102,454
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						6.3 11.54

AQUA PENNSYLVANIA, INC.

ACCOUNT 390.3 OFFICE FURNITURE AND EQUIPMENT - COMPUTER HARDWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 5-SQUARE						
NET SALVAGE PERCENT.. 0						
2011	19,045.57	19,046	19,046			
2013	117,296.53	117,297	117,297			
2014	172,252.13	172,252	172,252			
2015	75,307.16	71,542	65,066	10,241	0.25	10,241
2016	92,364.31	69,273	63,003	29,361	1.25	23,489
2017	45,940.01	25,267	22,980	22,960	2.25	10,204
2018	212,266.10	90,213	82,047	130,219	2.88	45,215
2019	216,991.83	48,823	44,403	172,589	3.88	44,482
2020	444.95	11	10	435	4.88	89
	951,908.59	613,724	586,104	365,804		133,720
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						2.7 14.05

AQUA PENNSYLVANIA, INC.

ACCOUNT 390.4 OFFICE FURNITURE AND EQUIPMENT - COMPUTER SOFTWARE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2014	520.87	300	521			
2015	3,210.82	1,525	3,188	23	5.25	4
2017	36,949.65	10,161	21,245	15,705	7.25	2,166
2018	19,448.06	4,133	8,641	10,807	7.88	1,371
	60,129.40	16,119	33,595	26,534		3,541
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.5 5.89

AQUA PENNSYLVANIA, INC.

ACCOUNT 391 TRANSPORTATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 15-L3						
NET SALVAGE PERCENT.. 0						
1989	12,000.06	11,660	12,000			
2010	16,689.82	10,887	16,690			
2012	50,977.20	27,895	45,786	5,191	6.41	810
2013	88,333.69	42,930	70,463	17,871	7.14	2,503
2014	16,458.00	6,917	11,353	5,105	7.93	644
2015	26,364.42	9,280	15,232	11,132	8.74	1,274
2016	60,263.95	16,904	27,746	32,518	9.62	3,380
2017	90,835.79	18,812	30,877	59,959	10.53	5,694
2018	83,537.32	13,383	21,966	61,571	11.14	5,527
2019	94,555.97	8,028	13,177	81,379	12.12	6,714
	540,016.22	166,696	265,290	274,726		26,546
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						10.3 4.92

AQUA PENNSYLVANIA, INC.

ACCOUNT 392 STORES EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
2005	4,484.78	3,308	3,723	762	5.25	145
2009	6,470.63	3,478	3,914	2,557	9.25	276
	10,955.41	6,786	7,637	3,318		421
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.9 3.84

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 393 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1970	260.00	260	260			
1972	1,400.00	1,400	1,400			
1974	141.36	141	141			
1975	774.96	775	775			
1976	177.97	178	178			
1978	119.04	119	119			
1979	602.65	603	603			
1980	757.40	757	757			
1981	215.76	216	271		55-	
	4,449.14	4,449	4,504		55-	

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

AQUA PENNSYLVANIA, INC.

ACCOUNT 394 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1988	766.00	766	766			
1989	2,262.00	2,262	2,262			
1990	5,684.99	5,685	5,685			
1991	7,585.00	7,585	7,585			
1992	1,228.00	1,228	1,228			
1994	4,255.00	4,255	4,255			
1995	7,521.63	7,446	7,522			
1999	15,604.05	12,951	14,404	1,200	4.25	282
2000	574.01	453	504	70	5.25	13
2001	1,989.00	1,492	1,659	330	6.25	53
2002	8,198.56	5,821	6,474	1,725	7.25	238
2003	22,085.07	14,797	16,457	5,628	8.25	682
2004	713.99	450	500	214	9.25	23
2005	38,413.18	22,664	25,207	13,206	10.25	1,288
2006	42,593.89	23,427	26,055	16,539	11.25	1,470
2007	32,179.23	16,411	18,252	13,927	12.25	1,137
2008	43,643.71	20,513	22,814	20,830	13.25	1,572
2009	8,888.55	3,822	4,251	4,638	14.25	325
2010	10,577.49	4,125	4,588	5,989	15.25	393
2011	23,126.89	8,094	9,002	14,125	16.25	869
2012	1,790.10	555	617	1,173	17.25	68
2013	6,884.99	1,859	2,068	4,817	18.25	264
2014	29,949.87	6,888	7,661	22,289	19.25	1,158
2015	152,863.70	29,044	32,302	120,562	20.25	5,954
2016	91,391.25	13,709	15,247	76,144	21.25	3,583
2017	58,013.63	6,381	7,097	50,917	22.25	2,288
2018	54,857.27	4,663	5,186	49,671	22.88	2,171
2019	37,285.91	1,678	1,866	35,419	23.88	1,483
	710,926.96	229,024	251,514	459,413		25,314

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 18.1 3.56

AQUA PENNSYLVANIA, INC.

ACCOUNT 395 POWER OPERATED EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L2.5						
NET SALVAGE PERCENT.. 0						
2000	30,076.00	23,165	25,530	4,546	5.89	772
2003	8,973.41	6,524	7,190	1,783	6.29	283
2004	2,984.00	2,115	2,331	653	6.47	101
2005	30,737.00	21,083	23,236	7,501	6.75	1,111
2006	3,444.00	2,278	2,511	933	7.04	133
2007	64,936.28	41,066	45,259	19,677	7.41	2,655
2008	6,630.00	3,973	4,379	2,251	7.86	286
2009	6,343.00	3,566	3,930	2,413	8.37	288
2010	3,767.00	1,965	2,166	1,601	8.94	179
2011	18,093.39	8,645	9,528	8,565	9.56	896
2012	3,459.34	1,488	1,640	1,819	10.27	177
2013	2,414.11	919	1,012	1,402	10.98	128
2018	2,343.64	296	327	2,017	14.68	137
	184,201.17	117,083	129,039	55,163		7,146
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.7 3.88

AQUA PENNSYLVANIA, INC.

ACCOUNT 396 COMMUNICATION EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 15-SQUARE						
NET SALVAGE PERCENT.. 0						
2003	512.72	513	513			
2008	24,463.32	19,163	16,064	8,399	3.25	2,584
2009	2,950.39	2,114	1,772	1,178	4.25	277
2011	9,314.11	5,433	4,554	4,760	6.25	762
2012	2,556.55	1,321	1,107	1,450	7.25	200
2013	127,230.97	57,254	47,994	79,237	8.25	9,604
2014	28,256.79	10,832	9,080	19,177	9.25	2,073
2015	19,657.44	6,225	5,218	14,439	10.25	1,409
2016	4,848.22	1,212	1,016	3,832	11.25	341
2017	170,220.90	31,207	26,160	144,061	12.25	11,760
2018	458,578.44	64,967	54,460	404,118	12.88	31,376
2019	275,814.87	20,686	17,340	258,475	13.88	18,622
	1,124,404.72	220,927	185,278	939,127		79,008
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						11.9 7.03

AQUA PENNSYLVANIA, INC.

ACCOUNT 396.7 COMMUNICATION EQUIPMENT - SCADA

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 10-SQUARE						
NET SALVAGE PERCENT.. 0						
2016	33,295.71	12,486	9,762	23,534	6.25	3,765
2017	150,989.25	41,522	32,462	118,527	7.25	16,349
2018	214,442.39	45,569	35,625	178,817	7.88	22,693
2019	129,597.28	14,580	11,399	118,199	8.88	13,311
	528,324.63	114,157	89,248	439,077		56,118
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						7.8 10.62

AQUA PENNSYLVANIA, INC.

ACCOUNT 397 MISCELLANEOUS EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2007	187.05	95	123	64	12.25	5
2010	191.19	75	97	94	15.25	6
2011	1,773.24	621	804	969	16.25	60
2012	26,101.44	8,091	10,470	15,631	17.25	906
2014	2,292.01	527	682	1,610	19.25	84
2018	8,515.00	724	937	7,578	22.88	331
	39,059.93	10,133	13,113	25,947		1,392
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					18.6	3.56

AQUA PENNSYLVANIA, INC.

ACCOUNT 398 OTHER TANGIBLE PLANT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
2018	31,100.00	2,644	1,643	29,457	22.88	1,287
2019	200,000.00	9,000	5,593	194,407	23.88	8,141
	231,100.00	11,644	7,236	223,864		9,428
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						23.7 4.08

CUSTOMERS' ADVANCES FOR CONSTRUCTION

AQUA PENNSYLVANIA, INC.
CUSTOMERS' ADVANCES FOR CONSTRUCTION

ACCOUNT 361 COLLECTION MAINS - GRAVITY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
2004	126,000.00	29,761	4,826	121,174	50.92	2,380
	126,000.00	29,761	4,826	121,174		2,380
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						50.9 1.89

CONTRIBUTIONS IN AID OF CONSTRUCTION

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 354.2 STRUCTURES AND IMPROVEMENTS - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 55-S0.5						
NET SALVAGE PERCENT.. 0						
2011	1,277,000.00	258,082	458,324	818,676	34.54	23,702
	1,277,000.00	258,082	458,324	818,676		23,702
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					34.5	1.86

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 354.3 STRUCTURES AND IMPROVEMENTS - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 60-S1						
NET SALVAGE PERCENT.. 0						
1972	39,195.96	27,139	30,996	8,200	21.21	387
1973	13,556.99	9,254	10,569	2,988	21.74	137
1980	10,637.50	6,596	7,533	3,104	24.35	127
1981	47,773.77	29,066	33,197	14,577	24.94	584
2011	135,000.00	24,219	27,661	107,339	40.03	2,681
2017	838,712.00	48,645	55,559	783,153	44.64	17,544
	1,084,876.22	144,919	165,515	919,361		21,460
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					42.8	1.98

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 354.4 STRUCTURES AND IMPROVEMENTS - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R2						
NET SALVAGE PERCENT.. 0						
1972	42,000.00	32,689	26,556	15,444	13.60	1,136
1973	7,981.64	6,157	5,002	2,980	13.85	215
1980	6,844.83	4,789	3,891	2,954	17.07	173
1986	561,771.00	350,770	284,960	276,811	20.30	13,636
1987	469,604.40	287,586	233,631	235,973	20.73	11,383
1999	1,179,768.83	509,188	413,657	766,112	27.33	28,032
2001	745,942.16	296,512	240,882	505,060	28.42	17,771
2002	872,209.25	331,265	269,115	603,094	28.98	20,811
2003	971,761.31	351,583	285,621	686,140	29.55	23,220
2004	916,760.18	314,815	255,751	661,009	30.12	21,946
2006	150,000.00	45,990	37,362	112,638	31.09	3,623
2007	79,963.00	22,941	18,637	61,326	31.69	1,935
2008	51,125.00	13,635	11,077	40,048	32.30	1,240
2011	94,630.00	19,541	15,875	78,755	33.62	2,343
2012	370,713.84	68,656	55,775	314,939	34.09	9,238
2013	16,080.27	2,628	2,134	13,946	34.57	403
	6,537,155.71	2,658,745	2,159,926	4,377,229		157,105
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						27.9 2.40

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 354.7 STRUCTURES AND IMPROVEMENTS - GENERAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 50-R3						
NET SALVAGE PERCENT.. 0						
1982	1,636.81	1,155	1,045	592	15.73	38
1983	13,000.00	9,030	8,174	4,826	16.16	299
	14,636.81	10,185	9,219	5,417		337
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						16.1 2.30

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 360 COLLECTION MAINS - FORCE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1970	19,117.80	12,079	11,484	7,634	28.99	263
1972	739,587.98	452,036	429,772	309,816	30.38	10,198
1973	158,612.90	95,659	90,948	67,665	30.77	2,199
1977	18,223.43	10,205	9,702	8,521	33.59	254
1980	250,225.15	132,294	125,778	124,447	35.44	3,511
1981	465,119.47	241,490	229,596	235,523	35.88	6,564
1982	139,234.47	70,954	67,459	71,775	36.33	1,976
1999	228,231.05	69,154	65,748	162,483	47.74	3,403
2006	168,816.14	35,283	33,545	135,271	52.04	2,599
2010	1,745,849.85	265,544	252,465	1,493,385	54.35	27,477
2011	186,353.00	25,605	24,344	162,009	54.94	2,949
2012	240,000.00	29,376	27,929	212,071	55.54	3,818
2013	21,203.00	2,290	2,177	19,026	55.75	341
2014	32,176.58	2,980	2,833	29,344	56.36	521
2017	5,459,708.90	250,601	238,259	5,221,450	57.13	91,396
	9,872,459.72	1,695,550	1,612,039	8,260,421		157,469
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						52.5 1.60

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 361 COLLECTION MAINS - GRAVITY

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 75-R2.5						
NET SALVAGE PERCENT.. 0						
1970	13,338.75	8,427	7,415	5,924	28.99	204
1972	39,847.06	24,355	21,430	18,417	30.38	606
1973	28,745.49	17,336	15,254	13,491	30.77	438
1977	116.92	65	57	60	33.59	2
1980	22,093.00	11,681	10,278	11,815	35.44	333
1986	53,412.00	24,698	21,732	31,680	39.24	807
1991	24,968.00	10,122	8,907	16,061	42.17	381
1999	2,760,060.31	836,298	735,877	2,024,183	47.74	42,400
2011	358,844.00	49,305	43,385	315,459	54.94	5,742
2014	45,199.00	4,185	3,682	41,517	56.36	737
2015	99,144.95	7,674	6,753	92,392	56.60	1,632
2017	638,045.57	29,286	25,769	612,277	57.13	10,717
	4,083,815.05	1,023,432	900,539	3,183,276		63,999
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						49.7 1.57

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 363 SERVICES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 70-R4						
NET SALVAGE PERCENT.. 0						
1972	50.00	34	50			
1977	2,359.54	1,453	2,342	18	26.69	1
1980	12,216.58	7,042	11,350	867	29.21	30
1981	5,935.68	3,358	5,412	524	29.74	18
1982	1,028.22	567	914	114	30.74	4
1984	53,053.00	27,879	44,934	8,119	32.28	252
1999	501,480.17	156,061	251,534	249,946	45.92	5,443
2005	75,000.00	16,702	26,920	48,080	51.48	934
2006	55,485.24	11,519	18,566	36,919	52.48	703
2007	549,978.58	105,871	170,639	379,340	53.48	7,093
2013	18,908.00	1,940	3,127	15,781	59.04	267
2014	27,150.44	2,373	3,825	23,325	60.04	388
2015	24,679.05	1,782	2,872	21,807	61.04	357
2017	161,089.36	6,734	10,853	150,236	63.04	2,383
	1,488,413.86	343,315	553,338	935,076		17,873

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 52.3 1.20

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 371.3 PUMPING EQUIPMENT - PUMPING

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 25-L0.5						
NET SALVAGE PERCENT.. 0						
1987	43,530.60	33,788	31,751	11,780	9.44	1,248
2017	421,017.00	69,341	65,161	355,856	13.94	25,528
	464,547.60	103,129	96,912	367,636		26,776
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						13.7 5.76

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 380 TREATMENT AND DISPOSAL EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-S0						
NET SALVAGE PERCENT.. 0						
1973	88,336.75	70,616	79,487	8,850	11.73	754
1980	141,308.51	103,918	116,972	24,337	14.30	1,702
1986	37,451.00	25,279	28,455	8,996	16.25	554
1999	734,508.02	371,881	418,597	315,911	20.23	15,616
2006	100,000.00	38,220	43,021	56,979	22.22	2,564
2007	100,000.00	36,210	40,759	59,241	22.46	2,638
2011	352,188.97	95,514	107,512	244,677	23.51	10,407
	1,553,793.25	741,638	834,803	718,990		34,235
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						21.0 2.20

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 381.4 PLANT SEWERS - TREATMENT AND DISPOSAL

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R1.5						
NET SALVAGE PERCENT.. 0						
1973	1,536.55	1,286	1,282	255	9.12	28
	1,536.55	1,286	1,282	255		28
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						9.1 1.82

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 382 OUTFALL LINES

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 40-R2.5						
NET SALVAGE PERCENT.. 0						
1973	1,536.55	1,350	1,306	231	6.44	36
	1,536.55	1,350	1,306	231		36
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					6.4	2.34

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 389.2 OTHER PLANT AND MISCELLANEOUS EQUIPMENT - COLLECTION

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. IOWA 20-L3						
NET SALVAGE PERCENT.. 0						
2011	13,030.75	6,179	6,310	6,720	9.70	693
	13,030.75	6,179	6,310	6,720		693
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..					9.7	5.32

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 390.1 OFFICE FURNITURE AND EQUIPMENT - FURNITURE

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1973	72.91	73	73			
1977	89.28	89	89			
1979	20.53	21	21			
1982	92.26	92	77	15		
	274.98	275	260	15		
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 393 TOOLS, SHOP AND GARAGE EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 20-SQUARE						
NET SALVAGE PERCENT.. 0						
1969	60.00	60	60			
1970	200.00	200	200			
1972	1,400.00	1,400	1,400			
1974	141.36	141	141			
1975	774.96	775	775			
1976	177.97	178	178			
1978	119.04	119	119			
1979	602.65	603	603			
1980	757.40	757	757			
1981	215.76	216	271		55-	
	4,449.14	4,449	4,504		55-	

COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT .. 0.0 0.00

AQUA PENNSYLVANIA, INC.
CONTRIBUTIONS IN AID OF CONSTRUCTION

ACCOUNT 394 LABORATORY EQUIPMENT

CALCULATED REMAINING LIFE DEPRECIATION ACCRUAL
RELATED TO ORIGINAL COST AS OF MARCH 31, 2020

YEAR (1)	ORIGINAL COST (2)	CALCULATED ACCRUED (3)	ALLOC. BOOK RESERVE (4)	FUTURE BOOK ACCRUALS (5)	REM. LIFE (6)	ANNUAL ACCRUAL (7)
SURVIVOR CURVE.. 25-SQUARE						
NET SALVAGE PERCENT.. 0						
1972	1,267.00	1,267	1,267			
1977	35.71	36	36			
1981	19.34	19	19			
1982	7.44	7	7			
1983	33.33	33	54		21-	
	1,362.82	1,362	1,383		20-	
COMPOSITE REMAINING LIFE AND ANNUAL ACCRUAL RATE, PERCENT ..						0.0 0.00

PART III. EXPERIENCED AND ESTIMATED NET SALVAGE

AQUA PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2015 TRANSACTION YEAR				
354.20	6,161.60			
354.30	20,686.77			
354.40	30,037.57			
355.40	5,083.19			
360.00	6,408.14			
361.20	209,732.68			
364.00	326.00			
371.30	61,064.37			
371.50	1,068.86			
380.00	129,489.42			
389.20	2,624.27			
390.20	1,462.93			
390.30	12,157.34			
390.40	71,760.18			
393.00	45,687.96			
396.00	.01			
	603,751.29			
2016 TRANSACTION YEAR				
354.20	6,728.06			
354.30	22,082.98			
354.40	185,998.09			
355.40	3,409.50			
360.00	9,366.45			
361.20	45,379.46			
371.30	14,301.28			
371.50	3,081.09			
380.00	92,496.08			
390.10	586.00			
390.30	29,303.07			
390.40	28,896.19			
393.00	2,439.02			
394.00	.06			
	444,067.33			

AQUA PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2017 TRANSACTION YEAR				
354.20	110,163.77			
354.30	5,612.05			
354.40	468,580.32			
355.30	1,927.68			
355.40	16,130.90			
360.00	48,182.83			
361.20	158,410.38			
363.00	5,691.00	94.70		94.70-
371.30	153,780.54			
371.50	11,194.98			
380.00	188,331.40	23,840.11		23,840.11-
389.20	35,150.83			
390.30	19,135.69			
390.40	38,437.26			
393.00	.01			
394.00	2,748.48			
396.00	.06			
	1,263,478.18	23,934.81		23,934.81-
2018 TRANSACTION YEAR				
354.20	19,120.11			
354.30	26,652.72			
354.40	87,137.10	22,138.66		22,138.66-
355.30	10,485.43			
355.40	30,059.57			
360.00	27,225.00	141,351.15		141,351.15-
361.20	267,164.11			
363.00	652.50	6,607.05		6,607.05-
364.00	145.13			
370.30	900.00			
371.30	47,745.32			
380.00	558,979.64	21,365.76		21,365.76-
382.40	2,250.00			
390.20	3,459.85			
390.30	20,055.63			
390.40	35,074.49			
396.00	.01			
397.00	383.18			
398.00	119.00			
	1,137,608.79	191,462.62		191,462.62-

AQUA PENNSYLVANIA, INC.

EXPERIENCED RETIREMENTS BY ACCOUNT AND ASSOCIATED
COST OF REMOVAL, GROSS SALVAGE, AND NET SALVAGE

ACCT	REGULAR RETIREMENTS	COST OF REMOVAL	GROSS SALVAGE	NET SALVAGE
2019 TRANSACTION YEAR				
354.20	45,009.47			
354.30	45,159.56			
354.40	207,388.97	6,057.56		6,057.56-
360.00	4,275.00	4,720.29		4,720.29-
361.20	125,104.50			
363.00	990.00	1,072.55		1,072.55-
371.30	73,530.00			
380.00	789,385.50	21,140.46		21,140.46-
382.40	2,250.00			
390.20	29.32			
390.30	31.43			
394.00	1,350.00			
	1,294,503.75	32,990.86		32,990.86-
TOTAL	4,743,409.34	248,388.29		248,388.29-

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

AQUA NEW JERSEY, INC.

BPU Docket No. 2001_____

**DIRECT TESTIMONY OF
Adam Burger**

With Regard to an Overview of the Company's Request

January 21, 2020

AQUA NEW JERSEY, INC.**DIRECT TESTIMONY
OF
ADAM BURGER**

1 **Q. Please state your name, and business address.**

2 **A.** My name is Adam Burger. My business address is 10 Black Forest Road, Hamilton, New
3 Jersey 08691.

4 **Q. By whom are you employed and in what capacity?**

5 **A.** I am employed by Aqua New Jersey, Inc. (“Company,” or “Aqua”) as the Director of
6 Operations, and am currently appointed Interim President.

7 **Q. Please provide a brief description of your education and experience.**

8 **A.** I hold a bachelor of science degree in Chemical Engineering from Drexel University. I was
9 hired as the Director of Operations in April of 2019, and in that capacity have overall
10 responsibility for the day-to-day operations, business development and financial results of
11 Aqua. In October 2019, I was named Interim President. Additionally, I lead our
12 management team in developing and implementing the Company’s vision, strategy, goals
13 and objectives. Along with others, I am accountable for establishing and overseeing
14 relations and reporting with governmental agencies, providing quality water and wastewater
15 service to our customers and achieving the Company’s financial goals. I am responsible for
16 the overall operations of the Company’s four divisions including all aspects of water
17 treatment and distribution, wastewater treatment and collection, water quality, and customer
18 service.

1 My industry related experience is as follows:

- 2 • 2007 to 2012 Philadelphia Water Department - Process Engineer at the Southwest
3 Water Pollution Control plant. Working on a variety of projects to optimize
4 treatment and maintain compliance of the large treatment facility.
- 5 • 2012 to 2015 Philadelphia Water Department - Assistant Plant Manager of the
6 Belmont Water Treatment Plant. Overseeing all operations, maintenance and
7 capital project work for a 55 MGD facility.
- 8 • 2015 to 2017 Philadelphia Water Department - Plant Manager of the Belmont
9 Water Treatment Plant. Responsibilities included hiring, union relations, capital
10 and operational budgeting and planning as well as ensuring the operation of the
11 water plant providing water to over 750,000 customers.
- 12 • 2017 to 2019 Philadelphia Water Department - Plant Manager Northeast Water
13 Pollution Control Plant (210 MGD wastewater plant). Responsibilities included
14 capital project management, process startup, hiring and training new engineers,
15 environmental compliance and record keeping.
- 16 • April 2019 to present Aqua New Jersey - Director of Operations and Interim
17 President.

18 **Q. Do you hold any Professional licenses in connection with your occupation?**

19 **A.** Yes, I hold T-4 Water Treatment and S-4 Wastewater Treatment licenses from the New
20 Jersey Department of Environmental Protection (“NJ DEP”). I also hold a Professional
21 Engineer License in NJ and PA.

22 **Q. Have you testified in rate cases before this Board before?**

23 **A.** No, I have not.

1 **Q. What is the purpose of your Direct Testimony?**

2 **A.** The purpose of my Direct Testimony is to provide a general overview of the Company and
3 its wastewater systems, our requests in this proceeding, and the factors driving those
4 requests.

5 **Overview of Aqua New Jersey, Inc.**

6 **Rate Case Summary**

7 **Q. Please summarize the Company's requests in this matter.**

8 **A.** As will be discussed in detail in this filing, Aqua is requesting an increase in base rates of
9 \$1,089,968 or approximately 22.2% above the annual level of revenues for the test year
10 ending April 30, 2020. Aqua is filing for a rate increase so that it has the opportunity to
11 earn an adequate return of, and on, its capital invested to serve customers, and for
12 recognition of the increasing expenses the Company incurs to provide safe, adequate and
13 proper utility service to our customers.

14 With the filing of this rate case, the Company is also proposing to combine the rates of
15 several of our previously acquired systems into one fixed base rate, to be billed monthly,
16 which rate will be applicable to all customers, except those served by the Wallkill system.

17 Because of the move to a consolidated fixed rate, the Company is also proposing to create a
18 fixed flat-rate Purchased Sewerage Treatment Adjustment Clause ("PSTAC") to spread the
19 cost of the Company's purchased sewerage treatment costs across all customers. These
20 purchased treatment costs represent approximately 60% of the Company's O&M expenses.

21 The consolidation of rates is discussed more fully in the Direct Testimony of Company
22 Witnesses William C. Packer (PT-3) and Daniel T. Franceski (PT-4).

1 In addition to our requested rate increase, the Company has completed a comprehensive
2 review of its wastewater service tariff to ensure it is in compliance with all applicable
3 regulations and statutes, and that it is clear and understandable to our customers. Therefore,
4 we are also seeking approval by the Board of the revised tariff.

5 **Q. Would you please highlight some of the key items driving the need for the requested**
6 **rate increase?**

7 **A.** Increased capital investment is a major factor in this case. The Company has deployed
8 millions of dollars of capital into its wastewater systems to ensure these systems are capable
9 of providing reliable and adequate service to customers. Specifically, the Company has
10 made significant investments in influent screening equipment at various plants, as well as
11 integrating SCADA to allow for remote operation and monitoring of our facilities and lift
12 stations as identified in Company Witness Julie A. Black's Direct Testimony (PT-2).

13 The Company has also seen an increase in its Operations & Maintenance ("O&M")
14 expenses, some of which are quite significant, and anticipates that its purchased sewerage
15 treatment costs will also increase in the near term. Those specific increases will be
16 discussed in greater detail in the Direct Testimony of Ms. Dawn Peslak (PT-5) and Mr.
17 Packer (PT-3).

18 Finally, given the number of wastewater systems that have been acquired over the past few
19 years and the, in some instances significant, amount of time that has passed since
20 acquisition, the Company thought it appropriate to move towards a consolidated rate
21 structure for its sewer customers. This consolidated rate structure will better reflect the fact
22 that each system is part of a greater whole. For example, while our sewer systems provide
23 service to customers in eight different municipalities across the State, those systems are all

1 located within one of the Company's three sewer divisions – Northern, Southern, and
2 Central. Essentially, this means that the Company (as a whole) is providing the necessary
3 operational and system support by allocating resources, based on geographical location,
4 while also providing strategic planning for the Company's overall vision for its sewer
5 business. The Company has one sewer operation, with three divisions, not nine separate
6 divisions, and this consolidation reflects that reality. In addition, as a result of this
7 consolidation, which reflects a better and more proportionate sharing of costs among all
8 customers and classes of customers than the current piecemeal rate structure, the Company
9 will be better positioned to pursue strategic acquisitions of other sewer systems across the
10 State.

11 In summary, the Company is seeking rate relief to meet the increased investment and
12 expenses that result from capital improvements, increases in O&M costs, and environmental
13 compliance. The rates requested by Aqua in this proceeding should allow the Company the
14 opportunity to earn a fair return on its investments to serve customers.

15 **Q. Are there any other consolidated rates in place for the Company?**

16 **A.** Yes. Today, customers using the Woolwich, North Hanover, California Village and Spartan
17 Village wastewater systems are all on one rate – they all share in the costs necessary to
18 provide service for each of the systems, as approved in the Company's last sewer rate case.

19 **Q. What are the test year and pro forma periods used in the Company's filing?**

20 **A.** The Company has used a test year ending April 30, 2020, which contains five months of
21 actual and seven months of projected data. Additionally, we have normalized certain
22 expenses to reflect anticipated costs during the first year rates will be in effect, and reflected

1 post-test year plant additions of \$1,169,490, all of which are major in nature and
2 consequence, as discussed by Ms. Black in her Direct Testimony (PT-2).

3 **Q. What is the rate impact of the Company's proposed rate increase on the typical**
4 **residential customer?**

5 **A.** Under the proposed rates, for the customers included in the new \$70.64 flat monthly rate
6 (including PSTAC charges), some will see an increase and others will have a slight
7 decrease. For those residential customers that experience an increase, the average total
8 residential monthly bill will increase anywhere from \$1.89 to \$13.48 (or between 3% and
9 15%) above the current monthly bill, with some customers having more or less of that
10 increase. Bear Brook and Stanton Ridge monthly bills for service will decrease by 6% and
11 14%, respectively. For customers in the Wallkill service territory (in Hardyston Township),
12 the typical residential customer will see a total monthly bill increase of 43% above the
13 current monthly bill. Aqua's rate design is discussed more fully by Mr. Packer and Mr.
14 Franceski.

15 **Q. Please elaborate on the changes the Company proposes to make to its tariff.**

16 **A.** Apart from the consolidation of rate schedules from six to two, the Company's changes fall
17 into two categories: corrections to accurately reflect currently applicable statutes and Board
18 regulations, and changes to clarify and simplify language to make our tariff more readily
19 understandable by our customers. The Company has made two substantive changes, both
20 having to do with customer charges. Aqua is proposing a flat Restoration Charge of \$100
21 following discontinuance of service, and also a Bad Check Charge, equal to the fees
22 imposed by the bank, for all dishonored customer payments. The Company believes both

1 charges to be reasonable and in line with industry norms, by comparison to other utilities in
2 the State.

3 **Q. Is the Company proposing any acquisition adjustments in this case?**

4 **A.** Yes, it is. The Company is firmly of the view that it should be permitted to recover
5 acquisition adjustments for each of the systems acquired. Mr. Packer will address the
6 accounting related to this request in his Direct Testimony.

7 **Overview of Aqua's Wastewater Systems**

8 **Q. You mentioned three divisions within the Company, in which division are each of the**
9 **systems located?**

10 **A.** Aqua New Jersey has wastewater operations in three of its four geographical divisions –
11 Northern, Southern, and Central. Howell, North Hanover, California Village, and Spartan
12 Village all reside in the Central Division. Southern Division wastewater responsibilities are
13 solely in Woolwich Township. Stanton Ridge, Oakwood Village, Wallkill, and Bear Brook
14 are all in the Northern Division.

15 **Q. Please briefly describe the wastewater systems for which the Company is seeking a**
16 **rate increase.**

17 **A.** Briefly, Woolwich was acquired in 1998 and is the largest of the Company's systems,
18 followed closely by Maxim. Woolwich has approximately 2,591 customers, while Maxim,
19 which was acquired in 2003, has approximately 2,588 customers. The Company has three
20 systems serving mobile home parks. California Village, North Hanover and Spartan
21 Village, which were acquired in 2006, 2005 and 2014, respectively. California Village has
22 111 customers, North Hanover has 90 customers and Spartan Village has 222 customers.
23 Lastly, Bear Brook, Stanton Ridge, Wallkill, and Oakwood were acquired in 2004, 2007,

1 2010, and 2016, respectively. Bear Brook serves a development with 87 single family
2 homes and condominiums, a golf course and a clubhouse. Similarly, Stanton Ridge serves a
3 development of 151 homes, a golf course and a clubhouse. Wallkill has 411 customers in an
4 apartment complex, and Oakwood has 35 customers, one of which is an apartment complex
5 with 1,224 units.

6 **Q. Please describe the Woolwich wastewater treatment and collections facilities?**

7 **A.** Aqua and its predecessor, Consumers New Jersey, has owned and operated the Woolwich
8 system since the first house was constructed. Aqua and the Developer, Summit Ventures,
9 entered a contractual relationship in 1999 by which the Developer provides and pays for all
10 the sewer conveyance and disposal capacity necessary to build out the 4,500 prospective
11 homes in Woolwich. There are approximately 41 miles of sewer mains and 535 manholes
12 in the system. The entire sewer flow from Woolwich is conveyed to the Logan Township
13 Municipal Utilities Authority (“LTMUA”) for treatment, and the Developer is fully
14 responsible for providing LTMUA sewer treatment credits. The refund schedule was
15 established in the original contract from 1999. The Woolwich system consists of a gravity
16 collection system that discharges to various pumping stations using force mains to pump the
17 wastewater to LTMUA. Routine maintenance is performed throughout the system that
18 includes but is not limited to cleaning and jetting of collection mains, lift station cleaning,
19 manhole inspections and inflow and infiltration investigations. Backup power and SCADA
20 monitoring are provided at all pumping stations. The Company is planning to upgrade its
21 SCADA capabilities to allow for full control of the lift stations this year. Aqua recently
22 added a grinder to the main lift station, and replaced some pumps and switchgear at the
23 station. Since the development started in 1999, approximately 2,591 customers have been

1 added, most of which are residential customers ranging from 4 bedroom single family
2 homes to 1 bedroom apartments. Also included in the customer count are two schools, a
3 few doctors' offices and roughly 50,000 square feet of commercial space. The current rate
4 of growth in Woolwich is approximately 75 additional customers/year.

5 **Q. Please describe the Hanover Village wastewater treatment and collections facilities?**

6 A. The Hanover Village system was built around 1955 and acquired by the Company in 2005.
7 It consists of a stand-alone gravity collection system that includes two small pumping
8 stations and onsite treatment and stream disposal, serving approximately 90 customers. This
9 system is completely built out, and has required capital investments by Aqua to ensure
10 continued compliance with all NJDEP regulations. Since taking ownership, Aqua has
11 completed continuous projects to provide safe and adequate service to its customers
12 including, sewer collection system renovations, treatment plant renovations, aeration system
13 improvements, tank painting, safety equipment installation and pump station improvements.
14 This year Aqua will be adding full SCADA control and monitoring to both the plant and the
15 lift stations. Also an influent grinder will be installed to remove the flushable wipes and
16 other trash that have frequently caused issues with the facility. Prior to the acquisition by
17 the Company, the system experienced monitoring and reporting violations due to equipment
18 failures, poorly trained operators and lack of consistent treatment. There were also
19 overflows and backups in the collection system due to lack of proper operation and
20 maintenance. There are no NJDEP violations now. The plant is located in a remote area of
21 the Township that is susceptible to sustained power outages; standby power is now available
22 via a diesel generator.

1 **Q. Please describe the California Village wastewater treatment and collections facilities?**

2 **A.** The California Village system was built in the 1950's and acquired by the Company in
3 December 2006. It is a stand-alone gravity collection system that includes one small
4 pumping station that flows to the Company's onsite treatment plant, serving approximately
5 111 customers. Like Hanover Village, this system is also completely built-out, and has
6 required (i) capital investments by Aqua to maintain compliance with all NJDEP
7 regulations, and (ii) the completion of several similar projects to provide safe and adequate
8 service to customers. At the time of acquisition, this system still contained gaseous chlorine
9 treatment, so Aqua converted this system over to hypochlorite shortly after the acquisition.
10 Prior to the acquisition by the Company, the system experienced monitoring and reporting
11 violations due to equipment failures, poorly trained operators and lack of consistent
12 treatment. There are no NJDEP violations now. There were also overflows and backups in
13 the collection system due to lack of proper operation and maintenance. Customer
14 complaints have been decreased significantly since the Company took over the system.

15 **Q. Please describe the Spartan Village wastewater system.**

16 **A.** Aqua acquired the Spartan Village wastewater system, which serves a mobile home
17 community consisting of approximately 222 residential customers, in 2014 from the owner
18 of the mobile home community.¹ Utility services were previously included in the cost of
19 monthly lot rentals. As a part of Aqua's acquisition, the Board authorized the Company to
20 charge Spartan Village customers the same monthly rates that had been recently set earlier

¹ See *I/M/O the Petition of Aqua New Jersey, Inc. for Approval of Municipal Consents to Provide Water and Wastewater Service to Areas of the Township of North Hanover and the Borough of Wrightstown, and Other Required Approvals*, BPU Dkt. No. WE13121186, Order (dated July 23, 2014). Aqua also provides water service to Spartan Village.

1 that year for customers in Woolwich, California Village and Hanover Village (*i.e.*, Rate
2 Schedule No. 1 – General Sewer Service). Recently, the Company has invested a large
3 amount of capital for lining of the sewer pipes at Spartan Village, because during heavy
4 rain, the facility saw significant increases in flow pushing close to its rated capacity. Aqua
5 has already seen results in decreased plant influent flows during heavy rains from the sewer
6 lining work, and it will pay off for years to come with the extra capacity in the facility.

7 **Q. Please describe the Company’s Bear Brook and Stanton Ridge wastewater systems.**

8 **A.** Aqua acquired the Bear Brook wastewater system in July of 2004 in BPU Docket No.
9 WE03090731. The system serves a development consisting of approximately 87 single
10 family homes and condominiums, a golf course, and a clubhouse located in Fredon
11 Township. Initial rates for wastewater service for Bear Brook were established by the
12 Board in December of 2000 in BPU Dkt. No. WE99120915, and the Board approved the
13 Company’s proposal to continue to charge wastewater customers the same monthly rates
14 previously set in that earlier proceeding. Those rates are set out in Rate Schedule No. 2.
15 Immediately upon acquisition, this system required capital investments by Aqua to maintain
16 compliance with all NJDEP regulations. In 2019, Aqua installed new UV Treatment at the
17 Bear Brook wastewater treatment plant in order to improve the treatment process and
18 facilitate continued environmental compliance. Aqua also performed upgrades to the spray
19 field system to allow for better operation.

20 Aqua acquired the Stanton Ridge wastewater system, which serves a development
21 consisting of approximately 151 homes, a golf course, and a clubhouse located in the
22 Township of Readington, in 2007 from the Stanton Ridge Homeowners Association, Inc.
23 The rates in effect prior to the acquisition remain in place today, and are set forth in Rate

1 Schedule No. 3. As a result of the proposed consolidated rate, Stanton Ridge customers will
2 both see a rate decrease and move from quarterly to monthly billing. Since taking
3 ownership, Aqua has completed continuous projects to provide safe and adequate service to
4 its customers including, sewer collection system renovations, treatment plant renovations
5 including replacement filter media.

6 The rates for both Bear Brook and Stanton Ridge customers have remained the same for
7 over a decade, and the rates for Stanton Ridge have never been reviewed by the Board in a
8 base rate case. This year, Aqua will tie the facilities and lift stations for both Bear Brook
9 and Stanton Ridge into SCADA for monitoring and control. This will save time and money
10 by optimizing operators time in the monitoring of these facilities by allowing the operators
11 to remotely control and monitor plant and equipment parameters.

12 **Q. Please describe the Maxim and Wallkill wastewater systems.**

13 **A.** Aqua acquired the Maxim wastewater system, which serves approximately 2,588 mostly
14 residential customers located in Howell Township, from AquaSource Utility in 2003. The
15 base rates charged to Maxim customers have not changed since they were set by the Board
16 in 1998², which rates are set out in Rate Schedule No. 4. Since acquisition, the Company
17 has made routine filings to adjust the PSTAC rate to pass through treatment costs from the
18 Ocean County Utilities Authority, but has never conducted a base rate case for the Maxim
19 system.

20 Aqua acquired the Wallkill wastewater system, which provides service to approximately
21 411 customers located in an apartment complex in Hardyston Township, in 2010. The

² AquaSource completed a base rate case for the system in 1998 (BPU Dkt. No. WR97010052), in which it also established a PSTAC rate.

1 system was established in 1977, and its base rates were set by the Board in 2003 (using a
2 2001 calendar year test year), along with the establishment of a PSTAC rate. Base rates
3 were adopted by Aqua and are set forth in Rate Schedule No. 5. Like Maxim, Aqua has
4 routinely filed for adjustments to the Wallkill PSTAC rate in order to pass through treatment
5 costs from the Sussex County Municipal Utilities Authority to customers, but has never filed
6 a base rate case for this system – meaning that the base rate has not changed in 16 years.
7 Since taking ownership, Aqua has completed continuous projects to provide safe and
8 adequate service – and specifically to reduce pre-ownership inflow and infiltration issues –
9 to its customers including: sewer collection system renovations and treatment plant
10 renovations. This year, the Company will integrate this system into its SCADA network to
11 ensure the compliant operation of this system during off hours.

12 **Q. Finally, please describe the Company’s Oakwood Village system.**

13 A. In late December 2016, Aqua purchased the Oakwood Village wastewater system, which
14 provides service to 35 customers, including 34 single-family homes and an apartment
15 complex consisting of 1,224 rental apartments, located in the Township of Mount Olive.
16 Aqua adopted the existing Oakwood rates (approved by the Board in 2002), and also agreed
17 to complete a program of significant capital investment to ensure the system complied with
18 applicable environmental requirements. To date, Aqua has made significant investments to
19 return this wastewater treatment plant to a functioning plant that is in compliance with the
20 NJDEP requirements, including: replacement of the UV disinfection system, replacement of
21 the membrane filters, spray field improvements, SCADA integration, repairs to site fencing,
22 and the addition of an influent screening system. As a result of the proposed consolidated

1 rate, Oakwood Village’s customers will move from quarterly to monthly billing, and its
2 residential customers will see a modest increase (3%).

3 **Overview of the Company’s Petition**

4 **Q. Please summarize the Company’s Petition.**

5 **A.** This filing consists of the Petition for an increase in base rates and supporting Exhibits,
6 together with my Direct Testimony and the Direct Testimony of four other witnesses.
7 Those witnesses and the general topics they address are as follows:

- 8 • Ms. Julie A. Black, State Engineer, provides testimony on the Company’s additions to
9 Utility Plant in Service.
- 10 • William C. Packer, Vice President – Controller, Aqua Pennsylvania, Inc., provides
11 testimony on certain accounting matters including the consolidated tax adjustment
12 calculation, acquisition adjustments, rate base, the development of a new PSTAC, and the
13 Company’s cost of equity.
- 14 • Daniel T. Franceski, Independent Consultant, provides testimony regarding the
15 Company’s bill analysis and proposed rate structure.
- 16 • Ms. Dawn M. Peslak, Controller, provides testimony regarding expenses.

17 **Conclusion**

18 **Q. Does this conclude your Direct Testimony in this case?**

19 **A.** Yes, it does.

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

AQUA NEW JERSEY, INC.

Docket No. WR2001_____

**DIRECT TESTIMONY OF
JULIE A. BLACK**

With Regard To The Additions To Utility Plant In Service

January 21, 2020

AQUA NEW JERSEY, INC.

**DIRECT TESTIMONY
OF
JULIE A. BLACK**

1 **Q. Please state your name, occupation and business address.**

2 **A.** My name is Julie A. Black. My business address is 10 Black Forest Road, Hamilton, New
3 Jersey 08691.

4 **Q. By whom are you employed and in what capacity?**

5 **A.** I am employed by Aqua New Jersey, Inc. (“Aqua” or the “Company”) as State Engineer.

6 **Q. Please provide a brief description of your education and experience.**

7 **A.** I graduated from The Pennsylvania State University in 2012 with a Bachelor of Science
8 degree in Environmental Systems Engineering. My experience is as follows:

9 a. 2012 to 2015 – Whitman Requardt and Associates, as Design Engineer

10 b. 2015 to 2017 – Aqua Pennsylvania, Inc., as Project Engineer.

11 c. 2017 to 2019 – Aqua Services, Inc., as Project Engineer.

12 d. 2019 to present – Aqua, as State Engineer.

13 As State Engineer, I am responsible for the short-term and long-term capital planning,
14 budgeting, designing and implementation of all capital projects in New Jersey.

15 **Q. Do you hold any professional licenses in connection with your occupation?**

16 **A.** Yes, I hold a Professional Engineer license from the Delaware State Board of Professional
17 Engineers and Land Surveyors.

18 **Q. Have you testified before the New Jersey Board of Public Utilities (“Board”) before?**

19 **A.** No, I have not previously provided testimony before the Board.

1 **Q. What is the purpose of your Direct Testimony?**

2 **A.** The purpose of my Direct Testimony is to support and explain the Company's capital
3 additions to Utility Plant in Service in this proceeding.

4 **Q. Are you sponsoring any exhibits in this case?**

5 **A.** Yes, I am partially sponsoring Exhibit P-26, with Company Witness Dawn Peslak (PT-4).
6 Exhibit P-26 displays the Company's utility plant in service by account. Specifically, I will
7 be supporting the need for the Company's projected investment in rate base in the test year
8 ended April 30, 2020 and post-test year additions through October 31, 2020.

9 **Q. Please describe Exhibit P-26, Sheets 2-3, regarding the capital additions that are a part**
10 **of the Company's rate base in this case.**

11 **A.** I have assisted Company Witness William C. Packer in the preparation of schedules which
12 show by plant account the Company's actual plant balance at September 30, 2019, the
13 adjusted test year plant balance (reflecting net additions and retirements through April 30,
14 2020), as well as post-test year plant additions through October 31, 2020. These schedules
15 can be found at P-26, Sheets 2 and 3. Sheets 2 and 3 reflect the Company's Utility Plant in
16 Service detail. Sheet 2 summarizes the Company's calculation of Utility Plant in Service
17 and depreciation expense to be included in rates in this proceeding. Sheet 3 provides
18 additional details by plant account regarding plant additions and retirements through April
19 30, 2020, the end of the test year, as well as additions through October 31, 2020, the end of
20 the post-test year period. All additions shown on Exhibit P-26 are Company funded and
21 therefore exclude contributions in aid of construction ("CIAC").

22

- 1 **Q. What is included in the capital additions?**
- 2 **A.** The rate base additions are system-wide and generally relate to overall system upgrades
3 and/or operational improvements such as for sewer main replacements, replacements of
4 pumping units, minor treatment plant rehabilitation and the upgrading or replacement of
5 other equipment, as shown on Exhibit P-26. They are all necessary projects, and I have
6 analyzed each project’s merit before including them in our plans and budget. These are all
7 the kind of projects that need to be completed in order to maintain our system reliability to
8 serve our customers.
- 9 **Q. Do the current plant, proposed test year projects and those you have included in rate**
10 **base as post-test year additions accurately reflect the plant in service that will serve**
11 **Aqua customers during the time these rates will be in effect?**
- 12 **A.** Yes, they do. New Jersey Department of Environmental Protection (“NJDEP”)
13 requirements, the operational needs of the system, and the Company’s obligation to manage
14 efficient sewer treatment all combine to require that certain activities need to be performed
15 in a planned and consistent manner. The rate base included on the schedules in this case
16 reflects the plant which will provide quality service to customers during the time these rates
17 will be in effect. At this time, I expect that each of the projects I have discussed will be in
18 service at the time indicated in Exhibit P-26. All projects will be updated as the rate case
19 proceeds.
- 20 **Q. Please describe the capital additions that were included in the Pro Forma period**
21 **(5/1/2020 – 10/31/2020)?**
- 22 **A.** These projects, the most significant of which are the SCADA replacement and upgrade
23 projects, will all be completed and in-service by end of the Pro Forma period. As the Board

1 is aware, one of the findings identified in the Board’s 2018 audit of Aqua was that SCADA
2 should be installed at the Company’s wastewater facilities, and the Company agreed to
3 implement that finding.¹ They are therefore appropriate for inclusion in rates resulting from
4 this rate case.

5 The SCADA projects will enable the Company to better monitor its wastewater systems in
6 its three sewer divisions. The projects will provide remote access to monitor and control
7 wastewater treatment plants and lift stations. The SCADA installations will allow Aqua to
8 improve efficiency and reliability of service to the Company’s customers. Better monitoring
9 and controls will provide a net positive benefit to the Company’s customers. The individual
10 system SCADA costs are included in a larger Company-wide project to complete a
11 wholesale replacement and upgrade of its SCADA controls and programming in all of the
12 systems. Thus the SCADA project satisfies *Elizabethtown’s* “major in nature and
13 consequence” criteria for post-test year additions, with a collective post-test year capital cost
14 of \$550,000.

15 The Spartan Village spend of \$175,000 will be used for necessary maintenance activities,
16 including treatment plant upgrades, tank replacements and sewer rehabilitation projects, all
17 of which are integral to provide reliable service to customers.

18 The \$414,000 capital spend for Oakwood Village is for the installation of a new mechanical
19 screen on the influent pipe to remove solids and debris. The Oakwood Village system has
20 experienced significant disruption and expense related to the inability of the system to
21 effectively remove solids. After careful consideration, it was deemed that the most cost-

¹ See *Management and Affiliate Audits of Aqua New Jersey, Inc.*, BPU Docket, No. WA16121156, Final Report, at 9.

1 effective and efficient way to decrease the solids in the system was by installation of the
2 mechanical screen. The mechanical screen will collect and remove debris from the
3 wastewater prior to the treatment process improving overall efficiency by preventing clogs
4 and overflows. This project is in the design phase: including, gathering background data,
5 engineering and permitting. Construction is expected to begin in March of 2020, with a
6 target date for substantial completion of May 11, 2020.

7 The Stanton Ridge spend of \$75,000 will be used for necessary maintenance activities
8 including, treatment plant upgrades and collection system improvements, all of which are
9 integral to provide reliable service to customers.

10 **Q. Does this conclude your Direct Testimony in this case?**

11 **A.** Yes, it does.

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

AQUA NEW JERSEY, INC.

Docket No. WR2001_____

**DIRECT TESTIMONY OF
WILLIAM C. PACKER**

**With Regard To Certain Expense Adjustments, Rate Base claims, and Return on Equity
Considerations**

January 21, 2020

AQUA NEW JERSEY, INC.**DIRECT TESTIMONY
OF
WILLIAM C. PACKER****Overview**

1

2 Q. Please state your name and business address.

3 **A.** My name is William C. Packer. My business address is 762 West Lancaster Avenue, Bryn
4 Mawr, PA 19010.

5 Q. By whom are you employed and in what capacity?

6 **A.** I am employed by Aqua Pennsylvania, Inc., as Vice President and Controller.

7 Q. Please provide a brief description of your education and experience.

8 **A.** I graduated from the Richard Stockton College of New Jersey in 1998 with a Bachelor of
9 Science degree in Business Studies with a concentration in Accounting. In 1998, I joined
10 GE Capital Mortgage Services Inc. as a staff accountant. In September 1999, I joined New
11 Jersey-American Water Company (“American”) as a General Staff Accountant responsible
12 for financial statement preparation, account reconciliation, financial support for rate cases,
13 and account analysis. In September 2001, I was transferred to American’s Service
14 Company, in its Shared Services operation located in Mt. Laurel, New Jersey. I was
15 employed there for four years in many roles, including Senior Fixed Assets/Job Cost
16 Accountant, Financial Support Analyst, and Accounting Supervisor Fixed Assets. At
17 American, I had the opportunity to support the rate-making process by working closely
18 with operating subsidiaries in 23 states, preparing schedules and answering interrogatories.
19 In March, 2005, I joined Aqua New Jersey, Inc. (the “Company” or “Aqua”) where I
20 served as Assistant Controller until December 2006 when I transferred to Aqua America.

1 In July 2008, I was promoted to the position of Mid-Atlantic Manager of Rates. In April
2 2011, I became Manager of Rates and Planning - Northeast Divisions, and in October 2012
3 I assumed the position of Regional Controller for Pennsylvania and New Jersey operations.
4 In April 2017, I became Controller and Vice President of Aqua Pennsylvania, Inc., which is
5 my current position.

6 **Q. Have you testified before this Board before?**

7 **A.** Yes, I testified and served as the principal accounting witness for the Company in several
8 proceedings including the following five water base rate case proceedings, in BPU Docket
9 Nos. WR11120859, WR05121022, WR07120955, WR09121005, and WR18121351, and in
10 the Company's only wastewater case to-date in BPU Docket No. WR13070686.

11 **Q. What is the purpose of your Direct Testimony in this proceeding?**

12 **A.** I will explain the calculations of the revenue requirement and the rate base claim the
13 Company has requested in this proceeding.

14 Specifically, I will address the following claims:

- 15 • Amortization Adjustments – Exhibit P-23, Sheet 1
- 16 • Rate Base Claims – Exhibit P-26, Sheets 1-10

17 I am also the overall accounting witness in this case. Should any witness defer any
18 accounting questions, I am the witness who will respond to those issues. I will also be
19 providing support for the Company's request to implement a consolidated Purchased
20 Sewerage Treatment Adjustment Clause ("PSTAC"), pursuant to N.J.A.C. 14:9-7.1 et seq.,
21 for the Company's purchased sewer treatment expense. In addition, I support the
22 Company's request for a 10.45% Return on Equity and a new consolidated rate structure.

1 **Q. Are you sponsoring other exhibits in this case?**

2 **A.** Yes, in addition to the above mentioned exhibits, I am also sponsoring Exhibits P-7, P-8,
3 P-9, P-10, P-13, P-14, and P-15, which show the accumulation of the various components of
4 the Company's revenue requirements. Exhibits P-7, P-8, P-9, and P-10 show historical
5 calendar year data for the sewer systems for the years 2016 through 2018. Exhibit P-13, the
6 Statement of Income, displays the Company's requested revenue increase, along with all
7 expense components that make up the calculation of Utility Operating Income at present and
8 proposed rates. In Exhibit P-14, I support the Company's proposed capital structure. This
9 exhibit shows the detailed components of the Company's requested ratio of debt and equity
10 financing and the calculation of the weighted average cost of capital. Exhibit P-15 shows
11 the detailed components included in the calculation of the Company's revenue requirement
12 and the requested increase in this proceeding.

13 **Q. Please provide an overview of the Company's request for increased rates.**

14 **A.** The Company is seeking a rate increase for all of its sewer systems in order to earn a fair
15 and reasonable return on its investment in utility plant in service and to recognize expense
16 increases that the Company has already realized, and will continue to realize beginning and
17 during the period the rates will be in effect as a result of this proceeding. In addition, as
18 discussed more fully in Company Witness Adam Burger's Direct Testimony, in this case,
19 the Company is seeking to merge the rates of several previously distinct and stand-alone
20 systems acquired by Aqua over the last approximately 16 years. Specifically, the Company
21 is proposing to combine several rate schedules into a single fixed tariff rate of \$44.41 per
22 month. The only exception to this approach will be the Wallkill rate, \$21.01 per month,
23 which I will explain in further detail below. In addition, the Company is proposing a

1 uniform PSTAC rate of \$26.23 to be applied to all wastewater customers, including Walkkill
2 customers. We believe this rate design will provide benefits to both customers and the
3 Company.

4 **Q. Why is Aqua requesting a rate increase now?**

5 **A.** Aqua's primary business is water service to its approximately 54,000 customers. By
6 comparison, providing sewer service accounts for about 10% of the Company's revenues.
7 With that said, the Company has had a water rate case almost every two years as a result of
8 significant capital investments and annual increases in operating costs. Historically,
9 however, annual capital expenditures on the wastewater side of the business were not as
10 great, and operating costs were fairly consistent. In addition, because PSTAC rates are in
11 place for Walkkill and Maxim, Aqua has been able to capture increases in purchased
12 wastewater treatment costs for those systems without the necessity of a full rate case filing.
13 As the Board may be aware, purchased wastewater treatment costs represent approximately
14 60% of the Company's operating costs on an annual basis. Now that the number of systems
15 owned and operated by the Company has expanded, with some of the systems requiring
16 significant capital investment to maintain safe and proper service to customers, rate base has
17 grown and the cumulative systems have begun to lose money. The Company has evaluated
18 its alternatives and strategic position on these sewer systems and determined that now is the
19 appropriate time to request rate relief.

20 **Q. Why is Aqua requesting that the rates of all systems, except Walkkill, be combined into**
21 **one rate?**

22 **A.** Put simply, merging the rates of these systems will ensure that the Company can earn a fair
23 rate of return on its investments made to serve customers, while customers continue to be

1 charged reasonable rates for safe and adequate service. First, I would note that such rate
2 consolidation is consistent with Board policies in water and sewer rates. Second, given the
3 fact that the Company's sewer business has grown primarily through acquisitions of smaller
4 systems, the Company's rates have not been revised for several of those systems for many
5 years. As a result of the increased need for investment in many of the Company's sewer
6 systems, the Company has been under-earning. Many of the assets in these systems have
7 increased in age and are now requiring repair or replacement, which has led to significant
8 and meaningful capital investments. Aqua believes that it makes more economic and
9 strategic sense to merge these systems, since they are largely centrally operated and are now
10 treated as separate areas of the same utility, as opposed to being treated as satellite systems.
11 Third, after this initial consolidation, the customers of the collective group would share in
12 any future costs of running the systems and capital investments, which will allow Aqua to
13 be in a position to take on new service territories through the acquisition of additional sewer
14 operations in the State. This consolidation is consistent with the Company's prior practice
15 of merging multiple systems into one rate (which occurred in the last sewer rate case), will
16 advance the Company's long-term vision and goals, and will provide rate stability to
17 customers.

18 **Q. Why did the Company maintain a separate fixed charge for Wallkill?**

19 **A.** The Company did not move Wallkill to the consolidated rate to allow for a more gradual
20 increase to a system-wide equalized rate. As indicated in the Direct Testimony of Company
21 Witness Daniel T. Franceski (PT-4), Wallkill's current rates are well below those paid by
22 other Aqua wastewater customers. While the Company believes Wallkill customers should
23 pay the same system-wide rate as other customers, the Company is also mindful of the

1 potential impact of such a rate increase on customers. For more details on the specific rate
2 design please refer to the Direct Testimony of Mr. Franceski.

3 **Q. What are the test year and pro forma periods utilized in this filing?**

4 **A.** The Company has utilized a test year ending April 30, 2020 which contains five months of
5 actual and seven months of projected data. For the pro forma period, we have adjusted the
6 test year for certain expenses to reflect known and measurable increases the first year rates
7 will be in effect.

8 **Q. Please address Exhibit P-15, the Rate Increase Calculation.**

9 **A.** Exhibit P-15 summarizes the components of the revenue requirement and provides the
10 calculation of the additional annual revenue which the Company is requesting in this case.
11 Pro Forma Rate Base is shown on Exhibit P-13, at \$12,053,826, Rate of Return is 7.73%,
12 incorporating a Return on Equity of 10.45%. The application of Rate of Return to Rate
13 Base produces Operating Income at Proposed Rates, which, when compared to Operating
14 Income at Pro Forma Present Rates, results in an Operating Income Deficit of \$745,966,
15 which when grossed up for fees and taxes produces the Revenue Increase requested in this
16 case of \$1,089,968 as shown on Exhibit P-13.

17 **Amortization**

18 **Q. Please describe Exhibit P-23, Sheet 1, Amortization Adjustments.**

19 **A.** Exhibit P-23, Sheet 1 includes only the Amortization Expense related to both positive and
20 negative Utility Plant Acquisition Adjustments recorded with the acquisition of wastewater
21 systems approved by the Board. Those specific acquisitions are detailed within Exhibit P-
22 26, Sheet 7. There are adjustments relating to seven acquisitions in this claim, four negative
23 adjustments (Bear Brook, Oakwood Village, Stanton Ridge, and Spartan Village) and three

1 positive adjustments (California Village, Maxim and Wallkill). As I discuss later in my
2 Direct Testimony, Aqua is requesting that the acquisition adjustments associated with these
3 purchases be approved, as well as the related amortization of those adjustments.

4 **Rate Base**

5 **Q. Please explain the calculation of Exhibit P-26.**

6 **A.** The Company's rate base claim as of the end of the test year April 30, 2020 is \$12,053,826.
7 The Company summarizes the components of Rate Base requested in this proceeding on P-
8 26, Sheet 1. For all of the components, the Company started with actual results as of
9 September 30, 2019 and then projected activity through the remainder of the test year
10 through April 30, 2020. The largest and most significant component is Utility Plant in
11 Service, shown specifically on P-26, Sheets 2-3, on which I worked closely with Company
12 Witness Julie A. Black in the inclusion of both test year capital and post-test year capital.
13 Utility Plant additions are supported in Ms. Black's Direct Testimony (PT-2).

14 **Q. Please describe Exhibit P-26, Sheets 2 and 3.**

15 **A.** Exhibit P-26, Sheet 2 is a schedule that rolls forward the Company's Utility Plant in
16 Service, including test year and post-test year additions, both net of applicable retirements.
17 With regard to the post-test year additions adjustment, shown on Exhibit P-26 Sheet 3, the
18 Board has in the past recognized post-test year additions for certain capital improvements
19 that will be in service up to six months beyond the test year, in this case by October 31,
20 2020. In addition, those projects must be (1) major in nature and consequence, and (2)
21 substantiated by reliable data. Having said that, the Company has included a number of
22 projects that we believe meet that criteria. These projects are necessary to ensure that our
23 customers continue to receive safe, adequate and proper service.

1 **Q. Please continue with a description of Exhibit P-26, Sheets 5 through 10.**

2 **A.** Rate Base Exhibit P-26, Sheet 5, deals with Materials and Supplies inventory. These are
3 items that are stored at Aqua's facilities for day-to-day operations, emergency activities, and
4 chemical inventories. Given the relatively small size of the Company's sewer business,
5 Aqua does not maintain a financial inventory on its books and records as the cost of
6 materials and supplies is expensed as incurred. Regarding Prepaid Expense Balances, and
7 consistent with our past practice on water rate cases, I have utilized a 13-month average to
8 determine the balance to be used as of April 30, 2020, shown on P-26, Sheet 6.

9 **Acquisition Adjustments**

10 **Q. Please address Exhibit P-26, Sheet 7.**

11 **A.** The unamortized balance of Utility Plant Acquisition Adjustment Amortizations is shown
12 on Exhibit P-26, Sheet 7. For the systems identified, the Company has included the original
13 cost of their assets and accumulated depreciation as rate base in this proceeding. The effect
14 of including utility plant acquisition adjustments shown on Exhibit P-26, Sheet 7, sets the
15 value of rate base for each acquisition equal to its purchase price. The Company has both
16 positive and negative acquisition adjustments. A negative acquisition adjustment occurs
17 when the Company acquires utility assets at a purchase price discount or less than the
18 depreciated original cost of assets when first devoted to public use. A positive acquisition
19 adjustment occurs when the Company acquires utility assets at a purchase price premium or
20 greater than the depreciated original cost of the assets. Negative acquisition adjustments
21 begin to amortize immediately, since the assets acquired that created the adjustment equally
22 begin to depreciate, hence they offset each other in operating income. Positive acquisition

1 adjustments may only begin amortizing once the Board has provided regulatory approval to
2 do so.

3 **Q. Has the Company received approval of acquisition adjustments in the past?**

4 **A.** Yes, the Company has many positive and negative acquisition adjustments recognized in
5 base rates today. Some of the adjustments included in this filing are simply the sewer utility
6 counterpart to a similar adjustment approved in water rates, which was part of the same
7 system acquisition.

8 **Q. What determines if an acquisition adjustment is approved?**

9 **A.** Positive and negative acquisition adjustments have historically been treated differently in
10 New Jersey. With respect to negative adjustments, the Board has recognized the adjustment
11 in rate base as well as the amortization credit as a reduction to cost of service, which means
12 that the Company is permitted to recover a return on and return of its investment only.
13 Regarding positive acquisition adjustments, the Board has generally approved positive
14 acquisition adjustments where the Company can demonstrate that there is a public benefit to
15 the acquisition of the system. Typically, these acquired systems are considered “troubled”
16 because they face one or more challenges such as significant needed capital investment,
17 environmental compliance problems, lack of professional management, and/or lack of long-
18 term financial viability. As a result of these types of problems, “troubled” systems (and
19 their customers) generally benefit by being acquired by an established public utility with the
20 resources to address their problems. From the acquiring company’s perspective, acquisition
21 of a “troubled” system can be an opportunity to grow customer numbers and rate base in a
22 strategic manner. Additionally, from a regulatory perspective, acquisitions of “troubled”
23 systems by Board-regulated public utilities lessens the need for intensive Staff oversight and

1 involvement and is more administratively efficient. Permitting recognition of a positive
2 acquisition adjustment should be encouraged as it facilitates the continued acquisition of
3 these types of systems by larger, more capable companies, such as Aqua, with the resources
4 and experience required to run them safely and properly. In this filing, the Company has
5 included three positive acquisition adjustments, one for its Maxim system, a second for its
6 Wallkill system, and the third for its California Village system.

7 **Q. Please elaborate on why you feel these acquisition adjustments are warranted and**
8 **should be included in Rate Base?**

9 **A.** The Company acquired the California Village sewer system in December 2006, upon
10 approval of the acquisition by the Board in Docket No. WE05121010. This system serves a
11 small mobile home park with approximately 111 customers. Prior to acquisition by Aqua,
12 this system experienced sanitary sewer overflows and effluent violations, all of which were
13 remediated by the Company – providing an immediate benefit to customers. For more
14 details on the characteristics of the system and related Company improvements please refer
15 to the Direct Testimony of Company Witness Adam Burger (PT-1).

16 The Company acquired the Wallkill system in 2010 following Board approval in BPU
17 Docket No. WM10020117. At the time of its acquisition by Aqua, Wallkill was being
18 operated by a real estate development entity and lacked qualified, professional utility
19 management and adequate system investment. Lack of proper utility management resulted
20 in a number of problems. Indeed, Wallkill unilaterally enacted a PSTAC without proper
21 approvals and took other actions that were inconsistent with Board regulations and required

1 additional Board oversight to rectify these problems.¹ Wallkill also experienced problems
2 with infiltration and inflow that were not prudently managed.² In short, Wallkill and its
3 customers were clearly in need of the resources and management expertise offered by Aqua.
4 The Company acquired the Maxim Sewerage Corporation in July 2003 and received
5 approval from the Board in Docket No. WM02110808. In that proceeding, the parties
6 agreed that some or all of the acquisition adjustment attributable to Maxim could be
7 requested in the context of a future base rate case, which is the proposed treatment in the
8 Company's instant application.³ Aqua's acquisition of the Maxim system has resulted in
9 benefits for the customers of the Maxim system specifically, and for Aqua's wastewater
10 customers generally. As noted in the Petition, Maxim's base rates were last reviewed by the
11 Board in 1998. Since that time, base rates have remained unchanged – including during the
12 sixteen years that Aqua has owned the system – resulting in a period of unprecedented rate
13 stability for Maxim customers. In the interest of basic fairness, this fact alone supports
14 recognition of the Maxim acquisition adjustment. As for Aqua's wastewater customers
15 generally, the acquisition of the Maxim system creates economies of scale for all wastewater
16 customers. Maxim is the Company's second largest customer-base in New Jersey (right

¹ See *I/M/O the Petition of Wallkill Sewer Company to Change the Level of its Purchased Sewage Treatment Clause*, BPU Docket No. WR03100806, Order (dated November 10, 2004) at 4 (noting the company had implemented a PSTAC for five months prior to Board approval).

² See *I/M/O the Petition of Wallkill Sewer Company for Approval of an Increase in Rates for Sewer Service and the Establishment of a Purchased Sewage Treatment Clause (PSTAC)*, BPU Docket Nos. WR02030193 & WR02030194, Order (dated August 7, 2003) at 5.

³ See *I/M/O the Joint Petition for Approval of the Acquisition by Consumers New Jersey Water Company of a Controlling Interest in Maxim Sewerage Corporation, and the Resulting Merger of Maxim Sewerage Corporation into Consumers New Jersey Water Company, as Part of the Stock Purchase of AquaSource Utility, Inc. by Philadelphia Suburban Corporation*, BPU Docket No. WM02110808, Order (dated May 20, 2003) at 7 (explicitly permitting Aqua to “seek to include in rates some or all of the acquisition adjustment in the context of an appropriate rate proceeding.”)

1 behind Woolwich). Taken as a whole, the addition of the Maxim sewer system to the
2 Company's portfolio of systems is clearly providing a benefit to all customers by spreading
3 the costs of service over a larger customer base and mitigating the costs of needed capital
4 investments on any individual system or group of customers. If the Maxim system had not
5 been acquired by Aqua and rates in this case were set based on the remaining customer base,
6 the proposed rate increase would still be approximately one million dollars or about twenty
7 percent. Said another way, it means the impact of the Maxim stand-alone cost of service is
8 marginal overall, yet the value of the allocation of cost of service in their proposed rate is
9 approximately \$400,000, resulting in meaningfully lower rates for everyone else in the
10 consolidated group. In addition to cost savings, Aqua's acquisition has provided much
11 needed stability of operations, reduced environmental compliance issues, and added
12 experienced management and oversight of the system's operation. Moreover, but-for the
13 acquisition adjustment, Maxim would have negative rate base – creating additional
14 complexity for setting rates going forward. In short, there are numerous benefits as a result
15 of the Maxim acquisition, and the acquisition adjustment should be fully recognized.

16 **Q. Please discuss Exhibit P-26, Sheets 8 through 10, respectively.**

17 **A.** The remaining Sheets in Exhibit P-26 deal with typical deductions to rate base. Those
18 include Accumulated Depreciation, Customer Advances (“CAC”), Contributions in Aid of
19 Construction (“CIAC”), and Deferred Income Taxes. On Exhibit P-26, Sheet 8, the
20 Company is detailing its roll-forward of the balance of Accumulated Depreciation of Utility
21 Plant, net of CAC and Contributed Property. The rates used in the calculation of
22 depreciation expense are shown on Exhibit P-26, Sheet 2, and the resulting annualized
23 depreciation expense claim is shown on Exhibit P-13; the rates utilized were approved in the

1 Company's previous rate case. The resulting depreciation rates and expense were utilized to
2 bring forward the Accumulated Depreciation balance expected at April 30, 2020, net of any
3 retirements/salvage shown separately. Regarding Exhibit P-26, Sheet 9, CAC and CIAC,
4 the Company again started with September 30, 2019 balances and brought them forward
5 with no activity through April 30, 2020. Both CAC and CIAC represent utility plant that the
6 Company did not pay for, except to the extent refunds were paid on CAC balances, which
7 are specified in agreements between the Company and developers. Lastly, regarding
8 Exhibit P-26, Sheet 10, Deferred Income Taxes, the Company has again started with actual
9 Deferred Income Taxes as of September 30, 2019 and projected through April 30, 2020.
10 Deferred Taxes represent the timing difference between the payment of taxes collected
11 through customer rates, at statutory tax rates, and actual tax paid in tax returns. To the
12 extent the Company pays less tax, there is a resulting adjustment to rate base for the "cost-
13 free" capital the Company has gained until such time as those taxes are eventually paid over
14 time. In this case, the Company has included a projected adjustment for increased Deferred
15 Income Taxes expected to be realized before the end of the test year April 30, 2020. It has
16 also included the annual ARAM amortization.

17 **Q. Please explain the Company's use of uniform depreciation rates.**

18 **A.** On Exhibit P-26, Sheet 2, the Company has utilized a set of uniform depreciation rates that
19 would be applied to all of its sewer utility assets. These rates were derived from the
20 Company's affiliate, Aqua Pennsylvania Wastewater, Inc. ("APWW"), which has recently
21 established its own set of uniform rates in Pennsylvania for over 30 systems. The Company
22 decided to leverage the work and analysis of APWW by using the rates determined in that
23 study for Aqua's New Jersey wastewater operations. The Company believes this is a

1 prudent, cost-effective approach that avoids the need to conduct a costly comprehensive
2 study for Aqua. Moreover, in my experience, the rates established by the Pennsylvania
3 Depreciation Report (Exhibit P-27) are typical and reasonable for sewer utility service.
4 APWW includes a number of small customer systems (less than 5,000 connections) that are
5 similar to the New Jersey systems, and that are both collection only and collection/treatment
6 systems. In addition, Pennsylvania's close proximity to New Jersey means these assets are
7 subject to similar weather and other conditions. As such, this sample is a good proxy to
8 utilize for setting initial depreciation rates on a consolidated basis. Notably, the overall
9 composite rate of depreciation is approximately 2.60%, which equates roughly to a
10 remaining life of approximately 38.50 years.

11 **Consolidated Tax Adjustment ("CTA")**

12 **Q. Has the Company performed a calculation of a CTA and included its result as an**
13 **adjustment to rate base?**

14 **A.** No. The Company performed a CTA calculation consistent with the requirements set forth
15 at N.J.A.C. 14:1-5.12(a)(11) in its last water base rate case, and 100% of that adjustment
16 was applied against the Company's rate base for water. Accordingly, it would not be
17 appropriate to apply a CTA in this case, and no such adjustment is required to be made to
18 rate base in this proceeding.

19 **PSTAC**

20 **Q. Are there any other claims or requests being made in the instant proceeding?**

21 **A.** Yes, I would like to discuss the Company's request to establish a single PSTAC rate that
22 would cover the cost of purchased sewerage treatment for its major treatment providers:
23 Logan Township Municipal Utilities Authority ("LTMUA"), Ocean County Utilities

1 Authority (“OCUA”), and Sussex County Municipal Utilities Authority (“SCMUA”).
2 Purchased sewerage treatment expense accounts for almost 60% of total O&M expenses for
3 the Company. Clearly this level of expense meets the 10% regulatory threshold to be
4 eligible for a PSTAC.

5 **Q. Why is the Company seeking to set a uniform system-wide PSTAC?**

6 **A.** The Company already has authorized PSTACs in its Maxim (OCUA) and Wallkill
7 (SCMUA) service areas, and Aqua has been submitting annual filings with respect to these
8 rates for each system. As far as the Company’s Woolwich service area (LTMUA), the
9 Company has always included treatment costs in its fixed rate for service, which combined
10 rate was established in the Company’s last sewer base rate case. Because there have not
11 been any increases in the rate charged by LTMUA for treatment in the last few years, Aqua
12 anticipates that an increase in those costs could occur in January 2021, and without a
13 PSTAC it will not be able to recover those pass-through costs from customers without
14 coming in for a full rate case. Moreover, given that this is the Company’s first consolidated
15 sewer rate case, and therefore the cost of sewer utility service will be spread amongst all
16 customers, which has in the past and will continue to benefit customers of Aqua’s smaller
17 systems, it is equitable that treatment costs be handled in the same manner.

18 **Q. What portion of the proposed fixed monthly rate for Woolwich customers is related to**
19 **LTMUA treatment costs?**

20 **A.** As shown in Exhibit DTF-1, attached to the Direct Testimony of Mr. Franceski (PT-4), the
21 portion of the fixed monthly charge attributable to treatment costs is \$26.23 for a residential
22 customer (or per Equivalent Dwelling Unit (“EDU”).

1 **Return on Equity (“ROE”)**

2 **Q. How did the Company determine its requested ROE in this filing of 10.45%?**

3 **A.** The Company felt this was an appropriate return on equity considering the overall financial
4 market conditions, the risks of operating these systems, and what other utilities have been
5 authorized to earn in New Jersey. This equity return should allow the Company to earn a
6 fair and reasonable return on its investment, which currently stands at approximately 4%. I
7 would also note that the Company elected, at this time, to forgo hiring an expert witness on
8 ROE to minimize the cost of this filing. Should it be necessary, the Company reserves the
9 right to supplement this initial testimony.

10 **Conclusion**

11 **Q. Does this conclude your Direct Testimony in this case?**

12 **A.** Yes, it does.

**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

AQUA NEW JERSEY, INC.

BPU Docket No. WR2001_____

**DIRECT TESTIMONY OF
Daniel T. Franceski**

With Regard To Billing Determinants and Rate Design

January 21, 2020

AQUA NEW JERSEY, INC.**DIRECT TESTIMONY
OF
DANIEL T. FRANCESKI**

1 **Q. What is your name and business address?**

2 **A.** My name is Daniel T. Franceski. My business address is 30 Glenn Circle, Erdenheim,
3 Pennsylvania 19038.

4 **Q. By whom are you employed and in what capacity?**

5 **A.** I am an independent consultant. I have provided technical assistance in that capacity to
6 numerous Aqua subsidiaries, including Aqua New Jersey, Inc. (“Aqua NJ” or the
7 “Company”).

8 **Q. Please describe your education and business experience.**

9 **A.** I graduated from Lehigh University with a degree in Electrical Engineering, and I worked
10 for 37 years for a regulated utility, known at various times as Bell of Pennsylvania, Bell
11 Atlantic, and Verizon. In the past ten years, I have performed billing analyses for various
12 Aqua utility companies in Florida, Illinois, Indiana, Missouri, New Jersey, Ohio,
13 Pennsylvania, Texas, and Virginia. I have also prepared rate case filings and/or rate design
14 proposals for various Aqua utility companies, as well as for Dolomite Utility Corp. (in
15 Sarasota County, Florida). Also, I have testified before the Florida and Virginia regulatory
16 commissions in conjunction with my work.

17

1 **Q. Have you testified before the New Jersey Board of Public Utilities (“Board”) before?**

2 **A.** I provided pre-filed direct testimony in the Company’s previous base rate cases: BPU Dkt.

3 Nos. WR11120859 (Wtr), WR13070686 (Swr), WR14010019 (Wtr), WR16010089 (Wtr)

4 and WR18121351 (Wtr).

5 **Q. What is the purpose of your Direct Testimony?**

6 **A.** My Direct Testimony supports the Company’s billing determinants, level of rate revenues,

7 and proposed rate design.

8 **Q. Are you sponsoring any exhibits in this case?**

9 **A.** Yes. The billing determinants, proposed rates, and revenues that I calculated are contained

10 in the Company’s filing Exhibit P-17. The Direct Testimony that follows will discuss the

11 development of the data contained therein. The proposed rate effects are contained in my

12 Exhibit DTF-1 to this Direct Testimony.

13 **Q. Were those exhibits prepared by you or under your direction and supervision?**

14 **A.** Yes, they were.

15 **Q. Please describe the billing determinants you developed.**

16 **A.** The billing determinants consist of the number of bills and billed-months and gallons of

17 usage, where appropriate.

18 **Q. Please describe the method you used to develop billing determinants.**

19 **A.** I obtained billing information from Aqua NJ covering three 12-month periods ending

20 September 2017, 2018, and 2019. From those reports, I compiled the number of billed-

21 months and consumption in each month for all three years by tariff division, class of service,

22 and meter size. The 12-month period ending with September 2019 is defined as the “Base

23 Year” or “Base Period.”

1 **Q. Please describe billed-months.**

2 **A.** While most bills are for a one-month period, there are some which cover a shorter period
3 (e.g., new connects and final bills) or a longer period (e.g., bills which recalculate charges
4 after previous bills were canceled for an adjustment). So, for example, if a customer started
5 or ended service within a month, the number of billed-months for that bill would be less
6 than 1.0, and for a bill covering 45 days the number of billed-months would be greater than
7 1.0. A regular quarterly bill covering approximately 90 days would be 3.0 billed-months.
8 The sum of all billed-months for all customers over a 12-month period is an accurate
9 measurement of the actual billing that occurred. When comparing calculated base year
10 revenue to booked revenue, multiplying billed-months (as opposed to customer count) by
11 the monthly sewer service rate in effect yields a more precise revenue amount.

12 **Q. How did you calculate consumption?**

13 **A.** The billing data for customers paying measured (or volumetric) rates contains the gallons of
14 usage that were measured, identifying both the usage which was billed at the tariff usage
15 rates and that which was not billed (because it was included in the fixed minimum monthly
16 rates). Because only three percent of Aqua NJ's present sewer revenue comes from variable
17 charges based on usage, usage is not a significant determinant.

18 **Q. How did you validate the accuracy of your Base Period billing determinants?**

19 **A.** To calculate "expected base year revenue" at the billing determinants that I compiled, I
20 multiplied base year billed-months and consumption volumes by the base and usage rates
21 which were in effect during the base year for the various meter sizes and rate groups. I
22 compared this "expected revenue" to the "booked revenue" for the same period. The

1 percent difference between calculated and booked revenue was less than one hundredth of a
2 percent, thereby validating the accuracy of my developed billing determinants.

3 **Q. How did you adjust your Base Period data to account for end-of-period customers?**

4 **A.** I normalized the bill data by multiplying the actual bill count data for the last month of the
5 base period, September 2019, by 12 months, except in a few instances where that month was
6 not representative.

7 **Q. Did you include a growth adjustment in the development of Pro Forma billing
8 determinants?**

9 **A.** Yes. Aqua NJ had organic growth of 47 customers in the last six months of the base period.
10 I added bills for that many additional customers for the next six months to calculate Pro
11 Forma units at the present rate structures.

12 **Q. Do you believe that the level of Pro Forma Revenues at Present Rates as shown on
13 Exhibit P-17 is appropriate for calculating a proposed revenue requirement in this
14 case?**

15 **A.** Yes. For each tariff group I applied present rates to the Pro Forma using the present rates
16 billing determinants that I developed to calculate pro forma revenues at present rates.

17 **Q. Please describe the current customer groups under present rates in effect.**

18 **A.** Wallkill has around 371 residential and 40 commercial customers, all billed at measured
19 rates. The remaining approximately 5,800 customers in the other tariff groups are billed
20 primarily at flat rates:

- 21 • Bear Brook has about 87 residential customers and one country club.
- 22 • Oakwood Village has about 34 residences and one commercial customer which is an
23 apartment complex of 1,224 units.

- 1 • Stanton Ridge has about 151 residences and one country club.
- 2 • The previously consolidated tariff group containing Woolwich, California Village, North
- 3 Hanover, and Spartan Village has about 2,930 residential, 1 public, and 31 commercial
- 4 customers.
- 5 • Maxim has about 2,550 residential and 34 commercial customers; the commercial
- 6 customers are being billed essentially at flat rates because their monthly rates include a
- 7 usage allowance which is rarely exceeded.

8 **Q. Did you calculate the proposed rates in this proceeding?**

9 **A.** Yes, I did.

10 **Q. Please describe the overall proposed rate structure.**

11 **A.** As mentioned previously, only about three percent of the Company's sewer revenue comes
12 from measured usage. The proposed rate structure is designed to migrate all customers to a
13 flat rate, which will simplify and unify the tariffs. Proposed rates are specified as per
14 Equivalent Dwelling Unit (EDU), with a residential single-family house equal to one EDU.
15 Non-residential customers will be charged at multiple EDUs, as may be determined by size
16 and/or specific customer characteristics.

17 **Q. Did you use the standard AWWA recommended factors by size as the basis of EDUs?**

18 **A.** Yes, in most cases those factors were used. The existing rates for Maxim vary by size at
19 factors somewhat lower than the AWWA's recommended factors. Therefore, in order to
20 mitigate rate shock for Maxim customers, I applied a modified EDU factor across all
21 systems for the four meter sizes present in the Maxim system. Otherwise, the EDU factors
22 would have increased, causing a more significant increase to those customers.

1 **Q. Please explain the impact of the proposed rate increase on the Oakwood Village**
2 **Apartment Complex?**

3 **A.** In Oakwood Village the present rate for a single residence is \$68.75 per month. Today, the
4 apartment complex (a single commercial customer, which is comprised of 1,224 individual
5 apartments) pays a monthly rate of \$19,730.42. This equates to a charge of \$16.12 per
6 month, per apartment, resulting in an apartment rate to single residence EDU factor of about
7 0.23. The proposed rate for the apartment complex was calculated at a factor of 0.50 EDUs
8 per apartment.¹

9 **Q. How did you select the proposed EDU factor for rate design for the laundromat in**
10 **Maxim?**

11 **A.** One customer, the laundromat, accounts for two-thirds of Maxim's annual metered billing.
12 I assigned a factor of 24.4 EDUs to this customer based on an analysis of its monthly billing
13 records.

14 **Q. Please describe the proposed Purchased Sewerage Treatment Adjustment Clause**
15 **(PSTAC) rate.**

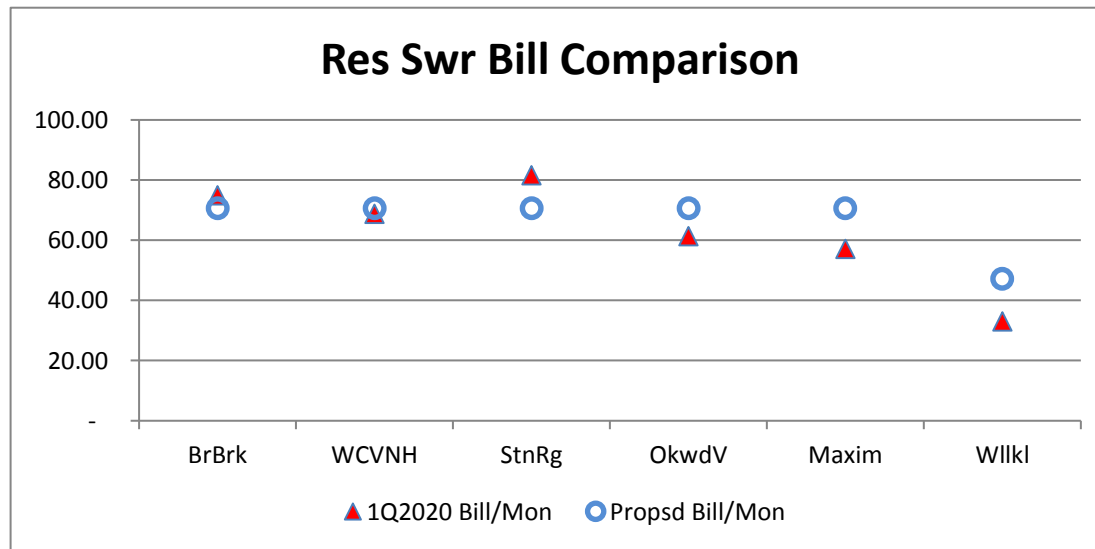
16 **A.** In accordance with the Company's proposal to consolidate the recovery of wastewater
17 treatment costs, I calculated a monthly fixed PSTAC rate which is applied consistently, per
18 EDU, to all customers in all rate divisions. This rate was calculated by dividing the Pro
19 Forma purchased wastewater treatment expense from Exhibit P-20, Sheet 3, by the number
20 of pro forma EDUs.

¹ This EDU factor was designed in order to mitigate the effect of the impact of the move to a system-wide flat rate, inclusive of a new flat PSTAC rate, on this customer. The Company reserves the right to revisit the appropriateness of the EDU factor as applied to this, and other non-residential customers, as circumstances change and in future rate cases.

- 1 **Q. Does the proposed design move rates toward a consolidated rate structure?**
- 2 **A.** Yes. Proposed rates are shown in Exhibit P-17, Sheet 3. A comparison of the present and
3 proposed residential monthly bills for each existing tariff group is shown on Exhibit DTF-1.
4 Two rate divisions would be established under one tariff: a Main division (all except
5 Wallkill), and a division for Wallkill. The present monthly residential bills of Maxim,
6 Oakwood Village, and the presently Consolidated tariff systems (on Rate Schedule No. 1),
7 which represent 96% of the non-Wallkill customers, range from \$57.16 to \$68.75. These
8 customers would all receive an increase to the combined single proposed rate of \$70.64. The
9 other two systems (Bear Brook and Stanton Ridge) have present residential monthly rates
10 ranging from \$75.00 to \$81.67. These approximately 240 customers, by contrast, will
11 experience a rate decrease once migrated to the new common rate. Finally, Wallkill
12 customers presently pay around \$33.00 (based on an average 3,600 gallons of usage), so
13 while these customers would experience an increase in their rate – to \$47.24, Wallkill’s
14 rates would still be at about 67% of the fixed flat rate for all other customers, per EDU.
- 15 **Q. Are you satisfied that your proposed rates and rate structure can yield appropriate**
16 **revenues?**
- 17 **A.** Yes. The proposed charges, when applied to the Pro Forma at Proposed Rates billing
18 determinants, result in an expected proof-of-revenue amount which matches the applied-for
19 revenue requirement within an acceptable margin of less than one hundredth of a percent.
- 20 **Q. Does this conclude your Direct Testimony in this case?**
- 21 **A.** Yes, it does.

	BrBrk	OkwdV	StnRg	WCVNH	Maxim	Wllkl	Total
~# Custs	87	35	152	3,014	2,588	411	6,287
<i>Tot EDUs</i>	<i>1,289</i>	<i>7,746</i>	<i>1,880</i>	<i>38,306</i>	<i>32,165</i>	<i>5,335</i>	<i>86,722</i>
1Q2020 Bill/Mon	75.00	68.75	81.67	61.40	57.16	33.03	
Proposed Base FR	44.41	44.41	44.41	44.41	44.41	21.01	
Proposed PSTAC FR	26.23	26.23	26.23	26.23	26.23	26.23	
Propsd Bill/Mon	70.64	70.64	70.64	70.64	70.64	47.24	
Incrs> 1Q2020	-6%	3%	-14%	15%	24%	43%	
Proof of Rev	91,041	547,177	132,831	2,705,964	2,272,121	252,035	6,001,169

WCVNH is the tariff group of Woolwich, California & Spartan Villages, and North Hanover, combined in 2013 case.
 Note: Oakwood Village has 34 houses @ 1 EDU and 1 Com customer with 1,224 aptmnts @ 0.5 EDU



**BEFORE THE
NEW JERSEY BOARD OF PUBLIC UTILITIES**

AQUA NEW JERSEY, INC.

BPU Docket No. WR2001_____

**DIRECT TESTIMONY OF
DAWN M. PESLAK**

With Regard To Expenses

January 21, 2020

AQUA NEW JERSEY, INC.**DIRECT TESTIMONY
OF
DAWN M. PESLAK**

1 **Q. Please state your name and business address.**

2 **A.** My name is Dawn M. Peslak. My business address is 10 Black Forest Road, Hamilton, NJ
3 08691.

4 **Q. By whom are you employed and in what capacity?**

5 **A.** I am employed by Aqua New Jersey, Inc. (“Aqua” or the “Company”), as the Controller.

6 **Q. Please provide a brief description of your education and experience.**

7 **A.** I graduated from The College of New Jersey, Ewing, NJ, in 1994 with a Bachelor’s in
8 Statistics. In 2000, I earned a Master’s in Business Administration from Monmouth
9 University, West Long Branch, NJ. My work experience is as follows:

- 10 • In 1994, I joined Prudential Insurance as a Staff Accountant. I remained at
11 Prudential until 2004, holding various positions, including Associate Manager of
12 Financial and Statutory Reporting and Associate Manager of Expense Planning and
13 Reporting.
- 14 • In 2004, I joined the Global Institute for Maximizing Potential as a Data Analyst
15 and Office Manager.
- 16 • In February 2009, I joined Springpoint Assisted Living as a Senior Accountant.
- 17 • From December 2010 to August 2019: I was at Berkley Life Sciences, holding the
18 role of Accounts Receivable and Financial Reporting Manager. In 2013, I was
19 promoted to Controller.

- 1 • From August 2019 to present: I joined Aqua as the Controller.

2 **Q. Have you testified before the New Jersey Board of Public Utilities (“Board”) before?**

3 **A.** No, I have not.

4 **Q. What is the purpose of your Direct Testimony in this proceeding?**

5 **A.** The purpose of my Direct Testimony is to support and explain several of the Company’s
6 accounting adjustments in this proceeding and its rate base.

7 **Q. What accounting adjustments and exhibits are addressed in your Direct Testimony?**

8 **A.** I will explain certain of the calculations of the revenue requirement and certain expense
9 claims the Company has requested in this proceeding. Specifically, I will address:

- 10 • Summary of O&M Expenses – Exhibit P-20, Sheet 1
- 11 • Labor Expense & Benefits Expense – Exhibit P-20, Sheet 2
- 12 • Purchased Wastewater and Sludge Removal Expense – Exhibit P-20, Sheet 3
- 13 • Purchased Power Expense – Exhibit P-20, Sheet 4
- 14 • Chemical Expense – Exhibit P-20, Sheet 5
- 15 • Supplies Expense – P-20, Sheet 6
- 16 • Outside Contract Services – P-20, Sheet 7
- 17 • Lease, Transportation, Insurance, Other Expense – P-20, Sheet 8
- 18 • Rate Case Expense – P-20, Sheet 9
- 19 • Bad Debt Expense – P-20, Sheet 10
- 20 • Taxes Other than Income – P-21, Sheets 1-4
- 21 • Federal Income Tax – P-22, Sheet 1
- 22 • Interest Expense – P-25, Sheet 1

1 **Q. Please discuss Exhibit P-17 with regard to the Company's calculation of wastewater**
2 **revenue at present rates.**

3 **A.** In Exhibit PT-4, Company Witness Dan Franceski explains his calculations and the process
4 he used to develop the Company's wastewater revenue at present rates. I worked closely
5 with Mr. Franceski in the development of this calculation. As shown on Exhibit P-13, Sheet
6 1, the Company's total operating revenues at Pro-Forma present rates are \$4.911 Million.

7 **Q. Please provide an overview of how the Company developed its various claims for**
8 **O&M Expenses.**

9 **A.** As is required by the Board, the first point of measurement for the Company's O&M
10 Expense claims is the projected test year ended April 30, 2020. This includes actual results
11 from May 1, 2019 through September 30, 2019, and then includes projections of actual
12 results through April 30, 2020. Utilizing this foundation, the Company then makes
13 normalization and annualization adjustments to certain expenses to reflect expected known
14 and measurable expense levels to be realized during the first year that rates are expected to
15 be in effect. In my experience, I would describe the State of New Jersey as an historical test
16 year state, meaning that during the course of this proceeding the Company will update its
17 projections to a full actual test year. Expense claims that the Company can demonstrate to
18 have "known and measurable" changes (in other words, adjustments that can be evidenced
19 through proofs) are allowed and appropriate claims. In this proceeding, where the Company
20 has made adjustments to the projected test year ended April 30, 2020, it is referred to as
21 "Pro Forma Present Rates." The adjustments, and resulting expense levels included in Pro
22 Forma Present Rates, reflect the Company's expectations of expense levels to be realized
23 during the first year that new rates are in effect. These adjustments will be annualized when

1 the Company updates the record in this proceeding to a full actual test year (referred to as
2 “12 + 0”).

3 **Q. Please describe Exhibit P-20, Sheet 2, Labor Expense?**

4 A. To compute test year labor, I utilized the actual labor expense for the five months ended
5 September 30, 2019, and then projected labor expense for the remaining seven months of
6 the test year through April 30, 2020. Labor for the Pro Forma Present Rates April 30, 2020,
7 includes a portion of salary for two Aqua employees who dedicate a significant amount of
8 their time to sewer operations. Additionally, 10% of Aqua’s administrative salaries are
9 included in sewer expenses; this is based upon the percentage of revenue received for sewer
10 as compared to water. I included a known and measurable (i) 2.5% increase in labor rates
11 (Union employees) to be effective on May 15, 2020; and (ii) 3.0% increase in labor rates
12 (non-Union employees) to be effective on April 1, 2020, and annualized those rates to bring
13 the Company’s labor expense claim up to expected levels during the first year that new rates
14 are expected to be in effect. In addition, I would note that we are planning to add an
15 additional employee to the accounting department effective April 1, 2020.

16 **Q. Please describe Exhibit P-20, Sheet 2, Benefits Expense, and its adjustments to selected**
17 **benefits expense items (i.e., Health, Dental and 401K).**

18 A. The rates and the employee contributions for the test year are the actual costs in effect at
19 September 30, 2019, and projected through the test year ending April 30, 2020. For the Pro
20 Forma Present Rates ended April 30, 2020, the Company is utilizing the rates effective
21 January 1, 2020 and annualizing our claim for benefits. The Company provides its
22 employees certain benefits in addition to those I made adjustments to, such as Long Term
23 Disability Insurance, Accidental Death and Dismemberment, Life Insurance, Training,

1 Pension, and Post-retirement Healthcare. Specifically, my adjustments to Employee Health
2 and Dental insurance reflect anticipated increases in coverage rates effective on January 1,
3 2021. Regarding 401K, I included an anticipated increase in Company 401K expense,
4 which I will update specifically at a later date. During the course of this proceeding, and
5 consistent with past regulatory practice in New Jersey, I will be updating this claim to
6 reflect actual results for the twelve months ended April 30, 2020, and at that time, I will then
7 annualize the actual rates being charged.

8 **Q. Please explain the calculation of Exhibit P-20, Sheet 3, Purchased Wastewater and**
9 **Sludge Removal Expense.**

10 A. The test year for Purchased Wastewater expense was compiled by taking the actual expenses
11 for the period May 1, 2019 through September 30, 2019 combined from each entity from
12 which the Company purchases sewerage treatment: OCUA, SCMUA and LTMUA, and
13 adding the projected expenditures for the remainder of the test year through April 30, 2020.
14 The Pro Forma Present Rates Purchased Wastewater and Sludge Removal Expense
15 represents the anticipated expense for the first year new rates go into effect.

16 **Q. Please explain the calculation of Exhibit P-20, Sheets 4 and 5, Purchased Power and**
17 **Chemical Expense.**

18 A. The test year expense was compiled by taking the actual expenses for the period May 1,
19 2019 through September 30, 2019 and adding the projected expenditures for the remainder
20 of the test year through April 30, 2020. The Pro Forma Present Rates Purchased Power and
21 Chemical Expense represents the anticipated expense for the first year new rates go into
22 effect.

1 **Q. Please explain the calculation of Exhibit P-20, Sheet 6, Supplies.**

2 **A.** The test year expense was compiled by taking the actual expenses for the period May 1,
3 2019 through September 30, 2019 and adding the projected expenditures for the remainder
4 of the test year through April 30, 2020. The Pro Forma Present Rates Supplies Expense
5 represents the anticipated expense for the first year new rates go into effect.

6 **Q. Please explain the calculation of Exhibit P-20, Sheet 7, Outside Services.**

7 **A.** The Company utilizes contract services for certain expenditures such as Auditing,
8 Engineering, Lab Testing, Customer Billing, Contract Operations/Maintenance, and Legal.
9 All of the aforementioned expenses were compiled by taking the actual expenses for the
10 period May 1, 2019 through September 30, 2019 and adding the projected expenditures for
11 the remainder of the test year through April 30, 2020. The Pro Forma Present Rates Outside
12 Services Expense represents the anticipated expense for the first year new rates go into
13 effect.

14 **Q. Regarding certain Outside Services, please describe Management Fees Expense, shown
15 on Exhibit P-20, Sheet 7.**

16 **A.** Aqua is charged monthly for the services rendered to it by the employees of Aqua Services,
17 Inc., which include primarily employees based in Aqua Services, Inc.'s corporate
18 headquarters of Bryn Mawr, Pennsylvania. For example, some of the services provided by
19 Aqua Services, Inc. include, but are not limited to the following categories: Corporate
20 Governance, Accounting, Legal, Engineering, Human Resources, Information Technology,
21 Regulatory, Communications, Water Quality, Taxes, Treasury and Auditing. The
22 Company's expense claim in this proceeding is based on the projected actual results through

1 April 30, 2020, and then adjusted to a normalized level to include expense levels expected
2 to be realized during the first year rates are in effect.

3 **Q. Is there a document or agreement that specifies the services to be received by Aqua**
4 **from Aqua Services, Inc. and how they are allocated and charged to Aqua?**

5 **A.** Yes, services are provided to Aqua pursuant to an Affiliate Interest Agreement that was
6 previously reviewed and approved by the Board.

7 **Q. How are the costs of those services charged out by Aqua America, Inc. to its**
8 **subsidiaries?**

9 **A.** Aqua Services personnel keep daily time records and, where appropriate, their time and
10 related overheads are directly assigned to the subsidiary for which they are working. Where
11 costs are incurred in rendering services to multiple companies in common and cannot be
12 identified and related exclusively to a particular company, they are allocated to all such
13 companies based on the number of customers served by each company at the end of the
14 immediately preceding calendar year.

15 **Q. Please explain the calculation of Exhibit P-20, Sheet 8, Lease Expense.**

16 **A.** Lease expense for the Company is the cost of leasing office equipment. The test year
17 expense was compiled by taking the actual expenses for the period May 1, 2019 through
18 September 30, 2019 and then projecting the expense for the remaining seven months of the
19 test year through April 30, 2020. Pro Forma Present Rates Lease expense represents the
20 anticipated expense for the first year new rates go into effect.

21 **Q. Please explain the calculation of Exhibit P-20, Sheet 8, Transportation Expense.**

22 **A.** Transportation expenses are the costs associated with the Company's fleet of vehicles and
23 their associated operational costs (fuel, maintenance, etc.). The test year expense was

1 compiled by taking the actual expenses for the period May 1, 2019 through September 30,
2 2019 and then projecting the expense for the remaining seven months of the test year
3 through April 30, 2020. Pro Forma Present Rates Transportation expense represents the
4 anticipated expense for the first year new rates go into effect.

5 **Q. Please explain the calculation of Exhibit P-20, Sheet 8, Insurance Expense.**

6 **A.** Insurance expenses are the costs associated with the Company's insurance coverage for
7 Workers Compensation, Auto & Property, General Liability and Executive Risk. The test
8 year expense was compiled by taking the actual expenses for the period May 1, 2019
9 through September 30, 2019 and then projecting the labor expense for the remaining seven
10 months of the test year through April 30, 2020. Pro Forma Present Rates Insurance expense
11 represents the anticipated expense for the first year new rates go into effect. The Company
12 monitors this expense annually in terms of claims experience as analyzed in a multi-year
13 average. The projected 2020 Insurance expense for the Company is approximately \$53,000.

14 **Q. Please explain the calculation of Exhibit P-20, Sheet 8, Other Expense.**

15 **A.** Other Expenses primarily include a variety of Administrative and General expenses that are
16 individually not material enough to be reported as a separate line item, however, are
17 recurring and necessary expenditures of the Company in providing service to customers.
18 Some examples include Office Supplies, Business Travel Expense, Office Utilities, Mail &
19 Postage, and Bank Fees. The test year expense was compiled by taking the actual expenses
20 for the period May 1, 2019 through September 30, 2019 and then projecting the expense for
21 the remaining seven months of the test year through April 30, 2020.

1 **Q. Would you please explain Exhibit P-20, Sheet 9, Bad Debt Expenses?**

2 **A.** I have averaged the bad debt percentages for the calendar years ended 2016 through 2018,
3 and applied that percentage to the projected test year and normalized rate year period gross
4 revenues to determine the bad debt expense. I believe that this method of averaging bad
5 debt best represents what the Company can expect during the first year that rates are in
6 effect. During the course of this proceeding, I will update this calculation to include the
7 calendar year 2019 and propose to utilize the result as a basis for the final adjustment to Bad
8 Debt Expense.

9 **Q. Please describe Exhibit P-20, Sheet 10, Rate Case Expense.**

10 **A.** Exhibit P-20, Sheet 10 shows rate case expenses detailed by category based on the
11 Company's best estimate at the date of filing and assumes a fully litigated rate case. I will
12 update this schedule periodically as the case progresses. The Company is requesting a three
13 (3) year amortization period for rate case expenses, which is consistent with the
14 amortization period requested and approved in the Company's last water base rate case.

15 **Q. Please explain Exhibit P-21, Sheets 1 through 4, Taxes other than Income.**

16 **A.** The Company pays various taxes, assessments, and other fees included in Exhibit P-21,
17 Sheets 1 through 5. Those include Regulatory Assessments, Revenue Taxes, Property
18 Taxes, and Payroll Taxes. The Regulatory Assessments from the Board of Public Utilities
19 and the Division of Rate Counsel are assessed based on a percentage of utility revenue. The
20 test year and the pro forma period are based on the most recent actual assessment
21 percentages. We are not currently projecting any changes in the assessment percentages, but
22 will appropriately revise these sheets if any changes occur in the assessment percentages.

1 Certain expense adjustments and revenue implications of the instant proceeding have an
2 effect on the aforementioned taxes and are detailed in Exhibit P-21.

3 **Q. Please explain Exhibit P-22, Sheet 1, Federal Income Tax.**

4 **A.** The calculation of federal income tax expense for both the test year and the pro forma
5 period is detailed on Exhibit P-22. I have utilized a 21% Federal Income Tax rate for Aqua
6 as a member Company of a consolidated tax group with a tax sharing/allocation agreement.
7 Note that I have synchronized interest with the Company's proposed capital structure for the
8 purposes of calculating federal income taxes.

9 **Q. Please describe Exhibit P-25, Sheet 1, Interest Expense.**

10 **A.** On Exhibit P-25, Sheet 1, the Company has calculated the Interest Expense claim being
11 used in this application and synchronized this calculation with rate base. In other words, the
12 Company is seeking recovery of interest expenses to the extent they finance the rate base
13 being requested in this application with debt. The weighted average cost of debt used in the
14 calculation is derived from the Company's pro forma Exhibit P-14, Sheet 1, whereby the
15 Company has shown the Capital Structure being requested in this application. Furthermore,
16 Exhibit P-14 shows the various instruments of debt and their respective cost rates that were
17 then used to calculate the effective cost of debt "requested" which is 4.65%. Over recent
18 years, the Company has lowered the effective cost rate of long term debt to below 5%. The
19 lower cost of debt is certainly one benefit of many worth noting of being a subsidiary of
20 Aqua America, Inc., which can borrow debt at lower cost than the Company could on a
21 stand-alone basis.

22 **Q. Does this conclude your Direct Testimony in this case?**

23 **A.** Yes, it does.